CHAPTER SEVEN

SOME PERSONALITY TRAITS -

- ANXIETY STATE (A)

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Anxiety results when the individual's ego needs are threatened. The feeling of anxiety is the primary source of personality disorders. Anxiety lies at the core of nearly all personality maladjustment. So called normal anxiety can be considered as a fear reaction to threats to personal values that the individual holds essential to his existence as a personality. Abnormal anxiety is referred to as neurotic anxiety. Examples of anxiety are common enough in our everyday life. The sight of the whip in the hands of the approaching father is meaningful enough to the terrorized child.

In recent years considerable experimental evidence has been accumulated which enables us to understand fairly clearly the effects of a number of variations on the basis of anxiety paradigm. The following are the occasions for anxiety.

(1) Impossibility of overt escape

(2) Anticipation of punishment

(3) Separation from support.

Freud considered anxiety as a consciously painful experience which arises from excitations of the internal organs of the body. The present-day life of much hubbub in this fast moving machine age too provokes vast anxiety and presents a large number of situations stimulating in one way or the other an experience of anxiety. Feelings of insecurity, lack of understanding, love and sympathy, and atmosphere of distrust, distress, conflict and frustration often at home, in school and on job lead to tense and anxious state of mind.

Anxiety reaction, it is observed, is the most common form of psychoneurosis occurring among individuals possessing above average intelligence. It has been defined by Ross as "a series of symptoms which arise from faulty adaptations to the stresses and strains of life. It is caused by overaction in an attempt to meet these difficulties"[1]. All neurotic anxiety has its beginnings in early childhood. Most often, anxiety develops on the basis of parental rejection. Parental disapproval, punishment, threats of abandonment, or neglect are very often the sources of a child's basic anxiety. These threatening interpersonal relations with the parents create strong conflicts

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1. Page : Abnormal Psychology. p.122.

within the child. Anxiety is frequently aroused in a child also when he feels incapable of living up to the standards and goals that his parents have set up for him. The child feels ashamed because he cannot meet the expectations of his parents. As the child develops into an adolescent, his anxiety increases as he realizes more and more the disappointments and heartaches he is causing to his parents. Anxiety in young children also stems from parental insistence on respect. The implication of such remarks is that nice and good children do not hurt their parents' feelings. This demand for respect causes strong internal conflicts. Anxiety results when the child's need to express his own feelings and ideas is stifled by parental demands for respect and affection. This is frequently the source of a child's guilty feelings.

According to R. May, "Anxiety and hostility are interrelated; one affect usually generates the other. First, anxiety gives rise to hostility. This can be understood in its simplest form in the fact that anxiety, with its concomitant feelings of helplessness, isolation, and conflict, is an exceedingly painful experience; and one tends to be angry and resentful towards those responsible for placing one in such a situation of pain".[1]

An attempt has been made in the present investigation to study the differences, if any, in anxiety level of the groups of boys and girls under study. To assess the level of anxiety

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1. Thorpe, Katz and Lavis : The Psychology of Abnormal Behaviour.

prevailing among the sampled pupils, an Anxiety Scale consisting of forty statements, prepared by Dr. A. S. Patel was administered to them, and their scores (maximum being forty) on the scale were summarized and analysed statistically.

As presented in the preceding chapters, the data and results on anxiety scores of the subjects follow the same pattern of analysis, presentation and discussion in respective tables and sections for each of the groups under study, described in the pages that follow. The author would not henceforth repeat the details of procedure, but present findings directly as related to variables under study.

RESULTS AND DISCUSSION

I. Overall Analysis

The overall general picture emerging from the analysis of all data on anxiety state of the subjects under study is revealed in the general summary sheets (A) Nos. 1, 2 and 3 presented herewith.

SUMMARY SHEET NO. 1

Showing Mean Scores on Anxiety Scale for the Main Groups

Main Variables	Group	Number	Mean
A. Sex	Boys	735	12.76
	Girls	701	13.93
B. Birth Order	I. First-born	500	17.05
	II. Second-born	308	8.61
	III. Middle-born	332	14.06
	IV. Last-born	296	11.17
C. Family Size	F1	100	14.11
	F2	183	11.97
	F3	190	11.67
	F4	313	11.03
	F5	291	14.97
	F6	359	15.39
	Grand Total	1436	13.33

SUMMARY SHEET NO. 2

Sowing Mean Scores of each specific Groups on Anxiety Level

Sr. No.	Group	Ordinal Status of the Group	Family Size	Boys		Girls		Total	
				No.	Mean	No.	Mean	No.	Mean
1	2	3	4	5	6	7	8	9	10
1.	I	Only Child	F1	50	13.10	50	15.12	100	14.11
2.	I	First Born	F2 (M.S.)	50	13.14	50	8.30	100	10.72
3.	I	First Born	F2 (S.S.)	10	17.60	10	15.90	20	16.75
4.	I	First Born	F3 (M.S.)	25	10.52	25	17.20	50	14.06
5.	I	First Born	F3 (S.S.)	10	18.60	10	24.30	20	21.45
6.	I	First Born	F4 (M.S.)	25	10.92	25	17.24	50	14.08
7.	I	First Born	F4 (S.S.)	10	22.50	10	23.80	20	23.15
8.	I	First Born	F5 (M.S.)	25	22.64	25	24.40	50	23.52
9.	I	First Born	F5 (S.S.)	10	24.50	10	27.10	20	25.80
10.	I	First Born	F6 (M.S.)	25	22.64	25	24.44	50	23.56
11.	I	First Born	F6 (S.S.)	10	23.20	10	31.00	20	28.10
	I	First Born	Total	250	16.22	250	17.89	500	17.05

(contd....)

Summary Sheet No. 2 (contd....)

1	2	3	4	5	6	7	8	9	10
12.	II	Second Born	F3	31	9.22	41	8.97	72	9.08
13.	II	Second Born	F4 (M.S.)	31	8.54	31	10.42	62	9.48
14.	II	Second Born	F4 (S.S.)	36	5.58	36	5.96	72	5.44
15.	II	Second Born	F5 XXXXX	27	6.18	26	12.38	53	9.73
16.	II	Second Born	F6	25	7.72	24	12.87	49	10.24
	II	Second Born	Total	150	7.59	158	9.57	308	8.61
17.	III	Middle Born	F4 (3rd)	30	8.53	30	11.00	60	9.76
18.	III	Middle Born	F5 (3rd)	25	14.04	20	14.85	45	14.40
19.	III	Middle Born	F5 (4th)	30	10.40	20	20.80	50	14.56
20.	III	Middle Born	F6 (3rd)	25	20.60	20	21.20	45	20.86
21.	III	Middle Born	F6 (4th)	22	12.45	20	14.30	42	13.30
22.	III	Middle Born	F6 (5th)	45	16.82	45	10.02	90	13.31
	III	Middle Born	Total	177	14.49	155	14.21	332	14.06
23.	IV	Last Born	F2	32	10.87	31	14.04	63	12.44
24.	IV	Last Born	F3	27	9.62	21	8.23	48	9.02
25.	IV	Last Born	F4	25	14.76	24	14.58	49	14.67
26.	IV	Last Born	F5	42	10.66	31	10.38	73	10.54
27.	IV	Last Born	F6	32	9.34	31	9.61	63	9.04
	IV	Last Born	Total	158	10.91	138	11.41	296	11.17
		Grand Total		735	12.76	701	13.93	1436	13.33

SUMMARY SHEET NO. 3

Showing an Overall Summary of Results (i.e. Mean Scores on Anxiety Level of Each Main and Sub-groups)

	Groups	Boys		Girls		Total	
		No.	Mean	No.	Mean	No.	Mean
I	All Boys Vs. All Girls	735	12.76	701	13.93	1436	13.33
II	First Born Vs. Other Later Born	500	17.05	936	11.35	1436	13.33
III	Only Child Vs. Other First Born (Boys) (Boys)	100	14.11	400	17.79	500	17.05
IV	Only Child Vs. First Born (Boys) (Boys)	50	13.10	200	17.00	250	16.22
V	Only Child Vs. First Born (Girls) (Girls)	50	15.12	200	18.59	250	17.89
VI	First Born of Mixed Sex Vs. First Born of Same Sex	300	16.11	100	22.85	400	17.79
VII	Only Child Vs. Later Born (Excluding First Born)	100	14.11	936	11.35	1036	11.61
VIII	First Born Vs. Last Born (Youngest)	500	17.05	296	11.17	796	14.86
IX	Last Born Vs. Second Born & (Youngest) Middle Born	296	11.17	640	11.43	936	11.35
X	Last Born Vs. Only Child (Youngest)	296	11.17	100	14.11	396	11.90
XI	First Born Vs. First Born (Boys) (Girls)	250	16.22	250	17.89	500	17.05
XII	Second Born Vs. Second Born (Boys) (Girls)	150	7.59	158	9.57	308	8.61
XIII	Middle Born Vs. Middle Born (Boys) (Girls)	177	13.92	155	14.21	332	14.06
XIV	Last Born Vs. Last Born (Boys) (Girls)	158	10.91	138	11.44	296	11.17

Thus, the general Summary Sheet (A) No. 1 reveals the contribution of the main variables, viz. sex, birth order and family size. It would be seen that on the whole the girls seemed to be more anxious (13.93) than boys (12.76). Similarly, examining the birth order contribution, it was found that the second-born children were the least anxious (8.61), next in order were the last-born (11.51) and the middle-born (14.06), while the first-born were the most anxious (17.05).

Similar general analysis of data of family size-wise shows that F6 was most anxious (15.39), next in order were F5 (14.97), F1 (14.11), F2 (11.97), F3 (11.67), and F4 (11.03). It can be said that anxiety level seemed to be more affecting the families of larger sizes and lesser affecting the smaller families, excepting the family with one child only which appeared to be affected by anxiety as much as the larger families; perhaps there being no other children therein isolated children from the least size family (F1) were as much anxious as children having to face tensions and jealousies in larger families. In other words, too big size of family is anxiety-provoking and so also is one-child family; family size with two or three children seems to be alright as far as anxiety state is concerned.

The same results in greater details are observed in general Summary Sheet (A) No.2, which presents separately the mean scores on anxiety of each of possible 27 sub-groups whose data were available.

General Summary Sheet (A) No. 3 presents the data (Mean Scores) of only fourteen sub-groups under study, made available. for purposes of comparison between two sexes, four birth order positions and six family sizes. These data have been further analyzed with adequate statistical techniques (described earlier) and the results obtained have been presented in appropriate tables 1 to 14 for these fourteen groups and have been discussed and summarized following the same pattern of presentation as in earlier chapters showing the contribution of each of these variables.

In order to study the statistical significance of these overall results and thereby to find out the significance of the variables, sex and birth order, as related to the anxiety state of the subjects under study, all data were subjected to adequate statistical techniques and the results have been summarized in (A) Table Nos. 1(a), (b) and (c).

Thus, (A) Table No. 1(a) shows the mean scores on anxiety of boys and girls separately as belonging to different birth orders. The data have been arranged accordingly in the table, presenting 2 X 4 factorial design with two levels of sex and four levels of birth order respectively. These data were treated with the statistical technique of analysis of variance and the summary of results is presented in (A) Table No. 1(b). Further, to study which sex pair of specific birth order or birth order pair of specific sex was significantly different,

the Least Significant Difference Test was applied and the results have been presented in (A) Table Nos. 1 (c).

Group I : All Boys Vs. All Girls (Anxiety)

Sex Vs. Birth Order

(A) Table 1 (a) - Showing Mean Scores on 'Anxiety' of Boys and Girls of Different Birth Orders

Birth Order	Boys		Girls		Total	
	No.	Mean	No.	Mean	No.	Mean
First Born	250	16.22	250	17.89	500	17.05
Second Born	150	7.59	158	9.57	308	8.61
Middle Born	177	13.92	155	14.21	332	14.06
Last Born	158	10.91	138	11.44	296	11.17
Total	735	12.76	701	13.93	1436	13.33

(A) Table 1 (b) - Showing Analysis of Variance for Above Data

Source	df	SS	MS	F.Ratio	Remarks
Sex	1	492.21	492.21	7.66	Sig. at .01
Birth Order	3	15383.41	5127.80	79.85	Sig. at .01
S X O	3	189.14	63.04	0.98	Not Signi.
Within	1428	91696.44	64.21		
Total	1435	107761.20			

(A) Table 1 (c) - Showing Results of L.S.D. Test Birth Order-wise

Groups	Boys	Girls	Total
F.B. Vs. S.B.	Sig.at .01	Sig.at .01	Sig. at .01
F.B. Vs. M.B.	Sig.at .05	Sig.at .01	Sig. at .01
F.B. Vs. L.B.	Sig.at .01	Sig.at .01	Sig. at .01
S.B. Vs. M.B.	Sig.at .01	Sig.at .01	Sig. at .01
S.B. Vs. L.B.	Sig.at .01	Sig.at .06	Sig. at .05
M.B. Vs. L.B.	Sig.at .05	Sig.at .01	Sig. at .05

Sex-wise :

Among the First-Born	B - G	Not Significant
Second-Born	B - G	Significant at .01
Middle-Born	B - G	Not Significant
Last-Born	B - G	Not Significant

It would be seen from (A) Table 1 (b) that both sex and birth order have been highly significant factors contributing to anxiety state of the subjects. Luckily no significant interaction has been observed. Thus, both sex and birth order independently by themselves contributed to anxiety, i.e. sex is effective irrespective of birth order or same sex is effective at each birth order; similarly birth order is effective irrespective of sex or same order of effectiveness of birth orders is maintained at each sex level.

Thus, referring to (A) Table 1(a), it would be seen that girls were significantly on the whole more anxious (13.93) than boys (12.76) and were so also at each birth order. Similarly, on the whole, the first born were found most anxious (17.05), then in order of lesser anxiety were the middle-born (14.06) and the last-born (11.17); while the second born were the least anxious (8.61), and the same was the order among the boys and the girls separately. This position accounts for lack of significant interaction between sex and birth order which played their own role independently of each other.

The greater anxiety of girls in comparison to that of boys in the present case may be attributed to social or family structure, the parental attitude and the treatment received by girls in the Hindu family wherein the male counterpart generally receives a more favourable attention. The significant differences in anxiety of subjects at different birth orders can be explained by the common observation that the first born being the first, having none of siblings to share experiences in the early formative years and also being more fondled and protected by the anxious parents might be feeling most anxious himself in the family.

With the arrival of other siblings, perhaps the anxiety level gets lesser and we see that the other later born were less anxious than the first born. The second born have been found least anxious, and almost similar finding on adjustment

traits has been observed earlier with respect to the second born who are most adjusted. This would serve as a very effective reason for the slogan 'Only TWO' in family planning campaign of the Government and social workers. With a few more arrivals in the family, perhaps anxiety would increase due to sibling rivalry, tension of economic factors, etc. and this increase is reflected among the middle-born and the last-born, though not as much anxious as the first-born.

Further, (A) Table No. 1(c) shows the results of the LSD Test which reveals that each birth order is significantly different from the other in anxiety level. However, sex was not found that much significant at each birth order; there were significant sex differences among the second-born, but not so among the first-born, the middle-born and the last-born. In other words, girls were more anxious than boys even among the most anxious first-born and the least anxious second-born. Among the middle-born and the last-born, there were no sex differences, but the middle-born on the whole as well as at each sex level were more anxious than the last-born as remarked earlier.

II. Analysis for Comparison Between Birth Order Groups

It has been observed in the earlier section that both sex and birth order were significantly and independently contributing to anxiety. Next, it is worthwhile to study and compare

the findings with respect to different birth order groups, as studied earlier with respect to adjust processes. In view of this, data have been re-arranged and analysed in a way to enable the readers to understand how one birth order groups stands in comparison to the other. The following paragraphs are devoted to the discussion of the results for comparison purpose. Thus, the (A) Tables 2 to 10 (a), (b) and (c) given herewith summarize the results - (a) giving mean scores, (b) giving summary of results of analysis of variance, and (c) giving results of L.S.D. Test in case found necessary.

Group II : First-Born Vs. Other Later Born

Sex Vs. Birth Order (Anxiety Scale)

(A) Table 2(a) - Showing Mean Scores

Birth Order	Boys		Girls		Total	
	No.	Mean	No.	Mean	No.	Mean
First-born	250	16.22	250	17.89	500	17.05
Other Siblings	485	10.98	451	11.74	936	11.35
Total	735	12.76	701	13.93	1436	13.33

(A) Table 2(b) - Showing Analysis of Variance for Above Data

Source	df	SS	MS	F.Ratio	Remarks
Sex	1	492.21	492.21	7.68	Sig.at .01
Birth Order	1	15383.41	15383.41	240.25	Sig.at .01
S X O	1	189.14	189.14	2.95	Not Signi.
Within	1432	91696.44	64.02		
Total	1435	107761.20			

(A) Table 2(c) - Showing Results of L.S.D. Test

Birth Order-wise :

Among Boys : F.B. Vs. Others - Sig. at .01

Among Girls: F.B. Vs. Others - Sig. at .01

Sex-wise :

Among First-born : B - G - Sig. at .05

Among Later-born : B - G - Not significant

Group III : Only Child Vs. Other First Born
Sex Vs. Birth Order (Anxiety Scale)

(A) Table 3 (a) - Showing Mean Scores

Birth Order	Boys		Girls		Total	
	No.	Mean	No.	Mean	No.	Mean
Only Child	50	13.10	50	15.12	100	14.11
Other First-Born	200	17.00	200	18.59	400	17.79
Total	250	16.22	250	17.89	500	17.05

(A) Table 3 (b) - Showing Analysis of Variance for Above Data

Source	df	SS	MS	F.Ratio	Remarks
Sex	1	351.12	351.12	2.69	Not Significant
Birth Order	1	1086.34	1086.34	8.33	Sig. at .01
S X O	1	3.70	3.70	0.283	Not Significant
Within	496	64681.16	130.40		
Total	499	66122.32			

(A) Table 3 (c) - Showing Results of L.S.D. Test

Birth Order-wise :

Among Boys : Only Child Vs. First Born - Sig. at .01
Girls : -do- -do- - Sig. at .01

Sex-wise :

Among Only Child : B - G - Not Significant
Among First-born : B - G - Not Significant

Group IV : Only Child (Boys) Vs. First-born (Boys)
(Anxiety Scale)

(A) Table 4 (a) - Showing Mean Scores

Birth Order	Boys	
	No.	Mean
Only Child	50	13.10
First-born	200	17.00
Total	250	16.22

(A) Table 4 (b) - Showing Analysis of Variance for Above Data

Source	df	SS	MS	F.Ratio	Remarks
Between Group	1	608.40	608.40	4.99	Sig. at .05
Within	248	30226.50	121.88		
Total	249	30834.90			

Group V : Only Child (Girls) Vs. First-born (Girls)
(Anxiety Scale)

(A) Table 5 (a) - Showing Mean Scores

Birth Order	Girls	
	No.	Mean
Only Child	50	15.12
First-born	200	18.59
Total	250	17.89

(A) Table 5 (b) - Showing Analysis of Variance for Above Data

Source	df	SS	MS	F.Ratio	Remarks
Between Group	1	481.64	481.64	3.46	Sig. at .05
Within	248	34454.66	138.93		
Total	249	34936.30			

Group VI : First-born of Mixed Sex Vs. First-born of Same Sex

(Anxiety Scale)

(A) Table 6 (a) - Showing Mean Scores

Birth Order	Boys		Girls		Total	
	No.	Mean	No.	Mean	No.	Mean
First-born of Mixed Sex	150	15.57	150	16.65	300	16.11
First-born of Same Sex	50	21.28	50	24.42	100	22.85
Total	200		200		400	17.79

(A) Table 6 (b) - Showing Analysis of Variance for Above Data

Source	df	SS	MS	F.Ratio	Remarks
Between Group	1	3407.07	3407.07	26.58	Sig. at .01
Within	398	51007.12	128.15		
Total	399	54414.19			

Group VII : Only Child Vs. Later-born (excluding First-born)
Sex Vs. Birth Order (Anxiety Scale)

(A) Table 7 (a) - Showing Mean Scores

Birth Order	Boys		Girls		Total	
	No.	Mean	No.	Mean	No.	Mean
Only Child	50	13.10	50	15.12	100	14.11
Later Born	485	10.98	451	11.74	936	11.35
Total	535	11.18	501	12.07	1036	11.61

(A) Table 7 (b) - Showing Analysis of Variance for Above Data

Source	df	SS	MS	F.Ratio	Remarks
Sex	1	208.01	208.01	5.18	Sig. at .05
Birth Order	1	687.99	687.99	17.14	Sig. at .01
S X O	1	28.02	28.02	0.69	Not Sig.
Within	1032	41407.85	40.12		
Total	1035	42331.87			

(A) Table 7 (c) - Showing Results of LSD Test

Birth Order-wise :

Among Boys : Only Child Vs. Last Born - Sig. at .01

Among Girls : Only Child Vs. Last Born - Sig. at .01

Sex-wise :

Among Only Child : B - G - Sig. at .05

Among Later Born : B - G - Not Significant

Group VIII : First Born Vs. Last Born (Anxiety Scale)

Sex Vs. Birth Order

(A) Table 8 (a) - Showing Mean Scores

Birth Order	Boys		Girls		Total	
	No.	Mean	No.	Mean	No.	Mean
First-Born	250	16.22	250	17.89	500	17.05
Last-Born	158	10.91	138	11.41	296	11.17
Total	408	14.16	388	15.60	796	14.86

(A) Table 8 (b) - Showing Analysis of Variance for Above Data

Source	df	SS	MS	F.Ratio	Remarks
Sex	1	10.30	10.30	0.13	Not Sig.
Birth Order	1	6470.52	6470.52	87.12	Sig.beyond .01
S X O	1	18671.70	18671.70	83.80	Sig.beyond .01
Within	792	58674.86	74.08		
Total	795	83827.38			

(A) Table 8 (c) - Showing Results of LSD Test

Birth Order-wise :

Among Boys : First Born Vs. Last Born - Sig. at .01

Girls : -do- Vs. -do- - Sig. at .01

Sex-wise :

Among First Born : B - G - Sig. at .05

Last Born : B - G - Not Significant

Group IX : Last Born Vs. Second Born and Middle Born
Sex Vs. Birth Order (Anxiety Scale)

(A) Table 9 (a) - Showing Mean Scores

Birth Order	Boys		Girls		Total	
	No.	Mean	No.	Mean	No.	Mean
Last Born	158	10.91	138	11.41	296	11.17
Second Born &Middle Born	327	11.02	313	11.87	640	11.43
Total	485	10.98	451	11.74	936	11.35

(A) Table 9 (b) - Showing Analysis of Variance for Above Data

Source	df	SS	MS	F.Ratio	Remarks
Sex	1	134.02	134.02	4.04	Just Sig. .05
Birth Order	1	15.92	15.92	0.48	Not Sig.
S X O	1	3.34	3.34	0.100	Not Sig.
Within	932	30868.81	33.12		
Total	935	31022.09			

(A) Table 9 (c) - Showing Results of LSD Test

Birth Order-wise :

Among Boys : Last-born Vs. Second Born & Middle Born - Not Sig.

Girls : -do- Vs. -do- - Not Sig.

Sex-wise :

Among Last Born : B - G - Not Sig.

Among Second Born and Middle Born : B - G - Sig. at .05

Group X : Last Born Vs. Only Child (Anxiety Scale)
Sex Vs. Birth Order

(A) Table 10 (a) - Showing Mean Scores

Birth Order	Boys		Girls		Total	
	No.	Mean	No.	Mean	No.	Mean
Last Born	158	10.91	138	11.41	296	11.17
Only Child	50	13.10	50	15.12	100	14.11
Total	208	11.43	188	12.42	396	11.90

(A) Table 10 (b) - Showing Analysis of Variance for Above Data

Source	df	SS	MS	F.Ratio	Remarks
Sex	1	594.30	594.30	19.01	Sig. at .01
Birth Order	1	651.03	651.03	20.83	Sig. at .01
S X O	1	9011.03	9011.03	288.32	Sig. at .01
Within	392	12251.00	31.25		
Total	395	22507.36			

(A) Table 10 (c) - Showing Results of LSD Test

Birth Order-wise :

Among Boys : Last Born Vs. Only Child - Sig. at .01
Girls : -do- Vs. -do- - Sig. at .01

Sex-wise :

Among Last Born : B - G - Not Significant
Among Only Child : B - G - Significant at .01

(a) Comparison Between the First-Born and the Other Later-Born

Data were so arranged and analysed as to enable the investigator to compare the first-born on one hand and all other later-born siblings on the other hand. Results in this regard have been summarized in (A) Table 2 (a), (b) and (c) showing respectively the mean scores, results of F-Test, and LSD Test. It would be seen therefrom that both sex and birth order are significant at .01 level; interaction is not at all significant. Looking to the mean scores, it would be inferred that girls were more anxious (13.93) than boys (12.76) and that the first-born were more anxious (17.05) than the other later-born siblings (11.35). Both these factors contributed independently by themselves without any interaction. (This fact has been explained earlier. On closer examination, the LSD Test results show that both among boys and girls, the first-born were more anxious than the later-born; however among the first-born the girls were more anxious than the boys, but there were no sex differences among the other later-born.

(b) Comparison Between the Only Child Group and the Other First-born Group

In order to study how the only children stand in relation to the other first-born children on anxiety level, data were re-arranged and analysed accordingly. Thus, (A) Tables 3(a), (b) and (c) present the results in this respect. In this case,

it has found from (A) Table 3(b) that only the birth order was significant at .01 level of confidence; neither the sex nor the interaction was significant. The mean scores in (A) Table 3(a) reveal that the other first-born children were more anxious (17.79) than the only children (14.11). This seems a little strange since only children would be expected usually to be more anxious; however it is likely that parents might be more careful to relieve the only child of the possible situations of anxiety. The closer analysis by LSD Test in (A) Table 3(c) reveals that both among boys and girls, the only children were less anxious than the other first-born children, but there were no sex differences both among only children as well as other first-born children. This also accounts for lack of significant interaction. Yet, it should be noted that girls tended to be a little more anxious than boys though not significantly.

(c) Comparison Between the Only Child Boys Group and Other First-Born Boys

To confirm the above results in (A) Table 3 further the data of only child boys group were compared with the data of other first-born boys. (A) Table 4 (a) and (b) give these results. The only born boys were less anxious (13.10) than other first-born boys (17.00).

(d) Comparison Between the Only Child Girls Group and Other First-born Girls

Similarly, (A) Table 5(a) and (b) reveal and confirm results in (A) Table 3 that the only girls were less anxious (15.12) than other first-born girls (18.59).

(e) Comparison Between the First-Born Children of Mixed Sexes and the First-Born Children of Same Sex

Again, to study whether siblings of same sex and siblings of mixed sex among the first-born differ on anxiety level, data were accordingly tabulated and analysed. Thus (A) Table 7(a), and (b) reveal these results. Analysis of variance were done in total groups of same sex on one hand and mixed group on the other, irrespective of being boys or girls. It would be observed that both groups differed significantly as expected and the first-born siblings of same sex were found to be highly more anxious (22.85) than those of mixed sexes (16.11). Examining even sex-wise, boys with same sex were more anxious (21.28) than parallel group of boys mixed with girls (15.57). Similarly, girls with same sex were more anxious (24.42) than parallel group of girls mixed with boys (16.65); and thus girls with same sex were more anxious (24.42) than boys with same sex (21.28).

As seen in earlier chapters, the mixed sex group was found more adjusted than the same sex group, and as such it would also follow that mixed sex group would be less anxious than the same sex group among the first-born children. It is worthwhile that investigators should take up a problem for further research and examine this issue for children of other ordinal positions by gathering more data needed.

(f) Comparison Between Only Child Group and All Later-Born Group (Excluding First-Born)

Since the first-born were found more anxious (17.05) than other later-born (11.35) (as seen from (A) Table 2) and the other first-born were found also more anxious (17.79) than the only child group (14.11) (as seen from (A) Table 3), it was thought to compare the only child group with all later-born group. The results of analysis for these data are presented in (A) Table 7(a), (b) and (c). It would be again seen that both sex and birth order were significant at .05 and .01 level respectively, and there was no interaction between the two, i.e. both factors worked independently, girls always being more anxious in each birth order and only child group also being more anxious in each sex. On the whole, girls were more anxious (12.07) than boys (11.18); and the only child group was more anxious (14.11) than the later-born group (11.35). Thus, it would be observed that most anxious were other first

born excluding only children (17.79), or all first-born together (17.05); lesser anxious then were only child group (14.11) and lower anxious were the other later-born (11.35) in comparison. Results of closer analysis in (A) Table 7 (c) reveals that both among boys and girls, the only child group was more anxious; and there were sex differences among the only children (girls being more anxious), but no sex differences among the later-born as observed earlier.

(g) Comparison Between the First-born and the Last-born

Results of analysis of data in order to compare the first-born and the last-born have been presented in (A) Table 8(a), (b) and (c). It would be observed therein that sex was not a significant factor, but it interacted significantly with birth order which itself was also a significant factor. Thus, the first-born were found more anxious (17.05) than the last-born (11.17). However, results in (A) Table 8 (c) show that both among boys and girls the first-born were significantly more anxious than the last-born; and that there were sex differences among the first-born (girls being more anxious than boys), but no sex differences among the last-born; this accounts for significant interaction.

(h) Comparison Between the Last-born and the Aggregate of Second and Middle Born

As in earlier cases, it was thought to combine all middle-born children, i.e. in this case the second born and the middle born, and to compare this aggregate group with the last-born. The results of such analysis have been summarized in (A) Table 9 (a), (b) and (c). It is observed that only the sex factor is just significant at .05 level; neither birth order nor interaction is significant. Girls on the whole were more anxious (11.74) than boys (10.98), and even here only the girls of aggregate group of the second and middle born were just significantly more anxious than boys of the same group; there were no sex differences among the last-born group as observed above in (A) Table 8 (c).

It should be noted in this connection (cf. (A) Table 1) that in order of anxiety level, the least anxious were the second-born (8.11), somewhat more were the last-born (11.17) and still more were the middle-born (14.06). Thus, when the second born (least) and middle born (most) were combined, the average of the two was not significantly different from the last-born (with middle position). This accounts for lack of significance of birth order. Only the sex factor somewhat significant earlier remains just significant.

(i) Comparison Between the Last-born and the Only Child Group

Since first-born were the more anxious (all together 17.05 and excluding only children 17.79), only children were a little less anxious (14.11) and the last-born still less anxious (11.17); it was thought worthwhile to compare statistically also the last-born and the only child group. Results are summarized in (A) Table 10(a), (b) and (c). It is noted that sex, birth order and their interaction all were significant beyond .01 level. Girls were more anxious (12.42) than boys (11.43); and only children were more anxious (14.11) than last-born (11.17). However, results of LSD Test in (A) Table 10 (c) reveal that both among boys and girls, the only children were more anxious than last-born; and there were sex differences among only children, but not among the last-born as noted also earlier; this accounts for a significant interaction.

III. Analysis for Comparison Between Family Sizes

The preceding section deals with the role of birth order towards anxiety state; this section is devoted to the role of family size towards anxiety state. The data have been separated out family size-wise at each birth order position for boys and girls, subjected to appropriate statistical analysis, and the results have been presented in (A) Tables 11 to 14 (a), (b) and (c) in the same pattern - (a) showing

mean scores on anxiety, (b) showing the results of analysis of variance, and (c) showing the results of LSD Test, as in earlier cases.

(a) Role of Family Size
Within the First-born

The data of the first-born boys and girls were classified according to the number of children coming from each family size, viz. F1, F2, F3, F4, F5 and F6 or more. The results of the statistical analysis of these data have been presented below in (A) Tables 11 (a), (b) and (c).

Group XI : First-born Boys Vs. First-born Girls
Sex Vs. Family Size

(A) Table 11 (a) - Showing Mean Scores

Family Size	Boys		Girls		Total	
	No.	Mean	No.	Mean	No.	Mean
F1	50	13.10	50	15.12	100	14.11
F2	60	13.88	60	9.56	120	11.72
F3	35	13.11	35	19.23	70	16.17
F4	35	14.23	35	19.11	70	16.67
F5	35	23.17	35	25.17	70	24.17
F6	35	22.82	35	26.31	70	24.57
Total	250	16.22	250	17.89	500	17.05

(A) Table 11 (b) - Showing Analysis of Variance for Above Data

Source	df	SS	MS	F.Ratio	Remarks
Sex	1	351.12	351.12	3.27	Not Sig.
Family Size	5	11841.10	2368.22	22.11	Sig. at .01
S X F	5	1665.44	333.08	3.11	Not Sig.
Within	488	52264.66	107.09		
Total	499	66122.32			

(A) Table 11 (c) - Showing Results of LSD Test

Family Size-wise :

Group	Boys	Girls	Total
F1-F2	Not Sig.	Sig. .01	Not Sig.
F1-F3	NS	Sig. .01	NS
F1-F4	NS	Sig. .01	NS
F1-F5	Sig. .01	Sig. .01	Sig. .01
F1-F6	Sig. .01	Sig. .01	Sig. .01
F2-F3	NS	Sig. .01	Sig. .01
F2-F4	NS	Sig. .01	Sig. .01
F2-F5	Sig. .01	Sig. .01	Sig. .01
F2-F6	Sig. .01	Sig. .01	Sig. .01
F3-F4	NS	NS	NS
F3-F6	Sig. .01	Sig. .01	Sig. .01
F4-F6	Sig. .01	Sig. .01	Sig. .01
F4-F5	Sig. .01	Sig. .01	Sig. .01
F4-F6	Sig. .01	Sig. .01	Sig. .01
F5-F6	NS	NS	NS

Sex-wise : At F1 : B-G - Not Sig.
F2 : B-G - Sig. .01
F3 : B-G - Sig. .01
F4 : B-G - Sig. .01
F5 : B-G - NS
F6 : B-G - Sig. .05

The analysis reveals that neither sex nor its interaction was significant among the first-born, thus confirming also the lack of sex difference revealed by (A) Table 3 for first-born Vs. only child. The only factor of significance was the family size in this case as revealed by (A) Table 11(b). The mean scores in (A) Table 11 (a) show that as the family size increases, the level of anxiety increases too. The only exception is that F1 was more anxious (14.11) than F2 (11.72) which was the least anxious, after which the anxiety level increased with increasing size of the family (F3 - 16.17; F4 - 16.67; F5 - 24.17; F6 - 24.57). It is again the most welcoming finding for the propaganda in family planning campaign that the children from family with size two were the least anxious; and F6 children were the most anxious.

The closer analysis of results by LSD Test further revealed that F1 and F2, F3 and F4 as well as F5 and F6 form almost equal groups on the whole; among the boys F1, F2, F3 and F4 as well as F5 and F6 form equal groups; and among girls F3 and F4 as well as F5 and F6 form equal groups within them. Between members of one group and the other, there are usually differences. Details of significant differences have been summarized in (A) Table 11(c). The striking conclusion among the first-born is that anxiety level increases with family size, excepting in F2 which is the least anxious; more specifically the F2 girls were the least anxious (9.56) and F6 girls were the most anxious (26.31).

(b) Role of Family Size
Within the Second-born

Similar analysis was made for data of the second-born boys and girls to study the role of family size. In this case, it would be understood that there could not exist F1 (there cannot be second-born in F1); and at the same time there could not be F2 (since second-born in F2 would be the last-born) not to be considered here for analysis. Thus the only sizes considered for analysis were F3, F4, F5 and F6. The results of this analysis have been presented in (A) Table 12 (a), (b) and (c).

Group XII : Second-born Boys Vs. Second-born Girls
Sex Vs. Family Size

(A) Table 12 (a) - Showing Mean Scores

Family Size	Boys		Girls		Total	
	No.	Mean	No.	Mean	No.	Mean
F3	31	9.22	41	8.97	72	9.08
F4	67	6.95	67	7.67	134	7.53
F5	27	6.18	26	12.38	53	9.73
F6	25	7.72	24	12.87	49	10.24
Total	150	7.59	158	9.57	308	8.61

(A) Table 12 (b) - Showing Analysis of Variance for Above Data

Source	df	SS	MS	F.Ratio	Remarks
Sex	1	302.46	302.46	17.09	Sig. at .01
Family Size	3	439.53	146.51	8.28	Sig. at .01
S X F	3	399.33	133.11	7.52	Sig. at .01
Within	300	5309.93	17.69		
Total	307	6451.25			

(A) Table 12 (c) - Showing Results of LSD Test

Group	Boys	Girls	Total
F3 - F4	Sig. at .01	Not Sig.	Not Sig.
F3 - F5	Sig. at .01	Sig. at .01	NS
F3 - F6	Not Sig.	Sig. at .01	NS
F4 - F5	NS	Sig. at .01	NS
F4 - F6	NS	Sig. at .01	NS
F5 - F6	NS	NS	NS

The analysis of the second-born children reveals that sex, family size and their interaction all were significantly contributing to the anxiety state in this case. Girls were found more anxious (9.57) than boys (7.59). Again, the anxiety level was found to increase with increase in family size, with the exception of F4 (7.58) which was the least anxious. F6 was the most anxious (10.24); F3 and F4 were almost equal (9.08 and 9.73). Among the boys, F3 is significantly more than F4 and F5 and all other pairs were almost equal; among the girls F3 and F4 were almost the same, and so also F5 and F6, all other pairs were different; on the whole no pair was found significant; all this accounts for significant interaction.

(c) Role of Family Size
Within the Middle-born

Again, the similar analysis of the data for middle-born children (naturally from F4, F5 and F6 only for reasons understood as above) brought out the results that are presented in (A) Tables 13 (a), (b) and (c).

Group XIII : Middle-born Boys Vs. Middle-born Girls

Sex Vs. Family size

(A) Table 13 (a) - Showing Mean Scores

Family Size	Boys		Girls		Total	
	No.	Mean	No.	Mean	No.	Mean
F4	30	8.53	30	11.00	60	9.76
F5	55	12.05	40	17.82	95	14.48
F6	92	16.80	85	13.65	177	15.29

(A) Table 13 (b) - Showing Analysis of Variance for Above Data

Source	df	SS	MS	F.Ratio	Remarks
Sex	1	7.08	7.08	0.392	Not Sig.
Family Size	2	1392.48	696.24	38.63	Sig. at .01
S X F	2	1292.44	646.22	35.86	Sig. at .01
Within	326	5877.58	18.02		
Total	331	8569.68			

(A) Table 13 (c) - Showing Results of LSD Test

Family Size-wise :

Group	Boys	Girls	Total
F4 - F5	Sig. at .01	Sig. at .01	Sig. at .01
F4 - F6	Sig. at .01	Sig. at .01	Sig. at .01
F5 - F6	Sig. at .01	Sig. at .01	Not Sig.

Sex-wise : At F4 : B - G Sig. at .05

F5 : B - G Sig. at .01

F6 : B - G Sig. at .05

Here again, the analysis reveals that sex was not the significant factor; only family size and its interaction with sex were significant. The same trend again is revealed that anxiety level increases with family size (F4 - 9.76; F5 - 14.48 and F6 - 15.29). Further analysis by LSD Test revealed that both among boys and girls each pair of family sizes differed in anxiety and similarly there were significant sex differences in each family size. However, in F4 and F5 the girls were more anxious and in F6 the boys were more anxious; similarly between family sizes among boys F6 was most anxious group and among girls F5 was the most anxious group; this differing trend accounts for significant interaction.

(d) Role of Family Size Within the Last-born

Finally, the data of the last-born boys and girls were classified according to different family sizes from F2 to F6 (excepting F1 in which last-born and first-born or only child means the same). The results of analysis of these data are presented in (A) Tables 14 (a), (b) and (c).

Group XIV : Last-born Boys Vs. Last-born Girls
Sex Vs. Family size

(A) Table 14 (a) - Showing Mean Scores

Family Size	Boys No.	Boys Mean	Girls No.	Girls Mean	Total No.	Total Mean
F2	32	10.87	31	14.04	63	12.44
F3	27	9.62	21	8.23	48	9.02
F4	25	14.76	24	14.58	49	14.67
F5	42	10.66	31	10.38	73	10.54
F6	32	9.34	31	9.61	63	9.04
Total	158	10.91	138	13.93	296	11.17

(A) Table 14 (b) - Showing Analysis of Variance

Source	df	SS	MS	F.Ratio	Remarks
Sex	1	20.74	20.74	0.59	Not Sig.
Family Size	4	1134.41	283.60	8.18	Sig. at .01
S X F	4	165.22	41.30	1.19	Not Sig.
Within	286	9914.17	34.66		
Total	295	11234.54			

(A) Table 14 (c) - Showing Results of LSD Test

Family Size-wise :

Group	Boys	Girls	Total
F2 - F3	Not Sig.	Sig. at .01	Sig. at .01
F2 - F4	Sig. at .01	NS	Sig. at .05
F2 - F5	NS	Sig. at .01	NS
F2 - F6	NS	Sig. at .01	Sig. at .05
F3 - F4	Sig. at .01	Sig. at .01	Sig. at .01
F3 - F5	NS	NS	NS
F3 - F6	NS	NS	NS
F4 - F5	Sig. at .01	Sig. at .01	Sig. at ,01
F4 - F6	Sig. at .01	Sig. at .01	Sig. at .01
F5 - F6	NS	NS	NS

Sex-wise : At F2 : B-G : Not Sig.
F3 : B-G : NS
F4 : B-G : NS
F5 : B-G : NS
F6 : B-G : NS

The analysis reveals that only the family size was the significant factor. However, the usual trend of increase in anxiety with increase in family size was not found to be systematic. The order of family sizes beginning with least anxiety and ending with the most is F4 (14.67), F2 (12.44), F5 (10.54), F6 (9.04) and F3 (9.02) respectively. Strangely among the last-born, F2 was more anxious, while F3 was the least anxious, almost like F6 which was found to be most anxious in other cases. Anyway, the family size was the significant factor contributing to anxiety state among also the last-born, through the trend was not systematic.

On the whole, family size and birth order position were significantly effective variables so far as anxiety level was concerned. Like family composition, the size of the family is a sociological variable. Bossard has contrasted the large and small family with respect to impact on the child. In the small family, most issues such as family size, spacing of children, and the main objectives of education and child rearing are matters of general agreement. Parenthood is intensive rather than extensive. The small family rests upon the ideas of planning, individualization, democratic cooperation, social isolation and intensive pressures.

Large families are different. Here the emphasis on the group rather than on the individual is encouraged. In a large family one has to learn to make adjustments to all sorts of

changes - changes in status, in responsibilities, in role. Moreover, one's own actions and behaviour inevitably depend upon the conduct and attitudes of others. Furthermore, there is less intimate contact in a large family between the parent and any individual child. Over-protectiveness, over-indulgence and intrusiveness seldom occur. And by the very nature of the family's size, problems of internal stress and strain are manifold. Due to all these reasons, anxiety level is more prominent in larger family sizes. While in small family sizes anxiety level is of lesser degree.

In the same way birth order position is significant factor in the development of personality and intelligence. Contrary to rather wide-spread belief, there is no one position in the family circle that might be regarded as the ideal. Each position in the family circle involves special problems as well as certain advantages. While each position provides certain emotional satisfactions and dissatisfactions for child, the effect of the position the child has in the family constellation will be influenced by his age and sex. Thus, to a certain extent, the advantages and disadvantages of different positions depend upon the child himself as much as upon the position he holds within the family.

SUMMARY OF RESULTS

Sex Variable :

1. On the whole, the sex was found to be a significant factor contributing to anxiety state; girls were usually more anxious than boys. However, closer examination has revealed that sex was most effective only among the second-born children.

2. While making comparison between different birth orders, the sex was found significant in case of comparison between the first-born Vs. other later-born, between only child group Vs. later-born, between only child group and the last-born, between last-born Vs. aggregate of second-born and middle-born; but not at all between only child group and other first-born, between first-born and last-born.

3. While studying the role of family sizes at different birth order positions, again the sex was significant only within the second-born, and not at all within the first-born, the middle-born and the last-born (even after taking out the data of some children from few families of some sizes for the purpose).

In other words, sex was a contributing factor to anxiety of mostly second-born children, making usually girls more anxious.

Birth Order Variable

4. Birth order was always significantly contributing to anxiety state of subjects under study, both among boys and girls of each birth order, making one birth order group significantly different from the other group in all cases of possible comparison. Usually, the second-born were the least anxious, then in increasing order were the last-born, the middle-born and the first-born who were most anxious.

5. In birth order comparisons under study, the first-born were more anxious in comparison to other later-born;

6. Only children were less anxious in comparison to other first-born;

7. Only boys were less anxious in comparison to other first-born boys;

8. Only girls were also less anxious in comparison to other first-born girls;

9. Siblings of same sex among the first-born were more anxious than those of mixed sexes among the first-born;

10. Only children were more anxious than other later-born;

11. The first-born were more anxious than the last-born.

12. There were not birth order differences between last-born ~~and~~ on one hand and the aggregate of second and middle born on the other.

13. Only children were more anxious than the last-born.

Family Size :

14. Family size was a significantly contributing factor to anxiety state. There was a general trend of systematic increase in anxiety level with the increase in size of family within the first-born children; however, the children from F2 were the least anxious among F1, F2, F3, F4, F5 and F6 under comparison.

15. Among the second-born, family size was a significant factor with the same systematically increasing trend, except F4 being the least anxious among F3, F4, F5 and F6 under possible comparison.

16. Among the middle-born also, family size was significant with the same systematically increasing trend among F4, F5 and F6 under possible comparison.

17. Finally, among the last-born, the family size was again significantly contributing to anxiety state, but not showing the systematic trend of increase or decrease. The order of family sizes with increasing level of anxiety was F3 (least) anxious); F6, F5, F2 and F4 (Most anxious) - among family sizes under possible comparison.