

CHAPTER V

ANALYSIS OF THE DATA

CONTENTS

- 5.0 INTRODUCTION
- 5.1 MEANS AND SDs OF
- (a) Components of Classroom Climate
 - (b) Pupils' Motivation and its Components
 - (c) Academic and Non-Academic Achievements
 - (d) Components of Socio-Economic Status
- 5.2 CORRELATIONS OF
- (a) Classroom Climate with its Components
 - (b) Pupils' Motivation with its Components
 - (c) Pupils' Motivation with the Components of Classroom Climate
 - (d) Pupils' Motivation with Socio-Economic Status
 - (e) Pupils' Motivation with Academic and Non-Academic Achievements
 - (f) Academic Achievement with Components of Classroom Climate
 - (g) Non-Academic Achievement with Components of Classroom Climate
- 5.3 t-VALUE OF
- | | |
|-----------------------|--------------------------|
| (a) Authenticity | (e) Pupils' Motivation |
| (b) Legitimacy | (f) Academic Achievement |
| (c) Productivity | (g) Non-Academic |
| (d) Classroom Climate | Achievement |
- 5.4 DISCUSSION OF RESULTS



5.0 INTRODUCTION

The teachers teach the same syllabus to all the pupils of the respective grades with the same speed and same methods of teaching, thereby providing almost the same type of experiences to all the pupils. They assign same tasks to perform and evaluate their progress with the same type of question papers.

Several questions arise out of this. They are as follows:

1. Do the pupils of different management schools, different medium, and from different levels of SES have the same level of pupils' motivation?
2. Do they have the same level of Authenticity, Legitimacy, Productivity and Classroom Climate?
3. Do they get same type of experiences in the classroom life?
4. Do they have same type of value system?
5. Is there any relation between pupils' level of classroom climate and their academic achievement?
6. Is there any relation between pupils' motivation and classroom climate?
7. Is there any relation between pupils'

motivation and academic achievement?

The ensuing pages will throw light on the answers to most of the questions posed above.

5.1 MEANS AND SDs

The question is: From the total sample, what is the mean score of each of the following variables?

- | | |
|----------------------|-----------------------------|
| 1. Authenticity | 5. Pupils' motivation |
| 2. Legitimacy | 6. Academic achievement |
| 3. Productivity | 7. Non-academic achievement |
| 4. Classroom climate | 8. SES |

The following analysis answers this question. The Graphs No. 1 & 2 showed classwise frequency distribution of the mean scores of Classroom Climate and Pupils' Motivation.

TABLE 8

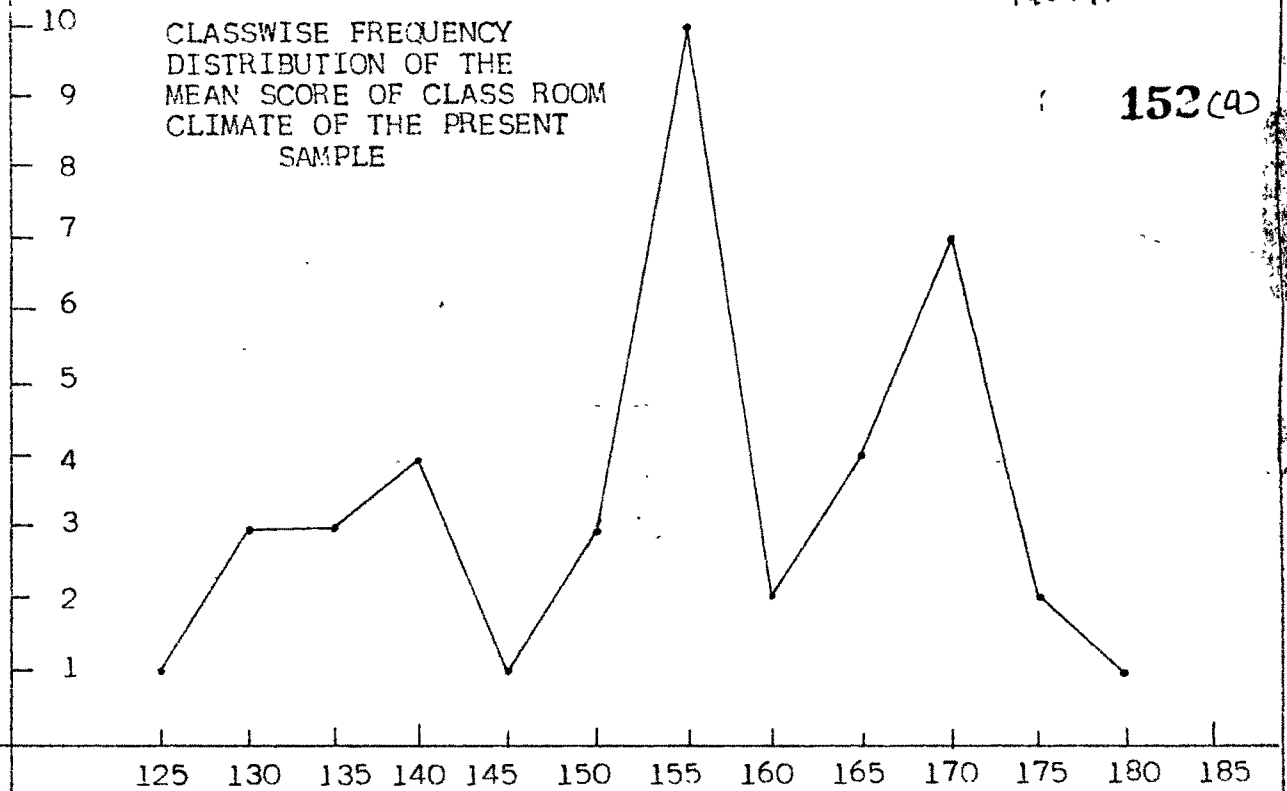
The table showed as the followings:

- Class No. 17 (K.L.S. Khandwala High School for girls) got the highest mean score (24.34) for socio-economic status, while class No.41 (Choksi H.V. Vidyalaya School) got lowest mean score (11.45).
- Class No. 34 (Pratap High School) got the highest mean score (52.82) for Authenticity

No.1.

CLASSWISE FREQUENCY
DISTRIBUTION OF THE
MEAN SCORE OF CLASS ROOM
CLIMATE OF THE PRESENT
SAMPLE

152 (a)



No.2

152 (b)

CLASS WISE FREQUENCY DISTRIBUTION OF
THE MEAN SCORE OF PUPILS ACADEMIC
MOTIVATION OF THE PRESENT SAMPLE

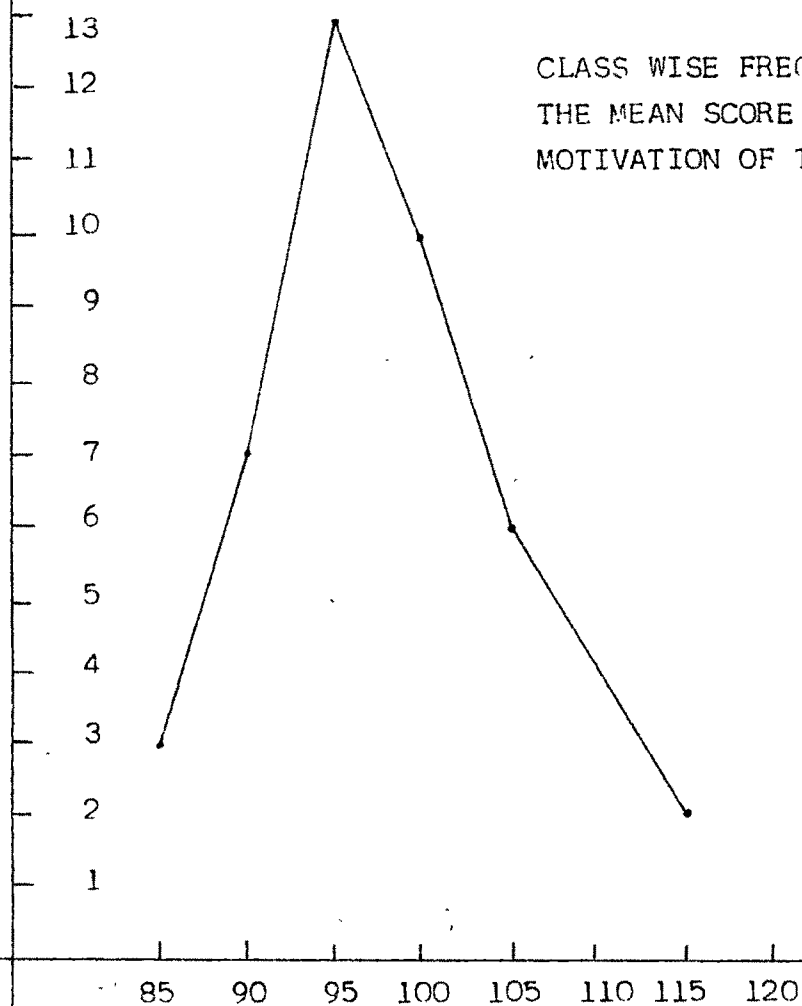


TABLE 8

Means and SDs of all Variables in Each Class

Class No.	SES		Classroom				Climate				Trials' Motivation				Academic Achievement		Non-Academic Achievement	
	Mean	SD	Authenticity	Legitimacy		Productivity	Classroom Climate		Trials' Motivation	Academic Achievement		Mean	SD	Mean	SD	Mean	SD	
				Mean	SD		Mean	SD		Mean	SD							
1	19.00	6.02	51.94	8.96	53.18	7.21	53.76	7.21	156.79	21.25	91.82	20.53	2.09	0.90	2.58	0.82		
2	18.07	5.07	51.79	7.53	53.43	9.11	52.57	8.24	165.14	24.41	98.07	19.02	2.67	1.37	2.74	1.09		
3	21.47	5.29	50.14	6.72	54.44	8.28	53.70	8.05	165.84	22.39	80.23	15.49	2.70	0.82	2.63	0.78		
4	20.16	4.84	53.49	7.78	55.02	7.03	56.02	7.13	171.47	21.63	99.67	14.11	3.16	0.73	3.31	0.76		
5	16.95	5.16	46.38	8.98	49.73	8.72	48.95	8.41	152.24	24.19	94.65	14.47	2.86	1.02	2.89	1.18		
6	19.05	5.66	44.97	11.44	48.78	12.57	51.08	11.75	151.65	35.24	86.00	13.77	2.97	0.92	3.08	0.85		
7	19.10	5.65	43.29	9.42	43.59	10.64	44.06	10.66	137.78	29.69	95.08	15.20	3.39	1.22	3.08	1.19		
8	17.21	5.71	49.76	8.19	55.16	6.44	54.58	6.23	167.11	19.14	95.03	12.74	2.89	0.85	3.21	1.15		
9	13.09	5.27	43.03	10.41	45.37	9.64	44.63	9.40	139.74	27.22	93.57	14.83	3.00	1.22	3.20	1.35		
10	12.77	4.84	47.65	6.25	48.46	6.70	49.12	6.68	152.19	16.18	93.31	16.97	3.31	0.72	2.77	0.64		
11	15.77	5.62	51.97	9.65	55.16	7.50	56.75	5.50	171.63	19.38	83.56	17.56	3.13	1.17	2.59	0.61		
12	16.64	6.02	47.31	7.46	52.31	7.09	52.08	5.97	159.56	19.65	102.78	16.06	3.89	1.02	3.92	0.92		
13	14.82	5.28	45.15	7.91	50.56	8.67	48.12	7.61	151.53	22.48	85.59	15.61	4.35	0.84	2.65	0.94		
14	15.69	3.19	39.06	6.44	44.16	9.33	43.47	7.30	132.13	21.82	90.69	12.92	3.53	0.87	3.38	0.70		
15	15.31	5.84	46.85	9.47	49.03	9.77	48.36	8.73	151.69	25.88	97.59	14.56	2.82	0.87	3.67	0.94		
16	13.39	4.17	48.22	6.33	49.98	5.82	49.59	6.75	155.17	16.20	103.12	13.51	3.41	1.08	2.93	1.37		
17	13.37	4.83	51.84	5.93	56.30	5.10	52.55	6.77	168.36	14.31	105.11	14.24	2.95	0.80	3.00	1.00		
18	20.00	6.23	48.57	12.10	50.78	10.12	49.71	12.95	170.10	97.11	90.84	19.82	3.18	1.04	2.61	1.14		
19	24.34	4.77	41.83	9.89	41.87	9.78	40.38	8.43	130.45	26.51	85.34	20.64	2.68	0.97	2.26	0.86		
20	20.53	6.87	41.82	7.68	44.62	9.91	46.20	8.68	141.03	25.86	96.56	14.44	3.29	0.57	2.94	0.84		
21	23.56	5.19	39.10	9.48	40.41	10.91	42.08	10.90	127.28	23.83	91.95	16.61	3.08	1.27	3.33	1.12		
22	17.00	7.29	39.36	8.08	38.82	8.46	39.53	9.90	124.00	23.61	93.31	19.94	3.04	1.13	2.73	1.02		
23	23.64	5.21	40.44	7.29	45.48	7.12	43.22	8.04	136.60	20.32	95.92	13.45	2.78	1.19	2.40	1.00		
24	17.02	5.66	42.67	7.73	43.96	9.10	41.22	9.03	134.60	23.95	80.80	15.69	3.89	1.02	3.38	1.27		

TABLE 8 (Contd.)

Mean and SDs of all Variables in Each Class

Class No.	SES		Classroom				Climate				Pupils' Motivation		Academic Achievement		Non-Academic Achievement	
	Mean	SD	Authenticity		Legitimacy		Productivity		Classroom Climate		Mean	SD	Mean	SD	Mean	SD
			Mean	SD	Mean	SD	Mean	SD	Mean	SD						
25	22.73	4.99	49.13	5.74	52.23	6.16	54.93	4.54	162.70	15.61	103.23	17.28	3.07	1.12	2.37	0.98
26	12.45	7.13	40.52	8.53	45.31	7.77	47.62	7.02	140.48	22.19	84.79	22.13	4.24	1.01	3.52	0.97
27	15.88	5.52	38.03	8.07	41.07	8.72	42.30	9.50	128.64	25.05	91.48	19.25	3.73	1.33	2.15	0.89
28	23.06	5.21	45.90	8.23	50.11	7.57	50.43	7.53	153.74	20.54	95.53	20.20	4.02	1.10	2.79	1.03
29	20.37	6.42	39.33	9.27	42.88	10.17	42.05	9.64	131.56	27.86	89.95	20.03	2.84	1.14	2.72	1.25
30	17.94	4.89	44.67	10.63	49.15	8.84	49.64	7.74	151.27	26.33	98.09	16.99	3.18	1.19	2.35	1.13
31	16.75	5.15	51.29	10.49	56.04	7.85	52.79	8.99	168.04	25.62	98.53	14.59	2.67	0.99	2.71	0.84
32	17.30	5.10	47.92	12.24	49.62	14.01	51.11	11.50	155.57	39.23	92.24	9.27	2.65	0.31	2.78	0.37
33	16.08	3.97	50.71	8.63	54.55	9.17	52.95	9.39	165.18	25.63	93.39	14.78	2.13	0.73	2.61	0.83
34	17.95	5.50	47.74	9.32	49.91	12.11	51.37	11.87	176.26	25.97	112.80	120.17	3.11	1.14	3.17	1.08
35	17.88	5.00	45.00	9.68	47.54	12.50	47.88	10.92	145.27	31.68	96.50	20.45	2.65	0.32	2.35	0.99
36	18.00	6.48	52.82	7.21	54.27	6.79	54.02	7.66	169.04	20.75	103.90	12.96	2.37	0.90	2.76	0.90
37	13.05	10.95	47.33	7.01	50.14	7.33	51.81	7.85	158.02	25.83	111.60	107.17	3.34	1.01	3.19	0.32
38	13.06	2.80	48.17	6.68	54.28	4.72	56.50	5.22	166.67	13.34	96.33	13.14	3.00	1.00	2.50	0.83
39	12.58	3.34	47.58	7.69	50.00	8.10	49.13	8.30	153.65	21.83	102.75	14.55	2.78	1.08	2.90	0.77
40	11.79	2.13	45.32	9.72	49.50	8.07	47.54	7.92	148.89	24.17	93.75	18.34	3.21	1.11	3.43	0.82
41	11.45	2.06	44.87	7.61	47.58	6.96	47.58	7.88	147.35	19.42	98.53	15.73	2.68	1.00	3.26	0.76

whereas class No. 25 (St.Thomas Girls' High School) got the lowest mean score (38.03).

3. For the component Legitimacy, Class No.15 (G. & G. V. Kadiwala Boys' High School) got the highest mean score (56.30) whereas class No. 20 (Jeevan Bharati High School) got the lowest mean score (38.82).
4. For the component Productivity, class No. 9 (Utkarsh Vidyalaya) got the highest mean score (56.75) while class No.20 (Jeevan Bharati High School) got the lowest mean score (39.53).
5. For the total of Classroom climate, class No. 32 (Mount Carmel Convent Girls' High School, Poona) got the highest mean score (176.26) while class No. 20 (Jeevan Bharati High School) got the lowest mean score (124.00).
6. For Academic motivation, class No. 32 (Mount Carmel Convent Girls' High School, Poona) got the highest mean score (112.80) whereas class No. 9 (Utkarsh Vidyalaya) got the lowest mean score (83.56).
7. For Academic performance, class No.11 (Lal Bahadur Shashtri High School) got the highest

mean score (4.35) while class No. 1 (The New Era Boys' High School) got the lowest mean score (2.09).

8. For Non-academic performance, class No. 10 (Lal Bahadur Shastri High School) got the highest mean score (3.92) while class No. 25 (St. Thomas Girls' High School) got the lowest mean score (2.15).

TABLE 9

Mean and SDs of the Components of Classroom Climate

Sr. No.	Components	Mean	SD
1	Authenticity	46.20	9.61
2	Legitimacy	49.07	9.89
3	Productivity	48.80	9.83
4	Classroom climate	151.66	32.65

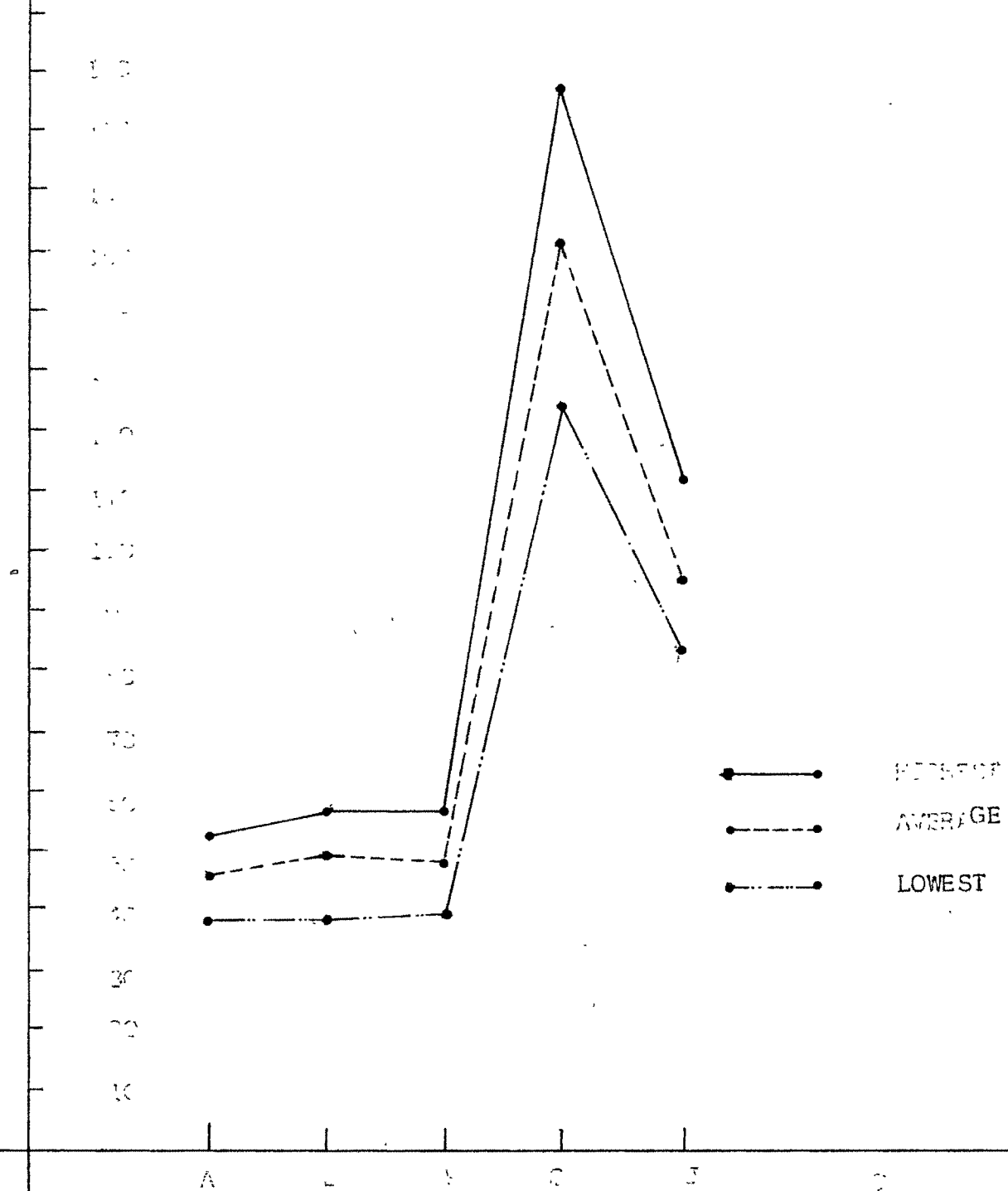
The mean score of Authenticity of the present sample is 46.20.

The mean score of Legitimacy is 49.07 for the present sample.

The mean score of Productivity is 48.80 for the present sample.

No. 3

THE HIGH, AVERAGE AND LOW MEAN SCORES OF A. L. P. CLASS **154**
 ROOM CLIMATE AND JIM OF THE PRESENT STUDY *a*



The total mean score of classroom climate is 151.66.

It can be concluded that pupils are having more ideas about the classroom climate in Legitimacy than Productivity and Authenticity.

Graph No.3 showed high, average and low mean scores of Authenticity, Legitimacy, Productivity, Classroom Climate and Pupils' Motivation.

The findings can be compared to Puri's study as shown in the Table 10.

TABLE 10

Mean Scores of the Components of Classroom Climate of Present Study Compared to Puri's Study

Sr. No.	Components	Code	Puri's study (Mean)	Present Study (Mean)
1	Authenticity	A	66.30	46.20
2	Legitimacy	L	69.04	49.07
3	Productivity	P	68.54	48.80

The table showed that, in both studies, pupils are having more ideas for Legitimacy than Productivity and Authenticity. Graph No.4 showed the above comparison.

TABLE 11

Mean and SDs of Pupils' Motivation

Variable	Mean	SD
JIM	95.28	26.95

No. 4.

155 (a)

INVESTIGATION OF THE EFFECTS OF
 AROMATIZED POLYMER'S

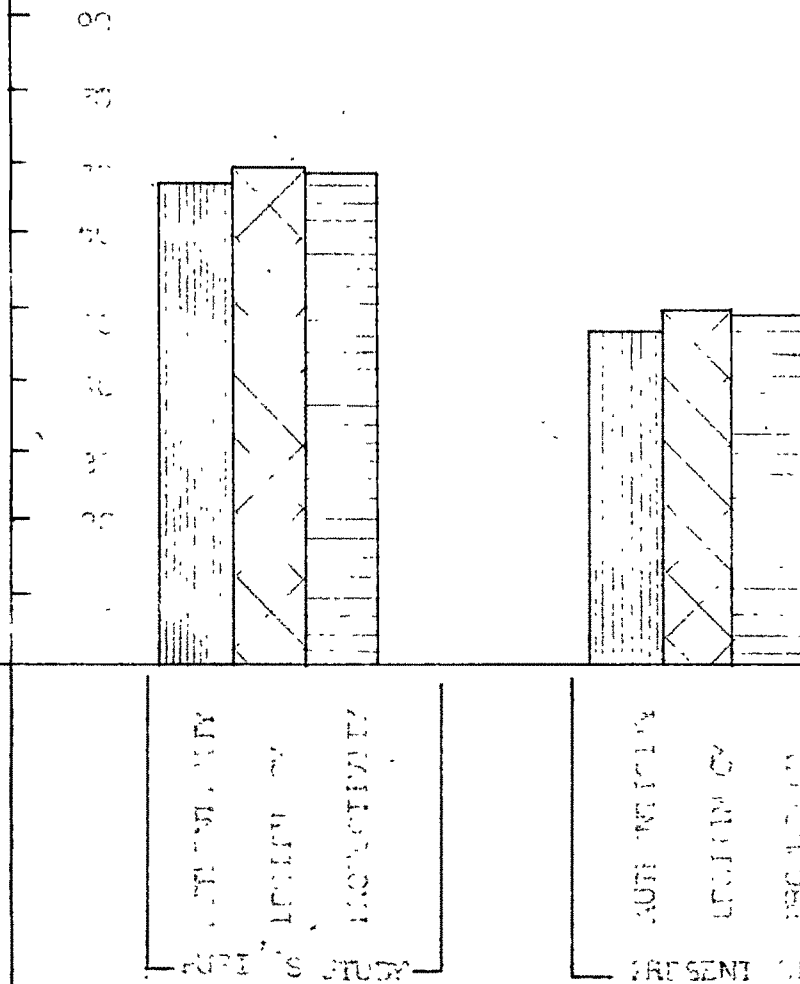


TABLE 12

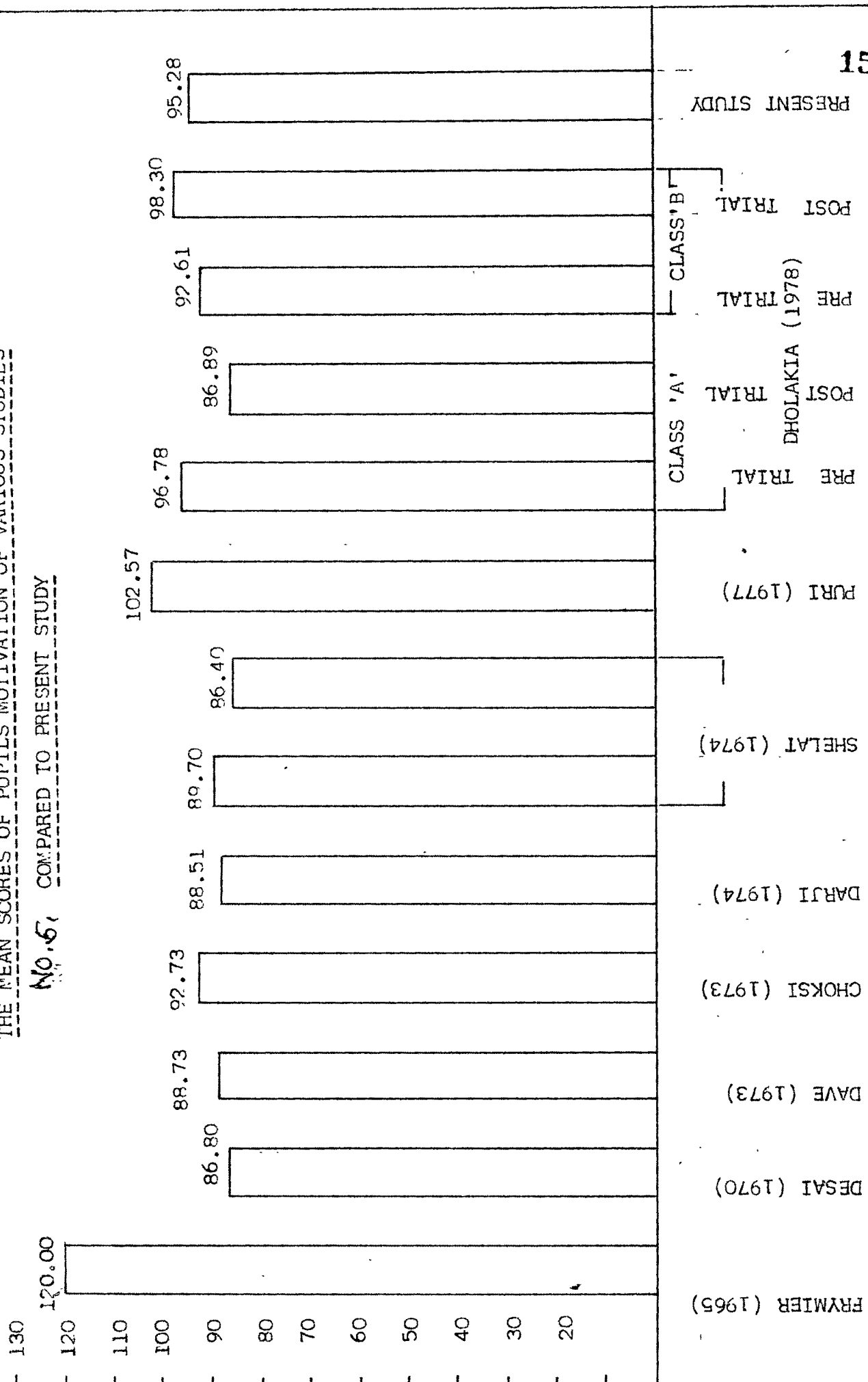
Mean Scores of Pupils' Motivation of Various Studies and Present Study

	Frymier (1965)	Desai (1970)	Dave (1973)	Choksi (1972)	Darji (1974)	Shelat (1974)	Puri (1977)	Dholakia (78)	Present Study
					Large size school	Small size school	Class A	Class B	
							Pre tri- al	Pre Post tri- al	
JIM	120.00	86.80	88.73	92.74	88.51	89.7	86.4	102.57	96.78
Mean								86.89	92.61
									95.28
									98.30

Graph No. 5 showed the above comparison.

THE MEAN SCORES OF PUPILS MOTIVATION OF VARIOUS STUDIES

No. 6, COMPARED TO PRESENT STUDY



The table showed the mean score of pupils' academic motivation. It is 95.28. This mean score is an average mean, therefore, the pupils in the sample are having average level of academic motivation.

The mean score of academic motivation of the present study can be compared to the other studies as shown in the table 12.

TABLE 12

The table 12 showed that the pupils' motivation of Indian pupils (Gujarat) are lower than American pupils.

TABLE 13

Means and SDs of the Components of
Pupils' Motivation

Sr. No.	Variables	Code	Means	SD
1	Positive -Negative School Attitude	F1	0.48	.995
2	Belongingness-Alienation	F2	0.49	1.018
3	Idealism-Pragmatism	F3	0.51	1.038
4	Personal Control-Fatalism	F4	0.44	.933
5	Optimism-Pessimism	F5	0.55	1.119
6	Flexibility-Dogmatism	F6	0.47	.47

It can be seen from the table that:

1. The mean score of Optimism-Pessimism is (.55), It means that pupils have more idea in Optimism-Pessimism than others.

2. The mean score of Idealism-Pragmatism is (0.51). The mean score of Belongingness-Alienation is (0.49). The mean score of Positive-Negative School Attitude is (0.48). The mean score for Flexibility-Dogmatism is (0.47). The mean score for Personal Control-Fatalism is (0.44).

The present findings can be compared to Choksi's study as shown in the table 14.

TABLE 14

Mean Scores of the Components of Pupils' Motivation of Choksi's Study Compared to Present Study

Sr. No.	Components of academic motivation	Code	Choksi's Study (1972)	Present Study
1	Positive-Negative School Attitude	F1	2.30	0.48
2	Belongingness-Alienation	F2	0.247	0.49
3	Idealism-Pragmatism	F3	1.23	0.51
4	Personal Control-Fatalism	F4	0.883	0.44
5	Optimism-Pessimism	F5	4.33	0.55
6	Flexibility-Dogmatism	F6	-0.235	0.47

In Choksi's study, pupils show great significant

amount of Optimism and Positive-Negative School Attitude. Pupils are having less of Belongingness-Alienation and Personal Control-Fatalism. The pupils show -.235 of Flexibility which means that they are very dogmatic in their beliefs.

The present study also shows that pupils are having more idea in Optimism-Pessimism followed by Idealism-Pragmatism, Belongingness-Alienation, Positive-Negative School Attitude, Flexibility-Dogmatism and Personal Control-Fatalism.

TABLE 15
Means and SDs of Academic Achievement and
Non-Academic Achievement

Sr. No.	Variables	Mean	SD
1	Academic achievement	3.09	1.13
2	Non-academic achievement	2.92	1.06

The table showed that the mean score of academic achievement is (3.09). The mean score for non-academic achievement is (2.92). It means that pupils of the present sample performed better on academic achievement than non-academic achievement.

TABLE 16
Means and SDs of the Components of Socio-Economic Status

Sr. No.	Variables	Mean	SD
1.	Education	4.3	1.51
2	Occupation	6.0	2.63
3	Income	7.2	3.44
4	Total SES	17.54	6.62

It can be marked from the table that: The component income got the mean score (7.2). The mean score of the component occupation is (6.0) and the same for education is (4.3). The total mean score of Socio-Economic Status is 17.54.

5.2 CORRELATIONS

TABLE 17
Correlations of Classroom Climate with its Components

Variables	Authenticity	Legitimacy	Productivity
Classroom climate	0.796**	0.791**	0.727**

** Significant at .01 level

It can be seen from the table that total classroom

climate is positively related with all its components and is significant at .01 level. It means that high classroom climate has high Authenticity, Legitimacy and Productivity.

TABLE 18

Correlation of Pupils' Motivation (JIM)
with its Components

Variables	F1	F2	F3	F4	F5	F6
JIM	0.077**	0.091**	0.096**	0.082**	0.105**	0.044 ^{NS}

** Significant at .01 level NS - Not significant

Note: F1 - Positive-Negative School Attitude
F2 - Belongingness-Alienation
F3 - Idealism-Pragmatism
F4 - Personal Control-Fatalism
F5 - Optimism-Pessimism
F6 - Flexibility-Dogmatism

The table showed that pupils' academic motivation is positively related with all its components and significant at .01 level. Only with the component Flexibility-Dogmatism it is not significant.

It means that high JIM has high Positive School Attitude, high Belongingness, high Idealism, high Personal Control and high Optimism. It also means that the tool has internal consistency between its components.

TABLE 19

Correlation Between Pupils' Motivation
(JIM) and the Components of Classroom Climate

Variables	Authenticity	Legitimacy	Productivity	Classroom Climate
JIM	0.167**	0.065**	0.193**	0.148**

The table revealed that pupils' academic motivation is positively related with all the components of classroom climate. The relationship with Authenticity, Productivity and total classroom climate is significant at .01 level whereas with Legitimacy it is significant at .05 level.

It means that if classroom climate is good, pupils' academic motivation level will be high. If it is not, it will be low. High JIM has high Authenticity, high Legitimacy and high Productivity, and high Classroom Climate.

TABLE 20

Correlation Between Pupils' Motivation (JIM)
and the Components of Socio-Economic Status
(SES)

Variables	Education	Occupation	Income	Total SES
JIM	-0.070*	0.322**	0.003 NS	0.214**

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

It can be marked from the table as the followings:

1. Pupils' academic motivation (JIM) is positively related to the component occupation, and total socio-economic status and it is significant at .01 level. It means that pupils who are coming from the family of good occupation, high income, and high level of socio-economic

status will help them to have high pupils' motivation level. They will like to study more.

2. Pupils' academic motivation is negatively related to educational level of their family. High level of pupils' motivation but low educational level of their family.

TABLE 21

Correlation Between Pupils' Motivation (JIM) with Academic Achievement and Non-academic Achievement

Variables	Academic achievement	Non-academic achievement
JIM	0.121**	-0.085**

** Significant at .01 level

The table showed that pupils' motivation is positively related with academic/and negatively with non-academic achievements and also significant at .01 level.

It means that high in pupils' motivation is high in academic/and low in non-academic achievement.

TABLE 22

Correlation of Academic Achievement and the Components of Classroom Climate

Variables	Authenticity (A)	Legitimacy (L)	Productivity (P)	Classroom Climate
Academic achievement	0.095**	0.098**	0.093**	0.077**

** Significant at .01 level

The table showed that academic achievement of pupils is positively related with all the components of classroom climate and significant at .01 level. Also with total classroom climate^{it} is significant at .01 level.

It means that high in academic achievement is high in Authenticity, Legitimacy, Productivity and total Classroom Climate.

TABLE 23

Correlation of Non-Academic Achievement
with the Components of Classroom Climate

Variables	Authenti- city	Legitimacy	Producti- vity	Classroom Climate
Non-academic achievement	-0.094**	-0.092**	-0.102**	-0.116**

** Significant at .01 level

This table showed that non-academic achievement is negatively related with all the components of classroom climate and significant at .01 level.

It means that more in non-academic achievement but less in Authenticity, Legitimacy, Productivity and Classroom Climate.

From correlation tables, we can conclude the classroom climate and its components A, L and P have positive relation with Pupils' Motivation and Academic Achievement.

5.3 t-VALUE OF:

TABLE 24

Significance of Difference Between the
Mean Scores of Authenticity According
to High, Average and Low Group of
Legitimacy

Legiti- macy group	Authen- ticity Means & SDs		Number of stude- nts	t-value		
	Mean	SD		High	Average	Low
High	55.71	5.58	269	-	18.099**	39.86**
Average	46.673	7.68	1038	-	-	24.122**
Low	33.785	5.89	246	-	-	-

=====
** Significant at .01 level

The pupils of high group of Legitimacy have the highest mean scores for Authenticity (55.71).

The pupils of average group of Legitimacy have higher mean score (46.673) than the mean score of the pupils of low group of Legitimacy (33.785).

There is significant difference upto .01 level between (1) high and average group, (2) high and low group, and (3) average and low group.

The pupils of high Legitimacy have high mean scores of Authenticity.

TABLE 25

Significance of Difference Between the Mean
Scores of Authenticity According to the High,
Average and Low Groups of Productivity

Producti- vity group	Means & SDs		Number of stude- nts	t- value		
	Mean	SD		High	Average	Low
High	56.052	5.66	250	-	18.36**	39.06**
Average	46.48	7.77	1075	-	-	24.06**
Low	34.04	7.47	228	-	-	-

=====
** Significant at .01 level

The pupils of high group of Productivity have the highest mean score of Authenticity (56.052).

The pupils of average group of Productivity have higher mean score (46.48) than the mean score of the pupils of low group of Productivity (34.04).

t-value shows that there is significance of difference between (1) high and average group, (2) high and low group, and (3) average and low group upto .01 level.

TABLE 26

Significance of Difference Between the Mean Scores of Authenticity According to High, Average and Low Groups of Classroom Climate

Authenti- city		Number of stude- nts	t- value			
Classroom Climate group	Means & SDs		High	Average	Low	
	Mean					SD
High	59.55	3.171	165	-	22.27**	55.47**
Average	46.92	7.18	1177	-	-	29.07**
Low	31.73	5.799	211	-	-	-

** Significant at .01 level

The pupils of high group of classroom climate have the highest mean score of Authenticity (59.55).

The pupils of average group have higher mean score of Authenticity (46.92) than the mean score of the pupils of low group of classroom climate (31.73).

t-value shows that there is significant difference between (1) high and average group, (2) high and low group and (3) average and low group upto .01 level.

We can say that the high classroom climate has high Authenticity whereas average and low classroom climate have average and low Authenticity.

TABLE 27

Significance of Difference Between the Mean Scores of Authenticity According to High, Average and Low Groups of Pupils' Motivation

Pupils' Motivation group	Means & SDs		Number of students	t-value		
	Mean	SD		High	Average	Low
High	48.28	8.38	65	-	1.55*	4.43**
Average	46.42	9.51	1400	-	-	4.99**
Low	41.16	10.78	88	-	-	-

=====

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

The pupils of high group of Pupils' Motivation have the highest mean score of Authenticity (48.28).

The pupils of average group have higher mean score (46.42) than the mean score of the pupils of low group of Pupils' Motivation (41.16).

There is significance of difference between high and low group and between average group and low group upto .01 level.

The difference is significant upto .05 level between high group and average group.

We can say that the high Pupils' Motivation group has high Authenticity while average and low groups have average and low Authenticity.

TABLE 28

Significance of Difference Between the Mean Scores of Authenticity According to High, Average and Low Groups of Academic Achievement

Authenti- city		Number of stude- nts	t- value			
Academic Achievement group	Means & SDs		High	Average	Low	
	Mean					SD
High	47.24	9.83	474	-	2.095*	3.81**
Average	46.10	9.41	890	-	-	2.74**
Low	44.03	9.74	189	-	-	-

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

The pupils of high group of Academic Achievement have the highest mean score of Authenticity (47.24).

The pupils of average group have higher mean score (46.10) than the mean score of low group of academic achievement (44.03).

There is significance of difference between high and low group and between average and low group upto .01 level.

The significance of difference is upto .05 level between high and average group.

The pupils with high academic achievement have high Authenticity while average and low groups have average and low Authenticity.

TABLE 29

Significance of Difference Between the Mean Scores of Authenticity According to High, Average and Low Groups of Non-Academic Achievement

Authenticity						
Non-Academic Achievement group	Means & SDs		Number of students	t-value		
	Mean	SD		High	Average	Low
High	47.343	9.37	522	-	2.88**	2.61**
Average	45.832	9.71	926	-	-	2.12*
Low	43.724	9.39	105	-	-	-

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

The pupils of high group of Non-Academic Achievement have the highest mean score (47.34) of Authenticity.

The pupils of average group have the higher mean score (45.83) than the mean score (43.72) of the pupils of low group of Non-Academic Achievement.

There is significance of difference between high and average group and between high and low group upto .01 level.

The significance of difference between average and low group is upto .05 level.

It can be concluded that high, average and low groups of Non-Academic Achievement have high, average and low Authenticity.

TABLE 30

Significance of Difference Between the
Mean Scores of Authenticity According
to High, Average and Low Groups of Socio-
Economic Status (SES)

Authen- ticity						
SES	Means & SD		Number of stude- nts	t-value		
Group	Mean	SD		High	Average	Low
High	45.26	10.42	345	-	2.224*	1.051 NS
Average	46.63	9.51	896	-	-	0.505 NS
Low	45.96	8.95	313	-	-	-
* Significant at .05 level NS - Not significant						

The pupils of average group of Socio-Economic Status have the highest mean score (46.63) of Authenticity.

The pupils of low group of Socio-Economic Status have higher mean score (45.96) than the mean score (45.26) of high group of Socio-Economic Status.

t-value shows that the difference is significant between high and average group at .05 level.

There is no significant difference between high and low group and between average and low group of Socio-Economic Status. It seems that Socio-Economic Status has no relation with Authenticity.

TABLE 31

Significance of Difference Between the Mean
Scores of Authenticity According to the Type
of Schools

Authen- ticity		Number of stude- nts	t-value			
Type of Schools	Means & SDs		Boys	Girls	Mixed	
	Mean					SD
Boys	49.45	8.64	155	-	5.058**	3.85**
Girls	44.96	9.93	497	-	-	2.510*
Mixed	46.31	9.47	902	-	-	-

=====

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

It can be seen from the table that the boys' school have the highest mean score (49.45) of Authenticity.

The mean score of the mixed school is higher (46.31) than the mean score of girls' school (44.96).

t-value shows that there is significant difference between boys' school and girls' school, and between boys' school and mixed schools upto .01 level.

There is a significant difference between girls' school and mixed school upto .05 level.

Conclusions can be made that boys' schools score highest for Authenticity and mixed schools score higher than girls' schools.

TABLE 32

Significance of Difference Between the Mean Scores of Legitimacy According to High, Average and Low Groups of Authenticity

Legiti- macy		Number of studen -ts	t- value			
Authenti- city group	Means & SDs		High	Average	Low	
	Mean					SD
High	58.23	4.52	280	-	17.07**	38.27**
Average	49.99	7.71	1000	-	-	25.65**
Low	36.197	8.48	274	-	-	-

** Significant at .01 level

The table shows that means and SDs of Legitimacy according to high, average and low groups of Authenticity.

The pupils of high Authenticity group have highest mean scores for Legitimacy (58.23).

The pupils of average Authenticity group have higher mean scores (49.99) than the pupils of low group of Authenticity (36.197).

From the t-value, we can find that the significance of difference between (1) high and average group, (2) high and low group and (3) average and low group is upto .01 level.

It can be said that pupils of high Authenticity have high mean score for Legitimacy.

TABLE 33

Significance of Difference Between the
Mean Scores of Legitimacy According to
High, Average and Low Groups of Productivity

Producti- vity group	Means & SDs		Number of stude- nts	t-value		
	Mean	SD		High	Average	Low
High	59.06	4.03	250	-	18.47**	39.06**
Average	49.59	7.87	1075	-	-	24.06**
Low	35.59	8.51	228	-	-	-

=====
** Significant at .01 level

The pupils of high group of Productivity have the highest mean score of Legitimacy (59.06).

The pupils of low group of Productivity have the lowest mean score of Legitimacy (35.59).

The pupils of average group of Productivity have higher mean score (49.59) than the mean score of low group of Legitimacy.

From the t-value table, we can say that the significance of difference between (1) high and average group, (2) high and low group, and (3) average and low group is upto .01 level.

TABLE 34

Significance of Difference Between
the Mean Scores of Legitimacy According
to High, Average and Low Groups of
Classroom Climate

Classroom Climate Group	Legiti- macy Means & SDs		Number of stude- nts	t-value		
	Mean	SD		High	Average	Low
High	60.97	2.80	165	-	22.27**	55.47**
Average	50.38	7.13	1177	-	-	29.07**
Low	32.38	6.36	211	-	-	-

** Significant at .01 level

The pupils of high group of classroom climate have the highest mean score of Legitimacy (60.97).

The pupils of average group have higher mean score (50.38) for Legitimacy than the mean score of the pupils of low group of classroom climate (32.38).

t-value shows that there is a significant difference between (1) high and average group, (2) average and low group, and (3) high and low group, upto .01 level.

The high classroom climate has high Legitimacy is seen from the table.

TABLE 35

Significance of Difference Between the Mean
Scores of Legitimacy According to High,
Average and Low Groups of Pupils' Motivation

Pupils' Motivation	Means & SDs		Number of stude- nts	t-value		
	Mean	SD		High	Average	Low
High	50.01	9.57	65	-	0.541 NS	3.62**
Average	49.34	9.83	1400	-	-	4.99**
Low	43.92	10.78	88	-	-	-

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

The pupils of high group of Pupils' Motivation have the highest mean score (50.01) of Legitimacy.

The pupils of average group has higher mean score (49.34) than the mean score of the pupils of low group of Pupils' Motivation (43.92).

There is no significant difference between high and average group of Pupils' Motivation.

The difference is significant upto .01 level between high and low group, and between average and low group of Pupils' Motivation.

The pupils with high Pupils' Motivation have high Legitimacy.

TABLE 36

Significance of Difference Between the
Mean Scores of Legitimacy According to
High, Average and Low Groups of Academic
Achievement

Academic Achievement Group	Means & SDs		Number of stude- nts	t-value		
	Mean	SD		High	Average	Low
High	50.06	10.201	474	-	1.78 NS	3.97**
Average	49.05	9.75	890	-	-	3.12**
Low	46.61	9.88	189	-	-	-

** Significant at .01 level NS - Not significant

The pupils of high group of Academic Achievement have the highest mean score of Legitimacy (50.06).

The pupils of average group have higher mean score (49.05) than the mean score of the pupils of low group of Academic Achievement (46.61).

t-value shows that there is significance of difference between high and low group, and between average and low group upto .01 level.

There is no significant difference between high and average group of Academic Achievement.

The pupils with high Academic Achievement have high Legitimacy.

TABLE 37

Significance of Difference Between the
Mean Scores of Legitimacy According to
High, Average and Low Groups of Non-
Academic Achievement

Non-Academic Achievement Group	Means & SDs		Number of stude- nts	t-value		
	Mean	SD		High	Average	Low
High	50.23	10.09	522	-	2.70**	4.062**
Average	48.77	9.71	926	-	-	2.94**
Low	45.81	10.57	105	-	-	-

** Significant at .01 level

The pupils of high group of Non-Academic Achievement have the highest mean score (50.23) of Legitimacy.

The pupils of average group of Non-Academic Achievement have higher mean score (48.77) than the mean score of the pupils of low group (45.81) of Non-Academic Achievement.

t-value shows that there is significance of difference between (1) high group and average group, (2) average and low group, and (3) high and low group, upto .01 level.

It means that pupils with high, average and low Non-Academic Achievement have high, average and low Legitimacy.

TABLE 38

Significance of Difference Between
the Mean Scores of Legitimacy
According to High, Average and Low
Groups of Socio-Economic Status (SES)

----- Legitimacy -----							
SES Group	Means & SDs		Number of stude- nts	t-value			
	Mean	SD		High	Average	Low	

High	48.23	10.51	345	-	1.759 NS	1.051 NS	
Average	49.36	10.05	896	-	-	0.505 NS	
Low	49.04	9.1	313	-	-	-	
=====							
NS - Not significant							

The pupils of average group of SES have the highest mean score (49.36) of Legitimacy.

The pupils of low group of SES have higher mean score (49.04) than the mean score (48.23) of high group of SES.

There is no significant difference between any group at all. It seems that Socio-Economic Status have no relation with Legitimacy.

TABLE 39

Significance of Difference Between the
Mean Scores of Legitimacy According to
the High, Average and Low Groups of
Type of Schools

Type of Schools	Means & SDs		Number of stude- nts	t-value		
	Group	Mean	SD	Boys	Girls	Mixed
Boys		50.96	9.17	155	-	3.013** 2.073*
Girls		48.20	10.17	497	-	- 1.75 NS
Mixed		49.18	9.96	902	-	- -

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

The Boys' schools have the highest mean score (50.96) for Legitimacy.

The Girls' schools have the lowest means score (48.20) for Legitimacy.

The Mixed schools have higher mean score (49.18) than the mean score of Girls' schools.

There is significance of difference between Boys' schools and Girls' schools upto .01 level.

There is significance of difference between Boys' schools and Mixed schools upto .05 level.

There is no significant difference between Girls' schools and Mixed schools.

TABLE 40

Significance of Difference Between the
Mean Scores of Productivity According
to High, Average and Low Groups of
Authenticity

Producti- vity		Number of stude- nts	t- value			
Authenti- city Group	Means & SDs		High	Average	Low	
	Mean		SD			
High	57.64	6.02	280	-	16.08**	33.21**
Average	49.72	7.596	1000	-	-	24.46**
Low	36.65	8.65	274	-	-	-

** Significant at .01 level

The pupils of high Authenticity group have the highest mean scores for Productivity (57.64).

The pupils of average group have higher mean score (49.72) than the pupils of low group of Authenticity (36.65).

From the t-value we can say that the significance of difference between (1) high and average group, (2) high and low group, and (3) average and low group, is upto .01 level.

We can say that the pupils with high Authenticity have high mean scores for Productivity.

TABLE 41

Significance of Difference Between the Mean Scores of Productivity According to High, Average and Low Groups of Legitimacy

Producti- vity			Number of stude- nts	t-value		
Legiti- macy Group	Means & SDs			High	Average	Low
	Mean	SD				
High	58.04	4.97	269	-	17.18**	35.09**
Average	49.49	7.76	1038	-	-	23.62**
Low	36.13	3.83	246	-	-	-

** Significant at .01 level

The pupils of high group of Legitimacy have the highest mean scores of Productivity (58.04).

The pupils of average group of Legitimacy have higher mean scores (49.49) than the mean score of pupils of low group of Legitimacy (36.13).

From t-value table we can say that there is significance of difference between (1) high and average group, (2) high and low group, and (3) average and low group, upto .01 level.

We can say that the pupils with high Legitimacy have high Productivity.

TABLE 42

Significance of Difference Between the Mean
Score of Productivity According to High,
Average and Low Groups of Classroom Climate

Producti- vity		Number of		t-value		
Classroom Climate Group	Means & SDs		stude- nts			
	Mean	SD		High	Average	Low
High	61.17	2.47	165	-	20.13**	47.84**
Average	49.98	7.08	1177	-	-	32.12**
Low	32.92	7.26	211	-	-	-

=====

** Significant at .01 level

The pupils of high group of Classroom Climate have the highest mean score (61.17) of Productivity.

The pupils of average group of Classroom Climate have higher mean score (49.98) than the mean score of the pupils of low group of Classroom Climate (32.92) for Productivity.

The significance of difference between (1) high group and average group, (2) high group and low group, and (3) average group and low group, is upto .01 level.

We can say that the pupils with high Classroom Climate have high Productivity.

TABLE 43

Significance of Difference Between the Mean
Scores of Productivity According to High,
Average and Low Groups of Pupils' Motivation

Producti- vity				Number	t- value		
Pupils'	Means & SDs		of				
Motivation			stude-				
Group	Mean	SD	nts	High	Average	Low	
High	49.40	8.55	65	-	0.194 NS	3.61*	
Average	49.16	9.77	1400	-	-	5.24*	
Low	43.50	10.93	88	-	-	-	
** Significant at .01 level NS - Not significant							

The pupils of high group of Pupils' Motivation have the highest mean score of Productivity (49.40).

The pupils of low group of Pupils' Motivation have the lowest mean score (43.50).

The pupils of average group have higher mean score (49.16) than the mean score of the pupils of low group.

There is no significant difference between high group and average group.

The significance of difference between (1) high and low group and (2) average and low group, is upto .01 level.

Pupils with high Pupils' Motivation has high Productivity.

TABLE 44

Significance of Difference Between the Mean
Scores of Productivity According to High,
Average and Low Groups of Academic Achievement

Producti- vity		Number of stude- nts	t-value		
Academic Achievement Group	Means & SDs Mean SD		High	Average	Low
High	49.83 10.05	474	-	1.99*	3.254**
Average	48.73 9.48	890	-	-	2.29*
Low	46.95 10.90	189	-	-	-

** Significant at .01 level

* Significant at .05 level

The pupils of high group of Academic Achievement have the highest mean score (49.83) of Productivity.

The pupils of average group have higher mean score (48.73) than the mean score of the pupils of low group of Academic Achievement (46.95).

The significance of difference between high group and low group is upto .01 level.

The significance of difference between high and average group and between average and low group is upto .05 level.

The pupils with high Academic Achievement have high Productivity.

TABLE 45

Significance of Difference Between the
Mean Scores of Productivity According
to High, Average and Low Groups of Non-
Academic Achievement

Non-Academic Achievement Group	Means & SDs		Number of stude- nts	t-value		
	Mean	SD		High	Average	Low
High	50.16	9.39	522	-	3.29**	3.697**
Average	48.39	10.07	926	-	-	1.897 NS
Low	46.43	9.64	105	-	-	-

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

The pupils of high group of Non-Academic Achievement have the highest mean score (50.16) of Productivity.

The pupils of average group have higher mean score (48.39) than the mean score of the pupils of low group of Non-Academic Achievement (46.43) for Productivity.

The significance of difference between high and average group and between high and low group is upto .01 level.

There is no significant difference between average and low group of Non-Academic Achievement.

It means that pupils with high, average and low Non-Academic Achievement have high, average and low Productivity.

TABLE 46

Significance of Difference Between the Mean
Scores of Productivity According to High,
Average and Low Groups of Socio-Economic
Status (SES)

Producti- vity						
Socio-Economic Status Group	Means & SDs		Number of stude- nts	t-value		
	Mean	SD		High	Average	Low
High	47.67	10.91	345	-	2.58**	1.402 NS
Average	49.32	9.72	896	-	-	0.876 NS
Low	48.78	8.97	313	-	-	-
=====						
** Significant at .01 level			NS - Not significant			

The pupils of average group of SES have the highest mean score (49.32) of Productivity.

The pupils of low group of SES have higher mean score (48.78) than the mean score (47.67) of high SES group for Productivity.

There is significance of difference between high and average group upto .01 level.

There is no significance of difference between high and low group and between average and low group.

It can be said that Socio-Economic Status has no relation with Productivity.

TABLE 47

Significance of Difference Between the Mean
Scores of Productivity According to the
Type of Schools

Producti- vity		Number of stude- nts	t-value			
Type of Schools	Means & SDs		Boys	Girls	Mixed	
	Mean					SD
Boys	51.10	8.47	155	-	3.361**	2.644**
Girls	48.07	10.21	497	-	-	1.462 NS
Mixed	48.88	9.86	902	-	-	-

** Significant at .01 level NS - Not significant

The boys' schools have the highest mean score of Productivity (51.10).

The girls' schools have the lowest mean score of Productivity (48.07).

The mixed schools have higher mean score (48.88) of Productivity than the mean score of girls' schools.

The significance of difference between boys' schools and girls' schools and between boys' schools and mixed schools is upto .01 level.

There is no significance of difference between girls' schools and mixed schools.

TABLE 48

Significance of Difference Between the Mean
Scores of the Classroom Climate According
to the High, Average and Low Groups of
Authenticity

Authenti- city Group	Means & SDs		Number of stude- nts	t-value		
	Mean	SD		High	Average	Low
High	184.996	38.42	280	-	14.79**	28.66**
Average	154.37	28.07	1000	-	-	24.36**
Low	110.26	19.89		-	-	-

** Significant at .01 level

From the table, we find that the pupils of high group of Authenticity have the highest score for the Classroom Climate (184.99).

The pupils of average group of Authenticity have higher score (154.37) than the pupils of low group of Authenticity (110.26), for Classroom Climate.

From the t-value table we can say that the significance of difference between (1) high and average group, (2) high and low group, and (3) average and low group, is upto .01 level.

The pupils with high, average and low scores for Authenticity have high, average and low scores for Classroom Climate.

TABLE 49

Significance of Difference Between the Mean Scores of Classroom Climate According to High, Average and Low Groups of Legitimacy

Classroom Climate						
Legitimacy Group	Means & SDs		Number of students	t-value		
	Mean	SD		High	Average	Low
High	182.68	10.17	269	-	13.14**	56.256**
Average	154.73	34.50	1038	-	-	20.595**
Low	107.80	19.07	246	-	-	-

** Significant at .01 level

The pupils of high group of Legitimacy have the highest mean scores of Classroom Climate (182.68).

The pupils of average group of Legitimacy have higher mean scores (154.73) than the mean scores of the pupils of low group of Legitimacy (107.80).

t-value table shows that the significance of difference between (1) high and average group, (2) high and low group, and (3) average and low group, is upto .01 level.

The pupils with high, average and low Legitimacy have high, average and low Classroom Climate.

TABLE 50

Significance of Difference Between the Mean
Scores of Classroom Climate According to
High, Average and Low Groups of Productivity

Producti- vity Group	Means & SDs		Number of stude- nts	t-value		
	Mean	SD		High	Average	Low
High	184.48	40.09	250	-	15.24**	26.96**
Average	153.69	28.01	1075	-	-	28.83**
Low	107.15	20.06	228	-	-	-

=====
** Significant at .01 level

The pupils of high group of Productivity have the highest mean score of Classroom Climate (184.48).

The pupils of average group of Productivity have higher mean score of Classroom Climate (153.69) than the mean score ~~the~~ pupils of low group of Productivity (107.15).

t-value shows that the significance of difference between (1) high and average group, (2) high and low group, and (3) average and low group, is upto .01 level.

It can be said that pupils with high, average and low Productivity have high, average and low Classroom Climate.

TABLE 51

Significance of Difference Between the
Mean Scores of Classroom Climate Accord-
ing to High, Average and Low Groups of
Pupils' Motivation

Pupils' Motivation Group	Classroom Climate		Number of stude- nts	t-value		
	Mean	SD		High	Average	Low
High	154.86	25.89	65	-	0.38 NS	4.15**
Average	153.098	37.18	1400	-	-	4.498**
Low	134.86	31.83	88	-	-	-

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

The pupils of high group of Pupils' Motivation have the highest mean score (154.86) of Classroom Climate.

The pupils of average group have higher Pupils' mean score Motivation/(153.098) than the mean score of the pupils of low group (134.86) of Pupils' Motivation, for Classroom Climate.

There is significant difference between high group and low group, and between average and low group upto .01 level. There is no significant difference between high and average group.

The pupils with high Pupils' Motivation have high Classroom Climate and pupils with average and low Pupils' Motivation have average and low Classroom Climate.

TABLE 52

Significance of Difference Between the Mean
Scores of Classroom Climate According to
High, Average and Low Groups of Academic
Achievement

Classroom Climate				Number	t-value		
Academic Achievement Group	Means & SDs		of students		High	Average	Low
	Mean	SD					
High	154.16	28.93	474	-	1.96*	0.495	NS
Average	151.05	27.31	890	-	-	0.355	NS
Low	152.18	74.07	189	-	-	-	
=====							
* Significant at .05 level				NS	- Not significant		

The highest mean score (154.16) for Classroom Climate is obtained by the pupils of high group of Academic Achievement.

The pupils of average group have the lowest mean score (151.05). The pupils of low group have the mean score (152.18) which is little higher than the pupils of average group.

t-value shows that there is no significance of difference between high and low groups and between average and low groups. There is a significant difference between high and average groups upto .05 level.

It means that pupils with high Academic Achievement have high Classroom Climate.

TABLE 53

Significance of Difference Between the
Mean Scores of Classroom Climate Accord-
ing to High, Average and Low Groups of
Non-Academic Achievement

Classroom Climate	Means & SDs		Number of stude- nts	t-value		
	Non-Academic Achievement Group	Mean SD		High	Average	Low
High		154.97 27.61	522	-	2.92**	1.316 NS
Average		150.83 35.62	926	-	-	0.298 NS
Low		149.59 70.41	105	-	-	-
** Significant at .01 level NS - Not significant						

The pupils of high group of Non-Academic Achievement have the highest mean score (154.97) of Classroom Climate.

The pupils of average group have higher mean score (150.83) of Classroom Climate than the mean score (149.59) of the pupils of low group of Non-Academic Achievement.

t-value shows that there is significant difference between high and average group upto .01 level.

There is no significant difference between high and low group and between average and low group.

It means that pupils with high, average and low Non-Academic Achievement have high, average and low Classroom Climate.

TABLE 54

Significance of Difference Between the Mean Scores of Classroom Climate According to High, Average and Low Groups of Socio-Economic Status (SES)

Classroom Climate	Socio-Economic Status	Means & SDs		Number of students	t-value		
		Mean	SD		High	Average	Low
High		147.83	30.94	345	-	2.496*	1.636 NS
Average		153.98	41.46	896	-	-	0.979 NS
Low		151.51	26.44	313	-	-	-
* Significant at .05 level NS - Not significant							

The pupils of average group of SES have the highest mean score (153.98) of Classroom Climate.

The pupils of low group of SES have higher mean score than the mean score (147.83) of high group of SES.

There is significance of difference between high and average group of SES upto .05 level.

There is no significance of difference between high and low groups of SES and between average and low groups of SES.

We can say that Socio-Economic Status have no relation with Classroom Climate as such.

TABLE 55

Significance of Difference Between the Mean
Scores of Classroom Climate According to the
Type of Schools

Type of Schools Group	Means & SDs		Number of students	t-value		
	Mean	SD		Boys	Girls	Mixed
Boys	163.48	57.43	155	-	4.362**	3.270**
Girls	148.28	29.30	497	-	-	2.138**
Mixed	152.27	35.48	902	-	-	-

** Significant at .01 level

The boys' schools have the highest mean score of the Classroom Climate (163.48).

The girls' schools have the lowest mean score of the Classroom Climate (148.28).

The mixed schools have higher mean score (152.27) of Classroom Climate than the mean score of girls' schools.

There is significance of difference between boys' schools and girls' schools, between boys' schools and mixed schools, and between girls' schools and mixed schools upto .01 level.

It means that boys' schools score the highest whereas mixed schools score higher than girls' schools for Classroom Climate.

TABLE 56

Significance of Difference Between the
Mean Scores of Pupils' Motivation (JIM)
According to High, Average and Low
Groups of Authenticity

Pupils' Motivation		Means & SDs		Number of stude- nts	t-value		
Authenti- city Group		Mean	SD		High	Average	Low
High		96.896	16.95	280	-	0.224 NS	5.753**
Average		97.421	38.14	1000	-	-	3.815**
Low		88.365	17.95	274	-	-	-
=====							
NS - Not significant				** Significant at .01 level			

The pupils of average group of Authenticity have the highest mean scores of Pupils' Motivation (97.42).

The pupils of high Authenticity group have higher mean scores of Pupils' Motivation (96.896) than mean score of low group of Authenticity (88.37).

From the t-value we can say that the high and average groups have no significant difference at all.

Between high and low groups and between average and low groups, there is significant difference upto .01 level.

It means that pupils with average Authenticity have highest ^{high} Pupils' Motivation whereas pupils with ^{high} Authenticity have higher Pupils' Motivation than ^{the pupils with} low Authenticity.

TABLE 57

Significance of Difference Between the Mean Scores of Pupils' Motivation According to High, Average and Low Groups of Legitimacy

Pupils' Motivation			Number of students	t- value		
Legitimacy Group	Means & SDs			High	Average	Low
	Mean	SD				
High	96.81	15.08	269	-	0.063 NS	4.192**
Average	96.66	37.90	1038	-	-	2.42**
Low	90.65	18.23	246	-	-	-
=====						
NS - Not significant			** Significant at .01 level			

The pupils of high group of Legitimacy have the highest mean score of Pupils' Motivation (96.81)

The pupils of average group of Legitimacy have higher mean scores of Pupils' Motivation (96.66) than the mean scores of low group of Legitimacy (90.65).

There is not significant difference between high and average groups.

There is significant difference between high and low groups and between average and low groups upto .01 level.

Pupils with high Legitimacy has high Pupils' Motivation level.

TABLE 58

Significance of Difference Between the Mean
Scores of Pupils' Motivation According to
High, Average and Low Groups of Productivity

Pupils' Motivation						
Productivity Group	Means & SDs		Number of students	t-value		
	Mean	SD		High	Average	Low
High	96.49	16.25	250	-	0.166 NS	4.504**
Average	96.89	37.26	1075	-	-	2.94*
Low	89.46	17.89	228	-	-	-
=====						
** Significant at .01 level			NS	Not significant		
* Significant at .05 level						

The pupils of average group of Productivity have the highest mean score (96.89) of Pupils' Motivation.

The pupils of high group of Productivity have higher score (96.49) than the mean score of the pupils of low group of Productivity (89.46).

There is no significance of difference between high group and average group of Productivity.

The significance of difference between high group and low group and between average group and low group is upto .01 level.

TABLE 59

Significance of Difference Between the Mean
Scores of Pupils' Motivation According to
High, Average and Low Groups of Classroom
Climate

Pupils' Motivation						
Classroom Climate Group	Means & SDs		Number of students	t-value		
	Mean	SD		High	Average	Low
High	98.36	14.85	165	-	0.628 NS	5.341**
Average	96.58	35.97	1177	-	-	2.995**
Low	88.99	18.31	211	-	-	-

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

The pupils of high group of Classroom Climate have the highest mean score (98.36) of Pupils' Motivation.

The average group of Classroom Climate have higher mean score (96.58) than the mean score of low group of Classroom Climate (88.99).

There is no significant difference between high group and average group of Classroom Climate.

There is significance of difference between high group and low group, and between average group and low group upto .01 level.

The pupils with high Classroom Climate have high Pupils' Motivation.

TABLE 60

Significance of Difference Between the Mean Scores of Pupils' Motivation According to High, Average and Low Groups of Academic Achievement

Pupils' Motivation		Means & SDs		Number of students	t-value		
Academic Achievement Group		Mean	SD		High	Average	Low
High		98.55	17.39	474	-	5.029**	0.240 NS
Average		93.84	15.94	890	-	-	1.261 NS
Low		97.598	81.869	189	-	-	-

=====

** Significant at .01 level NS - Not significant

The pupils of high group of Academic Achievement have the highest mean score of Pupils' Motivation(98.55).

The pupils of low group have higher mean score (97.598) than the mean score of the pupils of average group (93.84) of Academic Achievement.

The significance of difference between high and average group is upto .01 level.

There is no significance of difference between high and low groups and between average and low groups.

The pupils with high Academic Achievement have high Pupils' Motivation.

TABLE 61

Significance of Difference Between the Mean
Scores of Pupils' Motivation According to
High, Average and Low Groups of Non-Academic
Achievement

Pupils' Motivation		Number of Students	t-value			
Non-Academic Achievement Group	Means & SDs		High	Average	Low	
	Mean					SD
High	97.33	17.50	522	-	1.88 NS	0.347 NS
Average	94.52	31.595	926	-	-	1.042 NS
Low	98.58	72.93	105	-	-	-

NS - Not significant

The pupils of low group of Non-Academic Achievement have the highest mean score of Pupils' Motivation (98.58).

The pupils of high group have higher mean score (97.33) than the mean score (94.52) of average group of Non-Academic Achievement.

t-value shows that there is no significant difference between any group.

We can say that Non-Academic Achievement has no concern with Pupils' Motivation.

TABLE 62

Significance of Difference Between the Mean
Scores of Pupils' Motivation According to
High, Average and Low Groups of Socio-
Economic Status (SES)

Pupils' Motivation						
Socio-Economic Status Group	Means & SDs		Number of students	t-value		
	Mean	SD		High	Average	Low
High	94.57	17.18	345	-	0.381 NS	1.379 NS
Average	95.21	29.23	896	-	-	1.403 NS
Low	98.495	49.69	313	-	-	-

NS - Not significant

The pupils of low group of SES have the highest mean score (98.495) of Pupils' Motivation.

The pupils of high group of SES have the lowest mean score (94.57) of Pupils' Motivation.

The pupils of average group of SES have the mean score (95.21) of Pupils' Motivation which is higher than the high group of SES.

There is no significance of difference between any group of SES.

We can say that Pupils' Motivation has no relation with Socio-Economic Status of the pupils.

TABLE 63

Significance of Difference Between the Mean
Scores of Pupils' Motivation According to
Type of Schools

Pupils' Motivation		Means & SDs		Number of stude- nts	t-value		
Type of Schools Group		Mean	SD		Boys	Girls	Mixed
Boys		102.53	59.81	155	-	2.74**	2.196**
Girls		94.22	17.85	497	-	-	0.756 NS
Mixed		95.39	31.99	902	-	-	-

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

The Boys' schools have the highest mean score (102.53) of Pupils' Motivation.

The girls' schools have the lowest mean score (94.22) of Pupils' Motivation.

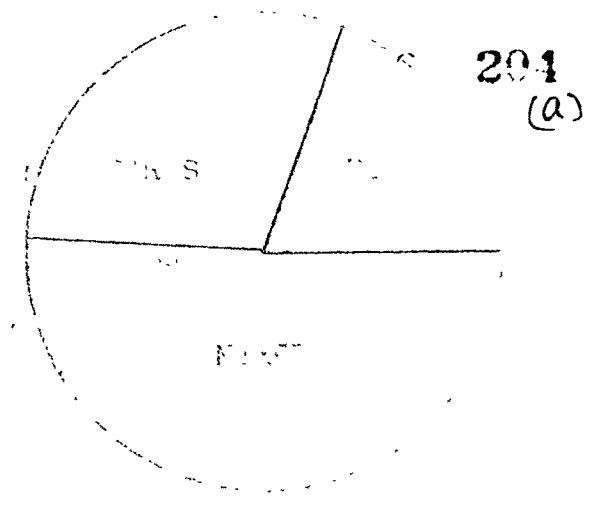
The Mixed schools have higher score of Pupils' Motivation (95.39) than the Girls' Schools.

t-value shows that there is significance of difference in two groups (1) between boys' schools and girls' schools, (2) between boys' school and mixed schools, upto .01 level. There is no significant difference between girls' schools and mixed schools.

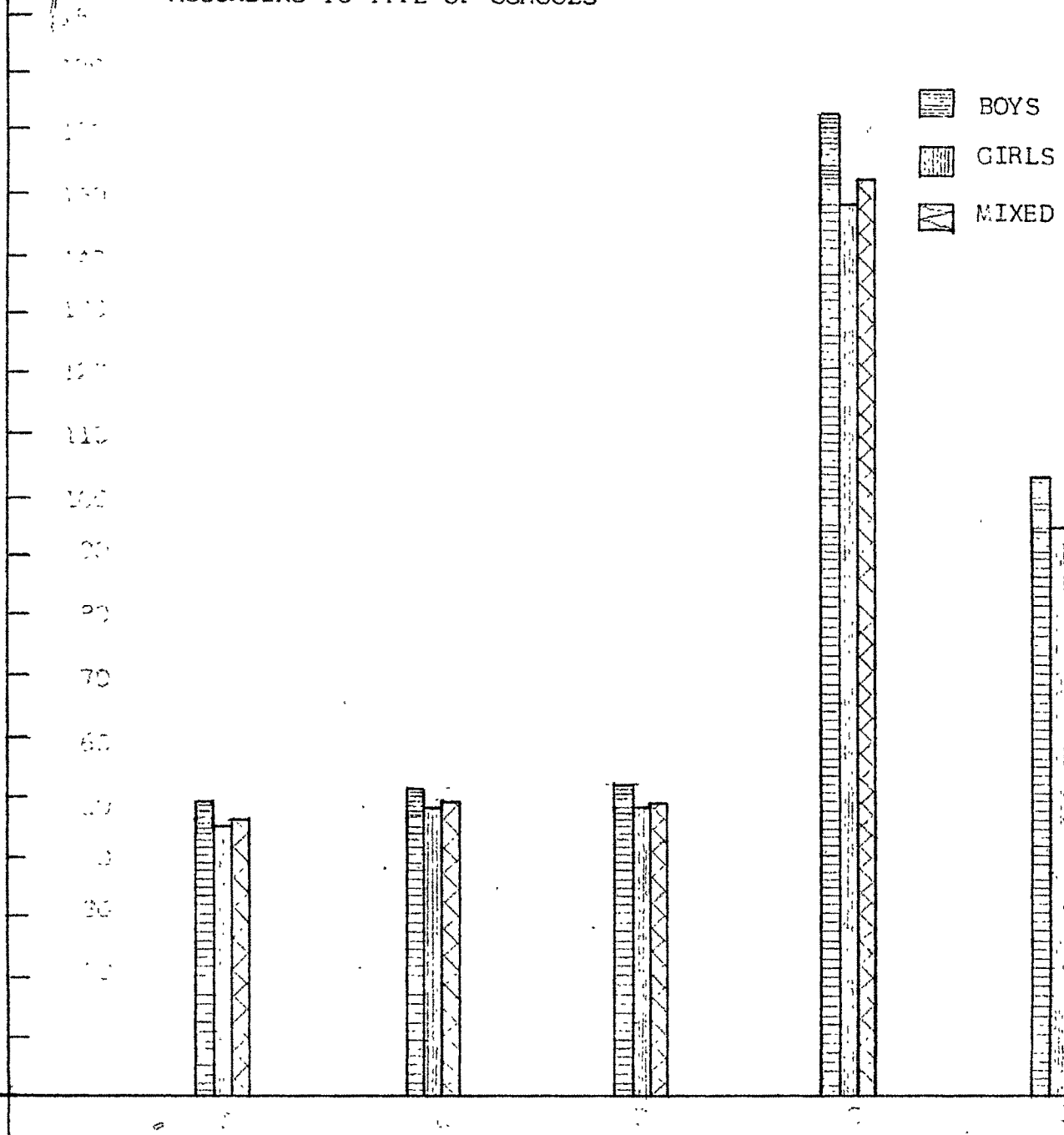
It means that boys' schools have the highest level of Pupils' Motivation, whereas mixed schools have higher

THE GRAPH SHOWING PROPORTION OF
DIFFERENT TYPE OF SCHOOLS IN
THE PRESENT STUDY

No. 6.



THE MEAN SCORES OF A. L. P. CLASS ROOM CLIMATE AND JIM
ACCORDING TO TYPE OF SCHOOLS



level of Pupils' Motivation than the girls' schools. Girls' schools have the lowest level of Pupils' Motivation. Graph No. 6 showed the mean scores of A,L,P classroom climate and JIM according to type of schools. TABLE 64

Significance of Difference Between the Mean Scores of Academic Achievement According to High, Average and Low Groups of Authenticity

Authenti- city Group	Means & SDs		Number of stude- nts	t-value		
	Mean	SD		High	Average	Low
High	3.14	1.04	280	-	2.23*	3.895**
Average	2.89	1.05	1000	-	-	2.49*
Low	2.91	1.04	274	--	-	-

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

The pupils of high group of Authenticity have the highest mean scores of Academic Achievement (3.14).

The pupils of low group of Authenticity have higher mean scores (2.91) than the pupils of average Authenticity group (2.89).

The t-value shows that the significance of difference between high and low groups is upto .01 level. The significance of difference between (1) high and average groups and (2) average and low groups is upto .05 level.

It means that pupils with high Authenticity have high Academic Achievement.

TABLE 65

Significance of Difference Between the Mean
Scores of Academic Achievement According to
High, Average and Low Groups of Legitimacy

Academic Achievement		Means & SDs		Number of students	t-value		
Legitimacy Group		Mean	SD		High	Average	Low
High		3.18	1.12	269	-	0.440 NS	3.681**
Average		3.14	1.13	1038	-	-	4.22**
Low		2.82	1.10	246	-	-	-

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

The pupils of high group of Legitimacy have the highest mean score (3.18) of Academic Achievement.

The pupils of average group of Legitimacy have higher mean score (3.14) than the mean score (2.82) of the pupils of low group of Legitimacy.

There is significant difference between high and low groups and between average and low groups upto .01 level.

There is no significant difference between average and high groups of Legitimacy.

It means pupils with high Legitimacy have high Academic Achievement.

TABLE 66

Significance of Difference Between the Mean Scores of Academic Achievement According to High, Average and Low Groups of Productivity

Academic Achievement			Number of students	t-value		
Productivity Group	Means & SDs			High	Average	Low
	Mean	SD				
High	3.20	1.51	250	-	0.973 NS	3.31**
Average	3.12	1.15	1075	-	-	3.09**
Low	2.88	1.01	228	-	-	-
=====						
NS - Not significant			** Significant at .01 level			

The pupils of high group of Productivity have the highest mean score (3.20) of Academic Achievement.

The pupils of low group of Productivity have the lowest mean score (2.88) of Academic Achievement.

The pupils of average group of Productivity have the mean score (3.12) which is higher than that of low group of Productivity.

There is no significance/difference between average and high group.

The significance of difference between (1) high group and low group and (2) average group and low group, is upto .01 level. Pupils with high Productivity have high Academic Achievement.

TABLE 67

Significance of Difference Between the Mean Scores of Academic Achievement According to High, Average and Low Groups of Classroom Climate

Academic Achievement						
Classroom Climate Group	Means & SDs		Number of students	t-value		
	Mean	SD		High	Average	Low
High	3.28	1.151	165	-	2.17*	3.46**
Average	3.09	1.388	1177	-	-	2.26*
Low	2.88	1.035	211	-	-	-

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

The pupils of high group of Classroom Climate have the highest mean score of Academic Achievement (3.28).

The pupils of average group have higher mean score (3.09) of Academic Achievement than the mean score of the pupils of low group of Classroom Climate (2.88).

There is significance of difference between high and average group and between average and low group upto .05 level.

The difference is significant between high and low groups upto .01 level.

The pupils with high Classroom Climate have high Academic Achievement.

TABLE 68

Significance of Difference Between the Mean
Scores of Academic Achievement According to
High, Average and Low Groups of Pupils'
Motivation

Academic Achievement			Number of stude- nts	t-value		
Pupils' Motivation Group	Means & SDs			High	Average	Low
	Mean	SD				
High	3.48	1.14	65	-	3.11**	4.93**
Average	3.097	1.11	1400	-	-	4.36**
Low	2.48	1.36	88	-	-	-

=====
** Significant at .01 level

The pupils of high group of Pupils' Motivation have the highest mean score (3.48) of Academic Achievement.

The pupils of average group have higher mean score (3.09) of Academic Achievement than the mean score of the pupils of low group of Pupils' Motivation (2.48).

t-value shows that the significance of difference between (1) high and average groups, (2) high and low groups, and (3) average and low groups, is upto .01 level.

This means that pupils with high, average and low Pupils' Motivation have high, average and low Academic Achievement.

TABLE 69

Significance of Difference Between the Mean
Scores of Academic Achievement According to
High, Average and Low Groups of Non-Academic
Achievement

Academic Achievement						
Non-Academic Achievement Group	Means & SDs		Number of students	t-value		
	Mean	SD		High	Average	Low

High	4.28	0.893	522	-	0.675**	15.597**
Average	3.29	1.004	926	-	-	13.67**
Low	2.51	1.09	105	-	-	-

=====

** Significant at .01 level

The pupils of high group of Non-Academic Achievement have the highest mean score (4.28) of Academic Achievement.

The average group has higher mean score (3.29) than the mean score of low group (2.51) of Non-Academic Achievement.

t-value shows that the significance of difference between (1) high and low groups, (2) high and average groups, and (3) average and low groups is upto .01 level.

This means that pupils with high, average and low Non-Academic Achievement have high, average and low Academic Achievement.

TABLE 70

Significance of Difference Between the Mean Scores of Academic Achievement According to High, Average and Low Groups of Socio-Economic Status (SES)

----- Academic Achievement -----						
Socio-Economic Status Group	Means & SDs		Number of students	t-value		
	Mean	SD		High	Average	Low
High	2.86	1.098	345	-	3.65**	5.028**
Average	3.11	1.121	896	-	-	2.484**
Low	3.297	1.157	313	-	-	-

=====
 ** Significant at .01 level

The pupils of low group of SES have the highest mean score (3.297) of Academic Achievement.

The pupils of high group of SES have the lowest mean score (2.86) of Academic Achievement.

The pupils of average group have higher mean score (3.11) than the mean score of high group of SES.

t-value shows that there is significance of difference between (1) high and average groups, (2) high and low groups, and (3) average and low groups of SES upto .01 level.

We can say that Academic Achievement has no relation with Socio-Economic Status.

TABLE 71

Significance of Difference Between the
Mean Scores of Academic Achievement
According to Types of Schools

Type of Schools Group	Academic Achievement Means & SDs		Number of stude- nts	t- value		
	Mean	SD		Boys	Girls	Mixed
Boys	3.21	1.19	155	-	3.738**	2.913**
Girls	2.80	1.21	497	-	-	2.142**
Mixed	3.08	1.08	902	-	-	-

=====
** Significant at .01 level

The boys' schools have the highest mean score (3.21) for Academic Achievement.

The girls' schools have the lowest mean score (2.80) for Academic Achievement.

The mixed schools have higher mean score (3.08) than the mean score of girls' schools.

t-value shows that the significance of difference between (1) boys' schools and girls' schools, (2) girls' schools and mixed schools, and (3) mixed schools and boys' schools, is upto .01 level.

It means that boys' schools have highest level of Academic Achievement whereas mixed schools have higher level of Academic Achievement than girls' schools.

TABLE 72

Significance of Difference Between the Mean
Scores of Non-Academic Achievement According
to High, Average and Low Groups of Authenticity

Non-Academic Achievement				Number of stude- nts	t-value		
Authenti- city Group	Means & SDs				High	Average	Low
	Mean	SD					
High	2.82	1.01	280	-	1.01 NS	3.519**	
Average	2.89	1.05	1000	-	-	3.344**	
Low	3.14	1.08	274	-	-	-	
=====							
NS - Not significant				** Significant at .01 level			

The pupils of low group of Authenticity have the highest mean score of Non-Academic Achievement (3.14).

The pupils of high group of Authenticity have the lowest mean score (2.82) of Non-Academic Achievement.

The pupils of average group of Authenticity have the mean score (2.89) of Non-Academic Achievement.

There is significance of difference between high and low groups and average and low groups upto .01 level.

There is no significant difference between high and average groups of Authenticity.

TABLE 73

Significance of Difference Between the Mean
Scores of Non-Academic Achievement According
to High, Average and Low Groups of Legitimacy

Non-Academic Achievement			Number of students	t-value		
Legitimacy Group	Means & SDs			High	Average	Low
	Mean	SD				
High	2.71	1.01	269	-	3.503**	3.054**
Average	2.96	1.05	1038	-	-	0.404 NS
Low	2.996	1.080	246	-	-	-

** Significant at .01 level NS - Not significant

The pupils of low group of Legitimacy have the highest mean score of Non-Academic Achievement (2.99).

The pupils of average group of Legitimacy have higher mean score (2.96) than the mean scores of high group of Legitimacy (2.71).

There is significance of difference between high and average groups and between high and low groups upto .01 level.

There is no significant difference between average and low groups.

TABLE 74

Significance of Difference Between the Mean Scores of Non-Academic Achievement According to High, Average and Low Groups of Productivity

Non-Academic Achievement						
Producti- vity Group	Means & SDs		Number of stude- nts	t-value		
	Mean	SD		High	Average	Low
High	2.74	0.93	250	-	2.59**	4.04**
Average	2.93	1.08	1075	-	-	2.27*
Low	3.11	1.07	228	-	-	-
** Significant at .01 level * Significant at .05 level						

The highest mean score of Non-Academic Achievement is scored by the pupils of low group of Productivity (3.11).

The pupils of high group of Productivity have the lowest mean score of Non-Academic Achievement (2.74).

The pupils of average group of Productivity have the mean score (2.93) of Non-Academic Achievement.

There is significant difference between high and low groups upto .01 level.

There is significant difference between high and average groups upto .01 level and between average and low groups of Productivity, the significant difference is upto .05 level.

TABLE 75

Significance of Difference Between the Mean
Scores of Non-Academic Achievement According
to High, Average and Low Groups of Classroom
Climate

Non-Academic Achievement				Number of stude- nts	t-value		
Classroom Climate Group	Means & SDs				High	Average	Low
	Mean	SD					
High	2.72	0.95	165	-	2.352*	3.597**	
Average	2.92	1.07	1177	-	-	2.18*	
Low	3.095	1.07	211	-	-	-	

* Significant at .05 level

** Significant at .01 level

The pupils of low group of Classroom Climate have the highest mean score of Non-Academic Achievement (3.095).

The pupils of average group have higher mean score (2.92) than the mean score of the pupils of high group of Classroom Climate (2.72)

The difference is significant between high group and low group upto .01 level.

The significance of difference between high and average groups and between average and low groups is upto .05 level.

TABLE 76

Significance of Difference Between the Mean
Scores of Non-Academic Achievement According
to High, Average and Low Groups of Pupils'
Motivation

Pupils' Motivation Group	Non-Academic Achievement		Number of stude- nts	t-value		
	Means & SDs			High	Average	Low
	Mean	SD				
High	2.72	1.23	65	-	1.44 NS	2.05*
Average	2.91	1.04	1400	-	-	1.79 NS
Low	3.13	1.17	88	-	-	-

NS	Not significant		*	Significant at .05 level		

The pupils of low group of Pupils' Motivation have the highest mean score (3.13) of Non-Academic Achievement.

The pupils of average group have higher mean score (2.91) than the mean score of the pupils of high group of Non-Academic Achievement (2.72).

There is no significant difference between (1) the high and average groups and (2) average and low groups.

t-value shows that there is significance of difference between high and low groups upto .05 level.

TABLE 77

Significance of Difference Between the Mean
Scores of Non-Academic Achievement According
to High, Average and Low Groups of Academic
Achievement

Non-Academic Achievement		Means & SDs		Number of stude- nts	t-value		
Academic Achievement Group		Mean	SD		High	Average	Low
High		2.295	0.904	474	-	15.58**	15.02**
Average		3.12	0.943	890	-	-	5.72**
Low		3.57	.172	189	-	-	-

=====
** Significant at .01 level

The pupils of low group of Academic Achievement have the highest mean score (3.57) of Non-Academic Achievement.

The pupils of average group have higher (3.12) mean score than the mean score (2.295) of high group of Academic Achievement.

There is significance of difference between each group (1) high and average groups, (2) high and low groups, and (3) average/low groups upto .01 level.

TABLE 78

Significance of Difference Between the
Mean Scores of Non-Academic Achievement
According to High, Average and Low
Groups of Socio-Economic Status (SES)

Non-Academic Achievement						
Socio-Economic Status Group	Means & SDs		Number of students	t-value		
	Mean	SD		High	Average	Low
High	2.701	1.087	345	-	3.881**	4.305**
Average	2.96	1.03	896	-	-	1.54*
Low	3.06	1.07	313	-	-	-

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

The pupils of low group of SES have the highest mean score (3.06) of Non-Academic Achievement.

The pupils of high group have the lowest mean score (2.701) of Non-Academic Achievement.

The pupils of average group have higher mean score (2.96) than the mean score of high group of SES.

There is significance of difference between high and average groups, and between high and low groups upto .01 level. The difference between average and low groups is upto .05 level.

TABLE 79

Significance of Difference Between the
Mean Scores of Non-Academic Achievement
According to Type of Schools

Non-Academic Achievement		Means & SDs		Number of stude- nts	t-value		
Type of Schools Group		Mean	SD		Boys	Girls	Mixed
Boys		3.00	1.18	155	-	2.063**	0.196 NS
Girls		2.79	1.08	497	-	-	3.298**
Mixed		2.98	1.02	902	-	-	-

** Significant at .01 level NS - Not significant

The mean score of boys' schools is the highest (3.00) for Non-Academic Achievement.

The mean score of girls' schools is the lowest (2.79) for Non-Academic Achievement.

The mean score of mixed schools is higher (2.98) than the mean score of girls' schools for Non-Academic Achievement.

t-value shows that there is significance of difference between boys' schools and girls' schools and between girls' schools and mixed schools upto .01 level.

There is no significant difference between boys' schools and mixed schools. We can say that the pupils of boys' schools achieve higher in co-curricular activities.

TABLE 80

Significance of Difference Between the
Mean Scores of the Components of Class-
room Climate According to the Sex Group

----- Authenticity scores -----				
Sex groups	N	Mean	SD	t- value

Boys		46.33	8.99	0.54 NS
Girls		46.07	10.11	

Boys got higher mean score (46.33) for Authenticity than girls (46.07). The difference is not significant at any level.

Legitimacy

Boys		48.95	9.72	0.38 NS
Girls		49.15	10.07	

Girls got higher mean score (49.15) for Legitimacy than boys (48.95) but the difference is not significant at any level.

Productivity

Boys		48.74	9.36	0.27 NS
Girls		48.87	10.22	

Girls got higher mean score (48.87) for Productivity than boys (48.74). The difference is not significant at any level.

Classroom Climate

Boys	151.20	27.11	0.51 NS
Girls	152.06	36.70	

Girls got higher mean score (152.06) for total Classroom Climate than boys (151.20). The difference is not significant at any level.

=====

It will be interesting enough to see the mean score of the components of Classroom Climate of various studies by sex group compared to present study as shown in the Table 81.

TABLE 81

The table showed that, in all the studies, girls scored higher than boys in almost all the components. Only some, namely, Dholakia's study in Class A, in both trial, girls score lower than boys for Authenticity and also in present study, girls scored lower than boys for Authenticity.

It can be concluded that girls scored higher than boys for Legitimacy and Productivity. For Authenticity, almost all the studies showed that girls score higher than boys but few studies showed girls score lower than boys for Authenticity. Therefore, one cannot jump to the conclusion until further study has been done in the same area.

TABLE 81

Means of the Components of Classroom Climate of Various
Studies by Sex Group While Compared to Present Study

Components	Code	Puri (1977)		Dholakia (1978)								Present study	
		Boys	Girls	Class A				Class B				Boys	Girls
				Pre-trial	Post-trial	Boys	Girls	Pre-trial	Post-trial	Boys	Girls		
Authenticity	A	64.75	68.31	43.08	42.60	39.375	44.523	39.045	43.291	36.545	38.083	46.33	46.0'
Legitimacy	I	67.59	70.92	45.70	47.76	38.95	50.95	42.50	50.291	36.40	44.50	48.95	49.14
Productivity	P	67.01	70.54	46.70	48.57	38.166	48.476	45.36	49.666	33.363	50.08	48.74	48.86

Graph No. 7 showed the above comparison.

MEANS OF THE COMPONENTS OF CLASSROOM CLIMATE BY SEX GROUP
OF VARIOUS STUDIES COMPARED TO PRESENT STUDY

No. 7

☐ BOYS
☐ GIRLS

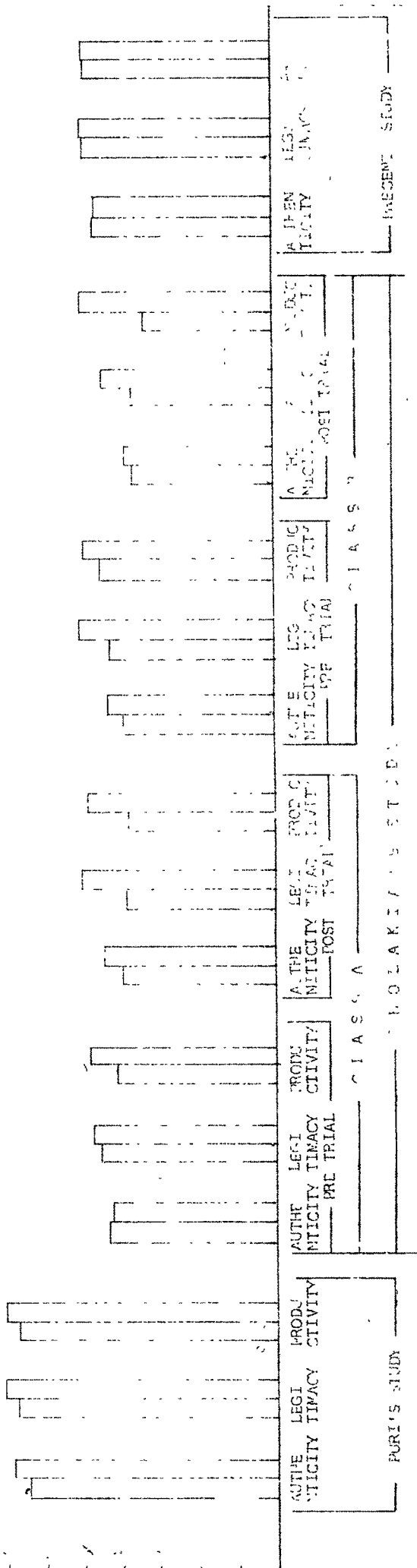


TABLE 82

Significance of Difference Between the
Mean Scores of Pupils' Motivation (JIM)
According to Sex Group

----- Pupils' Motivation			
Sex group	Mean	SD	t-value

Boys	97.42	35.11	
			2.89**
Girls	93.45	17.30	

=====
** Significant at .01 level

This table showed that boys got higher mean score (97.42) for Pupils' Motivation than girls (93.45). The difference is significant at .01 level.

This finding is supported by various studies as:

Choksi (1973) found the Pupils' Motivation of boys (93.53) is higher than girls (91.90).

Dave (1973) also found the Pupils' Motivations of boys (88.83) is higher than girls (88.54).

It can be said that in Gujarat schools, Pupils' Motivation of boys is higher than girls. According to the Indian conditions, the girls are less motivated from their homes than boys as they give more importance to the boys. This may be the reason for the girls having low level of

Pupils' Motivation than boys.

In the other studies also we find boys have higher level of Pupils' Motivation such as:

Shelat (1974) found mean score of Pupils' Motivation of boys (88.9) is higher than girls (86.1).

Dholakia (1978) found the Pupils' Motivation of boys is higher than girls in Class A in both the trials but in Class B, pre-trial, boys score lower than girls whereas in post-trial, again boys score higher than girls in Pupils' Motivation.

These findings can be compared to various studies as shown in the Table 83.

TABLE 83

The table showed that almost all the studies showed boys are having higher level of Pupils' Motivation than girls. Few studies showed girls are having higher level of Pupils' Motivation than boys. These studies are Frymier, Puri and Dholakia in Class B, pre-trial.

TABLE 83
Means of Pupils' Motivation of Various Studies by
Sex Group Compared to Present Study

Sex group	Pupils' Motivation scores in various studies	Frymier (1965)	Dave (1973)	Choksi (1973)	Shelat (1974)	Publ (1977)	Dholekia (1978)				Present study
							Class A		Class B		
							Pre trial	Post trial	Pre trial	Post trial	
Boys		193.90	88.83	93.53	88.9	102.27	102.28	99.36	84.727	96.36	97.42
Girls		194.83	88.54	91.90	86.1	102.95	89.71	94.047	104.30	95.75	93.45

Graph No. 8 showed the above comparison.

THE MEAN SCORES OF PUPIL'S MOTIVATION BY SEX
GROUP OF VARIOUS BTUDIES COMPARED TO

PRESENT STUDY

No. 8

BOYS
GIRLS

200
180
160
140
120
100
80
60
40
20

FRYMIER (1965)

DAVE (1973)

CHOKSI (1973)

SHELAT (1974)

PURI (1977)

PRE TRIAL POST TRIAL
CLASS A

PRE TRIAL POST TRIAL
CLASS B

DHOLAKIA (1978)

PRESENT STUDY

229

TABLE 84

Significance of Difference Between the
Mean Scores of Academic and Non-
Academic Achievements According to Sex
Groups

----- Academic Achievement -----			
Sex groups	Mean	SD	t-value

Boys	4.45	2.86	
Girls	4.43	2.85	0.091 NS
=====			
NS - Not significant			

Boys scored higher than girls for Academic Achievement. It means that boys performed better than girls for academic. But the difference is not significant at any level.

----- Non-Academic Achievement -----			
Sex groups	Mean	SD	t-value

Boys	2.29	1.10	
Girls	3.17	1.15	3.16**
=====			
** Significant at .01 level			

Girls scored higher than boys for Non-Academic Achievement. It means that girls performed better than boys in Non-Academic Achievement. The difference is significant at .01 level.

It can be concluded that boys performed better than girls in academic but girls performed better than boys in non-academic achievement.

TABLE 85

Significance of Difference Between the Mean Scores of the Components of Classroom Climate According to the Medium of Instruction Groups

Authenticity Scores			
Medium of instruction	Mean	SD	t-value
English	41.495	9.123	13.382**
Gujarati	48.227	9.095	
<u>Legitimacy</u>			
English	44.145	9.664	13.609**
Gujarati	51.194	9.243	
<u>Productivity</u>			
English	44.049	9.847	13.249**
Gujarati	50.875	9.860	
<u>Classroom Climate</u>			
English	136.534	27.041	12.595**
Gujarati	158.217	32.73	
** Significant at .01 level			

The table showed that pupils who are taught by Gujarati language score higher than pupils who are taught

by English language in Authenticity, Legitimacy, Productivity and Classroom Climate. The difference is significant at .01 level in all the variables.

TABLE 86

Significance of Difference Between the Mean Scores of Pupils' Motivation (JIM) According to the Medium of Instruction Groups

Pupils' Motivation			
Medium of instruction	Mean	SD	t-value
English	92.81	18.86	2.37*
Gujarati	96.33	29.74	

This table showed that pupils who are taught by Gujarati language are having higher level of Pupils' Motivation than pupils who are taught by English language. The difference is significant upto .05 level.

It means that pupils would like to learn more if schools teach them by using their mother tongue.

TABLE 87

Significance of Difference Between the Mean
Scores of Academic Achievement and Non-
Academic Achievement According to the Medium
of Instruction Groups

Academic Achievement score	Mean	SD	t- value
Medium of instruction group			
English	4.45	2.90	0.13 NS
Gujarati	4.43	2.83	
<u>Non-Academic Achievement</u>			
English	3.25	1.22	3.57**
Gujarati	3.02	1.08	
=====			
NS - Not significant ** Significant at .01 level			

The table revealed that pupils who are taught by English language performed better than pupils who are taught by Gujarati language in both academic and non-academic achievements. In non-academic achievement, the difference is significant at .01 level whereas in academic achievement the difference is not found significant at any level.

TABLE 88

Significance of Difference Between the Mean
Scores of the Components of Classroom Climate
According to the Management Groups

Authenticity Score			
Management group	Mean	SD	t- value

Government	47.26	9.56	8.98**
Convent	41.95	8.66	

Government schools group got higher mean score for Authenticity than Convent schools group. The difference is significant at .01 level.

Legitimacy

Government	50.01	9.90	7.79**
Convent	45.21	9.33	

Government schools group got higher mean score for Legitimacy than Convent schools group. The difference is significant at .01 level.

Productivity

Government	49.78	9.70	7.61**
Convent	45.133	9.66	

Government schools group got higher mean score for Productivity than Convent schools group. The difference is significant at .01 level.

Classroom Climate

Government	154.85	38.56	5.88**
Convent	141.39	45.65	

For the total of Classroom Climate, again Government x schools group got higher mean score than Convent schools group. The difference is significant at .01 level.

=====

It can be concluded that Government schools group score higher than Convent schools group in all the components of Classroom Climate. The difference is quite satisfactory.

TABLE 89

Significance of Difference Between the Mean Scores of Pupils' Motivation (JIM) According to the Management Groups

----- Pupils' Motivation score -----			
Management group	Mean	SD	t-value

Government	95.52	28.58	0.51 NS
Convent	96.56	44.70	

=====

NS - Not significant

For the Pupils' Motivation, pupils belong to Convent schools group got higher mean score (96.56) than

pupils belong to Government schools group. The difference is not much since it is not found significant at any level.

TABLE 90

Significance of Difference Between the
Mean Scores of Academic and Non-Academic
Achievements According to the Management
Groups

Academic Achievement Score			
Management group	Mean	SD	t- value

Government	4.42	2.86	0.44 NS
Convent	4.50	2.84	

NS - Not significant			

The table showed that pupils belong to Convent schools group score higher than pupils belong to Government schools group for Academic Achievement. The difference is not significant.

Non-Academic Achievement

Government	3.01	1.07	5.79**
Convent	3.42	1.29	

** Significant at .01 level

This table revealed that pupils of Convent schools group score higher than pupils of Government schools group in Non-Academic Achievement. The difference is significant at .01 level.

=====

It can be concluded that pupils of Convent schools group performed better than pupils of Government schools group in both Academic and Non-Academic Achievements.

TABLE 91

Significance of Difference Between the Mean Scores of the Components of Classroom Climate According to Standard Groups

<u>Authenticity Score</u>			
Standard groups	Mean	SD	t- value
IX	46.33	9.84	1.43 NS
X	45.37	8.02	
<u>Legitimacy</u>			
IX	49.14	10.98	0.58 NS
X	48.74	8.82	
<u>Productivity</u>			
IX	48.88	9.95	0.57 NS
X	48.49	8.37	
<u>Classroom Climate</u>			
IX	151.46	28.68	0.97 NS
X	149.55	23.48	

NS - Not significant

The table showed that pupils belong to IX standard score higher than pupils belong to X standard in all the components of Classroom Climate. The difference is not much

since it is not found significant at any level.

It means that pupils of lower standard are scored higher than pupils of higher standard in all the components of Classroom Climate.

TABLE 92

Significance of Difference Between the Mean Scores of Pupils' Motivation (JIM) According to Standard Groups

Pupils' Motivation scores			
Standard groups	Mean	SD	t-value

IX	95.02	17.40	
			1.20 NS
X	93.59	14.75	

=====
NS - Not significant

This table showed that pupils belong to IX standard got higher mean score for Pupils' Motivation than X standard. The difference is not significant at any level.

This means that pupils of lower standard are having higher level of Pupils' Motivation than pupils of higher standard. It seems to be that pupils of lower standard like to learn in school more than pupils of higher standard. Therefore, they score higher for Pupils' Motivation.

TABLE 93

Significance of Difference Between the
Mean Scores of Academic and Non-Academic
Achievements According to Standard Groups

----- Academic Achievement scores -----			
Standard groups	Mean	SD	t-value

IX	3.02	1.13	5.46**
X	3.45	1.08	

** Significant at .01 level

This table revealed that pupils of X standard scored higher than IX standard in Academic Achievement.

It means that pupils of higher standard performed better than pupils of lower standard in Academic Achievement, but the difference between pupils of the two standards is significant at .01 level.

Non-Academic Achievement

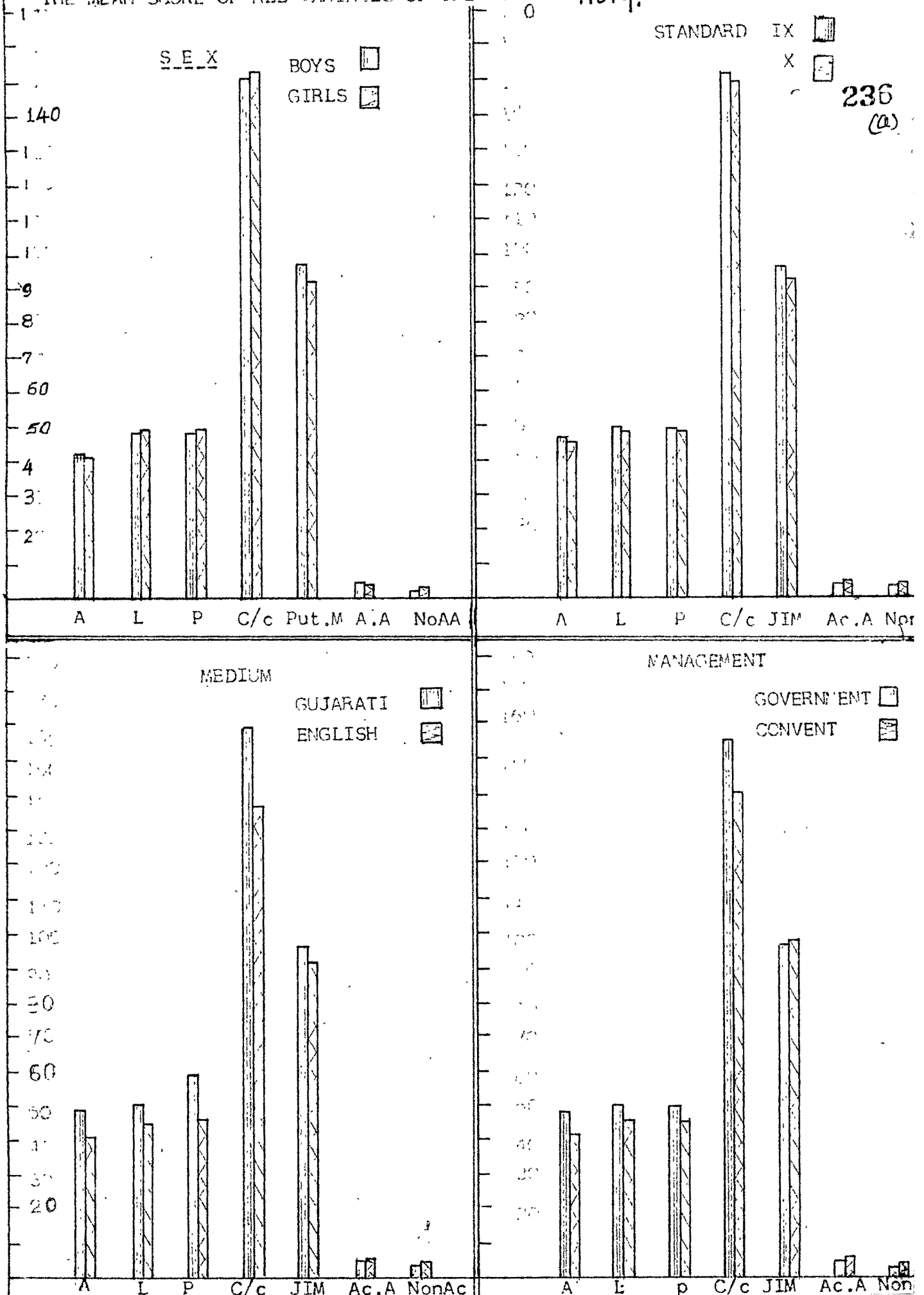
IX	2.91	1.07	1.03 NS
X	2.99	0.99	

NS - Not significant

For Non-Academic Achievement, again, pupils of higher standard scored higher than pupils of lower standard. The difference is not significant at any level.

=====

THE MEAN SCORE OF ALL VARIABLES OF THE PUPILS NO.9.



It can be concluded that pupils of higher standard performed better than pupils of lower standard in both Academic and Non-Academic Achievements.

The Graph No. 9 showed the mean scores of all variables according to sex, management, medium and standard.

Classroom Profiles (Climatograph)

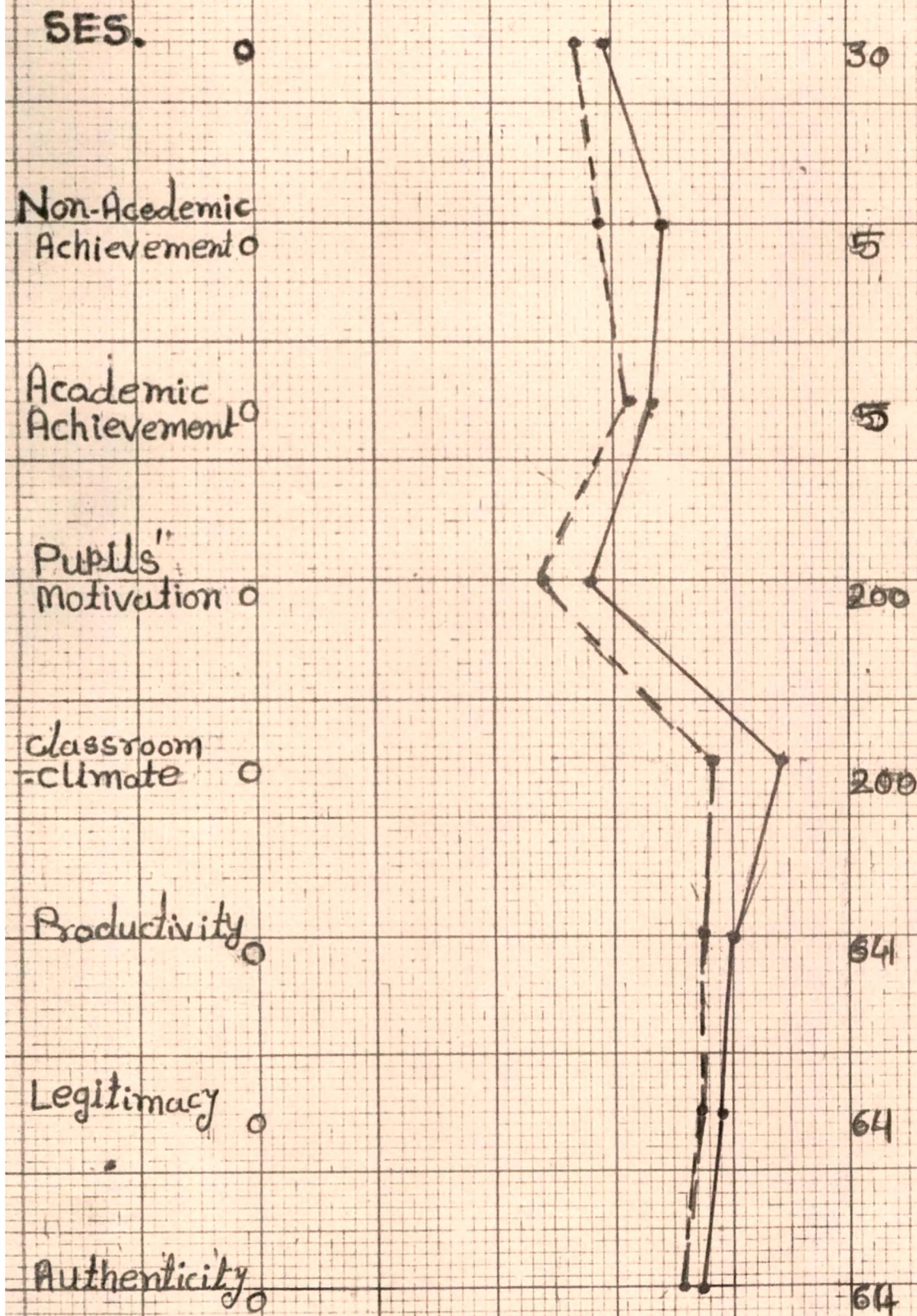
A comparative study of classroom climate and its components; and the various factors affecting the climate of the class can be shown by means of a graphical representation of the mean scores of the variables in the present study through classroom profiles.

Each of the variables of the study, namely, Pupils' Motivation, Academic and Non-Academic Achievements have been analysed in relation to classroom climate of all the classes. When a study of an individual classroom is done the mean scores of these variables that are obtained could be depicted graphically as done in Graph No. 10^{(A), (B), (C), (D)} which reveals interesting picture of climate prevailing in four classrooms. The average mean scores of all the variables are also plotted with each classroom profile. Class A - the mean scores of classroom climate, Authenticity, Legitimacy, Productivity, Academic Motivation, Academic Achievement are not only higher than other classrooms B, C, D, but are also higher than the average mean scores of 41 classes for all variables. A question arises here; why is the climate score of Class B

Classroom Profile - class A [climatograph.]

No. 10

237(a)



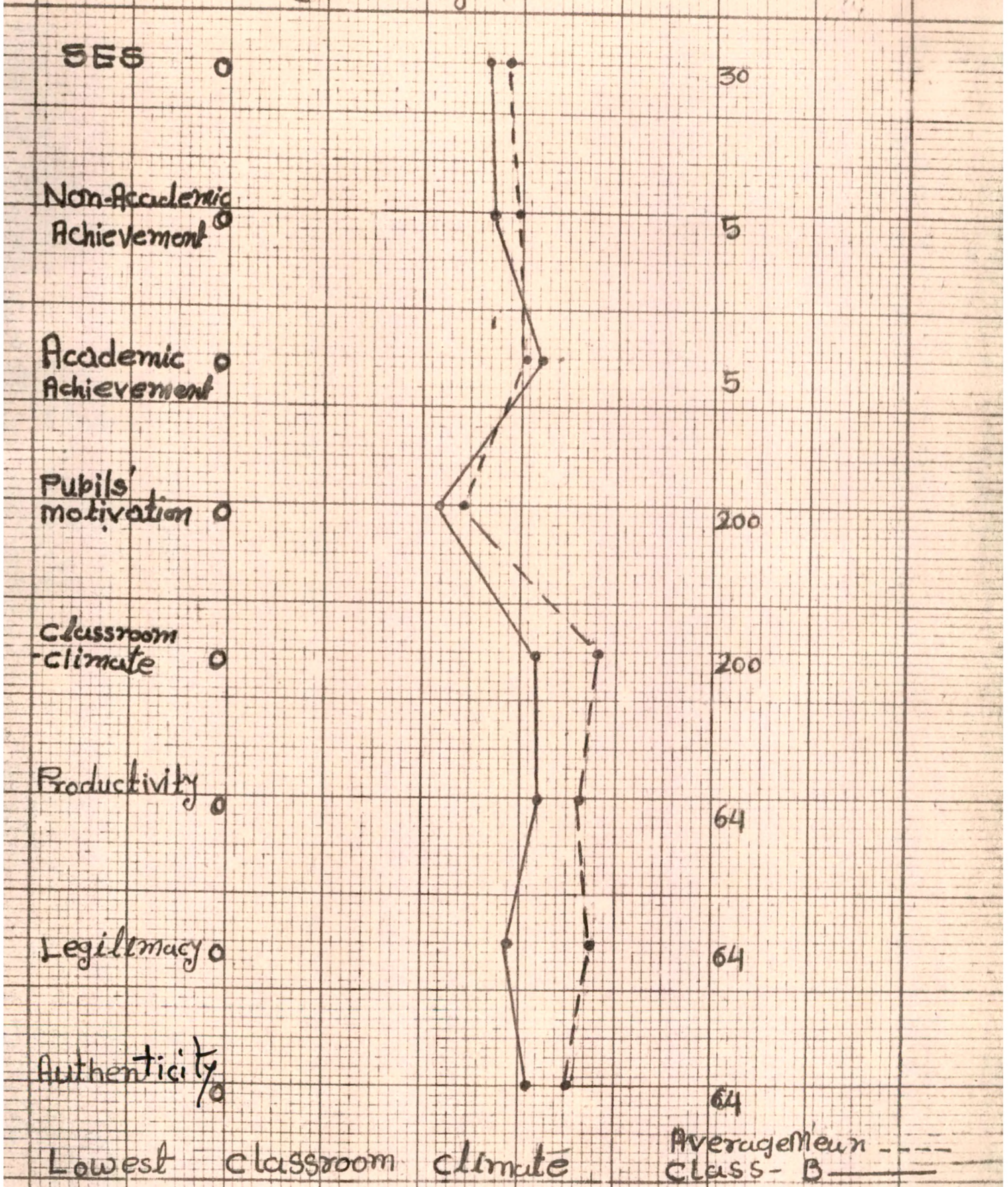
Highest classroom climate
and highest pupils' motivation.

Average Mean ---
class A —

Classroom Profile - Class-B. (ctimatograph.)

No. 10.

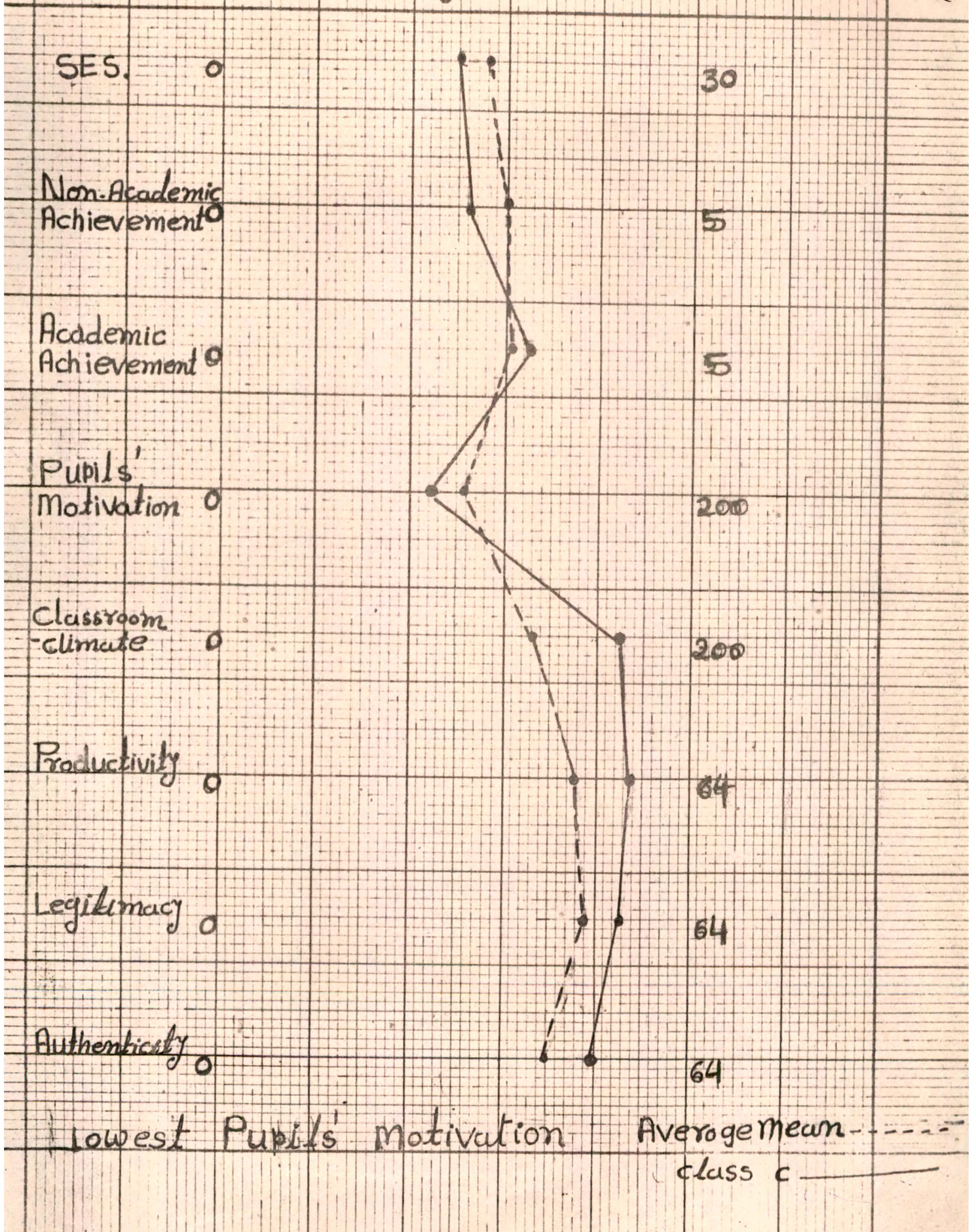
237(b)



Classroom Profile - Class C (climatograph)

No. 10

237 (C)



Classroom

Profile - class - D. (climatograph)

No. 10

237(d)

SES 0

30

Non-Academic Achievement 0

5

Academic Achievement 0

5

Pupils Motivation 0

200

Classroom - climate 0

200

Productivity 0

64

Legitimacy 0

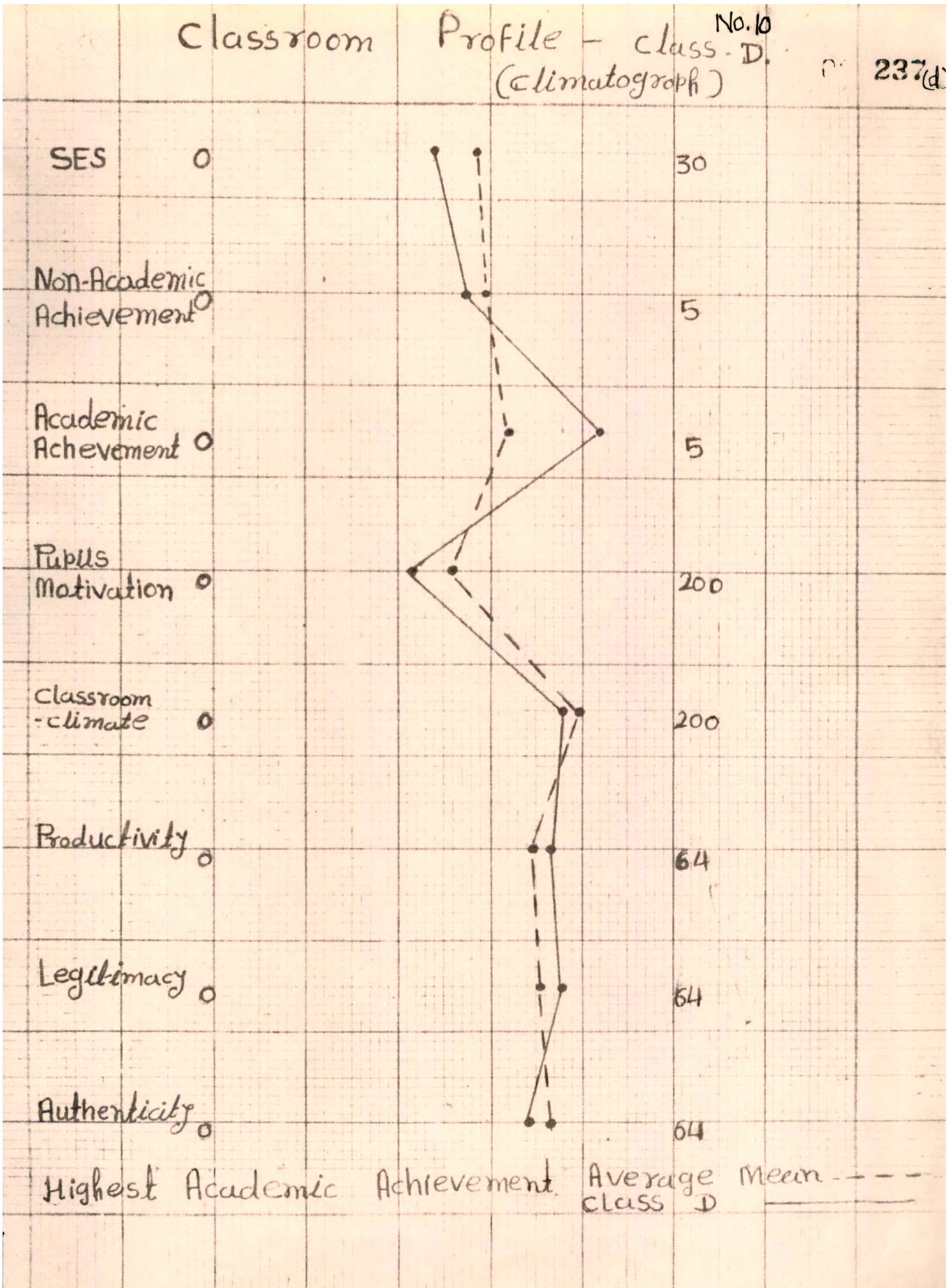
64

Authenticity 0

64

Highest Academic Achievement

Average class D Mean



lower? Can anything be wrong with the management or teachers or pupils or medium of instruction of that classroom?

The pupils of classroom A have higher classroom climate score and high Academic Motivation. The teachers of this classroom have definitely made the pupils feel alive, which shows that challenged and involved in the activities, the students are satisfied with the learning activities in the class.

Class B - The mean scores of all the variables of B classroom are lower than the average score of all the variables. Why is it so? What can be done to raise the level of all variables in this class? This profile leaves these questions to be answered.

Class C - It represents a classroom with low Pupils' Academic Motivation level. In this class, classroom climate score and its Authenticity, Legitimacy and Productivity levels is higher than average mean scores of the A, L, P and classroom climate. Its Pupils' Motivation score is very low.

Class D - It represents a classroom with high Academic Achievement level. In this class, scores of A, L, P and classroom climate scores are very near to average scores. Its Pupils' Motivation level is lower than the average mean score. What can be done?

In this way, classroom profiles are very useful for diagnostic and remedial purpose for each school.

5.4 DISCUSSION OF RESULTS

It would be worthwhile to discuss a few issues arising out of the results of this study. Such issues need a thorough discussion, e.g., questions have been raised by many as regards the relationship of classroom climate and pupils' academic motivation. Moreover, there are contradictory research findings about some components.

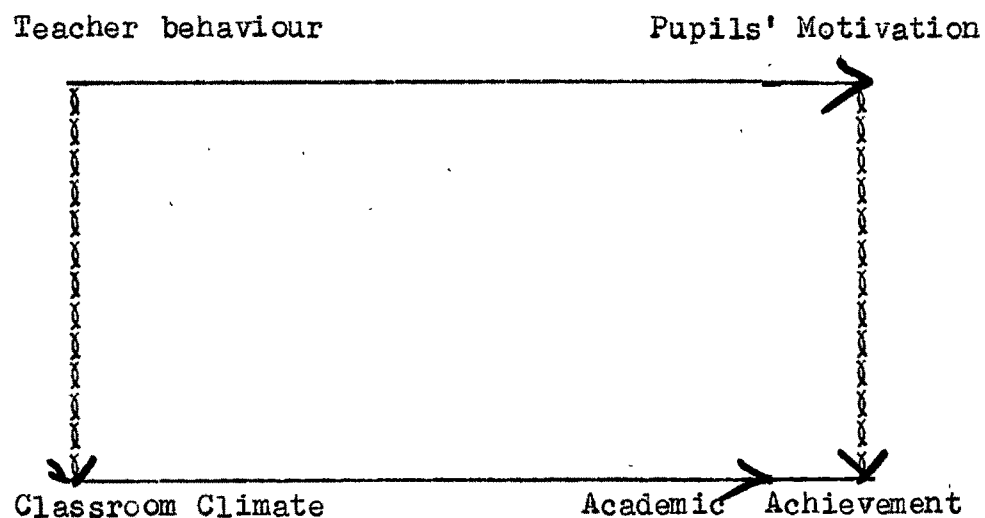
Motivation is the first requisite for learning. The teacher first task is to motivate children to do good work, find interest and enjoyment in their activities and take pride in their accomplishments. But motivating students is not an easy task. The teacher is a counsellor and not a mere teacher of languages or science. He must be deeply concerned about the students.

The present study reveals that classroom climate is positively related to Pupils' Motivation. This means that the pupils who are highly academically motivated got high score on classroom climate. Conceptually also, academic motivation is the cause and classroom climate is the effect. If pupils are motivated towards academic study they will generate conducive classroom climate. It is also true that classroom climate may effect academic motivation of the pupils. The prime factor is teacher behaviour in the classroom which affects Pupils' Motivation and which generates classroom climate. The further study should find out the predictive value of interaction effect of Pupils' Motivation and

classroom climate..

The mean score of pupils' academic motivation (Table 12, Chapter V) in Frymier study is 120 whereas in Gujarat, it moves between 86 to 98 which is much less (Table 14, Chapter V).

It is observed from the study that Authenticity, Legitimacy and Productivity show internal relationship at a significant level. Moreover, each component of climate Authenticity, Legitimacy and Productivity show positive relation with Pupils' Motivation at a significant level. It means the classroom climate and A or L or P as separate component has a positive relation with pupils' academic motivation. If the motivation is high then pupils show greater achievement in study. Table 22, Chapter V shows a positive relationship of academic achievement with academic motivation and classroom climate. The sequence can be conceptualized like this.



As regards the flow of A, L, P, it seems (Tables 24, 25) if Legitimacy is high, Authenticity is also high, if Productivity is high, Authenticity is also high. This positive relationship shows that there are common components in A, L, P or if one component (A or L or P) is affected positively then the other components have a tendency to get positive effect. This throws a further hypothesis for future research to construct a tool to measure each component separately and to experiment to produce high Authenticity in a classroom to study the effects on Legitimacy and Productivity.

In the present study, boys score higher in classroom climate, pupils' motivation and academic achievement than girls. This may be due to social conditions of girls who have to work at home and whose education is viewed as of secondary importance. A further study could find the real causes of this situations.

The pupils of Gujarati medium schools show high score in all variables than the pupils of English medium schools. This findings break the myth that English medium schools are always superior. Sending children to English medium schools have become a fashion or a fad in the present complex society. Many parents are not able to provide good and healthy environment to communicate fluently in English. Some of the parents are also not able to guide and even help their children so it becomes difficult for the children to adjust themselves in the class. They are always in tension

during the class hours. Some students always try to escape from the situation ⁱⁿ which they have to communicate in English. They are not able to express their views well in English. So they find themselves aloof from the interaction process going in the class.

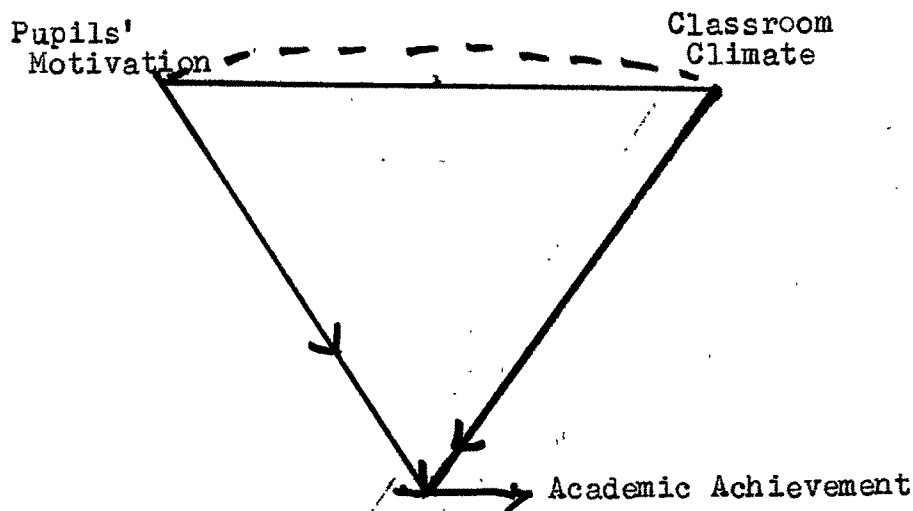
The aim of this study is to find out the relationship of Non-Academic Achievement with achievement motivation and classroom climate. It is observed that academic motivation has no significant relation with Non-Academic Achievement (Table 61). But those students who are having high score on Non-Academic Achievement show higher score of classroom climate (Table 53) whereas average group of Non-Academic Achievement have average score of classroom climate which is at a significant level.

One of the reasons could be that pupils tend to have greater interaction in Non-Academic Activities and therefore they obtained high classroom climate score.

It seems that Non-Academic Achievement has no definite predictable relationship with Authenticity or Legitimacy or Productivity.

The ultimate concern of the society is towards academic achievement. The present study reveals that pupils' academic motivation has positive relation with their academic achievement and classroom climate has also positive relation with their academic achievement. The relationship

can be depicted in a diagram as follows:



If pupils' academic motivation can be developed then the classroom climate score will be high which will lead to higher academic achievement of pupils.

The present researcher thinks of one hypothesis for further study. The teacher behaviour affects pupils' academic motivation, classroom climate and academic achievement. An attempt should be made to study this phenomenon.

The classroom profiles (climatograph) given on page 238 (Graph 10), in the present study, will help the school to study each classroom in details, to diagnose the defects and to remedy the situation. There are other variables also which represent pupils' development (such as anxiety, classroom trust, classroom adjustment,

classroom independency also). A further investigation can be done on the effect of classroom climate on pupils psychic world.

The present study reveals that pupils' academic achievement could be improved if more supportive classroom climate can be generated and if pupils' academic motivation is high,