

A P P E N D I C E S

APPENDIX - I

	PAGE
I-1 Selection of items from a pool of CMI attitude scale (Crites 1978) items and modified & new items, on the basis of judgement of judges.	i
I-2 Product-moment correlations between scores of upper 27% and lower 27% students on attitude scale items	v
I-3 Means, standard deviations and F values for modified and new items in the adapted attitude scale	viii
I-4 Means and standard deviations of scores of adapted attitude scale items for grades VIII to XII in the Indian standardization sample	ix
I-5 Product-moment correlations between scores of upper 27% and lower 27% students for 20 items of self appraisal	xi
I-6 Product-moment correlations between scores of upper 27% and lower 27% students for 20 items of occupational information	xii
I-7 Product-moment correlations between scores of upper 27% and lower 27% students for 20 items of goal selection	xiii
I-8 Product-moment correlations between scores of upper 27% and lower 27% students for 20 items of planning	xiv
I-9 Product-moment correlations between scores of upper 27% and lower 27% students for 20 items of problem solving	xv
I-10 Means, SD's and F values for scores of modified items of the adapted competence test	xvi
I-11 Means and standard deviations of scores of adapted competence test items for grades VIII to XII in the Indian standardization sample	xvii

APPENDIX I-1

SELECTION OF ITEMS FROM A POOL OF CMI ATTITUDES SCALE (CRITES '78) ITEMS AND MODIFIED AND NEW ITEMS, ON THE BASIS OF JUDGEMENT OF JUDGES

Item No. in the test tried out	Item No. in the test used in the study	Judges True	Rating False	% of Agreement	Item Selected 70-100% agreement	Original key	Modified key on the basis of Judges majority rating & Class XII (Indian students) majority	Remarks
1	2	3	4	5	6	7	8	9
1	1	3	12	80	Yes	False	False	Selected Original item
2	2	14	1	93	Yes	True	True	Selected " "
3	3	0	15	100	Yes	False	False	Selected " "
4	4	1	14	93	Yes	False	False	Selected " "
5	-	5	10	66	No	False	-	Omitted " "
6	5	0	15	100	Yes	False	False	Selected " "
7	6	4	11	74	Yes	False	False	Selected " "
8	-	5	10	66	No	False	-	Omitted " "
9	8	15	0	100	Yes	False	True	Selected " (Key Changed)
10	9	3	12	80	Yes	False	False	Selected " "
11	10	4	11	74	Yes	False	False	Selected " "
12	11	0	15	100	Yes	False	False	Selected " "
13	-	6	9	60	No	False	-	Omitted " "
14	12	0	15	100	Yes	False	False	Selected " "

Contd.....2/-

1	2	3	4	5	6	7	8	9
15	13	0	15	100	Yes	False	False	Selected Original Item
16	14	1	14	93	Yes	False	False	Selected " "
17	15	0	15	100	Yes	False	False	Selected " "
18	16	0	15	100	Yes	False	False	Selected (Modified item for original item 8)
19	17	1	14	93	Yes	False	False	Selected New Item
20	18	0	15	100	Yes	False	False	Selected Original Item
21	19	1	14	93	Yes	False	False	Selected " "
22	20	2	13	87	Yes	False	False	Selected " "
23	-	15	0	100	Yes	False	True	Omitted " (Low item correlation)
24	21	11	4	73	Yes	True	True	Selected " "
25	22	0	15	100	Yes	False	False	Selected " "
26	23	2	13	87	Yes	False	False	Selected " "
27	-	2	13	87	Yes	-	False	Omitted New Item (Low item correlation)
28	24	0	15	100	Yes	-	False	Selected " "
29	25	12	3	80	Yes	-	True	Selected " "
30	-	9	6	60	No	-	-	Omitted " "
31	26	15	0	100	Yes	-	True	Selected " "
32	31	3	12	80	Yes	False	False	Selected Original Item

Contd.....

1	2	3	4	5	6	7	8	9
33	27	2	13	87	Yes	False	False	Selected Original Item
34	28	2	13	87	Yes	False	False	Selected " "
35	29	3	12	80	Yes	False	False	Selected " "
36	7	3	12	80	Yes	False	False	Selected (Modified from Original Item 29)
37	30	4	11	73	Yes	False	False	Selected Original Item
38	-	5	10	66	No	False	-	Omitted Original Item
39	32	15	0	100	Yes	False	True	Selected " " (Key changed)
40	33	1	14	93	Yes	False	False	Selected " "
41	34	0	15	100	Yes	-	False	Selected New Item
42	-	8	7	54	No	False	-	Omitted original item
43	-	10	5	66	No	False	-	Omitted original item
44	35	0	15	100	Yes	False	False	Selected Original Item
45	-	2	13	87	Yes	False	False	Omitted Original Item (Low item Correlation)
46	36	0	15	100	Yes	-	False	Selected New Item
47	37	13	2	87	Yes	True	True	Selected Original Item
48	-	7	8	54	No	False	-	Omitted Original Item
49	38	4	11	73	Yes	False	False	Selected Original Item
50	39	0	15	100	Yes	False	False	Selected " "
51	40	13	2	87	Yes	True	True	Selected " "
52	41	0	15	100	Yes	False	False	Selected " "

i: iii : i

Contd.....

1	2	3	4	5	6	7	8	9
53	42	1	14	93	Yes	False	False	Selected (Modified for Original item 34)
54	-	8	7	54	No	False	-	Omitted Original Item
55	43	13	2	87	Yes	True	True	Selected Original Item
56	44	11	4	73	Yes	True	True	Selected " "
57	45	14	1	93	Yes	True	True	Selected " "
58	46	1	14	93	Yes	False	False	Selected " "
59	47	1	14	93	Yes	False	False	Selected " "
60	48	1	14	93	Yes	False	False	Selected " "
61	49	15	0	100	Yes	True	True	Selected New Item
62	50	0	15	100	Yes	False	False	Selected (Modified from Original item 37)

APPENDIX I-2

PRODUCT MOMENT CORRELATIONS BETWEEN SCORES OF UPPER 27% AND
LOWER 27% STUDENTS ON ATTITUDE SCALE ITEMS

Item No. in the test used in the study	Item No. in the test used in the study	Upper 27%	Lower 27%	r	Remarks
1	2	3	4	5	6
1	1	85	48	.43	Selected
2	2	100	74	.59	Selected
3	3	81	59	.28	Selected
4	4	93	52	.55	Selected
5	-	7	29	.39	Omitted*
6	5	81	63	.25	Selected
7	6	74	55	.22	Selected
8	-	15	29	.21	Omitted*
9	8	85	70	.22	Selected
10	9	81	33	.51	Selected
11	10	100	85	.49	Selected
12	11	89	55	.43	Selected
13	-	37	33	.04	Omitted*
14	12	100	63	.67	Selected
15	13	78	33	.47	Selected
16	14	93	29	.70	Selected
17	15	81	55	.32	Selected
18	16	96	52	.60	Selected
19	17	89	63	.38	Selected
20	18	85	22	.63	Selected
21	19	96	41	.67	Selected

Contd....

-: vi :-

1	2	3	4	5	6
22	20	81	59	.27	Selected
23	-	56	44	.12	Omitted*
24	21	81	55	.32	Selected
25	22	100	63	.66	Selected
26	23	67	44	.25	Selected
27	-	81	74	.11	Omitted*
28	24	100	37	.78	Selected
29	25	96	63	.71	Selected
30	-	48	44	.04	Omitted*
31	26	100	70	.62	Selected
32	31	81	33	.51	Selected
33	27	96	55	.57	Selected
34	28	93	29	.68	Selected
35	29	70	44	.27	Selected
36	7	78	33	.47	Selected
37	30	89	33	.60	Selected
38	-	66	48	.19	Omitted*
39	32	85	66	.27	Selected
40	33	89	44	.53	Selected
41	34	100	63	.66	Selected
42	-	48	29	.21	Omitted*
43	-	81	74	.11	Omitted*
44	35	78	55	.27	Selected
45	-	67	59	.11	Omitted*
46	36	89	41	.56	Selected

Contd...

1	2	3	4	5	6
47	37	93	63	.46	Selected
48	-	44	26	.20	Omitted*
49	38	70	41	.31	Selected
50	39	81	55	.32	Selected
51	40	100	66	.65	Selected
52	41	93	37	.65	Selected
53	42	96	48	.62	Selected
54	-	44	33	.13	Omitted*
55	43	100	63	.66	Selected
56	44	93	52	.55	Selected
57	45	93	63	.40	Selected
58	46	96	52	.60	Selected
59	47	81	55	.29	Selected
60	48	100	29	.81	Selected
61	49	81	44	.41	Selected
62	50	100	63	.66	Selected

* Items with r's below .22 were rejected, except item 5 which has an r of .39; it was omitted because of judges disagreement.

APPENDIX I-3

MEANS, STANDARD DEVIATIONS AND F VALUES FOR MODIFIED
AND NEW ITEMS IN THE ADAPTED ATTITUDE SCALE

Item No. in the test tried out	Item No. in the test used in the study	GRADES						F Ratio	Remarks
		VIII=104		X = 100		XII=105			
		MEAN	SD	MEAN	SD	MEAN	SD		
18	16	1.43	.50	1.53	.50	1.77	.42	14.13**	Modified item
19	17	1.68	.47	1.78	.42	1.56	.50	5.89**	New item
28	24	1.41	.49	1.62	.49	1.83	.38	21.82**	New item
29	25	1.66	.48	1.78	.42	1.90	.30	9.47**	New item
31	26	1.77	.42	1.84	.37	1.35	.48	40.12**	New item
36	7	1.20	.40	1.27	.45	1.83	.38	71.68**	Modified item
41	34	1.66	.48	1.90	.30	1.94	.23	19.18**	New item
46	36	1.35	.48	1.47	.50	1.62	.49	7.64**	New item
53	42	1.40	.49	1.63	.49	1.74	.44	14.10**	Modified item
61	49	1.53	.50	1.57	.50	1.69	.46	2.99	New item
62	50	1.62	.51	1.79	.43	1.91	.28	12.74**	Modified item

p .05 = 3.02
p .01 = 4.68

** All F values are significant at .01 level except 2.99 which has
missed .05 level of significance by only .03.

APPENDIX I-4

MEANS AND STANDARD DEVIATIONS OF SCORES OF ADAPTED
ATTITUDE SCALE ITEMS FOR GRADES VIII TO XII IN THE
INDIAN STANDARDIZATION SAMPLE

Item No.	GRADE					
	VIII=104		X=100		XII=105	
	MEAN	SD	MEAN	SD	MEAN	SD
1	1.42	.50	1.60	.49	1.72	.45
2	1.79	.41	1.85	.36	1.92	.27
3	1.23	.42	1.51	.50	1.76	.43
4	1.41	.49	1.68	.47	1.75	.44
5	1.35	.48	1.45	.50	1.62	.49
6	1.34	.48	1.61	.49	1.69	.46
7	1.20	.40	1.27	.45	1.83	.38
8	1.49	.50	1.84	.37	1.86	.34
9	1.45	.50	1.49	.50	1.90	.30
10	1.10	.30	1.08	.27	1.70	.46
11	1.25	.44	1.42	.50	1.92	.27
12	1.79	.41	1.85	.36	1.60	.49
13	1.29	.46	1.58	.50	1.62	.49
14	1.42	.50	1.56	.50	1.73	.45
15	1.46	.50	1.72	.45	1.84	.37
16	1.43	.50	1.53	.50	1.77	.42
17	1.68	.47	1.78	.42	1.56	.50
18	1.74	.44	1.80	.40	1.79	.41
19	1.43	.50	1.55	.50	1.72	.45
20	1.50	.50	1.61	.49	1.52	.50
21	1.77	.42	1.82	.39	1.83	.38
22	1.62	.49	1.76	.43	1.58	.50
23	1.11	.31	1.39	.49	1.75	.44
24	1.41	.49	1.62	.49	1.83	.38
25	1.66	.48	1.78	.42	1.90	.30
26	1.77	.42	1.84	.37	1.35	.48
27	1.52	.50	1.61	.49	1.80	.40

Contd....

Item No.	MEAN	SD	MEAN	SD	MEAN	SD
28	1.39	.49	1.64	.48	1.69	.46
29	1.41	.49	1.42	.50	1.59	.49
30	1.20	.40	1.36	.48	1.24	.43
31	1.27	.45	1.39	.49	1.68	.47
32	1.56	.50	1.64	.48	1.78	.42
33	1.40	.49	1.53	.50	1.67	.47
34	1.66	.48	1.90	.30	1.94	.23
35	1.46	.50	1.71	.46	1.75	.44
36	1.35	.48	1.47	.50	1.62	.49
37	1.65	.48	1.83	.38	1.85	.36
38	1.39	.49	1.55	.50	1.46	.50
39	1.45	.50	1.54	.50	1.73	.45
40	1.69	.47	1.76	.43	1.85	.36
41	1.50	.50	1.62	.49	1.66	.47
42	1.40	.49	1.63	.49	1.74	.44
43	1.80	.40	1.83	.38	1.91	.28
44	1.53	.50	1.51	.50	1.44	.50
45	1.73	.45	1.84	.37	1.87	.34
46	1.60	.49	1.79	.41	1.78	.42
47	1.33	.47	1.56	.50	1.71	.46
48	1.59	.49	1.67	.47	1.87	.34
49	1.53	.50	1.57	.50	1.69	.46
50	1.62	.51	1.79	.43	1.91	.28

APPENDIX I-5

PRODUCT MOMENT CORRELATIONS BETWEEN SCORES OF UPPER 27%
AND LOWER 27% STUDENTS FOR 20 ITEMS OF SELF APPRAISAL

Item No. in the Crite's Test	Item No. in the test used in the study	Upper 27%	Lower 27%	r
1	1	100	73	.61*
2	-	36	27	.12
3	2	91	73	.32*
4	3	36	9	.36*
5	-	45	36	.08
6	4	91	45	.53*
7	5	63	27	.39*
8	6	73	27	.44*
9	-	18	27	-.11
10	-	63	45	.23
11	7	91	54	.49*
12	8	36	9	.40*
13	9	100	73	.61*
14	10	63	27	.39*
15	-	73	45	.30
16	-	54	36	.19
17	11	27	9	.32*
18	12	82	36	.48*
19	13	82	27	.54*
20	14	27	9	.32*

*Item with r's above .32 were selected.

APPENDIX I-6

PRODUCT MOMENT CORRELATIONS BETWEEN SCORES OF UPPER 27%
AND LOWER 27% STUDENTS FOR 20 ITEMS OF OCCUPATIONAL
INFORMATION

Item No. in the Crite's Test	Item No. in the test used in the study	Upper 27%	Lower 27%	r
21	15	60	20	.42*
22	16	80	70	.13*
23	17	60	10	.56*
24	-	60	60	0
25	18	90	70	.30*
26	19	100	70	.62*
27	-	100	100	0
28	20	90	20	.70*
29	21	90	50	.48*
30	-	30	40	-.11
31	22	70	60	.11*
32	23	100	60	.68*
33	-	100	100	0
34	24	100	90	.40*
35	-	100	100	0
36	25	100	80	.53*
37	26	80	50	.33*
38	27	50	20	.33*
39	-	90	90	0
40	28	80	70	.13*

* All the selected items have correlations above .30
except three items which have an r of .13, .13 and .11.

APPENDIX I-7

PRODUCT MOMENT CORRELATIONS BETWEEN SCORES OF UPPER 27%
AND LOWER 27% STUDENTS FOR 20 ITEMS OF GOAL SELECTION

Item No. in the Crite's Test	Item No. in the test used in the study	Upper 27%	Lower 27%	r
41	29	45	0	.70 [*]
42	30	54	0	.74 [*]
43	-	73	54	.22
44	-	27	9	.30
45	31	100	91	.40 [*]
46	-	73	73	0
47	32	54	0	.74 [*]
48	33	100	91	.40 [*]
49	-	100	91	.40
50	34	91	54	.45 [*]
51	35	100	36	.78 [*]
52	-	91	82	.15
53	36	100	73	.61 [*]
54	37	100	91	.40 [*]
55	38	100	73	.61 [*]
56	39	73	27	.46 [*]
57	40	100	73	.61 [*]
58	-	27	18	.11
59	41	100	36	.78 [*]
60	42	100	73	.61 [*]

*The items with r's above .40 were selected.

APPENDIX I-8

PRODUCT MOMENT CORRELATIONS BETWEEN SCORES OF UPPER 27%
AND LOWER 27% STUDENTS FOR 20 ITEMS OF PLANNING.

Item No. in the Crite's Test	Item No. in the test used in the study	Upper 27%	Lower 27%	r
61	43	100	60	.68*
62	44	80	40	.42*
63	45	60	30	.31*
64	46	100	40	.77*
65	-	10	10	0
66	47	90	20	.70*
67	48	90	0	.88*
68	-	60	70	-.11
69	-	30	30	0
70	49	60	30	.31*
71	50	100	40	.77*
72	-	70	50	.21
73	51	80	40	.42*
74	52	70	20	.51*
75	53	100	40	.77*
76	54	100	80	.53*
77	-	10	10	0
78	55	90	40	.56*
79	-	50	30	.21
80	56	90	40	.56*

* Items with r's above .31 were selected.

APPENDIX I-9

PRODUCT MOMENT CORRELATIONS BETWEEN SCORES OF UPPER 27%
AND LOWER 27% STUDENTS FOR 20 ITEMS OF PROBLEM SOLVING

Item No. in the Crite's test	Item No. in the test used in the study	Upper 27%	Lower 27%	r
81	-	27	9	.30
82	57	54	9	.55*
83	58	100	36	.78*
84	59	73	18	.56*
85	-	54	27	.30
86	60	82	9	.73*
87	61	36	9	.40*
88	-	0	0	0
89	-	9	9	0
90	62	100	63	.67*
91	63	73	18	.54*
92	64	100	54	.71*
93	-	36	27	.09
94	65	27	0	.61*
95	66	36	9	.40*
96	67	45	9	.49*
97	68	82	9	.72*
98	69	100	63	.67*
99	-	54	36	.19
100	70	100	54	.71*

*Items with r's above .40 were selected

APPENDIX I-10

MEANS, SDs AND F VALUES FOR SCORES OF MODIFIED ITEMS OF THE ADAPTED COMPETENCE TEST

Item No. in the Crite's Test	Item No. in the test used in the study	GRADES						F ratio
		VIII=104			X=100			
		M	SD	M	SD	M	SD	
12	8	1.23	.42	1.32	.47	1.36	.48	2.22
37	26	1.49	.50	1.55	.50	1.72	.45	6.55**
57	40	1.57	.50	1.62	.49	1.70	.46	2.17
63	45	1.40	.49	1.42	.50	1.53	.50	2.10
64	46	1.51	.50	1.57	.50	1.69	.47	3.50*
70	49	1.19	.40	1.35	.48	1.43	.50	7.15**
71	50	1.46	.50	1.48	.50	1.65	.48	4.48*
74	52	1.30	.46	1.33	.47	1.55	.50	8.76**
75	53	1.33	.47	1.40	.49	1.56	.50	6.35**
86	60	1.50	.50	1.61	.49	1.70	.46	4.68**
92	64	1.38	.49	1.50	.50	1.74	.44	15.34**

* Significant at .05 level

** Significant at .01 level

APPENDIX I-11

MEANS AND STANDARD DEVIATIONS OF SCORES OF ADAPTED
COMPETENCE TEST ITEMS FOR GRADES VIII TO XII IN
THE INDIAN STANDARDIZATION SAMPLE

Item	GRADES					
	VIII=104		X=100		XII=105	
	M	SD	M	SD	M	SD
<u>Part-I</u>						
1	1.62	.49	1.74	.44	1.85	.36
2	1.46	.50	1.58	.50	1.70	.46
3	1.17	.38	1.27	.45	1.45	.50
4	1.47	.50	1.57	.50	1.62	.49
5	1.48	.50	1.60	.49	1.65	.48
6	1.57	.50	1.71	.46	1.79	.41
7	1.51	.50	1.62	.49	1.70	.46
8	1.23	.42	1.32	.47	1.36	.48
9	1.72	.45	1.78	.42	1.87	.34
10	1.52	.50	1.66	.48	1.68	.47
11	1.62	.49	1.67	.47	1.70	.46
12	1.15	.36	1.27	.45	1.33	.47
13	1.50	.50	1.57	.50	1.61	.49
14	1.23	.42	1.27	.46	1.32	.47
<u>Part II</u>						
15	1.57	.50	1.67	.47	1.69	.47
16	1.50	.50	1.61	.49	1.65	.48
17	1.34	.47	1.34	.48	1.37	.49
18	1.62	.49	1.67	.47	1.69	.47
19	1.46	.50	1.67	.47	1.76	.43
20	1.64	.48	1.68	.47	1.68	.47
21	1.37	.49	1.51	.50	1.65	.48
22	1.71	.46	1.73	.45	1.76	.43
23	1.77	.42	1.86	.35	1.89	.32
24	1.65	.48	1.78	.42	1.78	.42
25	1.45	.50	1.73	.45	1.78	.42
26	1.49	.50	1.55	.50	1.72	.45
27	1.22	.42	1.26	.44	1.30	.46
28	1.66	.47	1.66	.48	1.80	.40

Contd....

Item	GRADE					
	VIII		X		XII	
	M	SD	M	SD	M	SD
<u>Part-III</u>						
29	1.39	.49	1.47	.50	1.48	.50
30	1.19	.40	1.23	.42	1.26	.44
31	1.78	.42	1.78	.42	1.85	.36
32	1.21	.41	1.28	.45	1.33	.47
33	1.70	.46	1.77	.42	1.83	.38
34	1.77	.42	1.80	.40	1.82	.39
35	1.21	.41	1.37	.49	1.42	.50
36	1.59	.49	1.62	.49	1.78	.42
37	1.74	.44	1.77	.42	1.86	.35
38	1.73	.45	1.75	.44	1.84	.37
39	1.25	.44	1.30	.46	1.52	.50
40	1.57	.50	1.62	.49	1.70	.46
41	1.33	.47	1.56	.50	1.65	.48
42	1.76	.43	1.76	.43	1.82	.39
<u>Part-IV</u>						
43	1.52	.50	1.54	.50	1.69	.47
44	1.43	.50	1.48	.50	1.60	.49
45	1.40	.49	1.42	.50	1.53	.50
46	1.51	.50	1.57	.50	1.69	.47
47	1.41	.49	1.44	.50	1.52	.50
48	1.38	.49	1.41	.49	1.44	.50
49	1.19	.40	1.35	.48	1.43	.50
50	1.46	.50	1.48	.50	1.65	.48
51	1.50	.50	1.56	.50	1.63	.49
52	1.30	.46	1.33	.47	1.55	.50
53	1.33	.47	1.40	.49	1.56	.50
54	1.58	.50	1.61	.49	1.78	.42
55	1.50	.50	1.52	.50	1.55	.50
56	1.44	.50	1.46	.50	1.52	.50

Contd.....

-: xix :-

Item	GRADE					
	VIII		X		XII	
	M	SD	M	SD	M	SD
<u>Part-V</u>						
57	1.41	.49	1.43	.50	1.46	.50
58	1.37	.48	1.39	.49	1.53	.50
59	1.14	.35	1.16	.37	1.22	.42
60	1.50	.50	1.61	.49	1.70	.46
61	1.11	.31	1.15	.36	1.19	.39
62	1.76	.43	1.75	.44	1.83	.38
63	1.24	.43	1.27	.45	1.31	.47
64	1.38	.49	1.50	.50	1.74	.44
65	1.24	.43	1.29	.46	1.35	.48
66	1.21	.41	1.23	.42	1.28	.45
67	1.34	.47	1.36	.48	1.36	.48
68	1.31	.46	1.31	.46	1.37	.49
69	1.51	.50	1.53	.50	1.64	.48
70	1.54	.50	1.65	.48	1.75	.43