CHAPTER IV

ANALYSIS AND DISCUSSIONS

Organizational Climate - Analysis of Scores:

The OCDQ instrument has a set of 64 simple statements and the respondents were asked to indicate to what extent each statement characterized his school. The scale against which the respondent indicated the extent to which each statement characterized his school was defined by four categories, viz.,

1. Rarely occurs,
2. Sometimes occurs,
3. Often occurs and
4. Very frequently occurs.

These four categories of responses were scored by assigning to the respective categories 4 successive integers 6, 7, 8 and 9. Items which compose each of the eight

corresponding subtests are as follows:-

	SUBTESTS		ITEMS	
Teachers' behaviour	Disengagement	-	1 - 10	both inclusive
	Hindrance	-	11 - 16	"
	Esprit	-	17 - 26	"
	Intimacy	-	27 - 33	"
Principals' behaviour	Aloofness	-	34 - 42	"
	Production emphasis		43 - 49	"
	Thrust	-	50 - 58	"
	Consideration	-	59 - 64	"

Items 15, 16, 33, 41 and 42 were scored negatively i.e., in the order 9, 8, 7, 6.

After scoring each item, each respondent's each subtest score was computed by summing the item scores, subtest by subtest and dividing each of the eight sums by the number of items in the corresponding subtest. To construct the school profile, a school mean - subtest score for each of the eight subtests was computed. These scores define the average response of teachers for each respective subtest. Hence the profile of scores shows how most of the teachers in a school characterise the organizational climate of their particular school. Specifically, the scores indicate how often certain types of behaviour 'occur' among the teachers and with the Principal.

The 190 profiles, were now in terms of raw scores. These raw scores were converted into standard scores first normatively and then ipsatively. Normative standardization was done across the sample of 190 schools so that each of the eight subtest score could be compared on a common scale. Thus each subtest was standardized according to the mean and standard deviation of the total sample for that subtest.

Ipsative standardization was made with respect to the mean and standard deviation of the profile scores for each school. For both standardization procedures, a standard score system based upon a mean of 50 and standard deviation of 10 was chosen.

These standardized scores indicated two things; first, a score above 50 on a particular subtest indicated that the given school scored above the mean of the sample on that subtest and second, that the score on that subtest was above the mean of the school's other subtest scores. The distribution of the school mean-standard scores is presented in table 4.1.

The next step was the classification of the 190 schools with respect to organizational climate. For this the prototype profiles for each of the six climates ranked in respect to openness vs closedness arrived by Halpin and Croft's study was used.

TABLE No. 4.1

School Code No.		Organizational Climate								Global
		1	2	3	4	5	6	7	8	9
MM	1	34	42	64	50	44	48	55	60	6
"	2	65	42	53	42	35	45	60	60	2
"	3	45	50	35	55	65	45	50	55	5
"	4	26	52	58	44	54	50	58	56	4
"	5	27	52	47	54	54	53	57	58	4
"	6	60	65	40	50	40	50	40	60	1
"	7	36	48	64	52	34	52	62	54	6
"	8	73	37	47	47	47	45	45	50	2
"	9	55	35	45	45	55	60	70	35	2
"	10	50	65	40	55	60	45	45	55	1
"	11	25	55	60	65	60	45	40	40	5
"	12	77	45	43	45	48	43	48	45	2
"	13	62	43	50	35	40	60	55	55	2
"	14	66	54	40	52	64	44	42	44	1
"	15	37	53	50	53	73	40	50	42	5
"	16	50	35	70	50	30	45	55	55	6
"	17	68	57	38	42	57	55	43	43	1
"	18	67	40	43	60	43	43	57	50	3
"	19	23	48	68	56	50	50	52	54	6
"	20	45	45	65	65	45	35	50	45	3
"	21	28	50	52	44	64	48	54	58	4
"	22	27	47	68	50	50	53	50	47	6

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School Code No.		Organizational Climate								Global
		1	2	3	4	5	6	7	8	9
MM	23	32	55	48	62	48	52	58	40	4
"	24	56	58	34	64	52	56	40	44	1
"	25	50	47	25	50	65	55	58	50	1
"	26	32	53	60	50	40	60	47	60	6
"	27	123	43	30	50	53	27	40	40	1
"	28	70	36	42	54	38	42	52	60	3
"	29	74	38	50	48	50	46	48	38	3
"	30	74	40	53	47	47	54	46	36	2
"	31	25	46	55	52	51	57	53	61	4
"	32	38	46	57	52	49	51	53	54	6
"	33	70	43	40	60	53	37	53	47	3
"	34	37	47	39	67	34	59	47	56	2
"	35	42	50	52	64	64	52	36	44	5
"	36	74	50	47	49	55	40	41	44	1
"	37	70	53	35	47	47	43	48	50	1
"	38	74	49	42	50	47	47	46	42	1
"	39	28	50	60	54	52	50	56	52	6
"	40	30	50	53	60	47	50	47	56	5
"	41	24	53	50	51	50	53	57	56	4
"	42	53	37	53	53	60	63	37	40	1
"	43	127	50	25	35	50	38	34	40	1
"	44	35	70	60	60	70	50	60	45	5

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School Code No.		Organizational Climate								Global
		1	2	3	4	5	6	7	8	9
MH	45	26	54	57	51	60	60	49	44	4
"	46	29	46	57	46	51	51	60	61	6
"	47	25	48	57	52	47	59	57	54	6
"	48	53	43	47	37	69	43	63	40	5
MD	49	76	44	52	49	46	44	48	43	2
MD	50	60	53	60	47	67	33	47	43	1
"	51	46	40	61	54	34	47	57	63	6
"	52	72	47	42	48	55	36	47	56	2
"	53	53	43	63	33	39	57	59	56	6
"	54	76	50	41	49	49	44	46	45	1
"	55	60	55	40	50	60	30	45	50	1
"	56	74	42	35	52	47	50	49	47	1
"	57	60	50	60	55	50	25	50	40	3
"	58	30	53	47	37	60	53	60	50	4
"	59	76	44	51	49	46	54	40	43	1
"	60	30	37	67	53	60	50	50	47	5
"	61	75	38	42	50	47	47	45	57	2
"	62	26	50	50	58	50	52	58	52	5
"	63	80	37	40	44	40	50	55	57	2
"	64	33	50	70	60	37	47	53	50	6
"	65	75	46	40	43	54	44	51	50	2
MP	66	30	45	66	58	53	45	53	49	5
MP	67	28	47	67	50	45	55	58	50	6

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School Code No.		Organizational Climate								Global
		1	2	3	4	5	6	7	8	9
MP	68	76	50	48	50	48	50	38	40	1
MP	69	74	46	39	51	54	47	46	44	1
"	70	40	60	40	50	55	35	65	65	6
"	71	67	50	37	50	50	63	47	40	1
"	72	26	48	61	48	48	55	60	51	6
"	73	33	60	50	53	50	60	57	40	4
"	74	47	70	37	63	50	47	40	40	1
"	75	25	50	57	53	52	53	54	58	6
"	76	68	52	28	52	42	52	50	52	2
"	77	27	46	60	51	48	53	57	58	6
"	78	29	45	60	62	55	56	51	42	5
"	79	55	60	35	35	45	65	65	50	4
"	80	63	30	60	60	53	47	43	43	1
"	81	32	47	68	47	50	50	55	50	6
"	82	40	46	60	67	56	39	46	45	5
"	83	25	51	51	52	54	60	50	52	5
"	84	75	44	50	49	45	50	44	46	2
"	85	40	58	30	55	53	47	53	60	1
"	86	40	50	47	73	43	87	58	55	5
"	87	65	50	30	47	58	42	53	53	2
"	88	50	45	60	50	30	55	65	45	2
"	89	70	45	43	47	62	45	42	45	1
"	90	42	35	58	47	47	45	58	65	6

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School Code No.		Organizational Climate								Global
		1	2	3	4	5	6	7	8	9
MP	91	68	56	50	52	64	54	36	36	1
"	92	72	57	38	47	57	47	41	43	1
"	93	58	60	32	55	53	40	53	45	1
"	94	26	47	53	46	49	58	56	61	4
"	95	71	74	36	38	45	55	53	51	2
"	96	76	41	47	43	48	49	47	48	2
MU	97	50	50	60	55	60	40	30	45	5
MU	98	24	62	55	51	54	53	56	54	4
"	99	62	46	29	48	56	60	46	58	1
"	100	70	58	45	50	55	45	36	50	1
"	101	55	60	37	55	60	39	37	53	1
"	102	66	58	30	50	52	48	50	50	1
"	103	66	58	32	62	52	46	44	38	1
"	104	25	48	58	52	49	55	58	55	6
"	105	25	48	59	49	51	53	55	56	6
"	106	25	51	59	54	49	52	58	54	6
"	107	26	46	58	54	48	52	57	57	6
"	108	70	43	53	40	53	50	50	33	2
MM	109	58	40	56	40	40	46	60	66	3
MM	110	48	49	49	49	53	51	49	49	2
MD	111	53	48	40	46	74	44	45	51	1
MD	112	22	46	53	46	45	49	51	51	6

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School Code No.		Organizational Climate								Global
		1	2	3	4	5	6	7	8	9
MD	113	68	39	64	50	43	45	52	43	6
"	114	76	44	47	49	53	43	43	46	1
"	115	28	60	42	58	58	58	47	47	4
MP	116	63	47	35	50	65	50	40	53	1
MP	117	73	52	33	53	50	48	47	45	1
"	118	37	47	63	63	53	50	40	47	5
"	119	30	43	67	57	47	53	60	53	6
"	120	58	60	34	58	62	50	38	44	1
"	121	75	45	48	46	46	49	45	43	2
"	122	50	48	35	45	50	43	63	69	6
"	123	26	50	53	47	52	52	59	61	6
"	124	67	50	35	38	40	52	58	50	2
"	125	40	64	50	64	60	42	40	46	5
MU	126	37	56	30	53	60	47	53	60	4
MU	127	43	40	49	60	66	51	63	61	5
"	128	73	48	85	46	53	50	46	51	2
"	129	44	32	72	58	52	48	46	56	6
"	130	74	49	38	47	49	48	43	50	1
CC	131	26	51	56	58	50	52	54	55	5
CCC	132	27	42	53	47	62	55	60	52	5
CC	133	33	48	53	60	50	45	65	60	5
CC	134	27	48	60	50	42	55	52	60	6
"	135	47	37	60	43	40	73	47	57	6

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School Code No.		Organizational Climate								Global
		1	2	3	4	5	6	7	8	9
CC	136	37	40	70	56	42	40	60	47	6
"	137	28	47	57	55	47	50	61	57	6
"	138	26	50	58	52	50	60	64	46	4
MS	139	30	46	61	45	48	52	63	58	6
MS	140	35	43	40	48	57	55	67	52	6
MS	141	50	40	50	53	30	53	63	63	6
"	142	25	46	62	52	51	55	54	57	6
"	143	64	50	25	46	54	46	54	50	1
"	144	70	55	52	62	43	48	43	35	1
"	145	35	53	37	57	53	55	63	53	1
"	146	66	45	40	48	53	48	47	52	2
"	147	69	47	29	47	46	53	49	56	2
"	148	21	43	51	53	49	51	54	51	5
"	149	28	47	62	60	45	52	52	50	6
"	150	35	48	62	45	40	57	58	62	6
"	151	54	50	54	57	64	63	63	61	4
"	152	33	47	43	63	43	47	53	53	5
"	153	32	38	60	46	54	52	64	56	6
"	154	26	51	55	60	50	50	58	52	5
"	155	40	45	58	58	48	42	52	62	5
"	156	27	48	53	60	53	55	42	57	5
"	157	68	53	35	45	50	53	40	47	1
"	158	43	46	57	57	29	57	57	50	6

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School Code No.		Organizational Climate								Global
		1	2	3	4	5	6	7	8	9
MS	159	67	50	37	43	50	43	47	47	2
"	160	43	33	57	43	63	43	47	57	5
"	161	40	40	60	40	47	43	70	57	6
"	162	27	47	60	54	48	53	56	54	6
"	163	30	40	63	60	48	54	50	62	6
"	164	38	45	65	33	47	48	65	52	6
"	165	33	43	45	50	60	45	65	65	6
"	166	32	43	55	53	50	50	58	65	6
"	167	43	33	67	37	57	47	53	57	6
"	168	40	60	28	57	57	50	55	57	1
"	169	75	50	39	51	46	44	48	48	1
"	170	30	45	48	52	43	56	63	63	6
"	171	26	47	58	55	56	56	54	48	4
"	172	50	56	38	60	38	42	52	62	3
"	173	65	35	57	43	38	52	53	50	2
"	174	25	57	50	60	55	55	52	45	4
"	175	47	57	30	63	50	50	60	50	1
"	176	72	50	36	51	51	48	47	44	1
"	177	40	36	68	58	44	42	52	52	6
"	178	66	40	63	50	44	47	57	40	6
"	179	30	45	48	65	59	50	44	44	5
"	180	29	51	68	50	46	56	52	51	6

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School Code No.		Organizational Climate								Global
		1	2	3	4	5	6	7	8	9
MS	181	26	53	59	51	53	57	53	46	4
"	182	63	37	47	43	40	43	53	70	2
"	183	25	51	56	55	49	51	56	57	6
"	184	36	44	58	38	54	52	60	60	6
"	185	40	55	52	62	52	60	48	28	4
"	186	24	51	63	54	51	54	60	53	6
"	187	72	48	40	50	55	45	45	38	1
"	188	68	40	40	50	60	45	47	40	1
"	189	27	52	47	54	54	53	57	58	4
"	190	46	40	61	54	34	47	57	63	6

The prototype profiles are given in Table 4.2. Each of the 190 schools' profiles was compared in turn with each of the six prototype profiles, and the profile similarity scores were computed. Graphs 4.1-4.6 give us the prototype profiles of each of the six climates. The absolute differences between each subtest score in a school's profile and the corresponding score in the first prototype profile was obtained, then in the second one and so on. In each case, the sum of the absolute differences between the profile scores was computed and a low sum indicates the profiles are highly similar and a large sum indicates that the profiles are dis-similar. Each of the 190 schools was assigned to the set defined by that prototype profile for which its profile similarity score was lowest.

Table 4.3 shows that profiles for the 190 schools grouped in respect to profiles which are similar. The profile similarity scores are shown in the last column and the schools which depict each climate have been ranked in order from the lowest similarity score (indicating the profile most similar to each respective prototype climate) to the highest similarity score.

TABLE No. 4.2

PROTOTYPE PROFILES FOR SIX ORGANIZATIONAL CLIMATES RANKED IN RESPECT TO OPENNESS Vs CLOSEDNESS

	GROUP'S CHARACTERISTICS				LEADER'S CHARACTERISTICS			
Climate	Disengage-ment.	Hindrance	Esprit	Intimacy	Aloofness	Production emphasis	Thrust	Consideration
Open	43	43	63	50	42	43	61	55
Autonomous	40	41	55	62	61	39	53	50
Controlled	38	57	54	40	55	63	51	45
Familiar	60	42	50	58	44	37	52	59
Paternal	65	46	45	46	38	55	51	55
Closed	62	53	38	54	55	54	41	44

TABLE No. 4.3

THE SAMPLE OF 190 SCHOOL PROFILES GROUPED IN RESPECT TO THE SIX ORGANIZATIONAL CLIMATES

School No.	1	2	3	4	5	6	7	8	Similarity score
				OPEN CLIMATE					
1	34	42	64	50	44	48	55	60	29
7	36	48	64	52	34	52	62	54	34
136	37	40	70	56	42	40	60	47	34
161	40	40	60	40	47	43	70	57	35
90	42	35	58	57	47	45	58	65	37
51	46	40	61	54	34	47	57	63	40
177	40	36	68	58	44	42	52	52	40
190	46	40	61	54	84	47	57	63	40
16	50	35	70	50	30	45	55	55	42
119	30	43	67	57	47	53	60	53	42
137	28	47	57	55	46	50	61	57	43
139	30	46	61	45	48	52	63	58	43
164	38	45	65	33	47	48	65	52	43
150	35	48	62	45	40	57	58	62	45
32	38	46	57	52	49	51	53	54	46
67	28	47	67	50	45	55	58	50	46
77	27	46	60	51	48	53	57	58	46
53	53	43	63	33	39	57	59	56	47
153	32	38	60	46	54	52	64	56	48
72	26	48	61	48	48	55	60	51	49

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School No.	1	2	3	4	5	6	7	8	Similarity score
81	32	47	68	47	50	50	55	50	49
162	27	47	60	54	48	53	56	54	49
107	26	46	58	54	48	52	57	57	50
134	27	48	60	50	42	55	52	60	50
46	29	46	57	46	51	51	60	61	51
166	32	42	55	53	50	50	58	65	51
178	67	40	63	50	44	47	57	40	52
184	36	44	58	38	54	52	60	60	52
39	28	50	60	54	52	50	56	52	54
105	25	48	59	49	51	53	55	56	54
106	25	51	59	54	49	52	58	54	54
113	68	39	64	50	43	45	51	43	54
142	25	46	62	52	51	55	54	57	54
186	24	51	63	54	51	54	60	53	54
64	33	50	70	60	37	47	53	50	56
149	28	47	62	60	45	52	52	50	56
158	43	36	57	57	29	57	57	50	56
167	43	39	67	37	57	47	53	57	56
47	25	48	57	52	47	59	57	54	57
170	30	45	48	52	43	57	63	63	57
180	29	51	68	50	46	56	52	51	57
104	25	48	58	52	49	55	58	55	58
141	50	40	50	53	30	53	63	63	58

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School	1	2	3	4	5	6	7	8	Similarity score
22	27	47	68	50	50	53	50	47	60
129	44	32	72	58	52	48	46	56	60
183	25	51	56	55	49	51	56	57	60
19	23	48	68	56	50	50	52	54	61
112	22	46	53	46	45	49	51	51	61
26	32	53	60	50	40	60	47	60	62
163	30	40	63	60	48	55	50	62	62
165	33	43	45	50	60	45	65	65	62
75	25	50	57	53	52	53	54	58	64
123	26	50	53	47	52	52	59	61	64
135	47	37	60	43	40	73	47	57	68
122	50	48	35	45	50	43	63	69	69
140	35	43	40	48	57	55	67	52	69
140	35	43	40	48	57	55	67	52	69
70	40	60	40	50	55	35	65	65	78

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School No.	1	2	3	4.	5	6	7	8	Similarity score.
				AUTONOMOUS CLIMATE					
155	40	44	58	58	48	42	52	62	39
66	30	45	66	58	53	45	53	49	44
127	43	40	49	60	66	51	63	61	50
125	40	64	50	64	60	42	40	46	51
133	33	40	53	60	50	45	65	60	51
160	43	33	57	43	63	43	47	57	51
179	30	45	48	65	59	50	44	44	52
15	37	53	50	53	73	40	50	42	53
60	30	37	67	53	60	50	50	47	53
78	29	45	60	62	55	56	51	42	53
118	37	47	63	63	53	50	40	47	53
35	42	50	52	64	64	52	36	44	55
154	26	51	55	60	50	50	58	52	55
132	27	42	53	47	62	55	60	52	57
86	40	50	47	73	43	37	58	55	58
3	45	50	35	55	65	45	50	55	59
131	26	51	56	58	50	52	54	55	59
40	30	50	53	60	47	50	47	56	60
91	50	50	60	55	60	40	30	45	61
148	21	43	51	53	49	51	54	51	62
62	26	50	50	58	50	52	58	52	63
83	24	51	51	52	54	60	50	52	63

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School No.	1	2	3	4	5	6	7	8	Similarity score
				AUTONOMOUS CLIMATE (CONTD.)					
152	33	57	43	63	43	47	53	53	65
82	40	46	60	67	56	39	46	44	66
156	27	48	53	60	53	55	42	58	66
11	25	45	60	65	60	45	40	40	67
48	53	43	47	37	67	43	63	40	78
44	35	70	60	60	70	50	60	45	143

School No.	1	2	3	4	5	6	7	8	Similarity score
				CONTROLLED CLIMATE					
73	33	60	50	53	50	60	57	40	38
45	26	54	57	51	60	60	49	44	40
181	26	53	59	51	53	57	53	46	43
174	25	57	50	60	55	55	52	45	46
4	26	52	58	44	54	50	58	56	51
58	30	53	47	37	60	53	60	50	51
185	40	55	52	62	52	60	48	28	54
171	26	47	58	55	56	56	54	48	55
98	24	52	55	51	54	53	56	54	56
115	28	60	42	58	58	58	47	47	57
138	26	50	58	52	50	60	64	46	57
94	26	47	53	46	49	58	56	61	61
21	28	50	52	44	64	48	54	58	63
31	25	46	55	52	51	57	53	61	65
41	24	43	50	51	50	53	57	56	65
23	32	55	48	62	48	52	58	40	66
5	27	52	47	54	54	53	57	58	67
189	27	52	47	54	54	53	57	58	67
126	37	56	30	53	60	47	53	60	69
79	55	60	35	35	45	65	65	50	75
151	54	50	54	57	64	63	63	61	77

School No.	1	2	3	4	5	6	7	8	Similarity score
				FAMILIAR CLIMATE					
28	70	36	42	54	38	42	52	60	40
18	67	40	43	60	43	43	57	50	45
33	70	43	40	60	53	37	53	47	45
109	58	40	56	40	40	46	60	66	48
20	45	45	65	65	45	35	50	45	49
57	60	50	50	55	50	25	50	40	50
172	50	56	38	60	38	42	52	62	52
29	74	38	50	48	50	46	48	38	60

School No.	1	2	3	4	5	6	7	8	Similarity score.
				PATERNAL CLIMATE					
13	62	43	50	35	40	60	55	55	33
147	69	47	29	47	46	53	49	56	35
173	65	35	57	43	38	52	53	50	36
95	71	47	36	38	45	55	53	51	37
146	66	45	40	48	53	48	47	52	38
128	73	48	35	46	53	50	46	51	39
124	67	50	35	38	40	52	58	50	41
2	65	42	53	42	35	45	60	60	43
76	68	52	28	52	42	52	50	52	43
121	75	45	48	46	46	49	45	43	46
84	74	44	50	49	45	50	44	46	47
159	67	50	37	43	50	43	47	57	47
182	63	37	47	43	40	43	53	70	47
96	76	41	47	43	48	49	47	48	48
8	73	37	47	47	47	45	45	50	50
61	75	38	42	50	47	47	45	57	50
63	80	37	40	40	40	50	55	57	50
65	75	46	40	43	54	44	51	50	50
12	77	45	43	45	48	43	48	45	51
52	72	47	42	48	55	36	47	56	52
49	76	44	52	49	46	44	48	43	53
87	65	50	30	47	58	42	53	53	57
30	74	40	53	47	47	54	46	36	58
110	48	49	49	49	53	51	49	49	59
108	70	43	53	40	53	50	50	33	65

.../-

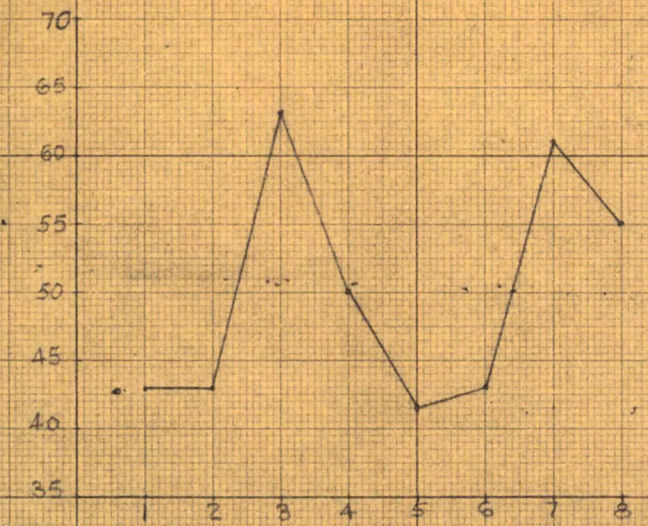
School No.	1	2	3	4	5	6	7	8	Similarity Score
				PATERNAL CLIMATE (Contd.,)					
88	50	45	60	50	30	55	65	45	67
34	37	47	39	67	34	59	47	56	69
9	55	35	45	45	55	60	70	35	78

School No.	1	2	3	4	5	6	7	8	Similarity Score
				CLOSED CLIMATE					
17	68	57	38	42	57	55	43	43	28
157	68	53	35	45	50	53	40	47	28
14	66	54	40	52	64	44	42	44	29
55	60	55	40	50	60	30	45	50	29
92	72	51	38	47	57	47	41	43	29
93	58	60	32	55	53	40	53	45	29
24	56	58	34	64	52	56	40	44	31
120	58	60	34	58	62	50	38	44	33
176	72	50	36	51	51	48	47	44	34
69	74	46	39	51	54	47	46	44	36
117	73	52	33	53	50	48	47	45	36
71	67	50	37	50	50	63	47	40	37
91	68	56	50	52	54	54	36	36	37
116	63	47	35	50	65	50	40	53	38
99	62	46	29	48	56	60	46	58	40
36	74	50	47	49	55	40	41	44	43
102	66	58	30	50	52	48	50	50	43
103	66	58	32	62	52	46	44	38	43
130	74	49	38	47	49	48	43	50	43
100	70	58	45	50	55	45	36	50	44
187	72	48	40	50	55	45	45	38	45
38	74	49	42	50	47	47	46	42	46
68	76	50	48	50	48	50	38	40	49
37	70	53	35	47	47	43	48	50	50

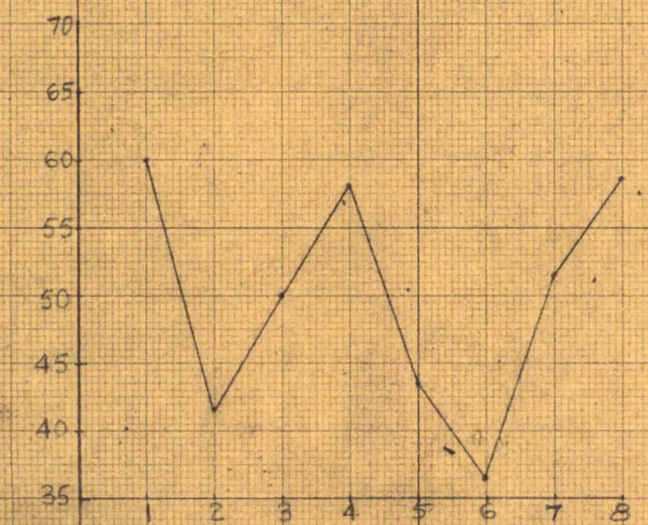
..../-

School No.	1	2	3	4	5	6	7	8	Similarity Score.
				CLOSED CLIMATE (Contd.)					
89	70	45	43	47	62	45	42	45	50
169	75	50	39	51	46	44	48	48	50
56	74	42	35	52	47	50	49	47	51
101	55	60	37	55	60	37	37	53	51
54	76	50	41	49	49	46	44	45	52
59	76	44	51	49	46	54	40	43	52
114	76	44	47	49	53	43	43	46	54
143	64	50	25	46	54	46	54	50	54
6	60	65	40	50	40	50	40	60	56
10	50	65	40	55	60	45	45	55	56
111	53	48	40	46	74	44	45	51	57
74	47	70	37	63	50	47	40	40	58
144	70	55	52	62	43	48	43	35	61
42	53	37	53	53	60	63	37	40	63
80	63	30	60	60	53	47	43	43	64
145	35	53	37	57	53	55	63	53	65
188	68	40	40	50	60	45	47	40	65
25	50	47	25	50	65	55	58	50	69
175	47	57	30	63	50	50	60	50	70
50	60	53	60	47	67	33	47	43	71
85	40	58	30	55	53	47	53	60	73
168	40	60	28	57	57	50	55	57	75
27	123	43	30	50	53	27	40	40	119
43	127	50	25	35	50	38	34	40	132

PROFILES OF THE ORGANIZATIONAL CLIMATES Fig 1&4

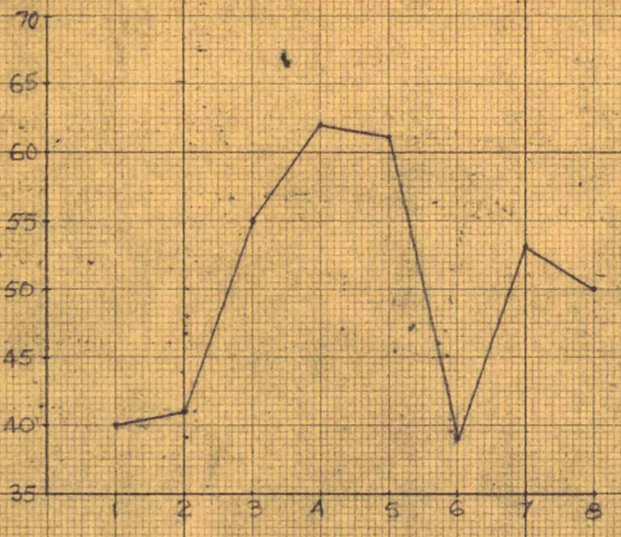


OPEN CLIMATE
GRAPH 4-1



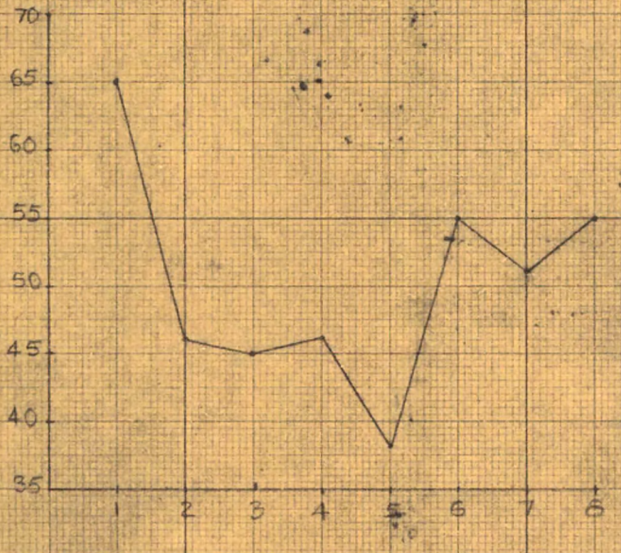
FAMILIAR CLIMATE
GRAPH 4-4

PROFILES OF THE ORGANIZATIONAL CLIMATES FIG. 2 & 5



AUTONOMOUS CLIMATE

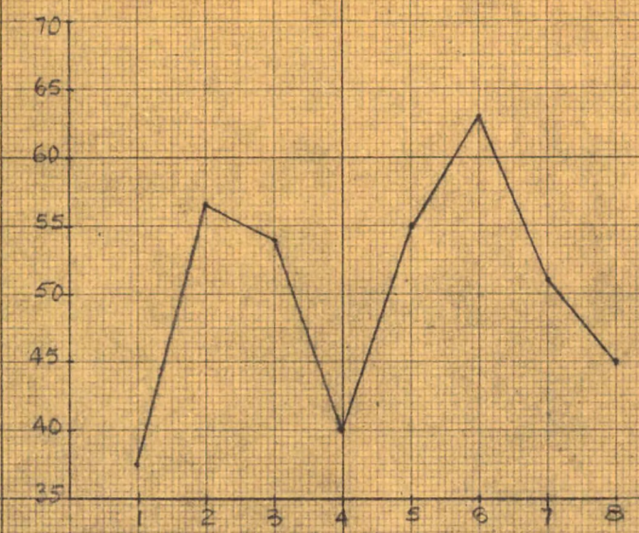
GRAPH 4-2



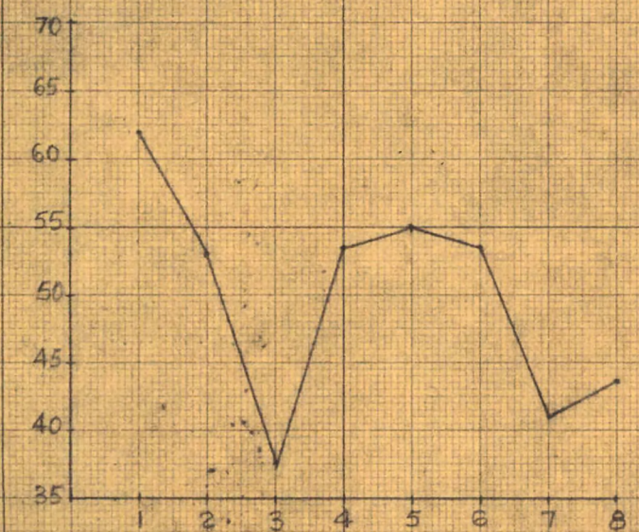
PATERNAL CLIMATE

GRAPH 4-5

PROFILES OF THE ORGANIZATIONAL CLIMATES FIG 3 & 6



CONTROLED CLIMATE
GRAPH 4-3



CLOSED CLIMATE
GRAPH 4-6

Table 4.4 gives the district-wise distribution of schools according to climate type:

Table 4.4:

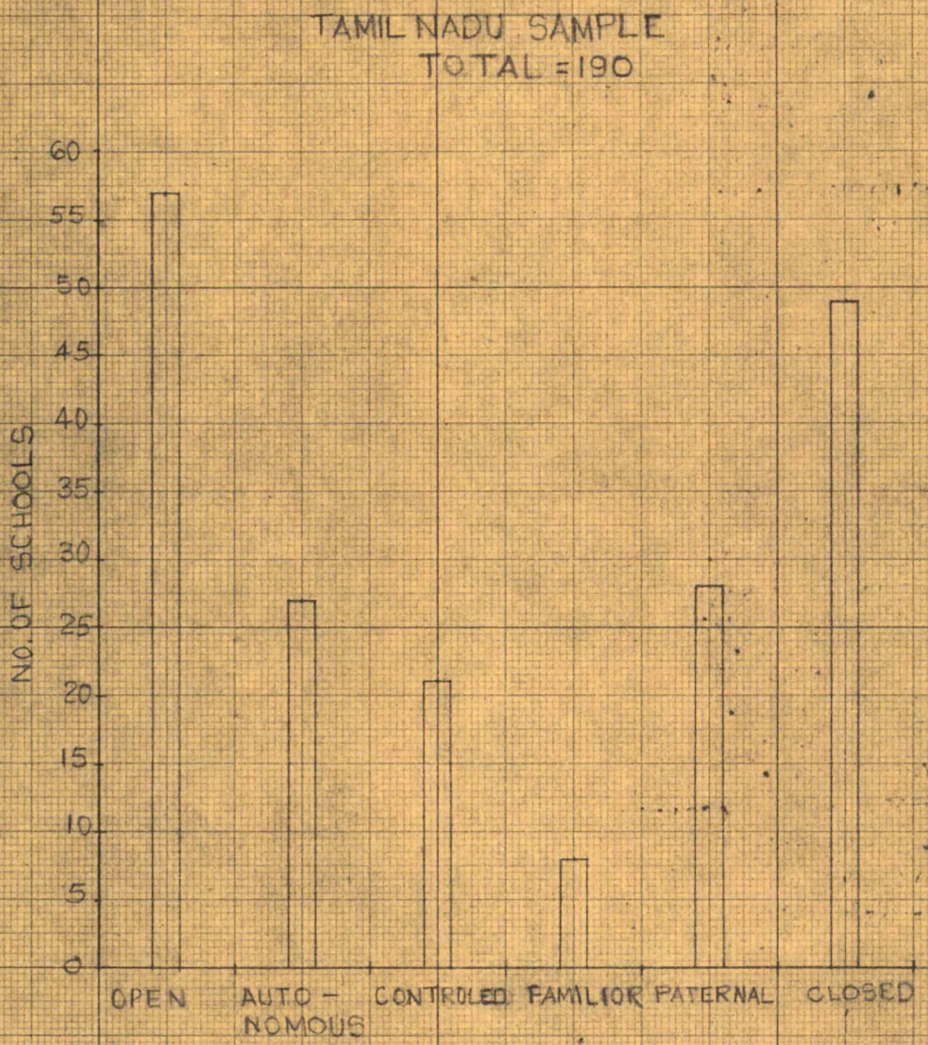
District-wise distribution of 190 schools according to climate types

Climate type	Madurai Ed. Dt.	Madurai Revenue Dt.	Tamil Nadu
Total	50	130	190
Open	10	30	57
Autonomous	7	17	27
Controlled	6	14	21
Familiar	6	7	8
Paternal	9	23	28
Closed	12	39	49

Graphs 4.7, 4.8, 4.9 give the pictorial discription of the district wise distribution of the schools according to climate type.

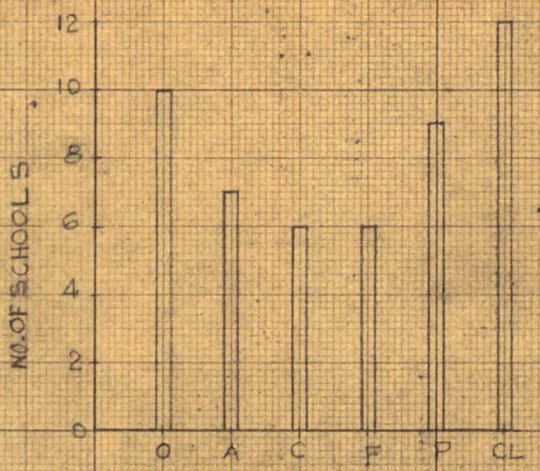
Findings:

Of the total 190 schools, it was found that 57 of the schools of this sample fall in the category of open climate and 49 fall in the category of closed climate.


TAMIL NADU SAMPLE
TOTAL = 190
NO. OF SCHOOLS
60
55
50
45
40
35
30
25
20
15
10
5
0
OPEN
AUTO - NOMOUS
CONTROLED
FAMILIOR PATERNAL
CLOSED
CLIMATE TYPE

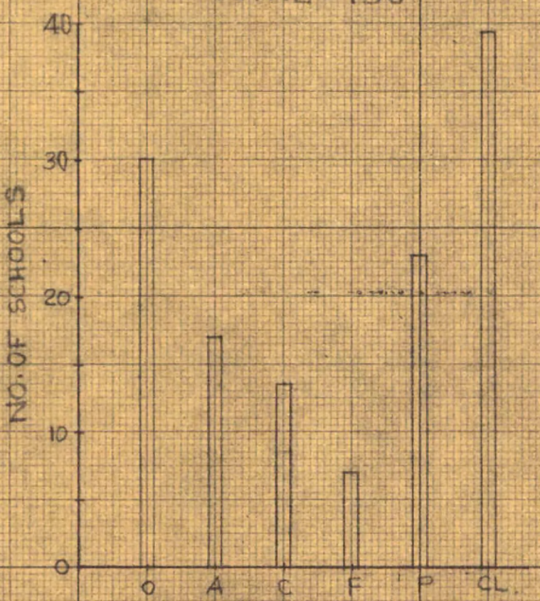
GRAPH 4-7

MADURAI EDUCATIONAL DISTRICT
TOTAL = 50



CLIMATE TYPE
GRAPH 4-8

MADURAI REVENUE DISTRICT
TOTAL = 130



CLIMATE TYPE
GRAPH 4-9

Of the 130 schools of the Revenue District of Madurai consisting of over 60% sample of the whole District, most in number (39) fall under closed climate, next (30) in open climate.

In the case of all school sample of one educational district of Madurai, closed climate claims the most number of schools - 12, and 10 fall in the category of open climate.

The explanation of the difference between total sample and the Madurai District sample is easily explained - 1) most of the reputed 'good' schools of Madras were purposely included for comparison purposes; another reason which explains the situation even better being that all the 50 called 'good' schools readily cooperated and returned the questionaire duly filled in whereas some of the so called 'ppor' schools were not very willing to return the questionnaire forms, though equal number of 'good' and 'poor' schools were selected; obviously, not all the poor schools were willing to participate in the study - the very attitude confirming the 'closedness' of the climate.

In Halpin's study of elementary schools, (1963), in U.S.A., the distribution of schools according to climate type was as follows: -

Table 4.5

Climate Type	No. of Schools	Rank
Open	17	I
Autonomous	9	V
Controlled	12	III
Familiar	6	VI
Paternal	12	III
Closed	15	II
Total	71	

Mehra (1967) in her study of the organizational climates of secondary schools in the State of Delhi in India, found the distribution as follows:-

Table 4.6

Climate type	No. of Schools	Rank
Open	14	III
Autonomous	9	IV
Controlled	9	IV
Familiar	3	VI
Paternal	10	III
Closed	16	I
Total	61	

Sharma (1972) in his study of 56 schools of Rajasthan found the distribution as follows:

Table 4.7:

Climate type	No. of schools	Rank
Open	15	II
Autonomous	6	IV
Controlled	11	III
Familiar	1	VI
Paternal	2	V
Closed	21	I
Total	56	

In all studies, both in India and in U.S.A. one similarity that stands out is that the least number of schools is found to be under the category 'familiar climate'; obviously such a climate with such high intimacy and low production emphasis does not and most probably cannot exist in an organizational system like the school.

In the studies by Mehra and Sharma in the States of Delhi and Rajasthan respectively, 'closed' seems to be the most frequently perceived type followed by open and then controlled. In the present study and that of Halpin, a slight reverse is there, with 'open'

being the most frequently perceived, followed by closed and familiar bringing the rear end. The sample of Madurai Educational District and entire Revenue District of Madurai the findings are like that of Mehra and Sharma, with closed more frequently perceived than open. So it seems that the schools under study stand on two extreme ends of the continuum of the climate.

Analysis of Purdue Teacher Opinionaire Scores -

The Purdue Teacher Opinionaire is a 100 item instrument with the items distributed under 10 factors as follows:

Table4.8:

Factor No.	Names of Factors	No. of item.	Max. score
1.	Teacher Rapport with Principal	20	80
2.	Satisfaction with teaching	20	80
3.	Rapport among teachers	14	56
4.	Teacher salary	7	28
5.	Teacher load	11	44
6.	Curriculum issues	5	20
7.	Teacher status	8	32
8.	Community support of Education	5	20
9.	School facilities and services	5	20
10.	Community pressures.	5	20
	Total:	100	400

Respondents were asked to record directly on the opinionaire indicating whether they -

agree	(A)
probably agree	(PA)
probably disagree	(PD)
disagree	(D)

with each statement.

The responses were hand scored. The opinionaire key was separated into strips, the appropriate strip for a given page was placed alongside the response columns so that opinionaire items matched with key items. First responses were checked with key and when 'A' is the keyed response, the weight assigned were in the order -

A	P.A.	P.D.	D
4	3	2	1

and when 'D' in the keyed response, the weights assigned were -

A	PA	PD	D
1	2	3	4

After writing the response weight, the appropriate factor number was written after a dash, as shown on the key - For e.g.

I am well satisfied with my present teaching position - (A) PA PD D 4 - 2

Our school has a well balanced curriculum - A PA (PD) D 2 - 6

The factor scores were obtained by summing the weights assigned to the items belonging to a given factor. The total score is obtained by summing the factor scores.

A sample of the opinionaire key is provided in ~~the~~ appendix. 9

The faculty morale score for each school was computed by finding the average total score and average factor stores for each of the ten dimensions. These mean faculty total score gives us an idea as to what the average morale of the faculty of a particular school is. To interpret the score, i.e., to decide whether the score is indicative of 'high', 'average' or 'low' morale the scores were converted into stanine scores i.e., scores which range from 1 (low) to 9 (high) with a mean of 5 and a standard deviation of 2. The stanine score, though crude enough to present a single digit to represent each class, it is precise enough for a practical and statistical comparison. As the stanines are equally spaced steps in a scale, level of morale in one school can be easily compared with level of morale in another school.

Table 4.9: shows the raw to stanine conversion table and table 4.10 gives the meaning of the stanine scores.

Table 4.11 gives the mean faculty morale scores, factor by factor, of the 190 schools of Tamil Nadu.

The distribution of morale scores in terms of high, average and low morale is shown in table 4.12.

Table 4.12:

Distribution of morale scores in terms of morale categories.

Category		Stanine	No. of schools.	
Very high	High	9	0	15
High		8	3	
Above average		7	12	
Little above average	Average	6	24	133
Average		5	53	
Little below average		4	56	
Below average	Low	3	25	42
Low		2	16	
Very low		1	1	
Total				190

Graph 4-10 shows the percentage distribution of schools by stanines for P.T.O. total scores.

TABLE 4.9

RAW TO STANINE CONVERSE IN TABLE FOR PTO SCORES.

STANINE	1	2	3	4	5	6	7	8	9	10	Total	Stamine
9	80	80	55-56	28	44	20	32	20	20	10	375-400	9
8	7[illegible]-79	78-79	53-54	26-27	42-43	19	30-31	20	19	20	359-374	8
7	74-76	76-77	51-52	23-25	40-41	18	28-29	18-19	17-18	19	343-358	7
6	69-73	73-75	47-50	21-22	38-39	16-17	26-27	16-17	15-16	18	325-342	6
5	62-68	69-72	44-47	18-20	34-37	15	23-25	15	13-14	16-17	305-324	5
4	5[illegible]-61	64-68	41-43	15-17	31-33	12-14	20-22	13-14	11-12	15	284-304	4
3	45-53	59-63	37-40	12-14	28-30	11	17-19	10-12	9-10	14	261-283	3
2	35-44	52-58	31-36	9-11	24-27	8-10	14-16	8-9	7-8	12-13	241-263	2
1	20-34	20-51	14-31	7-8	11-23	5-7	8-13	5-7	5-6	5-11	100-240	1

TABLE 4.10

SCORING OF STANINE SCORES

STANINE	9	8	7	6	5	4	3	2	1
Description	Very High	High	Above average	Little above average	Average	Little below average	Below average	Low	Very low
Percent in each Stanine	4	7	12	17	20	17	12	7	4
T Score equivalent	75	65	60	55	50	45	40	35	25
Percentile equivalent	98 2/9	92 2/9	83 6/9	68 2/9	50 2/9	32 2/9	17 1/9	8 5/9	2 5/9

TABLE No. 4.11

School Code No.		Teacher Morale										Global
		1	2	3	4	5	6	7	8	9	10	11
MM	1	75	75	50	24	39	16	30	19	19	15	362
MM	2	70	70	40	21	34	14	24	14	17	14	326
"	3	67	65	46	18	29	10	23	13	12	12	293
"	4	68	71	46	22	34	15	23	16	17	13	326
"	5	70	66	46	17	28	12	19	12	13	12	297
"	6	61	69	47	19	32	13	24	13	11	15	304
"	7	69	69	48	21	29	15	25	17	18	13	324
"	8	60	63	44	17	29	12	21	15	15	14	289
"	9	72	73	44	19	34	14	25	17	15	15	328
"	10	71	72	51	17	29	10	22	15	13	13	315
"	11	60	70	48	14	30	11	18	10	12	11	285
"	12	63	66	45	19	29	13	21	14	16	13	302
"	13	71	62	50	19	25	12	18	14	13	10	294
"	14	56	66	44	17	27	12	18	12	14	11	276
"	15	68	63	46	22	30	13	24	14	16	13	309
"	16	68	70	46	20	34	13	21	16	13	14	318
"	17	51	48	35	18	27	12	16	16	13	12	242
"	18	67	62	40	15	32	10	16	12	14	12	281
"	19	70	69	47	20	37	15	27	17	17	14	334
"	20	60	69	42	18	35	14	26	16	17	14	311
"	21	63	67	43	17	31	13	21	13	14	15	294
"	22	70	71	49	19	30	14	23	15	14	13	319

.../-

School Code No.		Teacher Morale										Global
		1	2	3	4	5	6	7	8	9	10	11
MM	23	49	68	33	15	26	12	24	91	14	10	262
MM	24	61	62	45	16	25	10	18	12	10	12	272
"	25	69	68	48	16	32	11	21	13	12	13	302
"	26	66	76	44	15	35	12	27	19	16	15	323
"	27	52	60	35	17	29	9	22	12	8	12	259
"	28	71	64	48	21	33	12	22	15	15	13	313
"	29	59	65	43	17	33	12	18	15	15	11	287
"	30	59	67	38	12	36	11	18	10	16	16	282
"	31	69	67	43	17	30	15	24	14	14	14	305
"	32	72	69	55	20	31	14	21	13	12	14	318
"	33	68	62	47	16	26	11	17	12	12	11	283
"	34	72	70	50	13	31	13	23	13	10	16	312
"	35	59	73	48	18	32	7	24	10	7	13	290
"	36	48	70	49	12	32	8	23	16	7	16	282
"	37	66	61	43	16	24	10	16	10	8	11	265
"	38	71	70	47	15	36	9	21	14	9	13	306
"	39	73	65	50	21	34	12	23	15	12	12	317
"	40	61	65	32	17	31	9	23	12	13	14	284
"	41	69	70	48	20	36	11	24	14	9	13	305
"	42	54	70	45	16	30	13	21	14	15	11	288
"	43	49	56	36	17	22	10	22	12	10	9	241
"	44	72	69	48	19	32	11	23	14	15	10	310

.../-

School Code No.		Teacher Morale										Global
		1	2	3	4	5	6	7	8	9	10	11
MM	45	63	73	50	15	31	12	23	14	12	12	305
MM	46	76	65	49	20	37	15	25	18	17	14	337
"	47	75	65	45	16	38	11	20	17	12	12	310
"	48	69	72	48	17	27	11	20	12	12	12	299
MD	49	70	69	46	20	34	14	23	14	15	13	318
MD	50	49	68	42	12	29	11	20	12	9	11	261
"	51	73	70	50	17	33	14	19	14	15	13	319
"	52	61	62	42	19	28	11	21	14	11	12	280
"	53	77	74	52	21	30	16	29	18	14	12	343
"	54	54	63	39	15	26	9	19	9	8	14	255
"	55	66	64	45	16	34	12	19	12	13	13	293
"	56	64	61	49	17	31	14	23	16	8	14	297
"	57	64	66	43	20	30	14	24	15	18	14	311
"	58	67	67	46	16	33	13	20	14	15	13	302
"	59	58	62	42	14	26	12	17	11	15	13	270
"	60	60	64	44	17	35	14	24	15	16	14	302
"	61	59	62	44	15	30	12	20	14	12	11	279
"	62	66	59	48	19	32	10	18	13	14	13	293
"	63	71	66	45	15	33	13	17	13	16	14	303
"	64	65	70	46	18	34	13	20	14	15	14	306
"	65	65	62	41	19	32	12	21	13	10	14	288
MP	66	67	69	51	22	31	17	29	18	17	17	349
MP	67	67	65	44	22	35	15	24	19	15	14	315
"	68	53	58	40	13	29	11	15	10	14	11	254

...../-

School Code No.		Teacher Morale										Global
		1	2	3	4	5	6	7	8	9	10	11
MP	69	55	66	44	13	33	12	22	12	10	12	276
MP	70	68	66	44	19	30	10	20	12	13	14	296
"	71	70	64	47	15	30	12	23	15	10	12	294
"	72	65	66	47	13	32	16	23	18	15	14	312
"	73	64	70	49	17	33	14	24	14	15	13	312
"	74	59	66	46	13	28	9	18	10	11	13	298
"	75	76	74	51	23	33	13	25	16	16	10	339
"	76	75	79	49	20	40	11	27	12	11	17	339
"	77	75	76	50	21	36	16	26	17	18	14	341
"	78	51	72	54	12	31	8	13	13	14	12	279
"	79	67	69	42	16	35	15	23	14	15	14	308
"	80	62	67	45	19	30	14	20	14	17	13	299
"	81	68	69	43	16	31	16	19	14	18	16	311
"	82	58	60	48	15	26	12	16	10	13	12	269
"	83	61	73	40	22	35	12	24	13	16	8	308
"	84	62	63	45	17	29	12	19	14	14	14	288
"	85	64	63	42	17	35	11	15	11	12	12	282
"	86	64	70	50	15	31	9	17	12	7	16	294
"	87	66	65	41	16	31	12	18	14	11	11	287
"	88	67	65	45	17	29	13	21	12	17	14	300
"	89	55	69	46	18	32	13	24	15	12	15	297
"	90	71	68	49	20	35	16	22	14	16	14	323
"	91	54	62	41	19	31	9	23	10	12	13	272

..../-

School Code No.		Teacher Morale										Global
		1	2	3	4	5	6	7	8	9	10	11
MP	92	40	72	38	16	33	11	19	12	10	12	268
"	93	60	46	48	16	30	9	16	12	10	13	280
"	94	73	74	53	22	38	15	25	16	17	12	245
"	95	72	65	49	18	34	7	26	9	10	13	303
"	96	75	71	46	21	29	14	21	10	10	16	313
MU	97	66	64	42	16	29	11	19	12	15	12	287
MU	98	71	70	48	26	36	15	22	9	15	15	324
"	99	66	69	39	22	28	11	25	14	10	11	293
"	100	56	67	46	17	26	15	23	14	14	12	286
"	101	54	54	36	17	26	10	18	10	9	13	246
"	102	63	68	46	17	26	10	19	12	9	11	271
"	103	53	59	38	15	35	9	22	11	9	12	263
"	104	72	72	50	23	37	17	26	16	19	14	345
"	105	75	72	51	21	41	18	30	14	18	14	354
"	106	70	66	51	17	36	12	21	15	16	14	319
"	107	77	69	50	19	40	16	29	15	14	17	346
MU	108	63	64	43	19	30	13	21	12	12	13	290
MM	109	72	66	45	19	32	13	24	17	14	12	302
MM	110	64	74	49	21	35	11	23	14	10	16	319
MD	111	65	60	42	20	31	12	19	11	10	14	283
MD	112	71	72	48	23	39	17	25	16	18	14	343
"	113	60	64	45	17	33	12	19	13	16	12	292
"	114	60	67	42	16	31	13	20	14	15	12	289

..../-

School Code No.		Teacher Morale										Global
		1	2	3	4	5	6	7	8	9	10	11
MD	115	47	67	42	19	28	13	23	13	12	12	277
MP	116	59	62	45	18	29	13	23	14	13	15	291
MP	117	49	50	43	15	27	10	18	10	12	12	254
"	118	57	65	42	10	32	13	20	12	17	12	281
"	119	67	67	45	18	29	13	18	15	15	12	298
"	120	37	57	41	16	22	10	19	12	11	10	234
"	121	67	70	45	18	31	13	24	14	14	11	305
"	122	72	60	42	11	33	7	21	10	8	13	277
"	123	78	74	51	14	41	14	24	14	19	16	346
"	124	72	71	47	22	33	12	28	14	11	11	321
"	125	54	55	37	16	31	8	14	12	12	16	252
MU	126	63	65	44	19	28	13	22	13	15	11	293
MU	127	58	67	42	21	31	12	19	14	11	13	291
"	128	51	71	29	16	33	6	17	6	10	14	251
"	129	71	76	48	20	43	10	25	15	11	14	333
"	130	54	55	40	16	25	12	13	9	10	11	245
CC	131	67	68	48	20	39	12	8	15	26	16	325
CCC	132	72	75	46	24	41	16	29	17	18	16	353
CC	133	70	69	44	19	34	15	24	16	18	14	321
"	134	62	71	48	19	33	15	24	17	17	13	320
"	135	67	73	49	19	35	13	27	17	17	16	332
"	136	72	65	47	18	35	15	22	14	18	14	319
"	137	70	67	49	17	31	14	21	13	18	13	314
"	138	66	73	46	18	32	13	23	16	17	14	312

..../-

School Code No.		Teacher Morale										Global
		1	2	3	4	5	6	7	8	9	10	11
MS	139	70	70	47	22	38	16	25	16	16	15	334
MS	140	73	72	42	23	38	17	27	17	15	15	337
"	141	67	68	44	20	31	13	25	15	16	15	313
"	142	67	72	52	25	38	18	28	18	19	16	360
"	143	63	68	38	17	32	12	22	12	14	12	297
"	144	54	57	42	13	26	10	19	9	12	13	254
"	145	63	68	45	18	28	11	23	15	11	13	296
"	146	65	66	42	18	34	11	23	12	14	14	299
"	147	57	63	44	20	33	12	24	14	14	14	287
"	148	68	71	43	18	37	14	24	14	11	14	315
"	149	62	68	48	19	29	15	25	16	14	13	309
"	150	71	68	48	23	33	15	18	16	18	12	321
"	151	69	65	46	20	31	13	21	15	11	12	303
"	152	59	62	42	17	29	13	21	14	14	13	283
"	153	76	71	51	25	37	14	25	17	17	17	350
"	154	72	69	49	25	35	18	26	17	13	14	333
"	155	71	66	45	21	30	15	22	15	16	12	314
"	156	67	63	42	15	33	11	21	13	9	14	297
"	157	58	66	43	19	27	13	23	16	15	12	293
"	158	73	71	44	20	34	17	25	13	18	13	327
"	159	59	62	38	20	29	14	24	13	13	12	283
"	160	64	65	42	19	35	13	22	13	14	13	299
"	161	71	66	46	22	31	13	24	16	17	14	319
"	162	72	72	50	24	39	16	28	16	18	16	352

..../-

School Code No.		Teacher Morale										Global
		1	2	3	4	5	6	7	8	9	10	11
MS	163	70	68	48	16	35	13	28	17	12	17	328
"	164	70	75	46	14	38	17	25	18	18	15	342
"	165	66	69	42	21	33	15	23	14	17	14	312
"	166	65	68	45	18	33	13	22	14	14	13	306
"	167	60	68	47	20	31	13	25	16	18	13	313
"	168	65	64	41	20	27	14	21	14	16	13	295
"	169	51	58	44	18	16	11	19	13	16	11	248
"	170	65	79	50	18	37	22	27	13	14	14	334
"	171	66	66	52	23	34	17	24	16	15	14	326
"	172	64	66	44	18	36	9	23	10	10	15	295
"	173	72	73	49	21	35	16	26	16	19	14	344
"	174	68	60	44	23	30	14	26	14	16	13	321
"	175	69	74	37	27	37	13	28	18	18	14	334
"	176	57	68	41	19	30	14	22	16	12	13	292
"	177	76	72	53	26	38	17	29	18	18	16	362
"	178	63	67	41	20	30	14	24	15	15	13	304
"	179	37	76	45	19	35	9	27	9	12	14	283
"	180	72	74	50	19	30	17	23	17	16	12	330
"	181	70	72	41	20	37	16	25	14	17	14	325
"	182	67	66	42	21	30	14	25	16	15	13	310
"	183	70	69	50	23	37	17	26	16	15	16	338
"	184	69	67	42	17	33	12	17	14	14	14	298
"	185	64	58	41	19	33	14	22	14	15	15	307

.../-

School Code No.		Teacher Morale										Global
		1	2	3	4	5	6	7	8	9	10	11
MS	186	71	70	50	23	34	17	27	17	17	15	341
MS	187	53	60	37	18	30	12	30	14	12	13	269
"	188	61	62	42	19	33	13	21	14	14	14	292
"	189	70	66	46	17	28	12	19	12	13	12	297
"	190	73	70	50	17	33	14	19	14	15	13	319

4-10

PERCENTAGE DISTRIBUTION OF SCHOOLS BY STANINES.

FOR PTO TOTAL SCORES.

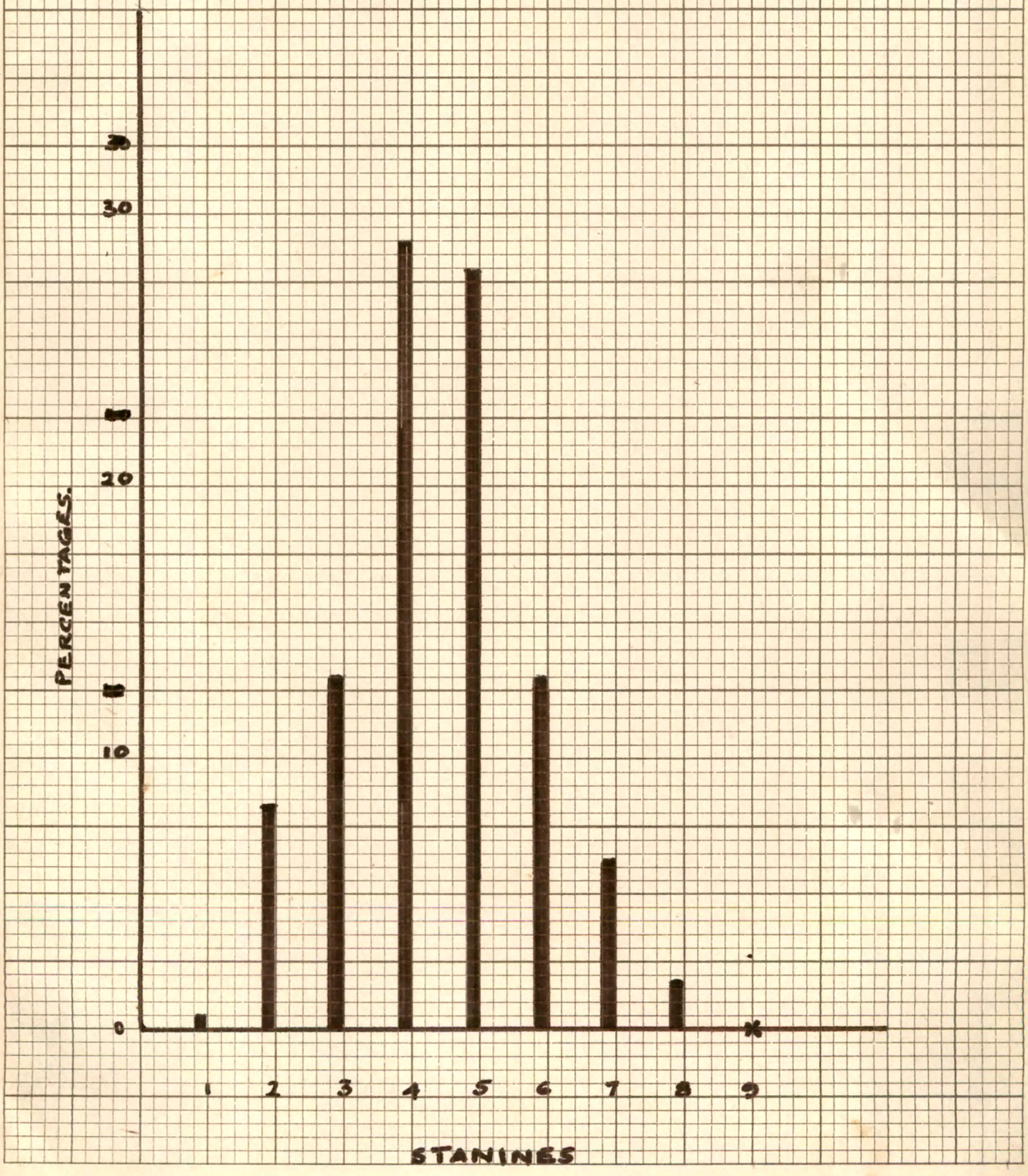


Table 4.13 shows the district-wise distribution of morale scores.

Table 4.13:

District-wise distribution of 190 schools of Tamilnadu according to morale categories.

Category	Madurai Educational Dt.	Madurai Revenue Dt.	Tamil Nadu
High (9,8,7)	1	9	15
Average (6,5,4)	38	85	133
Low (3,2,1)	11	36	42

From Tables 4.12 and 4.13 it can be seen that the P.T.O. scores follow almost a normal distribution with high concentration in stanine 5 and 4, i.e., average and little below average category. Mean faculty morale score of 293 falls in the category of stanine 4 - little below average.

Analysis of Pupil Performance Scores:

The curricular performance of the pupils of each school in the external S.S.L.C. Examination was taken as one of the criteria to measure school quality. Data was collected regarding the percentage of passes of each school for the past three years from the Principals

of schools and this was cross checked with the list obtained from the office of the Director of School Education. The mean of the percentages of the three years' results was taken as the pupil performance score.

Table 4.14 gives the mean percentage scores of pupil performance of 190 High Schools of Tamil Nadu. Table 4.15 gives the distribution of performance score of the 190 schools. The scores were classified as high, average and low with the two extremes in the continuum, viz., top 25% and bottom 25% categorised as high performing schools and low performing schools respectively. The classification is shown in Table 4.16.

Table 4.15:

Distribution of Pupil Performance Score of 190 Schools.

Performance score intervals	No. of schools
100 - 90	35
90 - 80	25
80 - 70	32
70 - 60	29
60 - 50	30
50 - 40	23
40 - 30	7
30 - 20	5
20 - 10	4
10 - 0	0
Total	190

The above table shows a heavy concentration of scores in the higher ranges.

TABLE No. 4.14

School Code No.		School Quality No.1 P.P. %
MM	1	32
MM	2	93
"	3	39
"	4	80
"	5	64
"	6	62
"	7	90
"	8	86
"	9	70
"	10	59
"	11	55
"	12	53
"	13	86
"	14	62
"	15	94
"	16	92
"	17	80
"	18	58
"	19	98
"	20	96
"	21	46
"	22	72

..../-

School Code No.	School Quality No. 1 P.P. %
MM 23	76
MM 24	47
" 25	83
" 26	82
" 27	25
" 28	73
" 29	99
" 30	89
" 31	81
" 32	53
" 33	45
" 34	71
" 35	48
" 36	28
" 37	44
" 38	71
" 39	19
" 40	59
" 41	70
" 42	100
" 43	59
" 44	64

...../-

School Code No.		School Quality No. 1 P.P. %
MM	45	51
MM	46	100
"	47	30
"	48	75
MD	49	72
MD	50	52
"	51	77
"	52	49
"	53	63
"	54	59
"	55	43
"	56	93
"	57	99
"	58	65
"	59	43
"	60	83
"	61	98
"	62	74
"	63	67
"	64	60
"	65	42
MP	66	100
MP	67	67
"	68	75

...../-

School Code No.		School Quality No. 1 P.P. %
MP	69	45
MP	70	63
"	71	47
"	72	100
"	73	72
"	74	60
"	75	79
"	76	40
"	77	86
"	78	71
"	79	53
"	80	89
"	81	81
"	82	74
"	83	69
"	84	83
"	85	53
"	86	90
"	87	63
"	88	55
"	89	67
"	90	82
"	91	44

..../-

School Code No.		School Quality No. 1 P.P. %
MP	92	96
MP	93	94
"	94	98
"	95	66
"	96	54
MU	97	40
MU	98	100
"	99	57
"	100	61
"	101	66
"	102	40
"	103	61
"	104	95
"	105	91
"	106	63
"	107	74
MU	108	73
MM	109	47
MM	110	89
MD	111	43
MD	112	71
"	113	71
"	114	68

...../-

School Code No.		School Quality No. 1 P.P. %
MD	115	50
MP	116	84
MP	117	42
"	118	95
"	119	76
"	120	59
"	121	39
"	122	56
"	123	65
"	124	63
"	125	52
MU	126	53
MU	127	91
"	128	47
"	129	50
"	130	50
MC	131	94
CCC	132	92
CC	133	69
CC	134	74
"	135	86
"	136	92
"	137	86
"	138	91

..../-

School Code No.		School Quality No. 1 P.P. %
MS	139	99
MS	140	99
"	141	49
"	142	94
"	143	21
"	144	48
"	145	76
"	146	12
"	147	68
"	148	62
"	149	62
"	150	82
"	151	21
"	152	30
"	153	100
"	154	79
"	155	74
"	156	35
"	157	50
"	158	84
"	159	58
"	160	26
"	161	95
"	162	75

..../-

School Code No.	School Quality No. 1 P.P. %
MS 163	50
MS 164	98
" 165	67
" 166	77
" 167	83
" 168	42
" 169	38
" 170	60
" 171	97
" 172	10
" 173	84
" 174	13
" 175	46
" 176	57
" 177	90
" 178	71
" 179	58
" 180	98
" 181	89
" 182	70
" 183	82
" 184	55
" 185	83

..../-

School Code No.		School Quality No. 1 P.P. %
MS	186	69
MS	187	72
"	188	56
"	189	56
"	190	79

Table 4.16:

Classification of 190 Schools in terms of performance categories.

Category	Score range	Mean	No. of schools.
High	85 - 100	93.5	47
Average	53 - 85	70.0	64
Low	0 - 53	41.1	49
All Schools		67.6	190

47 Schools fall in the category of high performing schools, with a mean performance score of 93.5. 49 schools belong to the low performing group, with a mean of 41.1, and the mean of the whole group being 67.6.

Table 4.17: gives the descriptive statistics about the distribution of the pupil performance scores.

Table 4.17:

Statistics	Value
Mean	67.6
Median	68
S.D.	2.05
Skewness	- 0.05
Kurtosis	0.026

The mean and median of the distribution are quite close showing that the distribution is almost normal. A slight negative skewness of 0.05 indicates that scores are massed at the high end of the scale and are spread out more gradually towards the low end. Kurtosis value of 0.026 shows that the distribution is more peaked than normal i.e., slightly lebtokurtic distribution.

Analysis of Innovative Index Score:-

The innovative inventory prepared by the investitor and validated by a pilot study, consisted of 30 items, the maximum possible score allotted for each item being 8. Weightage was given to number of innovations a school might have adapted, how early the innovation was introduced and whether the innovation was fully or partially implemented. Mean Score for innovativeness of a school was computed by summing all item scores and dividing by the total number of items $\left(\frac{\Sigma X}{N}\right)$

X = Item score.

N = No. of items.

Thus the maximum score/school could get was 8 and minimum zero.

Table 4.18 gives the innovative index scores of 190 schools of Tamil Nadu.

Distribution of the innovative index scores ranging from 0 to 8 obtained by 190 schools is given in Table 4.19.

Table 4.19:

Distribution of Innovative Index Scores of 190 Schools.

Innovative Index score interval	No. of schools.
8 - 7	0
7 - 6	3
6 - 5	27
5 - 4	47
4 - 3	52
3 - 2	45
2 - 1	16
1 - 0	0
Total	190

TABLE No. 4.18

School Code No.		School Quality No. 2 I.I.
MM	1	3.1
MM	2	6.3
"	3	3.3
"	4	3.8
"	5	3.1
"	6	4.2
"	7	3.1
"	8	4.5
"	9	3.2
"	10	3.3
"	11	5.0
"	12	3.7
"	13	4.3
"	14	3.9
"	15	4.5
"	16	2.8
"	17	5.0
"	18	3.2
"	19	5.2
"	20	5.5
"	21	4.7
"	22	2.7
"	23	2.7

...../-

School Code No.		School Quality No. 2 I.I.
MM	24	3.2
MM	25	2.1
"	26	4.7
"	27	1.6
"	28	4.4
"	29	4.0
"	30	4.1
"	31	3.3
"	32	4.0
"	33	3.0
"	34	3.3
"	35	3.0
"	36	1.5
"	37	3.4
"	38	1.7
"	39	2.7
"	40	1.5
"	41	3.0
"	42	3.2
"	43	4.5
"	44	2.7
"	45	2.4
"	46	2.7
"	47	3.5

.....-

School Code No.		School Quality No. 3 I.I.
MM	48	3.9
MD	49	4.3
MD	50	2.8
"	51	3.9
"	52	1.7
"	53	1.4
"	54	3.7
"	55	3.1
"	56	1.6
"	57	2.2
"	58	3.3
"	59	2.7
"	60	4.1
"	61	5.6
"	62	2.9
"	63	2.8
"	64	1.2
"	65	2.8
MP	66	5.7
MP	67	4.1
"	68	2.6
"	69	2.2
"	70	4.7
"	71	2.6
"	72	4.3

/---.

School Code No.		School Quality No. 2 I.I.
MP	73	4.1
MP	74	2.8
"	75	2.3
"	76	2.4
"	77	4.4
"	78	3.3
"	79	3.1
"	80	4.6
"	81	2.8
"	82	5.3
"	83	4.1
"	84	3.2
"	85	3.8
"	86	2.3
"	87	2.5
"	88	2.4
"	89	2.4
"	90	3.9
"	91	3.1
"	92	3.4
"	93	2.4
"	94	4.0
"	95	5.3
"	96	3.6

...../-

School Code No.	School Quality No.2 II.
MU 97	2.6
MU 98	5.4
" 99	2.9
" 100	1.4
" 101	2.5
" 102	1.5
" 103	3.4
" 104	3.7
" 105	4.3
" 106	4.7
" 107	2.2
" 108	2.8
MM 109	4.1
MM 110	2.6
MD 111	2.8
MD 112	5.7
" 113	4.1
" 114	3.1
" 115	2.5
MP 116	3.7
MP 117	4.0
MP 118	3.9
MP 119	1.9
MP 120	4.1
MP 121	3.9
MP 122	2.0

..../-

School Code No.		School Quality No. 2 I.I.
MP	123	5.3
MP	124	3.1
"	125	2.8
MU	126	2.4
"	127	2.2
"	128	2.6
"	129	2.5
"	130	2.8
CC	131	4.5
CCC	132	4.7
CC	133	2.8
CC	134	6.5
"	135	4.4
"	136	4.3
"	137	5.8
"	138	5.6
MS	139	5.6
MS	140	4.1
"	141	3.8
"	142	5.7
"	143	5.6
"	144	4.7
"	145	5.2
"	146	1.7
"	147	3.1

.../-

School Code No.		School Quality No. 2 I.I.
MS	148	3.6
MS	149	4.8
"	150	5.4
"	151	4.4
"	152	4.4
"	153	4.4
"	154	4.1
"	155	4.4
"	156	1.8
"	157	2.9
"	158	4.7
"	159	5.6
"	160	3.0
"	161	5.0
"	162	3.0
"	163	3.4
"	164	3.6
"	165	4.1
"	166	4.5
"	167	5.8
"	168	3.5
"	169	2.8
"	170	3.6
"	171	5.0
"	172	1.6

..../-

School Code No.		School Quality No. 2 I.I.
MS	173	5.3
"	174	4.9
"	175	5.8
"	176	1.8
"	177	1.8
"	178	4.5
"	179	4.7
"	180	3.2
"	181	2.7
"	182	6.4
"	183	5.2
"	184	3.8
"	185	5.0
"	186	4.7
"	187	2.6
"	188	5.4
"	189	4.4
"	190	3.8

To identify the number of schools scoring high on innovativeness and those scoring low on the innovative scale, extreme groups of the top 25% and the bottom 25% were selected. The schools were classified into highly innovative, average innovative and low innovative schools accordingly. Table 4.20 gives the classification of 190 schools in terms of innovative categories.

Table 4.20:

Category	Score range	Mean	No. of schools.
High	4.33 - 8	5.74	46
Average	2.67 - 4.32	3.49	98
Low	2.66 - 0	2.05	46
All schools	8 - 0	3.67	190

46 schools fall in the category of highly innovative schools, 98 schools can be considered as average innovative and 46 are low innovative schools.

The high innovative schools have a mean of 5.74 whereas the low group has only 2.05; the mean for all school sample being 3.67.

Table 4.21 gives the descriptive statistics of the distribution of innovative index scores of 190 schools of Tamil Nadu.

Table 4.21:

Statistics	Value
Mean	3.67
Median	3.65
S.D.	1.22
Skewness	- 0.521
Kurtosis	0.390

The mean and the median of the distribution are quite close, showing that the distribution is almost normal. A slight negative skewness indicates that the scores are massed at the high end of the scale and are spread out more gradually towards the low end. Kurtosis value of 0.390, being greater than the normal value of .263 shows that the distribution is platykurtic i.e., the frequency distribution is flatter than the normal.

Testing the Hypothesis:

In the present study, school quality is judged by 2 criterion variables and there are 18 independent variables. The criterion variables are 1) pupil performance and 2) innovative index.

The independent variables are under 2 categories, namely 1) climate dimensions and 2) morale dimensions.

Climate dimensions include the global organizational climate score ~~score~~ O.C. and the eight dimensions of climate.

Disengagement	OC	01
Hindrance	OC	02
Esprit	OC	03
Intimacy	OC	04
Aloofness	OC	05
Production emphasis	OC	06
Thrust	OC	07
Consideration	OC	08

Morale category includes -

Mean faculty morale score and the 10 dimensions of teacher morale -

Teacher Rapport with Principal	TM	09	
Satisfaction with teaching	TM	10	
Rapport among teachers	TM	11	
Teacher salary	TM	12	
Teacher load	TM	13	
Curricular issues	TM	14	
Teacher status	TM	15	
Community support of education	TM	16	
School facilities and services	TM	17	and
Community pressures	TM	18	

The criterion variables, pupil performance and innovative index are referred to as VARI 19 and VARI 20.

Measures for each one of these independent variables have been obtained for the 190 schools comprising the sample in the present investigation.

Variance Analysis:

A single composite test to compare all sample means simultaneously and to tell us whether or not a statiscally significant difference exists somewhere in the data is the analysis of variance. It answers the question, 'Is the variability between groups large enough in comparison with the variability within groups to justify the inference that the means of the population from which the different groups were sampled are not all the same ? In other words, if the variability between group means is large enough, we can conclude that they probably come from different populations and that there is a statistically significant difference presented in the data. The particular statistical test yielding the answer is the 'F' ratio.

$$F = \frac{\text{Between group variance}}{\text{Within group variance}}$$

'F' ratio is just a preliminary and explanatory tool. If a significant 'F' ratio is obtained, it indicates that somewhere in the data, something other than

chance is probably operating. To attempt to isolate the presence, nature and content of this non-chance influence, 't' test is used.

Pupil Performance and School Climate:

Research Hypothesis - 1:

The operational statement of the investigator's research hypothesis as given in the previous chapter reads " There is a significant positive relationship between pupil performance and openness of organizational climate of the school".

To reach an objective decision as to whether this particular hypothesis is confirmed by the data obtained, the first step of the objective procedure has been to state a null hypothesis or hypothesis of no difference.

Statistical hypothesis 1 - Pupils in schools of different climate types do not differ in performance.

Analysis of variance technique was used to test the hypothesis.

Table 4.22 gives the mean pupil performance scores and 'N' values according to climate:

Climate Type	Open	Autonomous	Controlled	Familiar	Paternal	Closed.
N	57	27	21	8	28	49
X(mean)	73	67	44	66	66	59

Table 4.23 gives a summary of the analysis of variance of pupil performance scores of different climates:

Table 4.23:

Summary of Analysis of Variance Results

Hyp. 1

Source of variation	Degrees of freedom	Sums of squares SS	Mean square variance MS(V)	SD
Among the means of concentration.	5	14273	2854.6	27.7
Within conditions.	184	141761	770.4	
Total	189	156034	$F = \frac{2854.6}{770.4} = 3.70$	

Table value of 'F' for df_1 5 & df_2 184 is,

'F' at .05 = 2.26

'F' at .01 = 3.11

The value obtained 'F' = 3.70 significant at .01 level.

The 'F' value obtained here is significant at both levels. This warrants the rejection of the null hypothesis and thereby accept the alternate research hypothesis, i.e., schools of different climate types differ significantly in terms of pupil performance. Significant results at this stage demand further comparisons taking two groups of different climate type schools at a time; groups of schools for such comparisons in terms of 6 organizational climate resulted in 15 such pairs. To test the mean differences, the 't' test was used.

Table 4.24 presents the 't' values of these comparisons - Hyp. 1:

No.	Climate group.	N	Mean	df	't'	Remarks
1.	Open	57	73	82	.90	Not significant.
	Autonomous	27	67			
2.	Open	57	73	76	3.9	Significant at 0.01 level
	Controlled	21	44			
3.	Open	57	73	63	.66	Not significant
	Familiar	8	66			
4.	Open	57	73	83	.89	Not significant
	Paternal	28	66			
5.	Open	57	73	104	2.59	Sig. at .05 level - Nearly sig. to .01 level.
	Closed	49	59			

No.	Climate group.	N	Mean	df	't'	Remarks
6.	Autonomous	27	67	46	2.9	Sig. at .01 level.
	Controlled	21	44			
7.	Autonomous	27	67	33	.09	Not significant.
	Familiar	8	66			
8.	Autonomous	27	67	53	.13	Not significant.
	Paternal	28	66			
9.	Autonomous	27	67	74	1.2	Not sig. even at .10 level
	Closed	49	59			
10.	Controlled	21	44	27	1.9	Sig. at .10 level
	Familiar	8	66			
11.	Controlled	21	44	47	2.8	Sig. at .01 level
	Paternal	28	66			
12.	Controlled	21	44	68	2.05	Sig. at .05 level
	Closed	49	59			
13.	Familiar	8	66	34	0	Not significant
	Paternal	28	66			
14.	Familiar	8	66	55	.67	Not significant
	Closed	49	59			
15.	Paternal	28	66	75	1.1	Not significant
	Closed	49	59			

It can be seen from the table that out of the 15 comparisons, 5 pairs have turned out to be statistically significant.

Pupil performance in open schools does differ quite significantly from controlled type climate schools and closed climate schools.

It is also found that pupil performance in autonomous climate schools differ significantly from controlled climate schools. Pupil performance in the controlled climate school seems to differ significantly from all the other climate schools.

The mean values show that in the open and autonomous climate schools pupil performance is significantly better than that of the schools of other climate types. Hence it can be concluded that this study does show that more open the climate, better the pupil performance of the school.

Researches by Feldvebel (1964), Andrews (1964) Miller (1969) Hale (1965) Pumphery (1969) and Guy (1970) found that there was no significant association between climate and academic achievement of students. Whereas Rice (1968) and Sharma (1971) have reported significant correlation between high achievement and openness of climate. These findings support the results of the present investigation.

Innovative Index and School Climate:

Statistical Hypothesis 2 - Schools of different types of climate do not differ in innovativeness.

Table 4.25:

Mean Innovative Index Scores and 'N' values according to climate types.

Climate type	Open	Autonomous	Controlled	Familiar	Paternal	Closed
N	57	27	21	8	28	49
X	3.9	3.6	3.9	3.5	3.7	3.3

Table 4.26:

Summary of Analysis of Variance Results - Hyp.2

Source of variation	df	SS	MS(V)	S.D
Between mean	5	1119	223.8	11.6
Within condition	184	24826	134.9	
Total	189	25945	F = 1.66 Not significant	

Table value of 'F' for df 5 & df 184 is,

'F' at .05 = 2.26

'F' at .01 = 3.1

The value of 'F' = 1.66 less than the tabulated value of 2.26 for 5 & 184 degrees of freedom at 5% level is not significant, i.e., the schools of different climate types do not differ

significantly in terms of their innovativeness. However, the mean values ranging from 3.3 (closed) to 3.9 (open) i.e., value increasing from closed to open does indicate that openness of climate does facilitate innovativeness in schools.

The result of this investigation is supported by other studies by Roosa (1969) Wilkes (1970) La Mantia (1970) Rai (1972) who also found no significant difference between open and closed types of schools for some aspects of innovativeness.

A few researches by McFadden (1966) Marcus (1969) Bennet (1969) and Hillman (1969) reported some positive correlation between climate and innovativeness of schools.

Pupil Performance and Teacher Morale:

Statistical Hypothesis 3 - There is no relationship between pupil performance and the faculty morale of the school.

Table 4.27:

Mean Pupil Performance Scores and 'N' values according to morale categories.

Morale categories.	High	Average	Low
N	15	133	42
X	82	68	57

Table 4.28:

Summary of Analysis of Variance - Hyp.3

Source of variation	df	SS	Mean square V	S.D.
Between means	2	7227	3613.5	26.3
Within conditions	187	129689	693.5	
Total	189	136966	$F = \frac{3613.5}{693.5} = \underline{5.21}$	Sig at both level.

Table value of 'F' for $df_1 = 2$ & $df_2 = 187$, is,

'F' at .05 = 3.05
'F' at .01 = 4.73

The value obtained here, F = 5.21 is significant at both levels. This warrants the rejection of null hypothesis and acceptance of research hypothesis i.e., pupil performance is positively related to the faculty morale of the school.

A comparison of the means of the three categories does show that pupil performance in high morale schools is better than that of average morale schools which in turn is better than low morale schools. This does indicate that pupil performance is positively related to morale of the faculty of the school; higher the morale, better the performance.

Significant 'F' value demands further comparison taking two groups of different morale categories at a time. Groups of schools for such comparison in terms of 3 morale categories are 3 pairs and 't' test was used to test the mean differences.

Table 4.29: presents the 't' value of three comparisons - Hyp. 3

No.	Morale category	N	Mean	df	't' ratio	Interpretation
1.	High	15	82	146	1.99	Sig.at .05 level
	Average	133	68			
2.	High	15	82	55	3.3	Sig. at .01 level
	Low	42	57			
3.	Average	133	68	173	2.44	Sig. at .02 level
	Low	42	57			

It can be seen from the table that all the three pairs are statistically significant - all of these at .05 level, and pair 2 at .01 level and pair 3 at .02 level. This warrants the rejection of the null hypothesis. This is supported by the findings of Wickert (1951) Likert (1941) Katz (1947) who reported that morale was positively correlated with productivity and operational effieiency

and Lester Andrews (1953) W.K. Stosberg (1958) Miller (1965) and F.S. Barry (1955) who reported that high morale among the faculty of the school led to better teaching and high student achievement.

Innovative Index and Teacher Morale:

Statistical Hypothesis 4 - There is no relationship between innovativeness of schools and the faculty morale.

Table 4.30:

Mean Innovative Index Score and 'N' values according to morale categories.

Morale category	High	Average	Low
N	15	133	42
X	4.4	3.7	3.3

Table 4.31:

A Summary of Analysis of Variance - Hyp.4

Source of variation	df	SS	Mean variance	S.D.
Among means	2	12.57	6.28	1.09
Within condition	187	226.43	1.2	
Total	189	239.0	$F = \frac{6.28}{1.2} = 5.23$	Sig.at .05 + .01 level.

Table values of 'F' for df = 2 & df = 187, is

'F' at .05 = 3.05

'F' at .01 = 4.73

The value of 'F' = 5.23 is significant at both levels. This warrants the rejection of the null hypothesis and acceptance of research hypothesis that Innovative Index of schools is related to the faculty morale of the school. A comparison of the means of the three categories shows that Innovative Index of high morale schools is better than that of average morale schools which in turn is better than that of low morale, schools. This does indicate that innovativeness of schools is positively related to morale of the faculty of the school; higher the morale, better the innovativeness.

Significant 'F' value demands further comparison among the 3 groups, taking 2 at a time and finding out the 't' ratios. Table 4.32 presents the 't' values of these comparisons - Hyp.4.

No.	Morale category.	N	M	df	't' ratio	Interpretation
1.	High	15	4.4	146	2.33	Sig.at .05 level Sig.at .02 level
	Average	133	3.7			
2.	Average	15	4.4	55	3.4	Sig. at .01 level
	Low	42	3.3			
3.	Average	133	3.7	173	2.1	Sig. at .05 level
	Low	42	3.3			

It can be seen from the table that all the 3 pairs are statistically significant, all of them at .05 level and the high - low group at .01 level. This warrants the rejection of the null hypothesis.

The studies by Richman and Stern (1968) Charles Wallace (1971) Malcum Provus (1966), all have indicated positive correlation between teacher personality characteristics and acceptance of innovations in the schools, thus supporting the findings of the present study.

Discussion:

The above analysis of the data using the technique of variance has indicated that pupil performance is influenced by school climate and the faculty morale of the school. Innovativeness of schools is influenced by the faculty morale significantly and very slightly influenced by the climate conditions. 't' test has identified that out of the 15 pairs of comparisons of organizational climate types, 5 pairs differ significantly regarding pupil performance. The 5 pairs are -

1) Open
   Controlled
2) Open
   Closed
3) Autonomous
   Controlled
4) Controlled
   Paternal and
5) Controlled
   closed.

Out of the 3 pairs of morale categories compared, all the three pairs, viz., high-average, high-low, average-low are statistically significant in terms of pupil performance as well as innovative index of schools.

We can safely conclude that pupil performance does differ from climate to climate and is affected by faculty morale. Innovative Index is affected by the faculty morale and differs slightly from climate to climate.

CORRELATIONAL ANALYSIS:

In this section, the relationship of each independent variable including that of climate dimensions and morale dimensions has been studied using correlational technique.

The global climate value and the global faculty morale value were found to be quite significantly related to pupil performance and innovative index by the technique of variance. It was felt that the correlational technique, as a more powerful statistical test would measure the degree of relationship between the dependent and independent variables, hence, this technique was used.

ORGANIZATIONAL CLIMATE AND PUPIL PERFORMANCE:

The six climates identified were arranged and ranked along a continuum from the open at one end to closed at the other. This ranking scheme provides useful approximation to a way in which one can conceptionalize the data. This ranking scheme assumes a linearity of relationship and different weightages of 6, 5, 4, 3, 2 & 1 have been assigned to open, autonomous, controlled, familiar, paternal and closed climates respectively. These scores have been treated as global climate scores for analysing the data. Pearson product moment correlation coefficient values were calculated for (1) climate and pupil performance and (2) climate and innovative index.

'r' value for OC & P.P. = .65 Sig. at .01 level

'r' value for OC & I.I. = .23 Sig. at .01 level

(for df = 188)

Pearson product moment 'r' was calculated between the global faculty morale scores and the scores of pupil performance and innovative index of 190 schools.

The 'r' values were found to be -

'r' for teacher morale & P.P. = .59 sig.at .01 level

'r' for teacher morale & I.I. = .73 highly sig.

These 'r' values, all of them statistically significant at .01 level warrants the rejection of the null hypothesis and acceptance of all the 4 research hypothesis, viz.,

1) Pupil performance is positively related to openness of climate
2) The Innovativeness of schools is positively related to openness of climate
3) Pupil performance is positively related to the high morale of the faculty of the school
4) The innovativeness of schools is positively related to the high morale of the faculty of the school.

Having found out that the global climate index and the teacher morale index are quite positively and strongly related to pupil performance scores and innovative index scores, it was decided to find out the strength of the relationship between the 8 dimension scores of climate and the 10 dimension scores of teacher morale with the criterion variables of pupil performance and innovative index. For this, a 20 x 20 matrix of inter-correlation between the variables was prepared and fed into the computer. The product moment 'r' between the 18 independent variables and the 2 dependent variables were computed.

Table 4.33:

Product moment 'r' between the Independent variables 01 to 18 and the dependent variables 19 & 20.

Independent variable	Criterion Variable 19 Product moment r with 19	Remarks Sig.at .05	Remarks Sig.at .01	Criterion Variable 20 Product moment r with 20	Remarks Sig.at .05	Remarks Sig.at .01
OC 01	- .243	✓	✓	- .1949	✓	✓
" 02	- .2796	✓	✓	- .1112		
" 03	+ .4026	✓	✓	+ .2092	✓	✓
" 04	- .6804 E^{-1}			- .6574 E^{-1}		
" 05	+ .1338	✓		- .9692 E^{-1}		
" 06	+ .1458	✓		+ .1305		
" 07	+ .2626	✓	✓	+ .2130	✓	✓
" 08	+ .3467 E^{-1}			+ .1234		
TM 09	+ .1814	✓	✓	+ .1081		
" 10	+ .2144	✓	✓	+ .3168 E^{-1}		
" 11	+ .2698	✓	✓	+ .1032		
" 12	+ .2161	✓	✓	+ .2796	✓	✓
" 13	+ .2492	✓	✓	+ .1386	✓	
" 14	+ .4394	✓	✓	+ .3198	✓	✓
" 15	+ .1453	✓	✓	+ .1527	✓	
" 16	+ .3612	✓	✓	+ .1829	✓	✓
" 17	+ .6668	✓	✓	+ .4435	✓	✓
" 18	+ .2134	✓	✓	+ .3524 E^{-1}		

From Table 4.33, it is seen that of the 18 independent variables, 14 variables show a high coefficient of correlation (.01 level) with the criterion variable 19 i.e, pupil performance and 7 independent variables show a high coefficient of correlation (.01 level) with the criterion variable 20 i.e., innovativeness of schools. Variables OC 05 & OC 06 yield a value of 'r' significant at .05 level with criterion variable 19. The dimensions which are highly significant with criterion variable of pupil performance are:-

OC 01	=	Disengagement (-ve)	Sig. with pupil performance at .01 level.
OC 02	=	Hindrance (-ve)	
OC 03	=	Esprit	
OC 07	=	Thrust	
TM 09	=	Teacher rapport with principal	
TM 10	=	Satisfaction with teaching	
TM 11	=	Rapport among teachers	
TM 12	=	Teacher salary	
TM 13	=	Teacher load	
TM 14	=	Curricular issues	
TM 15	=	Teacher status	
TM 16	=	Community support of education	
TM 17	=	School facilities and services	
TM 18	=	Community pressures	

The independent variables which are highly significant with the criterion variables of innovative index are :-

OC 01	=	Disengagement (-ve)	Sig. with innovative index at .01 level.
OC 03	=	Esprit	
OC 07	=	Thrust	
TM 12	=	Teacher salary	
TM 14	=	Curricular issues	
TM 17	=	School facilities and services	
TM 18	=	Community pressures	

Among the climate dimension variables, esprit and thrust correlate highest with pupil performance and of the 10 morale dimension variables, school facilities and services and curricular issues range high with both the criterion variables, pupil performance and innovative index.

The climate dimension 01 & 02 viz., disengagement and hindrance correlate nagatively to pupil performance and innovative index thus indicating that pupil performance and innovativeness of a school are influenced negatively if there is disengagement among the group and if the teachers feel that there is 'hindrance' from the principal in their work - this confirms Halpin's (1966) negative loading on his three factor rotation. The highly significant correlation of esprit and thrust with pupil performance and innovative index also supports Halpin's analysis (1966) on the quality of authenticity and his conclusion that thrust furnishes an index to the authenticity of the Principal's behaviour and that 'Esprit' provides an index to the authenticity of the group's behaviour.

Plaxton (1965) reported that a strong relationship (.61) existed between teachers' satisfaction and climate and even a stronger relationship (.66) between teacher satisfaction and esprit. He also found that teacher ratingsof school effectiveness

were correlated highly with esprit (.59).

W.G. Schmidt (1965) reported that open climate was significantly related to 'thrust' of leadership behaviour.

Though Rice (1968) reported that there was no significant relationship ~~existed~~ between the 8 subtests of OCDQ and pupil achievement, one positive partially valid finding gave some indication that those schools with open climate do have a significant relationship to high achieving schools as contrasted with closed climate and low achieving schools.

Otto and Veldman in a statistical OCDQ study reported that teachers perceive the climate as open when they are able to satisfy their social needs and enjoy a sense of accomplishment in their job i.e., 'high esprit'.

Bennet (1968) also felt the importance of the variable 'esprit' in terms of innovativeness of schools. He reported a positive correlation of .23 between esprit and number of innovations adopted by the secondary schools.

The negative significant value of - .1949 between disengagement and innovative index indicates that the disengagement tendency on the part of teachers can negatively influence the school's innovative tendency. Bennet (1968) , though did not get a significant correlation, when the factor disengagement was taken indepedently, concluded that disengagement on the part of the group can influence the innovativeness of schools when taken together with the other climate group dimensions.

Of the 10 Teacher morale dimensions, all the 10 are found to be highly significant in terms of pupil performance thus indicating that all dimensions contributing towards the total morale score influence the pupil performance of schools.

Innovativeness of schools is found to be influenced greatly by the 4 dimensions namely - Teacher salary, Curricular issues, School facilities and Services and Community pressures. Bentley and Rempel in their 1962 study on vocational agricultural teachers reported that high relationship existed between current position satisfaction and their morale and feeling of confidence in the future of their vocation. In the present study teacher rapport with principal, their satisfaction with teaching and rapport among themselves are found to be significant at 5% level with regard to innovativeness of schools.

Kplyoy and Mathis (1967) scanning different kinds of satisfaction within a climate, found that satisfaction differed significantly among the salary dimension in the merit system. In the present investigation also, teacher salary seems to be quite highly related to the morale score and pupil performance score.

SUMMARY: Correlational analysis has pointed out that climate is positively related to pupil performance and innovative index and teacher morale is highly significantly correlated with pupil performance and ~~teacher morale~~ innovative index

Of the climate dimension, 4 of these are found to be significantly correlated at .01 level with pupil performance viz., -

Esprit	+ ve	arranged in order of significance.
Thrust	+ ve	
Hindrance	- ve	
Disengagement	- ve	

Of the morale dimensions, all the 10 are found to be significantly correlated with pupil performance at .01 level; high ranking among these being school

facilities and services and curricular issues. With innovative index of the climate dimensions, 3 of these viz., thrust, esprit and disengagement (-vely) are found to be correlated at .01 level. Of the morale dimension, 4 of these, viz., school facilities and services, community support of education, curricular issues and teacher salary are found significantly correlated with innovative index.

Organizational Climate and Teacher Morale - Contingency Coefficient

The two main independent variables of this study are organizational climate and teacher morale. The main concern so far has been the relationship of these two independent variables with the criterion variables of pupil performance and innovative index of schools.

At this stage, it was thought that how these two variables stand in relationship to each other should be found out. To find the extent of association or relation between these two variables, it was assumed that these two sets of scores consist of an unordered series of frequencies and no assumption was made about the shape of the population from which the scores were drawn. It was considered that the best statistical test to determine the significance of association in

Such a case would be computing the contingency coefficiency as the two variables under study have been classified, into a number of categories.

To compute the contingency coefficient between the scores of these two variables, a contingency Table (4.34) was prepared by arranging the frequencies into rows and columns.

Table 4.34:

Contingency Table.

Morale categories	Climate categories: O - A	C - F	P - Cl	Total
High	(6.6) 14	(2.3) 1	(6.6) 0	15
Average	(58.8) 63	(20.3) 24	(53.9) 46	133
Low	(18.6) 7	(6.4) 4	(17.0) 31	42
Total	84	29	77	190

Table 4.34 is a 3 x 3 contingency table, where, the climate frequencies are clubbed into 3 groups open-autonomous, controlled-familiar and paternal-closed and the morale frequencies are grouped as high, average and low morale categories. The expected frequencies

within perenthesis ( ) for each cell is determined by multiplying the two marginal totals common to that cell and then dividing this product by 'N', the total number of cases; when all those expected frequencies or independence values are tabulated, the value of sum quotient 'S' is calculated by squaring each observed cell entry and dividing by its chance value and summing all these quotients. Contingency coefficient 'C' is given by the

Formula $C = \sqrt{\frac{S - N}{S}}$ S = sum of the quotients & N = size of the sample.

C and chisquare χ^2 have the relationship -

$$C = \sqrt{\chi^2 / N+\chi^2}$$

From Table 4.34 the value of of 'S' has been calculated as:

$$S = 226.9$$

and $N = 190$

$$C = \sqrt{\frac{36.9}{226.9}} = .40$$

value of $\chi^2 = 36.9$ (df = 4)

The χ^2 value is found highly significant, for beyond the .001 level.

(Table value of χ^2 df = 4) = 18.46)

DISCUSSION:

The sample of the present investigation was a random one, and scores from the two independent variables - organizational climate and teacher morale were collected from the same sample. To find out whether these two scores were associated in the population which is represented in the sample, the contingency coefficient of correlation was computed. In other words, in testing the significance of a measure of association, the null hypothesis that there is no correlation between organizational climate and teacher morale was put to test, and the appropriate statistical test of contingency coefficient was chosen. In the course of computing 'C', we compute the value of chisquare (χ^2) which provides a simple and adequate indication of the significances of C. If the χ^2 value is found to be significant for degrees of freedom (k-1) (r-1) where χ = row and K = column, then it can be concluded that the association between the variables is not zero. Limitation of the analysis - A study of the Table 4.34 shows that one cell has less than 5 in the expected frequencies, three cells have less than 5 in the observational frequencies and one cell has a zero frequency in the observational frequencies.

But as not less than 20% of the cells did have an expected frequency of less than 5 and as no cell had an expected frequency of less than one, contingency coefficient 'C' was considered applicable. The value of 'C' is found to be .40 and the value of χ^2 = 36.9 is significant far beyond the .001 level, thus proving that school organizational climate is not independent of teacher morale.

Studies by Null (1965) Eberlain (1968) Pettibone (1970) and others also came to the same conclusion that teachers' attitude was positively related to their perception of climate. Collin (1965) Moris(1964) Kirk (1965), Hamlin (1967) Turner (1969) Sargent (1967) Hingland (1972) - and others have confirmed that teacher satisfaction variable was positively and significantly related to openness of climate.

From the finding of the present investigation, it can be pointed out that as there is such a high correlation between climate and morale, one variable could be substituted for the other in future investigations.

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