

CHAPTER III

CHAPTER III

DESCRIPTION OF DATA

3.0.0 Introduction

This chapter is devoted to the description of data related to the objectives and testing the hypotheses. The data concerning all the variables in this investigation were collected from six secondary schools in India (Baroda) and six secondary schools in Thailand (Bangkok) with the help of the tools described in Chapter Two, under caption 2.3.0. Before attempting to test any of the hypotheses proposed in this descriptive correlational study by means of comparative method, it was thought desirable to describe the nature of distributions of scores related to different variables so as to fulfill some of the assumptions implicit in the statistical techniques used in this study.

Some of the statistical techniques depend upon a few assumptions about the nature of the distribution of the independent and dependent variables under consideration in the population. This assumption is based either on previous information available from other sources or on inferences that could be

drawn from the sample. Distribution of many psychological variables is generally assumed to be normal in the population and accordingly parametric tests are applied for statistical analysis. It may be pointed out here that dependent variables of this study should be continuous, therefore, the basic assumptions of analysis of variance as given in Chapter V as well as correlational approach would have been fulfilled. These assumptions were checked in the present case by working out the measures of central tendency in terms of mean, the measure of dispersion in terms of standard deviation alongwith their standard errors; and the graphical analysis through smoothed overlapping percentage of frequency polygons for Indian and Thai samples.

The description of the distributions has been presented in terms of frequency distribution. Briefly, the sequence of the tables is as follows. Descriptive results comprising the results of measures of central tendency like M and SE_M and measures of dispersion like SD and SE_{SD} are given alongwith comparative percentage frequency distributions of Indian and Thai sample for the 18 criterion variables of creative thinking namely, Seeing Problems (SP), Unusual Uses Fluency (UF), Unusual Uses Flexibility (UX), Unusual Uses Originality (UO), Unusual Uses Creativity (UC), Consequences Fluency (CF), Consequency Originality (CO),

Consequences Creativity (CC), Creativity Total (CY), Figural Fluency (FF), Figural Flexibility (FX), Figural Originality (FO), Figural Elaboration (FE), Figural Creativity (FC), Verbal Fluency (VF), Verbal Flexibility (VX), Verbal Originality (VO) and Verbal Creativity (VC). The overlapping smoothed frequency polygons were drawn for all these 18 criterion variables.

Furthermore, the comparative frequency distributions for the variables of socio-economic status (SES), School Climate (OCDQ), and the dimensions of classroom behaviour as Teacher Talk (TT), Pupil Talk (PT), indirect/direct ratio (i/d), Indirect/Direct ratio (I/D), Teacher Response Ratio (TRR), Teacher Question Ratio (TQR), Instantaneous Teacher Response Ratio (TRR89), Instantaneous Teacher Question Ratio (TQR89), Pupil Initiation Ratio (PIR), Content Cross Ratio (CCR), Total Steady State Ratio (SSR), and Pupil Steady State Ratio (PSSR) have also been given.

The results given in Tables 3.1 to 3.33 and Figures 3.1 to 3.18, providing an analytical and comparative picture of descriptive statistics concerning creative thinking and other variables in an economical and convenient manner thereby ensuring better understanding of results, are given below.

3.1.0 Description of Data

TABLE 3.1 PERCENTAGE FREQUENCY DISTRIBUTIONS OF
300 INDIAN STUDENTS AND 300 THAI STUDENTS
FOR SEEING PROBLEMS (SP)

CLASS INTERVALS	INDIAN				THAI				
	f	f%	Smoothed f%	f	f%	Smoothed f%	f	f%	Smoothed f%
52 - 56	0	0.000	0.000	0	0.000	0.111			
47 - 51	0	0.000	0.111	1	0.333	0.444			
42 - 46	1	0.333	0.444	3	1.000	1.333			
37 - 41	3	1.000	0.555	8	2.667	2.222			
32 - 36	1	0.333	3.555	9	3.000	7.111			
27 - 31	28	9.333	8.222	47	15.667	12.889			
22 - 26	45	15.000	17.222	60	20.000	22.111			
17 - 21	82	27.333	23.778	92	30.667	22.889			
12 - 16	87	29.000	23.222	54	18.000	18.556			
7 - 11	40	13.333	15.666	21	7.000	8.889			
2 - 6	13	4.333	6.000	5	1.667	2.889			
- 3 - 1	0	0.000	1.444	0	0.000	0.556			
$i = 5$	$N=300$	99.998		$N=300$	100.001				

M = 17.583

SD = 6.946

SE_M = .402

SE_{SD} = .285

M = 21.050

SD = 7.133

SE_M = .413

SE_{SD} = .292

SMOOTHED OVERLAPPING PERCENTAGE FREQUENCY
POLYGONS OF INDIAN STUDENTS AND THAI STUDENTS
FOR SEEING PROBLEMS (SP)

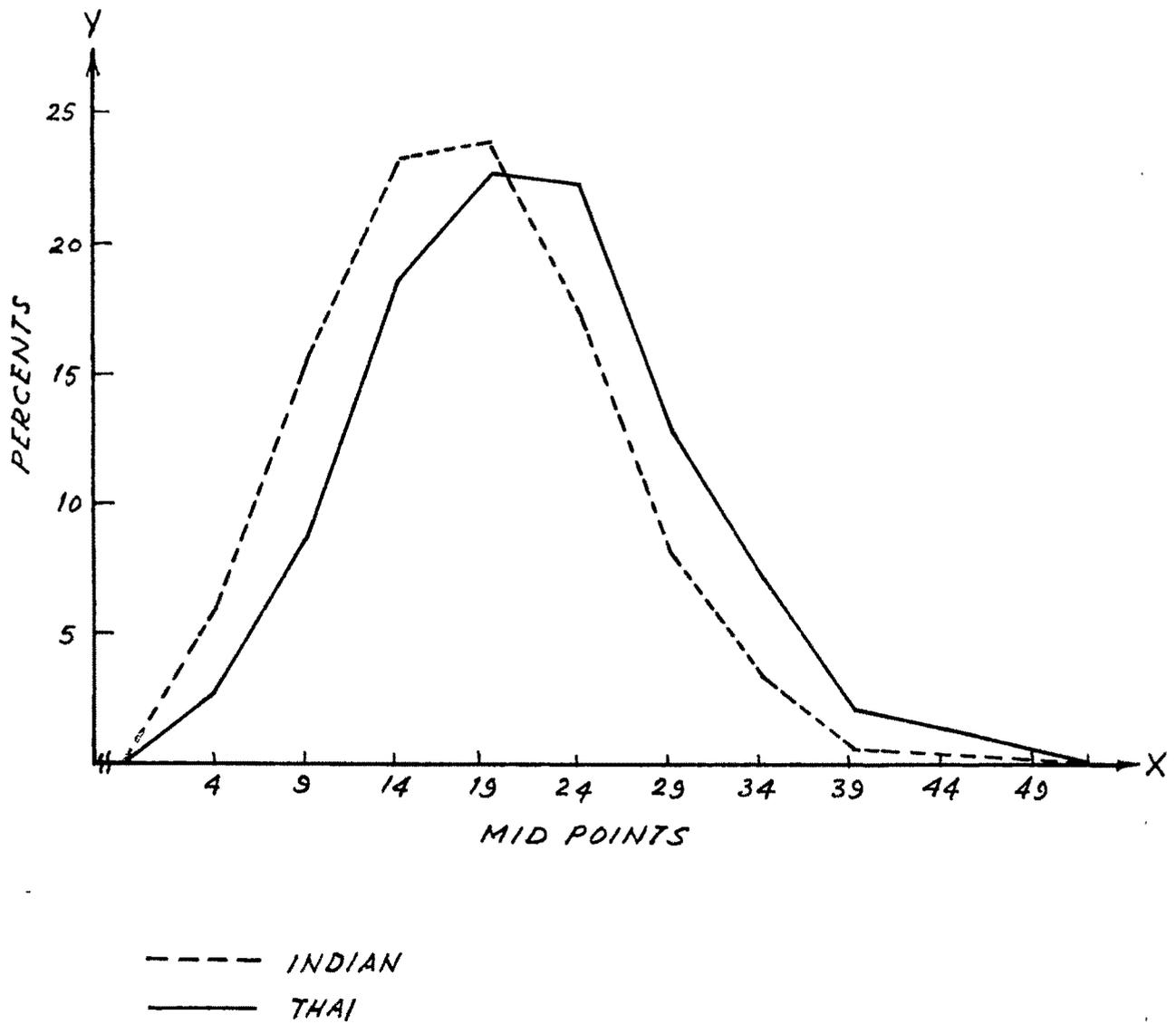


TABLE 3.2 PERCENTAGE FREQUENCY DISTRIBUTIONS OF
300 INDIAN STUDENTS AND 300 THAI STUDENTS
FOR UNUSUAL USES FLUENCY (UF)

CLASS INTERVALS	INDIAN			THAI		
	f	f%	Smoothed f%	f	f%	Smoothed f%
38 - 40	0	0.000	0.000	0	0.000	0.111
35 - 37	0	0.000	0.111	1	0.333	0.778
32 - 34	1	0.333	0.333	6	2.000	1.778
29 - 31	2	0.667	0.778	9	3.000	3.444
26 - 28	4	1.333	4.111	16	5.333	7.333
23 - 25	31	10.333	7.444	41	13.667	11.222
20 - 22	32	10.667	13.444	44	14.667	15.445
17 - 19	58	19.333	16.556	54	18.000	17.222
14 - 16	59	19.667	19.667	57	19.000	23.445
11 - 13	60	20.000	17.667	50	16.667	14.111
8 - 10	40	13.333	12.555	20	6.667	8.223
5 - 7	13	4.333	5.889	2	0.667	2.445
2 - 4	0	0.000	1.444	0	0.000	0.222
<u>i = 3</u>	<u>N=300</u>	<u>99.999</u>		<u>N=300</u>	<u>100.001</u>	
	M	= 15.680		M	= 18.210	
	SD	= 5.229		SD	= 5.795	
	SE _M	= .302		SE _M	= .335	
	SE _{SD}	= .214		SE _{SD}	= .238	

SMOOTHED OVERLAPPING PERCENTAGE FREQUENCY
POLYGONS OF INDIAN STUDENTS AND THAI STUDENTS
FOR UNUSUAL USES FLUENCY (UF)

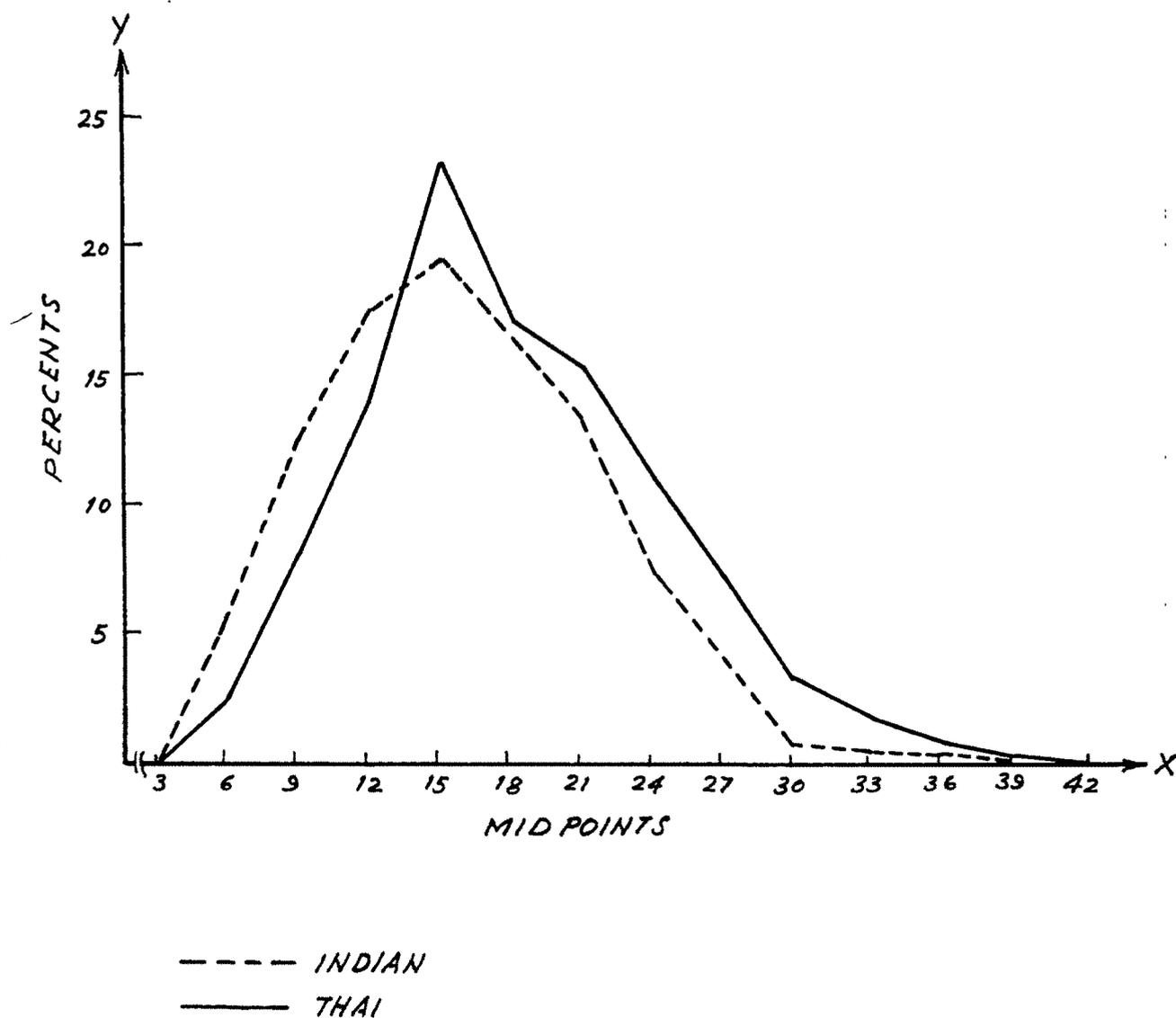


TABLE 3.3 PERCENTAGE FREQUENCY DISTRIBUTIONS OF
300 INDIAN STUDENTS AND 300 THAI STUDENTS
FOR UNUSUAL USES FLEXIBILITY (UX)

CLASS INTERVALS	INDIAN			THAI		
	f	f%	Smoothed f%	f	f%	Smoothed f%
35 - 37	0	0.000	0.222	0	0.000	0.000
32 - 34	2	0.667	0.222	0	0.000	0.000
29 - 31	0	0.000	0.222	0	0.000	0.222
26 - 28	0	0.000	0.000	2	0.667	0.333
23 - 25	0	0.000	0.222	1	0.333	0.778
20 - 22	2	0.667	1.778	4	1.333	3.000
17 - 19	14	4.667	3.889	22	7.333	11.555
14 - 16	49	16.333	15.778	78	26.000	23.333
11 - 13	79	26.333	23.555	110	36.667	28.333
8 - 10	84	28.000	24.778	67	22.333	21.444
5 - 7	60	20.000	17.111	16	5.333	9.222
2 - 4	10	3.333	7.778	0	0.000	1.778
-1 - 1	0	0.000	1.111	0	0.000	0.000
<u>i = 3</u>	<u>N=300</u>	<u>100.000</u>		<u>N=300</u>	<u>99.999</u>	

M = 10.750

SD = 4.439

SE_M = .257

SE_{SD} = .182

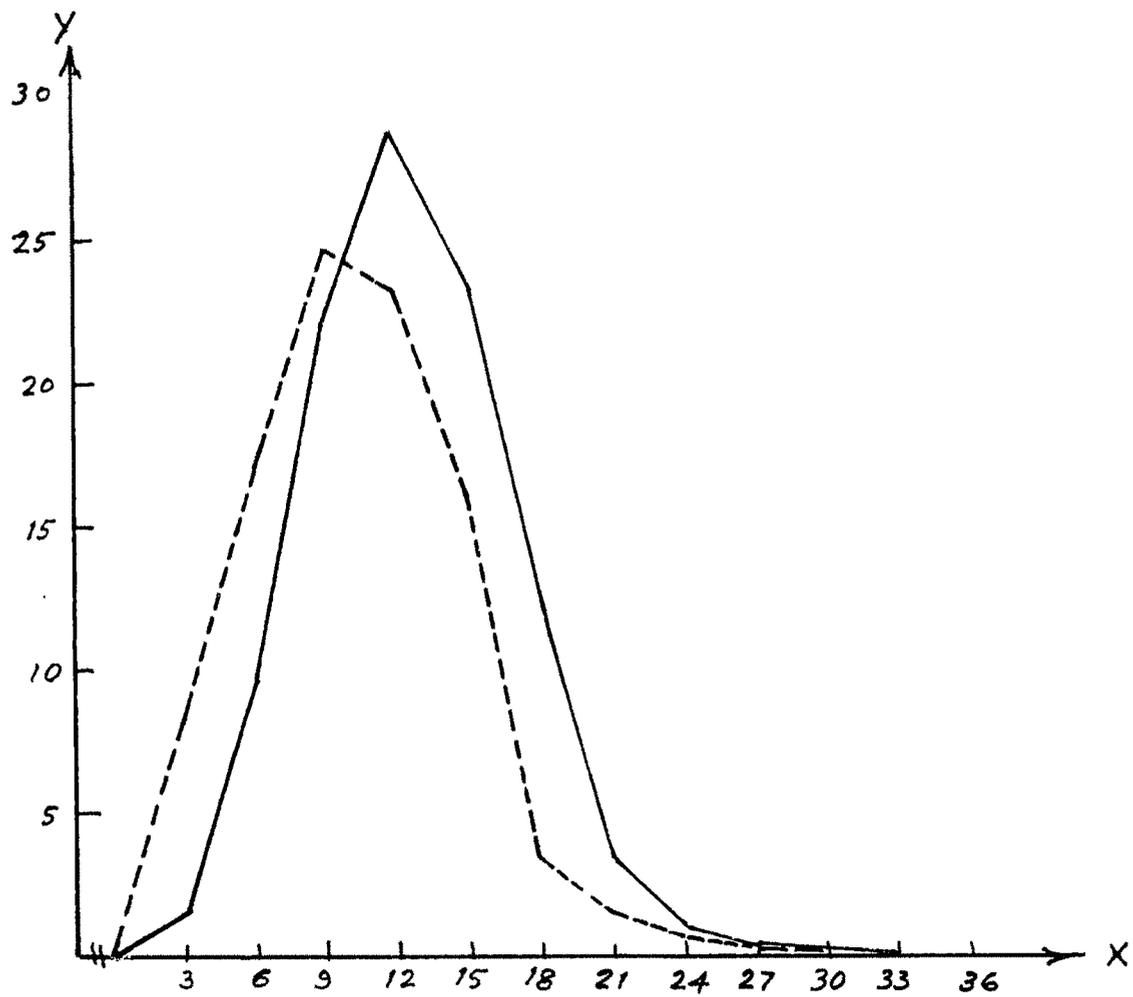
M = 12.490

SD = 3.425

SE_M = .198

SE_{SD} = .140

SMOOTHED OVERLAPPING PERCENTAGE FREQUENCY
POLYGONS OF INDIAN STUDENTS AND THAI STUDENTS
FOR UNUSUAL USES FLEXIBILITY (UX)



----- INDIAN
————— THAI

TABLE 3.4 PERCENTAGE FREQUENCY DISTRIBUTIONS OF
300 INDIAN STUDENTS AND 300 THAI STUDENTS
FOR UNUSUAL USES ORIGINALITY (UO)

CLASS INTERVALS	INDIAN			THAI		
	f	f%	Smoothed f%	f	f%	Smoothed f%
73 - 77	0	0.000	0.111	0	0.000	0.222
68 - 72	1	0.333	0.111	2	0.667	0.333
63 - 67	0	0.000	0.111	1	0.333	0.889
58 - 62	0	0.000	0.556	5	1.667	1.222
53 - 57	5	1.667	0.778	5	1.667	2.334
48 - 52	2	0.667	1.889	11	3.667	4.111
43 - 47	10	3.333	2.667	21	7.000	6.333
38 - 42	12	4.000	4.444	25	8.333	9.444
33 - 37	18	6.000	7.333	39	13.000	24.333
28 - 32	36	12.000	12.778	58	19.333	16.667
23 - 27	61	20.333	16.778	53	17.667	17.222
18 - 22	54	18.000	18.889	44	14.667	13.445
13 - 17	55	18.333	16.333	24	8.000	8.667
8 - 12	38	12.667	11.222	10	3.333	4.000
3 - 7	8	2.667	5.111	2	0.667	1.333
- 2 - 2	0	0.000	0.889	0	0.000	0.222
i = 5	N=300	100.000		N=300	100.001	

M = 23.117

SD = 10.757

SE_M = .622

SE_{SD} = .441

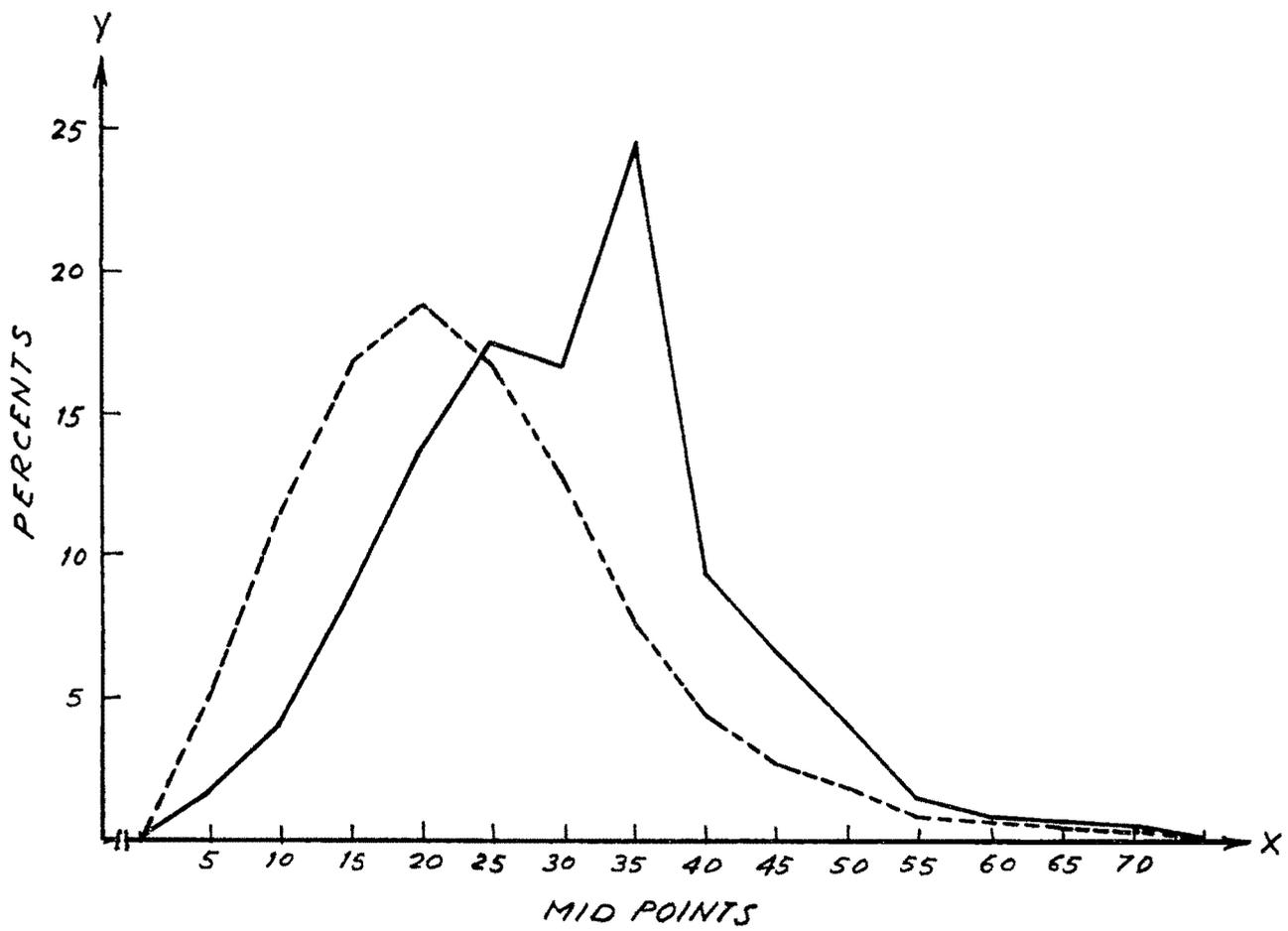
M = 30.183

SD = 11.693

SE_M = .676

SE_{SD} = .479

SMOOTHED OVERLAPPING PERCENTAGE FREQUENCY
POLYGONS OF INDIAN STUDENTS AND THAI STUDENTS
FOR UNUSUAL USES ORIGINILITY (UO)



----- INDIAN
————— THAI

TABLE 3.5 PERCENTAGE FREQUENCY DISTRIBUTIONS OF
300 INDIAN STUDENTS AND 300 THAI STUDENTS
FOR UNUSUAL USES CREATIVITY (UC)

CLASS INTERVALS	INDIAN			THAI		
	f	f%	Smoothed f%	f	f%	Smoothed f%
115 - 121	0	0.000	0.000	0	0.000	0.222
108 - 114	0	0.000	0.000	2	0.667	0.556
101 - 107	0	0.000	0.222	3	1.000	1.222
94 - 100	2	0.667	0.778	6	2.000	2.667
87 - 93	5	1.667	1.222	15	5.000	4.778
80 - 86	4	1.333	2.778	22	7.333	8.000
73 - 79	16	5.333	6.333	35	11.667	9.778
66 - 72	37	12.333	8.778	31	10.333	10.556
59 - 65	26	8.667	12.333	29	9.667	21.667
52 - 58	48	16.000	15.111	53	17.667	14.556
45 - 51	62	20.667	17.222	49	16.333	14.111
38 - 44	45	15.000	15.333	25	8.333	10.333
31 - 37	31	10.333	9.667	19	6.333	5.778
24 - 30	11	3.667	5.667	8	2.667	3.333
17 - 23	9	3.000	1.667	3	1.000	1.222
10 - 16	4	1.333	1.444	0	0.000	0.333
3 - 11	0	0.000	0.444	0	0.000	0.000
	$i = 7$	$N=300$	100.000	$N=300$	100.000	

M = 51.337

SD = 15.977

$SE_M = .922$

$SE_{SD} = .655$

M = 60.343

SD = 18.228

$SE_M = 1.052$

$SE_{SD} = .747$

SMOOTHED OVERLAPPING PERCENTAGE FREQUENCY
POLYGONS OF INDIAN STUDENTS AND THAI STUDENTS
FOR UNUSUAL USES CREATIVITY (UC)

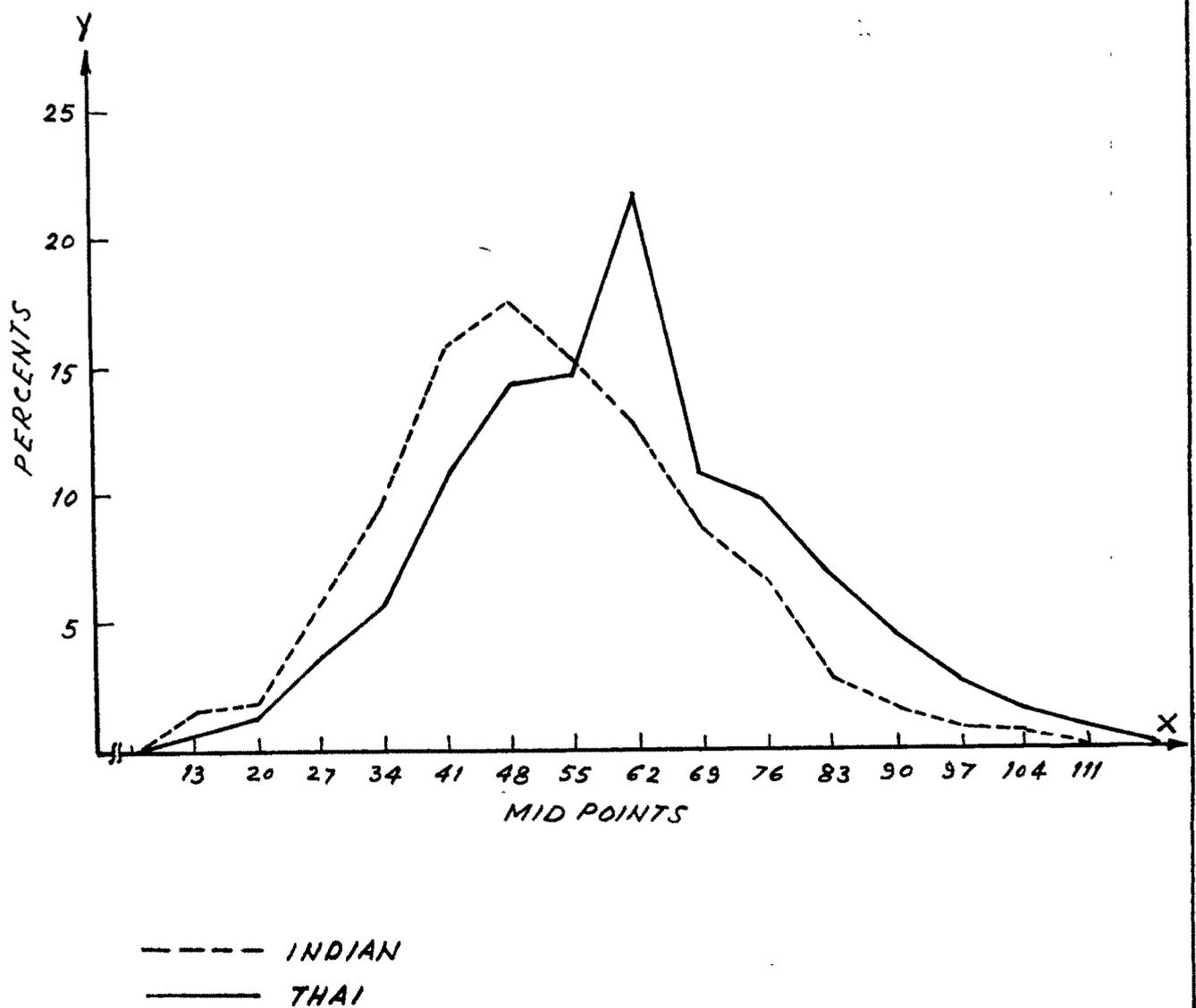


TABLE 3.6 PERCENTAGE FREQUENCY DISTRIBUTIONS OF
300 INDIAN STUDENTS AND 300 THAI STUDENTS
FOR CONSEQUENCES FLUENCY (CF)

CLASS INTERVALS	INDIAN			THAI		
	f	f%	Smoothed f%	f	f%	Smoothed f%
42 - 44	0	0.000	0.333	0	0.000	0.333
39 - 41	3	1.000	0.556	3	1.000	1.000
36 - 38	2	0.667	0.889	6	2.000	1.333
33 - 35	3	1.000	1.445	3	1.000	2.667
30 - 32	8	2.667	2.445	15	5.000	3.778
27 - 29	11	3.667	4.778	16	5.333	6.889
24 - 26	24	8.000	6.889	31	10.333	9.666
21 - 23	27	9.000	11.778	40	13.333	14.666
18 - 20	55	18.333	15.778	61	20.333	17.000
15 - 17	60	20.000	18.333	52	17.333	16.222
12 - 14	50	16.667	16.333	33	11.000	12.000
9 - 11	37	12.333	11.889	23	7.667	10.334
6 - 8	20	6.667	6.333	14	4.667	4.445
3 - 5	0	0.000	2.222	3	1.000	1.889
0 - 2	0	0.000	0.000	0	0.000	0.333
$i = 3$	N=300	100.001		N=300	99.999	

M = 17.370

SD = 6.671

SE_M = .386

SE_{SD} = .273

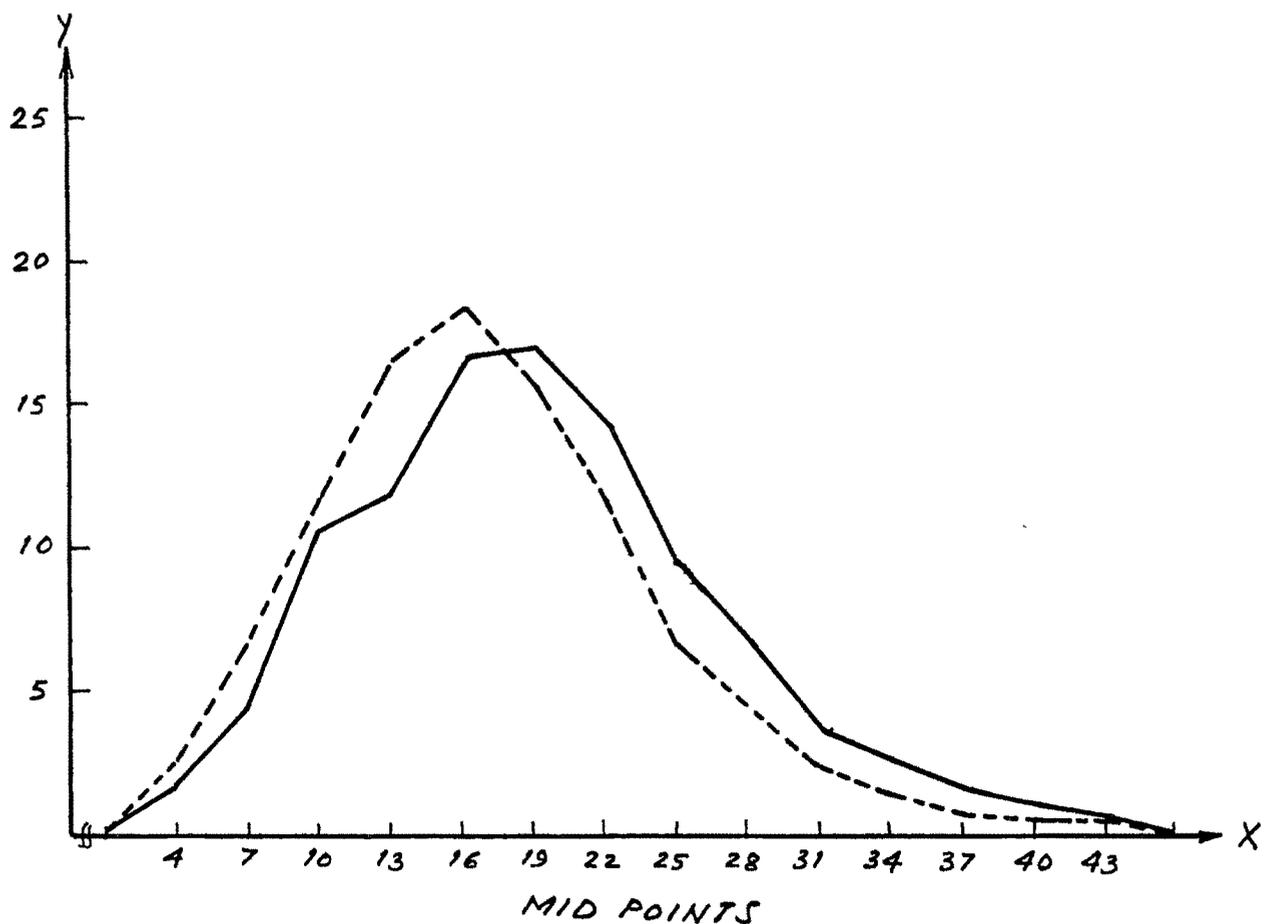
M = 19.240

SD = 7.066

SE_M = .409

SE_{SD} = .290

SMOOTHED OVERLAPPING PERCENTAGE FREQUENCY
POLYGONS OF INDIAN STUDENTS AND THAI STUDENTS
FOR CONSEQUENCES FLUENCY (CF)



----- INDIAN
————— THAI

TABLE 3.7 PERCENTAGE FREQUENCY DISTRIBUTIONS OF
300 INDIAN STUDENTS AND 300 THAI STUDENTS
FOR CONSEQUENCES ORIGINALITY (CO)

CLASS INTERVALS	INDIAN			THAI		
	f	f%	Smoothed f%	f	f%	Smoothed f%
28 - 30	0	0.000	0.111	0	0.000	0.222
25 - 27	1	0.333	0.333	2	0.667	1.000
22 - 24	2	0.667	1.556	7	2.333	2.444
19 - 21	11	3.667	4.000	13	4.333	5.111
16 - 18	23	7.667	8.334	26	8.667	9.333
13 - 15	41	13.667	15.778	45	15.000	17.778
10 - 12	78	26.000	21.889	89	29.667	23.333
7 - 9	78	26.000	23.667	76	25.333	21.889
4 - 6	57	19.000	16.000	32	10.667	13.111
1 - 3	9	3.000	7.333	10	3.333	4.667
- 2 - 0	0	0.000	1.000	0	0.000	1.111
<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
i = 3	N=300	100.001		N=300	100.000	

M = 10.140

SD = 4.420

SE_M = .256

SE_{SD} = .181

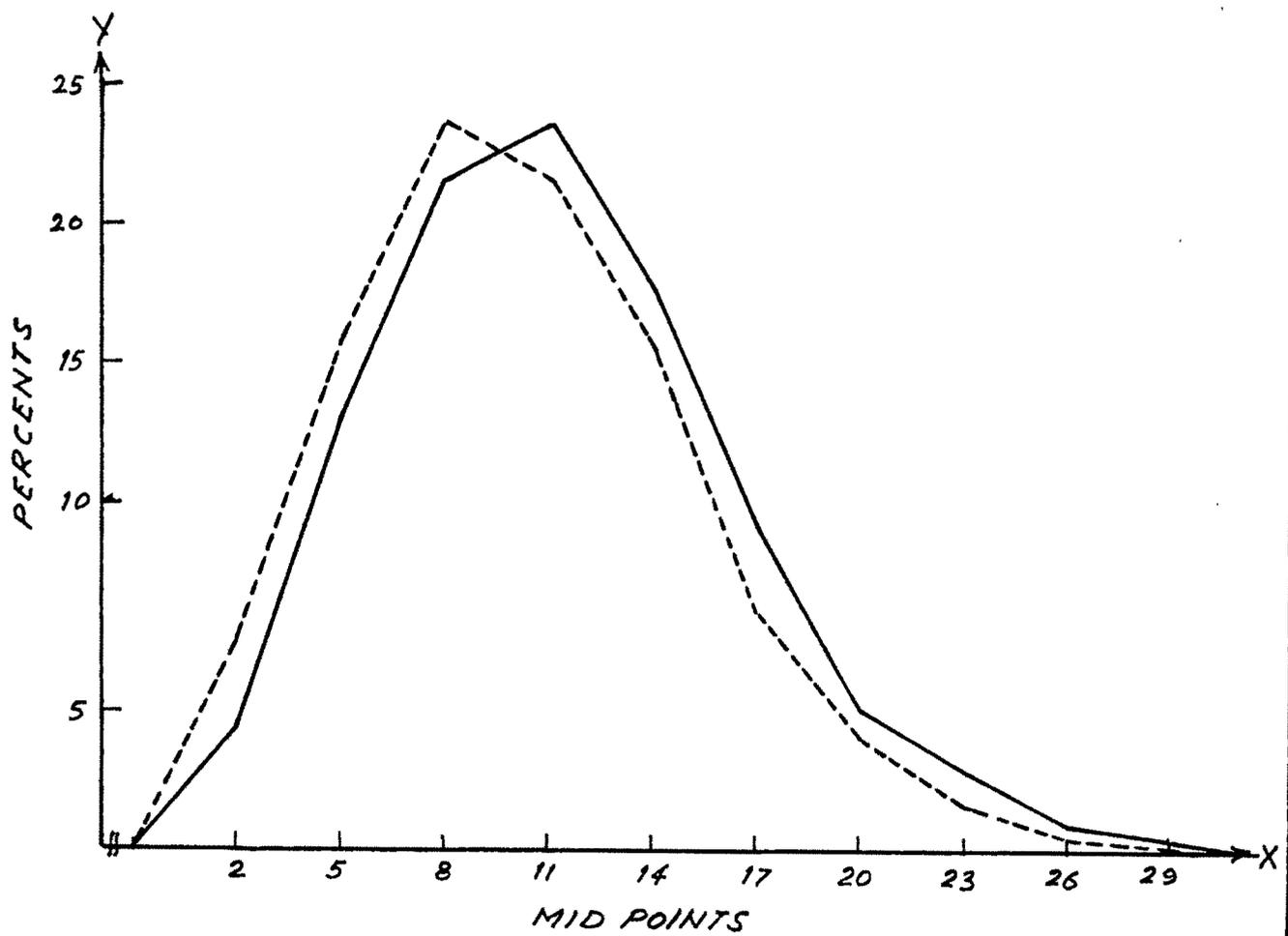
M = 11.040

SD = 4.385

SE_M = .254

SE_{SD} = .180

SMOOTHED OVERLAPPING PERCENTAGE FREQUENCY
POLYGONS OF INDIAN STUDENTS AND THAI STUDENTS
FOR CONSEQUENCES ORIGINALITY(CO)



----- INDIAN
———— THAI

TABLE 3.8 PERCENTAGE FREQUENCY DISTRIBUTIONS OF
300 INDIAN STUDENTS AND 300 THAI STUDENTS
FOR CONSEQUENCES CREATIVITY (CC)

CLASS INTERVALS	INDIAN			THAI		
	f	f%	Smoothed f%	f	f%	Smoothed f%
65 - 69	0	0.000	0.222	0	0.000	0.667
60 - 64	2	0.667	0.556	6	2.000	1.111
55 - 59	3	1.000	0.778	4	1.333	2.000
50 - 54	2	0.667	1.667	8	2.667	3.111
45 - 49	10	3.333	3.222	16	5.333	4.556
40 - 44	17	5.667	15.000	17	5.667	8.111
35 - 39	36	12.000	11.111	40	13.333	12.333
30 - 34	47	15.667	15.778	54	18.000	17.444
25 - 29	59	19.667	18.222	63	21.000	17.667
20 - 24	58	19.333	17.444	42	14.000	14.889
15 - 19	40	13.333	13.666	29	9.667	9.889
10 - 14	25	8.333	7.333	18	6.000	5.556
5 - 9	1	0.333	2.889	3	1.000	2.333
0 - 4	0	0.000	0.111	0	0.000	0.333
<u>i = 5</u>	<u>N=300</u>	<u>100.000</u>		<u>N=300</u>	<u>100.000</u>	

M = 27.583

M = 30.150

SD = 9.836

SD = 10.962

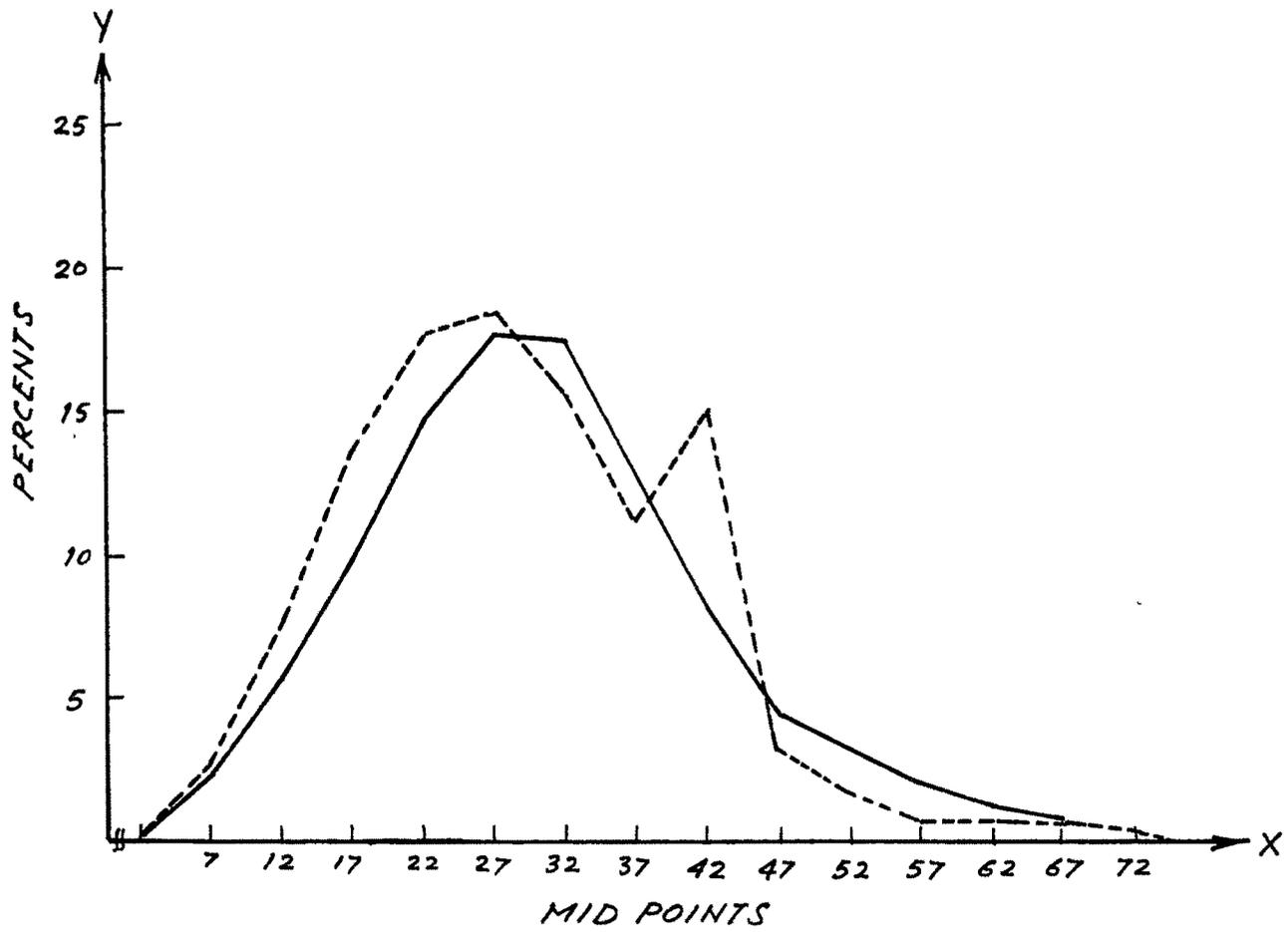
SE_M = .569

SE_M = .634

SE_{SD} = .403

SE_{SD} = .449

SMOOTHED OVERLAPPING PERCENTAGE FREQUENCY
POLYGONS OF INDIAN STUDENTS AND THAI STUDENTS
FOR CONSEQUENCES CREATIVITY (CC)



----- INDIAN
———— THAI

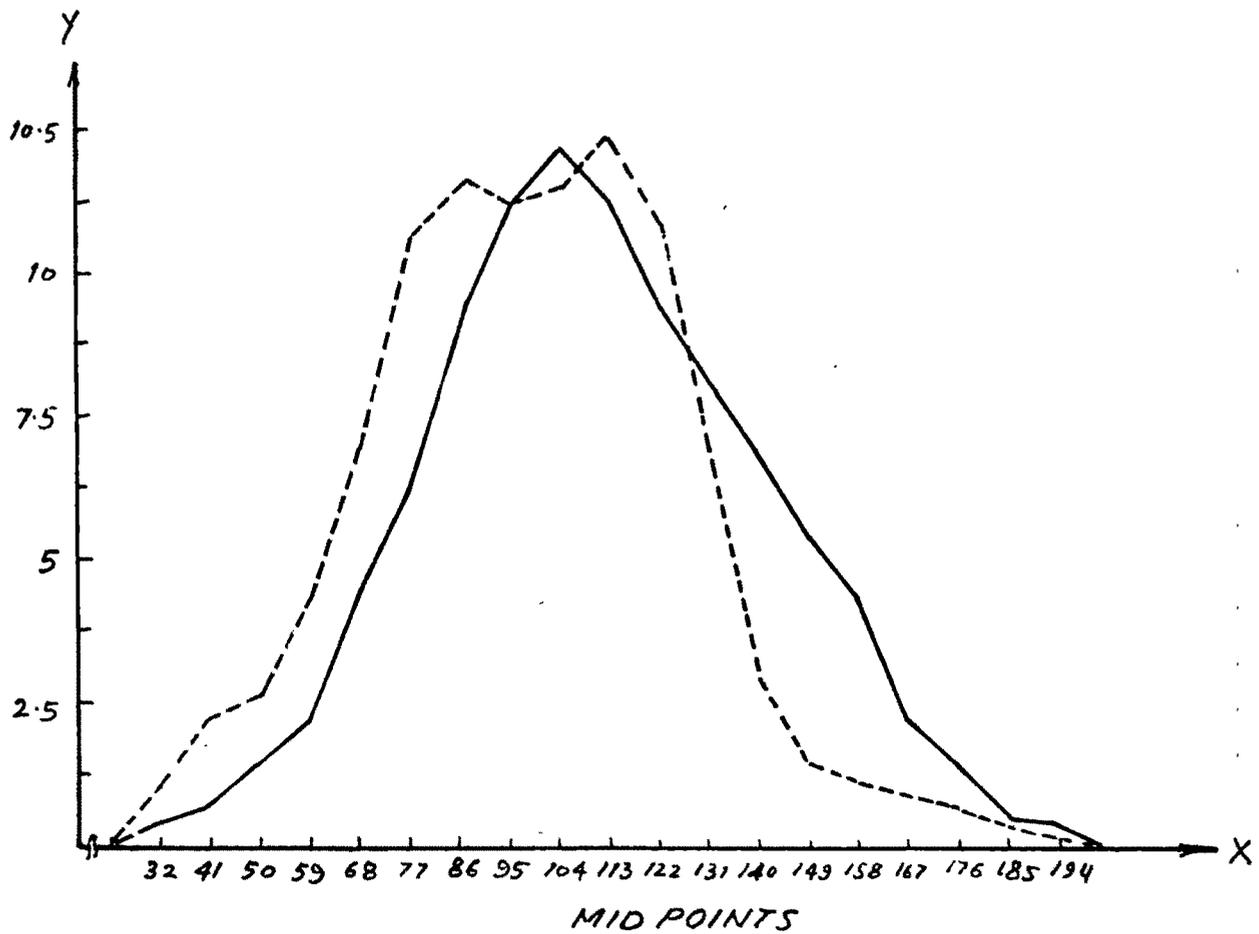
TABLE 3.9 PERCENTAGE FREQUENCY DISTRIBUTIONS OF
 300 INDIAN STUDENTS AND 300 THAI STUDENTS
 FOR CREATIVITY TOTAL (CY)

CLASS INTERVALS	INDIAN			THAI		
	f	f%	Smoothed f%	f	f%	Smoothed f%
190 - 198	0	0.000	0.000	0	0.000	0.444
181 - 189	0	0.000	0.111	4	1.333	0.667
172 - 180	1	0.333	0.667	2	0.667	1.667
163 - 171	5	1.667	1.111	9	3.000	2.445
154 - 162	4	1.333	1.333	11	3.667	4.445
145 - 153	3	1.000	1.444	20	6.667	5.445
136 - 144	6	2.000	3.111	18	6.000	7.000
127 - 135	19	6.333	7.000	25	8.333	8.000
118 - 126	38	12.667	11.000	29	9.667	9.667
109 - 117	42	14.000	12.222	33	11.000	11.222
100 - 108	30	10.000	11.333	39	13.000	12.667
91 - 99	30	10.000	11.111	42	14.000	11.222
82 - 90	40	13.333	11.667	20	6.667	9.667
73 - 81	35	11.667	10.556	25	8.333	6.333
64 - 72	20	6.667	7.000	12	4.000	4.555
55 - 63	8	2.667	4.222	4	1.333	2.222
46 - 54	10	3.333	2.778	4	1.333	1.222
37 - 45	7	2.333	2.111	3	1.000	0.778
28 - 36	2	0.667	1.000	0	0.000	0.333
19 - 27	0	0.000	0.222	0	0.000	0.000
i = 9	N=300	100.000		N=300	100.000	

M = 98.630
 SD = 27.190
 $SE_M = 1.570$
 $SE_{SD} = 1.115$

M = 111.470
 SD = 29.276
 $SE_M = 1.690$
 $SE_{SD} = 1.200$

SMOOTHED OVERLAPPING PERCENTAGE FREQUENCY
POLYGONS OF INDIAN STUDENTS AND THAI STUDENTS
FOR CREATIVITY TOTAL (CT)



----- INDIAN
————— THAI

TABLE 3.10 PERCENTAGE FREQUENCY DISTRIBUTIONS OF
300 INDIAN STUDENTS AND 300 THAI STUDENTS
FOR FIGURAL FLUENCY (FF)

CLASS INTERVALS	INDIAN			THAI		
	f	f%	Smoothed f%	f	f%	Smoothed f%
38 - 40	0	0.000	0.111	0	0.000	0.222
35 - 37	1	0.333	1.222	2	0.667	0.445
32 - 34	5	1.667	1.222	2	0.667	2.000
29 - 31	5	1.667	4.222	14	4.667	5.667
26 - 28	28	9.333	6.333	35	11.667	10.111
23 - 25	24	8.000	10.222	42	14.000	15.333
20 - 22	40	13.333	13.444	61	20.333	18.111
17 - 19	57	19.000	16.555	60	20.000	16.111
14 - 16	52	17.333	16.667	24	8.000	13.333
11 - 13	41	13.667	12.667	36	12.000	7.667
8 - 10	21	7.000	8.889	9	3.000	6.111
5 - 7	18	6.000	5.222	10	3.000	2.667
2 - 4	8	2.667	2.889	5	1.667	1.667
-1 - 1	0	0.000	1.778	0	0.000	0.556
$i = 3$	N=300	100.000		N=300	100.001	
	M	= 17.140		M	= 18.500	
	SD	= 6.702		SD	= 6.362	
	SE _M	= .388		SE _M	= .368	
	SE _{SD}	= .275		SE _{SD}	= .261	

SMOOTHED OVERLAPPING PERCENTAGE FREQUENCY
POLYGONS OF INDIAN STUDENTS AND THAI STUDENTS
FOR FIGURAL FLUENCY (FF)

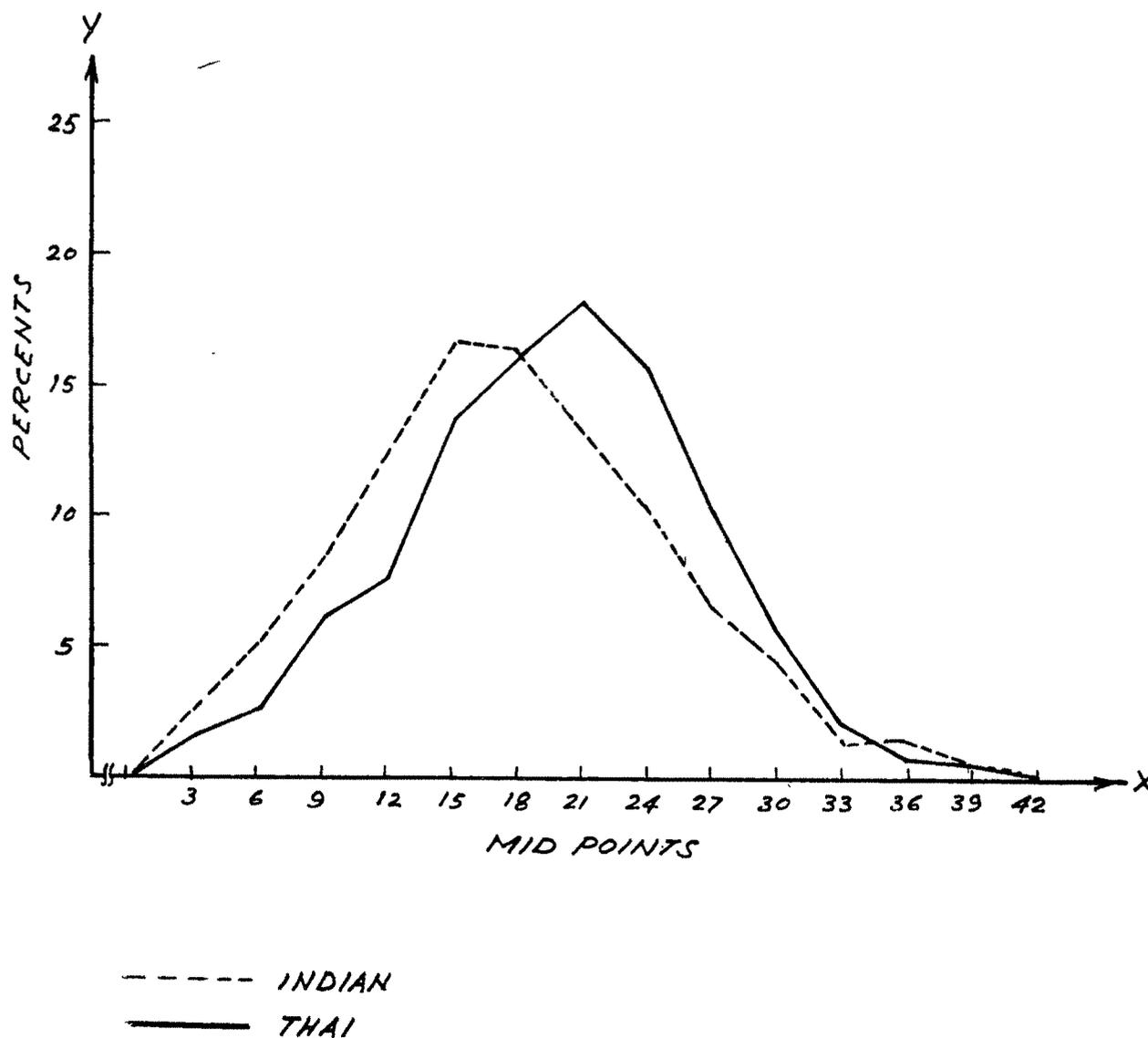
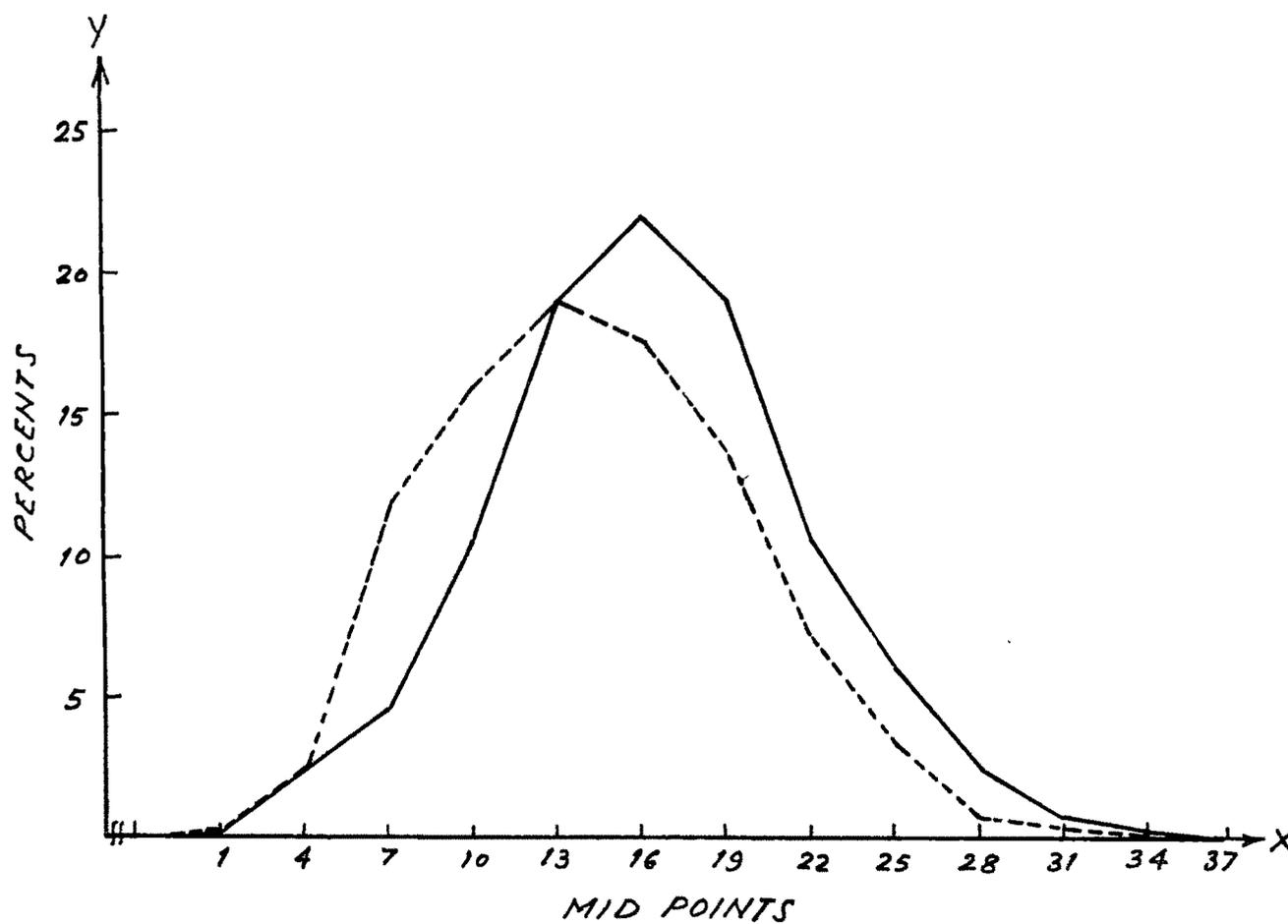


TABLE 3.11 PERCENTAGE FREQUENCY DISTRIBUTIONS OF
300 INDIAN STUDENTS AND 300 THAI STUDENTS
FOR FIGURAL FLEXIBILITY (FX)

CLASS INTERVALS	INDIAN			THAI		
	f	f%	Smoothed f%	f	f%	Smoothed f%
33 - 35	0	0.000	0.000	0	0.000	0.111
30 - 32	0	0.000	0.111	1	0.333	0.889
27 - 29	1	0.333	0.444	7	2.333	2.333
24 - 26	3	1.000	3.222	13	4.333	6.000
21 - 23	25	8.333	7.111	34	11.333	10.778
18 - 20	36	12.000	13.889	51	17.000	19.000
15 - 17	64	21.333	17.778	86	28.667	22.222
12 - 14	60	20.000	19.000	63	21.000	19.000
9 - 11	47	15.667	16.445	22	7.333	10.889
6 - 8	41	13.667	12.000	13	4.333	4.778
3 - 5	20	6.667	2.556	8	2.667	2.556
0 - 2	3	1.000	0.333	2	0.667	1.111
- 3 - 1	0	0.000	0.333	0	0.000	0.222
$i = 3$	N=300	100.000		N=300	99.999	
M	=	13.270		M	=	16.031
SD	=	5.332		SD	=	5.158
SE _M	=	.308		SE _M	=	.298
SE _{SD}	=	.219		SE _{SD}	=	.212

SMOOTHED OVERLAPPING PERCENTAGE FREQUENCY
POLYGONS OF INDIAN STUDENTS AND THAI STUDENTS
FOR FIGURAL FLEXIBILITY (FX)

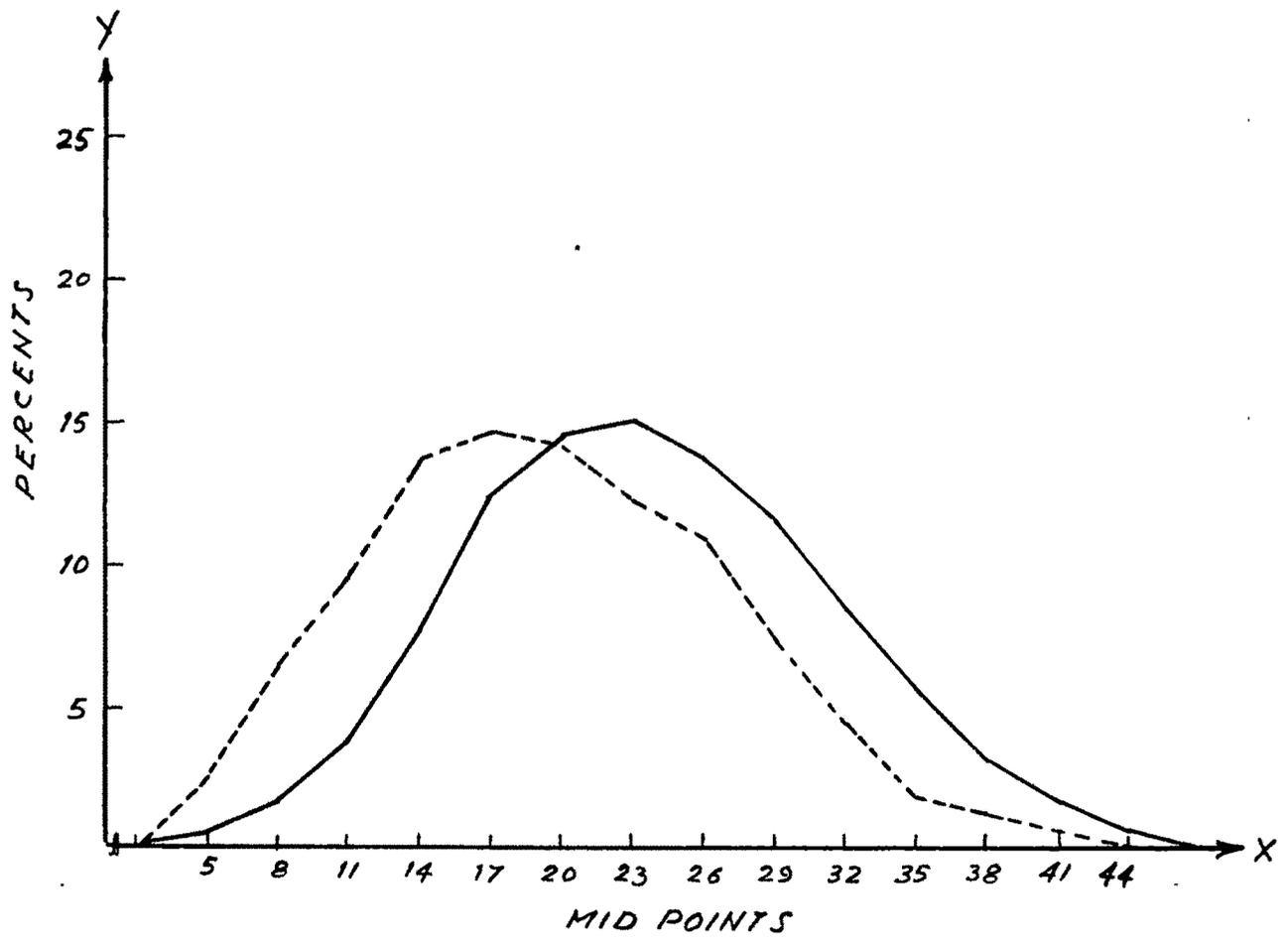


----- INDIAN
————— THAI

TABLE 3.12 PERCENTAGE FREQUENCY DISTRIBUTIONS OF
300 INDIAN STUDENTS AND 300 THAI STUDENTS
FOR FIGURAL ORIGINALITY (FO)

CLASS INTERVALS	INDIAN			THAI		
	f	f%	Smoothed f%	f	f%	Smoothed f%
43 - 45	0	0.000	0.111	0	0.000	0.333
40 - 42	1	0.333	0.667	3	1.000	1.556
37 - 39	5	1.667	1.444	11	3.667	3.111
34 - 36	7	2.333	1.889	14	4.667	5.334
31 - 33	5	1.667	4.444	23	7.667	8.556
28 - 30	28	9.333	7.222	40	13.333	11.556
25 - 27	32	10.667	10.556	41	13.667	13.889
22 - 24	35	11.667	12.111	44	14.667	15.000
19 - 21	42	14.000	14.000	50	16.667	14.556
16 - 18	49	16.333	14.555	37	12.333	12.222
13 - 15	40	13.333	13.666	23	7.667	7.778
10 - 12	34	11.333	9.666	10	3.333	3.889
7 - 9	13	4.333	6.222	2	0.667	1.556
4 - 6	9	3.000	2.444	2	0.667	0.445
1 - 3	0	0.000	1.000	0	0.000	0.222
i = 3	N=300	100.000		N=300	100.000	
	M	= 19.470		M	= 23.640	
	SD	= 7.425		SD	= 7.117	
	SE _M	= .429		SE _M	= .411	
	SE _{SD}	= .305		SE _{SD}	= .292	

SMOOTHED OVERLAPPING PERCENTAGE FREQUENCY
POLYGONS OF INDIAN STUDENTS AND THAI STUDENTS
FOR FIGURAL ORIGINALITY (FO)



----- INDIAN
————— THAI

TABLE 3.13 PERCENTAGE FREQUENCY DISTRIBUTIONS OF
300 INDIAN STUDENTS AND 300 THAI STUDENTS
FOR FIGURAL ELABORATION (FE)

CLASS INTERVALS	INDIAN			THAI		
	f	f%	Smoothed f%	f	f%	Smoothed f%
95 - 101	0	0.000	0.111	0	0.000	0.222
88 - 94	1	0.333	1.222	2	0.667	2.445
81 - 87	10	3.333	3.444	20	6.667	6.445
74 - 80	20	6.667	5.889	36	12.000	9.222
67 - 73	23	7.667	7.889	27	9.000	10.111
60 - 66	28	9.333	9.000	28	9.333	10.000
53 - 59	30	10.000	12.333	35	11.667	13.889
46 - 52	53	17.667	10.778	62	20.667	16.000
39 - 45	50	16.667	16.445	47	15.667	15.667
32 - 38	45	15.000	13.333	32	10.667	9.889
25 - 31	25	8.333	8.889	10	3.333	4.778
18 - 24	10	3.333	4.333	1	0.333	1.222
11 - 17	4	1.333	1.666	0	0.000	0.111
4 - 10	1	0.333	0.555	0	0.000	0.000
- 3 - 3	0	0.000	0.111	0	0.000	0.000
$i = 7$	N=300	99.999		N=300	100.001	

M = 49.233

SD = 16.691

SE_M = .964

SE_{SD} = .684

M = 55.603

SD = 15.922

SE_M = .919

SE_{SD} = .623

SMOOTHED OVERLAPPING PERCENTAGE FREQUENCY
POLYGONS OF INDIAN STUDENTS AND THAI STUDENTS
FOR FIGURAL ELABORATION (FE)

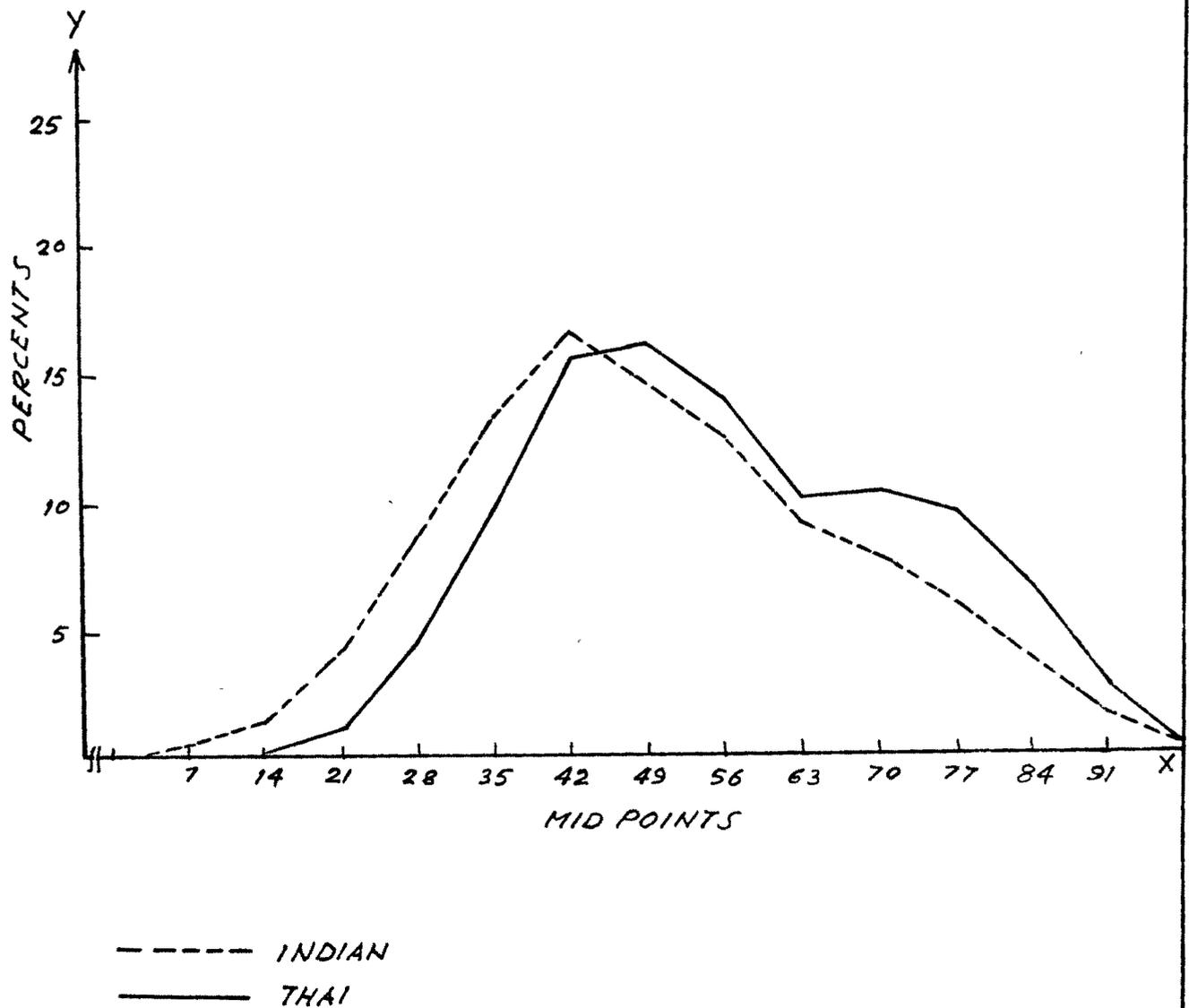


TABLE 3.14 PERCENTAGE FREQUENCY DISTRIBUTIONS OF
300 INDIAN STUDENTS AND 300 THAI STUDENTS
FOR FIGURAL CREATIVITY (FC)

CLASS INTERVALS	INDIAN			THAI		
	f	f%	Smoothed f%	f	f%	Smoothed f%
168 - 176	0	0.000	0.556	0	0.000	1.111
159 - 167	5	1.667	1.889	10	3.333	3.444
150 - 158	12	4.000	5.222	21	7.000	6.222
141 - 149	30	10.000	5.778	25	8.333	8.555
132 - 140	10	3.333	8.333	31	10.333	8.778
123 - 131	35	11.667	9.111	23	7.667	11.222
114 - 122	37	12.333	11.444	47	15.667	12.111
105 - 113	31	10.333	10.333	39	13.000	13.556
96 - 104	25	8.333	9.555	36	12.000	12.222
87 - 95	30	10.000	9.111	35	11.667	9.889
78 - 86	27	9.000	8.000	18	6.000	6.667
69 - 77	15	5.000	5.778	7	2.333	3.222
60 - 68	10	3.333	4.333	4	1.333	1.444
51 - 59	14	4.667	3.778	2	0.667	0.889
42 - 50	10	3.333	3.444	2	0.667	0.445
33 - 41	7	2.333	4.111	0	0.000	0.222
24 - 32	2	0.667	1.000	0	0.000	0.000
15 - 23	0	0.000	0.222	0	0.000	0.000
i = 9	N=300	99.999		N=300	100.000	

M = 104.290

SD = 31.293

SE_M = 1.807

SE_{SD} = 1.283

M = 115.510

SD = 24.735

SE_M = 1.428

SE_{SD} = 1.014

SMOOTHED OVERLAPPING PERCENTAGE FREQUENCY
POLYGONS OF INDIAN STUDENTS AND THAI STUDENTS
FOR FIGURAL CREATIVITY (FC)

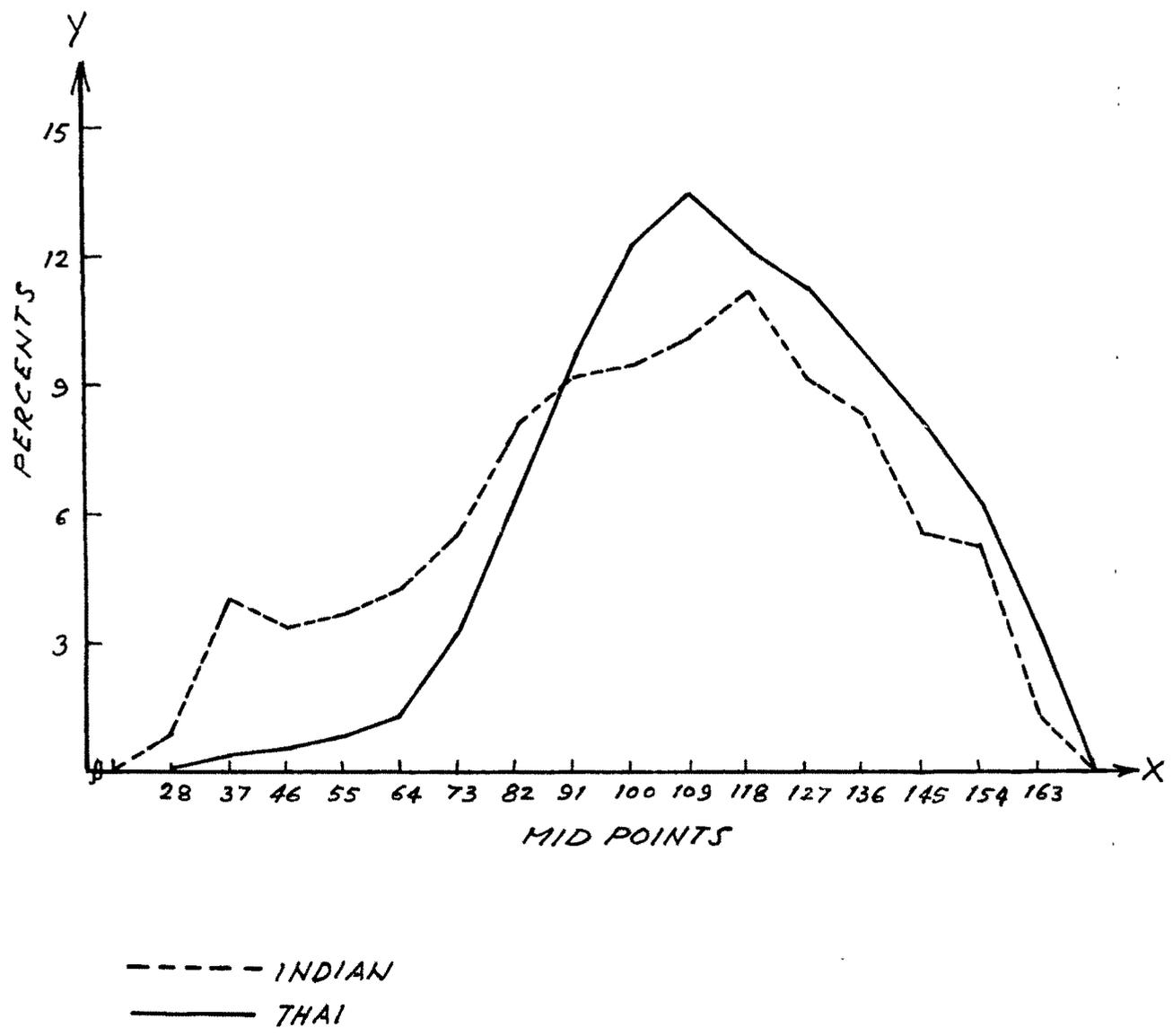


TABLE 3.15 PERCENTAGE FREQUENCY DISTRIBUTIONS OF
300 INDIAN STUDENTS AND 300 THAI STUDENTS
FOR VERBAL FLUENCY (VF)

CLASS INTERVALS	INDIAN			THAI		
	f	f%	Smoothed f%	f	f%	Smoothed f%
77 - 81	0	0.000	0.000	0	0.000	1.000
72 - 76	0	0.000	0.889	9	3.000	2.778
67 - 71	8	2.667	2.556	16	5.333	5.667
62 - 66	15	5.000	4.556	26	8.667	8.667
57 - 61	18	6.000	6.778	36	12.000	12.556
52 - 56	28	9.333	8.444	51	17.000	13.556
47 - 51	30	10.000	10.333	35	11.667	13.778
42 - 46	35	11.667	21.333	38	12.667	11.778
37 - 41	46	15.333	13.444	33	11.00	11.445
32 - 36	40	13.333	12.333	32	10.667	8.556
27 - 31	25	8.333	10.000	12	4.000	5.889
22 - 26	25	8.333	7.778	9	3.000	2.667
17 - 21	20	6.667	6.111	3	1.000	1.333
12 - 16	10	3.333	3.333	0	0.000	0.333
7 - 11	0	0.000	1.111	0	0.000	0.000
<u>i = 5</u>	<u>N=300</u>	<u>99.999</u>		<u>N=300</u>	<u>100.001</u>	

M = 40.317

SD = 13.760

SE_M = .794

SE_{SD} = .564

M = 48.983

SD = 8.544

SE_M = .493

SE_{SD} = .350

SMOOTHED OVERLAPPING PERCENTAGE FREQUENCY
POLYGONS OF INDIAN STUDENTS AND THAI STUDENTS
FOR VERBAL FLUENCY (VF)

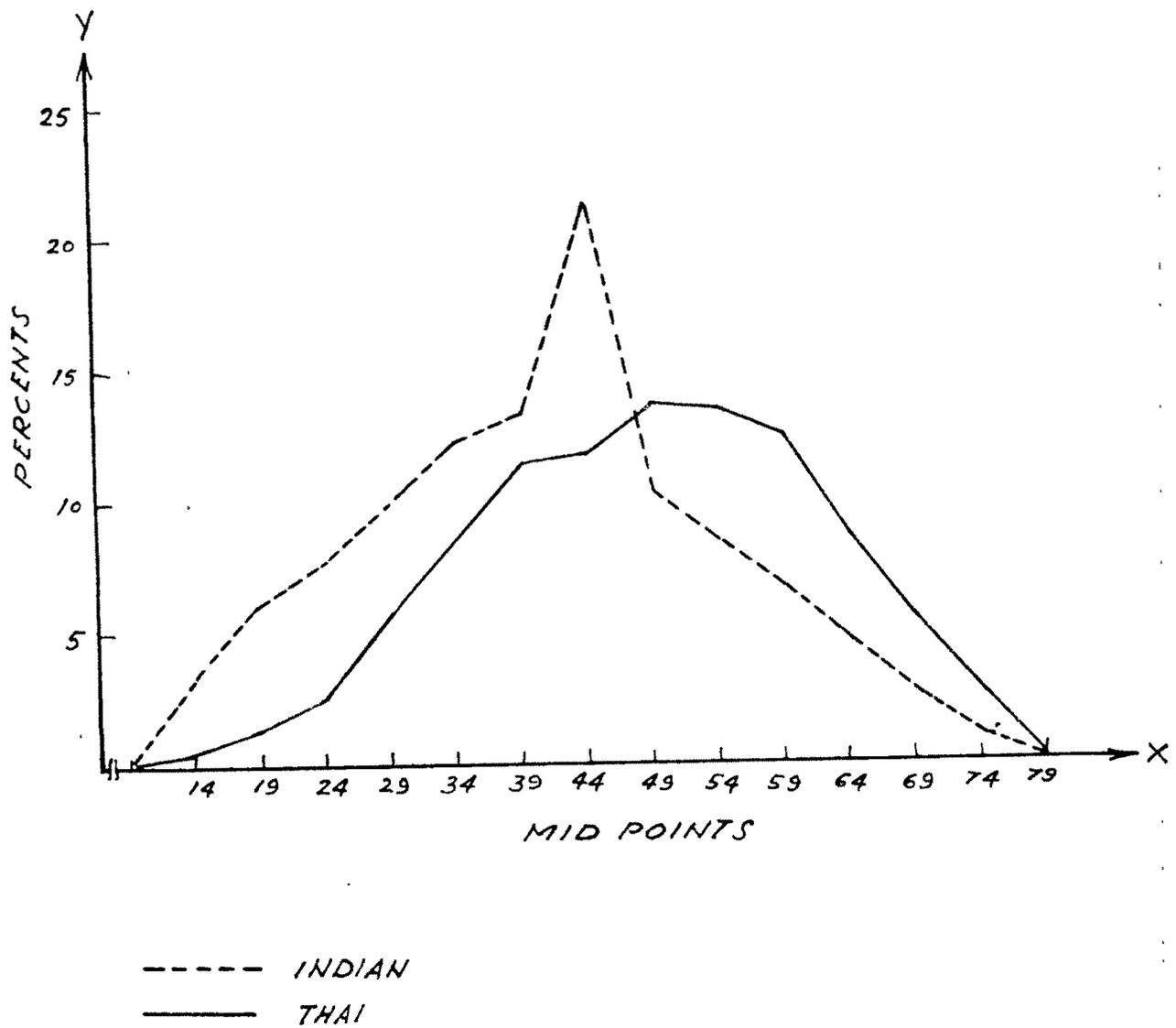
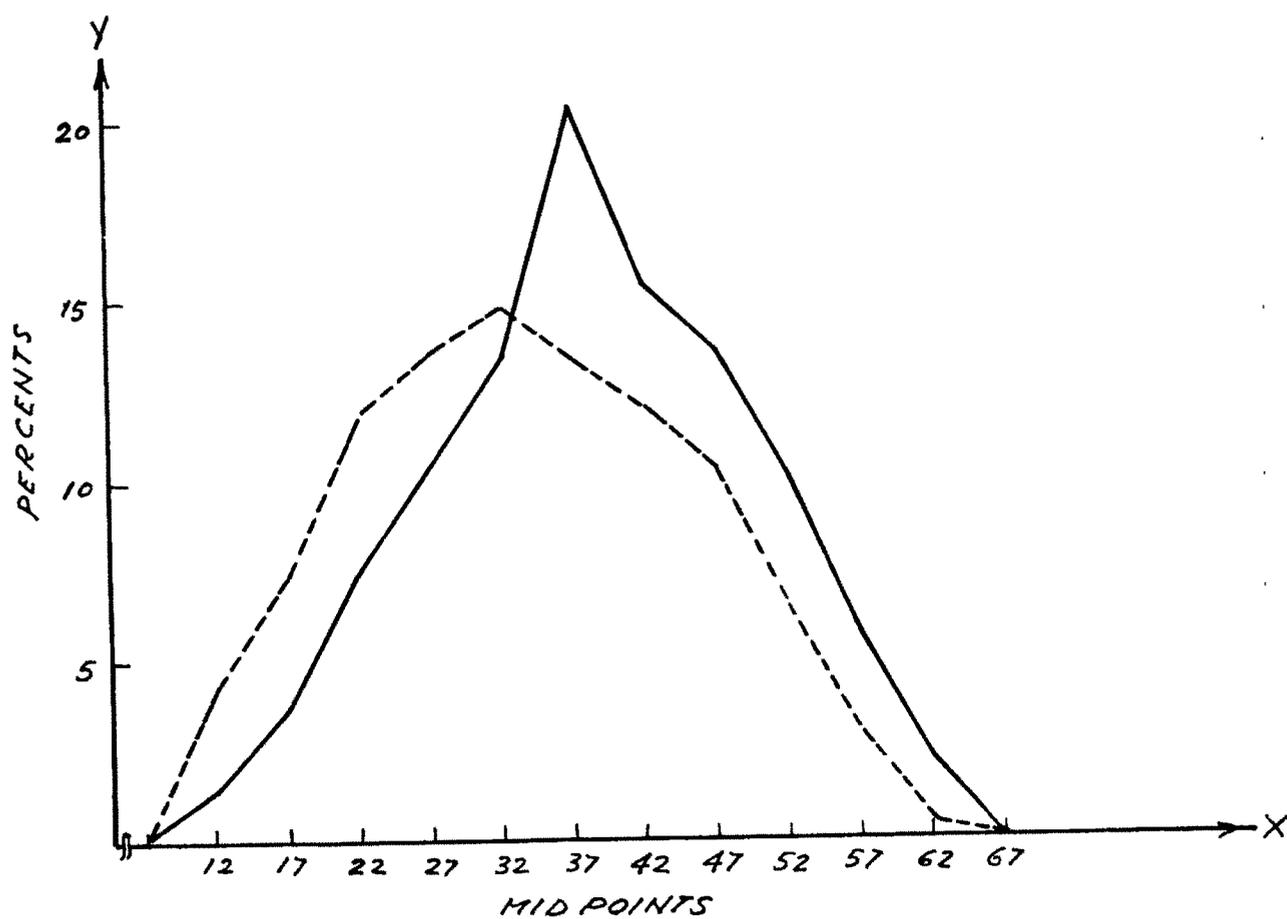


TABLE 3.16 PERCENTAGE FREQUENCY DISTRIBUTIONS OF
300 INDIAN STUDENTS AND 300 THAI STUDENTS
FOR VERBAL FLEXIBILITY (VX)

CLASS INTERVALS	INDIAN				THAI			
	f	f%	Smoothed f%	f	f%	Smoothed f%	f	
65 - 69	0	0.000	0.000	0	0.000	0.333		
60 - 64	0	0.000	0.556	3	1.000	2.222		
55 - 59	5	1.667	3.000	17	5.667	5.889		
50 - 54	22	7.333	6.667	33	11.000	10.222		
45 - 49	33	11.000	10.333	42	14.000	13.889		
40 - 44	38	12.667	12.111	50	16.667	15.556		
35 - 39	38	12.667	13.556	48	16.000	20.374		
30 - 34	46	15.333	14.889	37	12.333	13.333		
25 - 29	50	16.667	13.778	35	11.667	10.333		
20 - 24	28	9.333	12.000	21	7.000	7.445		
15 - 19	30	10.000	7.555	11	3.667	3.889		
10 - 14	10	3.333	4.444	3	1.000	1.556		
5 - 9	0	0.000	1.111	0	0.000	0.333		
<hr/> i = 5	<hr/> N=300	<hr/> 100.000	<hr/>	<hr/> N=300	<hr/> 100.001	<hr/>	<hr/>	
	M = 33.500			M = 36.800				
	SD = 11.288			SD = 11.100				
	SE _M = .652			SE _M = .641				
	SE _{SD} = .463			SE _{SD} = .455				

SMOOTHED OVERLAPPING PERCENTAGE FREQUENCY
POLYGONS OF INDIAN STUDENTS AND THAI STUDENTS
FOR VERBAL FLEXIBILITY (VX)



----- INDIAN
————— THAI

TABLE 3.17 PERCENTAGE FREQUENCY DISTRIBUTIONS OF
300 INDIAN STUDENTS AND 300 THAI STUDENTS
FOR VERBAL ORIGINALITY (VO)

CLASS INTERVALS	INDIAN			THAI		
	f	f%	Smoothed f%	f	f%	Smoothed f%
65 - 69	0	0.000	0.222	0	0.000	0.778
60 - 64	2	0.667	0.889	7	2.333	3.333
55 - 59	6	2.000	3.778	23	7.667	7.667
50 - 54	26	8.667	7.222	39	13.000	12.222
45 - 49	33	11.000	10.556	48	16.000	14.889
40 - 44	36	12.000	12.111	47	15.667	15.445
35 - 39	40	13.333	15.111	44	14.667	14.334
30 - 34	60	20.000	15.222	38	12.667	12.334
25 - 29	37	12.333	14.111	29	9.667	9.334
20 - 24	30	10.000	9.667	17	5.667	5.778
15 - 19	20	6.667	6.667	6	2.000	2.778
10 - 14	10	3.333	3.333	2	0.667	0.289
5 - 9	0	0.000	1.111	0	0.000	0.222
<hr/> i = 5	<hr/> N=300	<hr/> 100.00		<hr/> N=300	<hr/> 100.002	

$$M = 34.467$$

$$SD = 11.427$$

$$SE_M = .660$$

$$SE_{SD} = .469$$

$$M = 40.467$$

$$SD = 10.946$$

$$SE_M = .632$$

$$SE_{SD} = .449$$

SMOOTHED OVERLAPPING PERCENTAGE FREQUENCY
POLYGONS OF INDIAN STUDENTS AND THAI STUDENTS
FOR VERBAL ORIGINALITY(VO)

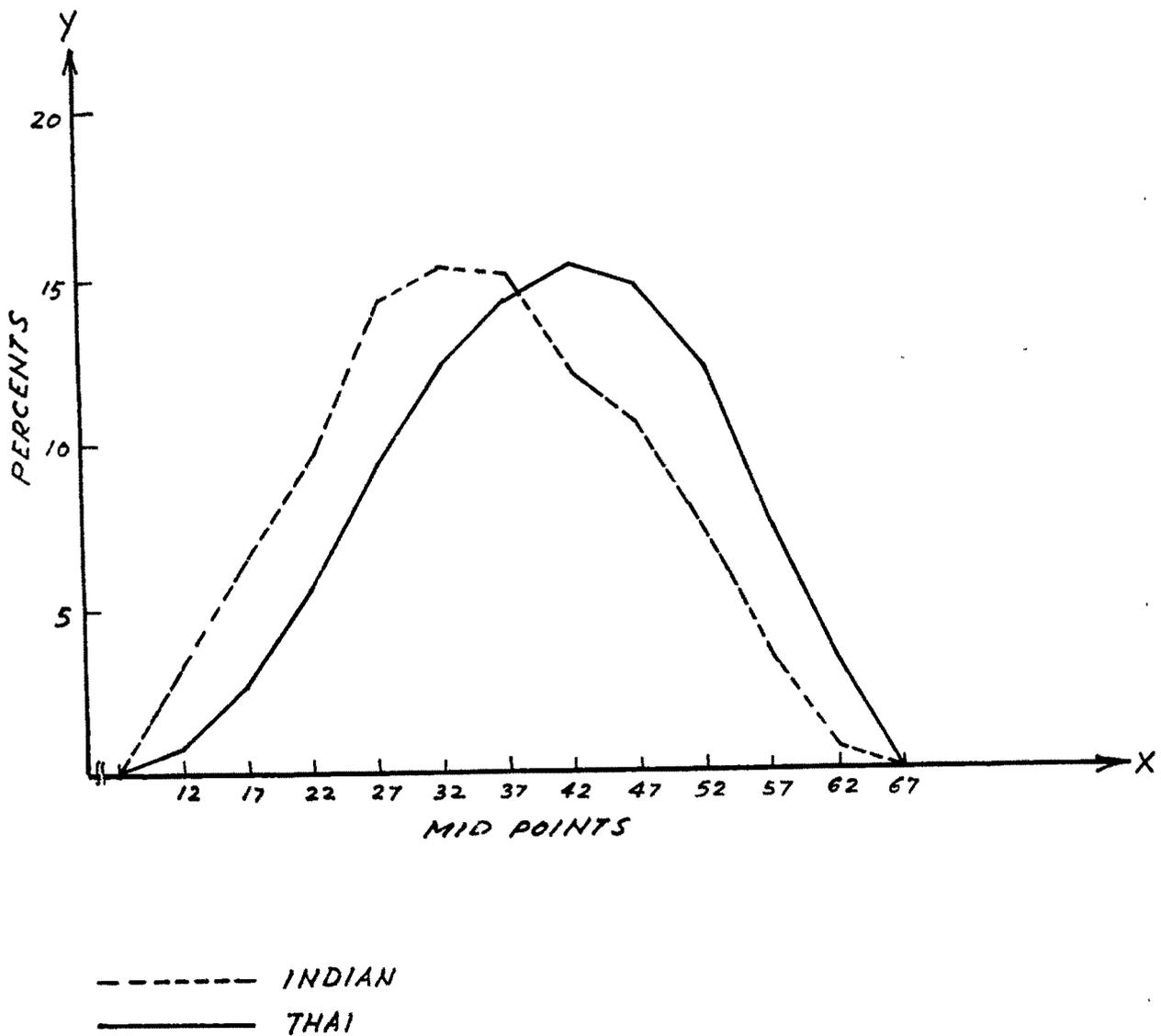


TABLE 3.18 PERCENTAGE FREQUENCY DISTRIBUTIONS OF
 300 INDIAN STUDENTS AND 300 THAI STUDENTS
 FOR VERBAL CREATIVITY (VC)

CLASS INTERVALS	INDIAN				THAI			
	f	f%	Smoothed f%	f	f%	Smoothed f%	f	
212 - 221	0	0.000	0.000	0	0.000	0.222		
202 - 211	0	0.000	0.000	2	0.667	1.000		
192 - 201	0	0.000	0.667	7	2.333	1.444		
182 - 191	6	2.000	1.000	4	1.333	2.444		
172 - 181	3	1.000	1.778	11	3.667	4.889		
162 - 171	7	2.333	3.222	29	9.667	7.889		
152 - 161	19	6.333	6.333	31	10.333	10.000		
142 - 151	31	10.333	8.000	30	10.000	10.444		
132 - 141	22	7.333	10.000	33	11.000	10.222		
122 - 131	37	12.333	10.000	29	9.667	10.333		
112 - 121	31	10.333	9.666	31	10.333	9.000		
102 - 111	19	6.333	8.889	21	7.000	8.222		
92 - 101	30	10.000	9.889	22	7.333	7.000		
82 - 91	39	13.000	8.778	20	6.667	6.111		
72 - 81	10	3.333	7.667	13	4.333	4.778		
62 - 71	20	6.667	5.000	10	3.333	3.111		
52 - 61	15	5.000	4.556	5	1.667	1.889		
42 - 51	6	2.000	2.889	2	0.667	0.778		
32 - 41	5	1.667	1.222	0	0.000	0.222		
22 - 31	0	0.000	0.556	0	0.000	0.000		
i = 10	N=300	99.998		N=300	100.000			

M = 111.067

SD = 34.159

SE_M = 1.991

SE_{SD} = 1.413

M = 128.200

SD = 34.002

SE_M = 1.963

SE_{SD} = 1.394

SMOOTHED OVERLAPPING PERCENTAGE FREQUENCY
POLYGONS OF INDIAN STUDENTS AND THAI STUDENTS
FOR VERBAL CREATIVITY (VC)

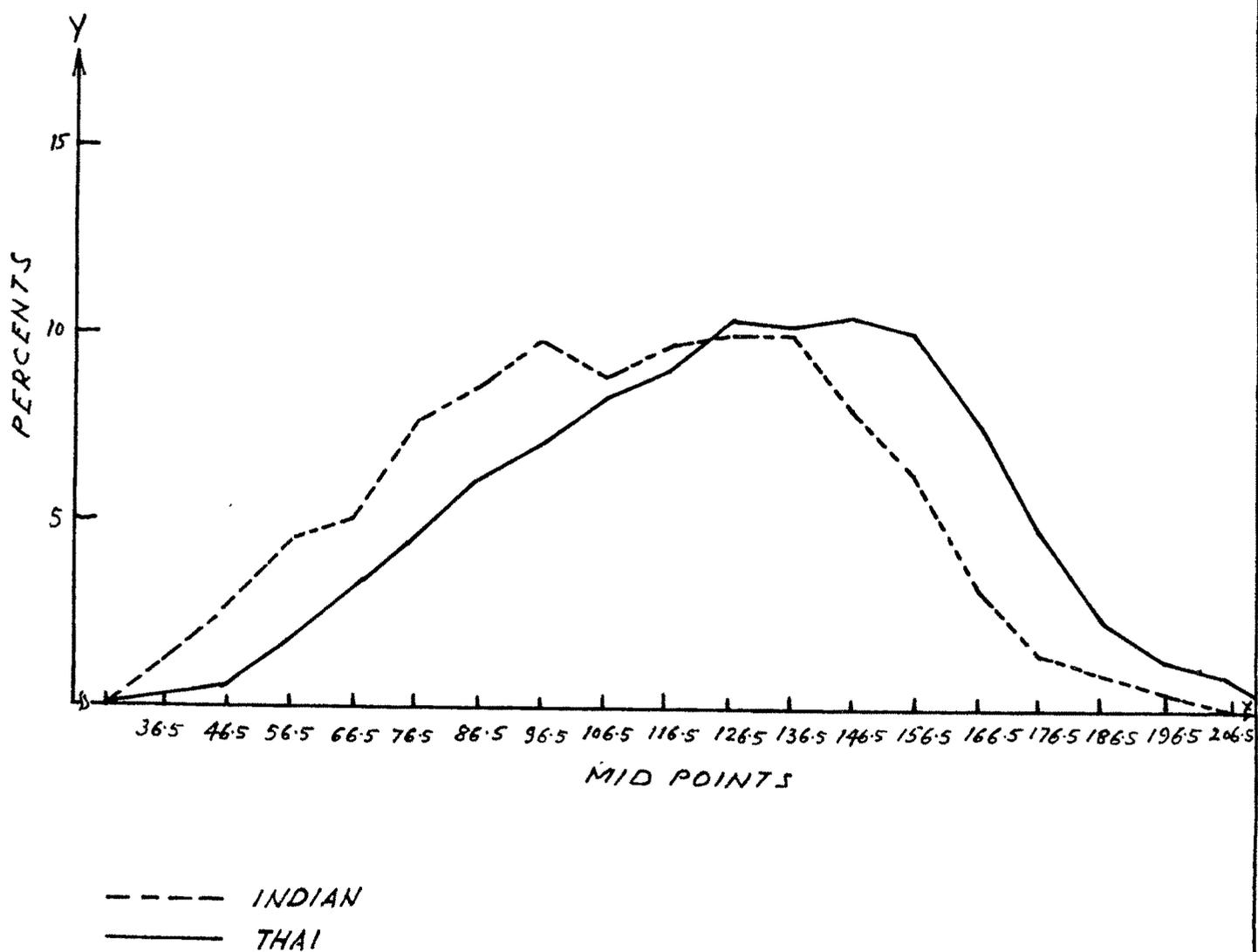


TABLE 3.19 FREQUENCY DISTRIBUTIONS OF SOCIO-ECONOMIC STATUS SCORES FOR 300 INDIAN STUDENTS (BARODA) AND 300 THAI STUDENTS (BANGKOK)

Class Intervals	INDIAN	THAI
	Frequency (f)	Frequency (f)
27 - 28	3	7
25 - 26	1	6
23 - 24	6	20
21 - 22	11	20
19 - 20	14	26
17 - 18	53	41
15 - 16	14	41
13 - 14	58	55
11 - 12	78	47
9 - 10	19	16
7 - 8	22	12
5 - 6	21	9
$i = 2$	$N = 300$	$N = 300$

M = 13.547

SD = 4.716

$SE_M = .272$

$SE_{SD} = .193$

M = 15.600

SD = 4.915

$SE_M = .284$

$SE_{SD} = .202$

TABLE 3.20 FREQUENCY DISTRIBUTIONS OF SCHOOL CLIMATE
SCORES FOR 100 INDIAN TEACHERS AND 100
THAI TEACHERS

Class Intervals	INDIAN	THAI
	Frequency (f)	Frequency (f)
290 - 299	3	2
280 - 289	5	7
270 - 279	8	7
260 - 269	10	15
250 - 259	20	18
240 - 249	25	29
230 - 239	13	10
220 - 229	8	4
210 - 219	2	3
200 - 209	4	3
190 - 199	2	2
	N = 100	N = 100
	M = 249.300	M = 250.300
	SD = 20.900	SD = 20.494
	SE _M = 2.090	SE _M = 2.049
	SE _{SD} = 1.484	SE _{SD} = 1.455

TABLE 3.21 FREQUENCY DISTRIBUTIONS OF TEACHER TALK (TT)
IN 36 TEACHING SITUATIONS OF INDIAN TEACHERS
AND THAI TEACHERS (N=72)

Class Intervals	INDIAN		THAI	
	Frequency (f)		Frequency (f)	
81 - 85	2		0	
76 - 80	2		2	
71 - 75	3		2	
66 - 70	8		6	
61 - 65	5		3	
56 - 60	6		5	
51 - 55	1		7	
46 - 50	3		1	
41 - 45	0		2	
36 - 40	1		4	
31 - 35	2		2	
26 - 30	3		2	
	N = 36		N = 36	

M	= 59.250	M	=54.665
SD	= 15.166	SD	=14.000
SE _M	= 2.528	SE _M	= 2.333
SE _{SD}	= 1.795	SE _{SD}	= 1.656

TABLE 3.22 FREQUENCY DISTRIBUTIONS OF PUPIL TALK (PT)
IN 36 TEACHING SITUATIONS OF INDIAN TEACHERS
AND THAI TEACHERS (N = 72)

Class Intervals	INDIAN		THAI	
	Frequency (f)		Frequency (f)	
50 - 54	1		2	
45 - 49	2		3	
40 - 44	0		1	
35 - 39	2		3	
30 - 34	2		1	
25 - 29	3		4	
20 - 24	6		5	
15 - 19	4		6	
10 - 14	12		10	
5 - 9	2		1	
0 - 4	2		0	
	N = 36		N = 36	

M	= 20.194	M	= 20.361
SD	= 12.145	SD	= 13.784
SE _M	= 2.024	SE _M	= 2.297
SE _{SD}	= 1.437	SE _{SD}	= 1.631

TABLE 3.23 FREQUENCY DISTRIBUTIONS OF indirect/
direct ratio IN 36 TEACHING SITUATIONS
OF INDIAN TEACHERS AND THAI TEACHERS
(N = 72)

Class Intervals	INDIAN	THAI
	Frequency (f)	Frequency (f)
.71 - .75	3	4
.66 - .70	5	7
.61 - .65	10	8
.56 - .60	6	5
.51 - .55	5	4
.46 - .50	2	3
.41 - .45	3	2
.36 - .40	1	1
.31 - .35	0	0
.26 - .30	0	1
.21 - .25	1	1
	N = 36	N = 36

M = .580

SD = 10.606

SE_M = 1.768

SE_{SD} = 1.255

M = .581

SD = 11.990

SE_M = 1.998

SE_{SD} = 1.419

TABLE 3.24 FREQUENCY DISTRIBUTIONS OF INDIRECT/
DIRECT RATIO IN 36 TEACHING SITUATIONS
OF INDIAN TEACHERS AND THAI TEACHERS
(N = 72)

Class Intervals	INDIAN	THAI
	Frequency (f)	Frequency (f)
.61 - .65	1	0
.56 - .60	0	0
.51 - .55	2	3
.46 - .50	3	2
.41 - .45	3	3
.36 - .40	1	1
.31 - .35	4	4
.26 - .30	2	2
.21 - .25	7	3
.16 - .20	5	9
.11 - .15	3	4
.06 - .10	5	5
	N = 36	N = 36

M	=	.253	M	=	.260
SD	=	13.583	SD	=	14.027
SE _M	=	2.264	SE _M	=	2.338
SE _{SD}	=	1.607	SE _{SD}	=	1.660

TABLE 3.25 FREQUENCY DISTRIBUTIONS OF TEACHER RESPONSE RATION (TRR) IN 36 TEACHING SITUATIONS OF INDIAN TEACHERS AND THAI TEACHERS (N = 72)

Class Intervals	INDIAN		THAI	
	Frequency (f)		Frequency (f)	
80 - 89	4		5	
70 - 79	8		4	
60 - 69	13		9	
50 - 59	0		8	
40 - 49	5		4	
30 - 39	2		3	
20 - 29	2		2	
10 - 19	1		1	
0 - 9	1		0	
	N = 36		N = 36	

M = 59.222

M = 57.833

SD = 20.199

SD = 20.099

$SE_M = 3.367$

$SE_M = 3.350$

$SE_{SD} = 2.391$

$SE_{SD} = 2.379$

TABLE 3.26 FREQUENCY DISTRIBUTIONS OF TEACHER QUESTION RATIO (TQR) IN 36 TEACHING SITUATIONS OF INDIAN TEACHERS AND THAI TEACHERS (N = 72)

Class Intervals	INDIAN		THAI	
	Frequency (f)		Frequency (f)	
45 - 49	2		1	
40 - 44	0		0	
35 - 39	2		1	
30 - 34	4		5	
25 - 29	0		3	
20 - 24	2		2	
15 - 19	2		4	
10 - 14	10		13	
5 - 9	8		4	
0 - 4	6		3	
	N = 36		N = 36	

M = 15.650

M = 17.450

SD = 11.758

SD = 10.771

SE_M = 1.960

SE_M = 1.795

SE_{SD} = 1.392

SE_{SD} = 1.274

TABLE 3.27 FREQUENCY DISTRIBUTIONS OF INSTANTANEOUS
TEACHER RESPONSE RATIO (TRR 89) IN 36
TEACHING SITUATIONS OF INDIAN TEACHERS
AND THAI TEACHERS (N = 72)

Class Intervals	INDIAN		THAI	
	Frequency (f)		Frequency (f)	
80 - 89	3		4	
70 - 79	7		6	
60 - 69	14		16	
50 - 59	3		4	
40 - 49	5		3	
30 - 39	2		1	
20 - 29	2		2	
	N = 36		N = 36	

M	= 60.611	M	= 63.056
SD	= 15.524	SD	= 13.342
SE _M	= 2.587	SE _M	= 2.224
SE _{SD}	= 1.837	SE _{SD}	= 1.579

TABLE 3.28 FREQUENCY DISTRIBUTIONS OF INSTANTANEOUS
TEACHER QUESTION RATIO (TQR 89) IN 36
TEACHING SITUATIONS OF INDIAN TEACHERS
AND THAI TEACHERS (N = 72)

Class Intervals	INDIAN		THAI	
	Frequency (f)		Frequency (f)	
60 - 64	7		6	
55 - 59	3		5	
50 - 54	0		2	
45 - 49	5		4	
40 - 44	8		10	
35 - 39	4		4	
30 - 34	4		1	
25 - 29	3		2	
20 - 24	2		2	
	N = 36		N = 36	

M	=	43.250	M	=	45.750
SD	=	6.245	SD	=	11.511
SE_M	=	1.041	SE_M	=	1.919
SE_{SD}	=	.739	SE_{SD}	=	1.362

TABLE 3.29 FREQUENCY DISTRIBUTIONS OF PUPIL INITIATION RATIO (PIR) IN 36 TEACHING SITUATIONS OF INDIAN TEACHERS AND THAI TEACHERS (N = 72)

Class Intervals	INDIAN		THAI	
	Frequency (f)		Frequency (f)	
30 - 34	2		1	
25 - 29	3		2	
20 - 24	2		2	
15 - 19	4		7	
10 - 14	4		5	
5 - 9	8		5	
0 - 4	13		14	
	N = 36		N = 36	

M	= 10.750	M	= 10.333
SD	= 9.461	SD	= 8.585
SE _M	= 1.577	SE _M	= 1.431
SE _{SD}	= 1.120	SE _{SD}	= 1.016

TABLE 3.30 FREQUENCY DISTRIBUTIONS OF CONTENT CROSS RATIO (CCR) IN 36 TEACHING SITUATIONS OF INDIAN TEACHERS AND THAI TEACHERS (N = 72)

Class Intervals	INDIAN		THAI	
	Frequency (f)		Frequency (f)	
80 - 89	6		3	
70 - 79	0		4	
60 - 69	16		15	
50 - 59	4		5	
40 - 49	5		7	
30 - 39	3		2	
20 - 29	2		0	
	N = 36		N = 36	
	M = 59.222		M = 60.333	
	SD = 16.401		SD = 13.000	
	SE _M = 2.733		SE _M = 2.167	
	SE _{SD} = 1.940		SE _{SD} = 1.539	

TABLE 3.31 FREQUENCY DISTRIBUTIONS OF STEADY STATE RATIO (SSR) IN 36 TEACHING SITUATIONS OF INDIAN TEACHERS AND THAI TEACHERS (N = 72)

Class Intervals	INDIAN		THAI	
	Frequency (f)		Frequency (f)	
81 - 85	4		3	
76 - 80	7		6	
71 - 75	5		7	
66 - 70	10		11	
61 - 65	4		5	
56 - 60	3		2	
51 - 55	3		2	
	N = 36		N = 36	

M	= 69.667	M	= 69.806
SD	= 8.660	SD	= 9.135
SE _M	= 1.443	SE _M	= 1.523
SE _{SD}	= 1.025	SE _{SD}	= 1.081

TABLE 3.32 FREQUENCY DISTRIBUTIONS OF PUPIL STEADY STATE RATIO (PSSR) IN 36 TEACHING SITUATIONS OF INDIAN TEACHERS AND THAI TEACHERS (N = 72)

Class Intervals	INDIAN		THAI	
	Frequency (f)		Frequency (f)	
80 - 89	3		2	
70 - 79	4		5	
60 - 69	7		7	
50 - 59	12		14	
40 - 49	3		2	
30 - 39	5		3	
20 - 29	0		2	
10 - 19	2		1	
	N = 36		N = 36	

M	= 55.351	M	= 55.889
SD	= 11.832	SD	= 15.133
SE _M	= 1.972	SE _M	= 2.522
SE _{SD}	= 1.400	SE _{SD}	= 1.791

3.2.0 Nature of Variables

In Table 3.1, percentage frequency distributions of Seeing Problems (SP) scores of 300 Indian students and 300 Thai students are shown. The M and SD of the scores of Indian students were 17.583 and 6.946 respectively. More clustering is seen around the class interval 12-16. While, in the case of Thai students, the M and SD were 21.050 and 7.133 respectively. The distribution shows clustering around class interval 17-21.

Alongwith percentage frequency distributions, the smoothed overlapping percentage frequency polygons are also given. From Figure 3.1, it is seen that the distributions are continuous and the curves are unimodels.

In Table 3.2, percentage frequency distributions of Unusual Uses Fluency (UF) scores of 300 Indian students and 300 Thai students are shown. The M and SD of the scores of Indian students were 15.680 and 5.229 respectively. The clustering is around the class interval of 11-16. As regards Thai students, the M and SD of the distribution was 18.210 and 5.795 respectively. The clustering is around the class interval 16-19.

In Figure 3.2, smoothed overlapping percentage frequency polygons of Indian students and Thai students

for Unusual Uses Fluency (UF) are given. It is seen that the distribution is continuous and unimodel.

In Table 3.3, percentage frequency distributions of Unusual Uses Flexibility (UX) scores of 300 Indian students and 300 Thai students are shown. The M and SD of the scores of Indian students were 10.750 and 4.439 respectively. The distribution shows clustering around class interval 8-13. Regarding Thai students, the M and SD of the distribution was 12.490 and 3.425 respectively. The maximum clustering of scores were around 11-16.

In Figure 3.3, smoothed overlapping percentage frequency polygons of Indian students and Thai students for Unusual Uses Flexibility (UX) are drawn. It revealed that the distribution is continuous and unimodel.

In Table 3.4, percentage frequency distributions of Unusual Uses Originality (UO) scores of ³⁰⁰ Indian students and 300 Thai students are presented. The M and SD of the scores of Indian students were 23.117 and 10.757 respectively, with maximum clustering around the class interval 13-27. In regard to Thai students, the M and SD of the scores were 30.183 and 11.693 respectively. The distribution shows clustering around class interval 18-32.

In Figure 3.4, smoothed overlapping percentage

frequency polygons are shown. The distribution is continuous and unimodel.

In Table 3.5, percentage frequency distributions of Unusual Uses Creativity (UC) scores of 300 Indian students and 300 Thai students are shown. The M and SD of the scores of Indian students were 51.337 and 15.977 respectively. The clustering is around the class interval 38-58. In the case of Thai students, the M and SD of the scores were 60.343 and 18.228 with maximum clustering around the class interval 45-65.

In Figure 3.5, smoothed overlapping percentage frequency polygons are drawn. From this figure, it is seen that the distribution is continuous and the curve is unimodel.

In Table 3.6, percentage frequency distributions of Consequences Fluency (CF) scores of 300 Indian - students and 300 Thai students are shown. The M and SD of the scores of Indian students were 17.370 and 6.671 respectively. More clustering is seen around the class interval 12-20. It also revealed that the M and SD of the distribution for Thai students were 19.240 and 7.066 with maximum clustering around 15-23.

In Figure 3.6, it indicated that the distribution of the smoothed overlapping percentage frequency

polygons is continuous and unimodel.

In Table 3.7, percentage frequency distributions of Consequences Originality (CO) scores of 300 Indian students and 300 Thai students are given. The M and SD of the distribution of Indian students were 10.140 and 4.420 respectively. The distribution shows clustering around the class interval 4-12. With regard to Thai students, the M and SD were 11.040 and 4.385 with the maximum clustering around the class interval 7-15.

With reference to Figure 3.7, it revealed that the distribution of the smoothed overlapping percentage frequency polygons is continuous and unimodel.

In Table 3.8, percentage frequency distributions of Consequences Creativity (CC) scores of 300 Indian students and 300 Thai students are shown. The M and SD of the distribution of Indian students were 27.583 and 9.836 respectively. More clustering is seen around the class interval 20-34. While, in the case of Thai students the M and SD were 30.150 and 10.962 with maximum clustering around 20-34 as well.

In Figure 3.8, it has been seen that the distribution of Indian students is continuous but bi-model. Meanwhile, the distribution of Thai students is continuous and unimodel.

In Table 3.9, percentage frequency distribution of Creativity Total (CY) scores of 300 Indian students and 300 Thai students are given. The M and SD of the scores of Indian students were 98.630 and 27.190. The clustering is around the class interval of 73-99. Regarding Thai students, the M and SD of the scores were 111.470 and 29.276 respectively. This distribution shows clustering around the class interval 91-117.

In Figure 3.9, smoothed overlapping percentage frequency polygons are drawn. The distribution is continuous and unimodal.

In Table 3.10, percentage frequency distribution of Figural Fluency (FF) scores of 300 Indian students and 300 Thai students are shown. The M and SD of Indian students were 17.140 and 6.702 respectively. The clustering is around 14-22. With regard to Thai students, the M and SD of distribution were 18.500 and 6.362 with the maximum clustering around 17-25.

Alongwith the percentage frequency for the raw scores, smoothed overlapping percentage frequency polygons are worked out (Vide Figure 3.10). The distribution is continuous and unimodal.

In Table 3.11, percentage frequency distribution of Figural Flexibility (FX) scores of 300 Indian students and 300 Thai students are given. The M and

SD of Indian students were 13.270 and 5.332 respectively. The clustering is around 9-17. Table 3.11 also indicated that the M and SD of Thai students with regard to Figural Flexibility (FX) were 16.031 and 5.158 with the maximum clustering around 12-20. Referring to Figure 3.11 4.11, smoothed overlapping percentage frequency polygons of Indian students and Thai students for Figural Flexibility (FX), the distribution is continuous and unimodel.

In Table 3.12, the percentage frequency distributions of Figural Originality (FO) scores of Indian students and Thai students, revealed that the variable was continuous. The M and SD of Indian students were 19.470 and 7.425 respectively with the maximum clustering around 13-21. Meanwhile, the M and SD of Thai students were 23.640 and 7.117. The clustering is around 19-27.

In Figure 3.12, the smoothed overlapping percentage frequency polygons of Indian students and Thai students for Figural Originality (FO), the distribution is continuous and unimodel.

In Table 3.13, percentage frequency distribution of Figural Elaboration (FE) scores of 300 Indian students and 300 Thai students are given. The M and SD of Indian students were 49.233 and 16.691 with the maximum clustering around 32-52. As regards Thai

students, the M and SD were 55.603 and 15.922 respectively. The clustering is around 39-59.

In Figure 3.13, the smoothed overlapping percentage frequency polygons of Indian students and Thai students for Figural Elaboration (FE), it showed that the distribution is continuous and unimodal.

In Table 3.14, percentage frequency distributions of 300 Indian students and 300 Thai students for Figural Creativity (FC) are shown. The M and SD of Indian students with regard to this continuous variable were 104.290 and 31.293 respectively. The clustering is around 87-113. Referring to Thai students, the M and SD of the distribution were 115.510 and 24.735 respectively with the maximum clustering around 96-122.

In Figure 3.14, the smoothed overlapping percentage frequency polygons of Indian students and Thai students for Figural Creativity (FC) are given. The distribution appears to be continuous and unimodal.

In Table 3.15, percentage frequency distributions of Verbal Fluency (VF) scores of Indian students and Thai students are given. The M and SD of Indian students were 40.317 and 13.760 respectively. The distribution shows clustering around 32-46. In regard to Thai students, the M and SD were 48.983 and 8.544 with the maximum clustering around 37-51.

In Figure 3.15, the smoothed overlapping percentage frequency polygons of Indian students and Thai students for Verbal Fluency (VF) are drawn. It is seen that the distribution is continuous and unimodal.

In Table 3.16, alongwith percentage frequency distributions of 300 Indian students and 300 Thai students, smoothed overlapping percentage frequency polygons are also given (Vide Figure 3.16).

The M and SD of Indian distribution were 33.500 and 11.288 respectively with the maximum clustering around the class interval 25-39. While, the M and SD of Thai distribution were 36.800 and 11.100. The clustering is around the class interval 30-44. The distribution happens to be continuous and unimodal.

Table 3.17 reveals the percentage frequency distributions of Verbal Originality (VO) scores of 300 Indian students and 300 Thai students. The M and SD of Indian students yield the values of 34.467 and 11.427 respectively. The distribution shows clustering around 25-39. As regards Thai students, the M and SD were 25-39. As regards Thai students, the M and SD were 40.467 and 10.946 with the maximum clustering around 35-49. It is seen that (Vide Figure 3.17), the distribution is continuous and unimodal.

In Table 3.18, the percentage frequency -

distributions of Verbal Creativity (VC) of 300 Indian students and 300 Thai students were presented. The M and SD of Indian students were 111.067 and 34.159. The distribution is clustering around 92-131. While, the M and SD of Thai students were 128.200 and 34.002 with the maximum clustering around 112-151.

In Figure 3.18, the smoothed overlapping percentage frequency polygons of Indian students and Thai students for Verbal Creativity (VC) were drawn. The distribution is continuous and unimodal.

In Table 3.19, frequency distributions of socio-economic status (SES) of 300 Indian students (Baroda) and 300 Thai students (Bangkok) are shown. The M and SD of the socio-economic status scores for Indian students were 13.547 and 4.716. While, the M and SD of the distribution for Thai students were 15.600 and 4.915 respectively.

In Table 3.20, frequency distributions of school climate (OCDQ) of 100 Indian teachers and 100 Thai teachers are given. The M and SD of the Indian teachers were 249.300 and 20.900 respectively. Meanwhile, the M and SD of the Thai teachers were 250.300 and 20.494 respectively.

In Tables 3.21 and 3.22, the frequency distributions of percentage of Teacher Talk (TT) and Pupil Talk (PT) are shown respectively. The M and SD for

TT for Indian teaching situations were 59.250 and 15.166 respectively. And the M and SD for TT for Thai teaching situations were 54.665 and 14.000. Buch and - Santhanam (1970) have found that the teachers in Baroda were talking, sixty-nine percent of the class time which is higher than in the present study. George (1975) has reported the Teacher Talk in class rooms of Baroda and Muvattupuzha secondary schools of sixty-seven percent. The percentage of Pupil Talk (PT) was found to be 20.194 for Indian teaching situations and 20.361 for Thai teaching situations.

In Tables 3.23, 3.24 and 3.25, frequency distribution of indirect/direct (i/d) ratio, Indirect/Direct (I/D) ratio and Teacher Response Ratio for Indian - teachers and Thai teachers are respectively shown. Since indirect/direct (i/d) ratio is free from content, it is an index of indirect/direct behaviour of teachers. The Ms of i/d and I/D of Indian teachers were .580 and .253 while in the case of Thai teachers the Ms of i/d and I/D were .581 and .260 respectively. The i/d ratio and Teacher Response Ratio (TRR) are closely connected and go hand in hand.

In Tables 3.26, 3.27 and 3.28 the frequency distributions of Teacher Question Ratio (TQR), - Instantaneous Teacher Response Ratio (TRR 89) and Instantaneous Teacher Question Ratio (TQR 89) of

Indian teachers and Thai teachers are given respectively. The mean of TQR for Indian teachers was 15.650; TRR 89 60.611 and TQR 89 43.250. According to Thai teachers the Mean of TQR was 17.450, TRR 89 63.056 and TQR 89 45.750.

In Table 3.29 the frequency distribution of Pupil Initiation Ratio (PIR) is given. The Ms and SDs of distribution for Indian teaching situations were 10.750 and 9.461 and 10.333 and 8.585 for Thai teaching situations.

In the Tables 3.30, 3.31 and 3.32, the frequency distribution of Content Cross Ratio (CCR), Steady State Ratio (SSR) and Pupil Steady State Ratio (PSSR) for Indian teaching situations and Thai teaching situations are shown respectively. The Ms of CCR, SSR and PSSR of Indian teaching situations were 59.222, 69.667 and 55.351 respectively. Regarding Thai teaching situations the Ms of CCR, SSR and PSSR were 60.333, 69.806 and 55.889.

The proceeding three chapters would be devoted for interpretation and discussion of the results in order to test the hypotheses.

TABLE 3.33 MEAN, STANDARD DEVIATION, STANDARD ERROR OF MEAN AND STANDARD ERROR OF STANDARD DEVIATION OF ALL VARIABLES OF INDIAN AND THAI STUDENTS. (N=300)

Cr. No.	Code*	INDIAN				THAI			
		M	SD	SE _M	SE _{SD}	M	SD	SE _M	SE _{SD}
1	SP	17.583	6.946	.402	.285	21.050	7.133	.413	.292
2	UF	15.680	5.229	.302	.214	18.210	5.795	.335	.238
3	UX	10.750	4.439	.257	.182	12.490	3.425	.198	.140
4	UO	23.117	10.757	.622	.441	30.183	11.693	.676	.479
5	UC	51.337	15.977	.922	.655	60.343	18.228	1.052	.747
6	CF	17.370	6.671	.386	.273	19.240	7.066	.409	.290
7	CO	10.140	4.420	.256	.181	11.040	4.385	.254	.180
8	CC	27.583	9.836	.569	.403	30.150	10.962	.634	.449
9	CY	98.630	27.190	1.570	1.115	111.470	29.276	1.690	1.200
10	FF	17.140	6.702	.388	.275	18.500	6.362	.368	.261
11	FX	13.270	5.330	.308	.219	16.031	5.158	.298	.212
12	FO	19.470	7.425	.429	.305	23.640	7.117	.411	.292
13	FE	49.233	16.691	.964	.684	55.603	15.922	.919	.623
14	FC	104.290	31.293	1.807	1.283	115.510	24.735	1.428	1.014
15	VF	40.317	13.760	.794	.564	48.983	8.544	.493	.350
16	VX	33.500	11.288	.652	.463	36.800	11.100	.641	.455
17	VO	34.467	11.427	.660	.469	40.467	10.946	.632	.449
18	VC	111.067	34.159	1.991	1.413	128.200	34.002	1.963	1.344
19	SES	13.547	4.716	.272	.193	15.600	4.915	.284	.202
20	OCDQ	249.300	20.900	2.090	1.484	250.300	20.494	2.049	1.455
21	TT	59.250	15.166	2.528	1.795	54.665	14.000	2.333	1.656
22	PT	20.194	12.145	2.024	1.437	20.361	13.784	2.297	1.631
23	I/d	.580	10.606	1.768	1.255	.581	11.990	1.998	1.419
24	I/D	.253	13.583	2.264	1.607	.260	14.027	2.338	1.660
25	TRR	59.222	20.199	3.367	2.391	57.833	20.099	3.350	2.379
26	TQR	15.650	11.758	1.960	1.392	17.450	10.771	1.795	1.274
27	TRR89	60.611	15.524	2.587	1.837	63.056	13.342	2.224	1.579
28	TQR89	43.250	6.245	1.041	.739	45.750	11.511	1.919	1.362
29	PIR	10.750	9.461	1.177	1.120	10.333	8.585	1.431	1.016
30	CCR	59.222	16.401	2.733	1.940	60.333	13.000	2.167	1.539
31	SSR	69.667	8.660	1.443	1.025	69.806	9.135	1.523	1.081
32	PSSR	55.351	11.832	1.172	1.400	55.889	15.133	2.522	1.791

* Description of Codes are given in Table 2.6