CHAPTER - IV

ANALYSIS AND INTERPRETATION OF DATA

" The ultimate criteria of administrator effectiveness should be expressed in terms of group or organization achievements, in respect to the changes in the organization's accomplishments that can be attributed to the behaviour of the administrator"

- Andrew W. Halpin,
Theory and Research in Administration
(New York, The Macmillan Company,
London, Collier-Macmillan, 1966), p.50

CHAPTER - 4

ANALYSIS AND INTERPRETATION OF THE DATA

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4.1 Introduction

In the previous chapter, a complete account of the approach to studying the problem of the present investigation was elucidated. Both, the process of data collection and the methods to be applied in analysing and interpreting the data collected through various tools were described and discussed at length. The present chapter is devoted to the analysis and interpretation of the data according to the hypotheses formulated in the previous chapter.

The problem of the present investigation, as described in the previous chapter, is the study of "leadership behaviour" of the principals of the secondary schools in Panchamahal District in the context of the organizational climate of the schools, teacher morale, innovativeness of the schools, and pupils' academic motivation. The "leadership behaviour" of the secondary school principals is studied also in the context of certain other personal variables of the principals, viz, age, sex, experience, and the schools changed by the principal as a principal. This is further studied in the context of certain school variables, viz., type of the school, management, rural/urban location of the school, size of the school, the nature of pupils' population and the socio-economic status of the school. All these aspects of the study of "leadership behaviour" of the school principals are specifically organized under certain hypotheses. These hypotheses are studied through

various sophisticated statistical techniques and the pertinent results are analysed and interpreted.

4.2 Emergent Patterns of Leadership Behaviour

The First Hypothesis deals with the varying patterns of leadership behaviour manifested by the principals of the sampled high schools of Panchamahals District. It is worded as under :

> "The principals of the Secondary Schools of Panchamahals district manifest a variety of leadership behaviour" (Hypothesis -I)

This Hypothesis is rather obvious. Principals of schools cannot be expected to belong to the same leadership behaviour category, because they come under varying environmental influences and they have different personality make-ups. Their ideology, values, attitudes, perceptions are bound to differ. Therefore, differences in the patterns of leadership behaviour do develop and the phenomenon is natural.

In the present Study, as discussed earlier, four patterns of leadership behaviour on the part of principals are envisaged. They are :

(1) The HH Pattern, where they are high both in the, 'Initiating Structure' and 'Consideration' dimensions of the leadership behaviour.

(2) The LL Pattern, where they are low both in the 'Initiating Structure' and 'Consideration' dimensions.

(3) The HL Pattern, where they are high in the 'Initiating Structure' dimension, but low in 'Consideration' dimension.

(4) The LH Pattern, where they are, low in 'Initiating Structure' dimension but high in 'Consideration' dimension.

In analysing the data yielded by the administration of the tool 'LBDQ', the Quadrant Scheme of Halpin (1966,p.99) is used.

TABLE -4.1 : A Quadrant Scheme for Describing Principal's Behaviour on Dimensions 'Initiating Structure' and 'Consideration'

Initiating Structure \ Consideration	Below Mean	Above Mean	
Above mean	H.I. (S) L.C. (-C) (4) (9) Principals	H.I. (S) H.C. (C) (1) (49) Principals.	Mean of Initiating Structure Score 40.07
Below Mean	L.I. (-S) L.C. (-C) (3) (36) Principals	L.I. (-S) H.C. (C) (2) (6) Principals	

N = 100 schools

Mean of Consideration Score ($\bar{M}_3$ = 39.08)

1	HH	48
2	LH	6
3	LL	36
4	HL	9

(N = 100)

I = Initiating Structure
S = Initiating Structure
C = Consideration

From the table, it can be observed that the maximum number (49) of principals fall in the HH Pattern of Leadership behaviour although there are 36 principals showing the LL Pattern of behaviour. This suggests that in Panchamahal district quite an appreciable number of principals manifests the HH behaviour pattern. Six principals manifest the LH pattern and 9 principals manifest the HL Pattern.

Therefore, the hypothesis that the principals of the secondary schools of Panchamahal District manifest variety of Leadership Behaviour patterns obviously is confirmed. But the results need to be examined in some details.

In Panchamahal district, the mean score on "Initiating Structure" is 40.07 and the mean score on "Consideration" is 39.08, the difference between these two mean scores being .99 There is high positive correlation between these two dimensions ($r = 0.744$, significant at 0.01 level).

The mean scores on both the dimensions indicate that the leadership behaviour of the principals is balanced sufficiently at a high level, and quite appreciable number of the principals are above these scores. The maximum limit can go upto 60 on each dimension. The percentage of principals who are high on "Initiating Structure" (above the mean) is 58 and the percentage of principals who are high on "Consideration" is 55 (above the mean). Looking at this, the gap between the two dimensions is not big enough.

Shelat (1974) in an earlier study, had found 35 per cent of principals in Baroda District manifesting the HH pattern, 11 per cent of the LH pattern, 37 per cent of the LL Pattern and 17 per cent of manifesting the HL Pattern of leadership behaviour. The trend in the manifestation of the HH Pattern to a greater extent than the LL Pattern is continued in the present study also.

TABLE - 4.2 : Quadrant Analysis Scheme
(Shelat and Present Study)

Shelat's Study (Baroda district)

Initiating Structure	Consideration: Below Mean	Consideration: Above Mean
Above Mean	HL 17% (IV)	HH 35% (I)
Below Mean	LL 37% (III)	LH 11% (II)

(N = 100)

Present Study (Panchamahals District)

Initiating Struc.	Consideration: Below Mean	Consideration: Above Mean
Above Mean	HL 9% (IV)	HH 49% (I)
Below Mean	LL 36% (III)	LH 6% (II)

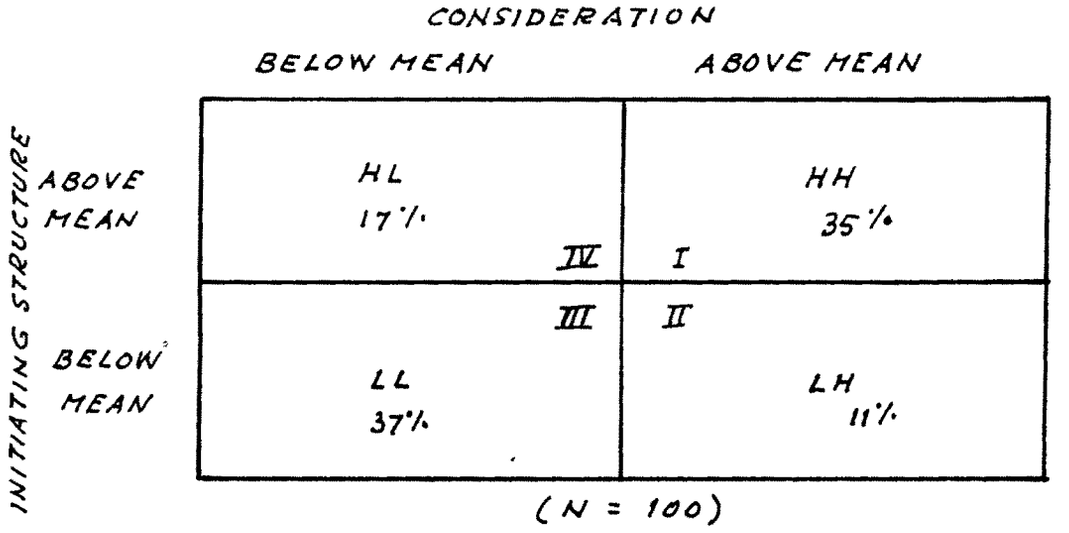
(N = 100) Consideration Mean 39.08

Initiating Structure Mean 40.07

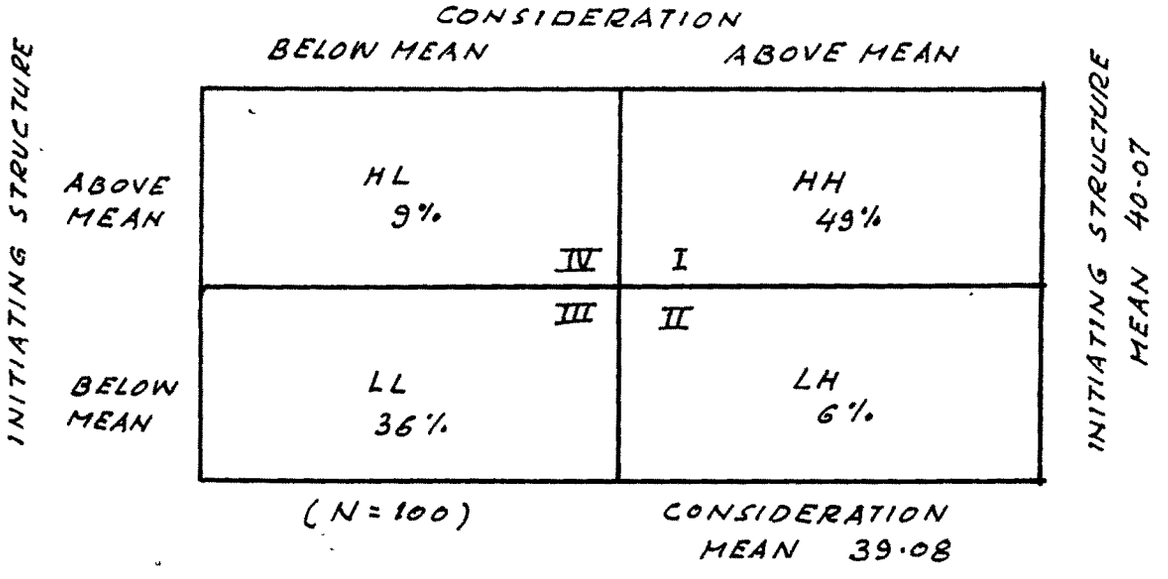
The principals who fall in Quadrant I are said to be effective and the principals in Quadrant III are said to be ineffective. The principals falling in Quadrants II and IV occupy the middle position. At times, they are effective and

QUADRANT ANALYSIS SCHEME

SHELAT'S STUDY (BARODA DISTRICT)



PRESENT STUDY (PANCHMAHAL DISTRICT)



at times, they fail to be effective. However, they never attain the level of that effectiveness which is manifested by the principals having the HH Pattern of leadership behaviour. To say in the words of Halpin (1966, pp. 98,99):

> "The leaders described in Quadrant I are evaluated as highly effective, whereas ordinarily accompanied by group chaos, are characterized as most ineffective. The leaders in Quadrant IV are the martinets and the 'cold fish' so intent upon getting a job done that they forget that they are dealing with human beings, not with cogs in a machine. The individuals described in Quadrant II are also ineffective leaders. They may ooze with the milk of human kindness but this contributes little to effective performance unless their consideration behaviour is accompanied by a necessary minimum of Initiating Structure behaviour."

The general conclusion from this account is that the leader in any organization to be really effective should maintain balance between "Initiating Structure" and "Consideration" sufficiently at a high level, because changes in the attitudes of group members towards each other, and group characteristics such as harmony, intimacy and procedural clarity, are significantly associated with the leadership behaviour style of the leader. High "Initiating Structure" combined with high "Consideration" is associated with favourable group attitudes and with favourable changes in group attitudes. The persons occupying the leadership position should be specially careful about how the group perceives their behaviour in the organization and should make necessary changes in their behaviour to bring out effectiveness potent in the group.

This indicates very clearly that the behaviour of leaders is a key factor in maintaining high level of group efficiency and healthy and inspiring climate in the institution in which the group functions.

Some pertinent questions may be raised which might help in interpreting the results of the LBDQ better. For instance, it may be asked which dimension of the tool gives a better indication of leadership behaviour contributing to the effectiveness of the group. Are these dimensions adequate enough to describe the leadership behaviour comprehensively? Is the LBDQ tool useful and comprehensive enough to evaluate these two dimensions of leadership behaviour? Halpin (1966, pp.97,98) has answered these basic questions also after doing valuable research work with his LBDQ. He says :

> "The evidence indicates that Initiating Structure and Consideration are fundamental dimensions of leader behaviour, and that the Leader Behaviour Description Questionnaire provides a practical and useful technique for measuring the behaviour of leaders on these two dimensions".

Further, he says (p. 127) in the concluding paragraph:

> "The dimensions of leadership behaviour we have delineated obviously do not exhaust these dimensions constitute the criterion of leadership effectiveness. They do not. However, they probably do represent a criterion that should be taken into account in evaluating the leadership skills of superintendents. Ours is only one approach to the study of leader's behaviour. Other investigators will, in turn, supplement our findings, and will take into account additional variables which we were not ready to include in the present series of studies."

From the above observations made by Halpin, it may be concluded that "Initiating Structure" and "Consideration" are the basic dimensions of leadership behaviour. Any behaviour of the leader in the context of organizational goal achievement could be boiled down to any of these two dimensions. Other dimensions if at all they are found by other research workers would merely supplement these two basic dimensions or they may change the nomenclature of the same dimensions. And the LBDQ is very useful and practical technique to measure and evaluate the behaviour of the leaders. As reviewed in the Chapter II many research workers have used this tool in foreign countries and on Indian soil as well to have a fair judgement about the leader behaviour and its effectiveness on other aspects of the working of the organization.

In the present investigation the Initiating Structure Mean Score is 40.07 and Consideration Mean Score is 39.08. Halpin (1966, p.102) in one of his studies of leadership behaviour of educational administrators arrived at a mean score of 37.9 on 'Initiating Structure' and a mean score of 41.1 on the 'Consideration' dimension. This shows that the principals of the secondary schools in Panchamahals district appear to be higher on the 'Initiating Structure' and lower on Consideration as compared to the Educational Administrators studied in the U.S.A. This may be due to our legacy from the British Rule when the principals of the schools used to behave as the most autocratic leaders considering their teachers as

Step - I : Construction of School profiles. This is done by computing, school by school, a school-mean sub-test score for each of the eight sub-tests (dimensions). At this stage, the school profiles are expressed in terms of raw scores.

Step - II : Conversion of raw scores into standard scores. The Standardization is done twice : first, normatively, and second, ipsatively. For both the standardization processes, a standard-score system based upon a mean of 50 and a standard deviation of 10 is chosen.

Step - III : Computation of six sets of school-profiles.

Step - IV : Computation for each of the six sets of school-profiles a single prototypic profile. The resultant prototypes can be viewed as descriptions of six different Organizational Climates, viz., Open, Autonomous, Controlled, Familiar, Paternal and Closed ranked on a continuum.

All the 100 sampled schools are thus identified on the Climate continuum. Table 4.3 given on the next page shows the distribution of the 100 sampled high schools according to both their climate designation and the patterns of leadership behaviour of their principals.

TABLE - 4.3: Percentage Distribution of Leadership Behaviour Patterns According to the Organizational Climate of the Sampled Schools

(Figures in brackets indicate percentages

Climate	Patterns					
	L.B.	HH	HL	LH	LL	Total
Open	17	17 (100.0)	0	0	0	17
Autonomous	10	7 (70.0)	0	0	3 (30.0)	10
Controlled	16	7 (43.75)	0	1 (6.25)	8 (50.0)	16
Familiar	10	5 (50.00)	2 (20.0)	3 (30.00)	0	10
Paternal	12	8 (66.66)	2 (16.66)	1 (8.33)	1 (8.33)	12
Closed	35	5 (14.28)	5 (14.28)	1 (2.85)	24 (68.57)	35
Total:	100	49	9	6	36	100

From the Table 4.3, it can be seen that -

(1) In Open climate types all the schools have principals with the HH Pattern of leadership behaviour, and in Closed climate types schools, 68 per cent of them manifest the LL Pattern of leadership behaviour. This suggests that the HH and the LL Pattern of leadership behaviour seem to be positively interacting with Open and Closed climate types respectively.

PERCENTAGE DISTRIBUTION OF LEADERSHIP BEHAVIOUR PATTERNS ACCORDING TO THE ORGANIZATIONAL CLIMATE OF THE SAMPLED SCHOOLS

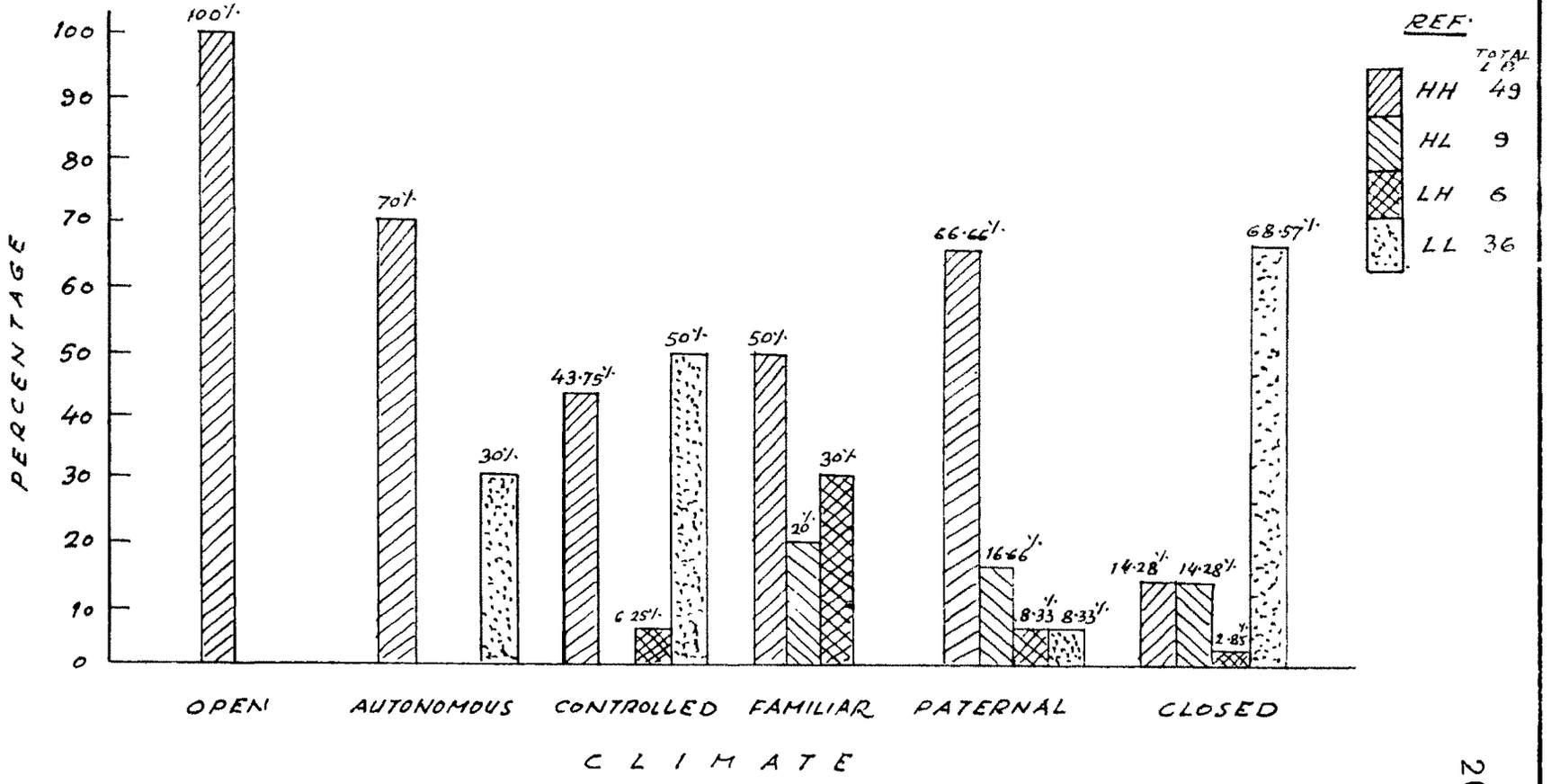


CHART-X

(2) In Controlled climate types, 56.25 per cent schools manifest the LH and the LL behaviour patterns, which means low "Initiating Structure" seems to be contributing to the "Controlled climate".

(3) Most of the schools having principals with the HH behaviour pattern seem to fall in Open, Controlled, Paternal and Autonomous climate type schools, whereas most of the schools having principals manifesting the LL behaviour pattern fall in Closed climate types.

Therefore, the hypothesis that the schools having Open climate tend to have principals manifesting the HH Pattern of leadership behaviour, and the schools having Closed Climate tend to have principals manifesting the LL Pattern of leadership behaviour is confirmed.

Hypothesis - III

The significant relationship found between leadership behaviour of principals of schools having Open or Closed Climate in the earlier hypothesis is further substantiated if the two dimensions of leadership behaviour are interacted with different Climate types of schools of which they are the heads.

TABLE - 4.4: Organizational Climate and Initiating Structure

(A)

Climate Types	N	M	SD
1. Open	17	48.882	2.998
2. Autonomous	10	43.600	4.351
3. Controlled	16	39.625	6.510
4. Familiar	10	42.000	12.101
5. Paternal	12	44.250	5.172
6. Closed	35	33.000	7.708

(B)

Variables@	t-values	p-values
1 : 2	13.739	0.01**
1 : 5	8.500	0.01**
2 : 3	1.701	N.S.
2 : 6	4.142	0.01**
3 : 4	0.653	N.S.
4 : 5	0.585	N.S.
5 : 6	4.690	0.01**
1 : 3	5.300	0.01**
1 : 6	8.167	0.01**
2 : 4	0.393	N.S.
1 : 4	2.258	0.05*
2 : 5	0.315	N.S.
3 : 6	2.982	0.01**
3 : 5	2.025	N.S.
4 : 6	2.849	0.01**

@ Variables : 1. Open , 2. Autonomous, 3. Controlled, 4. Familiar, 5. Paternal, 6. Closed.

From Table 4.4 it appears that the t-values for "Initiating Structure" in the context of Open and Autonomous schools, Paternal and Closed schools, Open and Controlled schools, Open and Closed schools, Open and Familiar schools, Controlled and Closed schools, and Controlled and Paternal schools are significant at 0.01 level, except in the pairing of Open and Familiar schools which is significant at 0.05 level. Means of "Initiating Structure" between various climate types are significant. "Initiating Structure" contributes to the "Openness" of the climate. That means, the score of Initiating Structure of "Open climate" school is significantly different from the means of this dimension of leader behaviour in all other climate types. Autonomous schools have 43.600 Initiating Structure mean score which does not show any significant difference between the means according to Controlled, Familiar, and Paternal climate types, and it shows significant difference with Closed climate types.

The mean of Initiating Structure seems to go well with Open, Paternal, Autonomous and Familiar climate types, but not so very well with Controlled and Closed climates.

TABLE -4:5 : Organizational Climate and Consideration

(A)

Climate Types	N	M	SD
1. Open	17	49.588	4.403
2. Autonomous	10	41.900	6.280
3. Controlled	16	36.875	7.890
4. Familiar	10	39.100	14.632
5. Paternal	12	43.417	5.072
6. Closed	35	32.686	8.224

Table 4.5 contdd....

(B)

Variables@	t-values	p-values
1 : 2	3.740	0.01**
1 : 5	3.493	0.01**
2 : 3	1.701	N.S.
2 : 6	3.271	0.01**
3 : 4	0.506	N.S.
4 : 5	0.959	N.S.
5 : 6	4.234	0.01**
1 : 3	5.762	0.01**
1 : 6	7.914	0.01**
2 : 4	0.558	N.S.
3 : 5	2.504	0.02*
4 : 6	1.804	N.S.
1 : 4	2.782	0.01**
2 : 5	0.627	N.S.
3 : 6	1.709	N.S.

@ No.1 to 6 of variables indicate six ~~dimensio~~ climate types mentioned in Section (A) of table 4.5

Table No.4.5(B) shows that the t-values for "Consideration" in the context with Open and Autonomous climate schools, Open and Paternal schools, Autonomous and Closed schools, Paternal and Closed schools, Open and Controlled schools, Open and Closed schools, Open and Familiar schools, are significant at .01 level and Controlled and Paternal schools significant at 0.02 level. Means of 'Consideration' between these climate types are significant. Consideration dimension of leadership behaviour contributes. to the 'openness' of the climate.

This means that mean scores of consideration obtained by the principals of Open schools is significantly different from the mean scores of this dimensions obtained by the principals of other climate type schools. The mean score according to Autonomous climate type is 41.900 which does not show any significant difference between the means of Controlled, Familiar, and Paternal climate types, but it does show significant difference with Closed climate types.

The mean of "Consideration" goes on very well with Autonomous, Familiar and Paternal climate types, but not with Closed and Controlled types.

Therefore, the hypothesis that the relation between various climate types of the schools, and 'Initiation' as well as 'Consideration' dimensions of leadership behaviour of the principals of the schools found to be significant in earlier analysis, has further support.

Thus, the study establishes clearly that there is a close relationship between the behaviour of the leader and the climate. The behaviour of the leader brings changes in the behaviour of the members of the organization and vice versa. In the present investigation also the relationship between the climate of the school and the dimensions of leader behaviour has been found highly significant. All the Open climate schools have principals manifesting the HH leadership behaviour pattern and these types

of schools as a group have principals receiving very high mean scores on both the dimensions "Initiating Structure" and "Consideration". Conversely, the schools having closed climate have principals receiving the lowest mean scores on both the dimensions. The schools having Autonomous climate and Paternal climate also have principals with the HH pattern as a group, but their mean scores are not so high on both the dimensions as the mean scores of Open climate schools on both the dimensions. It is also found that, moving from Open climate schools to Closed climate schools the percentage of schools having principals manifesting the HH Pattern of leadership behaviour goes on decreasing and the percentage of schools having principals manifesting the LL Pattern of leadership behaviour goes on increasing. Shelat (1974) also found that the HH Pattern of leadership behaviour of the school principals was closely associated with Open, Autonomous and Controlled climate and the LL Pattern was related to the Closed climate. These findings show obviously a close relationship between how teachers behave and the climate their behaviour creates in the organization. But this relationship is a two-way process. Halpin says (1966, p. 199)

> "The behaviour of the principal in its effect upon the organizational climate of a school should be construed a necessary but not a sufficient condition which determines the schools' climate. For example, if a principal behaves in a way such as is depicted in the sixth climate-the most closed one - it is doubtful that the group members, entirely on their own, can do very much to change this climate. Indeed, their high disengagement scores suggest that they already 'have given up'".

But the converse may also be true. A young, intelligent, well trained and very well experienced principal comes to the school which is the Closed type on climate category, with an intention to make it Open may fail to do so because of deeply rooted elements of closedness in the mind and behaviour of the teachers of the school. For them Openness becomes an anachronism and the openness of the behaviour of that principal may become psychological threat because of the deprivation of freedom from which the teachers suffered for a long time. The new principal should not be astonished if his openness in approach, attitude and behaviour has an adverse effect on his colleagues.

This fact also indicates that a principal who has always been showing very high "Initiating Structure" should not all of a sudden start showing very high "Consideration". The teachers and students will be puzzled and they will move from him at the first instance. This type of changeover should be slow and gradual.

This "Consideration" dimension of Leader Behaviour has puzzled the pioneers of this approach namely Hemphill and Coons, and Halpin and Winer. They found it formidable to judge the nature of "Consideration" behaviour of the leader. A person who shows 'Consideration' may want consideration in reciprocation or he has too much power and freedom to destribute love and sympathy to his subordinates. At the outset, both the type of considerations appear to be the same. One

should make sure whether the persons showing "Consideration" really means by it.

Some administrators show consideration without any discrimination while others use it specifically and discriminately. The man of ordinary prudence will prefer the second one to bring out the desirable effects. Things are not so simple. Halpin (1966, p.198) says :

> "But we have a strong hunch that the research on Consideration which has been reported to date presents an utterly oversimplified picture of the variety of behaviours that are encompassed within this dimension. A more sophisticated way of measuring consideration is surely needed. "

4.4 Relationship Between Patterns of Leadership Behaviour and Categories of Teacher Morale

The purport of the examination and testing of Hypotheses II and III was that leadership behaviour in its global concept as well as in its two dimensions of 'Initiating Structure' and 'Considerations' bears a significant close relationship. In this section, an attempt will be made to investigate the relationship, if any, that operates between leadership behaviour and teacher morale.

Two specific hypotheses have been formulated to examine and decide the facts of this relationship. The hypotheses are worded as under :

(1) The teachers of the high schools headed by principals manifesting the HH Pattern of leadership behaviour tend to have high morale and the teachers of the schools headed by principals manifesting the LL Pattern of leadership behaviour tend to have low morale. (Hypothesis IV)

(2) Higher the 'Initiating Structure' as well as 'Consideration' the higher is the teacher morale. The converse of it would also be true (Hypothesis V).

It may be recalled that in measuring the morale of teahcers of the sampled high schools in Panchamahals district, the school survey tool was used. The procedures for determining the morale scores of teacher respondents are as under.

These scores are based on 80 items selected from the total 120 items of the School Survey tool. The morale scores were distributed among three categories, High, Average and Low. The range for high morale scores was 203-172, average morale scores was 140 and below.

Now, the two hypotheses will be examined one by one.

Hypothesis IV

It is hypothesised here that the HH Pattern of school leadership would bear close and significant relationship with the High morale of teachers, and the LL Pattern of Leadership would be significantly related to low morale of teachers.

Morale scores of teachers have been classified into three categories of High Morale (scores 203 to 172) Average Morale (scores 171 to 140) and Low Morale (scores 140 and below).

TABLE -4.6: Percentage Distribution of Leadership Behaviour Patterns According to the Staff Morale of the Schools.

(Figures in brackets indicate percentages)

Morale	L.B. Patterns HH	HL	LH	LL	Total
High Morale (30)	25 (83.33)	2 (6.66)	1 (3.33)	2 (6.66)	30
Average Morale (53)	22 (41.59)	7 (13.20)	5 (9.05)	19 (35.84)	53
Low Morale 17	2 (11.46)	0 (0.00)	0 (0.00)	15 (88.35)	17
Total: (100)	49	9	6	36	100

N = 100 schools

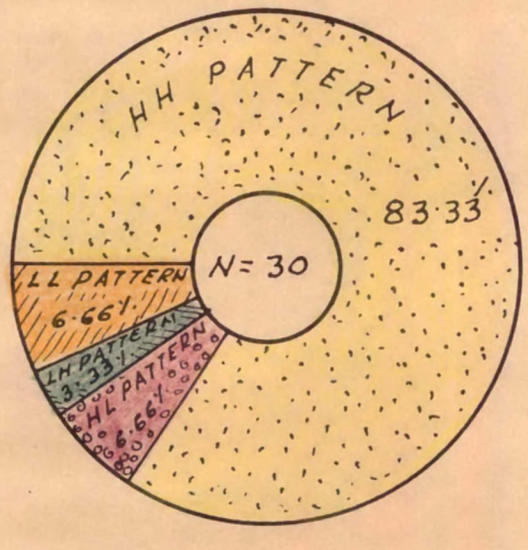
High Morale	172 - 203 scores
Average Morale	141 - 171 scores
Low Morale	109 - 140 scores.

Mean of Morale Scores is 160.35

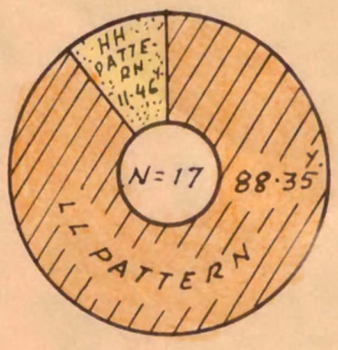
The table gives the frequency distribution of leadership behaviour patterns according to teacher morale in the sampled schools. Among the schools having high teacher morale, 83.33 per cent of the schools have principals manifesting the HH leadership behaviour pattern, and out of the schools having low teacher morale, 88.35 per cent of the schools have principals manifesting the LL leadership behaviour pattern. This suggests a clear interaction between teacher morale and leadership behaviour of the principals of the schools. Conceptually also the leadership behaviour of school principals contributes a great deal in creating teacher morale.

PERCENTAGE DISTRIBUTION OF LEADERSHIP BEHAVIOUR PATTERNS ACCORDING TO STAFF MORALE

(TABLE 4·6)

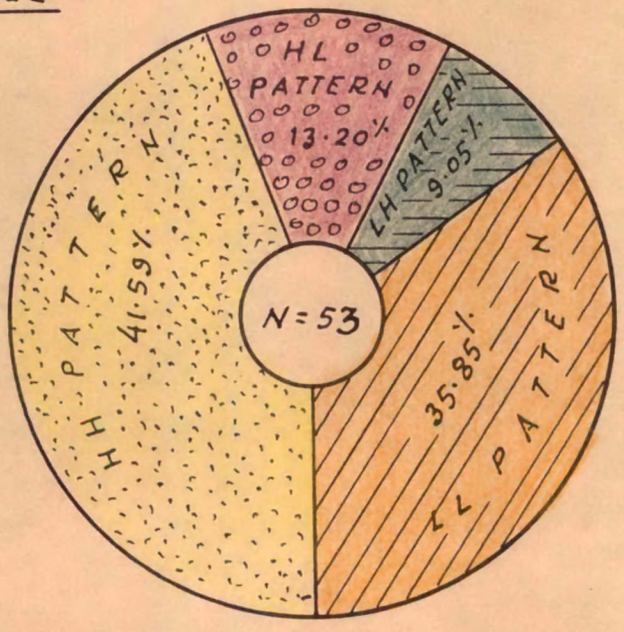


HIGH MORALE



LOW MORALE

(HL PATTERN = 0·00%)
(LH PATTERN = 0·00%)



AVERAGE MORALE

Therefore, the hypothesis that the teachers of the schools having principals manifesting the HH Pattern of leadership behaviour tend to have high morale, and the teachers of the schools having principals manifesting the LL Pattern of leadership behaviour tend to have low morale is accepted.

Hypothesis - V

It seens to examine the relationship between each of the two dimensions of leadership behaviour and teachers' morale.

Table 4.7 given below is developed to this end.

TABLE -4.7 : Morale and Initiating Structure

(A)

Morale	Initiating Structure N	M	SD
1 High morale	30	46.367	5.660
2 Average Morale	53	39.943	7.196
3 Low Morale	17	29.353	8.881

(B)

Variables @	t-values	P-Values
1 : 2	4.204	0.01**
2 : 3	4.982	0.01**
1 : 3	8.032	0.01**

@ Variables : 1. High Morale, 2. Average Morale
3. Low Morale

The Table 4.7 shows the mean scores of "Initating Structure" of leadership behaviour of the school principals of the schools having high, average and low teacher morale. On the 'Initiating Structure', the schools having high teacher morale, principals have 46.36 as the mean score, the schools having low teacher morale, principals have 29.35 as mean score, and schools having average teacher morale, principals have 39.94 as the mean score. All these mean scores are significant. It means that higher is the "Initiating Structure" higher is the teacher morale.

Therefore, the first part of the hypothesis that higher the "Initiating Structure", the higher is the morale is accepted.

Table 4.8 is prepared to examine the relationship between 'Consideration' dimension of leadership behaviour and teacher morale.

TABLE -4.8 : Relation between Consideration and Teacher Morale

(A)

Morale	Consideration N	M	SD
1 High Morale	30	46.467	5.952
2 Average Morale	53	38.321	8.519
3 Low Morale	17	28.341	9.341

Table 4.8 contd..

(B)

Variables @	t-values	P-Values
1 : 2	4.631	0.001**
2 : 3	4.077	0.01**
1 : 3	8.104	0.01**

@Variables 1,2,3 indicate High, Average and Low Morale respectively.

The Table 4.8 gives an idea of the functioning of the "Consideration" dimension of leadership behaviour of the principal according to teacher morale. On this dimension of leadership the schools having high teacher morale have 46.46 as mean score, schools having average teacher morale have 38.32 mean score and the schools having low morale have 28.34 mean score. All the mean scores are significant at 0.01 level. This suggests the higher the "Consideration", the higher is the teacher morale.

Therefore, the hypothesis that higher is the Consideration higher is the teacher morale, is also accepted.

The hypothesis also enjoins that other leadership behaviour patterns, particularly the LL pattern, are also related significantly. Table 4.9 has been developed to examine this fact.

TABLE - 4.9 : Leadership Behaviour Pattern and Teacher Morale

(A)

LBP		Morale N	M	SD
1	HH	49	168.83	18.111
2	LH	6	158.33	16.217
3	LL	36	145.55	15.684
4	HL	9	162.44	8.888

(B)

Variables@	t-values	P-values
1 : 2	1.34	N.S.
2 : 3	1.63	N.S.
3 : 4	4.22	0.01**
1 : 3	5.88	0.01**
1 : 4	1.64	N.S.
2 : 4	0.57	N.S.

@ Variables, 1,2,3,4 indicate the HH,LH,LL,HL leadership Behaviour Patterns respectively.

Table 4.9 gives the mean scores of teacher morale according to various leadership behaviour patterns. The schools are categorized as shown earlier, according to four leadership behaviour patterns. The schools having principals manifesting the HH leadership behaviour patterns have 168.83 as mean score on teacher morale, and the schools having principals manifesting the LL leadership behaviour patterns have 145.55 as mean score on morale which is the lowest. Both are

significant at 0.01 level. This means that taking into consideration both the high "initiation" and high "consideration", it shows a positive relationship with teacher morale. The relation between the mean scores on teacher morale with HH and HL leadership behaviour patterns shows significance at 0.01 level.

But the mean scores of teacher morale according to the LH and LL behaviour do not show significance. Therefore, in general, the schools having the HH and the LL leadership behaviour patterns definitely show interactions with teacher morale.

Therefore, the hypothesis that the relation between the HH and LL Patterns of leadership behaviour of the principal and teacher morale will tend to be significant. The Hypothesis is accepted.

Moreover, there is positive high correlation between teacher morale and "Initiating Structure" (r = 0.632), and teacher morale and Consideration' (r = .631). (Please see correlation matrix). Thefefere, the Hypothesis that Morale scores will correlate positively with both leadership behaviour dimensions "Initiating Structure" and "Consideration" stands.

Moving from high morale schools to low morale schools, the percentage of principals manifesting the HH Pattern of leadership behaviour goes on decreasing and the percentage of principals manifesting the LL Pattern of leadership behaviour

goes on increasing. Both the dimensionsa of leadership behaviour of school principals are very significantly related with teacher morale. Moving from high morale schools to low morale schools, the mean scores on both the dimensions go on decreasing. Further, the regression equation shows that "Initiating Structure" changes to the extent of .289 units for the variable teacher morale and "Consideration" changes to the extent of .323 units for the variable teacher morale.

All the above findings show strong relationship between teacher morale and each of the dimensions of leadership behaviour namely "Initiating Structure" and "Consideration", Various other researches support this finding. Patel (1974) found significant relationship among leadership, organizational climate, and teacher morale. Gross and Harriott (1965) found that the schools having principals with high EPL (Executive Professional Leadership) have teachers with high morale, high level of teaching, and have good pupil achievement. Similar to the finding of the present investigation, Powers (1973) found there was higher correlation in relationships involving "Morale" and "Consideration" than in relationships between "Initiating Structure" and "Morale". Dempsey (1973) also found that the pattern of effective leadership behaviour of elementary school principals was followed by (i) the improved instructional programme, (ii) the feelings of security among teachers, and (iii) improved students morale; and ineffective leader behaviour was associated with (i) low teacher morale,

(ii) poor discipline in the school, (iii) deterioration in instructional programme and (iv) the resentment from teachers towards the principals.

In the school, there is a principal, as well as the teachers, students, office staff and members of the Managing Committee. The school is an organization and there are definite work groups of teachers, clerical staff, peons, the principal and the supervisors. They are all assigned with their duties specifically and generally in view of the goal achievement which is the improvement in the achievements of the school through teaching-learning process and through other curricular activities. The principal will be pleased if these work groups get along well together as individuals and seem to enjoy being members of the institution. But it should be noted that they were not recruited on the criterion of getting along well together. On the contrary, as a matter of fact, they are chosen in terms of professional competencies pertinent to the task of the institution. Halpin (166, p.33) says "high group "Morale" is a desirable by-product and administrators will naturally seek to establish good morale among group members but it is not the primary task of the organization". To say in other words "group maintenance" is not the only criterion of leadership behaviours, it should be coupled with "group achievement". They should always go hand in hand. To say still in other words, "Initiation Structure" and "Consideration" should be balanced at a desirably high level for the principal to be

really effective, a task, which sometimes becomes extremely difficult. Halpin (1966, pp.33-34) observes : "Two points in particular should be made about the concept of morale. First, whatever, it is, it is not a unidimensional concept. It has more than a single component, and each component can be defined best only in respect to the operations by which it is measured. High morale in respect to one component does not guarantee high morale in respect to another. Secondly, there is no necessary relationship between high morale and high productivity. An increase in morale may or may not be accompanied by an increase in productivity, and even where both raise together it is extremely difficult to establish a causal relationship. Does higher productivity, for example, increase morale, or is it improved morale that makes higher productivity possible?" This is yet to be confirmed through further research.

4.5 Patterns of Leadership Behaviour and Pupil Motivation towards School

It may be recalled that pupil motivation has been selected as a variable in relation to patterns of leadership behaviour of school principals. The assumption made in this regard that in schools having principals with desirable patterns of leadership behaviour, pupil motivation towards school will be high. Thus, pupil motivation towards school is assumed to be a function of leadership of school principals.

The following hypothesis has been formulated to examine this issue.

> "The students of the high schools having principals manifesting the HH leadership behaviour pattern tend to have high motivation towards school, and the students of high schools having principals manifesting the LL leadership behaviour pattern tend to have low motivation towards school" (Hypothesis VI)

Another variable selected for study in relation to leadership behaviour is pupil motivation. To collect data on it, the JTM Scale was used. The process of computing score on motivation has already been described in the previous chapter. In the present study, motivation scores have been classified as High, with a range of 88-106, Average, with a range of 70-87, and Low, with a range of 51-69. The Table 4.10 given below presents the relationship between leadership behaviour and morale category.

TABLE -4.10 : Percentage Distribution of Leadership Behaviour Patterns according to the Motivation of Students Towards the Schools.

(Figures in the bracket indicate percentages)

Motivation / LB.		HH	HL	LH	LL	Total
High	58	27 (46.64)	6 (10.36)	3 (5.10)	22 (38.93)	58
Average	37	21 (56.81)	3 (8.10)	1 (2.70)	12 (32.43)	37
Low	5	1 (20.00)	0 (0.00)	2 (40.00)	2 (40.00)	5
Total -	100	49	9	6	36	100

N = 100

	Scores
High Motivation	88 - 106
Average Motivation	70 - 87
Low Motivation	51 - 69

Mean of Motivation Scores : 88.510

Tables 4.11 and 4.12 indicate, the relationship between the 'Initiating Structure' and 'Consideration' dimensions of leadership behaviour on one hand and the motivation categories on the other. Table 4.13 presents relationship between each of the four patterns of leadership behaviour and motivation.

TABLE - 4.11 : Motivation and Initiating Structure

(A)

Motivation	Initiating Structure	N	M	SD
1	High	58	39.897	10.073
2	Average	37	40.784	7.580
3	Low	5	36.800	5.020

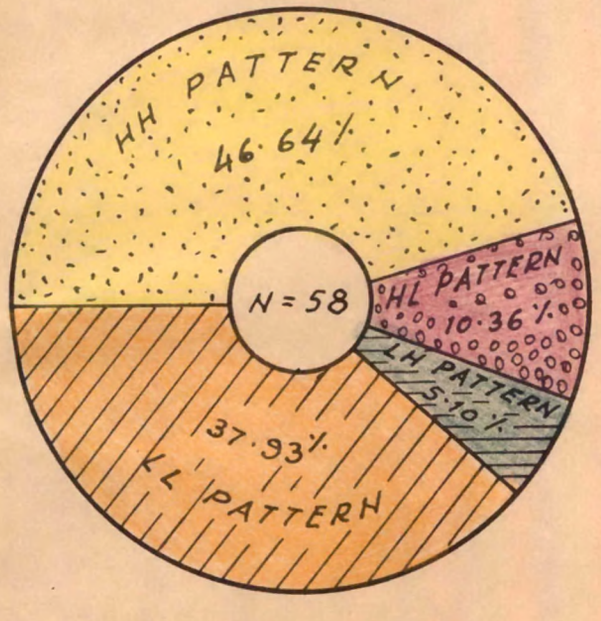
(B)

Variables@	t-values	p-values
1 : 2	0.459	N.S.
2 : 3	1.135	N.S.
1 : 3	0.676	N.S.

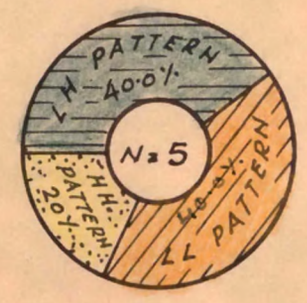
@ Variables 1,2,3, indicate High, Average and Low Motivation respectively.

PERCENTAGE DISTRIBUTION OF LEADERSHIP BEHAVIOUR PATTERNS ACCORDING TO THE MOTIVATION OF PUPILS TOWARDS SCHOOL

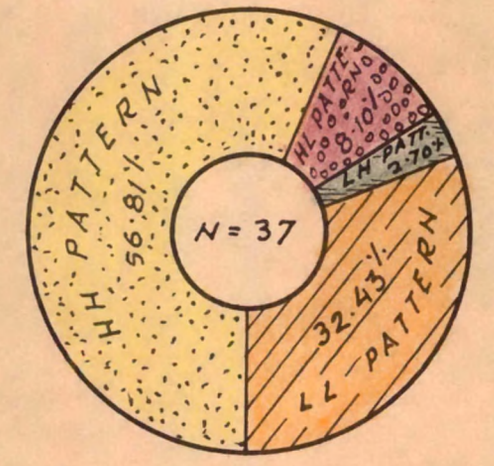
(TABLE 4.10)



HIGH MOTIVATION



LOW MOTIVATION
(HL PATTERN = 0.00%)



AVERAGE MOTIVATION

TABLE - 4.12 : Motivation and Consideration

(A)

Motivation	Consideration N	M	SD
1 High	58	39.103	11.019
2 Average	37	39.189	8.906
3 Low	5	38.000	9.138

(B)

Variables@	t-values	p-values
1 : 2	0.040	N.S.
2 : 3	0.295	N.S.
1 : 3	0.217	N.S.

@ Variables 1,2,3 indicates High, Average and Low Motivation respectively.

TABLE - 4.13: Leadership Behaviour Pattern and Motivation

(A)

LBP / Motivation:	N	M	SD
1 HH	49	93.89	10.817
2 LH	06	84.50	14.318
3 LL	36	88.47	10.296
4 HL	9	87.22	6.782

(B)

Variables @	t-values	p-values
1: 2	1.95	0.10
2 : 3	0.65	N.S.
3 : 4	0.23	N.S.
1 : 3	2.41	0.02
1 : 4	2.04	0.05*
1 : 4	0.43	N.S.

@ Variables 1,2,3,4, indicates HH, LH, LL, and HL Leadership Behaviour Patterns.

In the above tables, an attempt is made to study the leadership behaviour according to motivation of pupils towards the schools. The distribution of the schools do not give any meaningful relationship. Pupils' motivation towards the school is the result of many variables, like staff morale, organizational climate, the norms of the school, and teacher behaviour. Therefore, this relationship cannot be established as the intervening variables have strong influence on the motivation of pupils.

The Table 4.10 gives frequency distribution and Tables 4.11 and 4.12 give mean scores and significant values. Table 4.12 gives the mean scores of "Consideration" according to motivation which also does not show any significant difference of means. Table 4.13 reflects the same study from different angle. Here the schools are classified according to leadership behaviour patterns and the mean scores of pupils' motivation. The HH pattern of leadership behaviour and the LL pattern of leadership behaviour show significance of difference at 0.02 level. Similarly, motivation of pupils in the HH and the HL behaviour patterns of school principals show significant difference at 0.05 level. In the HH Behaviour pattern motivation is high, in the LL behaviour pattern motivation of pupils is slightly low. This shows that motivation has some relationship with leadership behaviour of principals. Perhaps a study with a larger sample from all over Gujarat will give definite finding.

Therefore, the hypothesis that the students of the schools having principals manifesting the HH leadership behaviour pattern tend to manifest high motivation and the students of the schools having principals with the LL leadership behaviour pattern manifest low motivation towards their schools is partially accepted with a suggestion that it may be further examined using a larger sample from all over Gujarat.

It is seen from the above findings that statistically no relationship exists between academic motivation of students and leadership behaviour of school principals. The principals with effective leadership behaviour have students with average motivation and the principals with ineffective leadership behaviour have poorly motivated students. Here, it should be noted that the students are not in the schools for all the twentyfour hours. Their family background and peer-group play a very significant role in boosting up or deteriorating their motivation. But so far as academic motivation is concerned, the school does play a significant role. Among the variables affecting motivation there are climate , morale, school norms, peer group influence, and teacher behaviour of the principal, teacher morale, school climate, students morale and discipline and the affection and warmth that they receive from their classmates and school friends do contribute very significantly to their academic achievement. Students dislike the teachers and they leave the school; teachers come with poor preparation

and they leave the school (NEA, 1961). Poor motivation may be due to teachers who themselves are not well motivated, who blame students, who do not want to work hard, who are found to be absent from the school many times, who are uncooperative and feel highly disengaged, who lack in initiative and who are always laging behind the scheduled work (Johnson, 1940). In one of the NEA studies, it was found that students leave the school because they are disliked by the classmates. It is such a state of affairs which stirs as well as lends an edge to the students' 'Navnirman' movement and the schools will be no more one day. If precautions are not taken, it will not be possible for the society to endure the 'future shock'. All these factors are within the control of the school. A beginning will have to be made by improving the leadership behaviour of the school principal to break the vicious circle. Effective leadership behaviour of the principal begets good relationship between them and teachers. This good human relationship contributes to the development of high teacher morale and healthy and inspiring climate of the school. In such climate, teachers will also receive high motivation. This high motivation and high morale of teachers will percolate down to the students and the interaction among these factors ultimately lead to high achievement. But the things are not so easy and simple. Nothing can be done overnight. It requires persistant and consistant efforts on the part of those who are involved in the process of education of the future generation.

Leadership training programme, group life, and motivation boosting programmes will have to be launched upon with the cooperation of and in collaboration with organizations like Department of Extension Services, State Institute of Education, etc. Big school complexes will have to take the initiative.

For the present study, it, could be concluded that the 'Initiating Structure' and 'Consideration' taken separately do not show any significant relationship with academic motivation of pupils, whereas, if the schools are classified according to 'Initiation Structure' and 'Consideration' taken together, they show some significant positive relationship with pupils motivation, i.e. the HH behaviour of school principals show a high motivation score (93.84) and the LL Behaviour of school principals show slightly a low motivation score (87.22) which is at significant level.

The hypothesis, therefore, is partly accepted with a suggestion that further research should be undertaken which could throw more light on it.

4.6 Patterns of Leadership Behaviour and School Innovativeness

A good school is one which is innovative - it tries to break through traditionalism, routine programme, mechanical teaching and tight and stereotyped attitude. The Kothari Commission (1964-66) had laid stress (para 9.02) on not only continually

deepening of the school curricula but also on the continual improvement of teaching methods and evaluation inclusive of guidance. Schools should be encouraged to adopt techniques of revitalizing Classroom teaching. Various ways and means have been suggested such as adoption of dynamic methods of teaching activity-centred school curriculum, comprehensive and continuous evaluation of students in terms of desired behavioural changes, etc. It is such approaches and programmes which make schools innovative. Two recent studies by Buch (1972) and Bhagia (1973) relating to adoption and diffusion of innovations in secondary schools of Gujarat have lime-lighted the role of school principals. They have shown that leadership in school has great relevance in making schools innovative.

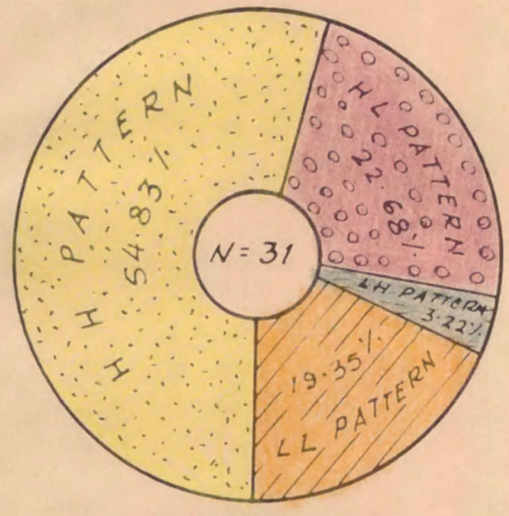
In the present study, school innovativeness is studied as a function of leadership behaviour of school principals. In this connection, the following hypothesis has been formulated.

> "The 'Initiating Structure' of leadership behaviour of school principals bears a significant relationship with the innovativeness of the school" (Hypothesis VII)

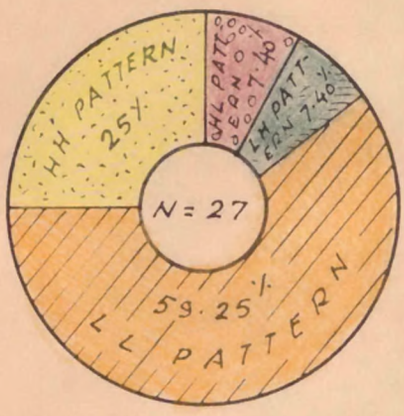
As stated in the previous chapter, to locate a school on innovativeness 'The Innovativeness Scale' developed by Ashma Doctor (1973) was used in the study. It is a ten point scale. With the help of this tool, the sampled schools were

PERCENTAGE DISTRIBUTION OF LEADERSHIP BEHAVIOUR PATTERNS ACCORDING TO THE INNOVATIVENESS OF HIGH SCHOOLS

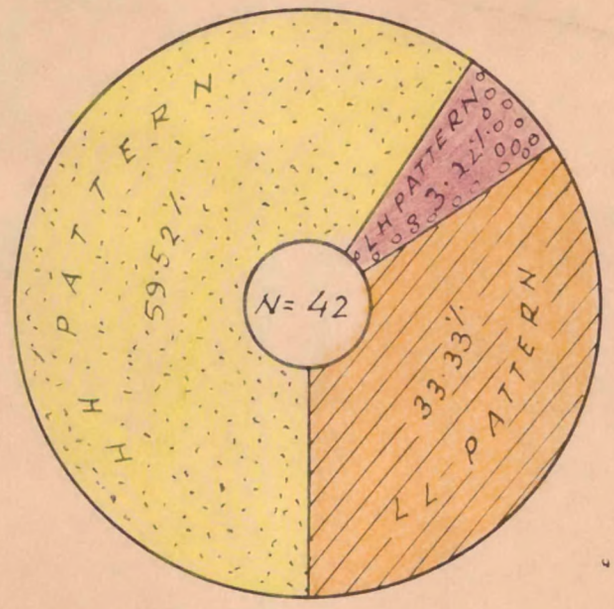
(TABLE - 4·14)



HIGH INNOVATIVENESS OF SCHOOLS



LOW INNOVATIVENESS OF SCHOOLS



AVERAGE INNOVATIVENESS OF SCHOOLS

(HL PATTERN = 0·00%)

classified as High (7,8,9,10 scale points), Average (4,5,6 scale points) and Low (1,2,3 scale points).

The Tables 4.14, 4.15 and 4.16 given below and on the next page seek to delineate the relationship between leadership behaviour on one hand and school innovativeness on the other.

TABLE - 4.14 : Percentage Distribution of Leadership Behaviour Patterns According to the Innovativeness of the Schools

(Figures in brackets indicate percentages.

Innovativeness.	L.B.	HH	HL	LH	LL	Total
High	31	17 (54.83)	7 (22.58)	1 (3.22)	6 (19.35)	31
Average	42	25 (59.52)	0 (0.00)	3 (7.14)	14 (33.33)	42
Low	27	7 (25.92)	2 (7.40)	2 (7.40)	16 (59.25)	27
Total:	100	49	9	6	36	100

N= 100 schools

TABLE - 4.15 : Innovativeness and Initiating Structure

(A) Innovativeness categories. / Initiating structure.	N	M	SD
1. High	31	42.742	8.563
2 Average	42	39.762	8.051
3 Low	27	37.481	10.984

Table 4.15 contd..

(B)

Variables @	t-values	p-values
1 : 2	1.522	N.S.
2 : 3	1.028	N.S.
1 : 3	2.213	).05

@ Variables 1,2,3, indicate High, Average, and Low Innovativeness respectively.

TABLE -4.16 : Innovativeness and Consideration

(A)

Innovativeness category. / Consideration.	N	M	SD
1. High	31	39.742	10.253
2. Average	42	39.357	8.985
3. Low	27	37.889	11.233

(B)

Variable @	t-values	p-values
1 : 2	0.170	N.S.
2 : 3	0.600	N.S.
1 : 3	0.657	N.S.

@ Variables 1,2,3, indicates High, Average and Low Innovativeness respectively.

In the above tables, an attempt is made to study leadership behaviour and 'innovativeness' of the sampled schools. The Table 4.14 shows that of the total schools having high innovativeness, 54.83 show the HH leadership behaviour pattern and 22.58 show the HL leadership behaviour patterns. This means that most of the schools of Panchamahals having high innovativeness have the HH and the HL leadership behaviour patterns whereas among the schools having low innovativeness, most of the schools have the LH and the LL leadership behaviour patterns. Totally 66.65 (7.40 and 59.25) per cent of schools having the LH and the LL patterns of leadership behaviour show low innovativeness.

Table 4.15 shows the means of "Initiating Structure" according to innovativeness. The schools having high innovativeness show 42.74 mean score on "Initiating Structure" and those having low innovativeness show 37.48 mean score on "Initiating Structure". Both are significant at 0.05 level. This suggests that 'Initiating Structure' has positive interaction with innovativeness of the school.

Conceptually, also, if the principal shows high "Initiation" then only the staff members will show readiness to accept and implement the change, because the principal is supposed to be an innovative leader in Gujarat.

Table 4.16 gives "Consideration" mean scores according to innovativeness of schools. There is no significant relation between the two mean scores. This means that the "Consideration' component of leadership behaviour of school principals has no definite relationship with school innovativeness.

Therefore, the hypothesis that "Initiating Structure" of leadership behaviour of school principals bears singnificant relationship with the innovativeness of the school is accepted.

From the above findings, the general conclusion that can be drawn is that effective leadership behaviour is followed by high innovativeness and ineffective leadership behaviour of the principal is followed by poor innovativeness of the school. Doctor (1973) concluded that the principal of the school plays the key-role in the acceptance of innovative practices and in making the school highly or poorly innovative. Buch (1972), Joshi (1972) and Rai (1972) also found that the role of the principal is one of the significant determining factors contributing towards the acceptance and diffusion of innovations in school.

These findings show that initiative and thrust on the part of the school principal, of course, play a very important role in accepting the new ideas. However, the cooperation from teachers and the students also play their own role in innovativeness of the school. According to Pillai (1974), the esprit

and the team spirit among the teachers and thrust behaviour set by the principal have been found to be at the top in building the climate conducive to change.

4.7 Patterns of Leadership Behaviour of School Principals and Academic Status of Schools

It may be recalled that the term ' academic status of school' was defined in terms of the percentages of the S.S.C. Examination results. Schools which have high percentage of pass at the S.S.C. Examination results are assumed to possess high academic status, and schools whose S.S.C. results are poor are conceived as having low achievement status.

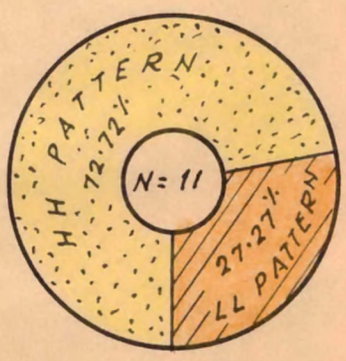
The hypothesis formulated in this regard reads as under :

> "High academic status schools tend to have principals manifesting the HH Pattern of leadership behaviour and the low academic status schools tend to have principals manifesting the LL pattern of leadership behaviour". (Hypothesis VIII)

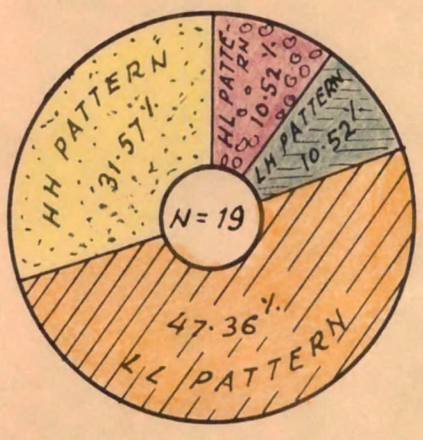
Tables 4.17, 4.18 and 4.19 classify and present data which lend themselves to interpretation as to whether any significant relationship obtains between patterns of leadership behaviour of school principals on one hand and achievement status of the sampled schools on the other.

PERCENTAGE DISTRIBUTION OF LEADERSHIP BEHAVIOUR PATTERNS ACCORDING TO ACADEMIC STATUS OF SCHOOLS

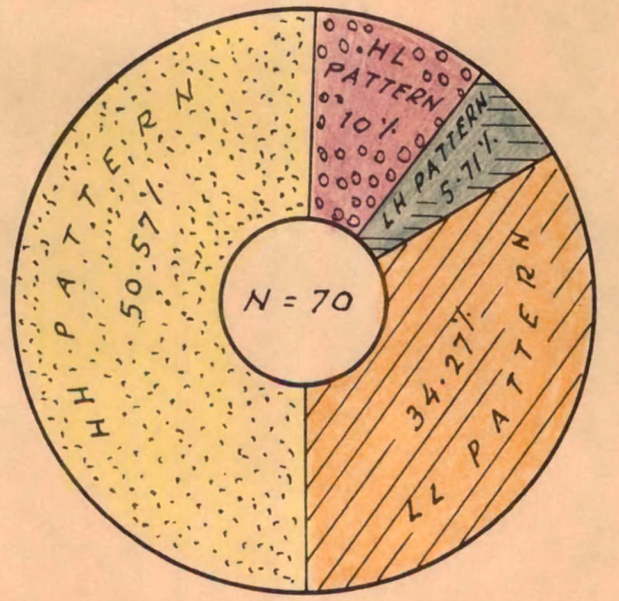
(TABLE 4·17)



HIGH ACADEMIC STATUS
(HL PATTERN = 0·00%)
(LH PATTERN = 0·00%)



LOW ACADEMIC STATUS



AVERAGE ACADEMIC STATUS

TABLE - 4.17 : Academic Status of the School and Leadership Behaviour

(Figures in the brackets indicate percentages).

A.S. /L.B.		HH	HL	LH	LL	Total
High	11	8 (72.72)	0 (0.00)	0 (0.00)	3 (27.27)	11
Average	70	35 (50.00)	7 (10.00)	4 (5.71)	24 (34.27)	70
Low	19	6 (21.57)	2 (10.52)	2 (10.52)	9 (47.36)	19
Total:	100	49	9	6	36	100

Percentage

N = 100 schools

A.S. = On the basis of S.S.C. Results.

High 67 - 100 S.S.C.results

Average 34 - 66 S.S.C.results

Low below 33 S.S.C.results

Mean = 48.08

TABLE - 4.18 : Academic Status and Initiating Structure

(A)

Academic Status.		N	M	SD
1	Low	19	39.368	7.096
2	Average	70	40.300	9.504
3	High	11	39.818	9.347

Table 4.18 contd..

(B) Variables @	t-values	p.-values
1 : 2	0.398	N.S.
2 : 3	0.157	N.S.
1 : 3	0.149	N.S.

@ Variables 1,2,3, indicate Low, Average, High Academic Status respectively.

TABLE - 4.19 : Academic Status and Consideration

(A)

Academic/ Status /	Considera-tion.	N	M	SD
1	Low	19	36.632	6.309
2	Average	70	40.014	10.689
3	High	11	37.364	9.963

(B)

Variables @	t-values	p-values
1 : 2	1.315	N.S.
2 : 3	0.771	N.S.
1 : 3	0.247	N.S.

@ Variables 1,2,3, indicate Low, Average, High Academic Status respectively.

In the above tables an attempt is made to study the academic status of the sampled schools according to leadership behaviour patterns. In Panchamahals District, most of the high academic status schools fall into the HH leadership behaviour pattern, whereas among the schools having low academic status, most of them fall in the LL and the LH patterns (10.52, 47.36) (Vide - Table 4.17)

Tables 4.18 and 4.19 give means of "Initiating Structure" and "Consideration" according to academic status of the schools. These means do not show any significant difference.

Conceptually, also, academic status of the school is a product of many variables such as teaching capacity, teacher effectiveness, classroom climate etc. Therefore, only leadership behaviour may not be able to affect it.

Therefore, the hypothesis that high academic status schools tend to have principals manifesting the HH pattern of leadership behaviour, and low academic status schools tend to have principals manifesting the LL pattern of leadership behaviour is not accepted.

It has been found that moving from high academic status schools to low academic status schools, the percentage of principals manifesting the HH pattern of leadership behaviour goes on decreasing and the percentage of principals manifesting the LL pattern of leadership behaviour goes on increasing.

However, statistical relations does not exist between the academic status of a school and any of the leadership behaviour dimensions. The schools with low academic status have principals as a group receiving low mean scores below the overall mean scores on "Initiating Structure" and "Consideration", and the average academic status schools have principals as a group receiving mean scores above the overall mean scores on both the dimensions. The co-efficient of correlation between the criterion variable "Initiating Structure" and the six predictor variables, namely, schools changed by the principal as a principal, the S.S.C. Examination results, the age of the principal, experience of the principal as a principal, teacher morale and motivation of pupils towards the school came to be .70. This is highly significant beyond .01 level of probability.

This means that six predictor variables including academic status of the school when combined share 49.50 per cent of the criterion variance in "Initiating Structure". Similarly, R between criterion variable "Consideration" and these six predictor variables including academic status of the school came to be .65 which is again highly significant beyond..01 level of probability. This means these six predictor variables when combined share 41.90 per cent of criterion variance in "Consideration". Shelat (1974) found that high achieve-

ment status schools have principals manifesting the HH pattern of leadership behaviour, compared to average and low achieving schools. Moreover, high 'Initiating Structure' dimension of leadership behaviour of school principals is found to be interacting significantly with high achieving status of the schools. The reverse was the case found with low achieving schools.

From the above findings, it can be concluded that the academic status of the school and leadership behaviour of the school principals bear distant relationship. But the general trend is that effective leadership behaviour of a school principal is associated with high academic status of the school and ineffective leadership behaviour of school principal is coupled with low academic status of the schools. The school principal cannot pump in the mind of the students directly. If at all he can do something by way of improving the achievement of the school pupils, he can do through his colleagues. Moreover, the achievement of the students is determined by so many other factors ws well; and these factors may not be within the control and jurisdiction of the school. That is why it is also found in the present investigation that average academic status schools have principals as a group manifesting the Hh leadership behaviour pattern above the overall mean scores on both the dimensions - "Initiating Structure" and "Consideration" and high academic status schools have principals as a group manifesting "Initiating Structure" and "Consideration" slightly below the overall mean scores of these dimensions. Preston

CHART-XV

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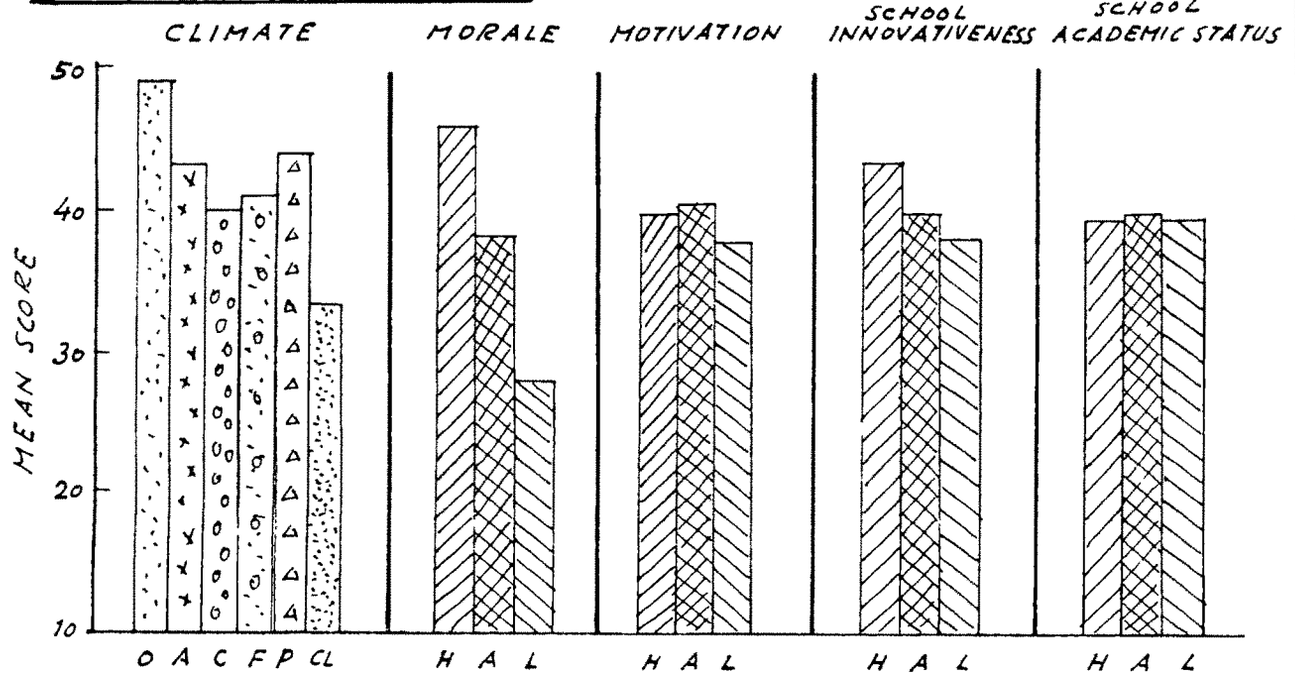
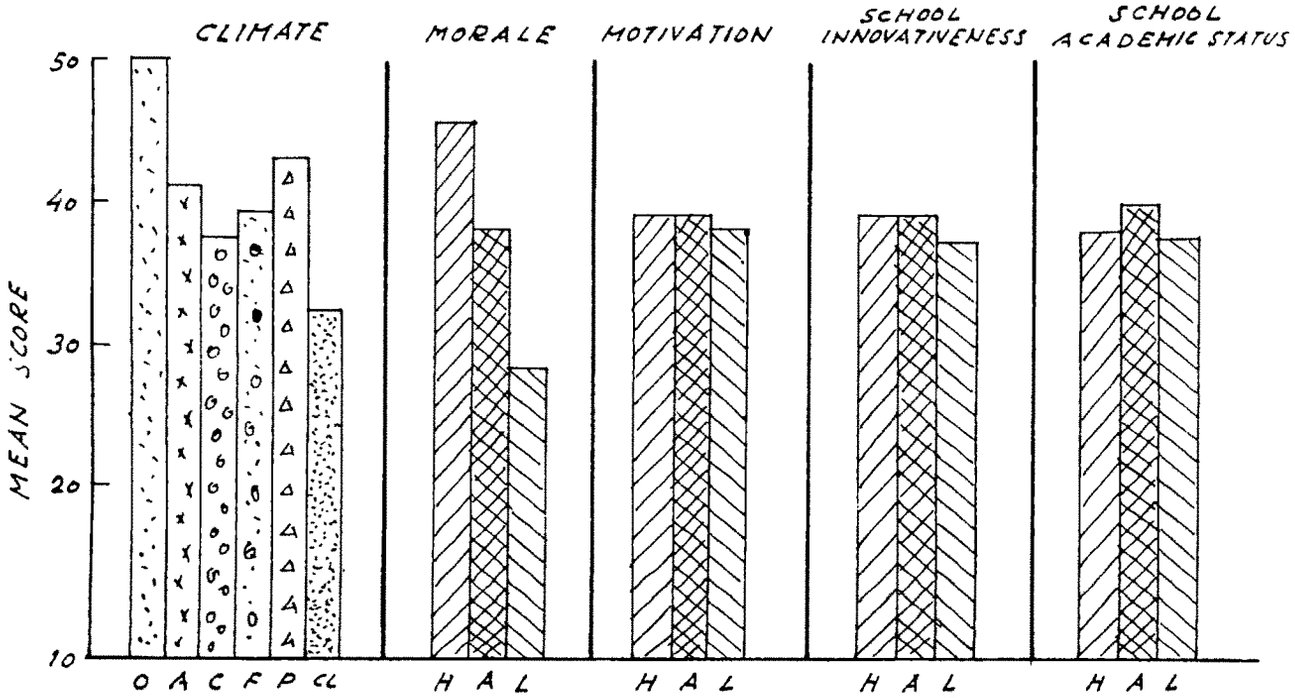
MEAN SCORE STATUS OF CLIMATE, MORALE, MOTIVATION, SCHOOL INNOVATIVENESS AND SCHOOL ACADEMIC STATUS ON 'INITIATING STRUCTURE' AND 'CONSIDERATION' DIMENSIONS OF LEADERSHIP BEHAVIOUR.





SYMBOLS:-

O - OPEN
A - AUTONOMOUS
C - CONTROLLED
F - FAMILIAR
P - PATERNAL
CL - CLOSED
H - HIGH
A - AVERAGE
L - LOW

(1973) found that 'open' group and 'traditional' group perceived their principals to be more effective on "Consideration' dimension of leader behaviour due to : (i) the nature of two dimensions; (ii) the openness of the learning climate; and (iii) the effectiveness of the principals as perceived by their subordinates. This means that there is some relationship between openness of learning climate and leadership behaviour of school principals. Dempsey (1973) has also found that effective leadership behaviour is followed by improvement of instructional programme and ineffective leadership behaviour is followed by decreased instructional effectiveness.

In brief, the principals will have to take initiative in the various types of programmes to be launched upon with a view to improving classroom instruction and students' achievement.

4.8 Patterns of the Principal's Leadership Behaviour in relation to Some Independent Variables.

After having examined nine hypotheses on leadership behaviours and some significant variables like organizational climate, teacher morale, pupil motivation toward school, school innovativeness and academic status of schools, an attempt will now be made to investigate and determine relationship of certain independent variables with leadership behaviour.

(1) Age of the Principal and Leadership Behaviour

The tables given below seek() to relate the variable of 'age' of the school principal with his leadership behaviour patterns.

TABLE - 4.20 : Percentage Distribution of Leadership Behaviour according to the Age of the Principal

(Figures in the brackets indicate percentages)

Age of the/ Principal/	L.B.	HH	HL	LH	LL	Total
Years						
30 - 35	21	8 (38.09)	2 (9.52)	0 (0.00)	11 (52.38)	21
36 - 40	24	15 (62.50)	0 (0.00)	3 (12.50)	6 (25.00)	24
41 - 45	25	13 (52.00)	0 (0.00)	3 (12.00)	9 (36.00)	25
46 - 50	18	9 (50.00)	3 (16.66)	0 (0.00)	6 (33.33)	18
51 - 55	9	2 (22.22)	4 (44.44)	0 (0.00)	3 (33.33)	9
56 - 60	1	0 (0.00)	0 (0.00)	0 (0.00)	1 (100.0)	1
Above 60	2	2 (100.0)	0 (0.00)	0 (0.00)	0 (0.00)	2
Total:	100	49	9	6	36	100

TABLE - 4.21 : Age of the Principal and Initiating Structure

(A)

Age of the Principal	/ Initiating / structure.	N	M	SD
1	(30-35)	21	35.524	10.976
2	(36-40)	24	42.333	7.051
3	(41-45)	25	39.000	9.818
4	(46-50)	18	41.833	5.216
5	(51-55)	9	44.556	8.263
6	(56-60)	1	24.000	0.00
7	(Above 60)	2	46.00	0.00

(B)

Variables @	t-values	p-values
1 : 2	2.507	0.02
1 : 5	2.207	0.05
2 : 3	1.360	N.S.
2 : 7	0.722	N.S.
3 : 4	1.114	N.S.
4.:5	1.050	N.S.
5 : 7	0.237	N.S.
1 : 3	1.133	N.S.
1 : 7	1.322	N.S.
2 : 4	0.253	N.S.
3 : 5	1.512	N.S.
4 : 7	1.103	N.S.
1 : 4	2.230	ϕ.05
2 : 5	0.770	N.S.
3 : 7	0.990	N.S.

@ Variables 1,2,3,4,5,6,7, indicate (30-35), (36-40), (41-45), (46-50), (51-55), (56-60), (Above 60), respectively.

TABLE -4.22 : Age and Consideration

(A)

Age of the/Consi- principal/ deration.	N	M	SD
1 (30-35)	21	33.952	9.88
2 (36-40)	24	44.417	6.520
3 (41-45)	25	39.080	11.004
4 (46-50)	18	37.833	9.532
5 (51-55)	9	38.889	11.285
6 (56-60)	1	31.000	0.00
7 (above 60)	2	45.000	0.00

(B)

Variable @	t-values	p-values
1 : 2	4.242	0.01
1 : 5	1.203	N.S.
2 : 3	2.054	0.05
2 : 6	0.124	N.S.
3 : 4	0.387	N.S.
4 : 5	0.255	N.S.
5 : 7	0.735	N.S.
1 : 3	1.648	N.S.
1 : 7	1.548	N.S.
2 : 4	2.659	0.02
3 : 5	0.044	N.S.
4 : 7	1.038	N.S.
1 : 4	1.243	N.S.
2 : 5	1.762	0.10
3 : 7	0.747	N.S.

@ Variables 1,2,3,4,5,6,7, indicate (30-35), (36-40), (41-45), (46-50), (51-55), (56-60), (Above 60), respectively.

According to Table 4.20, of the total 49 principals manifesting the HH leadership behaviour pattern, 36 principals are under the age group of 30 to 45, whereas of the 36 principals manifesting the LL leadership behaviour pattern, 26 principals are under the age group of 30 to 45 years. From this finding, it is difficult to show any definite relationship between the age of the principal and the leadership behaviour patterns. However, the percentage of principals manifesting the HH pattern of leadership behaviour is the highest in the agr group of (36-40), and the percentage of principals manifesting the LL leadership behaviour pattern is the highest in the age group of (30-45).

Table 4.21 shows mean scores of "Initiating Structure" according to various age groups of the principals. Here also, the mean score is highest in the age group of (36-40) years and which is significant. This shows significant relationship between "Initiating Structure" and the principals in the age group of (36-40).

Table 4.22 shows mean scores of "Consideration" dimension according to various age groups of principals. Difference between the mean scores between first age group (30-35) and the second age group (36-40) is in favour of the latter one. Therefore, it can be concluded that the principals in the age group of (36-40) manifest highest "Consideration".

In general, the principals in the age group of 36-40 appear to be manifesting the HH Pattern of leadership behaviour.

(2) Sex of the Principal and Leadership Behaviour Patterns

The second variable to be studied is the 'sex' of principals.

TABLE -4.23 : Percentage Distribution of Leadership Behaviour Patterns According to the Sex of the Principals.

(Figures in the bracket indicate percentage)

Sex of the Principal / L.B.		HH	HL	LH	LL	Total
Male	97	49 (50.5%)	9 (9.27)	6 (6.18)	33 (34.02)	97
Female	3	0 (0.00)	0 (0.00)	0 (0.00)	3 (100.0)	3
Total:	100	49	9	6	36	100

TABLE - 4.24 : Sex of the Principal and Initiating Structure

(A)

Sex of the Principal / Initiating Structure	N	M	SD
1 Male	97	40.412	8.837
2 Female	3	29.000	8.660

(B)

Variable @	t-values	p-values
1 : 2	2.204	0.05

@ Variables 1,2 indicate Male and Female sex of the principals respectively.

TABLE -4.25 : Sex of the Principals and "Consideration"

(A)

Sex of the principal /	/Consideration.	N	M	SD
1	Male	97	29.237	10.034
2	Female	3	34.000	5.196

(B)

Variable@	t-values	p-values
1: 2	0.897	N.S.

@Variables 1,2 indicate Male and Female sex of the Principals respectively.

According to Table 4.23, the principals that manifest the HH leadership behaviour pattern are males. All the female principals manifest the LL pattern. However, the number of female principals being less, no definite conclusion can be drawn.

Table 4.24 gives mean scores on 'Initiating Structure' according to the sex of the principal. The mean difference is in favour of male principals which is significant as well. This shows that a definite relationship between male principals and "Initiating Structure" exists. However, Table 4.25 does not show any significant relationship of either sex with "Consideration".

(3) Experience of the Principal and Leadership Behaviour

The third variable selected for study is 'experience' of school principals.

Tables 4.26, 4.27 and 4.28 deal with the above variable and its relationship with leadership behaviour patterns.

TABLE -4.26 : Percentage Distribution of Leadership Behaviour Patterns according to the Experience of the Principals as Principals

(Figures in the brackets indicate percentage)

Experience as a principal / L.B.		HH	HL	LH	LL	Total
Years						
1 - 5	43	17 (39.53)	1 (2.32)	2 (4.64)	23 (53.49)	43
6 - 10	46	25 (54.34)	5 (10.87)	3 (6.52)	13 (28.26)	46
11 - 15	6	5 (83.33)	0	1 (16.66)	0	6
16 - 20	3	2 (66.66)	1 (33.33)	0	0	3
21 - 25	2	0	2 (100)	0	0	2
Total:	100	49	9	6	36	100

TABLE -4.27 : Experience of the Principal and Initiating Structure

(A)

Experience (years) / Initiating structure	N	M	SD
1 (1-5)	43	38.186	9.116
2 (6-10)	46	41.087	9.053
3 (11-15)	6	39.667	8.287
4 (16-20)	3	48.333	3.786
5 (21-25)	2	46.000	0.000

Table -4.27 contd...

(H) Variables@	t-values	p-values
1 : 2	1.506	N.S.
1 : 5	1.199	N.S.
2 : 3	0.364	N.S.
3 : 4	1.681	N.S.
4 : 5	0.827	N.S.
1 : 3	0.376	N.S.
2 : 4	1.386	N.S.
3 : 5	1.025	N.S.
1 : 4	1.900	0.10
2 : 5	0.760	N.S.

@ Variables 1,2,3,4,5 indicate years of experience given under Table 4.28(B)

TABLE - 4.28 : Experience of the Principal and Consideration

(A)

Experience/Consi- (years) / deration.	N	M	SD
1 (1 - 5)	43	38.512	9.513
2 (6 - 10)	46	38.978	11.030
3 (11 - 15)	6	40.667	5.241
4 (16 - 20)	3	41.667	11.547
5 (21 - 25)	2	45.000	0.00

(B)

Variable s@	t-values	p-values
1 : 2	0.213	N.S.
1 : 5	0.954	N.S.
2 : 3	0.367	N.S.
3 : 4	0.186	N.S.
4 : 5	0.387	N.S.
1 : 3	0.540	N.S.
2 : 4	0.408	N.S.
3 : 5	1.109	N.S.
1 : 4	0.550	N.S.
2 : 5	0.764	N.S.

@ Variables 1,2,3,4,5 indicate (1-5), (6-10), (11-15), (16-20), (21-25) years of experience of the Principals as Principals respectively.

From the table 4.26, it appears that of the total 49 principals that manifest the HH leadership behaviour pattern, 17 principals are having the experience of (1- 5) years, and 25 principals are having the experience of (6-10) years, whereas of the 36 principals manifesting the LL leadership behaviour pattern, 23 principals are having (1-5) years of experience, and 13 principals are having (6-10) years of experience. This means that the majority of the principals with (1-5) years of experience manifest the LL leadership behaviour pattern, and the majority of the principals with (6-10) years of experience manifest the HH leadership behaviour pattern.

Tables 4.27 and 4.28 show mean scores on "Initiating Structure" and "Consideration" according to the experience of the principals as principals. But none of these mean scores is significant. Therefore, there is no significant relationship between experience of the principal as a principal with either of the dimensions of leadership behaviour pattern.

(4) Schools Changed by the Principal and Leadership Behaviour

Another variable selected for study is the number of schools changed by principals. Here, the focus is to find out whether there exists any relationship between a tendency on the part of principals to change schools and their leadership behaviour patterns.

Table 4.29 classifies data on this issue.

TABLE -4.29 : Percentage Distribution of Leadership Behaviour Patterns according to the Schools Changed by the Principals

(Brackets indicate percentages)

Schools changed / L.B.		HH	HL	LH	LL	Total
1 Schools	82	41 (50.00)	7 (8.54)	5 (6.09)	29 (35.38)	82
2 Schools	9	5 (55.55)	1 (11.11)	0	3 (33.33)	9
3 Schools	3	0	0	1 (33.33)	2 (66.66)	3
4 Schools	2	2 (100.0)	0	0	0	2
5 Schools	4	1 (25.00)	1 (25.00)	0	2 (50.00)	4
Total:	100	49	9	6	36	100

N = 100 principals

From the Table 4.29, it appears that of the total 100 sampled school principals 82 principals have stuck to one school and they are fairly distributed on two extremes leaving the middle positions sufficiently vacant, i.e. very few principals manifest the LH and the HL patterns of leadership behaviour. This corresponds to the overall distribution on principals over all the four categories.

One may try to get an over-view of the effects these variables have on the leadership behaviour patterns of school principals.

Moving from young age groups to old age groups, the trend is toward decreasing the LL pattern of leadership Behaviour. The percentage of principals within the age group of 36-40 and above 60 have the HH pattern of leadership behaviour. Looking at the t-values, the relation between age of the principal and "Initiating Structure" and "Consideration" is significant between 30 to 55 years of age. The principals between the age group of 51-55 shows highest "Initiating Structure" and the principals under the age group of 36-40 shows highest consideration. From these facts two observations are quite clear.

(i) With increase of maturity leadership behaviour becomes more effective; and

(ii) Principals under young age group manifest high "Consideration", while the principals under old age group manifest high "Initiating Structure".

Hale (1973) found that an increase in years of experience as an academic Dean results in a decrease in "Consideration" scores and increase in "Initiating Structure" scores. The present investigation has found that more the experience of a principal as a principal the higher he is perceived on both the dimensions of leadership behaviour, and the percentage of principals goes on increasing on 'initiating Structure' with the increase in the years of experience as a principal. Regression equation has also given the significant contribution of experience of the principal to the "Initiating Structure" and the "Initiating Structure" changes to the extent of .806 units for the variable experience of a principal as a principal.

From all these findings it can be concluded that with the increase of experience as a principal, "Initiating Structure" dimension of leadership behaviour of the principal attains higher score. This may be due to the fact that with the increase in age and experience, the principal becomes more matured professionally and becomes well versed in routines with emphasis on rules and regulations. But the "Consideration", the other dimension of leadership behaviour, has not significant relationship with the experience of the principal. In many schools due to the gap between the yough teachers and old and experienced principal, it (i.e. the gap) is found to vitiate the schools' climate and many problems creep in. With increase in age and experience, the principal should manifest matured and considerate behaviour to be really effective as a principal. He should strike a balance between "Initating Structure" and "Consideration" sufficiently at a high level.

About the sex of the leader, no definite conclusion can be drawn about the nature of the leadership behaviour, because of inadequate sample of female principals in the whole Panchamahals District. However, the relation between the "sex" of the principal and "Initiating Structure" is found to be significant at .05 level and the difference of mean scores on "Initiating Structure" is very big (11:412) and it is in favour of male principals. This shows very significant relationship between "Initating Structure" and "Male sex" of the principal. In the case of consideration no

significant relationship is found, but the mean difference is again in favour of 'male' principals. This means all the 'male' principals as a group manifest effective leadership and all 'female' ineffective. Some of the findings of Stogdill and David (1972) will throw some more light on this aspect. They found that male and female supervisors who occupied parallel positions and performed similar functions exhibited similar pattern of leader behaviour and levels of effectiveness when screened and evaluated by their immediate subordinates. This finding goes contrary to the finding of the present investigation.

Some more research needs to be done in India to find out the influence of the personal variables of the perceivers of the leader behaviour of the persons perceived. The major findings of Longstereth's (1973) study are useful in this context. Male subordinates perceived male and female principals as exercising a higher degree of "production emphasis". Subordinates perceived female principals as exercising a higher degree of "representation"; no significant difference was found in the interaction of the sex of subordinates; males perceived female principals as either "subordinate-centred" or boss-centred" and male principals as "boss-centred"; over half of the respondents had never worked under female principals; males were perceived as receiving greater opportunity to secure leadership positions, advance and exert leadership; principal's sex was not perceived as a factor in the relationships with

students and other principals; females varied regarding students' pelationship but felt sex was not a factor in relationship with other principals; and professional qualifications and experience were rated above personal qualities as criteria of principals selection.

Here it will be in the fitness of the things to cite the findings of Finnesey (1973). He found that the mean "Initiating Structure" score increased with age, years of experience and the number of school districts in which a teacher had taught, and the mean "Consideration" score showed a general but not consistent pattern of increasing with age and the number of schools districts in which a teacher had taught. The male teachers had higher mean "Initiating Structure" and "Consideration" leader behaviour scores than did the female teachers had. It was concluded from the findings of this study that while some writers have theorized a relationship between personality and leadership behaviour expectations, the linear relationship between followers' personality traits and followers' leader behaviour expectations is not strong enough to help a leader determine the leader behaviour he should manifest to be a more effective leader.

Still, however, further research work needs to be done in India in this connection. Let (i) male teachers perceive the female principals, (ii) let female teachers perceive the male principals, (iii) let female teachers perceive the female principals, and (iv) let male teachers perceive the male

principals in the context of "Initating Structure" and "Consideration". The results would be intersting as well as enlightening.

After having studied the relationship between the personal variables of school principals and their leadership behaviour patterns an attempt will now be made to study the bearing of other non-personal variables like management, urban-rural location of schools, size of schools, nature of population of school on leadership behaviour patterns.

(1) Management and Leadership Behaviour

Tables 4.30, 4.31, 4.32 and 4.33 present data to study relationship between the variable 'management' and leadership behaviour patterns.

TABLE -4.30: Percentage Distribution of Leadership Behaviour Patterns according to the Types of Management of the schools.

(Figures in the brakkets indicate percentages)

Management/L.B.		HH	HL	LH	LL	Total
Pvt. schools	92	44 (47.82)	7 (7.60)	6 (6.52)	35 (38.04)	92
Ashram schools.	8	5 (62.50)	2 (25.0)	0	1 (12.50)	8
Total:	100	49	9	6	36	100

TABLE -4.31 : Type of Management and Initiating Structure

(A)

Type of management/ /Initiating /structure	N	M	SD
1 Pvt. schools	92	39.969	8.838
2 Ashram schools	8	44.375	3.679

(B)

Variables@	t-value	p-values
1: 2	1.417	N.S.

@ Variables 1. Pvt. schools, 2. Ashram schools

TABLE -4.32: Type of Management and Consideration

(A)

Type of management/ /Consi- /deration.	N	M	SD
1 Pvt. schools	92	38.870	10.172
2 Ashram schools	8	41.500	6.887

(B)

Variables@	t-values	p-values
1 : 2	0.716	N.S.

@Variables 1. Pvt. schools, 2. Ashram schools

In Table 4.30, the principals are distributed between private schools and Ashram schools in the context of leadership behaviour patterns which are HH, LH, LL and HL. These schools are private in the sense that they are run by private manage-

ments, such as registered societies and trusts. As secondary education is made free in the Gujarat State, they are not dependent upon the income from tuition fees, but their major source of income is Government grants. These schools have been established as private institutions. But the Ashram schools were Ashram schools even before the secondary education was made free in the State. At present also they are Ashram schools. These schools are mostly situated in far remote areas inhabited by the communities of Adivasi, Bhils and Nayakas who are scheduled tribes. These schools are established specially for the upliftment of these Adivasi people. In these schools, most of the teachers and the students live in hostels on the school campus. Some of these schools have co-education and have hostel facilities for boys as well as for girls. One Asharam school in Dohad is for girls and one school in the same town is for boys. Though the schools are in urban area, the students are from the Adivasi people. In addition to the grants from the Government, they receive donations from many philanthropists . In these schools, Mahatma Gandhiji's scheme of Basic Education is followed. Agriculture, Takali and Soap manufacturing are the basic crafts. Almost all the schools have cultivable land.

Table 4.30 gives fair distribution of private schools over two leadership behaviour extremes, namely, the HH and the LL patterns leaving middle positions sufficiently vacant. Out of the 8 Ashram schools, 5 schools have principals mani-

festing the HH pattern of leadership behaviour, Distribution of schools of the first category is similar to overall distribution of all the sampled schools.

From tables 4.31 and 4.32, it appears that none of the Mean scores on either of the dimensions is significant. Therefore, it can be concluded that the relation between the types of management and the dimension of leadership behaviour is not significant.

(2) Area of the Schools and Leadership Behaviour

Tables 4.33, 4.34 and 4.35 present data on another impersonal variable of rural-urban location of schools and leadership behaviour patterns.

TABLE -4.33 : Percentage Distribution of Leadership Behaviour Patterns according to the Schools in Rural and Urban Area

(Figures in brackets indicate percentage)

Area / L.B.		HH	HL	LH	LL	Total
*Rural schools	65	31 (47.69)	3 (4.61)	2 (3.07)	29 (44.61)	65
*Urban schools	35	18 (51.42)	6 (17.14)	4 (11.42)	7 (20.00)	35
Total:	100	49	9	6	36	100

N = 100

* As per list from the office of District Education Officer, Godhra, Dist. Panchamahals)

TABLE - 4.34 : Urban Rural Character of the School and Initating Structure

(A)

Urban/ rural character./	/Initiating structure.	N	M	SD
1	Schools in Rural area	65	39.677	9.713
2	Schools in Urban area	35	40.800	7.592

(B)

Variables@	t-values	p-values
1 : 2	0.593	N.S.

@ Variables : 1, Rural Schools, 2. Urban schools.

TABLE -4.35 : Area of the School and Consideration

(A)

Area / Consideration.	N	M	SD
1 Schools in Rural Area	65	38.185	11.214
2 Schools in Urban area	35	40.743	6.866

(B)

Variables@	t-values	p-values
1 : 2	1.230	N.S.

@ Variables : 1. Rural schools, 2. Urban schools.

From Table 4.33 it appears that in rural areas the schools are fairly distributed over the HH and the LL patterns of leadership behaviour of their principals. In urban areas, out

of the total schools 51.22 per cent of the schools have principals manifesting the HH pattern and 20 per cent of the schools have principals with the LL pattern.

Tables 4.34 and 4.35 give mean scores of 'Initiating Structure and 'Consideration' respectively according to the rural and urban schools which are not significant. This shows that no significant relationship between rural and urban locations of schools and dimensions of leadership behaviour of school principals exists.

(3) Size of the School and Leadership Behaviour

Another variable is the size of the school as measured by the strength of school pupils.

TABLE -4.36 : Percentage Distribution of Leadership Behaviour Patterns according to the Size of Schools.

(Figures in brackets indicate percentages)

Size of the schools	L.B.	HH	HL	LH	LL	Total
Small schools	40	15 (37.5)	0 (0.00)	3 (7.5)	22 (55.00)	40
Big schools	60	34 (56.66)	9 (16.00)	3 (5.00)	14 (23.33)	60
Total:	100	49	9	6	36	100

N = 100

As per list of schools from the Office of District Education Officer, Godhra (Dist. Panchamahals)

TABLE -4.37 : Size of the School and Initiating Structure

(A)

Size of the schools.	/Initiating structure.	N	M	SD
1	Small schools	40	37.200	9.514
2	Big schools	60	41.983	8.179

(B)

Variables@	t-value	p-value
1 : 2	2.683	0.01

@ Variables : 1. Small schools, 2. Big schools.

TABLE -4.38 : Size of the School and Consideration

(A)

Size of the schools //	/Consideration.	N	M	SD
1	Small schools	40	37.575	11.695
2	Big schools	60	40.083	8.552

(B)

Variables@	t-value	p-value
1 : 2	1.238	N.S.

@ Variables : 1. Small schools, 2. Big schools

From Table 4.36, it appears that of the total 40 small schools the majority of them (55.00 per cent) have principals manifesting the LL pattern and of the total 60 big schools, the majority of the schools (56.66 per cent) have principals manifesting the HH pattern of leadership behaviour.

Table 4.37 gives mean scores on "Initiating Structure" in the context of small schools and big schools. The mean difference is in favour of big schools and it is significant. This means that the principals of big schools manifest higher "Initiating Structure" as compared to the principals of the small schools.

Table 4.38 does not give significant mean scores on 'Consideration' dimension of leadership behaviour in the context of small schools and big schools. As these mean scores are not significant, the relation between 'consideration' with any of the types of schools is not significant.

(4) Nature of Population of Schools and Leadership Behaviour

The fourth variable studied is nature of population of schools. It is examined in relation to leadership behaviour patterns. Tables 4.39, 4.40 and 4.41 are pertinent in this respect.

TABLE -4.39 : Percentage Distribution of Leadership Behaviour Patterns according to the Nature of School Population

(Figures in brackets indicate percentage)

Type of the/L.B. schools/		HH	HL	LH	LL	Total
Boys' schools	13	13 (100.0)	0	0	0	13
Girls' schools	8	4 (50.00)	1 (12.50)	0	3 (37.50)	8
Mixed schools	79	32 (40.50)	8 (10.11)	6 (7.59)	33 (41.79)	79
Total:	100	49	9	6	36	100

TABLE - 4.40 : Nature of Population and Initiating Structure

(A)

Type of schools.	/Initiating /structure.	N	M	SD
1	Boys' schools	13	42.077	3.278
2	Girls' schools	8	38.750	9.633
3	Co-educational schools	79	39.873	9.594

(B)

Variables@	t-values	p-values
1 : 2	1.157	N.S.
2 : 3	0.316	N.S.
1 : 3	0.817	N.S.

@ Variables as shown below in Table 4.41 (B)

TABLE -4.41 : Nature of Population of School and Consideration

(A)

Types of the schools	/Consi- /deration.	N	M	SD
1	Boys' schools	13	39.615	6.690
2	Girls' schools	8	41.250	8.242
3	Coeducational schools	79	38.772	10.584

(B)

Variable s@	t-values	p-values
1 : 2	0.498	N.S.
2 : 3	0.641	N.S.
1 : 3	0.278	N.S.

@ Variables : 1. Boy's schools, 2. Girls' schools,
3. Co-educational schools.

Table 4.39 shows that the principals of all the boys' schools manifest the HH pattern of leadership behaviour, whreas 50 per cent of the girls' schools and 40.50 per cent of coeducational schools have principals manifesting the HH patterns of leadership behaviour. The percentage of schools having principals manifesting the LL pattern of leadership is higher among the coeducational schools.

Tables 4.40 and 4.41 give mean scores on "Initiating Structure" and "Consideration" respectively according to the nature of population of the school. None of the mean scores is significant. Therefore, the relationship between each of the dimensions of leadership behaviour of the school principals and the types of the school is not significant.

(5) S.E.S. of Schools and Leadership Behaviour of Principals

The last selected non-personal variable is of the S.E.S. of schools. It is also studied in relation to different patterns of leadership behaviour of school principals. Table 4.42, 4.43 and 4.44 follow the same pattern of data presentation and seek to elucidate the same types of relationships.

TABLE -4.42 : Percentage Distribution of Leadership Behaviour Patterns according to the Socio-Economic Status of the Schools.

(Figures in bracket indicate percentages)

S.E.S. /	L.B.	HH	HL	LH	LL	Total
Advanced	68	33 (48.52)	7 (10.29)	4 (5.88)	24 (35.29)	68
Backward	22	10 (45.45)	2 (9.09)	0	10 (45.45)	22
Adivasi	10	6 (60.00)	0	2 (20.00)	2 (20.00)	10
Total	100	49	9	6	36	100

N = 100 schools

S.E.S.: As per list of schools from D.E.O., Godhra. Panchmahals.

TABLE -4.43 : Socio-Economic Status of the Schools and Initating Structure

(A)

SES /Initiating Structure	N	M	SD
1 Advanced schools	68	39.824	9.256
2 Backward schools	22	41.545	8.052
3 Adivasi schools	10	38.500	9.710

(B)

Variables @	t-values	p-values
1 : 2	0.751	N.S.
2 : 3	0.930	N.S.
1 : 3	0.420	N.S.

@ Variables : 1. Advanced Schools
2. Backward Schools
3. Adivasi schools.

TABLE -4.44 : Socio-Economic Status of the Schools and Consideration

(A)

SES /Consideration @	N	M	SD
1 Advanced Schools	68	37.868	9.905
2 Backward schools	22	41.545	9.679
3 Adivasi schools	10	41.900	10.246

(B)

Variables @	t-values	p-values
1 : 2	1.522	N.S.
2 : 3	0.094	N.S.
1 : 3	1.197	N.S.

@ Variables : As shown in Table 4.43 (B)

Table 4.42 shows fair distribution of advanced schools and backward schools over the HH and the LL pattern of leadership behaviour leaving the LH and the HL Patterns sifficiently vacant. Out of the total Adivasi schools, 60 per cent of them have principals manifesting the HH pattern of leadership behaviour.

Tables 4.43 and 4.44 give mean scores on "Initiating Structure" and "Consideration" respectively in the context of the socio-economic status of the schools. None of the mean scores is significant. Therefore, the relationship between each of these two dimensions of leadership behaviour and categories of the school according to socio-economic status is not significant.

INTERACTION OF SOME INDEPENDENT VARIABLES WITH 'INITIATING STRUCTURE' AND 'CONSIDERATION' DIMENSIONS OF LEADERSHIP BEHAVIOUR.

I - INITIATING STRUCTURE

	MEAN	t-VALUE	P-VALUE (SIGNIFICANT)
MALE	40·412	2·204	0·05
FEMALE	29·000		
EXPERIENCE (16-20 YRS)	48·333	0·827	NOT SIGNIFICANT
PRIVATE SCHOOLS	38·969	0·716	NOT SIGNIFICANT
ASHRAM SCHOOLS	44 375		
RURAL SCHOOLS	39·677	1·230	NOT SIGNIFICANT
URBAN SCHOOLS	40·800		
BIG SCHOOLS	41·983	2·683	0·01
SMALL SCHOOLS	37·200		
BOYS' SCHOOLS	42·077	1·157	NOT SIGNIFICANT
GIRLS' SCHOOLS	38·750	0·316	
MIXED SCHOOLS	39·873	0·817	
ADVANCED S.E.S.	39·824	1·522	NOT SIGNIFICANT
BACKWARD S.E.S.	41·545	0·094	
ADIVASI AREAS.	38·500	1·197	

II - CONSIDERATION

	MEAN	t-VALUE	P-VALUE (SIGNIFICANT)
MALE	29·237	0·897	NOT SIGNIFICANT
FEMALE	34·00		
EXPERIENCE (16-20YRS)	41·667	0·387	NOT SIGNIFICANT
PRIVATE SCHOOLS	38·870	0·716	NOT SIGNIFICANT
ASHRAM SCHOOLS	41·500		
RURAL SCHOOLS	38·185	1·230	NOT SIGNIFICANT
URBAN SCHOOLS	40·743		
BIG SCHOOLS	40·083	1·238	NOT SIGNIFICANT
SMALL SCHOOLS	37·575		
BOYS' SCHOOLS	39·615	0·498	NOT SIGNIFICANT
GIRLS' SCHOOLS	41·250	0·641	
MIXED SCHOOLS	38·772	0·278	
ADVANCED S.E.S	37·868	1·522	NOT SIGNIFICANT
BACKWARD S.E.S.	41·545	0·094	
ADIVASI AREAS	41·900	1·197	

CHART-XVI

Discussion of the Results

(1) Management and Leadership Behaviour Pattern

Majority of the Ashram schools have principals manifesting the HH pattern of leadership behaviour. These schools have principals who as a group possess mean scores on both the dimensions higher than the overall mean scores of these dimensions. The principals of private schools as a group are very negligibly lower than mean scores of "Initiation Structure" and "Consideration". But no statistical significant relationship seems to exist between the type of the management and any of the two dimensions of leadership behaviour. In Ashram schools, leadership behaviour will have to be effective otherwise these schools will have to be closed down. On one side the principals have to boost up the morale and motivation of students as well as the teachers by manifesting high "Consideration". On the other dimension also they have to be at high level to pilot the instructional programme on proper lines and in the interest of the children of the Adivasi people. If the principal's leadership behaviour is not effective, students as well as the teachers will not stay longer in the schools. Almost all these schools are residential schools. Principals also stay in the same campus with the boys and girls in the Ashrams. In some schools, teachers also stay with them. On one side, the principal has to maintain human relationship and on the other side he has to be strict in maintaining order and discipline.

(2) The Nature of Area (Rural and Urban) and Leadership Behaviour

In rural areas, principals are clustered at two extremes leaving the middle position sufficiently vacant. In urban areas about half the schools have principals with the HH pattern. Rest of them are distributed among other three patterns. But no significant relationship exists between the nature of the area and the dimensions of leadership behaviour of school principals. The principals of the rural schools are just below the average on "Initiating Structure" and "Consideration" whereas the urban schools have principals just above the average on both the dimensions. In urban areas the principals have to be effective, otherwise their existence as a principal will be in jeopardy.

(3) Size of the School and Leadership Behaviour of the Principal.

The HH pattern of leadership behaviour is found more in 'big' schools and the LL pattern of leadership behaviour is found more in 'small' schools. The relation between the size of the school and 'Initiating Structure' is significant, but it is not that significant in the case of "Consideration". The principals of 'big' schools as a group receive mean scores higher than the overall mean scores on both the dimensions. Shelat (1974) found that compared to large schools, a greater number of small schools have principals manifesting the HH pattern of leadership behaviour, and compared to small schools, a greater

number of big schools has principals manifesting the LL pattern of leadership behaviour. These findings contradict the findings of the present investigation. She also found close relationship between 'Initating Structure' and size of the school. In big schools, the principals have to be strict and show high 'Initiating Structure', otherwise, it will be difficult for them to run the school. On the other hand, he has to maintain the balance by showing high "Consideration" to be really effective Most of the big schools in Panchamahals District are managed by very sound managements and they are very sincere in their service to the cause of education and the principals of these schools enjoy sufficient freedom and responsibilities. However, in most of the small schools, managements rather than principals run the schools.

(4) <u>The Nature of Pupils' Population and the Leadership Behaviour of School Principals.</u>

All the boys' schools have principals manifesting the HH pattern of leadership behaviour and the co-education schools are clustered on both the extremes leaving the middle position sufficiently vacant. No significant statistical relationship seems to exist between the sex-wise category of the school and any of the dimensions of leadership behaviour. The principals of the boys' school as a group manifest the HH pattern of leadership behaviour and the principals of girls' schools as a group manifest the LL pattern of leadership behaviour. The principals of the Boys' schools have to be high on both the dimensions and they have to be really effective.

(5) Socio-Economic Status of the School and Leadership Behaviour of the Principals

In advanced schools, the principals are clustered on two extremes leaving the middle position sufficiently vacant. Backward schools are also distributed on two extremes leaving the LH pattern completely blank. Majority of the Adivasi schools have the HH Pattern, and the rest of them are equally distributed on the LH and the LL pattern, leaving the HL pattern completely blank. But the relationship between socio-economic status of the schools and leadership behaviour dimensions is not significant.

The finding about the Adivasi schools is similar to that of the Ashram schools and the same justifications can be offered here in the case of the Adivasi schools.

4.9 Correlation Matrix and Multiple Regression and Regression Equation

In this section, a correlation matrix and Multiple Correlation and Regression Equations are presented. It is a kind of quick review of some of the findings of this study arrived at so far. The matrix is given on the next page in Table 4.45.

(1) Relationship between the Two Dimensions of Leadership: The correlation between 'Initiating Structure' and 'consideration' is 0.774 which is significant at .01 level with

TABLE - 4.45 : The Correlation Matrix

Variables	SCHS	SSCE	AGEY	EXPY	INITI	Consi	Morales
SSCE	-0.060681	0.106529					
AGEY	0.242606*	0.106529					
EXPY	0.203296*	0.070466	0.821429**				
INITI	-0.138880	0.102906	0.145780	0.234135*			
CONSID	-0.116463	0.048809	0.027002	0.075869	0.774232**		
MORALES	-0.202478	0.176531	0.004389	-0.025638	0.611315**	0.631315**	
JIMS	0.028959	0.309863**	-0.011241	-0.034193	-0.087671	0.006891	0-087172

N = 100

Degree of Freedom (N -2) = 98

* Significant at .05 level

** Significant at .01 level.

df 98. 'Initiating Structure' and 'Consideration' are the two dimensions of leadership behaviour. This correlation indicates that increase on one dimension leads to the increase in another dimension. They go hand in hand.

(2) Relationship between Dimensions and Some Variables: Again the correlation between 'Initiating Structure' and 'experience' of the principal is 0.234 which is significant at .05 level. This indicates that experienced principals manifest high initiating structure. Experience of a principal and his initiating structure behaviour go hand in hand.

(3) The correlation between 'Initiating Structure' and 'teacher morale' is 0.632 which is significant at .01 level. This indicates that high initiating structure behaviour of the principal and 'teacher morale' are inter-related. (Increase in one leads to increase in the other).

(4) Again high correlation exists between 'Consideration' behaviour of the school principal and 'teacher morale'. This correlation is 0.631, significant at 0.01 level. 'Consideration' and 'teacher morale' also go hand in hand. It also indicates that increase in one would lead to increase in the other.

It should be noted that the level of correlation between 'teacher morale and 'initiating structure' and 'teacher morale' and 'consideration' is almost the same,(0.632 and 0.631 respectively). This is very much suggestive of the schools having principals with the HH pattern of leadership behaviour

to have teachers with high morale. Converse can also be true.

(5) The correlation between the 'motivation of students towards the school' and the S.S.C. Examination results is 0.309 which is significant at .01 level with df 98. This means 'academic motivation' of students and their 'academic achievement' are highly correlated; they go hand in hand.

In brief, there is positive high correlation between : (i) initiating structure and consideration; (ii) initiating structure and teacher morale; (iii) consideration and teacher morale; and (iv) academic motivation and academic achievement. There is positive correlation at .05 level between experience of the principal and Initiating Structure.

Multiple R and Regression Equations

Multiple R and Regression Equations for each of the dimensions of leadership behaviour of the secondary school principal, namely, "Initiating Structure" and "Consideration" were computed. They are given in the following two subsequent tables; Table 4.46 and and 4.47, given on the next two pages.

In the equation presented in table 4.46, the R between criterion variable 'Initiating Structure' and the six predictor variables namely, schools changed by the principal as a principal, S.S.C. Examination results, age of the principal, experience of the principal as a principal, teacher morale and Junior Index of Motivation (JIM) score was computed and it came to be 0.70

which is highly significant beyond .01 level of probability. This means that six predictor variables when combined share 49.50 per cent of the criterion variance in 'Initiating Structure'

TABLE -4.46 : Multiple R and Regression Equation for "Initiating Structure"

$R_{i \cdot 1,2,3,4,5,6} = .70$

$Y_1 = 7.29 + .806X_4 + .289X_5$

Where

R_i = Initiating Structure (Criterion Variable)

Y_1 = Initiating Structure (Criterion Variable)

Predictor Variables

1 : Schools changed by the principals as a principal

2 : S.S.C. Examination Results

3 : Age of the principal (Years)

4 : Experience of the principals as a principal(Years)

5 : Teacher morale scores

6 : JIM score

X_4 = Experience of the principal as a principal (years)

X_5 = Teacher morale score

The Multiple Regression Equation between criterion variable "Initiating Structure" and the six predictor variables mentioned in the above paragraph was further established that

only two β - coefficients of the predictor variables, viz., 'experience of the principals as a principal score' and 'teacher morale score' were significant out of the six variables. In the equation given above, it is seen that "Initiating Structure" changes to the extent of .806 and .289 units for the variables 'experience of the principal as a principal' and 'teacher morale'.

TABLE -4.47 : Multiple R and Regression Equation for "Consideration"

R_c .1,2,3,4,5,6 = 0.65
Y_2 = -3.797 + .323X_5

Where

R_c = Consideration (Criterion variables)

Y_2 = Consideration (Criterion variables)

Predictor Variables

1 : Schools changed by the principals as a principal

2 : S.S.C. Examination Results

3 : Age of the principal (Years)

4 : Experience of the principals as a principal (Years)

5.: Teacher morale score

6 : JIM score

X_5 = Teacher morale score

In the equation presented above the R between the criterion variable "Consideration" and the six predictor variables, namely, schools changed by the principal as a principal, the S.S.C. examination results, age of the principal, experience of the principal as a principal, teacher morale and Junior Index of Motivation was worked out and it come to be 0.65 which is highly significant beyond 0..01 level of probability. This means that the six predictor variables when combined share 41.90 per cent of the criterion variance in "Consideration".

The Multiple Regression Equation between the criterian variable "Consideration" and the six predictor variables was further established that only one β - coefficient of the predictor variable viz., 'teacher morale score' was significant out of the six variables. In the above equation, it is seen that "Consideration" changes to the extent of .323 unit for the variable teacher morale.

4.10 Conclusion

It will be seen from the results analysed in the foregoing pages that the two dimensions of leadership behaviour, viz., the Initiating Structure and Consideration and the four leadership behaviour patterns, viz. the HH, the HL, the LH, and the LL not only are related among themselves but they have significant relationship with factors such as organizational climate, teacher morale and school innovativeness and with some personal

and non-personal variables such as age, the male sex of the principals, an experience of 6 to 10 years, size of the urban-rural character of the school, etc.

Another inescapable conclusion is that it is possible to measure with accuracy and reliability the leadership behaviour of principals of high schools in Gujarat with the help of the tool LBDQ. This tool bears significant relationship between its two dimensions on the one hand, among the four leadership behaviour patterns and the patterns on one hand and either of the two dimensions on the other. This is a further guarantee for the valid use of the tool in Indian situation.

In the next concluding chapter the results of the testing of the hypotheses will be examined. The major findings of the present research would be reviewed serially and in one unified context, the evaluation of the achievement of the objectives formulated for the study will be made and major implications of the findings of the research would be attempted.

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