CHAPTER V

PERSONALITY AND GIFTEDNESS

5.0 INTRODUCTION

In this chapter the study of some of the personality traits of the gifted high school students has been undertaken. The same 935 capably gifted subjects served as the main sample of the study, that was later on sub-sampled into a sample of 683 for additionally studying the age variable besides I.Q. and sex, a sample of 325 of functionally gifted subjects and finally a sample of 143 subjects consisting of highly gifted and additional non-gifted subjects, as in the previous chapter. All these subjects were administered the Sixteen Factor Personality Test of R.B. Cattell for the purpose of studying personality traits of the gifted children. This test was translated into Gujarati and adapted for the use of Gujarati speaking children after testing its reliability and validity, as

described in the third chapter. The results on personality traits have been discussed in four ways, as in the preceding chapter on creativity results. (i) The first part of the study concerns 935 intellectually gifted children arranged in 3 x 2 factorial design, representing three levels of I.Q. and two sexes as shown in Table No. 3.4 earlier, with a view to examining main as well as interaction effects of I.Q. and sex. (ii) The second part studies a sample of 683 intellectually gifted, taken out of 935, and arranged in a $2 \times 2 \times 3$ factorial design representing two levels of I.Q., two sexes and three age levels, as in Table 3.5 earlier, with a view to studying main as well as interaction effects of I.Q., sex and age in addition. (iii) Further a sample of 325 functionally gifted subjects out of 935 was taken out and again arranged in a 3 x 2 factorial design representing three I.Q. levels and two sexes, with a view to investigating main as well as interaction contributions of I.Q. and sex to personality traits of the manifest gifted. (iv) And finally a sample of 143 consisting of highly gifted extraordinary and non-gifted backward boys and girls was studied in a 2 \times 2 factorial design representing two I.Q. levels, the extraordinary and the backward, as shown in Table No. 3.7 earlier, with a view to comparing the gifted with the non-gifted on the personality traits and examining :

the main as well as interaction effects of I.Q. and sex. The descriptions of all these samples have been given earlier.

All these subjects were tested on Cattell's 16-Factor

Personality Test. Their scores were statistically analysed by the F-test to study significance of overall difference and further by the L.S.D. test to study the sub-group pair difference of each variable on personality traits. The sixteen types of personality scores or traits have been separately analysed by F-test and L.S.D. test and all these results have been summarized in Tables 5.1(i), (ii), (iii), (iv); (a), (b), (c) to 5.16(i), (ii), (iii), (iv); (a), (b), (c) respectively for each of 16 personality traits;

- (i) discussing results of the sample of 935,
- (ii) discussing results of the sample of 683,
- (iii) discussing results of the sample of 325, and
 - (iv) discussing results of the sample of 143 subjects;
 - (a) giving the mean scores of each of main as well as sub-groups,
 - (b) summarizing the results of analysis of variance,(F-test), and
 - (c) presenting the results of L.S.D. tests on subgroups. The procedure of presentation is the same as that is followed in the earlier chapter.

All the results have been discussed in the pages that follow.

5.1 PERSONALITY FACTOR A (CYCLOTHYMIA vs SCHIZOTHYMIA)
AND GIFTEDNESS

This factor A in Cattell's Personality Test refers to the positive side to cyclical traits such as easy-goingness, co-operativeness, adaptability, trustfulness, soft and warm heartedness, etc.

The scores on this factor obtained by different groups of subjects namely - (i) 935 intellectually gifted subjects arranged in a 3 x 2 factorial design (3 levels of I.Q. x 2 sexes) and other groups separated out from this main group, viz. (ii) 683 intellectually gifted subjects arranged in a 2 x 2 x 3 factorial design (two levels of I.Q. x two sexes x three age levels), (iii) 325 functionally (manifest) gifted subjects arranged in a 3 x 2 factorial design (three I.Q. level x two sexes) and finally (iv) 143 gifted-nongifted subjects arranged in a 2 x 2 factorial design (two extreme I.Q. levels x two sexes) - were all statistically analysed by the F-test and the L.S.D. test; and all these results on this factor have been summarized in Tables 5.1(i), (ii), (iii), (iv) -(a), (b), (c) respectively for the four samples, (a) showing mean scores of main as well as sub-groups, (b) presenting the summary of results of analysis of variance, and (c) summarizing the results of L.S.D. test.

Table 5.1(i)(a): Showing Mean Scoreson Personality Factor A

(Cyclothymia vs Schizothymia) of each of

Main and Sub-groups (Sample size: 935)

(I.Q. x Sex)

	;		Extraordinary	Very Superior	Superior	Total
Boys	:	Nos.	15	76	334	425
		Scores	52	249	1156	1457
		Mean	3.47	3.28	3.46	3.43
Girls	:	Nos.	36	145	329	510
		Scores	115	481	1050	1646
,	,	Mean	3.194	3.32	3.191	3.23
otal	:	Nos.	51	221	663	935
		Scores	167	730	2206	3103
		Mean	3.27	3.30	3.33	3.32

Results of
Table 5.1(i)(b): Showing Summary of Analysis of Variance

Sources of Variance	df	Sum of Squares (Ss)	Mean Squares (Variance)	F ' Ratios	Remarks
Between I.Q. (Giftedness)	2	0.19	0.95	0.29	Not Sig.
Between Sex	1	9.34	9.34	2.84	Not Sig.
Interaction: I.Q. x Sex	2	3.66	1.83	0.56	Not Sig.
Within Groups (Error term)	3929	3059.83	3.29		
Total	934	3073.02			

From the statistical table

For df = 2/929 1/929 F at .05 = 3.00 3.85 F at .01 = 4.63 6.66

Table 5.1(i) (c) : Showing Results of L.S.D. Test for Pair Differences among I.Q. and Sex Sub-groups L.S.D. = $t\sqrt{MS_W/N_1} + MS_W/N_2$ (t for df of MS at .05 = 1.96 and at .01 = 2.58)

,	Obtained Mean Difference	Requirements Requi	uired erence .01	Signifi- cance
(i) For I.Q. Differences:	and the second s	Parish west for the second second second	rittip utvillip attillip er dennetillere 1944 er lætt	17 MB 74 MB 64 NO EL NEL PERSONE SER HANDE PER SER HANDE P
Among Main Groups -	-			
Extraordinary vs Very Sup.	.03	.54	.72	Not Sig.
Extraordinary vs Superior	.06	.51	.67	Not Sig.
Very Superior vs Superior	.03	. 27	.36	Not Sig.
Among Boys -				,
Extraordinary vs Very Sup.	.19	.99	1.32	Not Sig.
Extraordinary vs Superior	.01	.94	1.23	Not Sig.
Very Superior vs Superior	.18	. 45	.59	Not Sig.
Among Girls -				
Extraordinary vs Very Sup.	•13 §	.67	.88	Not Sig.
Extraordinary vs Superior	•01	.63	.83	Not Sig.
Very Superior vs Superior	•13 ?	. 35	. 46	Not Sig.
(ii) For Sex Differences:				- ,
Among Extraordinary :				•
Boys vs Girls	•28 ⁵	1.10	1.44	Not Sig.
Among Very Superior -		-		
Boys vs Girls	.04	.51	.67	Not Sig.
Among Superior -				
Boys vs Girls	s 27	. 28	.36	Not Sig.

Table 5.1(ii)(a): Showing Mean Scores on Personality Factor A (Cyclothymia . 83

each of main and Sub-groups	(I.Q. x Sex x Age)
of	
Versus Schizothymia)	(Sample Size : 683)

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(According	

		(. 4	Ä	ge in	Age in Years		•	F - - - -	`	Ţ,	Total	
		13			14			12		- 1	Total	,;	(Sexwise)	se)	
	NO NO	No. Scores Mean	3 Mean	o O	No. Scores	Mean	2	Scores	Mean	NO.	Scores	Mean	No	Scores	Mean
Boys (M):															
Highly Superior I_1	31	103	3,32	32		3.47	32	98	2.58	95	300	3.15	700	1021	90
Superior ${f I}_2$	39	140	3.59	82	287	3.38	85	304	3.57	209	731	3.49	†))	1 0 1	
Girls (F)															
Highly Superior $\mathbf{I}_{\mathbf{I}}$	30	83	2.97	64	220	3.44	71	234	3.29	165	543	3,29	270	1213	3.20
Superior I_2	56	186	3.32	75	224	2.99	83	260	3.13	214	679	3 • 13	<u> </u>) •
Total (I.Q.wise)														•	
Highly SuperiorI $_1$	61	192	3.15	96	331	3.45	103	320	3.10	260	843	3.24	683	2244	3,29
Superior ${ m I}_2$	95	326	3.43	160	511	3.19	168	564	3.35	423	1401	3.31) -))
Total (Agewise)	156	518	3,32	256	842	3,29	271	884	3.26	683	2244	3.29			
Andreas de Company de			** ** ** ** **	771	- 3-1 3-1 3-1 3-1 3-1				ng State Dave State State .		. Ober Stree Dear Stee Stee Stee St		The State St		Bade Space Mary Street State of

Table 5.1(ii)(b): Showing Summary of Analysis of Variance

			•		
Sources of Variance	df	Sum of Squares (SS)	Mean Squares (Variance)	F Ratio s	Remarks
Between I.Q. (Giftedness)	1	0.78	0.78	0.34	Not. Sig.
Between Sex	1	6.15	6.15	2.68	Not. Sig.
Between Age	2	0.34	0.17	0.07	Not. Sig.
Interaction: I.Q. x Sex	1	9.14	9.14	3.99	Sig.at 0.5
Interaction: I.Q. x Age	2	10.10	5.05	2.21	Not.Sig.
Interaction : Sex x Age	2	0.53	0.26	0.11	Not. Sig.
Interaction : IQ x Sex x Age	2	11.98	5.99	2.61	Not. sig.
Within Groups (Error term')	671	1537.31	2.29		
Total:	682	1576.33			

From the Statistical Table

df	= 1/671	2/671
F at	.05 = 3.857	3.007
Fat	-01 = 6.681	4-644

Table 5.1(ii) (c):Showing Results of L.S.D. test for Pair Differences among $I_{\mu}\Omega_{a}$ Sex and Age Sub-Groups

L.S.D. = $t\sqrt{MS_w/N_1 + MS_w/N_2}$ (t for df of MS_w at .05 = 1.96 and at .01 = 2.58)

		Obtained Mean Differe h o	Differe	nces	Signifi- cance
	1	2	3	4	5
(i)	For I.Q. Differences:		- The second		,
	Among Boys of -	•18	.71	•93	Not sig.
	13 years : Highly Sup. vs 14 years :	.09	•61	.80	not sig.
	14 years : ,, ,, 15 years ., ,,	.89	.61	.90	sig. at .01
	Among Girls of -				
	13 years : ,, ,,	•35	.67	.88	Not sig.
	14 years : ,, ,,	.45	•51	•67	not sig.
	15 years : ,, ,,	•16	.47	•52	not sig.
(ii)	For Sex Differences:				
	Among Highly Superior -				•
	13 years : Boys vs Girls	•35	.76	1.01	not sig.
	14 years : ,, ,,	.03	•65	.95	not sig.
	15 years :	•61	•63	.83	not sig.
	Among Superior -				,
	13 years ,, ,,	.27	. 63	.93	not sig.
	14 years	.39	.47	.62	not sig.
	15 years ,, ,,	.44	.45	. 59	not sig.

contd....

Table 5.1(ii)(c) contd....

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		22	3	4	5
(iii)	For Age Differences -				
	Among Main Groups -				
	13 years Vs 14 years	•03	.29	•39	not sig.
	13 years Vs 15 years	•06	.29	.39	not sig.
	14 years Vs 15 years	•03	•25	.34	not sig.
	Among Highly Superior Boys	· · ·			
	13 years Vs 14 years	.15	.74	.98	not sig.
	13 years Vs 15 years	•64	.74	•98	not sig.
•	14 years Vs 15 years	.79	.74	.98	sig.at .
	Among Superior Boys -				
	13 years Vs 14 years	•21	•59	.77	Not. sig
	13 years Vs 15 years	.02	•59	.77	not sig.
	14 years Vs 15 years	.19	.45	•59	not sig.
	Among Highly Superior Gir	ls-			
	13 years Vs 14 Years	.47	•67	.88	not sig.
	13 years Vs 15 years	.32	•65 ·	.85	not sig.
	14 years Vs 15 years	•15	.51	.67	not sig.
	Among Superior Girls -		•		r
	13 years Vs 14 years	•33	•53	.70	not sig.
	13 years Vs 15 years	.19	.51	.67	not sig.
	14 years Vs 15 years	.14	.47	•62,	not sig.

Table 5.1(iii) (a): Showing Mean Scores on Personality
Factor A (Cyclothymia vs Schizothymia) of each
of Main and Sub-groups (Sample Size: 325)
(I.Q. x Sex)

		Extra- ordinary	Very- Superior	Superior	Total
Boys :	Nos.	10	49	106	165
	Scores	38	166	348	552
	Mean	3.80	3.39	3.28	3.35
Girls:	Nos.	19	51	90	160
	Scores	58	171	270	499
	Mean	3.05	3.35	3.00	3.12
Total:	Nos.	29	100	196	325
,	Scores	96	337	618	1051
	Mean	3.31	3.37	3.15	3.23

Results of Table 5.1(iii)(b): Showing Summary of Analysis of Variance

Sources of Variance	đ£	Sum of Squares (Ss)	Mean Squares (Variance)	F Ratios	Remarks
Between I.Q. (Giftedness)	2	3.30	1.65	0.84	Not Sig.
Between Sex	1	4.18	4.18	2.12	Not Sig.
Interaction: (I.Q. x Sex)	2	3.41	1.71	0.87	Not Sig.
Within Groups (Error Term)	319	627.34	1.97		•
Total	324	638,23			

From statistical table

For df = 2/319 1/319 F at .05 = 3.028 3.868 F at .01 = 4.676 6.716

Table 5.1(iii)(c): Showing Results of L.S.D. Test for Pair Differences among I.Q. and Sex Sub-groups

L.S.D. = t $\sqrt{MS_w / N_1 + MS_w / N_2}$

(t for df of MS_w at .05 = 1.97 and at .01 = 2.59)

	Obtained Mean Difference	Diff	uired erence .01	Signifi- cance
(i) For I.Q. Differences:				- THE ANY PARTY STATE ST
Among Main Groups -				
Extraordinary vs Very Sup.	.06	.57	.75	Not Sig.
Extraordinary vs Superior	.16	•55	.73	Not Sig.
Very Superior vs Superior	. 22	.33	.44	Not Sig.
Among Boys -				
Extraordinary vs Very Super	rior.41	.97	1.27	Not Sig.
Extraordinary vs Superior	.52	.91	1.19	Not Sig.
Very Superior vs Superior	.11	. 47	.62	Not Sig.
Among Girls -				,
Extraordinary vs Very Super	rior.30	.75	.98	Not Sig.
Extraordinary vs Superior	.05	. 69	.91	Not Sig.
Very Superior vs Superior	. 35	. 49	.65	Not Sig.
(ii) For Sex Differences:				•
Among Extraordinary -				
Boys vs Girls	•75	1.08	1.42	Not Sig.
Among Very Superior -			1	noc org.
Boys vs Girls	.04	.71	.93	Not Sig.
Among Superior -				
Boys vs Girls	. 28	. 39	.52	Not Sig.
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Table 5.1(iv)(a): Showing Mean Scores on Personality Factor
A (Cyclothymia vs Schizothymia) of each of Main
and Sub-groups (Sample Size: 143)

(I.Q. x Sex)

provinces of the second			Extraordinary (Gifted)	Backward (Non-gifted)	Total
Boys	:	Nos.	15	61	76
		Scores	52	198	250
		Mean	3.47	3.25	3.29
Girls	:	Nos.	36	31	67
		Scores	115	106	221
		Mean	3.19	3.42	3.30
Total	:	Nos.	51	92	143
		Scores	167	304	471
		Mean	3.27	3.30	3.29

Results of

Table 5.1(iv)(b): Showing Summary of Analysis of Variance

Sources of Variance	đf	Sum of Squares (Ss)	Mean Squares (Variance)	F Ratios	Remarks
Between I.Q. (Giftedness)	1	0.02	0.02	•008	Not Sig.
Between Sex	1	0.01	0.01	-004	Not Sig.
Interaction: I.Q. x Sex	1	1.39	1.39	0.58	Not Sig.
Within Groups (Error term)	139	334.25	2.40		
Total	142	335.66	ann para bas with such to	* **	and the post total

From statistical table

For df = 1/139

F at .05 = 3.91

F at .01 = 6.825

Table 5.1(iv)(c): Showing Results of L.S.D. Test for Pair

Differences among I.Q. and Sex Sub-groups

L.S.D. =
$$t\sqrt{MS_W/N_1 + MS_W/N_2}$$

(t for df of MS, at .05 = 1.98 and at .01 = 2.615)

	Obtained Mean Difference	Diffe	ired rence .01	Signifi- cance
(i) For I.Q. Differences:				
Among Boys -				
Extraordinary vs Backward	. 22	.89	1.18	Not Sig.
Among Girls -				
Extraordinary vs Backward	. 23	. 7 5	.99	Not Sig.
(ii) For Sex Differences:				
Among Extraordinary -				
Boys vs Girls	. 28	.95	1.26	Not Sig.
Among Backward -				
Boys v s Girls	.17	.67	. 89	Not Sig.
THE THE COLD COLD COLD COLD COLD COLD COLD COLD				

The maximum score on this factor is ten, and the average scores obtained by the four groups amounted to 3.32, 3.29, 3.23 and 3.29 respectively, i.e., on an average the subjects under study are not high on cyclothymia, i.e., are only somewhat easy-going, adaptable, warm-hearted, etc. the role of other factors under study is discussed below.

The results in Table 5.1(i)(b) reveal that neither giftedness (I.Q.) nor sex nor their interaction played any significant role in contributing to this factor. Even the closer analysis of results by L.S.D. test in Table 5.1(i)(c) shows no sub-group

pair differences anywhere in the main sample of 935 subjects. However, when data were analysed in a $2 \times 2 \times 3$ factorial way for 683 subjects, the interaction between I.Q. and sex was found significant as shown in Table 5.1(ii) (b). This is explained from results in Table 5.1(ii)(c) which shows that though not a single main group was significantly different from the other, highly superior differed from superior among boys of 15 age, and among the highly superior boys, 14 age differed from 15 age; while there were no differences in any group of girls. Further, superior boys scored higher (3.49) than highly superior boys (3.15), while highly superior girls scored higher (3.29) than superior girls (3.13) on this factor A, and this accounts for significant interaction of I.Q. and sex. The results of analysis of data of 325 functionally gifted children in Table 5.1(iii)(b) and also of 143 gifted nongifted children in Table 5.1(iv)(b) also show that neither I.Q. nor sex nor any interaction was significant.

To sum up, neither giftedness (I.Q.) nor sex, nor age nor their interaction generally played any significant role in contributing to the personality factor A (cyclothymia), except among highly superior boys of 15 (scoring very low 3.15) and superior girls of 15 (with the lowest score of 3.13), accounting for significant I.Q. x sex interaction in I.Q. x Sex x Age design.

5.2 PERSONALITY FACTOR B (GENERAL INTELLIGENCE VS MENTAL DEFECT) AND GIFTEDNESS

The factor B in the test refers on the positive side to general intelligence, carrying with it the ratings on being conscientious, persevering, intellectually cultured, etc.

The scores on this factor obtained by the same four groups of subjects arranged in a factorial design were statistically analysed by the F-test and the L.S.D. test as usual and the results have been summarized in Tables 5.2(i), (iii), (iv); (a), (b), (c) following the same procedure of presentation as in the earlier factor A.

Table 5.2(i)(a): Showing Mean Scores on Personality Factor B

(General Intelligence vs Mental Defect) of each

of Main and Sub-groups. (Sample Size:935)

(I.Q. x Sex)

			Extra- ordinary	Very Superior	Superior	Total
Boys	:	Nos.	15	76	334	425
		Scores	96	521	2047	2664
		Mean	6.40	6.85	6.28	6.27
Girls	:	Nos.	36	145	329	510
		Scores	254	899	1873	3026
		Mean	7.05	6.20	5.69	5.93
Total	:	Nos.	51	221	663	935
		Scores	350	1420	3920	5690
		Mean	6.86	6.42	5.91	6.09

Results of Table 5.2(i)(b): Showing Summary of Analysis of Variance

Sources of Variance	df	Sum of Squares (Ss)	Mean Squares (Variance)	F Ratios	Remarks
Between I.Q. (Giftedness)	2	76.17	38.85	3.76	Sig.at .05
Between Sex	1	26.01	26.01	2.52	Not Sig.
Interaction: I.Q. x Sex	2	31.42	15.71	1.52	Not Sig.
Within Groups	929	9603.56	10.34		
(Error term) Total	934	9737.16			,

From the statistical table

For df = 2/929 1/929

 $F \text{ at .05} = 3.00 \quad 3.85$

F at .01 = 4.63 6.66

Table 5.2(i)(c): Showing Results of L.S.D. Test for Pair Differences among I.Q. and Sex Sub-groups

L.S.D. =
$$t\sqrt{Ms_w/N_1 + Ms_w/N_2}$$

(t for df of MS_{W} at .05 = 1.96 and at .01 = 2.58)

-	Obtained Mean Difference		uired erence .01	Signifi- cance
(i) For I.Q. Differences:				
Among Main Groups -				
Extraordinary vs Very Sup.	0.44	0.99	1.30	Not Sig.
Extraordinary vs Superior	0.95	0.92	1.21	Sig.at .05
Very Superior vs Superior	0.51	0.49	0.65	Sig.at .05

(continued)

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(Table 5.2(i) continued)

	Mean	Diffe	erence	Signifi- cance
	Difference	.05	.01	
Among Boys -				
Extraordinary vs Very Superior	r .45	1.78	2.35	Not Sig.
Extraordinary vs Superior	.12	1.67	2.19	Not Sig.
Very Superior vs Superior	.57	.94	1.24	Not Sig.
Among Girls -	•			
Extraordinary vs Very Superior	r .85	1.16	1.52	Not Sig.
Extraordinary vs Superior	1.36	1.08	1.44	Sig.at .05
Very Superior vs Superior	.51	.61	.83	Not Sig.
(ii) For Sex Differences:				
Among Extraordinary -			,	
Boys vs Girls	.65	1.94	2.55	Not Sig.
Among Very Superior -				
Boys vs Girls	.65	.90	1.17	Not Sig.
Among Superior -				
Boys vs Girls	. 59	. 49	. 65	Sig.at .05

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('I.Q. x Sex x Age) (According to Age) Table 5.2 (ii) (a) : Showing Mean Scores on Personality factor B (General Intelligence Versus Mental dDefect) of each of main and Sub-Groups. (Sample Size: 683)

Truditor dittr, disp., draw 40°7, pilka, disp, piere, 40°7, pilka, disp, piere, 40°7, pilka, 40°7, piere, 40°7, pilka, 40°7, piere, 40°					Age in	Vears	3	Address of the control of the contro	مقال مرد والديد والمديدة المديدة المديدة المديدة المديدة	· Annual Property Constitution of the Constitu	de como amos de como de como	-		***********	
		13			14				15		Total	اسر	Tc (Se)	Total (Sexwise)	
i	Nos	Scores Mean	Mean	No.	No. Scores	Mean	No.	Scores Mean	Mean	No.	Scores Mean	Mean	No.	No'. Scores Mean	Mean
Boys (M)	•			-					a de la composiçõe de la c	***	, de la company des company de la company de	, de pris de la pris d		And the second s	-
Highly Superior I_1	31	208	6.70	32	219	6.84	32	225	7.03	95	652	6.85	0	((
Superior ${ t I}_2$	33	. 230	5.89	85	534	6.28	82	528	6.21	209	1292	6.18	ع 4	44 44	0 9 9
Girls (F)						,	•				,				
Highly Superior \mathbf{I}_1	30	180	00.9	64	401	6.26	7.1	467	6.57	165	1048	6.35	(i i	(
Superior ${ m I}_2$	56	316	5.64	75	444	5.92	83	470	5.56	214	1230	5.74	ν, υ	8/77	T0.0
Total (I.Q.wise)															
Highly Superior ${ m I}_{ m I}$	61	388	6.36	96	620	6.45	103	692	6.71	260	1700	6.53	CO	7000	0
Superior ${ m I}_2$	92	546	5.74 1	160	978	6.11	168	866	5.94	423	2522	5.96	500	7 7 7 †	0 • 0
Total (Agewise)	156	934	5.99 2	256	1598	6.24	271	1690	6.23	683	4222	6.18			
d diese films films dans dans films diese dans diese diese dans dans diese films diese dans dans dans dans dans	1) ! !	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	7 7 7 7 9	` ! !	111111111111	***************************************	parte mer dem etan tana t	Men Mary Street Street Street Street Street Street Street Street Street	Te days flare flare days days in		Man den des	

Table 5.2(ii) (b): Showing Summary of Results of Analysis of Variance

Sources of Variance	đf	Sum of Squares (Ss)	Mean Squares (Variance)	F Ratios	Remarks
Between I.Q. (Giftedness)	1	53.47	53.47	51.91	Sig.at .01
Between Sex	1	24.89	24.89	24.16	Sig.at .01
Between Age	2	7.64	3.81	3.69	Sig.at .05
Interaction: IQ x Sex	1	10.89	10.89	10.57	Sig.at .01
Interaction: IQ x Age	2	6,33	3.16	3 .0 6	Sig.at .05
Interaction: Sex x Age	2	0.65	0.31	0.30	Not Sig.
Interaction: IQ x Sex x Age	2	2. 25	1.15	1.11	Not Sig.
Within Groups (Error term)	671	695.37	1.03		
Total	682	801.49			

From the statistical table

For df = 1/671 2/671 F at .05 = 3.857 3.007 F at .01 = 6.681 4.644

Table 5.2(ii)(c): Shwoing Results of L.S.D. Test for Pair Differences among I.Q., Sex and Age SubGroups.

L.s.D. = $t\sqrt{MS_w/N_1 + MS_w/N_2}$ (t for df of MS_w at .05 = 1.96 and at .01 = 2.58)

		~~~			Obtained	D1		
					Mean		rea rences	Signifi-
	one want was the was the print the same of		-		Difference			cance.
Control of the Contro	1		and the second second second second second		2	3	4	5
(i)	For I.Q.	D:	Lffere	nces :				
	Among Boy	/s	of -					
	13 years	:	Highly	y Sup. Vs	.31	.47	•62	sig.at.01
	14 years			* *	•56	.41	.54	sig.at.01
	15 years	:	* *	* *	.82	.41	.54	sig.at.01
	Among Gir	-1:	of -		•			
	13 years	:		* *	•36	.45	•59	not sig.
	14 years	ů	,,	,,	.34	.33	.44	sig.at.05
	15 years	:	,,	,,	•91 ·	.31	•41	sig.at.01
(ii)	For Sex I	<u>) i f</u>	feren	ces_:				
	Among Hig	jh]	y Supe	erior -				
	13 years	2	Boys V	s Girls	.70	.51	.67	sig.at.01
	14 years	:	,,	11	<b>.</b> 58	.43	.57	Sig.at.01
	15 years	-	* *	* *	.46	.43	•57	Sig.at.01
	Among Sur	er	cior -					
	13 years	:	,,	,,	.25	.41	.54	not sig.
	14 years	ŧ	* *	**	.36	.31	.41	Sig.at.05
	15 years	:	,,	* *	55	.31	.41	sig.at.01

Contd....

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Table 5.2(ii)(c) contd...

			. and wife and wat and was and an		
	1	2	3	4	5
(iii)	For Age Differences -				
	Among Main Groups :				
	13 years Vs 14 years	.25	•20	.27	Sig.at.05
	13 years Vs 15 years	•26	•2ò	.267	Sig.at.05
	14 years Vs 15 years	.01	.17	.27	Not.sig.
	Among Highly Superior Bo	ys-			
	13 years Vs 14 years	.14	.51	•67	not sig.
	13 years Vs 15 years	•33	.51	•67	not sig.
	14 years Vs 15 years	.19	.49	•65	not sig.
	Among Superior Boys -				
	13 years Vs 14 years	.39	•39	•52	sig.at.05
	13 years Vs 15 years	•32	.39	<b>.</b> 52	not sig.
	14 years Vs 15 years	.07	.29	<b>.</b> 39	not sig.
	Among Highly Superior Gi	rls-			
	13 years Vs 14 years	•26	.43	•57	not sig.
	13 years Vs 15 years	•57	.43	.57	sig.at.01
	14 years Vs 15 years	31	•33	.44	not sig.
	Among Superior Girls -		ι		
	13 years Vs 14 years	. •20	.35	.46	not sig.
	13 years Vs 1 <b>5</b> years	.02	.37	•49	not sig.
	14 years Vs 15 years	26	.31	.41	not sig.

Table 5.2(iii) (a): Showing Mean Scores on Personality Factor B
(General Intelligence vs Mental Defect) of each of
Main and Sub-groups ( Sample Size: 325)
(I.Q. x Sex)

			Extraordinary	Very Superior	Superior	Total
Boys	:	Nos.	10	49	106	165
		Scores	71	333	660	1064
		Mean	7.10	6.80	6.23	6.45
Girls	:	Nos.	19	51	90	160
•		Scores	134	324	524	982
		Mean	7.05	6.35	5.82	6.14
Total	:	Nos.	29	100	196	325
		Scores	205	657	1184	2046
		Mean	7.07	6.57	6.04	6.30

Table 5.2(iii) (b): Showing Summary of Results of Analysis of Variance

Sources of Variance	đf	Sum of Squares (Ss)	Mean Squares (Variance)	F Ratios	Remarks
Between I.Q. (Giftedness)	2	37.60	18.80	7.77	Sig.at .01
Between Sex	1	7.86	7.86	3.25	Not Sig.
Interaction: I.Q. x Sex	2	4.99	2.49	1.02	Not Sig.
Within Groups (Error term)	319	771.19	2.42	•	
Total	324	821.64			

From Statistical table

For df = 2/319 1/319 F at .05 = 3.028 3.868 F at .01 = 4.676 6.716

Table 5.2(iii)(c): Showing Results of L.S.D. Test for Pair Differences among I.Q., Sex Sub-groups;

L.S.D. =  $t \sqrt{MS_W / N_1 + MS_W / N_2}$ 

(t for df of  $MS_W$  at .05 = 1.97 and at .01 = 2.59)

·····································	Obtained Mean Difference	Diff	uired erence .01	Signifi- cance
(i) For I.Q. Differences:	<del>(1885-1988) - 1988 (4-188******</del> (1-185) - 1850 - 1858 (1-185) - 1858 (1-185)	······································	PLANS AMERICAN STREET, AND PROSENTE	الانتفاقينييون والمواجعة التناوي والمواجعة المواجعة المواجعة المواجعة المواجعة المواجعة المواجعة المواجعة المواجعة
Among Main Groups -				•
Extraordinary vs Very Superior	0.50	0.64	0.85	Not Sig.
Extraordinary vs Superior	1.03	0.61	0.80	Sig.at.01
Very Superior vs Superior	0.53	0.37	0.49	Sig.at .01
Among Boys -				
Extraordinary vs Very Superior	0.30	1.08	1.40	Not Sig.
Extraordinary vs Superior	0.87	1.01	1.32	Not Sig.
Very Superior vs Superior	0.57	0.53	0.70	Not Sig.
Among Girls -			-	_
Extraordinary vs Very Superior	0.70	0.84	1.11	Not Sig.
Extraordinary vs Superior	1.23	0.77	1.01	Sig. at .01
Very Superior vs Superior	0.53	0.53	0.70	Sig.at.05
(ii) For Sex Differences:				
Among Extraordinary - Boys vs G	Birlsa.05	1.20	1.58	Not Sig.
Among Very Superior - Boys vs 6	•	0.61	0.80	_
Among Superior - Boys vs Girls		0.43	0.57	Not Sig. Not Sig.
		V : 3U	0.37	HOC STG.

Table 5.2(iv)(a): Showing Mean Scores on Personality Factor B

(General Intelligence vs Mental Defect) of each of

Main and Sub-groups. (Sample Size: 143)

(I.Q. x Sex)

	Extraordinary (Gifted)	Backward (Non-gifted)	Total
Boys : Nos.	15	61	76
Scores	96	240	336
Mean	6.40	3.93	4.42
Girls : Nos.	36	31	67
Scores	254	110	364
Mean	7.05	3.54	5.43
Total : Nos.	51	92	143
Scores	350	350	700
Mean	6.86	3.80	4.89

Results of Table 5.2(iv)b): Showing Summary of Analysis of Variance

Sources of Variance	df	Sum of Squares (Ss)	Mean Squares (Variance)	F Ratios	Remarks
Between I.Q. (Giftedness)	1	306.91	306.91	49.90	Sig.at .01
Between Sex	1	36.45	36.45	5.93	Sig.at .05
Interaction: I.Q. x Sex	1	28.84	28.84	4.68	Sig.at .05
Within Groups (Error term)	139	855,23	6.15		
Total	142	1227.43			

From statistical table

For df = 1/139

F at .05 = 3.91

F at .01 = 6.825

Table 5.2(iv)(c): Showing Results of L.S.D. Test for Pair Differences among I.Q., Sex Sub-groups

(L.S.D. =  $t\sqrt{MS_W/N_1 + MS_W + N_2}$ 

(t for df of  $MS_{W}$  at .05 = 1.98 and at .01 = 2.615)

and the second second second second second	arvagundung nak habungarak dinakularak dan bagi habung adar dan bagi bagi mak habi bagi hagi bagi bagi bagi ba	Obtained Mean Difference	Requir Differe	ence	Signifi- cance
(i)	For I.Q. Differences:				
	Among Boys -				
	Extraordinary vs Backward	2.47	1.41	1.86	Sig.at .01
	Among Girls -			,	
	Extraordinary vs Backward	3.51	1.21	1.60	Sig.at .01
(ii)	For Sex Differences:		•		
	Among Extraordinary -				
	Boys vs Girls	0.65	1.50	1.99	Not Sig.
	Among Backward - Boys vs Gir	1s 0.39	1.09	1.44	Not Sig.

The maximum score on this factor is also 10, and the average scores of the four groups of 935, 683, 325 and 143 subjects on this factor B were respectively 5.09, 6.18, 6.30, and 6.86 by the gifted 51 and 3.80 by the backward 92, both making an average of 4.89 on the whole. The subjects under study are above average on this factor, i.e. are somewhat more conscientious; persevering and intellectual. Its relation to other factors is discussed below.

As it would be seen from the results in Table 5.2(i)(b), only giftedness (I.Q.) contributed significantly to this factor B of general intelligence. This is as expected. Among these I.Q. groups, there was no significant difference between the extraordinary and the very superior, but the superior differed both from the extraordinary and the very superior on the whole. No other factor sex nor interaction was significant in analysis of data of 935 subjects.

The closer examination of results of L.S.D. test on data of 935 subjects reveals that no I.Q. groups differed among boys, but among girls only the extraordinary and the superior differed Similarly though there were no sex differences on the whole, the superior group showed sex differences in favour of boys.

The results in Table 5.2(ii) (b) of 683 subjects, analysing the I.Q., sex and age reveals that all the three factors viz. giftedness, sex and age and contributed significantly to factor B, and in addition shows significant I.Q. x sex and I.Q. x age interactions. Thus, among I.Q. main groups, as expected the highly superior scored significantly higher (6.53) than the superior (5.96); the boys scored significantly higher (6.39) than girls (6.01); and among the age groups, 13 age group was significantly different and lower (5.99) than both the 14 age group (with score 6.24) and the 15 age group (with score 6.23) M both being almost equal.

Examining the L.S.D. test results in Table 5.2(ii)(c) all I.Q. groups differed at all ages and in both sexes, except the highly superior and superior being not different among girls of 13 age. Among sex groups, there were sex differences in all sub-groups, except among superior of 13 age. Among the age groups though there were significant age differences on the whole, especially between 13 vs 14, and 13 vs 15, no sub-group age pair showed significant age differences, except superior boys 13 vs 14 and highly superior girls 13 vs 15. Though the highly superior scored higher than the superior at all three ages or in both sexes, the gap between two I.Q. levels differed at different age and sex levels and this accounted for I.Q. x sex and also I.Q. x age significant interactions.

The results in Table 5.2(iii) (b) of 325 subjects show the same picture as in Table 5.2(i) (b), i.e. only giftedness being significant; the results in Table 5.2(iii) (c) shows that extraordinary and very superior are not different, but superior differed from both other I.Q. groups on the whole. Further, among boys no I.Q. group differed; but among girls superior differed from both extraordinary and very superior, both mutually not different as on the whole. There were no sex differences in any sub-group.

Finally, the results of 143 subjects in Table 5.2(iv) (b) reveal that I.Q., sex and their interaction are all significant. The gifted scored definitely higher (6.86) than the non-gifted (3.80); and surprisingly girls scored higher (5.43) than boys (4.42), in contrast to boys getting in all earlier three samples higher than girls (though not always significant). However, the closer examination of figures in Table 5.2(iv) (a) and results in Table 5.2(iv) (c) show that the extraordinary scored significantly higher than the backward both among boys as well as girls on the whole; but among the extraordinary, girls scored higher than boys and among the backward, boys scored higher than girls though not significantly at any I.Q. level. This accounted for significant I.Q. x sex interaction.

To sum up, giftedness was a significantly contributing factor to personality factor B in all cases. Sex was significant in some cases, particularly in case of both superior as well as highly superior of 14 and also 15 ages. Age was significant on the whole and particularly making 13 age group lowly different from 14 age group in case of superior boys, and from 15 age group in case of highly superior girls, all these accounting for significant I.Q. x sex and I.Q. x age interactions.

## 5.3 PERSONALITY FACTOR C ( EMOTIONAL STABILITY OR EGO STRENGTH VS DISSATISFIED EMOTIONALITY ) AND GIFTEDNESS

This factor C refers on the positive side to emotional stability; including ego strength, emotional maturity, absence of neuroticism, being calm, phlegmatic, realistic, placid, etc.

The scores on this factor in all four groups were statistically analysed separately and the results have been summarized in Tables 5.3(i),(ii),(iii),(iv) - (a),(b),(c).

Table 5.3 (i) (a): Showing Mean Scores on Personality Factor (Emotional Stability or Ego Strength vs Dissatisfied Emotionality) of each of Main and Sub-groups (Sample Size:935) (I.Q. x Sex)

	nivet y	R. ANGEL STATE OF A ANG	Extra- ordinary	Very Superior	Superior	Total
Boys	:	Nos.	15	76	334	425
		Scorés	71	371	1587	2029
		Mean	4.73	4.88	4.78	4.77
Sirls	:	Nos.	36	145	329	510
		Scores	159	676	1501	2336
		Mean	4.41	4,66	4.47	4.5ê
Cotal	:	Nos.	51	221	663	/935
		Scores	230	1047	<b>30</b> 88	4365
		Mean	4.50	4.73	4.62	4.67

Results of Table 5.3(i)(b): Showing Summary of Analysis of Variance

Sources of Variance	đ£	Sum of Squares (Ss)	Mean Squares (Variance)	F Ratios	Remarks
Between I.Q. (Giftedness)	2	2.41	1.20	0.28	Not Sig.
Between Sex	1	9.27	9.27	2.13	Not Sig.
Interaction: I.Q. x Sex	2	40.10	20.05	4.60	Sig.at .05
Within Groups (Error term)	929	4052.44	4.36		
Total	934	4104.22			

From the statistical table

For df = 2/929 1/929

F at .05 = 3.00 3.85

F at .01 = 4.63 6.66

Table 5.3.(i)(c): Showing Results of L.S.D. Test for Pair Differences among I.Q. and Sex Sub-groups

L.S.D. = 
$$t\sqrt{MS_w/N_1 + MS_w/N_2}$$

( t for df of  $MS_{W}$  at .05 = 1.96 and at .01 = 2.58)

		Obtained Mean Difference	Requ Diffe .05		Signifi- cance
(i)	For I.Q. Differences:				
	Among Main Groups -				
	Extraordinary vs Very Sup	0.23	0.62	0.83	Not Sig.
	Extraordinary vs Superior	0.12	0.58	0.77	Not Sig.
	Very Superior vs Superior	0.11	0.31	0.41	Not Sig.
	Among Boys -				,
	Extraordinary vs Very Sup	0.15	1.16	1.52	Not Sig.
	Extraordinary vs Superior	0.05	1.08	1.42	Not Sig.
	Very Superior vs Superior	0.10	0.53	0.70	Not Sig.
	**		(co	ntinued	)

(Table 5.3(i)(c) continued)

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mangine describes of the secure processing of the West Terr Through or Terr I through of the secure Through of	Obtained Mean	Diff	uired erence	Significance
erinder-reserved (200-Consigns, Albert brentsted ph. 420 majorished (100-14) to , beg upder classified about to Abbut brends (200-Consigns) (200-14) to .	Difference	.05	.01	
Among Girls -				
Extraordinary vs Very Sup.	0.25	0.76	1.01	Not Sig.
Extraordinary vs Superior	0.06	0.73	0.95	Not Sig.
Very Superior vs Superior	0.19	0.41	0.54	Not Sig.
(ii) For Sex Differences:	١			
Among Extraordinary -				
Boys vs Girls	0.32	1.27	1.68	Not Sig.
Among Very Superior				
Boys vs Girls	0.22	0.55	0.75	Not Sig.
Among Superior -Boys vs Gir	ls 0.31	0.31	0.41	Sig.at .05
work and all the last take take may been take the said take to the take take take				

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Table 5.3(ii)(a) : Showing mean Scores on Personality Factor C (Emotional Stability or Egostrength Versus Dissatisfied Emotionality) of each of Main and Sub-groups. (According to Age) (Sample size : 683)

(I.O. x Sex x Age)

		er diber die er der de er de er de er de		n. Organization	Age in	years.								Total	al le
-		13			14			15			Total			(Sexwise)	ise)
	No.	No. Scores Mean	Mean	No.	No. Scores	Mean	No.	Scores	Mean	No.	Scores	Mean	Q	Scores	Mean
Boys (m)				1. No. of the last											
Highly Superior $I_1$	3	137	4.41	32	160	5.00	32	164	5.12	95	461	4.35	2	7	Q V
Superior $I_2$	39	182	4.66	82	401	4.71	82	430	5.05	209	1013	4.84	† 0 0	<b>14/4</b>	4, 0
Girls (F)	ć		•	•		!									
Highly Superior I	သူ	T35	4.50	64	290	4.53	7.1	328	4.61	165	753	4.56	İ		1
Superior ${ m I}_2$	5	251	4.48	75	320	4.26	83	392	4.72	214	963	4.50	379	1716	4.53
Total (I.G.wise)															
Highly Superior $I_1$	61	272	4.45	96	450	4.68	103	492	4.77	260	1214	4.66	683	3190	4.67
Superior I ₂	o 3	433	4.55 1	160	721	4.50	168	822	4.89	423	1976	4.67	) )	) 1 1	
Total (Agewise)'	156	705	4.52 2	256	.71	4.57	271	1314	4.85	683	3190	4.67			
TO THE STATE OF THE STATE STAT				-	1111			1							!!!!!!!!

Results of Table 5.3(ii)(b): Showing Summary of Analysis of Variance

Sources of Variance	đf	Sume of Squares (SS)	Mean Squares (Variance)	F Ratios	Remarks
Between IQ					
(Giftedness)	1	0.01	0.01	0.003	Not Sig.
Between Sex	1	17.38	17 •38 ⁻	6.53	Sig.at .05
Between Age	2	14.54	7.27	2.73	Not.Sig.
Interaction : IQ x Sex	1	0.48	0.48	0.18	Not. Sig.
Interaction : IQ x Age	2	3.16	1.58	0.59	Not sig.
Interaction : Sex x Age	2	4.00	2.00	0.75	Not sig.
Interaction : IQ x Sex x Age	2	2.18	1.09	0.41	Not Sig.
Within Groups (error terms)	671	1785.13	2.66		
Total	682	1826.88			

From the statistical table

Table 5.3(ii) (c) : Showing Results of L.S.D. Test for Pair Differences Among I.Q., Sex and Age Sub-Groups. L.S.D. = t  $\sqrt{\text{MS}_{\text{W}} / \text{N}_{1} + \text{MS}_{\text{W}} / \text{N}_{2}}$ 

( t for df of  $MS_W$  at .05 = 1.96 and at .01 = 2.58)

traditional enterprising against the second	n garagan garagan garagan ayan garagan gagan garagan garagan garagan garagan garagan garagan garagan garagan g Garagan garagan garaga Garagan garagan garaga	Obtained Required Mean Difference. Difference .05 .01			Signifi- cance.
	1.	2	3	4	5
(i)	For I.Q. Differences	,			
	Among Boys of -				
	13 years: Highly Sup. VS Superior.	.25	.76	1.01	not sig.
	14 years: ,, ,,	.29	•67	.88	not sig.
	15 years : ,, ,,	•07	•67	•38	not sig.
	Among Girls of -				
	13 years : ,, ,,	.02	.73	•95	not sig.
	14 years : ,, ,,	.27	•55	.72	Not sig.
	15 years : ,, ,,	.11	.51	•67	not sig.
(11)	For Sex Differences:		J		
	Among Highly Superior -				
	13 years Boys Vs Girls	•09	.82	1.08	not sig.
	14 years Boys Vs Girls	.47	<b>.</b> 69	•90	not sig.
	15 years Boys Vs Girls	0.51	•69	•90	not sig.
	Among Superior -				
	13 years Boys Vs Girls	.18	•67	.83	not sig.
	14 years Boys Vs Girls	0.45	.51	•67	not sig.
	15 years Boys Vs Girls	.33	.49	•65	not sig.
				a	~

Contd....

Table 5.3(ii)(c) Contd...

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	and the real has been the real real one	2	3.	4.	5.		
(iii)	For Age differences:						
	Among Main Groups -						
	13 years vs 14 years	.05	.33	.44	Not sig.		
	13 years vs 15 years	•33	.31	.41	sig.at.05		
	14 years vs 15 years	•28	.27	.36	sig.at.05		
	Among Highly Superior B	oys					
	13 years vs 14 years	•59	.80	1.06	not sig.		
	13 years vs 15 years	•71	.80	1.06	not sig.		
	14 years vs 15 years	•12	.80	1.06	not sig.		
	Among Superior Boys -						
	13 years vs 14 years	<b>.</b> 65	•63	.83	not sig.		
	13 years vs 15 years	· • <b>3</b> 9	•63	.83	not sig.		
	14 years vs 15 years	.34	.49	•65	not sig.		
	Among Highly Superior Girls-						
	13 years vs 14 years	•03	.71	.93	not sig.		
	13 years vs 15 years	.11	-71	•93	not sig.		
	14 years vs 15 years	•08	<b>.</b> 55	.72	not sig.		
	Among Superior Girls -						
	13 years vs 14 years	.22	•57	.75	not sig.		
	13 years vs 15 years	.24	•55	.72	not sig.		
	14 years vs 15 years	⊍ <b>-4</b> 6	.51	•67	not sig.		

Table 5.3(iii)(a): Showing Mean Scores on Personality Factor C

(Emotional Stability or Ego Strength vs Dissatisfied

Emotionality) of each of Main and Sub-groups (Sample
Size 325) (I.Q. x Sex)

Martingly actives allowed the sold particular	<del></del>		Extra- ordinary	Very Superior	Superior	Total
Boys	;	Nos.	10	49	106	165
		Scores	47	237	513	797
		Mean	4.70	4.83	4.84	4.83
Girls	:	Nos.	19	51	90	160
		Scores	86	220	431	737
		Mean	4.53	4.31	4.79	4.61
Total	:	Nos.	29	100	196	325
		Scores	133	457	944	1534
	-	Mean	4.59	4.57	4.82	4.72

Results of Table 5.3(iii)(b): Showing Summary of Analysis of Variance

Sources of Variance	đf	Sum of Squares (Ss)	Mean Squares (Variance)	F Ratios	Remarks
Between I.Q. (Giftedness)	2	4.59	2.29	0.85	Not Sig.
Between Sex	1	4.08	4.08	1.51	Not Sig.
Interaction: I.Q. x Sex	2	3.08	1.54	0.57	Not Sig.
Within Groups (Error term)	319	860.77	2.70		
Total	324	872.52			

From statistical table

For df = 2/319 1/319 F at .05 = 3.028 3.868 F at .01 = 4.676 6.716

Table 5.3(iii) (c): Showing Results of L.S.D. Test for Pair Differences among I.Q. and Sex Sub-groups  $L.S.D. = t \sqrt{MS_W / N_1 + MS_W + N_2}$  (t for df of  $MS_W$  at .05 = 1.97 and at .01 = 2.59)

		Obtained Mean Difference		uired erence .01	Signifi- cance
(i)	For I.Q. Differences:				
	Among Main Groups -				
	Extraordinary vs Very Sup.	.02	. 69	.91	Not Sig.
	Extraordinary vs Superior	.23	.63	.83	Not Sig.
	Very Superior vs Superior	. 25	. 39	.52	Not Sig.
	Among Boys -				
	Extraordinary vs Very Supe	rior.14	1.12	1.48	Not Sig.
	Extraordinary vs Superior	.14	1.06	1.40	Not Sig.
	Very Superior vs Superior	.01	.55	.72	Not Sig.
	Among Girls -		í		
	Extraordinary vs Very Supe	rior .22	.87	1.14	Not Sig.
	Extraordinary vs Superior	. 26	.81	1.06	Not Sig.
	Very Superior vs Superior	· . 48	.57	<b>. 7</b> 5	Not Sig.
(ii)	For Sex Differences:	6			•
	Among Extraordinary -				
	Boys vs Girls	.17	1.26	.17/	Not Sig.
	Among Very Superior -				_
	Boys vs Girls	·.52	. 65	.85	Not Sig.
	Among Superior -				_
	Boys vs Girls	.05	. 47	.62	Not Sig.

Table 5.3(iv)(a): Showing Mean Scores on Personality Factor C

(Emotional Stability or Ego Strength vs Dissatisfied

Emotionality)of each of Main and Sub-groups. (Sample

Size: 143)

I.Q. x Sex

windpierszen, wie 3000 Collecti		Andrews and Angeles Colonic Colonic (See City of See	Extra- ordinary (Gifted)	Backward (Non-gifted)	Total
Boys	:	Nos.	15	61	76
		Scores	71	232	303
		Mean	4.73	3.80	3.98
Girls	:	Nos.	36	31	67
		Scores	159	123	282
		Mean	4.41	3.96	4.21
Total	:	Nos.	51	92	143
		Scores	230	355	585
		Mean	4.50	3.85	4.09

Results of

Table 5.3(iv)(b): Showing Summary of Analysis of Variance

Sources of Variance	df	Sum of Squares (Ss)	Mean Squares (Variance)	F Ratios	Remarks
Between I.Q. (Giftedness)	1	13.91	13.91	8, 28	Sig.at .0
Between Sex	1	1.76	1.76	1.05	Not Sig.
Interaction: (I.Q. x Sex)	1	.14	0.14	08	Not Sig.
Within Groups (Error term)	139	234.01	1.68		
Total	142	249.82			

From statistical table

For df = 1/139

F at .05 = 3.91

F at .01 = 6.825

Table 5.3(iv)(c): Showing Results of L.S.D. Test for Pair Differences among I.Q., Sex Sub-groups

L.S.D. = 
$$t\sqrt{MS_w/N_1 + MS_w/N_2}$$

( t for df of  $MS_{W}$  at .05 = 1.98 and at .01 = 2.615)

	I	Obtained Mean Difference	Diffe	ired rence .01	Signifi- ficance
(i)	For I.Q. Differences:	,			
	Among Boys -				
	Extraordinary vs Backward	.93	.73	.97	Sig.at .05
	Among Girls -				
	Extraordinary vs Backward	d .45	.63	.84	Not Sig.
(ii)	For Sex Differences:				
	Among Extraordinary -				
	Boys vs Girls	.32	.79	1.05	Not Sig.
	Among Backward -				
	Boys vs Girls	.16	.57	.76	Not Sig.
		-			

The maximum score on this factor is ten, and the average scores of the four groups turned out to be 4.67, 4.67, 4.72 and 4.09 respectively, implying that the subjects under study were generally emotionally stable on an average. Results of further analysis are described below.

The results in Table 5.3(i)(b) of 935 subjects show that neither giftedness nor sex was independently significant, but their interaction was significant. The results in Table 5.3(1)(c)

reveal that though neither giftedness nor sex was not significant on the whole, there were just significant sex difference among the superior, and gaps were so unequal with unequal number in each cell that the interaction was made significant, though apparently boys tended to be higher than girls, and the order of I.Q. level sub-groups tended to be the same.

The results of 683 subjects analysed in I.Q. x sex x age design in Table 5.3(ii)(b) showed that only sex was significantly contributing to factor C of emotional stability; the boys were more stable (4.85) than girls (4.53). However, the detailed results in Table 5.3(ii)(c) show that there were no I.Q. differences at any age level among boys or girls. There were no sex differences at any age level or I.Q. level, though significant on the whole. As regards the age differences, (perhaps due to unequal numbers), though not significant on the whole, 15 age group (4.85) differed significantly from both the 13 age group (4.52) and the 14 age group (4.57) both mutually not different; and yet at no I.Q. level nor among any sex, there were not age pair differences significant (again perhaps due to unequal number in each cell).

The results of 325 subjects in Table 5.3(iii) (b) further reveal that neither giftedness nor sex nor the interaction was significant on the whole, or in any sub-group.

Finally, the results of 143 subjects in Table 5.3(iv)(b) reveal that again giftedness was contributing significantly to emotional maturity; the extraordinary scored higher (4.50) than the backward (3.85) on the whole. Neither sex nor interaction was significant. The Table 5.3(iv)(c) shows that only among the boys, the two I.Q. groups differed; not among girls.

To sum up, giftedness was contributing to emotional maturity only in case of boys compared with non-gifted boys. Sex appeared to be significant on the whole, though truly not in any sub-group, in an I.Q. x sex x age study due to unequal trends of unequal numbers in sub-group comparisons. Age was significant only at 15 age making it different from 13 and 14 age groups.

5.4. PERSONALITY FACTOR E ( DOMINANCE OR ASCENDANCE VS SUBMISSION)
AND GIFTEDNESS

This factor E refers on the positive side to dominant, aggressive, competitive, assertive, independent, stern, solemn, hard, unconventional, attention-getting, tough type of personality.

The scores on this factor of all the four groups were separately analysed in a factorial design by F-test and L.S.D. test, and the results have been summarized in Tables 5.4(i), (iii), (iv) - (a), (b) and (c) as usual.

Table 5.4(i)(a): Showing Mean Scores on Personality Factor E

(Dominance or Ascendance vs Submission) of each of

Main and Sub-groups (Sample Size: 935)

(I.Q. x Sex)

**************************************	<del>-</del>		Extra- ordinary	Very Superior	Superior	Total
Boys	: No	S.	15	76 ·	334	425
	Sc	ores	67	351	1612	2030
	Me	ean	4,46	4.61	4.82	4.78
Girls :	: No	s.	36	145	329	510
	Sc	cores	170	617	1311	2098
	Me	ean	4.72	4.25	3.98	4.11
Total :	: No	s.	51	221	663	935
	Sc	cores	237	968	2923	4128
	Me	an	4.64	4.38	4.40	4.41

Results of Table 5.4(i)(b): Showing Summary of Analysis of Variance

Sources of Variance	df	Sum of Squares (Ss)	Mean Squares (Variance)	F Ratios	Remarks
Between I.Q. (Giftedness)	2	3,03	1.51	0.30	Not Sig.
Between Sex	1	101.83	101.83	20.33	Sig.at .01
Interaction: I.Q. x Sex	2	22.80	11.40	2.28	Not Sig.
Within Groups (Error term)	929	4658.33	5.01		
Total	934	4785.99			

From the statistical table For df = 2/929 1/929 F at .05 = 3.00 3.85 F at .01 = 4.63 6.66

Table 5.4(i)(c): Showing Results of L.S.D. Test for Pair Differences among I.Q. and Sex Sub-groups  $L.S.D. = t \sqrt{\frac{MS_w}{N_1} + \frac{MS_w}{N_1}} / \frac{N_1}{N_1}$ 

(t for df of  $MS_{W}$  at .05 = 1.96 and at .01 = 2.58)

	Obtained Mean Difference	Diff	uired erence .01	Signifi- cance
(i) For I.Q. Differences:				
Among Main Groups -				
Extraordinary vs Very Superior	0.26	0.69	0.90	Not Sig.
Extraordinary vs Superior	0.24	0.65	0.85	Not Sig.
Very Superior vs Superior	0.02	0.35	g. 46	Not Sig.
Among Boys -				
Extraordinary vs Very Superior	0.15	1.23	1.63	Not Sig.
Extraordinary vs Superior	0.36	1.16	1.52	Not Sig.
Very Superior vs Superior	0.21	0.55	0.72	Not Sig.
Among Girls -				
Extraordinary vs Very Superior	0.47	0.82	1.08	Not Sig.
Extraordinary vs Superior	0.74	0.76	1.01	Not Sig.
Very Superior vs Superior	0.27	0.43	0.57	Not Sig.
(ii) For Sex Differences:				
Among Extraordinary -				
Boys vs Girls	0.26	1.35	1.78	Not Sig.
Among Very Superior -				-
Boys vs Girls	0.36	0.63	0.83	Not Sig.
Among Superior - Boys vs Girls	0.84	0.35	0.44	Sig.at .01
	•			

Ascendance Versus Submission) of each of Main and Sub-groups. x Age) Table 5.4 (ii) (a) : Showing Mean Scores on Personality Factor E (Dominance or (Sample Size : 683) (I.Q. x Sex (According to age)

CONTRACTOR				Age	e in Years	ars								/	
		13				B		15		Total	3.1		7	Total	
	S.	No. Scores Mean	Mean	Nos S	cores	Mean	No.	Scores	Mean	No. Sc	Scores Mean	an	S.	XWI Se	-
													No. 9	Scores Mean	Mean
Boys (M)												! !			
Highly Superior $\mathbf{I}_1$	31	164	5.29	32	144	4.50	32	136	4.25	95 444		4.58	304	1443	4.75
Superior $_2$	39	177	4.53	85	392	4.61	82	430	5.05	209 999		4.77	; >	) ; ;	)
Girls (F)															
Highly Superior $\mathbf{I}_1$	30	140	4.66	64	271	4.23	7.1	306	4.30	165 717	`	4.34	379	1602	4.23
Superior ${ t I}_2$	56	221	3.94	75	328	4.37	83	336	4.04	214 885	4	.13	)	 	
Total (I.W. Wise)															
Highly Superior I,	61	304	4.98	96	415	4.32	103	442	4.29	260 11	1161 4	4.46	683	3045	4.46
Superio <del>d</del> I ₂	ر ا ا	398	4.18	160	720	5.50	168	766	4.55	423 18	1884 4	.45			
Total (Agewise)	156	156 702	4.50	256	1135	4.33	271	1208	4.46	683 30	3045 4	4.46		1	! ! !
Hirt wine this team from their their films then while their black drive their man, near their while joine	1			!!!!!!!!!			-		· day day (1944 447- 444- 4	Name above these some better block Total		  -  -			

Results of
Table 5.4(ii) (b) : Showing Summary of Analysis of Variance

Sources of Variance	đf	Sum of Squares (SS)	Mean Square <b>s</b> ( ^V ariance)	F Ratio <b>s</b>	Remarks
•					
Between IQ					
(Giftedness)	1	0.02	0.02	0.008	Not.sig.
Between Sex	1	45.58	45.58	20.16	Sig.at.01
Between Age	2	0.42	0.21	0.092	Not sig.
Interaction IQ x Sex	1	4.81	4.81	2.12	Not. sig.
Interaction IQ x Age	2	29.88	14.94	6.61	Sig.at.01
Interaction Sex x Age	2	6.36	3.18	1.41	not. sig.
Interaction IQ x Sex x Age	2	4.38	2.19	0.96	not sig.
Within groups (error term)	671	1521.12	2.26		
Total:	682	1612.57			

From the Statistical table

For df = 1/671 2/671 F at .05 = 3.857 **3.**007

F at .01 = 6.681 4.644

Table 5.4(ii)(c): Showing Results of L.S.D. Test for Pair Differences among I.Q., Sex and Age Sub-Groups.

L.s.D. =  $t\sqrt{MS_{\rm W}/N_{\rm 1} + MS_{\rm W}/N_{\rm 2}}$ t for df of  $MS_{\rm W}$  gt .05 = 1.96 and at .01 =2.587

William may shop shop shop shop shop shop shop shop	Marinda, Araba and Marinda, and Araba and Arab	a, di mang di dingga di mang dingga di dingga di dingga di dingga di dingga dingga dingga dingga dingga dingga	The state of the s	Obtained Mean Differen	Diffe	ired rence .01	Signifi- cance
	1			2	3		5
(i)	For I.Q. Di		ces :				
	13 years Hi			0.66	•71		not sig.
	14 years			0.11	.61	.80	not sig.
	15 years	,,	,,	0.80	.61	.80	sig.at.01
	Among Girls	of					
	13 years	* 1		0.72	•67	.88	sig.at.05
	14 years	* *		.14	•51	•67	not sig.
	15 years	.,	,,	.26	.47	.62	not sig.
<b>(</b> 11)	For Sex Dif						
	13 year Boy	s Vs G	irls	•63	.76	1.01	not sig.
	14 ,,	,,	,,	.27	•65	.85	not sig.
~	15 ,,	,,	* *	•05	•63	.83	not sig.
	Among Super	rior -		F.0		00	and the second and
	13 ,,	2.2	* *	.59	.63		_
	14 n.	• •	* *	.24	•47	.62	not sig.
	15 ,,		**	1.01	.45	<b>.</b> 59	sig.at.01

Contd..

Table 5.	4 (ii	) (c	) con	tã.	٠		
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	The read will be the read when the the the read the sale that the sale t			4.	5.
(iii)	For Age Differences:				,
	Among Main Groups -			,	
	13 years vs 14 years	.17	.29	•39	not sig.
	13 years vs 15 years	•04	•29	.39	not sig.
	14 years vs 15 years	13	.25	.34	not sig.
	Among Highly Superior R	pys			
	13 years vs 14 years	.79	.74	.98	sig.ət.05
	13 years vs 15 years	1.04	.74	.98	sig.at.01
	14 years vs 15. years	.25	.74	.98	not sig.
	Among Superior Boys -				
	13 years vs 14 years	.08	.59	.77	not sig.
•	13 years vs 15 years	•52	•59	.77	not sig.
	14 years vs 15 years	.44	.45	•59	not sig.
	Among Hihgly Superior Gi	rls-			
	13 years vs 14 years	.43	.67	.88	not sig.
	13 years vs 15 years	.36	•65	<b>\$</b> 85	not sig.
	14 years vs 15 years	.07	.51	•67	not sig.
	Among Superior Girls -			•	
	13 years vs 14 years	. •43	•53	.70	not sig.
	13 years vs 15 years	•10	.51	•67	not sig.
	14 years vs 15 vears	.33	.47	<b>.</b> 62	not sig.

Table 5.4(iii) (a): Showing Mean Scores on Personality

Factor E (Dominance or Ascendance vs Submission)

of each of Main and Sub-groups. (Sample Size: 325)

(I.Q. x Sex)

	·····································	Extra- ordinary	Very Superior	Superior	Total
Boys :	Nos.	10	49	106	165
	Scores	42	218	486	746
	Mean	4.20	4.45	4.58	4.52
Girls:	Nos.	19	51	90	160
	Scores	93	239	368	700
	Mean	4.89	4.69	4.08	4.38
Total :	Nos.	29	100	196	325
	Scores	135	457	854	1446
	Mean	4.66	4.57	4.36	4.45

Results of

Table 5.4(b) : Showing Summary of Analysis of Variance

(iii)					
Sources of Variance	df	Sum of 'Squares (Ss)	Mean Square (Variance)	F Ratios	Remarks
Between I.Q. (Giftedness)	2	4.35	2.17	0.70	Not Sig.
Between Sex	1	1.73	1.73	0.56	Not Sig.
Interaction: I.Q. x Sex	2	8.81	4.41	1.42	Not Sig.
Within Groups (Error term)	319	991.52	3.11		
Total	324	1006.41			

From statistical table

For df = 2/319 1/319 F at .05= 3.028 3.868 F at .01= 4.676 6.716

Table 5.4.(iii)(c): Showing Results of L.S.D. Test for Pair Differences among I.Q. and Sex Sub-groups

Differences among I.Q. and Sex Sub-groups L.S.D. = 
$$t\sqrt{\frac{MS_w}{N_1} + \frac{MS_w + N_2}{N_2}}$$
 (t for df of MS_w at .05 = 1.97 and at .01 = 2.59)

***************************************		Obtained Mean Difference	Diffe	ired rence .01	Signifi- cance
(i)	For I.Q. Differences:				
	Among Main Groups -				
	Extraordinary vs Very Su	<del>-</del>	.73	.96	Not Sig.
	Extraordinary vs Superio	r .30	. 69	.91	Not Sig.
	Very Superior vs Superio	r .21	.43	.57	Not Sig.
	Among Boys -				
	Extraordinary vs Very Su	p25	1.20	1.58	Not Sig.
	Extraordinary vs Superio		1.14	1.50	Not Sig.
	Very Superior vs Superio	p 0.13	.59	. 78	~
	Among Girls -				_
	Extraordinary vs Very Su	p. 0. 20	.93	1.22	Not Sig.
	Extraordinary vs Superio	r .81	1.17	.89	Not Sig.
	Very Superior vs Superior	r .61	1.20	1.58	Not Sig.
(ii)	For Sex Differences:				
	Among Extraordinary -	,			
	Boys vs Girls	.69	1.36	1.79	Not Sig.
	Among Very Superior -				_
	Boys vs Girls	. 24	.63	. 83	Not Sig.
	Among Superior - Boys vs Girls	.50	.51	.67	Not Sig.
<u>-</u>	GITIS				

Table 5.4(iv)(a): Showing Mean Scores on Personality

Factor E (Dominance or Ascendance vs Submission) of
each of Main and Sub-groups. (Sample Size: 143)

(I.Q. x Sex)

		in digitar selection and the s	Extra- ordinary (Gifted)	Backward (Non-gifted)	Total
Boys	:	Nos.	15	61	76
		Scores	67	263	330
		Mean	4.46	4.31	4.34
Girls	:	Nos.	36	31	67
		Scores	170	132	302
		Mean	4.72	4.25	4.51
Total	:	Nos.	51	92	143
		Scores	237	395	632
		Mean	4.64	4.29	4.42

Results of Table 5.4(iv)(b): Showing Summary of Analysis of Variance

Sources of Variance	df	Sum of Squares (Ss)	Mean Squares (Variance)	F Ratios	Remarks
Between I.Q. (Giftedness)	1	4.10	4.10	1.12	Not Sig.
Between Sex	1	0.97	0.97	0.27	Not Sig.
Interaction: I.Q. x Sex	1	. 24	0.24	.07	Not Sig.
Within groups (Error term)	139	509.52	3.66		
Total	142	514.83			

From statistical table

For df = 1/139

F at .05 = 3.91

F at .01 = 6.825

Table 5.4.(iv)(c): Showing Results of L.S.D. Test for Pair Differences among I.Q. and Sex  $\frac{1}{2}$  Substitute  $\frac{1}{2}$  L.S.D. =  $\frac{1}{2}$   $\frac{1}{2}$  MS $_{\rm W}$  /  $\frac{1}{2}$   $\frac{1}{2}$  (t for df of MS $_{\rm W}$  at .05 = 1.98 and at .01 = 2.615)

****		Obtained Mean Difference	Diffe		Signifi- cance
(i)	For I.Q. Differences:				·····································
	Among Boys -				
	Extraordinary vs Backwa	rd .15	1.09	1.44	Not Sig.
	Among Girls -		,		
	Extraordinary vs Backwa	rd .47	.93	1.23	Not Sig.
(ii)	For Sex Differences:				
	Among Extraordinary -				
	Boys vs Girls	. 26	1.17	1.54	Not Sig.
	Among Backward - Boys v Girl		.83	1.10	Not Sig.

The maximum score on this Factor is ten, and the four groups on an average scored 4.41, 4.46, 4.45 and 4.42 respectively, implying that all subjects are in the centre of the scale. The results of statistical analysis are discussed below.

The results in Table 5.4(i)(b) of 935 subjects show that only sex was a significant factor contributing to dominance. Neither giftedness nor interaction was significant. Boys were found more dominant (4.78) than girls (4.11) as expected.

However, the closer examination of the results in Table 5.4(i)(c) show that the sex differences were significant only among the superior, making also the sex differences on the whole significant. No other sub-group pair in I.Q. or sex was significant.

The results in Table 5.4(ii) (b) of 683 subjects also reveal that sex as well as I.Q. x age interaction were significant; neither giftedness nor age nor any other interaction showed significance. Again boys were more dominant (4.75) than girls (4.23) on the whole. However, at 13 for the highly superior were more dominant than the superior, while at 14 and 15 the superior were more dominant than the highly superior, and this accounts for significant interaction between I.Q. x age. The results in Table 5.4(ii)(c) show though giftedness was not significant on the whole the two I.Q. groups differed significantly at 15 age of boys, (superior being more dominant), and at 13 age of girls ( highly superior being more dominant). Similarly, though sex differences were significant on the whole, detailed analysis shows significant sex differences only among the superior 15 age group. Similarly, though there were no significant age differences on the whole, the 13 age group differed significantly from 14 age group as well as from 15 age group in case of highly superior boys.

The Table 5.4(iii)(b) of 325 subjects showed neither giftedness nor sex nor their interaction to be significant on the whole or in any sub-group pair.

Finally, the results in Table 5.4(iv)(b) of 143 subjects also showed neither giftedness nor sex nor their interaction to be significant.

To sum up, only sex contributed significantly to dominance, boys being more dominant than girls on the whole and particularly among the superior group of 15 age. The highly superior were higher at 13 and lower at 14 and 15 on dominance, thus accounting for significant I.Q. x age interaction.

## 5.5 PERSONALITY FACTOR F ( SURGENCY VS DESURGENCY ) AND GIFTEDNESS

This factor F refers on the positive side to surgency, one of the most important component of extraversion; including the traits of being enthusiastic, happy-go-lucky, talkative, cheerful, frank, expressive, quick and alert etc.

The scores on this factor F of all the four groups were separately analysed statistically by F test and L.S.D. test and the results have been summarized in Tables 5.5(i),(ii), (iii), (iv) - (a), (b), and (c) as usual.

Table 5.5(i)(a): Showing Mean Scores on Personality Factor F
(Surgency vs Desurgency) of each of Main and Subgroups (Sample size: 935)

~	~		<b>~</b>
1.	Q.	х	Sex

			Extra- ordinary	Very Superior	Superior	Total
Boys	:	Nos.	15	76	334	425
*		Scores	43	247	1042	1332
		Mean	2.87	3.25	3.12	3.13
Girls	:	Nos.	36	145	329	510
		Scores	120	482	1042	1644
		Mean	3.33	3.32	3.17	3.22
Total	:	Nos.	51	221	663	935
		Scores	163	729	2084	2976
		Mean	3.20	3.30	3.14	3.18

Results of

Table 5.5(i)(b) : Showing Summary of Analysis of Variance

Sources of Variance	đf	Sum of Squares (Ss)	Mean Squares (Variance)	F Ratios	Remarks
Between I.Q. (Giftedness)	2	4.01	2.05	0.53	Not Sig.
Between Sex	1	1.85	1.85	0.48	Not Sig.
Interaction: I.Q. x Sex	2	1.19	0.59	0.15	Not Sig.
Within Groups (Error term)	929	3602.68	3.88		
Total	934	3609.73			

From the statistical table

For df = 2/929 1/929 F at .05 = 3.00 3.85 F at .01 = 4.63 6.66

Table 5.5(i)(c): Showing Results of L.S.D. Test for Pair Differences among I.Q. and Sex Sub-groups L.S.D. =  $t\sqrt{MS_W/N_1} + MS_W/N_2$  (t for df of MS_W at .05 = 1.96 and at .01 = 2.58)

	Obtained Mean		uired erence	Signifi-
	Difference	.05		cance
(i) For I.Q. Differences:				
Among Main Groups -	•			
Extraordinary vs Very Sup.	.10	.61	.80	Not Sig.
Extraordinary vs Superior	.06	.51	.67	Not Sig.
Very Superior vs Superior	.16	. 29	. 39	Not Sig.
Among Boys -				
Extraordinary vs Very Super	ior :.38	1.08	1.42	Not Sig.
Extraordinary vs Superior	. 25	1.02	1.34	Not Sig.
Very Superior vs Superior	·13	. 49	. 65	Not Sig.
Among Girls -				
Extraordinary vs Very Super:	ior .01	.73	.95	Not Sig.
Extraordinary vs Superior	. 16	. 69	•90	Not Sig.
Very Superior vs Superior	. 15	. 39	.52	Not Sig.
(ii) For Sex Differences:				
Among Extraordinary -				
Boys vs Girls	.46	1.20	1.57	Not Sig.
Among Very Superior				
Boys vs Girls	.07	.55	.72	Not Sig.
Among Superior				
Boys vs Girls	.05	. 29	. 39	Not Sig.

Table 5.5 (ii) (a) : Showing Mean Scores on Personality Factor F(Surgency Versus Desurgency) (I.Q. x Sex : x Age) of Each of Main and Sub-groups. (According to age) (Sample Size : 683 )

					Age	in Years	ars			The state of the s				Total	
	ŕ	13			14			15		Total	1		Ř	(Sexwise	_
	No	Scores Mean	Mean	No.	Scores	Mean	No.	Scores	Mean	No. S	Scores Mean	lean	No.	Scores	Mean
Boys (M)	: ! !														
Highly Superior $\mathbf{I}_{1}$	31	86	3.00	32	101	3,15	32	101	3.16	95 2	295	3.10	204	770	, ,
Superior ${f I}_2$	39	119	3.05	85	265	3.11	85	268	3.15	209 6	652	3.11	† > >	F	0.00
Girls (F)															
Highly Superiof $\mathbf{I}_1$	30	86	3.26	64	207	3,23	7.1	247	3.47	165 5	552	3.34	070	1008	, ,
Superior I ₂	56	188	3.35	75	241	3.21	83	247	2.97	214 6	929	3.15	n	777	0 4 4
Total (I.Q.wise)															
Highly Superior I $_1$	61	191	3.13	96	308	3.20	103	348	3.37	260 8	847	3.25	o Q	7. 7.	0
Superior $I_2$	95	307	3.23	160 506		3.16	168	515	3.06	423	1328	3.13	? ? ?	7 / 1 %	0 -1 • •
Total (Agewise)	156	498	3.19	256	814	3.17	271 8	863	3.18	683 2	2175	3.18			
is age. Then then then then then step step like then then then then then then then the	!	u dan dan sebu tipu dan dan dan dini	! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! !	! ! ! !			!	***	Der State Date dere State State inter-	. Many Step Step Step Step 1	None Steen Print Steep Steen Steen	to Man upon poor ding dive laye.		!	† † †

Results of Table 5.5(ii) (b) : Showing summary of analysis of Variance

Sources of Variance	đf	Sum of Squares (SS)	Mean Square <b>s</b> (variance)	F Ra∕tios∋;	Remarks.
Between IQ					
(Giftedness)	1	2.24	2.24	1.10	not. sig.
Between sex	1	2.62	2.62	1.29	not sig.
Between age	2	0.02	0.01	0.004	not sig.
Interaction IQ x Sex	1	1.12	1.12	0.55	not sig.
Interaction IQ x Age	2	4.49	2.25	1.11	not sig.
Interaction Sex x Age	2	1.51	0.76	0.37	not sig.
Interaction IQ x Sex x Age	2	1.90	0.95	0.46	not sig.
Within groups (Error term)	671	1364.86	2.03		
Total	682	1378.76			

From the statistical table

For df = 1/671 2/671

F at .05 = 3.857 3.007

F at .01 = 6.681 4.644

Table 5.5(ii)(c): Showing Results of L.S.D. Test for Pair,
Differences among I.Q., Sex and Age
Sub-Groups.

L.S.D. = 
$$t \sqrt{MS_w/N_1 + MS_w/N_2}$$

(t for df of  $MS_{W}$  at .05 = 1.96 and at .01 = 2.587)

		Obtained Mean Difference	Differ	rence	Signifi- cance
	, maps long maps ring mass what maps done they white dead day.  1	, and that the that the that the the the the the the the the the th		4	5
(i) <u>For I.Q. Dif</u>	ferences				
	of Highly Sup Vs Superior	05	.67	.88	not sig:
14 vears :	,, ,,	.04	<b>.</b> 59	•77	not sig.
15years :	ylish ee	.01	•59	.77	not sig.
Among Girls	of -		•		
13 years	22 21	•05	.63	.83	not sig.
14 years		•02	.47	.62	not sig.
15 years		0.50	.45	<b>.</b> 59.	sig.at.05
(ii) For Sex Dif	ferences				
Among Highl	Y Seperior of	f -			
13 years Bo	ys <b>v</b> s Girls	.26	.71	.93	not sig.
14 years	., .,	.08	•61	.80	not sig.
15 years	**	.31	<b>.</b> 59	.77	not sig.
Among Super	ior of -		_		
13 years	,, ,,	• 30	.59	.77	not sig.
14 years	**	.10	.45	•59	not sig.
15 years	11 11	.18	43	_, •57	not sig.

Contd...

Table 5.5(ii)(c) contd....

	1	2	3	4	5
(iii)	For Age Differences:				
	Among Main Groups -				
	13 years vs 14 years	•02	.27	.36	not sig.
	13 years ws 15 years	•01	.27	•36	not sig.
	14 years vs 15 years	•01	.24	.31	not sig.
	Among Highly superior h	ooys -			
	13 years vs 14 years	.15	.71	•93	not sig.
	13 years vs 15 years	•16	.71	•93	not sig.
	14 years vs 15 years	.01	.71	•93	not sig.
	Among Superior Boys -				,
	13 years vs 14 years	•06	•55	•72	not sig.
	13 years vs 15 years	.10	<b>.5</b> 5	.72	not sig.
	14 years vs 15 years	•04	.47	•62	not sig.
	Among Highly Superior G	Birls -	~		
	13 years vs 14 years	•03	•63	.83	not sig.
	13 years vs 15 years	.21	•61	.80	not sig.
	14 years vs 15 years	.24	.49	•65	not sig.
	Among Superior Girls -				
	13 years vs 14 years	.14	.49	.65	not sig.
	13 years vs 15 years	.38	.49	•65	not sig.
	14 years vs 15 years	.24	•45	•59	not sig.

Table 5.5(iii) (a): Showing Mean Scores on Personality
Factor F(Surgency vs Desurgency) of each of
Main and Sub-groups. Sample Size: 325

I.Q. x Sex

		Extra- ordinary	Very Superior	Superior	Total
Boys :	Nos.	10	49	<b>10</b> 6	165
	Scores	29	143	337	509
	Mean	2.90	2.92	3.18	3.08
Girls:	Nos.	19	5 <u>1</u>	90	160
	Scores	62	170	293	525
	Mean	3.26	3.33	3.25	3.28
Total :	Nos.	_. 29	100	196	325
	Scores	91	313	630	1034
	Mean	3.14	3.13	3.21	3.18

Results of Table 5.5(iii) (b): Showing Summary of Analysis of Variance

Sources of Variance	đf	Sum of Squares (Ss)	Mean Squares (Variance)	F Ratios	Remarks
Between I.Q. (Giftedness)	2	0.53	0.27	0.15	Not Sig.
Between Sex	1	3.14	3.14	1.69	Not Sig.
Interaction: I.Q. x Sex	2	19.48	9.74	5.24	Sig.at.01
Within Groups (Error term)	319	592.14	1.86		
Total	324	615.29			

From statistical table

For df = 2/319 1/319

F at .05 = 3.028 3.868

F at .01 = 4.676 6.716

Table 5.5(iii)(c): Showing Results of L.S.D. Test for Pair Differences among I.Q. and Sex Sub-groups

Differences among I.Q. and Sex Sub-groups L.S.D. =  $t\sqrt{MS_W/N_1 + MS_W/N_2}$  (t for df of MS_W at .05 = 1.97 and at .01 = 2.59)

	Obtained Mean Difference		ired erence .01	Signif cance	 i_
(i) For I.Q. Differences:					
Among Main Groups -					
Extraordinary vs Very Sup.	0.01	0.55	0.73	Not S	Sig.
Extraordinary vs Superior	0.07	0.53	0.70	Not S	Sig.
Very Superior vs Superior	0.08	0.33	0.44	Not S	ig.
Among Boys -					
Extraordinary vs Very Sup.	0.02	0.92	1.22	Not S	ig.
Extraordinary vs Superior	0.28	0.88	1.16	Not S	ig.
Very Superior vs Superior	0.26	0.47	0.62	Not S	ig.
Among Girls -					
Extraordinary vs Very Sup.	0.07	0.73	0.96	Not S	ig.
Extraordinary vs Superior	0.01	0.88	0.67	Not S	ig.
Very Superior vs Superior	0.08	0.47	0.62	Not S	ig.
(ii) For Sex Differences:					
Among Extraordinary -					
Boys vs Girls	0.36	1.04	1.37	Not S	d or
Among Very Superior -			1.07	100 0	<b>19.</b>
Boys vs Girls	0.41	0.53	0.70	Not S	iα.
Among Superior -					-5•
Boys vs Girls	0.07	0.37	0.49	Not S	ig.

Table 5.5(iv)(a): Showing Mean Scores on Personality Factor F (Surgency vs Desurgency) of each of Main and Subgroups (Sample Size: 143) (I.a. x Sex)

	Extra- ordinary (Gifted)	Backward (Non-gifte <b>d</b> )	Total
: Nos.	15	61	76
Scores	43	236	279
Mean	2.87	3.93	3.67
:Nos.	36	31	67
Scores	120	110	230
Mean	3.33	3,55	3.43
: Nos.	<b>51</b> ,	92	143
Scores	163	346	509
Mean	3, 20	3.76	3.56
	Scores Mean :Nos. Scores Mean : Nos. Scores	ordinary (Gifted)  : Nos. 15     Scores 43     Mean 2.87  : Nos. 36     Scores 120     Mean 3.33  : Nos. 51     Scores 163	ordinary (Gifted)  : Nos. 15 61 Scores 43 236 Mean 2.87 3.93 :Nos. 36 31 Scores 120 110 Mean 3.33 3.55 : Nos. 51 92 Scores 163 346

Results of Table 5.5(iv) (b): Showing Summary of Analysis of Variance

Sources of Variance	df	Sum of Squares (Ss)	Mean Squares (Variance)	F Ratios	Remarks
Between I.Q. (Giftedness)	1	10.46	10.46	3.71	Not Sig.
Between Sex	1	2.01	2.01	0.71	Not Sig.
Interaction: I.Q. x Sex	1	2.39	2.39	0.85	Not Sig.
Within Groups (Error term)	139	392.38	2.82		
Total	142	407.24			

From statistical table

For df = 1/1

1/139

F at .05 = 3.91

F at .01 = 6.825

Table 5.5(iv)(c): Showing Results of L.S.D. Test of Pair Differences among I.Q. and Sex Sub-groups

L.S.D. = 
$$t \sqrt{MS_w/N_1 + MS_w/N_2}$$

(t for df of  $MS_w$  at .05 = 1.98 and at .01 = 2.615)

		Obtain4d Mean Difference	Requ Diffe .05	rence	Signifi- cance
(i)	For I.Q. Differences:				
	Among Boys -				
E	xtraordinary vs Backward	d 1.06	0.95	1.26	Sig.at .05
	Among Girls -				
E	xtraordinary vs Backward	d 0.22	0.81	1.07	Not Sig.
(ii)	For Sex Differences:				
	Among Extraordinary -				
	Boys vs Girls	0.46	1.03	1.36	Not Sig.
	Among Backward -				•
	Boys vs Girls	0.38	0.73	0.97	Not Sig.
end her has	dental dental COSD make their				

The maximum score on this factor is ten, and the average scores of all the four groups were respectively 3.18, 3.18, 3.18 and 3.56, implying that the group on the whole was a little below average on surgency. Findings of detailed statistical analysis are discussed below.

The results in Tables 5.5(i)(b) and (c) of 935 subjects show that neither giftedness nor sex nor their interaction showed significance in contributing to surgency on the whole or in any sub-group. Similarly, results in Tables 5.5(ii)(b) and (c) also show nowhere significance of any variable on the whole or in any i sub-group pair, except the significant I.Q. group differences among girls of 15 age. The results in Tables 5.5(iii) (b) and (c) show only I.Q. x sex interaction to be significant girls at all I.Q. levels tended to be more surgent than boys but among boys, order of I.Q. group on surgency was superior than very superior and last extraordinary. While among girls the order was first very superior, then extraordinary and last superior, this accounting for significant interaction not a single subgroup pair was found significantly different. Similarly, the Table 5.5(iv)(b) shows neither giftedness nor sex nor their interaction to be significant. However, Table 5.5(iv)(c) shows that the backward boys were significantly more surgent than the extraordinary boys, no other pair being significantly different.

To sum up, neither giftedness nor sex nor age contributed significantly to surgency; girls tended to be somewhat more surgent than boys and I.Q. groups did not keep the same position

on surgency in case of boys and girls, and this accounted for significant interaction between I.Q. and sex in analysis of data of 325 functionally gifted subjects.

5.6 PERSONALITY FACTOR G ( CHARACTER OR SUPEREGO STRENGTH VS LACK OF RIGID INTERNAL STANDARDS ) AND GIFTEDNESS

This factor G refers on the positive side to character or superego strength including the traits of being conscientious persitent, persevering, determined, responsible, emotionally mature, consistent, attentive to people etc.

The scores on this factor obtained by all the four groups were separately analysed by F-test and L.S.D. test, and the results have been summarized in Tables 5.6(i), (ii), (iii), (iv)-(a), (b), (c) as usual.

Table 5.6(i)(a): Showing Mean Scores on Permeability Factor G
(Character or Superego Strength vs Lack of Rigid
Internal Standards) of each of Main and Sub-groups
(Sample Size 935)
I.Q. x Sex

		· 中, 在 , 在 ,	Extra-ordinary	Very Superior	Superior	Total
Boys	:	Nos.	15	76	334	425
		Scores	109	515	2206	2830
		Mean	7.27	6.78	6.6 <u>1</u>	6.66
Girls	:	Nos.	36	145	329	510
		Scores	222	961	2319	3502
		Mean	6.70	6.63	7.05	6.87
Total	:	Nos.	51	221	663	1150
	•	Scores	331	1478	4525	6332
**** ***** ***** *********************		Mean	6.49	6.68	6.83	6,77

Results of Table 5.6(i)(b): Showing Summary of Analysis of Variance

Sources of Variance	df	Sum of Squares (Ss)	Mean Squares (Variance)	F Ratios	Remarks
Between I.Q. (Giftedness)	2	7.82	3.91	0.66	Not Sig.
Between Sex	1	10.01	10.01	1.68	Not Sig.
Interaction: I.Q. x Sex	2	36.57	18.28	3.07	Sig.at .05
Within Groups (Error term)	929	5534.08	5.96		
Total	934 	5588.48		• • • • • • • • • • • • • • • • • • •	Allows count were wear ways gagge

From the statistical table

For df = 2/929 1/929

F at .05 = 3.00 3.85

F at .01 = 4.63 6.66

Table 5.6(i)(c): Showing results of L.S.D. Test for Pair Differences among I.Q. and Sex Sub-groups

L.S.D. = 
$$t\sqrt{MS_W/N_1 + MS_W/N_2}$$
  
(t for df of MS_W at .05 = 1.96 and at .01 = 2.58)

	Obtained Mean Difference	Requi Differ		Signi: cance	
(i) For I.Q. Differences:	_			-5-700 or 200 E.John School (2011 con )	
Among Main Groups -					
Extraordinary vs Very Super:	ior 0.19	0.74	0.98	Not s	Sig.
Extraordinary vs Superior	0.34	0.66	0.90	Not s	Sig.
Very Superior vs Superior	0.15	0.31	0.41	Not &	Sig.

(Continued)

:305: (Table 5.6(i)(c) continued)

en van ee zen, jan valen in zen en generale korn aj dek zen maandes tom Den 1300 k. Jen van den dom Liberton "Jen den zen den den Man	Obtained Mean Difference	Diff	uired erence .01	Signific- ance
Among Boys -				
Extraordinary vs Very Sup.	0.49	1.35	1.78	Not Sig.
Extraordinary vs Superior	0.66	1.25	1.65	Not Sig.
Very Superior vs Superior	0.17	0.61	0.80	Not Sig.
Among Girls -				
Extraordinary vs Very Sup.	0.07	0.88	1.16	Not Sig.
Extraordinary vs Superior	0.35	0.84	1.11	Not Sig.
Very Superior vs Superior	0.42	0.47	0.61	Not Sig.
(ii) For Sex Differences +				
Among Extraordinary -				
Boys vs Girls	0.57	1.47	1.93	Not Sig.
Among Very Superior -				
Boys vs Girls	0.15	0.69	0.90	Not Sig.
Among Superior -				
Boys vs Girls	0.44	0.37	0.49	Sig.at .05

Superego Strength Versus Lack of Rigid Internal Standards) Table 5.6 (ii) (a) : Showing Mean Scores on Personality Factor G (Character or of Each of Main and Sub-groups (According to age) (Sample size : 683 ) (I.Q. x Sex x Age )

Andread State of the Anna Association of the Associ								-							
			,		Age	in Years	rs	-			Sandston the Alberton Street Street		Total		
			13			14		15		Total		<u>~</u>	(Sexwise	e e	
e de la compansión de l	No	No. Scores Mean	Mean	Nos	Scores Mean	Mean	No.	ScoresMean	Mean	No. Sec	Scores Mean		No. Sc	Scores	Mean
Boys (M)												And the second s			The same of the sa
Highly Superior ${f I}_{f 1}$	31	201	6.48	32	215	6.71	32	206	6.43	95 622	2 6.54				, 1
Superior $I_2$	39	240	6.15	82	581	6.83	82	550	6.47	209 1371	71 6.56		304 1	1993	9.56
Girls (F)															
Highly Superior $\mathbf{I_1}$	30	202	6,73.	64	410	6.40	71	483	6.30	165 1095	95 6 <b>.63</b>				
Superior ${f I}_2$	56	402	7.17	75	534	7.12	83	596	7.18	214 1532	32 7.15		379 2	2627	6.93
Total (I.Q.wise)											•				
cior	I ₁ 61	403	6.50	96	625	6.51	103	689	6.58	260 1717	09*9 27		683	4620	6.76
Superior $\mathtt{I}_2$	95	642	6.75	160	1115	96•9	168	1146	6.82	423 2903	3 6.86				)
Total (Agewise)	156	156 1045	6.70	256	1740	6.30	271	1835	6.77	683 4620	97.9 03	7.6			
dare this fiber than then then then then then then then the		dase Stick Mirer State lines State State State		-										-	!!!

Results of Table 5.6(ii) (b) : Showing Summary of Analaysis of Variance  $\Lambda$ 

Sources of Variance	đf	Sum of Squares (SS)	Mean Squares (Variance)	F Rati <b>os</b>	Remarks
Between IC					
(Giftedness)	1	10.80	10.80	9.55	siğ.ət.01
Between Sex	1	23.78	23.78	21.04	Sig.at .01
Between Age	2	0.96	0.48	0.42	not. sig.
Interaction; IQ x Sex	1	14.63	14.63	12.94	Sig.at .01
Interaction; IO x Age	2	3.66	1.83	1.61	not sig.
Interaction: Sex x Age	2	16.14	8.07	7.14	Sig.at .01
Interaction: IO x Sex x Age	2	0.04	0.02	0.017	not sig.
Within Groups (Error term)	67 <u>1</u>	761.04	1.13		
Total	682	831.05			

For df = 1/671 2/671 F at .05 = 3.857 3.007 F at .01 = 6.681 4.644

From the statistical table

Table 5.6(ii)(c): Showing Results of L.S.D. Test for Pair

Differences among I.Q., Sex and Age

Sub-groups

L.S.D. = 
$$t\sqrt{MS_W / N_1 + MS_W / N_2}$$
  
(t for df of MS_W at .05 = 1.96 and at .01 = 2.58)

	1			Obtained Mean Difference	Requi Differ .05		Signifi- cance
	1			2	3	4	5
(i)	For I.Q.		ence :	,			
	13 years:			's .33	.51	.67	Not Sig.
	14 years:	11	il	.12	. 43	.57	not sig.
	15 years:	48	18	.04	.43	.57	not sig.
	Among Gir	ls of .	<b>-</b>	,			
	13 years:	Ħ	ŧħ	.44	. 47	.62	not sig.
	14 years:	tk	44	.72	. 35	. 46	Sig.at 0:
	15 years:	tě	14	.38	.33	. 44	Sig.at .0
(ii)	For Sex D. Among High		TESTIC PROPERTY.				
	13 years	: Boys	vs Girl	.s .25	.53	.70	not sig.
	14 years	: it	ii	.31	. 45	.59	not sig.
	15 years	<b>3</b> 11	* II	.37	. 45	.59	not sig.
	Among Sup	erior .	-				
	13 years	2 11	ti	1.02	. 43	.57	Sig.at .01
	14 years	z ⁽¹	4	. 29	.33		not sig.
	15 years	: 11	tt	.71	.33		Sig.at .01

contd.

Table 5.6(ii)(c) Contd...

	1.	2	2	g	5
	The Main Cape TMA CANA and and also also also also any any and and any	ding also was their this sign and their time.		antus annus annus hanne hann hann hann	g uning which redge filters dated which would believe being believe union
(iii)	For Age difference :				,
(111)	For Age difference :				
	Among Main Groups -				
•	13 years vs 14 years	.10	.22	.28	not sig.
	13 years vs 15 years	•07	.22	.28	not sig.
	14 years vs 15 years	.03	.18	.23	not sig.
	Among Highly Superior Bo	vs -			
		-	E 2	70	
	13 years va 14 years	.23	•53	.70	not sig.
	13 years vs 15 years	.05	<b>.</b> 53	.70	not sig.
	14 years vs 15 years	.28	•51	<b>.</b> 67	not sig.
	Among Superior Boys -	•			
	13 years vs 14 years	•68 ·	.41	.54	sig.at.01
	13 years vs 15 years	.32	.41	.54	not sig.
	14 years vs 15 years	•36	.31	.41	sig.at.05
	Among Highly Superior Gi	rls-			
<b>+</b>			<i>1</i> =	50	
	13 years vs 14 years	.33	.45	.59	not sig.
	13 years vs 15 years	•07	.45	.59	not sig.
	14 years vs 15 years	.40	•35	.46	sig.at.05
	Among Superior girls -				
	13 years vs 14 years	•05	•37	.49	not sig.
	13 vears vs 15 years	.01	.39	.52	not sig.
	14 years vs 15 years	•06	· •33	.44	not sig.

Table 5.6(iii)(a): Showing Mean Scores on Personality Factor
G (Character or Superego Strength vs Lack of Rigid
Internal Standards) of each of Main and Sub-groups
(Sample Size 325) I.Q. x Sex

		The Committee of the Co	Extra- ordinary	Very Superior	Superior	Total
Boys	:	Nos.	10	49	106	165
		Scores	69	343	695	1107
		Mean	6.90	7.00	6.56	6.71
Girls	:	Nos.	19	51	90	160
		Scores	118	332	644	1094
		Mean	6.21	6.51	7.16	6.84
Total	:	Nos.	29	100	196	325
		Scores	187	675	1339	2201
phone graphs white south	***	Mean	6.45	6.75	6.83	6.77

Results of \(\tau_1\) Table 5.6(iii)(b): Showing Summary of Analysis of Variance

Sources of Variance	đf	Sum of Squares (Ss)	Mean Squares (Variance)	F Ratios	Remarks
Between I.Q. (Giftedness)	2	3.78	1.89	0.78	Not Sig.
Between Sex	1	1.34	1.34	0.56	Not Sig.
Interaction: I.Q. x Sex	2	122.39	61.20	25.39	Sig.at .01
Within Groups (Error term)	319	767.64	2.41	s	
Total	324	895.15			

## From the statistical table

For df = 2/319 1/319 F at .05 = 3.028 3.868 F at .01 = 4.676 6.716

Table 5.6(iii)(c): Showing Results of L.S.D. Test for Pair Differences among I.Q. and Sub-groups

L.S.D. =  $t\sqrt{MS_W/N_1} + MS_W/N_2$ (*trfor df of MS_W at .05 = 1.97 and at .01 = 2.59)

	Obtain Mean Differences	Diff	uired erences	Signifi- cance
(i) For I.Q. Differences:				The state of the s
Among Main Groups -				
Extraordinary vs Very Sup	o. 30	0.64	0.85	Not Sig.
Extraordinary vs Superior	0.38	0.61	0.80	Not Sig.
Very Superior vs Superior	0.08	0.37	0.49	Not Sig.
Among Boys -				
Extraordinary vs Very Sup	. 0.10	1.06	1.40	Not Sig.
Extraordinary vs Superior	0.34	1.003	1.32	Not Sig.
Very Superior vs Superior	0.44	0.53	0.70	_
Among Girls -				
Extraordinary vs Very Sup	. 0.30	0.83	1.09	Not Sig.
Extraordinary vs Superior	0.95	0.77	1.01	Sig.at .05
Very Superior vs Superior	0.65	0.53		Sig.at .05
(ii) For Sex Differences:				
Among Extraordinary -				
Boys vs Girls	0.69	1.20	1.58	Not Sig.
Among Very Superior -			1,00	Dig.
Boys vs Girls	Ó.49	0.61	0.80	Not Sig.
Among Superior -		- <del>-</del>		Sizy.
Boys vs Girls	0.60	0.43	0.67	Sig.at .01

Table 5.6(iv)(a): Showing Mean Scores on Personality Factor G (Character or Superego Strength vs Lack of Rigid Internal Standards) of each Main and Sub-groups

	-		Extra- ordinary (Gifted)	Backward (Nongifted)	Total
Boys	:	Nos.	15	61	76
•		Scores	109	359	468
		Mean	7.27	5.86	6.16
Girls	:	Nos.	36	31	67
		Scores	222	<b>1</b> 59	381
-		Mean	6.70	5.13	5.69
Total	:	Nos.	51	92	143
		Scores	331	518	849
		Mean	6.49	5.63	5.94

Results of Table 5.6(iv)(b): Showing Summary of Analysis of Variance

Sources of Variance	đf	Sum of Squares (Ss)	Mean Squares (Variance)	F Ratios	Remarks
Between I.Q. (Giftedness)	1	24.25	24.25	7.44	Sig.at .01
Between Sex	1	7.90	7.90	2.42	Not Sig.
Interaction: I.Q. x Sex	1	16.69	16.69	5.12	Sig.at .05
Within Groups (Error term)	139	453.59	3.26		
Total	142	502.43			

From the statistical table

For df = 1/139

F at .05 = 3.91

F at .01 = 6.825

Table 5.6(iv)(c): Showing Results of L.S.D. Test for Differences among I.Q. and Sex Sub-groups

L.S.D. = 
$$t\sqrt{MS_W/N_1} + MS_W/N_2$$
  
(t for df of MS_W at .05 = 1.98 and at .01 = 2.615)

entral Materials and Control States		Obtained Mean Difference	Diffe	ired erence .01	Signifi- cance
(i)	For I.Q. Differences :			a jam QuidQuid Qui anim aid	September (September (
	Among Boys -				
E	xtraordinary vs Backward Among Girls -	1.41	1.03	1.36	Sig.at .01
E	xtraordinary vs Backward	1.57	0.87	1.15	Sig.at .01
(ii)	For Sex Differences :				
	Among Extraordinary -				
	Boys vs Girls	0.57	1.09	1.44	Not Sig.
	Among Backward -		•		
	Boys vs Girls	0.73	0.77	1.02	Not Sig.
		-			

The maximum score on this factor is ten, and the four groups scored on an average respectively 6.77, 6.76, 6.77 and 6.49 by the highly gifted and 5.63 by the non-gifted, making an average of 5.94. The results of further statistical analysis are given below.

The results in Table 5.6(i)(b) of 935 subjects show that neither giftedness nor sex contributed independently and

significantly to character, but their interaction was significant. The results in Table 5.6(i)(c) show significant sex differences only among the superior; no other subgroup pair was significantly different. Boys scored more at first two I.Q. levels, and girls scored more at the third superior I.Q. level. The I.Q. groups stood on character in order of extraordinary, very superior and superior in case of boys, while they stood in order of the superior, the extraordinary and the very superior in case of girls; in other words extraordinary boys and superior girls topped on character, and this accounts for significant I.Q. x sex interaction in study of 935 subjects.

The results in Table 5.6(ii)(b) of 683 subjects reveal that giftedness, sex, I.Q. x sex, and sex x age interaction to be significant. The superior were highest (6.86), than highly superior (6.60) on the whole. Girls were higher (6.93) than boys (6.56) on character. The superior and highly superior were almost equal in case of boys, but both differed more in case of girls, and this accounts for significant I.Q. x sex interaction in the study of 683 subjects. Similarly, the superior were higher on character at all three age levels, but the gap between the two I.Q. levels, at each age level differed in amount, and this accounts for significant I.Q. x age interaction in the study of 683 subjects. The results in

Table 5.6(ii)(c) show that the I.Q. groups, differed only among girls of 14 and 15. There were significant sex differences only among superior of 13 age and 15 age. And among age sub-groups, the 14 age group differed from 13 age and 15 age group among the superior boys, and the 14 age group differed from the 15 age group among highly superior girls - all this accounting for I.Q. x sex and I.Q. x age significant interactions.

Further, the results in Table 5.6(iii) (b) of 325 subjects reveal that neither giftedness nor sex was significant, but their interaction was significant. Boys were higher than girls in first two I.Q. levels, and girls were higher in the third superior level in this analysis of 325 subjects, similar to that in case of analysis of 935 subjects; and the three I.Q. groups stood in order of very superior, extraordinary and superior in case of boys, while superior, very superior, and extraordinary in case of girls; in other words very superior boys and superior girls topped on character; all this accounts for significant I.Q. x sex interaction in the study of 325 subjects. The closer examination of results in Table 5.6(iii) (c shows that the superior differed from the other two I.Q. groups in case of girls, and there were sex differences in case of the superior only in the study of 325 subjects.

Finally, the results in Table 5.6(iv)(b) of 143 subjects show that giftedness, and their interaction were significant,

but not sex. The extraordinary scored higher (6.49) than the backward (5.63) on the whole and boys scored higher (6.16) than girls (5.69) on the whole on character. However, results in Table 5.6(iv)(c) show that the extraordinary were significantly higher than the backward in case of both boys and girls as on the whole. But there were no significant sex differences among the extraordinary or among the backward as on the whole.

The significant I.Q. x sex interaction in this case might be due to unequal gap ( in one case significant and insignificant in other case ) between pairs of unequal number.

To sum up, giftedness was significantly contributing to character strength, particularly among 14 year and 15 year girls, in favour of the superior. Sex was significant, particularly among the superior of 13 year and 15 year, in favour of girls. Age was not significant on the whole, but the pair 13 vs 14 was different in case of superior boys; and the pair 14 vs 15 differed in case of superior boys as well as highly superior girls, making I.Q. x sex and also sex x age interactions significant.

5.7 PERSONALITY FACTOR H ( PARMIA vs THRECTIAI): AND GIFTEDNESS

This factor H represents on the positive side of the trait
of being adventurfous, active, responsive, genial, friendly,

emotional, impulsive, carefree and on the negative side the basic, innate leptosomatic, schizothyme temperament showing the shy, withdrawn, careful, well-behaved syndrome.

The scores on this factor H obtained by the four groups under study were statistically analysed by the F test and the L.S.D. test, and the results have been summarized in Tables 5.7(i),(ii),(iii), (iv) - (a), (b), (c).

Table 5.7(i)(a): Showing Mean Scores on Personality

Factor H (Parmia vs Threctia) of each of Main
and Sub-groups (Sample Size: 935)

I.Q. x Sex

			Extra- ordinary	Very Superior	Superior	Total
Boys	:	Nos.	15	76	334	425
		Scores	63	337	1438	1838
		Mean	4.20	4.43	4.30	4.32
Girls	:	Nos.	36	145	329	510
		Scores	144	601	1345	2090
		Mean	4.00	4.14	4.08	4.10
rotal	:	Nos.	51	221	663	935
		Scores	207	938	2783	3928
		Mean	4.06	4.24	4.19	4.20

Results of Table 5.7(i)b: Showing Summary of Analysis of Variance

Sources of Variance	df	Sum of Squares (Ss)	Mean Squares (Variance)	F Ratios	Remarks
Between I.Q. (Giftedness)	2	1.44	1.44	0.29	Not Sig.
Between Sex	1	11.90	11.90	2.40	Not Sig.
Interaction : (I.Q. x Sex)	2	0.53	0.53	0.11	Not Sig.
Within Groups (Error term)	929	4596.32	4.95		
Total	924	4610.19			
				rem die teil Profincisment und und profincische	

## From the statistical table

For	đ£	=	2/929	1/929
F at	.05	=	3.00	3.85
F at	.01	=	4.63	6.66

Table 5.7(i) (c): Showing Results of L.S.D. Test for Pair Differences among I.Q. and Sex Sub-groups L.S.D. =  $t\sqrt{MS_W/N_1} + MS_W/N_2$ 

( t for df of  $MS_{W}$  at .05 = 1.96 and at .01 = 2.58)

	Obtained Mean Difference		uired erence .01	Sign cand	ifi-
(i) For I.Q. Differences:					
Among Main Groups -					
Extraordinary vs Very Superi	or .18	. 69	.90	Not	Sig.
Extraordinary vs Superior	.13	.63	.82	Not	Sig.
Very Superior vs Superior	.05	.33	.44	Not	Sig.
Among Boys -					
Extraordinary vs Very Superi	or .23	1.23	1.62	Not	Sig.
Extraordinary vs Superior	.10	1.16	1.52	Not	Sig.
Very Superior vs Superior	0.13	.55	.72	Not	Sig.
Among Girls -	ı				
Extraordinary vs Very Superi	or .14	.80	1.06	Not	Sig.
Extraordinary vs Superior	.08	.76	1.01	Not	Sig.
Very Superior vs Superior	.06	.43	.57	Not	Sig.
(ii) For Sex Differences:					
Among Extraordinary -		•			
Boys vs Girls	. 20	1.33	1.75	Not	Sig.
Among Very Superior -					
Boys vs Girls	. 29	.61	.80	Not	Sig.
Among Superior -	ţ				
Boys vs Girls	.22	.33	.43	Not	Sig.
and the control and control an					

Table 5.7 (ii) (a) : Showing Mean Scores on Personality Factor H (Parmia Versus Threctia) of Each of Main and Sub-groups.

x Age)
x Sex
(I.0.
Age) vo :
cording to
683 ) (AC
Size : 68
Sample S

- Commission of the Later of th					Ř	Age in Y	ears					깊	Total	
		13	-		1.4		15	war day, demandring the same way.	-	Total	****	(Sex	(Sexwise)	
	No	Scores Mean	1	<u>Q</u>	Scores	Mean	No.	res	Mean	No. Scores	Mean	S. O.	Scores	Mean
Boys (M)			rad resta formation of the same	and the confidence of the conf										
Highly Superior I1	31	139	4.48	32	137	4.28	32 1	134	4.18	95 410	4.31	304	1307	4.30
Superior $\mathbb{I}_2$	39	153	3.92	85	358	4.21	85 3	386	4.54	209 897	4.29	; ;	· ) )	) }
Girls (F)														
Highly Superior $\mathbf{I}_1$	30	123	4.10	64	276	4.31	71 2	222	3.12	165 621	3.76	379	1491	ი თ ი
Superior $\mathbb{I}_2$	56	220	3,93	75	288	3.84	83	362	4.36	214 870	4.06	• ·		
Total (I.Q.wise)														
Highly Superior $\mathbf{I}_{\mathbf{I}}$	61	262	4.29	96	413	4.30	103 3	356	3.45	260 1031	3.96	683	2798	4.10
Superior $\mathbf{I}_2$	95	373	3.92	160	646	4.03	168 7	748	4.45	423 1767	4.17			
Total (Agewise)	156	635	4.07	256	1059	4.14	271 1	1104	4.08	683 2798	4.10	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	14 Per 170 Per	1
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Results of Table 5.7 (ii) (b) : Showing Summary of Analysis of Variance

Sources of Variance	đ£	Sum of Squares (SS)	Mean Squares (Variance)	F Ratio	Remarks
Between IQ (Gifftedness)	1	7.23	7.23	2.25	not sig.
Between sex	1	22.51	22.51	7.03	sig.at .01
Between Age	2	0.65	0.33	0.103	not sig.
Interaction IQ x Sex	1	1.128	1.28	0.4	not sig.
Interaction IQ x Age	2	65 <b>.</b> 37	32.68	10.21	sig. at .01
Interaction Sex x Age	2	8.97	4.49	1.40	not sig.
Interaction IQ x Sex x Age	2	1.48	0.74	0.23	not sig.
Within groups (Error term)	671	2151.14	3.20		
Total	682	2258.63			

From Statistical table

For df = 1/671  $\cdot 2/671$ 

 $F \text{ at } .05 = 3.857 \quad 3.007$ 

 $F \text{ at } .01 = 6.681 \ 4.644$ 

Table 5.7(ii) (c): Showing Results of L.S.D. Test for Pair Differences Among I.Q., Sex and Age Sub-Groups.

L.s.D. = 
$$t\sqrt{Ms_w/N_1 + Ms_w/N_2}$$

( t for df of  $\mathrm{MS}_{\mathrm{W}}$  at .05 = 1.96 and at .01 = 2.58)

		*		Obtained			Signifi-
				mean		erence	cance.
				Differen	ce•0;	5 • 67	
	1			2	3	4	5
(i)	For I.Q. Among Boy		nces				
	13 years			<b>.</b> 56	.82	1.08	not sig.
	14 years	: ,,	,,	.07	.73	•95	not sig.
	15 years	: ,,	.,	.36	.73	.95	not sig.
	Among Gir	ls					
	13 years	$m_{i}$	21	.17	.78	1.03	not sig.
*	14 years	11		.47	.59	•77	not sig.
	15 years		,,	1.24	.57	.75	Sig.at.01
(11)	For Sex I	hly sup	ces erior-				
	13 years	: Boys	Vs Girls	.38	.90	1.19	not sig.
	14 years	2.7	,,	.03	.76	1.01	not sig.
	15 years	m,	* /	1.05	.74	.98	sig.at.01
•	Among Sur	erior -					
	13 years	,,	,,	.01	.73	•95	not sig.
	14 years	<i>t 1</i>		.37	.55	72	not sig.
	15 years			.18	•55	.72	not sig.
	lb years	* *	* *	.18	•55	•12	not sig

Contd..

Table 5.7 (ii) (c) contd....

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****	1	2	3	4	5
				t	
(iii)	For Age Differences				
	Among Main Groups				•
	13 years vs 14 years		•35		_
	13 yesrs vs 15 years	.01	<b>.</b> 35		
	14 years vs 15 years	•06	.31	.46	not sig.
	Among Highly Superior	Boys-			
	13 years vs 14 years	.20	.88	1.16	not sig.
	13 years vs 15 years	.20	.88	1.16	not sig.
	14 years vs 15 years	.10	.88	1.16	not sig.
	Among Superior Boys -				
	13 years vs 14 years	.29	.69	.90	hot sig.
	13 years vs 15.vears	•62	.69	.90	not sig.
	14 years vs 15 years		•53	•69	not sig.
	Among Highly Superior	Girls-			
	13 years vs 14 years	.21	.73	1.03	not sig.
	13 years vs 15 years	•98	.76	1.01	sig.at.05
	14 years vs 15 years		.63	.80	sig at .01
-	Among Superior Girls				
	13 years vs 14 years	•09	•61	.30	not sig.
	13 yesrs vs 15 years	.43	.59	.77	not sig.
	14 years vs 15 years	•52	•55	.72	not sig.

Table 5.7(iii) (a): Showing Mean Scores on Personality Factor H
(Parmia vs Threctia) of each of Main and Sub-groups
(Sample Size: 325) (I.Q. x Sex)

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Boys	Nos.	10	49	106	165
-	Scores	37	215	419	671
	Mean	3.70	4.39	3.95	4.07
Girls	Nos.	19	51	90	160
	Scores	78	224	365	667
	Mean	4.11	4.38	4.06	4.17
Total	Nos.	29	100	196	325
	Scores	115	439	784	1338
	Mean	3.97	4.39	4.00	4.12

Results of Table 5.7(iii) (b): Showing Summary of Analysis of Variance

Sources of Variance	df	Sum of Squares (Ss)	Mean Squares (Variance)	F Ratios	Remarks
Between I.Q. (Giftedness)	2	10.80	5.40	1.79	Not Sig.
Between Sex	1	0.84	0.84	0.28	Not Sig.
Interaction: I.Q. x Sex	2 -	0.76	0.38	0.13	Not Sig.
Within Groups (Error term)	319	963.16	3.02		
Total	324	975.56			

For statistical table

For df = 2/319 1/319 F at .05 = 3.028 3.8683 F at .01 = 4.676 6.716

Table 5.7(iii)(c): Showing Results of L.S.D. Test for Pair Differences among I.Q., and Sex Sub-groups

L.S.D. =  $t\sqrt{MS_w/N_1 + MS_w/N_2}$ (t for df of MS_w at .05 = 1.97 and at .01 = 2.59)

	Obtained Mean	Required Difference		Signifi-	
tanda milikalaminin danking mag-nakangkangkang orgi mag maga ng maga aga ng maga ng maga ng mag ng mag ng maga	Difference			cance	
(i) For I.Q. Differences:					
Among Main Groups -					
Extraordinary vs Very Supe	rior.42	.73	.96	Not Sig.	
Extraordinary vs Superior	.03	.69	.91	Not Sig.	
Very Superior vs Superior	.39	.41	.54	Not Sig.	
Among Boys -			•		
Extraordinary vs Very Supe	rior.69	1.18	1.55	Not Sig.	
Extraordinary vs Superior	. 25	1.12	1.48	Not Sig	
Very Superior vs Superior	.44	.59	.78	Not Sig.	
Among Girls -					
Extraordinary vs Very Supe	rior .27	.93	1.22	Not Sig.	
Extraordinary vs Superior	.05	.87	1.14	Not Sig.	
Very Superior vs Superior	.32	.59	.78	Not Sig.	
(ii) For Sex Differences:					
Among Extraordinary -					
Boys vs Girls	.41	1.34	1.76	Not Sig.	
Among Very Superior -					
Boys vs Girls	.01	. 69	.91	Not Sig.	
Among Superior -					
Boys vs Girls	.11	.51	.67	Not Sig.	

Table 5.7(iv)(a): Showing Mean Scores on Personality Factor H

(Parmia vs Threctia) of each Main and Sub-groups

(Sample Size: 143) (I. Q. X Sex)

·	-		Extra- ordinary (Gifted)	Backward (Non-gifted)	Total
Boys	:	Nos.	15	61	76
		Scores	63	245	308
		Mean	4.20	4.01	4.05
Girls	:	Nos.	36	31	67
		Scores	144	149	293
	•	Mean	4.00	4.81	4.37
Total	:	Nos.	51	92	143
		Scores	207	394	601
teritor devote acción sepa		Mean	4.06	4.28	4.20

Results of Table 5.7(iv)(b): Showing the Summary of Analysis of Variance

Sources of Variance	đ£	Sum of Squares (Ss)	Mean Square\$ (Variance)	F Ratios	Remarks
Between I.Q. (Giftedness)	1	1.64	1.64	1.14	Not Sig.
Between Sex	1	3.66	3.66	2.54	Not Sig.
Interaction: I.Q. x Sex	1	9.60	9.60	6.67 5	Sig.at .05
Within Groups (Error term)	139	200.22	1.44		
Total	142	215.12			,

From statistical table

For df = 1/139

F at .05 = 3.91

F at .01 = 6.825

Table 5.7(iv)(c): Showing Results of L.S.D. Test for Pair Differences among I.Q. and Sex Sub-groups L.S.D. =  $t\sqrt{MS_W/N_1} + MS_W/N_2$  (t for df of  $MS_W$  at .05 = 1.98 at .01 = 2.615)

	Obtained Mean Difference	Diff	uired erence .01	Signifi- cance
(i) For I.Q. Differences:				
Among Boys -				
Extraordinary vs Backward	.19	.69	.92	Not Sig.
Among Girls -				
Extraordinary vs Backward	0.81	.57	.76	Sig.at .01
(ii) For Sex Differences:				
Among Extraordinary -				
Boys vs Girls	. 20	.73	.97	Not Sig.
Among Backward -	•			
Boys vs Girls	0.80	.53	.71	Sig.at .01
2070 49 01112		.53	• /1	erd.er .01

The maximum score on this factor is ten, and the average scores of the four groups were respectively 4.20, 4.10, 4.12 and 4.20, implying that the sample under study was just nearer to active, responsive and friendly on the whole. However, the differences, if any attributed to the role of different factors have been discussed below.

The results in Table 5.7(i)(b) of 935 subjects show that on the whole neither giftedness nor sex nor their interaction contributed significantly to parmia. Even the closer examination

of results of sub-groups in Table 5.7(i)(c) showed lack of significant differences in all cases.

The results of 683 subjects in Table 5.7(ii)(b) studying I.Q. x sex x age reveal that sex as well as I.Q. x age interaction was significant; neither giftedness nor age independently nor any other interaction was significant. The boys scored significantly higher (4.30) than girls (3.93) on this factor.

However, the results in Table 5.7(ii) (c) reveal that though giftedness was not significant on the whole, only one sub-group pair, viz. highly superior vs superior girls of 15 years showed significant difference. Similarly, though there were significant sex differences on the whole, truly only one subgroup pair viz. boys vs girls of highly superior group of 15 years showed significant differences. Age showed significance in only two pairs viz. 13 vs 15 and 14 vs 15 among highly superior girls, though not on the whole. The figures in Table 5.7(ii)(a) show that the highly superior group at 13 and 14 age were higher than the superior, but at age 15 the superior were higher than the highly superior, ( and significantly higher among girls ), and this accounted for significant I.Q. x age interaction.

The results in Table 5.7(iii)(b) of 325 subjects also shows nowhere significant differences on the whole, as in the

Table 5.7(i)(b), on the whole or in any sub-group pair.

The results of 143 subjects in Table 5.7(iv)(b) show only I.Q. x sex interaction to be significant. The gifted boys scored somewhat higher than gifted girls, while non-gifted girls scored significantly higher than non-gifted boys or, the gifted boys scored somewhat higher than non-gifted boys, while non-gifted girls scored significantly higher than gifted girls. This accounted for significant interaction between I.Q. and sex.

## 5.8 PERSONALITY FACTOR I ( PREMSIA VS HARRIA ) AND GIFTEDNESS

This factor I represents on the positive side a person showing a fastidious dislike for crude people and rough occupations, a liking for travel and new experiences, labile, imaginative, aesthetic mind, love for dramatics, a person who is generally sensitive, effiminate, demanding, impatient, attention-seeking, dependent, gentle, etc.

The scores of different four groups on this factor were statistically analysed and results have been summarized in Tables 5.8(i),(ii),(iii),(iv) - (a),(b) and (c).

Table 5.8(i)(a): Showing Mean Scores on Personality Factor I

(Premsia vs Harria ) of each of Main and Sub-groups

(Sample Size: 935) (I.Q. x Sex)

		1	Extra- ordinary	Very Superior	Superior	Total
Boys	:	Nos.	15	76	334 .	425
		Scores	73	327	1394	1794
		Mean	4.86	4.30	4.17	4.22
Girls	:	Nos.	36	145	329	510
		Scores	176	658	1438	2272
		Mean	4.88	4.53	4.37	4.45
Total	:	Nos.	51	221	663	935
		Scores	249	985	2832	4066
		Mean	4.88	4.45	4.27	4.35

Results of Table 5.8(i)(b): Showing Summary of Analysis of Variance

Sources of Variance	đf	Sum of Squares (Ss)	Mean Squares (Variance)	F Ratios	Remarks
Between I.Q. (Giftedness)	2	21.06	10.53	2.78	Not Sig.
Between Sex	1	12.66	12.66	3.34	Not Sig.
Interaction: I.Q. x Sex	2	3.45	1.72	0.45	Not Sig.
Within Groups (Error term)	929	3521.17	3.79		
Total	934	3558,34			

From the statistical table

For df = 2/929 1/929

F at .05 = 3.00 3.85

F at .01 = 4.63 6.66

Table 5.8(i)(c): Showing Results of L.S.D. Test for Pair Differences among I.Q. and Sex Sub-groups

Differences among I.Q. and Sex Sub-groups L.S.D. =  $t / \frac{MS_w / N_1 + MS_w / N_2}$ 

(t for df of  $MS_{W}$  at .05 = 1.96 and at .01 = 2.58)

	Obtained Mean Differences		uired erences .01	Signifi- cance
(i) For I.Q. Differences	:		,	
Among Total -				
Extraordinary vs Very S	Sup. 0.43	0.59	0.77	Not Sig.
Extraordinary vs Superi	lor 0.61	0.56	0.75	Sig.at .05
Very Superior vs Superi	lor 0.18	0.29	0.39	Not Sig.
Among Boys -				
Extraordinary vs Very S	Sup. 0.56	1.08	1.42	Not Sig.
Extraordinary vs Superi	lor 0.69	0.99	1.32	Not Sig.
Very Superior vs Superi	or 0.13	0.49	0.65	Not Sig.
Among Girls -				
Extraordinary vs Very	Sup. 0.35	0.70	0.93	Not Sig.
Extraordinary vs Superi	lor 0.51	0.67	0.88	Not Sig.
Very Superior vs Superi	or 0.16	0.37	0.49	Not Sig.
(ii) For Sex Differences :	<b>!</b>			
Among Extraordinary -				,
Boys vs Girls	0.02	1.18	1.55	Not Sig.
Among Very Superior -				_
Boys vs Girls	0.23	0.55	0.72	Not Sig.
Among Superior -				_
Boys vs Girls	0.20	0.29	0.39	Not Sig.

:332:

Table 5.8(ii)(a) : Showing Mean Scores on Personality Factor I (Premsia Versus Harria) of Each of Main and Sub-groups. (According to Age) ( I.Q. x Sex x Age) (Sample Size : 683 )

					Age in	Years								TC+2T	
The state of the s		13			14	APPROXITE TO LACTOR OF THE PROPERTY OF THE PRO		15		To	Total	1	_	Sexwise	se )
Tergin administra afficient de la compansa de la c	No	No. Scores Mean	Mean	ON	No. Scores	Mean	No.	Scores	Mean	No.	Scores Mean		No.	Scores	Mean
Boys (M)									And the state of t		The same of the sa	And the second s	-		
Highly superior $\mathbf{I}_1$	31	128	4.12	32	136	4.25	32	139	4.34	95	403	4.24	•	1	·
Superior ${ t I}_2$	80	159	4.07	85	366	4.31	82	349	4.10	209	874	4.18	302 4	1771	4.20
Gilrs (F)															
Highly Superior In	30	149	4.96	64	290	4.53	7.1	333	4.69	165	772	4.67	0		ti ti
Superior $I_2$	56	248	4.42	75	344	4.58	83	360	4.33	214	952	4.44	0 V	7/77	CC • 4
Total (I.Q.wise)															
Highly Superior $\mathbf{I}_1$	61	277	4.54	96	426	4.43	103	472	4.58	260	1175	4.51	ć	Č	, (
Superior ${ iny I}_2$	95	407	4.28	160	710	4.44	168	402	4.22	423	1826	4.31	უ 0 0	100s	4. • • •
Total (Agewise)	156	156 684	4.38	256	1136	4.44	271	1181	4.36	683	3001	4.39			,
Mare have then have have have they was pres have have been part that days was days was have have bleng	1	*** *** *** *** *** *** *** *** *** ***	ner var Ann Sau Per jost gen Das ern ten var Sau Sau Sau Sau	!		1	!			1		:	1		 

Table 5.8(ii) (b): Showing Summary of Results of Analysis of Variance

Sources of Variance	đ£	Sum of Squares (Ss)	Mean Squares (Variance)	F Ratios	Remarks
Between I.Q. (Giftedness)	1	6.59	6,59	3.39	Not Sig.
Between Sex	1	20.45	20.45	10.54 S	ig.at .01
Between Age	2	0.84	0.42	0.21	Not Sig.
Interaction: I.Q. x Sex	1	1.44	1.44	0.74	Not Sig.
Interaction: I.Q. x Age	2	4.23	2.12	1.09	Not Sig.
Interaction: Sex x Age	2	1.68	0.84	0.43	Not Sig.
Interaction: I.Q. x Sex x Age	2	2.56	1.28	0.66	Not Sig.
Within Groups (Error term)	671	1302.15	1.94		
Total	682	1337.06			

From the statistical table 
For df = 1/671 2/671

F at .05 = 3.857 3.007

F at .01 = 6.681 4.644

Table 5.8(fi)(c): Showing Results of L.S.D. Test for Pair Differences among IQ., Sex, and Age - Sub-Groups.

L.S.D. = t 
$$\sqrt{MS_{W} / N_{1} + MS_{W} / N_{2}}$$

(t for df of  $MS_{W}$  at .05 = 1.96 and at .01 = 2.58)

many man that was mad mad a	ing managanan naganan br>Naganan naganan nagan	magamugath diga rasag magamagamaga wugamag Magamaga magamaga magamaga kung magamaga sasag unag unag unag unag unag unag unag un	Obtained mean Difference	Differ .05	ence	
	I was now may may say the real case their man may may have their up and	one dollar many sough reside doug things made. You then to	2	3	4	5
(1)	For I.Q. Differen	ces :				
	Among Boys of -					
	13 years : Highly Superi			•63	<b>.</b> S3	not sig.
	14 years :		•06	.57	.75	not sig.
	15 years: ,,	11	.24	•57	.75	not sig.
	Among Girls of -					
	13 years ,,	• •	.54	•63	.83	not sig.
	14 years ,	"	.05	.47	•62	not sig.
	15 years ,,	, , , , , , , , , , , , , , , , , , ,	<b>3</b> 6	.45	.59	not sig.
(ii)	A company of the second					
	Among Highly Supe	erior				
	13 years Soys va	Girls	.84	.71	.93	sig.at.05
	14 years	* *	.28	.59	.77	not sig.
	15 years ,,	,,	.35	<b>.</b> 59	.77	not sig.
	Among Superior -		•			
	13 years : ,,		.35	.59	.77	not sig.
	14 years ,,	,,	.27	.43	.57	not sig.
	15 years ,,	,,	.23	.41	.54	not sig.

Contd....

Table 5.8(ii)(c) Contd...

	1.	2	3	Ţ	5
	ملط عديد منظ بعض بعض المنظ	Angle broke stage angle stage driver having being would not			
(iii)	For Age Differences:				
	Among Main Groups -				
<i>/</i> ~	13 years vs 14 years	•06	.27	.36	not sig.
	13 years vs 15 years	•02	.27	.36	not sig.
	14 years vs 15 years	.08	.24	.31	not sig.
	Among Highly Superior Bo	ys -			•
	13 years vs 14 years	•13	•69	.90	not sig.
	13 years vs 15 years	.22	.69	.90	not sig.
	14 years vs 15 years	•09	•69	.90	not sig.
	Among Superior Boys -				
	13 years vs 14 years	.24	•53	<b>.</b> 70	not sig
	13 vears vs 15 years	.03	•53	.70	not sig
	14 years vs 15 years	.21	.41	. •54	not sig
	Among Highlv Superior Gi	rls -	-		
	13 years vs 14 vears	.43	.61	.80	not sig
	13 years vs 15 years	.27	.59	.77	not sig
	14 years vs 15 years	.16	.47	.62	not sig
	Among Superior GiEls				
-	13 years vs 14 years	.16	.43	•57	not sig
	13 years vs 15 years	•09	.47	.62	not sig
	14 years vs 15 years	.25	.43	•57	not sig

Table 5.8(iii) (a): Showing Mean Scores on Personality Factor I

(Premsia vs Harria) of each of Main and Sub-groups

(Sample size: 325) (I.Q. x Sex)

		alain, percentium agai terrapisma ata inperilipenya jainin angininga a	Extra- ordinary	Very Superior	Superior	Total
Boys	:	Nos.	10	49	106	165
		Scores	46	208	447	701
		Mean	4.60	4.24	4.22	4.25
Girls	:	Nos.	19	51	90	160
		Scores	97	247	395	739
		Mean	5.11	4.84	4.39	4.62
Total	:	Nos.	29	100	196	325
		Scores	143	455	842	1440
MANN ANNI MANNI MININA	_	Mean	4.93	4.55	4.30	4.43

Results of Table 5.8(iii) (b): Showing Summary of Analysis of Variance

Sources of Variance	df	Sum of Squares (Ss)	Mean Squares (Variance)	F Ratios	Remarks
Between I.Q. (Giftedness)	2	12.24	6.12	3.46	Sig.at .05
Between Sex	1	11.14	11.14	6.29	Sig.at .05
Interaction: I.Q. x Sex	2	0.91	0.91	0.51	Not Sig.
Within groups (Error term)	319	565.40	1.77		
Total	324	589.69			

From the statistical table -

For df = 2/319 1/319 F at .05 = 3.028 3.868 F at .01 = 4.676 6.716

Table 5.8(iii) (c): Showing Results of L.S.D. Test for Pair Differences among I.Q. and Sex Sub-groups

L.S.D. =  $t \sqrt{MS_w / N_2} + MS_w / N_2$ (t for df of MS_w at .05 = 1.97 and at .01 = 2.59)

	Obtained Mean		ired rence	Signifi- cance
	Difference	.05		Canco
(i) For I.Q. Differences:	and the second seco			and the second s
Among Main Groups -			•	
Extraordinary vs Very Suj	o38	.55	.72	Not Sig.
Extraordinary vs Superior	r .63	.51	.67	Sig.at .05
Very Superior vs Superior	r . 25	.31	.41	Not Sig.
Among Boys -			•	
Extraordinary vs Very Su	o36	.91	1.19	Not Sig.
Extraordinary vs Superior	r .38	.87	1.14	Not Sig.
Very Superior vs Superior	r .02	. 45	.60	Not Sig.
Among Girls -				
Extraordinary vs Very Suj	p 27	.73	.96	Not Sig.
Extraordinary vs Superior	r .72	.67	.88	Sig.at .05
Very Superior vs Superior	r .45	. 45	.60	Sig.at .05
(ii) For Sex Differences:				
Among Extraordinary -				
Boys vs Girls	.51	1.02	1.35	Not Sig.
Among Very Superior -				
Boys vs Girls	· <b>.</b> 60	.53	.70	Sig.at .05
Among Superior -				
Boys vs Girls	J. 17	.37	. 49	Not Sig.

Table 5.8(iv)(a): Showing Mean Scores on Personality Factor I

(Parmisia vs Harria) of each of Main and Sub-groups
(Sample 5.28.143) (1.47 Sex)

	<del></del>		Extraordinary (Gifted)	Backward (Non-gifted)	Total
Boys	:	Nos.	15	61	76
		Scores	73	256	329
		Mean	4.86	4.19	4.33
Girls	:	Nos.	36	31	<b>67</b> .
		Scores	176	124	300
		Mean	4.88	4.00	4.48
Total	:	Nos.	51	92	143
		Scores	249	380	629
		Mean	4.88	4.13	4.40

Results of Table 5.8(iv)(b): Showing Summary of Analysis of Variance

Sources of Variance	df	Sum of Squares (Ss)	Mean Squares (Variance)	F Ratios	Remarks
Between I.Q. (Giftedness)	1	18.54	18.54	8.62	Sig.at .01
Between Sex	1	0.78	0.78	0.36	Not Sig.
Interaction: I.Q. x Sex	1	.03	.03	0.013	Not Sig.
Within Groups (Error term)	139	298.93	2.15		
Total	142	318.28	****		

From statistical table

For df = 1/139

F at .05 = 3.91

F at .01 = 6.825

Table 5.8(iv)(c): Showing Results of L.S.D. Test for Pair Differences among I.Q. and Sex

L.S.D. = 
$$t\sqrt{MS_w/N_1 + MS_w/N_2}$$

(t for df of  $MS_{\overline{W}}$  at .05 = 1.98 and at .01 = 2.615)

- Bir Sin-Guideki guk Guige. Bui gerygkum, damihid dan basemud Bir gan Kur dumbung - Igas, propognamu	Obtained Mean Difference	Diffe	ired erence .01	Signifi- cance
(i) For I.Q. Differences				
Among Boys -				
Extraordinary vs Backwa	rd .67	.83	1.09	Not Sig.
Among Girls -				
Extraordinary vs Backwa	rd .88	.71	.94	Sig.at .05
(ii) For Sex Differences	•			
Among Extraordinary -				
Boys vs Girls	.02	.89	1.18	Not Sig.
Among Backward -				
Boys vs Girls	. 19	.63	.84	Not Sig.
	i unio pinto pinto teleb unio pinto com pinto unio pinto pinto com	g many september 1875.	and the second and the second	ande aus som verk eige gege Fälland freihand verk som finns hindanskald vig

The maximum score on this factor is ten, and the average scores of the four groups under study were 4.35, 4.39, 4.43 and 4.40 respectively, meaning that the sample on the whole was more or less sensitive, imaginative, gentle, and dependent. The differences due to I.Q., sex and age have been studied in the following lines.

The results of 935 subjects in I.Q. x sex design in Table 5.8(i)(b) show that neither giftedness nor sex nor their interaction was significant on the whole; however, results in Table 5.8(i)(c) show that extraordinary were higher significantly

(4.88) than the superior (4.27). When data of 683 subjects in I.Q. x sex x age design in Table 5.8(ii) (b) were considered, sex was found significant on the whole, not I.Q. not age nor any interaction, and results in Table 5.8(ii)(c) show that there were significant sex differences only among the highly superior group of 13 age. The results of 325 subjects in I.Q. x sex design in Table 3.8(iii) (b) show that both giftedness (I.Q.) and sex were independently contributing significantly to this factor I; the extraordinary scored highest (4.93), next were the very superior (4.55) and last were the superior (4.30); only the superior were significantly different from the extraordinary on the whole and among the girls the superior differed from both extraordinary and very superior. Similarly girls scored higher (4.62) than boys (4.25) on the whole, but truly there were significant sex differences only among the very superior. Finally, the results of 143 subjects in I.Q. x sex design in Table 5.8(iv)(b) and (c) show that only giftedness was significant on the whole and particularly among the girls. Neither sex nor interaction was significant.

To sum up, sex was significantly contributing to factor I, particularly in case of the highly superior group of 13 age or in case of very superior girls always scoring higher.

than boys. Giftedness was significant; particularly in case of extraordinary and very superior girls, making them different from ( higher than ) the superior or backward.

5.9 PERSONALITY FACTOR L (PROTENSION ( PARANOID TENDENCY )
VS RELAXED SECURITY ) AND GIFTEDNESS

This factor L (having larger variance in male than in female population) refers on the positive side to suspecting, jealous, self sufficient, withdrawn, brooding, tyranical, hard, irritable individuals, in contrast to the trustful, accepting, cheerful type on the negative side.

The scores of all the four groups on this factor were statistically analysed and the results have been summarized in Tables 5.9(i), (ii), (iii), (iv), - (a), (b), (c).

The maximum score on this factor is ten, and the average scores obtained by the four groups were respectively 5.27, 5.24, 5.32 and 4.81 implying that the group under study was average on this Factor L. The differences due to I.Q., sex and age, have been studied below.

The results of 935 subjects in Table 5.9(i)(b) show that neither giftedness nor sex was independently significant on the whole; or on any sub-group, but their interaction was significantly contributing to this Factor L. Girls were always higher than boys on this factor, but the superior were highest

Table 5.9(i)(a): Showing Mean Scores on Personality Factor L (Protension (Paranoid tendency) vs Relaxed, Security) of each of Main and Sub-groups (Sample Size: 935)

/ or, (I.Q. x Sex)

	at meste		Extra- ordinary	Very Superior	Superior	Total
Boys	:	Nos.	15	· 76	334	425
		Scores	73	388	1733	2194
		Mean	4.86	5.10	5.18	5.16
Girls	:	Nos.	36	145	329	510
		Scores	<b>17</b> 8	798	1762	2738
		Mean	4.94	5.50	5.35	5.37
Total	:	Nos.	51	221	663	935
		Scores	251	1186	3495	4932
		Mean	4.92	5.36	5.27	5.27

Results of Table 5.9(i)(b): Showing Summary of Analysis of Variance

Sources of Variance	đ£	Sum of Squares (Ss)	Mean Squares (Variance)	F Ratios	Remarks
Between I.Q. (Giftedness)	2	8.22	4.11	0.90	Not Sig.
Between Sex	1	9.86	4.93	1.08	Not Sig.
Interaction: I.Q. x Sex	2	392.21	196.10	43.01	Sig.at .01
Within Groups (Error term)	9 29	4239.07	4.56		
Total	934	4649.36%	9 may may may may may		

From the statistical table

For df = 2/929 1/929 F at .05 = 3.00 3.85 F at .01 = 4.63 6.66

Table 5.9(i) (c): Showing Results of L.S.D. Test for Pair Differences among I.Q. and Sex Sub-groups L.S.D. =  $t\sqrt{MS_W/N_1 + MS_W/N_2}$  (t for df of MS_W at .05 = 1.96 and at .01 = 2.58)

	Obtained Mean Difference		uired erence .01	Signifi- cance				
(i) For I.Q. Differences : Among the Main Groups -		**************************************	<b>東公司等に関係が関係を受ける。</b>	········· - 전 455,635 3 (66,43) 2점 14(4) 14(4)				
Extraordinary vs Very Sup.	0.44	0.65	0.85	Not Sig.				
Extraordinary vs Superior	0.35	0.61	0.80	Not Sig.				
Very Superior vs Superior	0.09	0.33	0.44	Not Sig.				
Among Boys -								
Extraordinary vs Very Super	rior0.24	1.18	1.54	Not Sig.				
Extraordinary vs Superior	0.32	1.10	1.44	Not Sig.				
Very Superior vs Superior	0.08	0.52	0.70	Not Sig.				
Among Girls -	,							
Extraordinary vs Very Super	rior0.56	0.76	1.01	Not Sig.				
Extraordinary vs Superior	0.41	0.73	0.95	Not Sig.				
Very Superior vs Superior	0.15	0.41	0.54	Not Sig.				
(ii) For Sex Differences:								
Among Extraordinary -								
Boys vs Girls	0.08	1.29	1.70	Not Sig.				
Among Very Superior -								
Boys vs Girls	0.40	0.59	0.77	Not Sig.				
Among Superior -								
Boys vs Girls	0.17	0.33	0.44	Not Sig.				

Table 5.9 (ii) (a) : Showing Mean Scores on Personality Factor L (Protension (Paranoid,tendency) Versus Relaxed, Security) of each of Main and Sub-groups (According to age).

(I.Q. x Sex x Age)

(Sample Size : 683)

Paginagis gymagisagisam sagina ary i arriv ein grindrigangrag disafran San Stan Stan Stan Stan Stan	,				Age i	Age in Verrs							Total	,
		13			14			15		Total		てハニ	Sexwise	1
	No	No. Scores Mean	Mean	No.	No. Scores	Mean	No.	Scores	Mean	No. Scores	s Mean	S. S.	Scores	Mean
Boys (M)														
Highly Superior I,	31	168	5.41	32	165	5.15	32	154	4.81	95 487	5.12	304	1564	5.14
Superior $I_2$	39	175	4.48	85	443	5.21	85 4	459	5.40	209 1077	5,15			
Girls (F)	30	161	5.36	64	338	5.28	71	384	5.40	165 883	5.35	379	2017	5,32
Superior	56		4,94	75	397	5.29	833	460	5 .54	214 1134	5.29	) )		
Total (I.Q.wise)														
Highly Superior I,	61	329	5.39	96	503	5.23	103	538	5.22	260 1370	5.26	683	3581	5,24
Superior	95	452	4.75	160	840	5.25	168	919	5.47	423 2211	5.15			
Total (Agewise)	15	156 781	55,01	256	1343	5.25	271	1457	5.38	683 3581	5.24	), (1 ), (2 ), (3 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4 ), (4	 	]
to fined gloud thing they when these there year them been down they fined Misser Stage than their Stage	1		1 1 1 1 1 1	 										

Results of Table No. 5.9 (ii) (b): Showing Summary of Analysis of Variance

Sources of Variance	đ£	Sum of Squares (SS)	Mean Square <b>s</b> (Variance)	F Ratios	Remarks
Between IQ (Giftedness)	1	0.28	0.28	0.11	not sig.
Between Sex	1	5.29	5.29	2.13	not sig.
Between Age	2	13.56	6.78	2.73	not sig.
Interaction IQ x Sex	1	0.01	0.005	0.002	not sig.
Interaction IQ x Age ,	2	18.61	9.31	3.75	Sig.at .05
Interaction Sex x Age	2	0.54	0.27	0.10	not sig.
Interaction IQ x Sex x Age	2	8.31	4.16	1.67	not sig.
Within Groups (Error term)	671	1669.06	2.48		
Total:	682	1715.66			

From statistical table

For df = 1/671 2/671

F at .05 = 3.857 3.007

F at .01 = 6.681 4.644

Table 5.9(ii) (c): Showing Results of L.S.D. Test for Pair Differences among I.Q., Sex and Age

Sub-groups. L.S.D. =  $t\sqrt{MS_W/N_1} + MS_W/N_2$  (t for df of MS at .05 = 1.96 and at .01 = 2.58)

	1	earnead regardaghing, and reage to the second regardage and second regardage to refer tags may use may have a	ntaga manga mangga mangga nangga mangah magaham ng Manga manga manga manga manga manga manga manga manga manga	Obtained Mean Differenc 2	Diffe	erence	Signifi- cance.
(i)				Alice Lique maps may reads strips made being those bring bring read			
(1)	and and and and and a fine of the self and		ices •	•			
-	Among Boys		•				
	13 years \$	Highly Superio		•93	.74	•98	Sig.at.05
	14 years	• •	,,	•06	.65	.95	not sig.
	15 years	,,	,,	∪ <b>.</b> 59	•65	.85	not sig.
	Among girls						
	13 years	,,	,,	.42	.71	•93	not sig.
	14 yesrs	,,	,,	.01	•53	<b>.</b> 730	not sig.
	15 years	• •	,,	.14	.49	• 65	not sig.
(ii)	For Sex Dif	ference	<u>es</u> :				
	Among Highl	y Super	cior				
	13 years :	Boys Vs	s Girls	.05	<b>.7</b> 8	1.03	not sig.
	14 years	* *	,,	.13	.65	.85	not sig.
	15 years	* *	••	•59	•57	.83	not sig.
	Among Super	ior					
	13 years	.,	,,	.46	.65	.85	not sig.
	14 years	**		•08	.49	.65	not sig.
	15 years	* *		.14	.47	.62	not sig.

Contd....

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Table 5.9(ii)(c) contd...

	1.		2	3	4	5
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iii)	For Age Differences	:			*	*
·	Among Main Groups -			-		
	13 years vs 14 years		.24	.31	.41	not sig.
	13 yesrs vs 15 years		•37	•31	.41	sig.at.0
	14 years vs. 15 years		.13	•27	•36	not sig.
	Among Hihgly Superior	s Boys	5 <del></del>			
	13 years vs 14 years		.26	.78	1.03	not sig.
	13 years vs 15 years		•60	.78	1.03	not sig.
	14 years vs 15 years		•34	.76	1.02	not sig.
	Among Superior Roys-					
	13 years vs 14 years		•73	.59	.77	sig.at.0
	13 years vs 15 years		•92	.59	•77	sig at .
	14 years vs 15 years		.19	.47	•62	not sig.
	Among Highly Superior	r Gir	ls-			
	13 years vs 14 years		•08	•69	.90	not sig.
	13 years vs 15 years		.04	.67	.88	not sig.
	14 years vs 15 years		•12	.53	<b>.</b> 70 -	not sig.
	Among Superior Girls					
	13 years vs 14 years		•35	.55	•72	not sig.
	13 years vs 15 years	,	.60	.53	.70	Sig.at.0
	14 years vs 15 years		.25	.49	•65	not sig.

Table 5.9(iii) (a): Showing Mean Scores on Personality Factor L (Protension (paranoid tendency) vs Relaxed Security) of each of Main and Sub-groups (Sample Size: 325)

(I.Q. x Sex)

Raf (10) Table (소리) 40 에 에 에 (10) (10) (10)		ndigenda amin'nya minina amin'nya minya	Extra- ordinary	Very Superior	Superior	Total
Boys	:	Nos.	10	49	106	165
		Scores	45	252	542	839
		Mean	4.50	5.14	5.11	5.08
Girls	:	Nos.	19	51	90	160
		Scores	95	299	496	890
		Mean	5.00	5.86	5.51	5.56
Total	2	Nos.	29	100	196	325
		Scores	140	551	1038	1729
		Mean	4.83	5.51	5.30	5.32

Results of Table 5.9(iii) (b): Showing Summary of Analysis of Variance

Sources of Variance	đ£	Sum of Squares (Ss)	Mean Squares (Variance)	F Ratios	Remarks
Between I.Q. (Giftedness)	2	10.75	5.38	1.98	Not Sig.
Between Sex	1	18.54	18.54	6.82	Sig.at .01
Interaction: I.Q. x Sex	2	3.76	1.88	0.69	Not Sig.
Within Groups (Error term)	329	866.67	2.72		
Total	324	899 <b>.7</b> 2		40 WW WW	and many state state year will still state.

From statistical table -

For df = 2/319 1/319 F at .05 = 3.028 3.868 F at .01 = 4.676 6.716

Table 5.9(iii) (c): Showing Results of L.S.D. Test for Pair Differences among I.Q. and Sex Sub-groups L.S.D. =  $t\sqrt{MS_W/N_1} + MS_W/N_2$  (t for df of MS at .05 = 1.97 and at .01 = 2.59)

	Obtained Mean Differences	Diff	uired erences .01	Signifi- cance
(i) For I.Q. Differences:				
Among Main Groups -				
Extraordinary vs Very Sup	<b>ე.</b> 0.68	. 69	.91	Not Sig.
Extraordinary vs Superior	. 47	.63	.83	Not Sig.
Very Superior vs Superior	r .21	. 39	.52	Not Sig.
Among Boys -				<del>-</del>
Extraordinary vs Very Sur	64	1.12	1.48	Not Sig.
Extraordinary vs Superior	.61	1.06	1.40	Not Sig.
Very Superior vs Superior	.03	•55	.72	Not Sig.
Among Girls -				
Extraordinary vs Very Sur	86	.86	1.14	Sig.at .05
Extraordinary vs Superior	.51	.81	1.06	
Very Superior vs Superior	. 35	.57	. 75	_
(ii) For Sex Differences:				•
Among Extraordinary -				
Boys vs Girls	•50	1.26	1.66	Not Sig.
Among Very Superior -				00 249.
Boys vs Girls	.72	.65	.85	Sig.at .05
Among Superior -			•	
Boys vs Girls	. 40	.47	.62	Not Sig.

Table 5.9(iv)(a): Showing Mean Scores on Personality Factor L (Protension ( paranoid tendency ) vs Relaxed, Security ) of each of Main and Sub-groups (Sample Size; [143])

(I.Q. X Sex) Extra-Backward Total ordinary (Non-gifted) (Gifted) 76 Boys : Nos. 15 61 356 283 73 Scores Mean 4.86 4.63 4.68 67 Girls: Nos. 36 31 Scores 154 178 332 4.94 4.96 4.95 Mean 143 51 92 Total : Nos. 688 Scores 251 437 4.81 Mean 4.92 4.75

Results of

Table 5.9(iv) (b): Showing Summary of Analysis of Variance

Sources of Variance	df	Sum of Squares (Ss)	Mean Squares (Variance)	F Ratios	Remarks
Between I.Q. (Giftedness)	1	0.97	0.97	0.33	Not Sig.
Between Sex	1	2.61	2.61	. 0.89	Not Sig.
Interaction: I.Q. x Sex	1	.33	0.33	0.11	Not Sig.
Within Groups (Error term)	139	406.00	2.92		•
Total	142	409.91			

From Statistical table

For df = 1/139

F at .05 = 3.91

F at .01 = 6.825

Table 5.9(iv)(c): Showing Results of L.S.D. Test for Pair Differences among I.Q. and Sex Sub-groups L.S.D. =  $t / MS_w / N_1 + MS_w / N_2$  ( t for df of MS at .05 = 1.98 and at .01 = 2.615)

**************************************	Obtained Mean Difference	Diff	uired erence .01	Signifi- cance
(i) For I.Q. Differences:			and a supplemental	
Among Boys -				
Extraordinary vs Backward	.23	.97	1.28	Not Sig.
Among Girls -				
Extraordinary vs Backward	.02	.83	1.09	Not Sig.
(ii) For Sex Differences:				
Among Extraordinary -				
Boys vs Girls	.08	1.05	1.39	Not Sig.
Among Backward -				
Boys vs Girls	.33	.75	.99	Not Sig.
•				

among boys, and the very superior scored, highest among the girls, thus accounting for significant interaction.

Similarly, the results of 683 subjects in Table 5.9(ii) (b) showed neither giftedness, nor sex nor age was independently significant, but I.Q. x age interaction was significant. The closer examination of results in Table 5.9(ii) (c) reveals that though I.Q. was not significant on the whole, highly superior scored significantly higher than the superior at 13 age. Similarly, though age was insignificant on the whole, 13

age group differed from 15 age group on the whole, and 13 age group differed from both 14 age group and 15 age group among the superior boys. Sex was not significant on the whole or in any sub-group. The highly superior scored higher than the superior at 13 age, and reverse was the case at 15 age; this accounted for significant interaction between I.Q. and age.

The results of 325 subjects in Table 5.9(iii) (b) and (c) indicate only sex to be significant, and that too only among the very superior. Though there were no I.Q. differences on the whole, the extraordinary differed from the very superior in case of girls on this factor.

The results of 143 subjects in Table 5.9(iv)(b) and (c) show no significant differences in I.Q. or sex anywhere on this factor.

To sum up, giftedness was significant only at age of 13, highly superior scoring higher than the superior. Age was significantly contributing was significant among superior boys, both 14 and 15 scoring significantly higher than 13 age and among superior girls, 15 scoring higher than 13. Sex was significant, particularly among the very superior, girls scoring higher on this factor.

5.10 PERSONALITY FACTOR M ( AUTIA VS PRAXERNIA ) AND GIFTEDNESS

This factor M represents on the positive side the introverted, absent-minded, unconventional, self-absorbed, frivolous, immature, impractical, imaginative, creative type of the individual, interested in art, theory, basic beliefs, etc.

The scores on this factor obtained by the four groups were statistically analysed by the F-test and the L.S.D. test, and the results have been summarized in Tables 5.10(i), (ii), (iii), (iv) - (a), (b), (c).

The maximum score on this factor is ten, and the average scores of the four groups under study were respectively 4.26, 4.23, 4.22 and 3.83, implying that the sample under study was below average on this factor, or more of a practical, conventional type. The differences due to some of the factors studied are described below.

The results in Table 5.10(i)(b) and (c) of 935 subjects (I.Q. x sex) reveal that giftedness was not significantly contributing to this factor; but only sex was significant. Girls scored higher (4.43) than boys (4.06) on the whole on this factor, and particularly among the very superior and the superior groups. No other sub-group pair was significant.

Table 5.10(i)(a): Showing Mean Scores on Personality Factor M

(Autia vs Praxernia) of each of Main and Sub-groups

(Sample Size: 935) I.Q. x Sex

		Extra- ordinary	Very Superior	Superior	Total
Boys	: Nos.	15	<b>7</b> 6	334	425
	Scores	58	289	1379	1726
	Mean	3.86	3.80	4.12	4.06
Girls	: Nos.	36	145	329	510
	Scores	143	652	1463	2258
	Mean	3.98	4.49	4.44	4.43
Total	: Nos.	5 <b>1</b>	221	663	935
	Scores	201	941	2842	3984
	Mean	3.98	4.25	4.28	4.26

Results of Table 5.10(i)(b): Showing Summary of Analysis of Variance

Sources of Variance	đ£	Sum of Squares (Ss)	Mean Squares (Variance)	F Ratios	Remarks
Between I.Q. (Giftedness)	2	5.65	2.82	0.77	Not Sig.
Between Sex	1	31.10	31.10	8.54	Sig.at .01
Interaction: I.Q. x Sex	2	9.81	4.91	1.35	Not Sig.
Within Groups (Error term)	929	3383.77	3.64		
Total	934	3430.33			

From the statistical table For df = 2/929 1/929 Fogat.05 = 3.00 3.85 F at .01 = 4.63 6.66

Table 5.10(i)(c): Showing Results of L.S.D. Test for Pair Differences among I.Q. and Sex Sub-groups  $\text{L.S.D.} = \text{t} \sqrt{\text{MS}_{\text{W}} / \text{N}_{1} + \text{MS}_{\text{W}} / \text{N}_{2} }$  ( t for df of MS $_{\text{W}}$  at .05 = 1.96 and at .01 = 2.58 )

	Obtained Mean Differences		uired erences .01	Signifi- cance
(i) For I.Q. Differences:				
Among Main Groups -				
Extraordinary vs Very Super	ior .27	.59	.77	Not Sig.
Extraordinary vs Superior	.30	.55	.72	Not Sig.
Very Superior vs Superior	.03	. 29	. 39	Not Sig.
Among Boys -				
Extraordinary vs Very Super	ior .06	1.06	1.39	Not Sig.
Extraordinary vs Superior	. 26	.98	1.29	Not Sig.
Very Superior vs Superior	.32	. 47	.62	Not Sig.
Among Girls -				
Extraordinary vs Very Super	ior 51	.70	.93	Not Sig.
Extraordinary vs Superior	. 46	.67	.88	Not Sig.
Very Superior vs Superior	.05	. 37	. 49	Not Sig.
(ii) For Sex Differences:				
Among Extraordinary -				
Boys vs Girls	.12	1.16	1.52	Not Sig.
Among Very Superior -				
Boys vs Girls	. 69	× 63	∕. <b>6</b> 3 S	ig.at .01
Among Superior -				
Boys vs Girls	`. 32	. 29	.3 <b>ģ</b> 5:	ig.at .05

k Table 5.10(ii) (a):Showing Mean Scores on Personality Factor M (Autia Versus Praxernia) of eac of Main and Sub-Groups (According to age).

x Age )

(I.O. x Sex

(Sample Size : 683)

And the second s	-	A COLUMN TO THE REAL PROPERTY OF THE PROPERTY			Age in	Vears		All the state of t					To	Total	
		13			14			15		Total	al		(Sexw	(Sexwise)	
	S S	No. Scores Mean No. Scores Mean	Mean	No.	Scores	Mean	1	No. Scores Mean	Mean	No.	No. Scores Mean	an	No. S	cores	Mean
					-	troppendetal ser and the Str									
Boys (M)															
Highly Superior I, 31 119	31	119	3.83 32	32	121	3.78	32	32. 1145	3.56	92	354	3.72	304	1218 4.01	4 01
Superion I,	39	39 163	4.17 85 343	85	343	4.03	82	358	4.27	209 864		4.13		) { 1	

Boys (M)														
Highly Superior $I_1$ 31 119	31	119	3.83	32 12	121	3.78	32. 1145	1145	3.56	95 354	3.72	304	1218	4.01
$\operatorname{Superior}_2$	30	163	4.17	85 34	343	4.03	85	358	4.27	209 864	4.13			
Girls (F)								•			ç			
Highly Superior I, 30 137	30	137	4.56 64 289	64	289	4.51	7.1	293	4.12	165 719	4.35	379	1669	4.40
Superior ${ extsf{I}}_2$	56	244	4.35	75	333	4.44	83	373	4.49	214 950	4.43	l		
Total (I.Q.wise)														
Hihgly Superior I,	61	256	4.19	96 41	410	4.55	103 407	407	က လ လ	260 1073	3 4.12	683	2887	4.23
Superior I,	95	95 407	4.28 160 67	160	919	4.22	168	731	4.35	423 1814	4 4.28			-
rotal (Agewise)	156	156 663	4.25	256	256 1086	4.24	271	271 1138	4.20	6 663 4.25 256 1086 4.24 271 1138 4.20 683 2887	7 4.23	been then days then days was	Anja Yess lase flow Reac Code	* * * * *
					, same man from the same same when									

Results of Table 5.10 (ii) (b) : Showing Summary of Analysis of Variance

•					
Sources of Variance	đf	Sum of Squares (SS)	Mean Squares (Variance)	F Ratios	Remarks
			Annual Control of the		
Between IQ (Giftedness)	1	4.19	4.19	2.05	not sig.
Between Sex	1	26.60	26.60	13.03	Sig. at .01
Between Age	2	0.35	0.18	0.088	not sig.
Interaction IO x Sex	1	7.58	7.58	3.71	not sig.
Interaction IQ x Age	2	6.42	3.21	1.57	not sig.
Interaction Sex X Age	2	1.70	0.85	0.42	not sig.
Interaction IQ x Sex x Age	2	1.50	0.75	.0. 37	not sig.
Within Groups (Error term)	671	1371.49	2.04		
Total:	682	1419.83	•	,	

From the Statistical table

For df = 1/671 2/671

F at .05 = 3.857 3.007

F at .01 = 6.681 4.644

Table 5.10(ii)(c): Showing Results of L.S.D. Test for Pair Difference Among I.Q., Sex and Age Sub-Groups.

L.S.D. = t 
$$\sqrt{MS_W / N_1 + MS_W / N_2}$$
  
(t for df of MS_W at .05 = 1.96 and at .01 = 2.58)

			Obtained mean Difference	Diffe	rence	Signifi- cance
	1	y may may wat May May May may	22	3	4	5
(i)	For I.Q. Difference	<u>:</u>				,
	13 years : Highly S		•34.	•67	.88	not sig.
	Superior 14 years		.25	.59	.77	not sig.
	15 years ,,	**	.71	•59	.77	sig.at.05
	Among Girls -					
	13 years ,,	,,	.21	<b>.</b> 63	.83	not sig.
	14 years ,,		•07	•47	.62	not sig.
•	15 years ,,		•37	.45	.59	not sig.
(ii)	For Sex Differences	to Tomas and				
	Among Highly Superi	or	-			
	13 years : Boys vs	Girls	.73	.71	•93	sig.at.05
	14 years ,,	,,	.73	•61	.80	sig.at.05
	15 years ,,		•56	•59	.77	not sig.
	Among Superior					•
	13 years ,,	* /	.18	<b>.</b> 59	.77	not sig.
	14 years ,,		.41	.45	.59	not sig.
	15 years ,,	,,	.22	.43	.57	not sig.

Contd....

Table 5.10(ii)(c) : Contd...

	hing rings was they was their host free rings and stage was also and they day for the case and may have				
word white while wage plants where		2	3	4	5
(iii)	For Age Differences				
	Among Main Groups				
	13 years vs 14 years	•01	.27	•36	not sig.
	13 years vs 15 years	•05	.27	•36	not sig.
	14 years vs 15 years	.04	.24	•31	not sig.
	Among Highly Superio	or Boys -			
	13 years vs 14 years	s .05	.71	<b>.</b> 93	not sig.
	13 years vs 15 years	.27	.71	•93	not sig.
	14 years vs 15 years	.22	.71	.93	not sig.
	Among Superior Boys	~			
	13 years vs 14 years	.14	•55	.72	not sig.
	13 years vs 15 years	.10	•55	.72	not sig.
	14 years vs 15 years	.24	.47	.62	not sig.
	Among Highly Superio	or Girls			
	13 years vs 14 years	•05	•63	.83	not sig.
	13 years vs 15 years	.44	•61	80	not sig.
	14 years vs 15 years	.39	.49	•65	not sig.
	Among Superior Girls	5			,
	13 years vs 14 years	.09	.49	•65	not sig.
	13 years vs 15 years	.14	.49	.65	not sig.
	14 years vs 15 years	.05	.45	.59	not sig.

Table 5.10(iii)(a): Showing Mean Scores on Personality

Factor M (Autia vs Praxernia) of each of Main and

Sub-groups (Sample Size = 325)

(I.Q. x Sex)

Maring American Ameri		Extra- ordinary	Very Superior	Superior	Total
Boys	Nos.	10	49	<b>10</b> 6	165
	Scores	35	192	439	666
	Mean	3.50	3.92	4.14	4.04
Girls	: Nos.	19	51	90	160
	Scores	76	235	395	706
	Mean	4.00	4.61	4.39	4.41
Total	: Nos.	29	100	196	325
	Scores	111	427	834	1372
Ministra sapakan wananin selamba	Mean	3.83	4.27	4.26	4.22

Results of Table 5.10(iii)(b): Showing Summary of Analysis of Variance

Sources of Variance	df	Sum of Squares (Ss)	Mean Square <b>s</b> (Variance)	F Ratios	Remarks
Between I.Q. (Giftedness)	2	4.96	2.48	1.06	Not Sig.
Between Sex	1	11.50	11.50	4.91	Sig.at .05
Interaction: I.Q. x Sex	2	5.18	2.59	1.11	Not Sig.
Within Groups (Error term)	319	746.41	2.34		
Total	324	768.05			

From statistical table -

For df = 2/319 1/319 F at .05 = 3.028 3.868 F at .01 = 4.676 6.716

Table 5.10(iii)(c): Showing Results of L.S.D. Test for Pair
Differences among I.Q. and Sex Sub-groups

L.S.D. = 
$$t\sqrt{MS_w/N_1 + MS_w/N_2}$$

(t for df  $MS_W$  at .05 = 1.97 and at .01 = 2.59)

	Obtained Mean Difference		uired erence .01	Signifi- cance
(i) For I.Q. Differences:				
Among Main Groups -				
Extraordinary vs Very Superi	or .44	.63	.83	Not Sig.
Extraordinary vs Superior	. 43	.59	.78	Not Sig.
Very Superior vs Superior	.01	.37	. 49	Not Sig.
Among Boys -				
Extraordinary vs Very Superi	or .42	1.04	1.37	Not Sig.
Extraordinary vs Superior	.64	1.03	1.32	Not Sig.
Very Superior vs Superior	. 22	.51	.67	Not Sig.
Among Girls -				
Extraordinary vs Very Superi	or .61	.83	1.09	Not Sig.
Extraordinary vs Superior	. 39	.75	.98	Not Sig.
Very Superior vs Superior	. 22	.51	.67	Not Sig.
(ii) For Sex Differences:	•			
Among Extraordinary -				
Boys vs Girls	50	1.18	1.55	Not Sig.
Among Very Superior -				
Boys vs Girls	.69	.59	.78	Sig.at .05
Among Superior -	•			
Boys vs Girls	. 25	.41	.54	Not Sig.

Table 5.10(iv)(a): Showing Mean Scores on Personality Factor M (Autia vs Praxemnia) of each of Main and Sub-groups

SHARPER - DV CO _ of votername		Extra- ordinary (Gifted)	Backward (Non-gifted)	Total
Boys :	Nos.	15	61	76
	Scores	58	237	295
	Mean	3.86	3.88	3.87
Girls:	Nos.	36	31	67
	Scores	143	110	253
	Mean	3.98	3.54	3.78
Total:	Nos.	51	92	143
	Scores	201	347	548
MANUEL	Mean	3.98	3.77	3.83

Results of

Table 5.10(iv)(b): Showing Summary of Analysis of Variance

Sources of Variance	đf	Sum of Squares (Ss)	Mean Squares (Variance)	F Ratios	Remarks
Between I.Q. (Giftedness)	1	0.93	0.93	0:29	Not Sig.
Between Sex	1	0.40	0.40	0.13	Not Sig.
Interaction: I.Q. x Sex	1	2.06	2.06	0.66	Not Sig.
Within Groups (Error term)	139	431.58	3.11		
Total	142	434.97			

From statistical table

For df = 1/139

F at .05 = 3.91

F at .01 = 6.825

Table 5.10(iv)(c): Showing Results of L.S.D. Test of Pair
Differences among I.Q. and Sex Sub-groups

L.S.D. = 
$$t / MS_W / N_1 + MS_W / N_2$$
  
(t for df of  $MS_W$  at .05 = 1.98 and at .01 = 2.615)

,	Obtained Mean Difference	Diff	uired erence .01	Sigr	nifi- ce
(i) For I.Q. Differences:	Perside (1704年) 150年   150年	s 研究 もうで 物 小 の 研 ヤ うくま ファヤ は しょっぱい 。	小衛 作用 私成 小田 (北京 インカー・ディング	**************************************	rut-ng regives
Among Boys -	,				
Extraordinary vs Backward	.02	1.01	1.33	Not	Sig.
Among Girls -					
Extraordinary vs Backward	.44	.85	1.22	Not	Sig.
(ii) For Sex Differences:					
Among Extraordinary -					
Boys vs Girls	.12	1.07	1.41	Not	Sig.
Among Backward -	_		•		
Boys vs Girls	. 34	.77	1.02	Not	Sig.

The results in Table 5.10(ii)(b) and (c) of 683 subjects (I.Q. x sex x age) also show that sex was the only significant factor; girls scored higher (4.40) than boys (4.01) on the whole, and particularly among highly superior group of 13 and 14 years. Giftedness was not significant on the whole, but only one pair, viz. highly superior vs superior boys of 15, showed differences. Age was not significant on the whole as well as in any sub-group.

The results in Table 5.10(iii)(b) and (c) of 325 subjects (I.Q. x sex) also indicate significant sex differences, girls scoring higher (4.41) than boys (4.04) on the whole, and particularly among the very superior.

The results in Table 5.10(iv)(b) and (c) show no differences in I.Q. or sex on this factor anywhere.

To sum up, only sex dontributed significantly to this factor M, and particularly among the very superior or highly superior of 13 and 14 years.

## 5.11 PERSONALITY FACTOR N ( SHREWDNESS VS NAIVETE ) AND GIFTEDNESS

This factor represents on the positive side the shrewd, sophisticated, polished, socially alert, exact, emotionally disciplined, esthetically fastidious, insightful, ambitious individual.

The scores on this factor obtained by the four groups were statistically analysed by the F-test and the L.S.D. test, and the results have been summarized in Tables 5.11(i), (ii), (iii), (iv) - (a), (b), (c).

Table 5.11(i)(a): Showing Mean Scores on Personality Factor N
(Shrewdness vs Naivete) of each of Main and Subgroups. (Sample Size: 935)

(I.Q. x Sex)

ecompany, did a "right technique. July 12 mg a	.og ander to the second village references in the second electric	Extra- ordinary	Very Superior	Superior	Total
Boys	Nos.	15	76	334	425
	Scores	80	429	1802	2311
	Mean	5.33	5.64	5.39	5,44
Girls	: Nos.	36	145	329	5 <b>10</b>
	Scores	189	789	1767	2745
	Mean	5.25	5.44	5.37	5.38
Total	:Nos.	51	221	663	935
	Scores	269	1218	3569	5056
	Mean	5.27	5.51	5.38	5.41

Results of Table 5.11(i)(b): Showing Summary of Analysis of Variance

Sources of Variance	đf	Sum of Squares (Ss)	Mean Squares (Variance)	F Ratios	Remarks
Between I.Q. (Giftedness)	2	3.68	1.84	0.33	Not Sig.
Between Sex	1	0.71	0.71	0.13	Not Sig.
Interaction: I.Q. x Sex	2	1.53	0.76	0.14	Not Sig.
Within Groups (Error term)	929	5173.83	5.57		
Total	934	5179.75			

From the statistical table

For df = 2/929 1/929 F at .05 = 3.00 3.85 F at .01 = 4.63 6.66

Table 5.11(i)(c): Showing Results of L.S.D. Test for Pair Differences among I.Q. and Sex Sub-groups L.S.D. =  $t\sqrt{MS_w/N_1} + MS_w/N_2$ 

(t for df of MS at .05 = 1.96 and at .01 = 2.58)

	Obtained Mean	Required Differences		Signifi-	
	Differences	.05		cance	
(i) For I.Q. Differences:	ルール・	Security in the Lates and the Security		Martingar Tall - 6 Martin and the Wall - 4 Martin and the Community	
************************************					
Among Main Groups -	•				
Extraordinary vs Very Supe	rior .24	.73	.95	Not Sig.	
Extraordinary vs Superior	0.11	.67	.88	Not Sig.	
Very Superior vs Superior	().13	. 35	.46	Not Sig.	
Among Boys -					
Extraordinary vs Very Supe	rior .31	1.31	1.73	Not Sig.	
Extraordinary vs Superior	.06	1.22	1.60	Not Sig.	
Very Superior vs Superior	<b>∴25</b>	.59	.77	Not Sig.	
Among Girls -					
Extraordinary vs Very Supe	rior .19	.86	1.14	Not Sig.	
Extraordinary vs Superior	.12	. 80	1.06	Not Sig.	
Very Superior ${f v}$ s Superior	.07	. 47	.62	Not Sig.	
(ii) For Sex Differences:	1				
Among Extraordinary -					
Boys vs Girls	.08	1.43	1.88	Not Sig.	
Among Very Superior -			<b>-</b>		
Boys vs Girls	.20	. 65	. 85	NotSig .	
Among Superior -		• • • •			
EBoys vs Girls	.02	.35	.46	Not Sig.	

(Shrewness Versus Naivete) on each of Main and Sub-Groups (According to age). Table 5.11(ii) (a) : Showing Mean Scores on Personality Factor N (I.O. x Sex X Age) (Sample size : 683)

				Age	in Years	rs			And the second name of the second	andress being distribution and the second	randingding vandinging	/ Name of the state of the stat	O.L	Total	
		13			14	The same of the sa	15	5		Total			(SEXMISE)	( as 1	
	No	No. Scores Mean	Mean	No.	Scores	Mean	No.	Scores	Mean	No. Sc	Scores	Mean	No.	Scores	Mean
Boys (M)								: : :					,		
Highly Superior ${f I}_1$	31	174	5.61	32	180	5.62	32	162	5.06	95 51	516	5.43	304	1663	5.47
Superior $ extsf{I}_2$	39	205	5.25	82	486	5.71	82	456	5,36	209 11	1147	5.33	; }	 	
Girls (F)												•			
Highly Superior $\mathbf{I_2}$	30	164	5.46	64	350	5.47	7.1	370	5.21	165 88	884	5,35	379	2049	5.41
Superior $ extsf{I}_2$	56	292	5.21	75	412	5.49	83	461	5 .55	214 1	1165	5,44	) ; )	)	
Total (I.Q.Wise)															
Highly Superior I,	61	338	5.54	96	530	5.52	103	532	5.16	260 1400		5.38	683	3712	5 4.3
Superior I,	05	497	5.23	160	868	5.11	168	917	5.45	423 23	2312	5.46	)   	! i	•
Total (Agewise)	156	156 835	5.35	256	1428	5.58	271	1449	5.34	683 3	3712	5 . 43			
ng thay than then plan game, Alm than Jam Sam Sam Sam Sam Jam Sam Sam Sam Sam Sam Sam Sam Sam Sam S	! ! !			1			1								****

Table 5.11(ii)(b): Showing Summary of Results of Analysis of Variance

Sources of Variance	đ£	Sum of Squares (Ss)	Mean Squares (Variance)	F Ratios	Remarks
Between I.Q. (Giftedness)	1	1.06	1.06	0.67	Not Sig.
Between sex	1	0.69	0.69	0.44	Not Sig.
Between Age	2	8.41	4.21	2.66	Not Sig.
Interaction: I.Q. x Sex	1	0.17	0.09	0.05	Not Sig.
Interaction: I.Q. x Age	2	8.48	4.24	2.68	Not Sig.
Interaction: Sex x Age	2	3,46	1.73	1.09	Not Sig.
Interaction: I.Q. x Sex x	_	0.88	0.44	0.27	Not Sig.
Within Groups (Error term)	671	1062.05	1,58	,	
Total	682	1084.86		,	

From the statistical table -

For df = 1/671 2/671 F at .05 = 3.857 3.007 F at .01 = 6.681 4.644

Table 5.11(ii)(c): Showing Results of L.S.D. Test For Pair Differences Among I.Q., Sex, and Age Sub-Groups

L.S.D. = t 
$$\sqrt{MS_W^2/N_1^2 + MS_W^2/N_2^2}$$
 (t for df of MS at .05 = 1.96 and at .01 = 2.58)

				Obtained			Signifi-
				mean	Differ		cance
	The other time times when the same times and times			Difference	e •02		the way flow with map true way have they were
~	1	s that was runs had had you had been so hear or		2	3	44	5
		Difference					
	Among Boy	s -				-	
	13 years	: Highly S Superior		•36 •	.59	.77	Not sig.
	14 years			•09	.51	•67	not sig.
	15 years	,,	,,	•30	.51,	•67	not sig.
	Among Gir	ls -					ł
	13 years	,,	,,	.25	•55	.72	not sig.
	14 years	,,	.,	.03	.41	.54	not sig.
	15 vears	* *	* *	.34	•39	.52	not sig.
(11)		oifferences					
	Among Hig	hly Superi	lor				
	13 years	: Boys vs	Girls	.15	•63	.83	not sig.
	14 vears	: My	* *	.16	•53	.70	not sig.
	15 years	: ,,	**	.15	•53	<b>.</b> 70	not sig.
	Among Sup	erior -					
	13 years	: ,,	,,	.04	.51	.67	not sig.
	14 years	. ,,	* *	.22	.39	.52	not sig.
	15 years	t gi,	**	.19	.37	.49	not sig.

Contd...

Table 5.11(ii)(c) contd...

	-mi -mid -mir star star star star star star star sta	. With Maje 1844 When When When When When 1844 When 1844			. was Mar Was Mark Mary Wine Mar Wat Mas Mary
	11	22	3	4	5
(iii)	For Age Differences				
	Among Main Groups				
	Among Marn Groups				
	13 years vs 14 years	•23	.25	•33	not sig.
	13 years vs 15 years	01	.25	•33	not siff.
	14 years vs 15 years	.24	.22	.28 s	ig.at.05
	Among Highly Superior E			_	
	13 vears vs 14 years	.01		.83	_
	13 years vs 15 years	<b>.</b> 55	•63	.83	not sig.
	14 years vs 15 years	•56	.61	.80	not sig.
	Among Superior Boys -		,		
•	13 years vs 14 years	146	.47	•62	not sig.
	13 years vs 15 years	<b>.11</b>	.47	.62	not sig.
	14 years vs 15.years	.35	.37	.49	not sig.
	Among Highly Superior G	irls-			t
	13 years vs 14 years	.01	.59	.77	not sig.
	13 years vs 15 years			.72	
	14 years vs 15. years			.57	·
	14 Acdis As 12. Acdis	* Z. O	• • •	••,	1 -
	Among Superior Girls				
	13 vears vs 14. years	.28	.43	•57	not sig.
	13 years vs 15 years	•34	.43	.57	not sig.
	14 years vs 15 years	.06	•39`	.52	not sig.

Table 5.11(iii)(a): Showing Mean Scores on Personality
Factor N (Shrewdness vs Naivete) of each of Main
and Sub-groups. (Sample Size: 325)

(I.Q. x Sex)

	in 'T till - Papp of a low 'T like a still a s	Extra- ordinary	Very Superior	Superior	Total
Boys :	Nos.	10	49	106	165
	Scores	49	277	550	8 <b>7</b> 6
	Mean	4.90	5.65	5.19	5.31
Girls :	Nos.	19	51	90	160
	Scores	105	270	490	865
	Mean	5.53	5.29	5.44	5.41
Total :	Nos.	29	100	196	325
	Scores	154	547	1040	1741
	Mean	5.31	5.47	5.30	5.36

Results of Analysis of Variance

Sources of Variance	df	Sum of Squares (Ss)	Mean Squares (Variance)	F Ratios	Remarks
Between I.Q. (Giftedness)	2	1.84	.92	0.39	Not Sig.
Between Sex	1	0.77	0.77	0.32	Not Sig.
Interaction: I.Q. x Sex	2	8.20	4.10	1.73	Not Sig.
Within Groups (Error term)	319	755.79	2.37		
Total	324	766.60			

	**** **** **** **					_
from stati	stical	tabl	.e .	edit ve ette ette en ette en ette en ette ett	terreti en til er dij et sej ungg vegge gelgenning gang i	•
•	For	df	=	2/319	1/319	
	F at	.05	=	3.028	3.868	
	F at	.01	=	4.676	6.716	

Table 5.11(iii) (c) : Showing Results of L.S.D. Test for Pair Differences among I.Q. and Sex Sub-groups L.S.D. =  $t\sqrt{MS_W/N_1 + MS_W/N_2}$  (t for df of MS_W at .05 = 1.97 and at .01 = 2.59)

	Obtained Mean Difference	Diffe	ired rence .01	Signifi- cance
(i) For I.Q. Differences:		THE APPLICATION OF THE PROPERTY OF	har territoria caretti harge et reti acett	
Among Main Groups -				,
Extraordinary vs Very Sup.	.16	.63	.83	Not Sig.
Extraordinary vs Superior	.01	.59	.78	Not Sig.
Very Superior vs Superior	.17	.37	. 49	Not Sig.
Among Boys -	•			
Extraordinary vs Very Sup.	.75	1.04	1.37	Not Sig.
Extraordinary vs Superior	. 29	1.003	1.32	Not Sig.
Very Superior vs Superior	. 46	.51	.67	Not Sig.
Among Girls -				
Extraordinary vs Very Sup.	. 24	.83	1.09	Not Sig.
Extraordinary vs Superior	.09	.75	.98	Not Sig.
Very Superior vs Superior	.15	.51	.67	Not Sig.
(ii) For Sex Differences:				
Among Extraordinary -				
Boys vs Girls	.63	1.18	1.55	Not Sig.
Among Very Superior				-
Boys vs Girls	.36	.59	.78	Not Sig.
Among Superior				
Boys vs Girls	. 25	.41	.54	Not Sig.

Table 5.11(iv)(a): Showing Mean Scores on Personality

Factor N ( Shrewdness vs Naivete) of each of

Main and Sub-groups ( Sample Size; 143) ( I. 6 f Sex)

		Extra- ordinary (Gifted)	Backward (Non-gifted)	Total
ي ر				
Boys :	Nos.	15	61	76
	Scores	80	244	324
	Mean	5.33	4.00	4.26
Girls:	Nos.,	36	31	<b>67</b>
	Scores	189	120	309
	Mean	5.25	3.87	4.61
Total:	Nos.	51	92	143
	Scores	269	364	633
	Mean	5.27	3.94	4.43

Results of
Table 5.11(iv)(b): Showing Summary of Analysis of Variance

Sources of Variance	đf	Sum of Squares (Ss)	Mean Square <b>s</b> (Variance)	F Ratios	Remarks
Between I.Q. (Giftedness)	1	56.99	56.99	14.50	Sig.at .01
Between Sex	1	4.33	4.33	1.10	Not Sig.
Interaction: I.Q. $x Sex$	1	3.90	3.90	0.999	Not Sig.
Within Groups (Error term)	139	545.76	3.93		
Total	142	610.98	e none and may and made		

the From statistical table

For df = 1/139

F at .05 = 3.91

F at .01 = 6.825

Table 5.11(iv)(c): Showing Results of L.S.D. Test for Pair Differences among I.Q. and Sex Sub-groups L.S.D. =  $t\sqrt{MS_W/N_1} + MS_W/N_2$  (t for df of MS at .05 = 1.98 and at .01 = 2.615)

	Obtained Mean Difference	Requir Differe	ence	Signifi- cance
			<del></del>	en <del>Marie en Marie en</del>
(i) For I.Q. Differences:				
Among Boys -				_
Extraordinary vs Backward	1.33	1.13	1.49	Sig.at.05
Among Girls -				m
Extraordinary vs Backward	1.38	.99	1.31	Sig.at.01
(ii) For Sex Differences:				
Among Extraordinary -				•
Boys vs Girls	.08	1.21	1.60	Not Sig.
Among Backward				
Boys vs Girls	.13	.87	1.15	Not Sig.
ر الله الله الله الله الله الله الله الل				

The maximum score on this factor is ten and the four groups obtained on an average 5.41, 5.43, 5.36 and 5.27 by the gifted and 3.94 by the non-gifted, making an average of 4.43 respectively. This means that the total sample was averagely normal on this factor of shrewdness. The differences due to giftedness (I.Q.), sex and age have been discussed below.

The results in  $T_able 5.11(i)(b)$  and (c) of 935 subjects (I.Q. x sex) indicate that neither giftedness nor sex nor their interaction was significantly contributing to this factor on the

whole or at any sub-group level. The results in Table 5.11(ii) (b) and (c) of 683 subjects (I.Q. x sex x age) also show that neither I.Q., nor sex nor age nor any interaction made any difference, excepting in one pair of main age group, viz. 14 age vs 15 age, in favour of the 14 age group. The results in Table 5.11(iii)(b) and (c) of 325 subjects (I.Q. x sex) also reveal no differences in I.Q. or sex anywhere. However, results in Tables 5.11(iv)(b) and (c) of 143 subjects (I.Q. x sex) show that giftedness made significant differences on the whole as well as separately among boys and girls, always the gifted scoring higher than the non-gifted on this factor N, neither sex nor I.Q. x sex was significant.

To sum up, neither giftedness nor sex nor age nor any interaction contributed substantially to the factor N. Only the comparison of the gifted with the non-gifted showed that giftedness was significant on the whole as well as among the boys and the girls, i.e., the gifted were higher than the non-gifted on this factor N of shrewdness, and this was as expected.

5.12 PERSONALITY FACTOR 0 ( GUILT PRONENESS vs CONFIDENT, ADEQUACY ) AND GIFTEDNESS

This factor O refers on the positive side to guilt pronemess.

i.e. to the timid, insecure, worrying, or anxious, depressed,
sensitive, tender, easily upset, moody, lonely, brooding,

individuals, somewhat like Factor L though distinct from it, it also represents exacting, fussy type having strong sense of duty and phobic symptoms, etc.

The scores on this factor obtained by the four groups were statistically analysed by the F-test and the L.S.D. test, and the results of this statistical analysis have been summarized in Tables 5.12 (i), (ii), (iii) and (iv), - (a), (b), (c).

The individual can obtain maximally ten on this factor if positively scored. The average scores obtained by the present four groups under study were 2.62, 2.63, 2.59 and 3.21 (average of 2.70 of the gifted and 3.51 of the non-gifted). This indicates that the total sample under study was far below on this factor of guilt proneness, or was normally self-confident and cheerful. The differences made by giftedness, sex and age have been examined below.

The results of 935 subjects (I.Q. x sex) in Table 5.12(1)

(b) and (c) reveal that neither giftedness (I.Q.), nor sex nor their interaction was significantly contributing to this factor 0 on the whole or in any subgroup. Similarly, the results of 683 subjects (I.Q. x sex x age) in Table 5.12 (ii), (b) and (c) also indicate that neither I.Q. nor sex nor age nor any interaction, except the highest I.Q. x sex x age interaction, was significant. Only girls scored significantly higher (more guilt prone) than

Table 5.12(i)(a): Showing Mean Scores on Personality

Factor O (Guilt Proneness vs Confident Adequacy)

of each of main and Sub-groups (Sample Size:935)

I.Q. x Sex

			Extra- ordinary	Very Superior	Superior	Total
Boys	:	Nos.	15	76	334	425
		Scores	48	167	846	1061
		Mean	3.20	.2.19	2.53	2.50
Girls	:	Nos.	36	145	329	510
		Scores	88	385	920	1393
		Mean	2.44	2.65	2.79	2.73
Total	:	Nos.	51	221	663	935
		Scores	136	552	1766	2454
		Mean	2.70	2.49	2.66	2.62

Results of Table 5.12(i)(b): Showing Summary of Analysis of Variance

				·····	
Sources of Variance	df	Sum of Squares (Ss)	Mean Squares (Variance)	F Ratios	Remarks
Between I.Q. (Giftedness)	2	4.66	2.33	0.53	Not Sig.
Between Sex	1	12.79	12.79	2.90	Not Sig.
Interaction: I.Q. x Sex	2	15.19	7.59	1.72	Not Sig.
Within Groups (Error term)	929	4095.59	4.41		
Total		4128.23			

From the statistical table

For df = 2/929 1/929 F at .05 = 3.00 3.85 F at .01 = 4.63 6,66

Table 5.12(i)(c): Showing Results of L.S.D. Test for Pair Differences among I.Q. and Sex Sub-groups  $\text{L.S.D.} = \text{t} \sqrt{\text{MS}_{\text{W}} / \text{N}_{1} + \text{MS}_{\text{W}} / \text{N}_{2} }$  (t for df of MS $_{\text{W}}$  at .05 = 1.96 and .01 = 2.58)

	Obtained Mean Difference		uired erence .01	Sign icar	
(i) For I.Q. Differences:					
Among the Main Groups -	•				
Extraordinary vs Very Superi	or .21	. 65	.85	Not	Sig
Extraordinary vs Superior	.04	.61	.80	Not	Sig.
Very Superior vs Superior	.17	.31	.41	Not	Sig.
Among Boys -					
Extraordinary vs Very Superi	or 1.01	1.16	1.52	Not	Sig.
Extraordinary vs Superior	. 67	1.08	1.42	Not	Sig.
Very Superior vs Superior	.34	.53	.70	Not	Sig.
Among Girls -					
Extraordinary vs Very Superi	or .21	.76	1.01	Not	Sig.
Extraordinary vs Superior	.35	.73	.95	Not	<b>Si</b> g
Very Superior vs Superior	.14	.41	.54	Not	Sig.
(ii) For Sex Differences:					
Among Extraordinary -				*	
Boys vs Girls	76	1.27	1.68	Not	Sig.
Among Very Superior -					
Boys vs Girls	. 46	.59	.77	Not	Sig.
Among Superior -					
Boys vs Girls	. 26	.31	.41	Not	Sig.

(I.Q. x Sex x Age) (According to Age.) Table 5.12(ii) (a) : Showing Mean Scores on Personality Factor O (Guilt Proneness Versus Confident, Adequacy) of Pach Of Mains and Sub-Groups. (Sample Size: 683)

					Age in Y	Years	ay and a supplementary and							Total	) )
,		13			14			15			Total		_	CCXMT	۵)
magh-aythin-ghadhraidhrai-madh sa eand bhadh a dhlai, bhadh aghair da eadh eitheashan	No	Scores	Mean	S S	ores	Mean	No. S	No.Scores	Mean	No.	Ø	Mean	⊗	Scores	Mean
Boys (M)															
Highly Superior $\mathbf{I}_{\mathbf{I}}$	31	74	2.38	32	78	2.43	32	75	2.34	95	227	2.38	304	757	2.59
Superior $\mathbf{I}_2$	39	113	2.89	85	197	2.31	82	220	2.58	209	530	2.53	, )		
Girls (F)				•											
Highly Superior $\mathbf{I}_1$	30	68	2.96	64	165	2.57	71	182	2.56	165	436	2.64	379	1037	2.74
Superior $1_2$	56	160	2.85	175	218	2.90	83	223	2.68	214	601	2.80		) )	' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '
Total (I.Q.wise)								_							
Highly Superior $oldsymbol{\mathrm{I}}_1$	61	163	2.67	96	243	2.53	103	257	2.49	260	663	2.55	88	1794	63.
Superior I2	95	273	2.87	160	415	2.59	168	443	2.63	423	1131	2.67	)	1 1	)
Total (Agewise)	156	436	2.89	256	658	2.57	271	700	2.58	683	1794	2.63			~
tion date from them gain dark later glass lead than their man sales lawy dark their tree their trees their	-	other team deep Castle Divine Labor Dates Tamp Three	* ** ** ** **	-					, see to the last like the last and	!!!!!				1	1

Results of Table 5.12 (ii) (b) : Showing Summary of Analysis of Variance

Sources of Variance	df	Sum of Squares (SS)	Mean Squares (Variance)	F Ratio	Remarks
	والمراجع وا	anning mengalah digilah dipunangan penganangan digilah	و المالية المالية والمالية والمالية المالية والمالية والمالية والمالية والمالية والمالية والمالية والمالية والم		
Between IQ (Giftednness)	1	2.47	2.47	0.87	not sig.
Between Sex	1	10.20	10.20	3.57	Not sig.
Between Age	2	5.73	2.87	1.01	Not sig.
Interaction IO x Sex	1	1.49	1.49	0.52	Not sig.
Interaction IQ x Age	2	0.55	0.28	0.09	Not sig.
Interaction Sex X Age	2	2.92	1.46	0.51	Not sig.
Interaction IQ x Sex x Age	2 .	47.47	22.74	7.97	Sig. at .01
Within groups (Error term)	671	1912.97	2.85		
Total	682	1981.80			

From the Statistical table

df = 1/671 2/671 F at .05 = 3.857 3.007 F at .01 = 6.681 4.644

Table 5.12(ii)(c): Showing Results of L.S.D. Test For Pair Differences among I.Q. Sex, and Age

Sub-Groups.

L.S.D. = t  $\sqrt{MS_W / N_1 + MS_W / N_2}$ 

(t for df of  $MS_W$  at .05 = 1.96 and at .01 = 2.58)

			02.1	7 17		
		Obtained mean	n kequi Differ		Signifi- cance	
			differen			Cance
	<u> </u>			3		5
ment total some from two means of						يوسام فحالي حيس فيساء فسنى مصين شينق فحال فدني كالبيا فينتا
(i)	For I.Q. Differe	nces				
	Among Boys					
	13 years : High. Super:	***	<b>.</b> 50	.80	1.06	not sig.
	14 years , ,	,,	.12	.69	.90	not sig.
	15 years ,,		J.24	.69	.90	not sig.
	Among Girls -					
	13 years ,,	,,	•11	.74	.98	not sig.
	14 years ,,		•33	.57	.75	not sig.
	15 years ,,		.12	•53	.70	not sig.
(ii)	For Sex Differen	ces ,				
	Among Highly Sup	erior -				
	13 year : Boys v	s Girls	J. <b>5</b> 8	.84	1.11	not sig.
	14 year : ,,	11	.14	.73	.95	not sig.
	15 years ,,		.22	.71	.93	not sig.
	Among Superior -					
	13 years ,,	4.1	.04	.69	.90	not sig.
	14 years	11	.59	.53	.70	sig.at.05
	15 years ,,	.,	J.10	.51	<b>.</b> 67	not sig.

Contd...

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Table 5.12(ii)(c) contd...

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more way, done when same ways	An was says than some lady than they they they they they they they they	2	3	4	5
(iii)	For Age Differences				
	Among Main Groups	-			
	-	20	2.0	4.4	
	13 years vs 14 year		•33		not sig.
	13 years vs 15 year		.33		not sig.
,	14 years vs 15 year	s .01	.29	•39	not sig.
	Among Highly Superi	or ^p oys-			
	13 years vs 14 year	s •05	.84	1.11	not sig.
	13 years vs 15 year	s .04	.84	1.11	not sig.
	14 years vs 15 year	s •09	.84	1.11	not sig.
	Among superior Boys	~			
	13 years vs 14 year	s .58	•65	.85	not sig.
	13 years vs 14 year	s .31	· .65	.85	not sig.
	14 years vs 15 year	s .27	.51	•67	not sig.
	Among Highly Superi	or Girls-			
	13 years vs 14 years	s .39	.73	•95	not sig.
	13 years vs 15 years	s .41	.71	.93	not sig.
	14 years vs 15 year	s .01	.57	.75	not sig.
	Among Superior Girl	s ~			
	13 years vs 14 year		.59	.77	not sig.
	13 years vs 15 years		.57		not sig.
	14 years vs 15 year		.53	•70	not sig.
		•	* ***	- · •	

Table 4.12(iii) (a): Showing Mean Scores on Personality
Factor O (Guilt Proneness vs Confident Adequacy)
of each of Main and Sub-groups (Sample Size: 325)
I.Q. x Sex

			Extra- ordinary	Very Superior	Superior	Total
Boys	:	Nos.	10	49	106	165
		Scores	27	103	256	<b>3</b> 86
		Mean	2.70	2.10	2.42	2.34
Girls	:	Nos.	19	51	90	160
		Scores	45	160	250	455
		Mean	2.37	3.14	2.78	2.84
Total	:	Nos.	29	100	196	325
		Scores	72	263	506	841
		Mean	2.48	2.63	2.58	2.59
					Results of	· · · · · · · · · · · · · · · · · · ·

Table 4.12(iii) (b) : Showing Summary of Analysis of Variance

Sources of Variance	đf	Sum of Squares (Ss)	Mean Squares (Variance)	F Ratios	Remarks
Between I.Q. (Giftedness)	2	0.51	0.26	0.10	Not Sig.
Between Sex	1	20.67	20.67	8.17	Sig.at .01
Interaction: I.Q. x Sex	2	13.22	6.61	2.61	Not Sig.
Within Group (Error term)	319	806.35	2.53		
Total	324	840.75			

the From statistical table

For df = 2/319 1/319 F at .05 = 3.028 3.868

F at .01 = 4.676 6.716

Table 5.12(iii) (c): Showing Results of the L.S.D. Test for Pair Differences among I.Q. and Sex Sub-groups  $\text{L.S.D.} = \text{t} \sqrt{\text{MS}_{\text{W}} / \text{N}_{1}} + \text{MS}_{\text{W}} + \text{N}_{2}$ 

( t for df of  $MS_W$  at .05 = 1.97 and at .01 = 2.59)

	Obtained Mean Difference		ired rence .01	Signifi cance
(i) For I.Q. Differences	:			
Among Main Groups -				
Extraordinary vs Very Sup	15	.67	.88	Not Sig.
Extraordinary vs Superior	.10	.63	.83	Not Sig.
Very Superior vs Superior	.05	. 39	.52	Not Sig.
Among Boys -				
Extraordinary vs Very Sup	60	1.08	1.42	Not Sig.
Extraordinary vs Superior	. 28	1.04	1.37	Not Sig.
Very Superior vs Superior	32	.55	.73	Not Sig.
Among Girls -				
Extraordinary vs Very Sup	77	.84	1.11	Not Sig.
Extraordinary vs Superior	.41	.78	1.04	Not Sig.
Very Superior vs Superior	.36	.55	.73	Not Sig.
(ii) For Sex Differences:				
Among Extraordinary -				
Boys vs Girls	.33	1.22	1.61	Not Sig.
Among Very Superior -				
Boys vs Girls	1.04	.60	.63	Sig.at .01
Among Superior -				
Boys vs Girls	.36	.45	.60	Not Sig.

Table 5.12(iv)(a): Showing Mean Scores on Personality
Factor O (Guilt Proneness vs Confident Adequacy)
of each of Main and Sub-groups

		Extra- ordinary (Gifted)	Backward (Non-gifted)	Total
Boys	: Nos.	15	61	76
	Scores	48	202	250
	Mean	3.20	3.21	3.29
Girls :	Nos.	36	31	67
	Scores	88	121	209
	Mean	2.44	3.90	3.12
Total:	Nos.	51	92	143
	Scores	136	323	459
	Mean	2.70	3.51	3.21

Results of
Table 5.12(iv)(b): Showing Summary of Analysis of Variance

Sources of Variance	đf	Sum of Squares (Ss)	Mean Squares (Variance)	F Ratios	Remarks
Between I.Q. (Giftedness)	1	23.39	23,39	7.11	Sig.at .01
Between Sex	1	1.04	1.04	0.32	Not Sig.
Interaction: I.Q. x Sex	1	12.20	12.20	3.71	Not Sig.
Within Groups (Error term)	139	457.08	ź. 29		
Total	142	493.71			

From statistical table

For df = 1/139

F at .05 = 3.91

F at .01 = 6.825

Table 5.12(iv)(c): Showing the Results of L.S.D. Test for Pair Differences among I.Q. and Sex Sub-groups

L.S.D. = 
$$t \sqrt{MS_w / N_1 + MS_w / N_2}$$
  
(t for df of  $MS_w$  at .01 = 1.98 and at .01 = 2.615)

	Obtained Mean Differences	Diff	equired erence •01	Signifi- cance
(i) For I.Q. Differences:	1			
Among Boys -				
Extraordinary vs Backwar	d .11	1.03	1.36	Not Sig.
Among Girls -				
Extraordinary vs Backwar	d 1.46	.87	1.15	Sig.at .01
(ii) For Sex Differences:	,			
Among Extraordinary	<del>-</del>			
Boys vs Girls	<b>.7</b> 6	1.09	1.44	Not Sig.
Among Backward -	•			
Boys vs Girls	0.59	.77	1.02	Not Sig.

boys among the superior group of 14 years, and this accounted for significant I.Q. x sex x age interaction.

The results of 325 subjects (I.Q. x sex) in Table 5.12(iii) (b) and (c) showed however, that only sex was significant, a girls scoring higher than boys on the whole, and particularly among the very superior group, while the results of 143 subjects (I.Q. x sex) in Table 5.12(iv)(b) and (c) reveal that only non-giftedness as contrasted with giftedness was significantly

contributing to this factor 0, the non-gifted being more guilt-prone(3.51) than the gifted (2.70) on the whole, and particularly among the girls.

To sum up, neither giftedness nor sex nor age was significantly contributing to the factor 0 of guilt proneness generally. However, when the functionally gifted subjects were studied separately, girls were found more prone to guilt than boys in the very superior group only; and when the gifted were compared with the non-gifted, the non-gifted girls were found more prone to guilt than the gifted girls. In other words, sex was significant in some cases on this factor 0.

5.13 PERSONALITY FACTOR  $\mathbf{Q}_1$  ( RADICALISM vs CONSERVATISM OF TEMPERAMENT ) AND GIFTEDNESS

This factor refers on the positive side to radicalism in political and religious attitudes in general.

The scores on this factor obtained by all the four groups were statistically analysed by the F-test and the L.S.D. test, and the results have been summarized in Tables 5.13 (i), (ii), (iii), (iv) - (a), (b) and (c).

Table 5.13(i)(a): Showing Mean Scores on Personality

Factor Q₁ (Radicalism vs Conservatism of temperament) of each of Main and Sub-groups

(Sample Size :935) (I.Q. x Sex)

		Extra- ordinary	Very Superior	Superior	Total
Boys	Nos.	15	76	334	425
	Scores	100	449	1860	2409
	Mean	6.66	5.90	4.44	5.67
Girls :	Nos.	36	145	329	510
	Scores	209	874	1867	2950
	Mean	5.80	6.02	5.67	5.78
Total	Nos.	51	221	663	935
	Scores	309	1323	3727	5359
	Mean	6.05	5.98	5.62	5.73

Results of Table 5.13(i)(b): Showing Summary of Analysis of Variance

Sources of Variance	đf	Sum of Squares (Ss)	Mean Square (Variance)	F Ratios	Remarks
Between I.Q. (Giftedness)	2	27.85	13.92	3.04	Sig.at .01
Between Sex	1	3.13	3.13	0.68	Not Sig.
Interaction: I.Q. x Sex	2	7.28	3.64	0.79	Not Sig.
Within Groups (Error term)	929	4259.36	4.58		
Total	934	4297.62			

From the statistical table For df = 2/929 1/929 F at .05 = 3.00 3.85 F at .01 = 4.63 6.66

Table 5.13(i)(c): Showing Results of L.S.D. Test for Pair
Differences among I.Q. and Sex Sub-groups

L.s.D. =  $t\sqrt{Ms_w/N_1 + Ms_w/N_2}$ 

( t for df of  $MS_{\overline{W}}$  at .05 = 1.96 and at .01 = 2.58)

	Obtained Mean Differences		ired erences .01	Signifi- cance
(i) For I.Q. Differences:				
Among Main Groups -				
Extraordinary vs Very Sup.	0.07	0.65	0.85	Not Sig.
Extraordinary vs Superior	0.43	0.61	0.80	Sig.at .05
Very Superior vs Superior	0.36	0.33	0.44	Sig.at .05
Among Boys -				
Extraordinary vs Very Sup.	0.76	1.18	1.54	Not Sig.
Extraordinary vs Superior	2.22	1.10	1.44	Sig.at .01
Very Superior vs Superior	1.46	0.52	0.70	Sig.at .01
Among Girls -				
Extraordinary vs Very Sup.	0.22	0.76	1.01	Not Sig.
Extraordinary vs Superior	0.13	0.73	0.95	Not Sig.
Very Superior vs Superior	0.35	0.41	0.54	Not Sig.
(ii) For Sex Differences:				
Among Extraordinary -				
Boys vs Girls	0.86	1.29	1.70	Not Sig.
Among Very Superior				
Boys vs Girls	0.12	0.59	0.77	Not Sig.
Among Superior -			١	
Boys vs Girls	1.23	0.33	0.44 9	Sig.at .01

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(I.Q. x Sex x Age) (According to Age) rable 5.13(ii) (a) : Showing Wean Scores on Personality Factor Q1 (Radialism Versus Conservatism of temperament) of each of Main and Sub-Groups. (Sample Size : 683 )

				) X	Age in Years	ars		and the second second second second section second section second section second section secti	- a transference a terral company de man de la company de man de la company de man de la company de la company		a Principal Company of the Company o	the continues of the co	1	Total	
			13		e Principal de la companya de la co	14	Transport of the Control of the Cont		15		Total	1	٠	SEXWI SE	70
	No	No. Scores Mean	Mean	No	Scores	Mean	No.	Scores	Mean	No.	Scores Mean	Mean	No.	Scores	Mean
Boys (M)					And the second s	terang vijangen aydeleyer kanadamanan	The state of the s							٠	
Highly Superior $I_1$	31	186	00.9	32	186	5.81	32	192	00*9	95	564	5.93	304	1722	5. . 6.
Superior ${ m I}_2$	39	186	4.76	85	462	5.43	82	510	0.00	209	1158	5.54	5	3 3	) •
Girls (F)											-				
Highly superior $I_1$	30	178	5.93	64	366	5.71	7.1	442	6.22	165	986	5.97	329	2185	5.77
Superior ${ m I}_2$	56	306	5.46	75	419	5.58	83	\$ 1 4	5.71	214	1199	5,60		!	
Total (I.Q.wise)															
Highly Superior $\mathbf{I}_1$	61	364	96 . 96* 9	96 .	552	5.75	103	634	6.15	260	1550	5.96			
Superior $I_2$	95	492	5.17	160	881	5.50	168	984	5.85	423	2357	5.57	68 <b>3</b>	3907	5.72
Total (Agewise)	156	5 856	5.49	256	1433	5.60	2713	27131618	5.97	683	3907	5.72			
u pa dha dha dha dha dha dha dha dha dha dh	]		Man Stree Street Street Street	1							, dhay been been their black Brow !	Pr. Dr. Dr. Dr. Dr. Dr. Dr. Dr. Dr. Dr. D	! !		And the Ann the Ann the

Table 5.13(ii)(b): Showing Summary of Results of Analysis of Variance

Sources of Variance	đ£	Sum of Squares (Ss)	Mean Square (Variance)	F Ratios Remarks
Between I.Q. (Giftedness)	1	24.41	24.41	11.30 Sig.at .01
Between Sex	1	1.70	1.70	0.79 Not Sig.
Between Age	2	29.28	14.64	6.77 Sig.at .01
Interaction: I.Q. x Sex	1	1.21	1.21	0.56 Not Sig.
Interaction: I.Q. x Age	2	7.90	3,95	1.82 Not Sig.
Interaction: Sex x Age	2	3.02	1.51	0.69 Not Sig.
Interaction: I.Q. x Sex x Age	2	11.71	5.86	2.71 Not Sig.
Within Groups (Error term)	671	1448.78	2.16	
Total	682	1525.59		
	-			

From the statistical table

For df = 1/671 2/671 F at .05 = 3.657 3.007 F at .01 = 6.681 4.644

Table 5.13(ii)(c): Showing Results of L.S.D. Test for Pair Differences Among I.Q., Sex and Age Sub-Groups.

L.S.D. = t 
$$\sqrt{MS_w / N_1 / + MS_w / N_2}$$
  
(t for df of MS at .05 = 1.96 and at .01 = 2.59)

and the line are and and				Obtain mean differ		Diff	ired erence 0.1	
week where same party sings then, w	1	-		2	· ~ · · · · · · · · · · · · · · · · · ·	_3	44	5
(i)	For I.Q. D	lfferer	ices					
	Among Boys							
	13 years :	Highly Superi		1.24	•	69	•90	sig.at.01
	14 years	* *	* *	.38	•	59	.77	not sig.
	15 years		,,	0.00	0.	59	.77	not sig.
	Among Girl	s <b>-</b>						
	13 years		,,	0.47	•	65	.85	not sig.
	14 years		,,	.13	•	49	.65	bot sig.
	15 years		• •	.51	•	47	•62	sig.at.05
<b>(</b> ii)	For Sex Di	fferenc	<u>ces</u>					
	Among High	ly Supe	eriors					•
	13 years :	Boys 7	s Girls	•07	•	74	.98	not sig.
	14 years	11	,,	0.10	•	63	.83	not sig.
	15 years	"	21	.22	•	61	.80	not sig.
	Among Supe	rior -						
	13 years		* *	.70	•	61	<b>∌80</b>	Sig.at.05
	14 years	* *		.15		45	.59	not sig.
	15 years		,,	.29	•	45	.59	not sig.

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Table 5.13 (ii) (c) Contd...

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	11	2	3	4	5
(iii)	For Age Differences				
	Among Main Groups				
	13 years vs 14 years	0.11	.29	•39	not sig.
	13 years vs 15 years	.48	.29	.38	šig.at.01
	14 years vs 15 years	•37	.25	.34	sig.at.01
	Among Highly Superior E	3ovs-			•
	13 years vs 14 years	•19	.73	•95	not sig.
	13 years vs 15 years	.00	.73	.95	not sig.
	14 years vs 15 years	•19	.73	.95	not sig.
	Among Superior Boys -				
	13 years \$s 14 years	.67	•55	.72	sig.at.05
	13 years vs 15 years	1.24	.55	.72	sig.at.01
	14 vears vs 15 years	.57	.45	.59	not sig.
	Among Highly Superior G	irls-			
	13 years vs 14 years	.22	•65	.85	not sig.
	13 years vs 15 years	.29	•63	.23	not sig.
	14 years vs 15. years	•51	.49	.65	sig.at.05
	Among Superior Girls -				
	13 years vs 14 years	•12	.51	.67	not sig.
	13 years vs 15 years	.25	.49	•65	not sig.
	14 years vs 15 years	.13	.45	.59	not sig.

Table 5.13(iii) (a): Showing Mean Scores on Personality

Factor Q₁ (Radicalism vs Conservatism of Temperament)

of each of Main and Sub-groups (Sample Size: 325)

(I.Q. x Sex)

Nacional policies de la disposició de la contraction de la contrac	nadiga akida akidiga magamunda amina akin mengan dikan diga seriba akidiga akili melili men	Extra- ordinary	Very Superior	Superior	Total
Boys :	Nos.	10	49	106	165
	Scores	68	295	579	942
	Mean	6.80	6.02	5.46	5.71
Girls:	Nos.	19	51	90	160
	Scores	116	310	523	949
	Mean	6.11	6.08	5.81	5.93
Total:	Nos.	29	100	196	325
	Scores	184	605	1102	1891
	Mean	6.34	6.05	5.62	5.82

Results of Table 5.13(iii) (b): Showing Summary of Analysis of Variance

Sources of Variance	đ£	Sum of Squares (Ss)	Mean Square (Variance)	F Ratios	Remarks
Between I.Q. (Giftedness)	2	20.93 /	10.47	4.11	Sig.at .01
Between Sex	1.	4.01	4.01	1.57	Not Sig.
Interaction: I.Q. x Sex	2 .	5.15	2.58	1.01	Not Sig.
Within Group: (Error term)		812.20	2.55		
Total	324	842.29			

From statistical table

For df = 2/319 1/319 F at .05 = 3.028 3.868 F at .01 = 4.676 6.716

Table 5.13(iii) (c) : Showing Results of L.S.D. Test for Pair Differences among I.Q. and Sex Sub-groups L.S.D. =  $t\sqrt{\frac{MS_w}{N_1} + \frac{MS_w}{N_2}}$  (t for df of MS at .05 = 1.97 and at .01 = 2.59)

·	Obtained Mean Difference	Diff	uired erence .01	Signifi- cance
(i) For I.Q. Differences:				
Among Main Groups -				
Extraordinary vs Very Superior	. 29	0.67	.88	Not Sig.
Extraordinary vs Superior	.72	.63	.83	Sig.at .05
Very Superior vs Superior	.43	. 39	.52	Sig.at .05
Among Boys -				
Extraordinary vs Very Superior	.78	1.08	1.42	Not Sig.
Extraordinary vs Superior	1.34	1.04	1.37	Sig.at .01
Very Superior vs Superior	ે.56	.55	.73	Sig.at .05
Among Girls				
Extraordinary vs Very Superior	.03	.84	1.11	Not Sig.
Extraordinary vs Superior	.30	.78	1.04	Not Sig.
Very Superior vs Superior	7.73	.55	.73	Sig.at .01
(ii) For Sex Differences:				
Among Extraordinary -				
Boys vs Girls	. 69	1.22	1.61	Not Sig.
Among Very Superior -				
Boys vs Girls	.06	.60	.63	Not Sig.
Among Superior -				
Boys vs Girls	35	.45	.60	Not Sig.

بغير.

(I.Q. x Sex)

nguan (Sarrawa), a da rengelo val te d		Extra- ordinary (Gifted)	B _a ckward (Noñ-Gifted)	Total	
Boys:	Nos.	15	61	76	
	Scores	100	254	354	
	Mean	6.66	4.16	4.66	
Total	: Nos.	36	31	67	
	Scores	209	148	357	
	Mean	5.80	4.77	5.33	
Total	: Nos.	51	92	143	
	Scores	309	402	711	
	Mean	6.05	4.36	4.97	

Results of Table 5.13(iv)(b): Showing Summary of Analysis of Variance

Sources of Variance	đf	Sum of Squares (Ss)	Mean Square (Variance)	F Ratios	Remarks
Between I.Q. (Giftedness)	1	93.62	93.62	72.57	Sig.at .01
Between Sex	1	16.00	16.00	12.40	Sig.at .01
Interaction: I.Q. x Sex	1	0.50	0.50	0.39	Not Sig.
Within Groups (Error term)	139	179 <b>.7</b> 7	1.29		
Total	142	289.89	<b></b>		

the From statistical table

For df = 1/139

F at .05 = 3.91

F at .01 = 6.825

Table 5.13(iv)(c): Showing Results of L.S.D. Test for Pair Differences among I.Q. and Sex Sub-groups  $L.S.D. = t\sqrt{\frac{MS_{_{W}}}{N_{_{1}} + \frac{MS_{_{W}}}{N_{_{2}}}}} / \frac{N_{_{2}}}{N_{_{2}}}$  (t for df of MS $_{_{W}}$  at .05 = 1.98 and at .01 = 2.615)

	Obtained Mean Difference	Requi Diffe	rence	Signifi- cance
(i) For I.Q. Differences:				
Among Boys -				
Extraordinary vs Backward	2.50	. 65	.86	Sig.at .01
Among Girls -				
Extraordinary vs Backward	1.03	.55	.73	Sig.at .01
(ii) For Sex Differences:				
Among Extraordinary -				
Boys vs Girls	.86	. 69	.92	Sig.at .05
Among Backward -				
Boys <b>v</b> s Girls	.61	.50	. 65	Sig.at .05

The maximum score obtained on this factor is ten, and the present four groups attained average scores of 5.73, 5.72, 5.82 and 4.97, implying that the group under study was medium on this radicalism-conservatism scale. The differences due to I.Q., sex and age have been examined below.

The results of 935 subjects (I.Q. x sex) in Table 5.13(i)(b) show that only giftedness (I.Q.) contributed significantly to radicalism on the whole, as expected. As shown by Table 5.13(i)(a) the extraordinary scored highest (6.05), the very superior were

next best (5.98) and the superior were last (5.62), but all being above average. Neither sex nor interaction was found significant. However, the results in Table 5.13(i)(c) show that the extraordinary and the very superior were not mutually different on this factor Q, but both these were different from the superior, on the whole, and more particularly among the boys. Though there were no significant sex differences on the whole (girls tending somewhat more radical than boys), superior girls were more significantly radical than superior boys though extraordinary level boys were somewhat more radical and at very superior level, girls were somewhat more radical. The results of 683 subjects (I.Q. x sex x age) in Table 5.13(ii) (b) show that both giftedness as well as age were independently significant on this factor  $Q_1$ ; neither sex nor any interaction was significant. Again, the highly superior were significantly higher on radicalism (5.96) than the superior (5.57) on the whole. Among the age group, radicalism increased with age, the 13 age group scoring 5.49, the 14 age group scoring 5.60 and the 15 age group scoring highest 5.97. The results in Table 5.13(ii) (c) indicate that among the I.O. groups, the two differed only with respect to boys of 13 and girls of 15, accounting for overall I.Q. differences. Similarly, among age groups the 15 age group differed significantly from both 13 and 14 age groups, which were

mutually not significant on the whole. More closely, 13 age group differed from both 14 and 15 age groups among superior boys, and 14 age group differed from 15 age group in case of highly superior girls - all these making overall age differences to be significant. Though sex was not significant on the whole, there were significant sex differences in case of the superior of 13 years only.

The results of 325 subjects (I.Q. x sex) in Table 5.13 (iii) (b) show that only giftedness was significant; the radicalism increased with greater I.Q. level. However, results in Table 5.13(iii) (c) show that the extraordinary were not different from the very superior, though both these were different from the superior on the whole and among the boys. In case of girls only the very superior differed from the superior. There were sex differences on the whole or in any I.Q. subgroup.

The results of 143 subjects (I.Q. x sex) in Table 5.13(iv) (b) and (c) indicate that both giftedness and sex were independently contributing to radicalism on the whole and in each subgroup pair; the gifted always significantly higher than the non-gifted on radicalism; boys were significantly more radical than girls in the gifted group, and girls were significantly more radicalthan boys in the nongifted group. Usually in such a case there should be significant interaction,

but it is not found so in the present case, because of unequal numbers in each cell of sub-group. The higher number of non-gifted girls are more radical, and observe the reverse trend of very few gifted boys being more radical.

To sum up, giftedness was found significantly contributing to the factor Q₁ of radicalism, and particularly among boys, making extraordinary and very superior more radical than superior and definitely than the non-gifted.

Sex was usually not significant, except among the superior of 13 age; where girls were more radical. Age was significant; the higher the age, the more radical a person, particularly 13 age differed from 14 and 15 age in case of superior boys, and 14 age differed from 15 age in case of highly superior girls, smaking on the whole 15 age, differed from 13 and 14 age.

## 5.14. Personality Factor $\Omega_2$ ( Self Sufficiency vs Group Dëpendency) and Giftedness

This factor refers on the positive side to self-sufficiency or resourcefulness in contrast to sociably group dependency. This is one of the major factor in introversion, like factor M.

The scores obtained by the four groups on this factor  $Q_2$  were statistically analysed by the F-test and L.S.D. test, and the results have been summarized in the Tables 5.14(i), (ii), (iii), (iv) - (a), (b), (c).

Table 5.14(i)(a): Showing Scores on Personality Factor Q₂

(Self Sufficiency vs Group Dependency) of each

of Main and Sub-groups (Sample Size:935)

(I.Q. x Sex)

		Extra- ordinary	Very superior	Superior	Total
Boys:	Nos.	15	76	334	425
•	Scores	78	410	1717	2205
	Mean	5.20	5.39	5.14	5.19
Girls:	Nos.	36.	145	329	510
	Scores	190	<b>79</b> 5	1791	2776
	Mean	5.27	5.48	5.44	5.44
Total :	Nos.	51	221	663	935
	Scores	268	1205	<b>350</b> 8	4981
	Mean	5.25	5.45	5.29	5.33

Results of Table 5.14(i)(b): Showing Summary of Analysis of Variance

	-				
Sources of Variance	đ£	Sum of Squares (Ss)	Mean Square (Variance)	F Ratios	Remarks
Between I.Q. (Giftedness)	2	4.60	2.30	0,42	Not Sig.
Between Sex	1	15.07	15.07	2.74	Not Sig.
Interaction: I.Q. x Sex	2	0.61	0.30	0.05	Not Sig.
Within Groups (Error term)	929	5121.58	5.51		
Total	934	5141.86			

From the statistical table

For dt = 2/929 1/929 F at .05 = 3.00 3.85 F at .01 = 4.63 6.66

Table 5.14(i)(c): Showing Results of L.S.D. Test for Pair Differences among I.Q. and Sex Sub-groups

L.S.D. =  $t \sqrt{MS_W / N_1 + MS_W / N_2}$ (t for df of MS_W at .05 = 1.96 and at .01 = 2.58)

	Obtained Mean		uired erence	Results
	Difference	.05		TCSQT CS
(i) For I.Q. Differences:				
Among Main Groups -				
Extraordinary vs Superior	. 20	.73	.95	Not Sig.
Extraordinary vs Superior	.04	.67	.88	Not Sig.
Very Superior vs Superior	.16	.35	. 46	Not Sig.
Among Boys -				
Extraordinary vs Very Supe	erior.19	1.31	1.73	Not Sig.
Extraordinary vs Superior	.06	1.22	1.60	Not Sig.
Very Superior vs Superior	. 25	.59	.77	Not Sig.
Among Girls -				
Extraordinary vs Very Sup	21	.86	1.14	Not Sig.
Extraordinary vs Superior	.17	.80	1.06	Not Sig.
Very Superior vs Superior	.04	. 47	.62	Not Sig.
(ii) For Sex Differences:				
Among Extraordinary -				
Boys vs Girls	.07	1.43	1.88	Not Sig.
Among Very Superior				_
Boys vs Girls	.09	.65	.85	Not Sig.
Among Superior -				-
Boys vs Girls	.30	.35	.46	Not Sig.

(I.O. x Sex x Age) (According to Age) Table 5.14(ii) (a) : Showing mean Scores on Personality Factor Q2. (Self Sufficiency Versus Group dependency) of each of main and sub groups. (Sample gize : 683)

			13	Ä	Age in Ye	Years		15		Total				Total (Sexwise)	(-)
	No	No.Scores Mean	Mean	<u>®</u>	Scores	Mean	S S	Scores	Mean	No. So	ores	Mean	No.Sc	No.Scores	Mean
Boys (M)		ng saftingatingatingating		}				Arte dan de la decembra de la decemb	englingten den den den		Very discussion with the plant				
Highly superior $\mathbf{I}_{\mathbf{I}}$	31	165	5.32	32	157	4.90	32	164	5.12	95 44	4486	5.11	304	1570	51.6
Superior ${ t I}_2$	39	177	4.53	85	445	5.23	85	462	5.43	209 10	1084	5.18	H > 7	) H	) 4 •
Girls (F)															
Highly Superior $I_1$	30	180	6.00	64	353	5.51	71	374	5.28	165 907		5.49	379	2056	5.42
Superior $I_2$	56	306	5.46	75	398	5,30	83	445	5,36	214 11	1149	5.36		) ) )	1 • •
Total (I.Q.wise)													•		-
Highly Superior $I_1$	61	345	5.65	96	510	5.3	103	538	5.22	260 13	1393	5.35			
Superior $I_2$	95	483	5.08	160	843	5.26	168	206	5,39	423 22	2233	5.27	683	3626	5.31
Total (Agewise)	156	3 828	5.31	256	1353	5.29	271	1445	5,33	683 36	3626	5.31		1	
der führ ber berg den führ ber sem fing för der ber ber ber ben den die den den den der		* ** ** ** ** ** ** **	1	[ [ ] [		1		. Other Street S	may just here then the the the	on Albas (Mary Marie Marie Albas Albas Albas A		,		, , , , , , , , , , , , , , , , , , ,	

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Table 5.14(ii)(b): Showing Summary of Analysis of Variance

Sources of Variance	đf	Sum of Squares (SS)	Mean Square (Variance)	F Ratio <b>s</b> ;	Remarks
		**************************************			
Between IQ (Giftedness)	1	0.99	0.99	0.37	not sig.
Between Sex	1	11.43	11.43	4.26	sig. at .05
Between Age	2	0.32	0.16	<b>0.</b> 05	not sig.
Interaction IQ x Sex	1	0.85	0.85	0.32	not sig.
Interaction IQ x Age	2	13.17	6.59	2.45	not sig.
Interaction Sex _X Age	2	15.42	7.71	2.87	not sig.
Interaction IQ x Sex X Age	2	7.79	3.89	1.45	not sig.
Within Groups (Error term)	671	1804.85	2.68	,	
Total:	682 ,	1854.82	•		

From the statistical table

For df = 1/671 2/671 F at .05 = 3.857 3.007 F at .01 = 6.681 4.644

Table 5.14(ii)(c): Showing Results of L.S.D. Test for Pair Differences among I.Q., Sex and Age Sub-Groups.

Sub-Groups.  
L.S.D. = 
$$t \sqrt{MS_w / N_1 + MS_w / N_2}$$

( t for df of  $MS_W$  at .05 = 1.96 and at .01 = 2.58)

				Obtained mean	Requi	ired e <b>re</b> nce	Signifi- cance.
	_			Difference			0
	aged water agent agen	1	, Mary 1994, 1994, Mary 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994, 1994,	2	3_	4	5
(i)	For I.Q. D	ifference	s				
	Among Boy	's -					
	13 years	Highly su Superio	p. vs.	0.79	<b>.</b> 75	1.01	sig.at.05
	14 years	2.2	11	•33	•67	•83	not sig.
	15 years		,,	.31	.67	.88	not sig.
	Among Gir	ls of -					
	13 years	,,	F F	.54	.73	•95	not sig.
	14 years	,,	* *	.21	•55	.72	not sig.
	15 years		,,	.08	.51	•67	not sig.
(ii)	For Sex D	ifference	<u>s</u>				
	Among Hig	hly Super	ior-				
	13 years	: Boys vs	Girls	.68	.82	1.08	not sig.
	14 years	,,	,,	.61	•69	.90	not sig.
	15 vears	11	,,	.16	•69	•90	not sig.
	Among Sup	erior					
	13 vears	£ 1	.,	•93	.67	.88	Sig.at.01
	14 years	**		.07	.51	•67	not sig.
	15 years	,,	,,	•07	.49	.65	not sig.

contd...

Table 5.14(ii)(c) Contd...

	ther was the was done was the the the the the the the top the	many which there were well when which retails when	ared gard aren't contract town town and and	y who was the thin this thin the	r mility many whose simule similar image similar similar
and the one are not as	1	2	3	4	5
(iii)	For Age Differences		,		
	Among Main Groups				
	13 years vs 14 years	.02	•33	.44 N	Ot sig.
	13 years vs 15 years	•02-	31	.41	not sig.
	14 years vs 15 years	•0 <u>4</u>	<b>.2</b> 7	•36	not sig.
	Among Highly Superior Bo	ys -			
	13 years vs 14 years	.42	.80	1.06	not sig.
	13 years vs 15 years	.20	.80	1.06	not sig.
	14 years vs 15 years	•22	.80	1.06	not sig.
	Among Superior Boys				
	13 years vs 14 years	.70	.63	.83	sig at.0
	13 years vs 15 years	.90	•63	.83	sig at.0
	14 years vs 15 years	•20	.49	.65	not sig.
	Among Highly Superior Gi	rls-			
	13 years vs 14 years	.49	.71	.93	not sig.
	13 years vs 15 years	.72	.71	. •93	sig at.0
	14 years vs 15 years	.23	.55	.72	not sig.
	Among Superior Girls -				
•	13 years vs 14 years	.16	<b>.</b> 57	.75	not sig.
•	13 years vs 15 years	.10	•55	.72	not sig.
	14 years vs 15 years	<b>.</b> 06	.51	•67	not sig.

Table 5.14(iii)a): Showing Mean Scores on Personality

Factor Q₂ (Self Sufficiency vs Group Dependency)

of each of Main and Sub-groups (Sample Size :325)

(I.Q. x Sex)

***************************************		Extra- ordinary	Very Superior	Superior	Total
Boys :	Nos.	10	49	106	165
	Scores	53	271	526	850
	Mean	5.30	5.53	4.96	5.15
Girls:	Nos.	19	51	90	160
	Scores	105	294	494	893
	Mean	5.53	5.76	5.49	5,58
Total:	Nos.	29	100	196	325
	Scores	158	565	1020	1743
	Mean	5.45	5.65	5.20	5.36

Results of Table 5.14(iii)(b): Showing Summary of Analysis of Variance

Sources of Variance	đf	Sum of Squares (Ss)	Mean Squares (Variance)	F Ratios	Remarks
Betweenn I.Q. (Giftedness)	2	13.40	6.70	2.48	Not Sig.
Between Sex	1	15.01	15.01	5,56	Sig.at .05
Interaction: I.Q. x Sex	2	(0.18	0.09	.03	Not Sig.
Within Groups (Error term)	319	860.57	2.70		
Total	324	889.16			

From statistical table

For df = 2/319 1/319

F at .05 = 3.028 3.868

F at .01 = 4.676 6.716

Table 5.14(iii) (c): Showing Results of L.S.D. Test for Pair Differences among I.Q. and Sex Sub-groups L.S.D. =  $t/MS_W/N_1 + MS_W/N_2$  (t for df of MS at .05 = 1.97 and at .01 = 2.59)

	Obtained Mean Difference		uired erence .01	Signifi- cance
(i) For I.Q. Differences:	-			
Among Main Groups -				
Extraordinary vs Very Sup.	. 20	. 69	.91	Not Sig.
Extraordinary vs Superior	. 25	.63	.83	Not Sig.
Very Superior vs Superior	. 45	. 39	.52	Sig.et .05
Among Boys -				
Extraordinary vs Very Sup.	. 23	1.12	1.48	Not Sig.
Extraordinary vs Superior	.34	1.06	1.40	Not Sig.
^V ery Superior vs Superior	.57	•55	.72	Sig.at .05
Among Girls -				
Extraordinary vs Very Sup.	.23	.87	1.14	Not Sig.
Extraordinary vs Superior	.04	.81	1.06	Not Sig.
Very Superior vs Superior	. 27	.57	.75	Not Sig.
(ii) For Sex Differences -				
Among Extraordinary -				
Boys vs Girls	.23	1.26	1.66	Not Sig.
Among Very Superior -				
Boys vs Girls	. 23	.65	.85	Not Sig.
Among Superior -				
Boys vs Girls	.53	.47	.62	Sig.at .05
Comp. and the last page 1999 and bord case west man and west table				

Table 5.14(iv)(a): Showing Mean Scores on Personality Factor  $\Omega_2$  (Self Sufficiency vs Group Dependency) of each of Main and Sub-groups (Sample Size: 143) (I.Q. x Sex)

Bangura danak da			Extra- ordinary (Gifted)	Backward (Non-gifted)	Total
Boys	:	Nos.	15	61	76
		Scores	78	295	373
		Mean	5.20	4.83	4.91
Girls	:	Nos.	36	31	67
		Scores	190	145	<b>3</b> 35
		Mean	5.27	4.67	5.00
Total	:	Nos.	51	92	143
		Scores	268	440	708
		Mean	5.25	<b>4.</b> 78	4.95

Results of Table 5.14(iv)(b): Showing Summary of Analysis of Variance

Sources of Variance	df	Sum of Squares (Ss)	Mean Square: (Variance)	F Ratios	Remarks
Between I.Q. (Giftedness)	1	7.32	7.32	.2.31	Not Sig.
Between Sex	1	0.30	0.30	.09	Not Sig.
Interaction: I.Q. x Sex	1	0.27	0.27	0.08	Not Sig.
Within Groups (Error term)	139	440.37	3.17		
Total	142	448.66			

From statistical table

For df = 1/139

F at .05 = 3.91

F at .01 = 6.825

Table 5.14(iv)(c): Showing Results of L.S.D. Test for Pair
Differences among I.Q. and Sex Sub-groups

L.S.D. = 
$$t\sqrt{MS_w/N_1 + MS_w/N_2}$$

(t for df of  $MS_{W}$  at .05 = 1.98 and at .01 = 2.615)

	Obtained Mean Difference	Diff	uired erence 01	Sigr cand	nifi- ce
	277767676	.00	• ^ _		
(i) For I.Q. Differences:					
Among Boys -					
Extraordinary vs Backward	.37	1.01	1.33	Not	Sig.
Among Girls -					
Extraordinary vs Backward	.60	.87	1.15	Not	Sig.
(ii) For Sex Differences:					
Among Extraordinary -					
Boys <b>v</b> s Girls	.07	1.09	1.44	Not	Sig.
Among Backward -					
Boys vs Girls	.16	.77	1.02	Not	Sig.
and place when shall their state and with a state and shall their work and shall their state and					

The maximum score on this factor is ten, and the subjects in the four groups obtained on an average the scores of 5.33, 5.31, 5.36 and 4.95 ( made up by 5.25 of the gifted and 4.78 of the non-gifted) respectively, implying that the group on the whole was medium on this self-sufficiency-dependency scale. The differences brought about by I.Q., sex and age have been described below.

The results of 935 subjects (I.Q. x sex) in Table 5.14 (i)(b) and (c) indicate no significant differences in this factor  $Q_2$  due to giftedness, sex or their interaction on the whole or in any subgroup.

The results of 683 subjects (I.Q. x sex x age) in Table 5.14 (ii) (b) and (c) indicate only sex differences to be significant on the whole, girls being more self-sufficiency (5.42) than the boys (5.16) on the whole, but particularly in case of the superior of 13 age. Though giftedness was not significant on the whole, the two I.Q. levels differed only in case of 13 years boys, the highly superior 13 years boys being more self-sufficient than the superior 13 year boys. Age was not significant on the whole; yet among superior boys 13 age differed from both 14 and 15 age, (higher age being more self-sufficient), and among highly superior girls 13 age differed from 15 age only, 13 age being more self-sufficient.

The results of 325 subjects (I.Q. x sex) in Table 5.14(iii) (b) and (c) indicate only sex to be significant on the whole, particularly among the superior group, girls scoring higher. Though giftedness was not significant on the whole, the very superior scored significantly higher than the superior on the total as well as among the boys.

The results of 143 subjects (I.Q. x sex) in Table 5.14(iv)

(b) and (c) indicate no significant differences between I.Q. or sex on the whole or in any sub-group.

To sum up, giftedness was not usually contributing to this factor  $\Omega_2$  of self-sufficiency, except that highly superior boys of 13 scored significantly higher than superior boys of 13 or very superior scored higher than superior on the whole and particularly among boys. Sex was significantly contributing to self-sufficiency only among the superior of 13 age, girls being more self-sufficient. Age was also not significant on the whole, the 13 age differed significantly from the 14 age and the 15 age group in case of superior boys (higher age being more self-sufficient), and the 13 age differed significantly from the 15 age group in case of highly superior girls, (lower age being more self-sufficient).

5.15 PERSONALITY FACTOR  $Q_3$  ( HIGH SELF-SENTIMENT FORMATION VS POOR SELF-SENTIMENT FORMATION) AND GIFTEDNESS

This factor refers on the positive side to high self-sentiment formation, or controlled, exacting will power, association with socially approved character responses, persistence, conscientiousness, as in Factor G.

The scores on this factor  $Q_3$  obtained by the four groups were statistically analysed by the F-test and the L.S.D. test, and the results have been summarized in Tables 5.15(i),(ii),(iii) (iv) - (a), (b) and (c).

Table 5.15(i)(a): Showing Mean Scores on Personality Factor

Q3 (High Self Sentiment Formation vs Poor-Self
Sentiment Formation) of each of Main and Sub-groups
(Sample Size: 935) (I.Q. x Sex)

	Extra- ordinary	Very Superior	Superior	Total
Boys : No	s. 15	76	334	425
<b>ప</b> ం	ores 85	422	1973	2480
M∈	ean 5.66	5.55	5.90	5.84
Girls : No	os. 36	145	329	510
Sc	ores 194	85 <b>0</b>	19 <b>7</b> 6	3020
M€	ean 5.39	5.86	6.01	5.92
Total : No	os. 51	221	663	935
క్య	ores 279	1272	3949	5500
Me	ean 5.47	5 <b>.7</b> 5	5.95	5.88

Results of Table 5.15(i)(b): Summary of Analysis of Variance

1					
Sources of Variance	đ£	Sum of Squares (Ss)	M _{ean} Square (Variance)	ř Ratios	Remarks
Between I.Q. (Giftedness)	2	15.80	<b>7.</b> 90	1.52	Not Sig.
Between Sex	1	1.73	1.73	0.33	Not Sig.
Interaction: I.Q. x Sex	2	5.47	2.73	0.53	Not Sig.
Within Groups (Error term)	929	4834.06	5.20		-
Total	934	4857.06			
				~ ~ ~ ~ ~	~

From the statistical table

For df = 2/929 1/929 F at .05 = 3.00 3.85 F at .01 = 4.63 6.66

Table 5.15(i)(c): Showing Results of L.S.D. Test for Pair Differences among I.Q. and Sex Sub-groups L.S.D. =  $t\sqrt{MS_W/N_1 + MS_W/N_2}$  ( t for df of  $MS_W$  at .05 = 1.96 and at .01 = 2.58)

	Obtained Mean Differences		uired erence .01	Signifi- cance
(i) For I.Q. Differences: Among Main Groups -	til er i den er det graden er er en er vande i verde profes som det par det profesion de province average avv			erst mit vertice vermite versich in beit versichtung
Extraordinary vs Very Sup.	. 28	. 69	.90	Not Sig.
Extraordinary vs Superior	• 48	. 65	.85	Not Sig.
Very Superior vs Superior	• 20	.35	.46	Not Sig.
Among Boys -				
Extraordinary vs Very Super	rior 0.11	1.25	1.65	Not Sig.
Extraordinary vs Superior	0.24	1.18	1.55	Not Sig.
Very Superior vs Superior	0.35	.57	.75	Not Sig.
Among Girls -				
Extraordinary vs Very Super	ior 0.47	.82	1.08	Not Sig.
Extraordinary vs Superior	.62	.78	1.03	Not Sig.
Very Superior vs Superior	0.15	. 45	•59	Not Sig.
(ii) For Sex Differences:				
Among Extraordinary -				
Boys vs Girls	0.27	1.37	1.81	Not Sig.
Among Very Superior-				
Boys vs Girls	0.31	.63	.83	Not Sig.
Among Superior -				<b>J</b> -
Boys vs Girls	0.11	.35	. 46	Not Sig.
and and any and also had also been and any and any and any				

Table 5.15(ii) (a): Showing Mean Scores on Personality Factor  $Q_3$  (High Self Sentiment Formation versus Poor-Self-Sentiment Formation) of each of Main and Sub-groups.

Age)
t
(According
x Age)
x Sex
×
(I.O.
683)
Size:
(Samble

							Age in Years	Year	Ø				
			13			1.4			15			Total	
		No.	Scores	Mean	No.	Scores	Mean	No.	Scores	: Mean	No.	Scores	Mean
Boys (M)									١				,
Highly Superior	Н	31	172	5.54	32	177	5.53	32	172	5.37	95	521	5.48
Superior	1 ₂	39	208	5,33	82	498	5.85	82	492	5.78	500	1198	5.73
Girls (F)													
Highly Superior	H	30	192	6.40	64	358	5,59	71	395	5,56	165	945	5.72
Superior	1 Z	56	345	6.16	75	417	5.56	83	497	5.98	214	1259	5,88
Total (I.Q.wise)													
Highly Superior	H	61	364	5.96	96	535	5.57	103	567	5,50	260	1466	5.6
Superior	1 Z	95	553	5.82	160	915	5.71	168	686	5,88	423	2457	5.80
Total (Agewise)		156	917	5,88	256	1450	5.66	271	1556	5.74	683	3923	5.74
			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					1	1	***************************************	1		

Results of Table 5.15(ii)(b): Showing Summarv of Analysis of Variance

Sources of Variance	đ£	Sum of Squares (SS)	Mean Square (variance)	F Ratio	Remarks
Between IQ (Giftedness)	1	4.66	4.65	1.39	not sig.
Between Sex	1	4.35	4.35	1.31	not sig.
Between age	2	4.45	2.23	0.66	not sig.
Interaction IQ x Sex	1	1.63	0.82	0.24	not sig.
Interaction IQ x Age	2	6.71	3.36	1.01	not sig.
Interaction Sex x Age	2	. 24.59	12.30	3.69	sig at .05
Interaction IQ x Sex xAge	2	2.32	1.16	0.34	not sig.
Within groups (Error term)	671	2235.46	3.33		
Total:	682	2284.17			

F at .01 = 6.681 4.644

Table 5.15(ii)(c): Showing Results of L.S.D. Test for Pair Differences Among I.Q., Sex and Age Sub-Groups.

Ls.D. = t 
$$\sqrt{MS_{W} / N_{1} + MS_{W} / N_{2}}$$

'(t for df of  $MS_W$  at .05 = 1.96 and at .01 = 2.58)

1 2 3 4 5  (i) For I.Q. Differences  Among Boys  13 years: Highly Sup. vs21 .86 1.14 not sig. Superior.  14 years ,, ,, .32 .74 .98 not sig. 15 years ,, ,, .41 .74 .98 not sig.  Among Girls  13 years ,, ,, .24 .80 1.06 not sig. 14 years ,, ,, .03 .61 .80 not sig. 15 years ,, ,, .42 .57 .75 not sig.		tra stage stage that their stage that stage and stage that stage the		annes de la compaño de la comp	Obtained Mean Differenc	Diffe	red erence	
Among Boys  13 years: Highly Sup. vs21 .86 1.14 not sig. Superior.  14 years ,, ,, .32 .74 .98 not sig. 15 years ,, ,, .41 .74 .98 not sig.  Among Girls  13 years ,, ,, .24 .80 1.06 not sig. 14 years ,, ,, .03 .61 .80 not sig.			1		2	3	44	5
13 years: Highly Sup. vs21 .86 1.14 not sig. Superior.  14 years ,, ,, .32 .74 .98 not sig. 15 years ,, ,, .41 .74 .98 not sig.  Among Girls 13 years ,, ,, .24 .80 1.06 not sig. 14 years ,, ,, .03 .61 .80 not sig.		For I.Q. Di						
15 years ,, ,, .41 .74 .98 not sig.  Among Girls  13 years ,, ,, .24 .80 1.06 not sig.  14 years ,, ,, .03 .61 .80 not sig.		-			.21	<b>.</b> 86	1.14	not sig.
Among Girls  13 years ,, ,, .24 .80 1.06 not sig.  14 years ,, ,, .03 .61 .80 not sig.		14 years	,,		•32	.74	.98	not sig.
13 years ,, ,, .24 .80 1.06 not sig. 14 years ,, ,, .03 .61 .80 not sig.		15 years	,,	,,	.41	.74	•98	not sig.
14 years ,, ,, .03 .61 .80 not sig.		Among Girls	<b>:</b>					-
		13 years	,,	,,	.24	.80	1.06	not sig.
15 years ,, ,, .42 .57 .75 not sig.		14 years	,,		.03	.61	.80	not sig.
		15 years	,,	,,	.42	.57	.75	not sig.
(ii) For Sex Differences Among Highly Superior	<b>(ii</b> )							
13 years: Boys vs Girls .86 .92 1.21 not sig.		13 years	Boys vs	Girls	•86	.92	1.21	not sig.
14 years: ,, ,, .06 .70 1.03 not sig.		14 years		* *	.05	<b>.</b> 70	1.03	not sig.
15 years ,, ,, .19 .76 1.01 not sig.		15 years		,,	.19	.76	1.01	not sig.
Among Superior of		Among Supe	erior of					
13 years: ,, ,, .83 .74 .99 sig at.05		13 years :	.,,	,,	.83	.74	.98	sig at.05
14 vears: ,, ,, .29 .57 .75 not sig.		14 vears	,,		.29	•57	.75	not sig.
15 years ,, ,, .20 .55 .72 not sig.		15 vears	* *	11	.20	•55	.72	not sig.

contd....

Table 5.15(ii)(c) contd...

	1	2	3	4		5
(iii)	For Age Differences					
	Among Main Groups -					
	13 years vs 14 years	.22	.37	.49	not	sig.
	13 years vs 15 years	.14	.35	.46	not	sig.
	14 years vs 15 years	.08	.31	.41	not	sig.
	Among Highly Superior Boy	7s -				
	13 years vs 14 years	.01	.90	1.19	not	sig.
	13 years vs 15 years	.17	.90	1.19	not	sig.
	14 years vs 15 years	.16	.90	1.19	not	sig.
	Among Superior Boys -					•
	13 years vs 14 years	.52	.67	.90	not	sig.
	13 years vs 15 years	. 45	.67	.90	not	sig.
	14 years vs 15 years	.07	•55	.72	not	sig.
	Among Highly Superior Gir	cls -				
	13 years vs 14 years	.81	.78	1.03	sig.	at .0!
	13 years vs 15 years	.84	.78	1.03	sig.	at .0
	14 years vs 15 years	.03	.61	.31	not	sig.
	Among Superior Girls -					
	13 years vs 14 years	.60	.63	.83	not	sig.
	13 years vs 15 years	.18	.61	.80	not	sig.
	14 years vs 15 years	.42	.57	.75	not	sig.

Table 5.15(iii)(a): Showing Mean Scores on Personality
Factor Q3 (High Self Sentiment Formation vs
Poor Self Sentiment Formation) of each of
Main and Sub-groups (Sample Size: 325)
(I.Q. x Sex)

			Extra- ordinary	Very Superior	Superior	Total
Boys	:	Nos.	10	49	106	165
		Scores	58	278	605	-941
		Mean	5.80	5.64	5.71	5.71
Girls	:	Nos.	19	51	90	160
		Scores	102	319	552	973
		Mean	5.37	6.25	6.13	6.08
Total	:	Nos.	29	100	196	325
		Scores	160	597	1157	1914
,		Mean	5.51	5.97	5.90	5.89

Results of Table 5.15(iii)(b): Showing Summary of Analysis of Variance

Sources of Variance	df	Sum of Squares (Ss)	Mean Squares (Variance)	F Ratios	Remarks
Between I.Q. (Giftedness)	2	4.70	2.35	0.59	Not Sig.
Between Sex	1	11.61	11.61	2.94	Not Sig.
Interaction: I.Q. x Sex	2	6.88	3.44	0.87	Not Sig.
Within Groups (Error term)	319	1260.82	3.95		
Total	324	1284.01			

From statistical table 
For df = 2/319 1/319

F at .05 = 3.0282 3.868

F at .01 = 4.676 6.716

Table 5.15(iii) (c) Showing Results of L.S.D. Test for Pair Differences among I.Q. and Sex Sub-groups

L.S.D. = 
$$1\sqrt{MS_w/N_1 + MS_w/N_2}$$

(t for df of  $MS_{W}$  at .05 = 1.97 and at .01 = 2.59)

	Obtained Mean	Diff	uired erence	Signifi- cance
	Difference	.05	.01	
(i) For I.Q. Differences:				
Among Main Groups -				
Extraordinary vs Very Super	cior .46	.83	1.09	Not Sig.
Extraordinary <b>v</b> s <b>S</b> uperior	.39	.79	1.04	Not Sig.
$^{ extsf{V}}$ ery Superior vs Superior	.07	. 47	.62	Not Sig.
Among Boys -				
Extraordinary vs Very Super	cior .16	1.36	1.78	Not Sig.
Extraordinary vs Superior	.09	1.30	1.71	Not Sig.
Very Superior vs Superior	.07	.67	.88	Not Sig.
Among Girls -				
Extraordinary vs Very Super	cior .88	1.04	1.37	Not Sig.
Extraordinary vs Very Super	cior .76	.98	1.30	Not Sig.
Very Superior vs Superior	.12	. 69	.91	Not Sig.
(ii) For Sex Differences:				
Among Extraordinary -				
Boys vs Girls	.43	1.54	2.02	Not Sig.
Among very Superior -				J.
Boys vs Girls -	.61	.79	1.04	Not Sig.
Among Superior -				
Boys vs Girls	.42	.55	.73	Not Sig.
tive grad many stage along state to the state of the stat				

Table 5.15(iv)(a) :Showing Mean Scores on Personality Factor  $\Omega_3$  ( High Self Sentiment Formation vs Poor Self Sentiment Formation) of each of Main and Subgroups (Sample Sizé: 143) (I.Q. x Sex)

			Extra <b>o</b> rdinary (Gifted)	Backward (Non-gifted)	Total
Boys	2	Nos.	15	61	<b>7</b> 6
		Scores	85	281	366
		Mean	5,66	4.60	4.82
Girls	:	Nos.	36	31	67
		Scores	194	147	341
		Mean	5.39	4.74	5.09
Total	:	Nos.	51	92	143
		Scores	279	428	707
		Mean	5.47	4,65	4.94

Results of
Table 5.15(iv)(b): Showing Summary of Analysis of Variance

Sources of Variance	df	Sum of Squares (Ss)	M _{ea} n Squares (Variance)	F Ratios	Remarks
Between I.Q. (Giftedness)	1	21.97	21.97	6.37	Sig.at .05
Between Sex	1	2.67	2.67	0.77	Not Sig.
Interaction: I.Q. x Sex	1	1.49	1.49	0.43	Not Sig.
Within Groups (Error term)	139	479.42	3.45		
Total	142	505.55			

From statistical table

For df = 1/139

F at .05 = 3.91

F at .01 = 6.825

Table 5.15(iv)(c): Showing Results of L.S.D. Test for Pairs Differences among I.Q. and Sex Sub-groups L.S.D. =  $t\sqrt{MS_W/N_1 + MS_W/N_2}$  (t for df of MS_W at .05 = 1.98 and at .01 = 2.615)

	Obtained Mean Difference	Diffe	rence	Signifi- cance
(i) For I.Q. Differences:	<del>lake distributed distributed and the state of the state </del>			
Among Boys -				
Extraordinary vs Backward Among Girls -	1.06	1.06	1.41	Sig.at .05
Extraordinary vs Backward	.65	. 65	.86	Sig.at .05
(ii) For Sex Differences:				
Among Extraordinary -				
Boys vs Girls	. 27	1.13	1.49	Not Sig.
Among Backward -				
Boys vs Girls	.14	.81	1.07	Not Sig.

The maximum score on this factor  $\Omega_3$  is ten, and the four groups under study scored on an average 5.88, 5.74, 5.89 and 4.94 (made up by 5.47 of the gifted and 4.65 of the non-gifted). The differences due to I.Q., sex and age have been considered below.

The results of 935 subjects (I.Q. x Sex) in Table 5.15(i)(b) and (c) showed no significant differences anywhere on this factor  $Q_3$ . Similarly, the results of 683 subjects (I.Q. x sex x age) in Table 5.15 (ii)(b) and (c) show that neither I.Q. nor sex nor age

nor any interaction was significant, except the significant sex x age interaction. The girls scored higher at age 13 and 15, while boys score higher at age 14 on this factor  $Q_3$ , as seen from figures in Table 5.15(ii)(a) and this accounted for significant interaction between sex and age. The closer examination of results in Table 5.15(ii)(c) show that there were significant sex differences in favour of girls among the superior of 13 years; and there were also significant age differences among highly superior girls group - 13 age higher than 14 and also higher than 15 on self-sentiment formation; all this accounted for significant independently on the whole.

The results of 325 subjects ( I.Q. x sex ) in Table 5.15(iii)(b) and (c) also show no significant differences in I.Q. or sex anywhere.

The results of 143 subjects (I.Q. x sex) in Table 5.15 (iv)(b) and (c) show that only giftedness was significantly contributing to self-sentiment formation, gifted being higher than the non-gifted on the whole as well as among boys and girls separately. There were no significant sex differences.

To sum up, neither giftedness, nor sex, nor age, nor any interaction, except sex x age, contributed significantly to the factor  $\Omega_3$  of self-sentiment formation in general. However, girls scored significantly higher than boys in case of superior 13 year age-group; and 13 year age group scored significantly higher than 14 and 15 year age groups in case of highly superior girls, thus accounting for significant sex x age interaction. When the highly gifted compared with the nongifted, the highly gifted scored significantly higher than the non-gifted on the whole as well as among boys and girls separately. In other words giftedness, sex and age contributed to factor  $\Omega_3$  only under certain conditions.

5.16 PERSONALITY FACTOR  $Q_{4}$  ( HIGH ERGIC TENSION vs LOW ERGIC TENSION ) AND GIFTEDNESS

This factor refers on the positive side to tense, excitable, worried, irritable, anxious type, ( somewhat similar to factor O or factor L, though distinct from both):

The scores on this factor obtained by the four groups under study were statistically analysed by the F-test and the L.S.D. test, and the results have been summarized in Tables 5.16(i), (ii), (iii), (iv) - (a), (b) and (c).

Table 5.16(i)(a): Showing Mean Scores on Personality

Factor Q4 ( High Ergic Tension vs Low Ergic

Tension) of each of Main and Sub-groups

(Sample Size: 935)

(I.Q. x Sex )

	~	- Control of the Cont	Extra- ordinary	Very Superior	Superior	Total
Boys	:	Nos.	15	76	334	425
		Scores	55	246	1037	1338
y		Mean	3.66	3.23	3.10	3.15
Girls	:	Nos.	36	145	329	510
		Scores	123	462	1040	1625
		Mean	3.41	3.18	3.16	3.19
Total	:	Nos.	51	. 221	663	935
		Scores	178	708	2077	2963
	· •	Mean	3.49	3.20	3.13	3.17

Results of

Table 5.16(i)(b): Showing Summary of Analysis of Variance

Sources of Variance	đ£	Sum of Squares (Ss)	Mean Square (Variance)	F Ratios	Remarks
Between I.Q. (Giftedness)	· <b>2</b>	6.39	3.19	0.80	Not Sig.
Between Sex	1	0.34	0.34	0.09	Not Sig.
Interaction: I.Q. x Sex	2	0.95	0.47	0.12	Not Sig.
Within Groups (Error term)	929	3685.62	3.97		
Total	934	3693.30			

From the statistical table

For df = 2/929 1/929

 $F \text{ at .05} = 3.00 \quad 3.85$ 

 $F \text{ at .01} = 4.63 \qquad 6.66$ 

Table 5.16(i)(c): Showing Results of L.S.D. Test for Pair Differences among I.Q. and Sex Sub-groups L.S.D. =  $t\sqrt{MS_W/N_1 + MS_W/N_2}$  (t for df of MS_W at .05 = 1.96 and at .01 = 2.58)

	Obtained Mean Differences		uired erence .01	Sign cano	ifi- e
(i) For I.Q. Differences:					
Among Main Groups -					
Extraordinary vs Very Su	p29	0.61	0.80	Not	Sig.
Extraordinary vs Superio	r .36	0.51	0.67	Not	Sig.
Very Superior vs Superio	r .07	0.29	0.39	Not	Sig.
Among Boys -					
Extraordinary vs Very Su	p43	1.08	1.42	Not	Sig.
Extraordinary vs Superio	r .56	1.02	1.34	Not	Sig.
Very Superior vs Superio	r .13	. 49	.65	Not	Sig.
Among Girls -					
Extraordinary vs Very Su	p23	0.73	.95	Not	Sig.
Extraordinary vs Superio	r .25	. 69	.90	Not	Sig.
Very Superior vs Superio	r .02	.39	.52	Not	Sig.
(ii) For Sex Differences:					
Among Extraordinary -					
Boys vs Girls	. 25	1.20	1.57	Not	Sig.
Among Very Superior -					_
Boys vs Girls	.05	0.55	0.72	Not	Sig.
Among Superior -					
Boys vs Girls	.06	0.29	. 39	Not	Sig.

Table 5.16(ii) (a): Showing Mean Scores on Personality Factor  $Q_{f q}$  (High Ergic Tension versus Low Ergic Tension) on each of Main and Sub-groups. (Sample Size : 683) (I.Q. x Sex x Age) (Accouding to Age)

And the state of t	-					Age	in	years						Ë	Total	
			13.			14			15			Total		(Se.	(Sexwise)	
ti eniman mali sepa miliju sili sepa miliju	1	No.	Scores Mean	Mean	No.	Scores	Mean	No.	Scores	Mean	No.	Scores Mean	Mean	No. 5	Scores	Mean
Boys (M)																
Highly Superior	H	31	96	3.09	32	101	3,15	32	109	3.40	95	306	3,23	304	945	3, 11
Superior	1 7 T	39	119	3.05	82	255	3.00	82	265	3.11	209	6395	3,05			
Girls (F)																
Highly Superior	H	30	94	3,13	64	191	2.98	71	257	3.61	165	542	3,28		i i	Ċ
Superior	12	26	186	3,32	75	248	3.30	83	249	3.00	214	683	3,19	3/9	C77T	3.28
Total (I.Q.wise)																
Highly Superior	H 1	61	190	3,11	96	292	3.04	103	366	3.55	260	848	3.26	683 2	2170	3.18
Superior	H ₂	92	305	3.21 160	160	503	3.14	168	514	3.05	423	1322	3.12			
Total (Agewise)		156	495	3.17 256	256	795	3,11	271	880	3,25	683	2170	3,18		·	
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Table 5.16(ii)(b): Showing Summary of Results of Analysis of Variance

Sources of Variance	df	Sum of Squares (Ss)	Mean Square (Variance)	F Ratios	Remarks
Between I.Q. (Giftedness)	1	2.99	2.99	1.36	not sig.
Between Sex	1	2.58	2.58	1.17	not sig.
Between Age	2	2.64	1.32	0.60	not sig.
Interaction: I.Q. x Sex	1	0.45	0.23	0.11	not sig.
Interaction: I.Q. x Age	2	13.54	6.77	3.09	sig.at .05
Interaction: Sex x Age	2	0.10	0.05	0.02	not sig.
Interaction: I.Q. x Sex x A	.ge	5.43	2.72	1.24	not sig.
Within Groups (Error term)	671	1470.74	2.19		
Total	682	1497.57			

From the statistical table

For df = 1/671 2/671 F at .05 = 3.857 3.007 F at .01 = 6.681 4.644

Table 5.16(ii)(c): Showing Results of L.S.D. Test for Pair Differences among I.Q., Sex and Age Sub-groups

L.S.D. = 
$$t / MS_w / N_1 + MS_w / N_2$$

(t for df of  $MS_W$  at .05 = 1.96 and at .01 = 2.58)

			Ι	Obtained Mean Difference	Requ Diffe .05		Signifi- cance
(i) For I.Q.	Differ	ences	5				
Among Bo	ys -				,		•
13 years :			vs.				
14 years :	Superi "	or	11	.04 .15	.69 .59	.90 .77	not sig. not sig.
15 years	it	H	H	. 29	.59	.77	not sig.
Among Gi	rls -	-	•				
13 years	a)	H	11	.19	. 65	. 85	not sig.
14 years	10	ti	и	. 3'2	. 49	.65	_
15 years	u *	H	II	.61	. 47	.62	sig.at .05
(ii) For Sex	Differe	nces			•		
Among, Hi	ghly Su	perio	or -				
13 years :		<del></del>		.04	.74	.98	not sig.
14 years :	16	ti ti	1	.17	.63	.83	not sig.
15 years :	11	48 48	ì	.21	.61	.80	not sig.
Among Su	perior	-					
13 years :	11	11 11	1	. 27	.61	.80	not sig.
14 years :	th	H (1	1	. 30	. 45	.59	not sig.
15 years:	11	14 (1	)	.11	. 45	.59	not sig.
•	•			_	_		

(continued)

Table 5.16(ii)(c) contd.

	1	2	3	4	5
(iii)	For Age Differences				
	Among Main Groups -				
•	13 years vs 14 years	.06	. 29	. 39	not sig.
	13 years vs 15 years	.08	. 29	.39	not sig.
	14 years vs 15 years	.14	. 25	.34	not sig.
	Among Highly Superior B	oys -			
	13 years vs 14 years	.06	.73	.95	not sig.
	13 years vs 15 years	.31	.73	.95	not sig.
	14 years vs 15 years	. 25	.73	.95	not sig.
	Among Superior Boys -				
	13 years vs 14 years	.05	.55	.72	not sig.
	13 years vs 15 years	.06	.55	.72	not sig.
	14 years vs 15 years	.11	. 45	.59	not sig.
	Among Highly Superior G	irls -		,	
	13 years vs 14 years	.15	. 65	.85	not sig.
	13 years vs 15 years	.48	.63	.83	not sig.
	14 years vs 15 years	.63	. 49	. 65	sig.at .05
	Among Superior Girls -				
	13 years vs 14 years	.02	.51	.67	not sig.
	13 years vs 15 years	.32	. 49	.65	not sig.
	14 years vs 15 years	.30	. 45	•59	not sig.

Table 5.16(iii) (a): Showing Mean Scores on Personality
Factor Q₄(High Ergic Tension vs Low Ergic
Tension of each of Main and Sub-groups
(I.Q. x Sex) (Sample Size: 323)

		Extra- ordinary	Very Superior	Superior	Total
Boys :	Nos.	10	49	106	165
	Scores	37	158	320	515
	Mean	3.70	3.22	3.02	3.12
Girls :	Nos.	19	51	90	160
	Scores	61	167	265	493
	Mean	3.21	3.27	2.94	3.08
Total :	Nos.	29	100	196	325
	Scores	98	325	585	1008
	Mean	3 <b>.3</b> 8	3.25	2.98	3.10

Table 5.16(iii) (b): Showing Summary of Results of Analysis of Variance

Sources of Variance	đf	Sum of Squares (Ss)	Mean Square (Variance)	F Ratios	Remarks
Between I.Q. (Giftedness)	2	7.12	3.56	1.66	Not Sig.
Between Sex	1	0.13	0.13	0.06	Not Sig.
Interaction: I.Q. x Sex	2	1.77	0.89	0.40	Not Sig.
Within Groups (Error term)	319	708.63	2.22		
Total	324	717.65	· name desti tapp desti gage tamb (	PANTE VICEY ARRING ANDRESS	

From the statistical table -

For df = 2/319 1/319

 $F \text{ at } .05 = 3.028 \quad 3.868$ 

F at .01 = 4.676 6.716

Table 5.16(iii) (c): Showing Results of L.S.D. Test for Pair Differences among I.Q. and Sex Sub-groups

L.S.D. =  $t\sqrt{MS_W/N_1 + MS_W/N_2}$ ( t for df of  $MS_W$  at .05 = 1.97 and at .01 = 2.59)

the planting of the property of the second s	Obtained Mean		uired erence	Signifi-
	Differences	.05		cance
(i) For I.Q. Differences	•			
Among Main Groups -				
Extraordinary vs Very S	up13	.61	.80	Not Sig.
Extraordinary vs Superio	or .40	.59	.78	Not Sig.
Very Superior vs Superior	or .27	.35	. 47	Not Sig.
Among Boys -			,	
Extraordinary vs Very S	up48	1.02	1.35	Not Sig.
Extraordinary vs Superio	or .68	.97	1.27	Not Sig.
Very Superior vs Superior	or .20	.51	.67	Not Sig.
Among Girls -			ŧ	
Extraordinary vs Very S	up06	.79	1.04	Not Sig.
Extraordinary vs Superio	or .27	.75	.98	Not Sig.
Very Superior vs Superior	or .33	.51	.67	Not Sig.
(ii) For Sex Differences:				
Among Extraordinary -				
Boys vs Girls	. 49	1.14	1.50	Not Sig.
Among Very Superior -				ē
Boys vs Girls	.05	.59	.78	Not Sig.
Among Superior -			_	
Boys vs Girls	.08	.47	.54	Not Sig.

Table 5.16(iv)(a): Showing Mean Scores on Personality Factor  $\Omega_4$  (High Ergic Tension vs Low Ergic Tension) of each of Main and Sub-groups (Sample Size: 143) (I.Q. x Sex)

	Extraordinary (Gifted)	Backward (Non-Gifted)	Total
Boys : Nos.	15	61	76
Scores	55	236	291
Mean	3.66	3.86	3.83
Girls : Nos.	36	31	67
Scores	123	114	237
Mean	3.41	3.67	3.54
Total : Nos.	5 <u>1</u>	92	143
Scores	178	350	528
Mean	3.49	3.80	3.69

## Results of

Table 5.16(iv)(b): Showing Summary of Analysis of Variance

Sources of Variance	đf	Sum of Squares (Ss)	Mean Squares (Variance)	F Ratios	Remarks
Between I.Q. (Giftedness)	1	3.23	3.23	1.24	Not Sig.
Between Sex	1	3.02	3.02	1.16	Not Sig.
Interaction : I.Q. x Sex	1	1.62	1.62	0.62	Not Sig.
Within Groups (Error term)	139	362.59	2.61		
Total	142	370.46			

From statistical table

For df = 1/139

F at .05 = 3.91

F at .01 = 6.825

Table 5.16(iv)(c): Showing Results of L.S.D. Test for Pair Differences among I.Q. and Sex Sub-groups L.S.D. =  $t\sqrt{MS_W/N_1} + \frac{MS_W/N_2}{2}$  (t for df of MS_w at .05 = 1.98 and at .01 = 2.615)

	Obtained Mean Differences	Required Difference* .05 .01		Signif- icance	
(i) For I.Q. Differences:				24 <b>0</b> ************************************	-
Among Boys -					
Extraordinary vs Backward	. 20	.93	1.23	Not	Sig.
Among Girls -	,				
Extraordinary vs Backward	. 23	.79	1.05	Not	Sig.
(ii) Among Sex Differences:					
Among Extraordinary -					
Boys vs Girls	. 25	.99	1.31	Not	Sig.
Among Backward -					
Boys vs Girls	.19	.71	.94	Not	Sig.

The maximum score on this factor  $Q_4$  is ten, and the four groups scored on an average 3.17, 3.18, 3.10 and 3.69 (made up by 3.49 of the gifted and 3.80 of the non-gifted), implying that the groups were far below average on this factor  $Q_4$  +i.e., they were not highly tense. The differences due to I.Q., sex and age have been examined below.

The results of 935 subjects ( I.Q. x sex ) in Table 5.16(i)(b) and (c) show that neither giftedness (I.Q.) nor sex nor their interaction contributed significantly to this factor  $Q_4$ .

Similarly, results of 683 subjects (I.Q. x sex x age) in Table 5.16(ii) (b) show that neither I.Q. nor sex nor age nor any interaction, except significant I.Q. x age interaction; showed significance. The closer examination of results in Table 3.16(ii) (c) showsthat highly superior scored significantly higher than superior in case of 15 year girls, while 15 age scored significantly higher than 14 age in case of highly superior girls. There were no other sub-group pair differences. To put it differently, highly superior were, significantly higher than superior at 15, and somewhat lower at 13 and 14, and all this accounted for significant interaction between I.Q. and age.

The results of 325 subjects (I.Q. x sex) in Table 5.16 (iii) (b) and (c) also showed that neither giftedness nor sex nor their interaction was significant, as in Table 5.16(i) (b) and (c).

And finally, even the comparison of the gifted and the non-gifted in data of 143 subjects (I.Q. x sex) in Table 5.16(iv) (a), (b), (c) showed that neither I.Q. nor their interaction was significant.

To sum up, neither giftedness nor sex nor age nor any interaction except I.Q. x age, showed significant contribution to factor  $\mathbf{Q}_4$  of high ergic tension. Only the highly superior

in case of 15 year old girls, and 15 year old scored significantly higher than 14 year old in case of highly superior girls, thus, accounting for significant I.Q. x age interaction.