

CHAPTER SIX

ADJUSTMENT PROCESSES -

- PERSONAL ADJUSTMENT

Personal adjustment is a process of interaction between oneself and one's environment in which one lives. In this process we can either adapt to the environment or alter it. We can modify our surroundings either directly or indirectly or we can modify our own behaviour if we achieve a satisfactory relationship. Satisfactory adjustment depends upon successful interaction.

Again, in a good home the child's sense of security is promoted by an atmosphere of affection and mutual respect. He is made to feel that he is a valuable and desired member of the family group, and when the matters of importance are discussed, his ideas - no matter how naive - are given some

sort of consideration; or at least he perceives or feels that he and his words are paid attention to or considered. Such atmosphere or perception of such environment would help the individual to learn to establish better relations with other members not only in the family but also in the society and thus would promote the development of his social as well as personal adjustment. Personal adjustment cannot be separated from social adjustment. All those factors that affect the social and personal adjustment would also influence the personal adjustment, though not necessarily in the same way. To be true, personal adjustment is the very basis of social and family adjustment. However, it is not necessarily true that all those who are personally adjusted are also socially adjusted, since social adjustment calls upon a few other personality characteristics. Personal adjustment is more or less a sort of one's own emotional adjustment, maturity, stability, balance, lack of neuroticism, absence of state of anxiety, etc. that a person exhibits not only in his dealings with others, but mainly within himself, in his own feeling, thinking and acting. Thus, though personal and social adjustment usually may go together, in a specific study like this investigating adjustment processes and personality traits of specific children, the author thought to study personal adjustment also as distinguished from social adjustment. In view of this, scores on personal adjustment were studied separately. This would enable the reader also to compare these results with those on social adjustment.

Thus, to assess the extent of personal adjustment of pupils under study, Dr. A.S. Patel's Adjustment Study Inventory (standardized in Gujarati) consisting of a series of statements (25 on personal adjustment and 25 on social adjustment as described earlier) was administered to all the subjects. Their scores only on personal adjustment (maximum being 25) have been separately summarized and analyzed. The results have been presented in respective tables on line similar to that in earlier chapters. The tables marked (PA) show summary of results on personal adjustment, just as those marked (SA) summarize results on social adjustment in the preceding chapter.

To test statistically whether sex of pupils, their birth order and family size had any significant contribution to personal adjustment, the scores were as usual subjected to the statistical techniques of analysis of variance (F-Test) as well as L.S.D. Test as described earlier. The general results have been presented in the first three summary sheets, and detailed statistical results in the respective tables as explained earlier i.e. (a) showing mean scores on personal adjustment, (b) showing summary of results of analysis of variance, and (c) showing findings of L.S.D. Test wherever needed. The first three summary sheets reveal the general picture at a glance; No. 1 (PA) shows the contribution of three main variables to personal adjustment; No. 2 (PA) summarizes results on all 27 main as well as sub-group; and No. 3 (PA)

presents the results of only 14 groups under specific study as explained earlier. All these are presented at due places in the pages that follow.

To begin with the first three summary sheets are given below to present a general picture of the findings at a glance.

SUMMARY SHEET NO. 1 (PA)

Showing Mean Scores of Main Groups on Personal Adjustment

<u>Main Variable</u>	<u>Group</u>	<u>Number</u>	<u>Mean</u>
A. Sex	Boys	735	12.50
	Girls	701	11.72
B. Birth Order	I. First Born	500	13.64
	II. Second Born	308	10.39
	III. Middle Born	332	12.84
	IV. Last Born	296	10.56
C. Family Size	F1	100	14.60
	F2	183	11.79
	F3	190	11.59
	F4	313	11.69
	F5	291	11.31
	F6	359	12.94
Grand Total		1436	12.12

SUMMARY SHEET NO. 2

Showing Mean scores of each Specific Groups on Personal Adjustment

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	16.82	50	12.38	100	14.60
2.	I	First Born	F2 (M.S.)	50	10.40	50	15.42	100	12.91
3.	I	First Born	F2 (S.S.)	10	11.40	10	12.40	20	11.90
4.	I	First Born	F3 (M.S.)	25	15.88	25	14.76	50	15.32
5.	I	First Born	F3 (S.S.)	10	13.20	10	9.60	20	11.40
6.	I	First Born	F4 (M.S.)	25	15.88	25	14.76	50	15.32
7.	I	First Born	F4 (S.S.)	10	13.90	10	10.70	20	12.30
8.	I	First Born	F5 (M.S.)	25	16.40	25	9.68	50	13.04
9.	I	First Born	F5 (S.S.)	10	16.80	10	11.80	20	14.30
10.	I	First Born	F6 (M.S.)	25	16.40	25	9.72	50	13.08
11.	I	First Born	F6 (S.S.)	10	11.70	10	12.00	20	11.85
			Total	250	14.58	250	12.71	500	13.64

contd....

Summary Sheet No. 2 contd.....

1	2	3	4	5	6	7	8	9	10
12.	II	Second Born	F3	31	10.19	41	9.95	72	10.05
13.	II	Second Born	F4 (M.S.)	31	11.70	31	10.12	62	10.91
14.	II	Second Born	F4 (S.S.)	36	10.27	36	10.64	72	10.45
15.	II	Second Born	F5	27	8.07	26	9.19	53	8.62
16.	II	Second Born	F6	25	11.36	24	12.79	49	12.06
-----	II	Second Born	Total	150	10.34	158	10.45	308	10.39
17.	III	Middle Born	F4 (3rd)	30	11.50	30	10.20	60	10.85
18.	III	Middle Born	F5 (3rd)	25	13.36	20	11.10	45	12.35
19.	III	Middle Born	F5 (4th)	30	7.36	20	16.40	50	10.98
20.	III	Middle Born	F6 (3th)	25	17.28	20	18.75	45	17.93
21.	III	Middle Born	F6 (4th)	22	13.40	20	13.15	42	13.28
22.	III	Middle Born	F6 (5th)	45	14.00	45	11.40	90	12.70
-----	III	Middle Born	Total	177	12.75	155	12.94	332	12.84
23.	IV	Last Born	F2	32	10.43	31	9.48	63	9.96
24.	IV	Last Born	F3	27	9.62	21	10.66	48	10.08
25.	IV	Last Born	F4	25	11.44	24	11.70	49	11.57
26.	IV	Last Born	F5	42	12.83	31	8.16	73	10.84
27.	IV	Last Born	F6	32	10.00	31	10.77	63	10.38
-----	IV	Last Born	Total	158	11.00	138	10.04	296	10.56
Grand Total				735	12.50	701	11.72	1436	12.12

SUMMARY SHEET NO. 3

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Showing an Overall Summary of Results (i.e. Mean Scores on Personal Adjustment of each Main and Sub-group)

Groups		Boys		Girls		Total	
		No.	Mean	No.	Mean	No.	Mean
I	All Boys Vs. All Girls	735	12.50	701	11.72	1436	12.12
II	First Born Vs. Other Later Born	500	13.64	936	11.31	1436	12.12
III	Only Child Vs. Other First Born	100	14.60	400	13.41	500	13.64
IV	Only Child Vs. Other First (Boys)	50	16.82	200	14.02	250	14.58
V	Only Child Vs. Other First (Girls)	50	12.38	200	12.79	250	12.70
VI	First Born of Mixed Sex Vs. First Born of Same Sex	300	13.76	100	12.35	400	13.41
VII	Only Child Vs. Later Born (Excluding First Born)	100	14.60	936	11.31	1036	11.63
VIII	First Born Vs. Last Born (Youngest)	500	13.64	296	10.56	796	12.49
IX	Last Born Vs. Second Born (Youngest)	296	10.56	640	11.66	936	11.31
X	Last Born Vs. Only Child (Youngest)	296	10.56	100	14.60	396	11.57
XI	First Born Vs. First Born (Boys)	250	14.58	250	12.70	500	13.64
XII	Second Born Vs. Second Born (Boys)	150	10.34	158	10.45	308	10.39
XIII	Middle Born Vs. Middle Born (Boys)	177	12.75	155	12.94	332	12.84
XIV	Last Born Vs. Last Born (Boys)	158	11.00	138	10.04	296	10.56

As noted above, the first two summary sheets illustrate the general picture of all data obtained on personal adjustment. However, the statistical analysis of data takes into account the data of the same sample arranged as 14 groups for comparison, as presented in summary sheet No. 3, on which the discussion follows in the main text of the thesis. It would be seen that the grand mean of the total sample on personal adjustment is 12.12, a little less than that on social adjustment (13.07) and lesser than on family adjustment (which is 23.96 out of 40, i.e. 15 out of 25 to be compared with above). As in other adjustment, here too on personal adjustment, the boys on the whole show more adjustment (12.50) than what the girls show (11.72). The first born are personally the most adjusted (13.64), next are the middle born (12.84) and then in order are the last-born (10.56) and the second-born (10.39). Among the groups of various family sizes, the most adjusted group in light of the scores on personal adjustment is the group of family with one child (14.60). On the whole, there is a general trend that as the size of family increases, personal adjustment decreases, somehow strangely with the exception of F-6 which shows adjustment (12.94) next to that of F-1, as seen from summary sheet No. 1. However, the analysis of family size at each birth order as presented in summary sheet No. 2 does not keep with this general trend, since it is likely that the variables of sex, size or birth order might be interacting, and to understand the contribution of the main variables of sex, size and birth order, the data have been arranged as 14 groups for study as shown in summary sheet No. 3 and are

subjected to statistical analysis, the results of which have been presented in respective tables and discussed in pages that follow.

Thus, the first row (Group I) of summary sheet No. 3 gives on the whole, the mean scores (PA) of boys and girls and the corresponding table No. 1 (PA) shows the statistical analysis of overall data presented sexwise and birth orderwise in tables 1(a), 1(b) and 1(c), and also sex-wise and family size wise in tables 1(d), 1(e) and 1(f). Thus Table 1 gives an overall analysis of data to show contribution of birth order and family size for each sex.

The next nine rows (Group II - X) of summary sheet No. 3 and corresponding tables 2-10 (PA) present data (sex X birth order) to enable the reader to understand the contribution of and make comparison between different birth orders for each sex, irrespective of family size.

The last four rows (Groups XI - XIV) of summary sheet No. 3 and corresponding tables 11-14 (PA) present data (sex X family size) enabling the reader to understand the contribution of and make comparison between different family sizes for each sex, separately at each birth order.

In other words, the scores on personal adjustment have been analysed with respect to three variables, viz. sex, birth order and family size. Table 1 (PA) with its sub-parts gives the total

picture of all the three variables with statistical analysis; in Tables 2-10 comparisons have been made to find out whether birth order is related to personal adjustment on the whole or at any level of sex for any of sub-groups in birth order category, irrespective of family size. Similarly, in tables 11-14 results on scores of personal adjustment have been presented to show the contribution of family size for each sex, separately analysed for each birth order. All the results obtained after application of the statistical techniques of analysis of variance (F-Test) and L.S.D. Test where needed have been reproduced in (PA) Tables 1-14 and discussed below on lines similar to that in earlier chapters, pointing out the contribution of each of the main variables or their interaction effects if any.

RESULTS AND DISCUSSION

I. Overall Analysis

As noted above, the overall general picture emerging from the analysis of all data on personal adjustment can be viewed in three summary sheets showing mean scores of each of main groups and sub-groups of sex, birth order and family size. However, for statistical analysis and discussion purpose the data arranged in summary sheet No. 3 have been taken into account and these have been subjected to statistical analysis of variance. Results of overall analysis have been presented in (PA) Tables 1(a), (b), (c), (d), (e) and (f), thus (a), (b) and

(c) showing results of data (sex X birth order) and (d), (e) and (f) showing results of data (sex X family size); (a) and (d) showing mean scores, (b) and (e) showing summary of results of overall analysis of variance on data in (a) and (d) respectively; and (c) and (f) showing results of L.S.D. Test on data in (a) and (d) respectively, in order to study specifically the difference between any two sub-groups compared at a time.

Group I : All Boys Vs. All Girls (Personal Adjustment)
Sex Vs. Birth Order

(PA) Table 1(a) - Showing Mean Scores

Birth Order	Boys		Girls		Total	
	No.	Mean	No.	Mean	No.	Mean
First Born	250	14.58	250	12.71	500	13.64
Second Born	150	10.34	158	10.45	308	10.39
Middle Born	177	12.75	155	12.94	332	12.84
Last Born	158	11.00	138	10.04	296	10.56
Total	735	12.50	701	11.72	1436	12.12

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

Source	df	SS	MS	F.Ration	Remarks
Sex	1	217.46	217.46	20.47	Sig. at .01
Order of Birth	3	2979.06	993.02	93.50	Sig. at .01
S x O	3	292.99	97.66	9.19	Sig. at .01
Within	1428	15170.17	10.62		
Total	1435	18659.68			

(PA) Table 1(c) - Showing Results of Least Gap Difference Test
Birth Order-wise

Group	Boys	Girls	Total
First Born Vs. Second Born (S.B.)	Sig. at .01	Sig. at .05	Sig. at .01
F.B. Vs. Middle Born	Sig. at .01	Not Sig.	Not Sig.
F.B. Vs. Last Born	Sig. at .01	Sig. at .05	Sig. at .01
B.B. Vs. Middle Born	Sig. at .01	Sig. at .05	Sig. at .01
S.B. Vs. Last Born	Not Sig.	Not Sig.	Not Sig.
M.B. Vs. L.B.	Sig. at .05	Sig. at .01	Sig. at .01
Sex-wise	Among F.B. : B - G	Sig. at .01	
	Among S.B. : B - G	Not Sig.	
	Among M.B. : B - G	Not Sig.	
	Among L.B. : B - G	Not Sig.	

Thus, table 1(a) reveals that sex-wise boys on the whole were more adjusted (12.50) than the girls (11.12), that birth order wise the first-born was most adjusted (11.64), next in order were the middle-born (12.84), the last-born (10.56) and the second-born (10.32). Table 1(b) shows that these sex differences as well as birth order differences were statistically ~~in~~ significant and there was significant interaction between sex and birth order, which put a premium on generalizing that sex or birth order by itself independently played a significant role in personal adjustment. Hence, L.S.D. Test was applied to study significant differences between ant two sub-groups at each sex level and at each birth order. These results are presented in (PA) Table 1(c). Similarly, analysis of results of data for sex and family size has been presented in (PA) tables 1(d), (e) and (f).

In light of this, the roles of sex, birth order and family size have been discussed below.

(a) Sex Factor

It is revealed by (PA) Table 1(b) that sex was a significantly contributing factor in personal adjustment, in contrast to its non-significant adjustment role in case of social and family adjustment as discussed in earlier chapters. Boys (12.50) seemed to be significantly more adjusted than girls(11.72) on the whole. However the significant interaction of sex with birth order needs to be examined further before concluding that sex was a significant factor by itself. Thus, the L.S.D. Test was applied

to study sex differences at each level of birth order, and the results in (PA) Table 1(c) reveals that there are significant sex differences only among the first-born and the last-born, and not at all among the second-born and the middle-born, amongst which the girls tended to be a little higher than boys on personal adjustment, while where are significant sex differences only amongst the first-born; the boys (14.58) were higher than girls (12.70), making also an overall significant difference on personal adjustment. It may be said that sex might not be a significant factor in personal adjustment as it is not in case of other adjustments, but used to show significance only while interaction with birth order which might be really significant factor by itself.

(b) Birth Order

As noted above and as revealed by (PA) Table 1(b), birth order has been found to be the effectively significant factor contributing to personal adjustment, as has been in case of family and social adjustment discussed in preceding chapters. Thus, the first-born seems to be most adjusted (13.64); next best in the middle-born (12.84) and then almost equally standing are the last-born (10.56) and the second-born (10.39). Strangely, the second-born standing highest on family adjustment and next best to the highest first-born on social adjustment has been lowest on personal adjustment in comparison to others. It tends to show that the basic traits needed for personal adjustment are probably

different from those needed for social and family (i.e. almost same as social) adjustment, as hinted in the beginning of this chapter. Further, the significant interaction between the birth order and sex as revealed by (PA) Table 1(b) puts a premium on generalizing that the birth order has been independently the significant factor though it appears to be so. Thus, to study the specific role of the factor of birth order at each sex level, the data were subjected to the L.S.D. Test as usual and the results have been presented in (PA) Table 1(c). This table reveals that the first-born boys being most adjusted did differ with statistical significance from the second-born, the middle-born and the last-born; the second-born boys being comparatively least adjusted differed from the middle-born at .05; but not from the last-born; and the middle-born boys were significantly higher than the last-born boys. Similarly, the first-born girls differed significantly from the second-born and last-born girls, but not from the second-born girls; the second-born girls differed from the middle-born girls, but not from the last-born girls; and the middle-born girls differed from the last-born girls. The order of boys on personal adjustment has been thus : the first-born, the middle-born, the last-born, and the last being the second-born; while in case of girls it stands thus : the middle-born and the first-born being almost same and then the second-born and the last-born being almost the same. This accounts for the significant interaction. But, anyway, the birth order has been found an effectively significant factor.

(c) Family Size

As the subjects under study came from families of varied sizes, it was also possible to study the contribution of family size if any, to personal adjustment. Hence, as done earlier, data were rearranged accordingly family-size-wise for each sex separately. Thus, means were found for each group and data were subjected to statistical technique of analysis of variance as in a factorial design (family size X sex), and then to L.S.D. Test where necessary. All these results have been presented in (PA) Tables 1(d), 1(e) and 1(f) respectively as explained earlier.

(PA) Table 1(d) - Showing Mean Scores on Personal Adjustment
Family Size X Sex

Family Size	Boys		Girls		Total	
	No.	Mean	No.	Mean	No.	Mean
F1	50	16.82	50	12.38	100	14.60
F2	92	10.52	91	13.06	183	11.79
F3	93	11.88	97	11.31	190	11.59
F4	157	12.10	156	11.28	313	11.69
F5	159	11.88	132	10.62	291	11.31
F6	184	13.53	175	12.31	359	12.94
Total	735	12.50	701	11.72	1436	12.12

(PA) Table 1(e) - Showing Summary of Results of Analysis of
Variance on Above Data (Personal Adjustment)
Family Size X Sex

Source	df	SS	MS	F.Ratio	Remarks
Sex	1	217.46	217.46	18.91	Sig.at .01
Family Size	5	1174.37	234.87	20.42	Sig.at .01
Sex X Family Size	5	887.02	177.40	15.43	Sig.at .01
Within Groups (error)	1424	16380.83	11.50		
Total	1435	18659.68			

(PA) Table 1(f) - Showing Results of L.S.D. Test (Personal Adjustment)

Family Size-wise

Group	Boys	Girls	Total
F1-F2	Sig. at .01	Not Sig.	Sig. at .01
F1-F3	Sig. at .01	Sig. at .05	Sig. at .01
F1-F4	Sig. at .01	Sig. at .05	Sig. at .01
F1-F5	Sig. at .01	Sig. at .05	Sig. at .01
F1-F6	Sig. at .01	Not Sig.	Sig. at .05
F2-F3	Sig. at .05	Sig. at .05	Not Sig.
F2-F4	Sig. at .05	Sig. at .05	Not Sig.
F2-F5	Sig. at .05	Sig. at .01	Not Sig.
F2-F6	Sig. at .01	Not Sig.	Sig. at .05
F3-F4	Not Sig.	Not Sig.	Not Sig.
F3-F5	Not Sig.	Not Sig.	Not Sig.
F3-F6	Sig. at .05	Sig. at .05	Sig. at .05
F4-F5	Not Sig.	Not Sig.	Not Sig.
F4-F6	Sig. at .05	Sig. at .05	Sig. at .05
F5-F6	Sig. at .05	Sig. at .05	Sig. at .05

<u>Sex-wise</u>	:	<u>Group</u>	
		For F1	B - G Sig. at .01
		For F2	B - G Sig. at .01
		For F3	B - G Not Significant
		For F4	B - G Not Significant
		For F5	B - G Just Sig. at .05
		For F6	B - G Just Sig. at .05

Thus, (PA) Table 1(e) shows that both the factors, viz. sex as well as family size and also their interaction are all significantly contributing to personal adjustment. As noted earlier in (PA) Table 1(b), the general significance of sex factor is confirmed here also by (PA) Table 1(e). However, the significant interaction of sex with family size necessitates the application of L.S.D. Test in order to understand the real significance of sex at each family size. Thus results in (PA) Table 1(f) shows sex-wise that there are significant sex differences mainly only in family sizes of F1 and F2, in both the cases girls (12.38 and 13.06) scoring higher than boys (10.82 and 10.52) respectively for F1 and F2); while F5 and F6 showed just significant sex differences and F3 and F4 did not show any significant sex differences. This accounts for significant interaction. In other words, sex, as noted earlier, played only somewhat significant role in personal adjustment. However, the important significant contribution to personal adjustment has been made by the family size as revealed both in (PA) Table 1(e) on an overall basis and in 1(f) by each size among each sex. Thus, F1 stands highest (14.60) on personal adjustment and then there is a general tendency for personal adjustment to decrease with the increase in family size, except at the highest size F6 which is next best (12.94) to F1. Somehow, F2, F3, F4 and F5 - all stand together (with scores 11.79, 11.59, 11.69 and 11.31 respectively) on personal adjustment. This finding of personal adjustment can be compared with that of family adjustment (where F2 and F3 were most adjusted, next best were F1 and F4 and lowest

were F5 and F6), and with that on social adjustment (where F1 and F2 were most adjusted forming one group, F3 and F4 were next best and F5 and F6 least adjusted together). On the whole, it can be said with respect to personal adjustment that the higher the size, the lesser the adjustment. In view of the significant interaction of family size with sex, the L.S.D. Test was applied and contribution of each family size for each sex separately has been compared in (PA) Table 1(f). It shows family size-wise that most of the pairs of sizes were significant at .01 level for boys and at .05 level for girls; at F2 girls scored higher, and at other sizes boys scored higher. F1 size stands highest (16.82) and F2 lowest (10.52) on personal adjustment of boys, while F2 is highest (13.06) and F5 lowest (10.62) in case of girls.

Thus, the order of family sizes with respect to personal adjustment of boys stands thus : F1 (16.82), F6 (13.53), F4 (12.10), F3 and F5 (both scoring 11.88), and least F2 (10.52); while among girls it is : F2 (13.06), F1 (12.38), F6 (12.31), F3 (11.31), F4 (11.28), and F5 (10.62). The differential tendencies of personal adjustment of boys and girls coming from different family sizes account for significant interaction between sex and the family size.

This completes the discussion on overall analysis of data with respect to contribution of sex, birth order and family size to personal adjustment. The sections that follow now are devoted

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to detailed discussion of results showing comparison between different birth orders and also different family sizes within each birth order for boys and girls.

II. Analysis for Comparison Between Birth Order Groups

It has been observed in the earlier section that the birth order was a significant factor contributing to personal adjustment (cf. PA-Table 1-b). In view of this, it was thought worthwhile to compare the contribution of one birth order with that of the other to personal adjustment, as it has been done in earlier chapters. Accordingly, all possible pairs of the four types of birth orders under study (as presented in the rows 2 to 10 of the summary sheet No. 3) have been compared and results have been discussed in the following paragraphs. The data have been arranged sex-wise separately for pairs of birth orders compared in Tables PA - 2 to 10, with statistical analysis in parts (a), (b) and (c) of each table as explained earlier.

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

In order to compare the first-born with all other later-born children, the mean scores of the former and the latter were tabulated sex-wise as shown in Table (PA) 2(a) and the results of statistical analysis in (PA) Tables 2(b) and 2(c) as usual.

Group II : First-Born Vs. Other Later-Born

Sex X Birth Order (Personal Adjustment)

(PA) Table 2(a) - Showing Mean Scores of Each Group

Birth Order	Boys		Girls		Total	
	No.	Mean	No.	Mean	No.	Mean
First-born	250	14.58	250	12.71	500	13.64
Other Later born	485	11.43	451	11.18	936	11.31
Total	735	13.12	701	11.73	1436	12.12

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

Source	df	SS	MS	F.Ratio	Remarks
Sex	1	217.46	217.46	18.92	Sig. at .01
Birth Order	1	1773.55	1773.55	154.35	Sig. at .01
S X O	1	235.59	235.59	20.52	Sig. at .01
Within	1432	16433.08	11.48		
Total	1435	18659.68			

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

Birth Order-wise : Among Boys : First Born - Sig. at .01
Vs. Others

Among Girls: First Born
Vs. Others - Not Sig.

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

Among Other Siblings : B-G - Not Significant

It would be observed from the results in (PA) Table 2(b) that with first-born on one hand and all others on the other hand, birth order and interaction between these two were all significantly contributing to the personal adjustment as it has been shown also by (PA) Table 1(b) in case of all separate birth orders. Sex played an important role here; boys scoring higher (13.12) than girls (11.73). Similarly birth order also contributed to personal adjustment, the first-born scoring higher (13.64) than the other later-born (11.31). However, significant interaction is accounted for by the closer observation that sex and birth order did not show the same trend always as described above on the whole (viz. boys and first-born always scoring higher), but that boys differed from girls only among the first born and not among the other later born, and similarly the first born differed from the other later born in case of only boys and not always among girls, as it has been revealed by results of L.S.D. Test in (PA) Table 2(c). In other words, only the first born boys scored significantly higher than (different from) any other three subgroups which mutually were not different. These results (of combined birth order) in (PA) Table 2(a), (b) and (c) can be compared with results of separate birth order in earlier (PA) Table 1(a), (b) and (c) which also show that boys differed from girls only among the first born, and not amongst the second, middle or last born category, and that the first-born differed from second and last-born but not from middle-born, that second born from also middle born but not from last-born, and that middle born also from last born on the whole. When scores of

second-born, middle-born and last-born were combined as one category of later-born to be compared with the first-born results stand as in (PA) Table 2(a), (b) and (c) above showing the superiority of the first-born boys only. Comparing with earlier results in case of other types of adjustment, mainly birth order and not sex was significant in family and social adjustment, while here in case of personal adjustment, both sex and birth order played the role.

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

The data with results of statistical analysis for this purpose of comparison have been presented below in (PA) Tables 3(a), (b) and (c).

Group III : Only Child Vs. Other First-Born
Sex Vs. Birth Order

(PA) Table 3(a) - Showing Mean Scores of Each Group

Birth Order	Boys		Girls		Total	
	No.	Mean	No.	Mean	No.	Mean
Only Child	50	16.82	50	12.38	100	14.60
Other First Born	200	14.02	200	12.79	400	13.41
Total	250	14.58	250	12.71	500	13.64

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

Source	df	SS	MS	Fratio	Remarks
Sex	1	438.04	438.04	568.88	Sig.beyond .01
Birth Order	1	113.29	113.29	147.12	-do-
S X O	1	206.08	206.08	267.61	-do-
Within	496	381.64	0.77		
Total	499	1139.05			

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

Birth Order-wise :

Among Boys : Only Child Vs.
Other First-born - Sig. at .01

Among Girls : -do- - Not Significant

Sex-wise :

Among Only Child : Sig. at .01 B - G

Among Other First-born : Sig. at .01 B - G

Again, as in above case, here also in comparison between the only child and the other first-born, sex, birth order and their interaction played significant role as seen from results in (PA) Table 3(b). The only child seemed to be significantly personally more adjusted (14.60) than the other first-born (13.41), and boys more adjusted (14.58) than girls (12.70). However, among boys, only children differed from other first

born, but not among girls, as shown also next sections (c) and (d) below; again boys differed from girls both among the only child group as well as other first-born group; all this accounts for significant interaction. Similar conditions in family adjustment (FA. Table 3) and social adjustment (SA. Table 3) showed no differences.

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

The following table 4 (a) shows the mean scores on personal adjustment for only boys among the only born group and other first-born group.

Group IV : Only Child Vs. First Born (Personal Adjustment)

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

Birth Order	No.	Mean
Only born Boys	50	16.82
Other First-born Boys	200	14.02
Total	250	14.58

(PA) Table 4(b) - Showing Analysis of Variance for above Data

Source	df	SS	MS	F.Ratio	Remarks
Between Group	1	312.48	312.48	15.61	Sig. at .01
Within Group	248	4965.53	20.02		
Total	249	5003.74			

This forms a part of above (PA) Table 3(a). It is not necessary to repeat the results of statistical analysis by F-Test here as (PA) Table 4(b) as done earlier, because the L.S.D. Test results in (PA) Table 3(c) give the same results that among the boys, the only child group was significantly higher (16.82) than the other first-born boys (14.02). However Table 4(b) above is presented to confirm the same finding.

(d) Comparison Between the Only Born Girls
and Other First-Born Girls

Similarly, the following Table 5(a) gives the mean scores on personal adjustment for only girls among the only born group and other first-born group.

Group V : Only Child (Girls) Vs. First-Born Girls
 (Personal Adjustment)

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

Birth Order	No.	Mean
Only Born	50	12.38
Other First Born	200	12.79
Total	250	12.71

(PA) Table 5(b) - Showing Analysis of Variance for above Data

Source	df	SS	MS	F.Ratio	Remarks
Between Group	1	6.89	6.89	0.30	Not Sig.
Within Group	248	5690.38	22.94		
Total	249	5697.27			

This table also forms a part of (PA) Table 3(a) above and statistical analysis by L.S.D. Test in (PA) Table 3(c) shows that there were no significant differences between the only born girls and other first-born girls on personal adjustment, though boys did differ in this respect as shown above. The same result is confirmed by the (PA) Table 5(b) above.

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

As discussed earlier, it was noted that the mixed sex first-born scored significantly higher than the same sex first born on family adjustment (FA. Table 6) and social adjustment (SA. Table 6). Hence, in this case of personal adjustment also, data were computed to study similar differences. The following (PA) Table 6(a) and (b) give the results obtained.

Group VI : First-Born of Mixed Sex Vs. First-Born of Same Sex
Personal Adjustment

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

Birth Order	No.	Mean
First-born of Mixed Sex	300	13.76
First-born of Same Sex	100	12.35
Total	400	13.41

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

Source	df	SS	MS	F.Ratio	Remarks
Between Group	1	149.81	149.81	2.71	Not Sig.
Within Group	398	21911.95	55.20		
Total	399	22061.76			

The (PA) Table 6(b) however shows contrary to expectation that there were on such differences between first-born of mixed sex and same sex groups on personal adjustment, as it was on family and social adjustment. This finding again suggests that traits demanded for personal adjustment are not necessarily the same as those for family or social adjustment.

(f) Comparison Between the Only Child Group
and the Later-born Group

It has been found earlier that the first-born scored significantly higher (13.64) than other later-born (11.31) as shown in (PA) Table 2 and that the only child group scored significantly higher (14.60) than the other first-born (13.41) as shown in (PA) Table 3. It was further logically thought to compare the only child group and the later-born group with the expectation from the above results that the only child group which stood higher than the other first-born group which stood higher than the later-born group would stand higher than the later-born group. The following (PA) Tables 7(a), (b) and (c) furnish these results.

Group VII : Only Child Vs. Later Born (Personal Adjustment)

Sex Vs. Birth Order
 (PA) Table 7(a) - Showing Mean Scores of Each Group

Birth Order	Boys		Girls		Total	
	No.	Mean	No.	Mean	No.	Mean
Only Child	50	16.82	50	12.38	100	14.60
Later Born	485	11.43	451	11.18	936	11.31
Total	535	11.86	501	11.30	1036	11.63

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

Sources	df	SS	MS	F.Ratio	Remarks
Sex	1	104.91	104.91	6.29	Sig. at .05
Birth Order	1	974.81	974.81	58.51	Sig. at .01
S X O	1	402.94	402.92	24.17	Sig. at .01
Within	1032	17165.23	16.67		
Total	1035	18647.89			

(PA) Table 7(c) - Showing Results of L.S.D. Test

Birth Order-wise :

Among Boys : Only Child Vs. Later Born : Sig. at .01

Among Girls : -do- -do- : Sig. at .05

Sex-wise :

Among Only Child : B - G Sig. at .01

Among Later-born : B - G Not significant

From these tables, it is evident that the only children were significantly higher (14.60) than the later-born (11.31), and that boys were just higher (11.86) than that of girls (11.30). Sex, birth order and their interaction were significant. As shown in (PA) Table 7(c), among both boys and girls, only child

differed from the later-born child, while boys differed from girls only in case of only child group and not for later-born group, thus accounting for significant interaction.

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

The following (PA) Tables 8(a), (b) and (c) present the results for comparison between the first-born and the last-born.

Group VIII : First-Born Vs. Last-Born (Youngest)

Sex Vs. Birth Order (Personal Adjustment)

(PA) Table 8(a) - Showing Mean Scores of Each Group

Birth Order	Boys		Girls		Total	
	No.	Mean	No.	Mean	No.	Mean
First Born	250	14.58	250	12.71	500	13.64
Last Born (Youngest)	158	11.00	138	10.04	296	10.56
Total	408	13.19	388	11.76	796	12.49

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

Source	df	SS	MS	F.Ratio	Remarks
Sex	1	409.89	409.89	45.19	Sig. at .01
Birth Order	1	1775.92	1775.92	195.80	Sig. at .01
S X O	1	96.44	96.44	10.57	Sig. at .01
Within	792	7190.75	9.07		
Total	795	9473.00			

(PA) Table 8(c) - Showing Results of L.S.D. Test

Birth Order-wise :

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

Sex-wise :

Among First-Born : B - G - Sig. at .05
 Among Last-born : B - G - Not significant

Again, it would be observed that sex, birth order and their interaction were contributing to personal adjustment so as to produce significant differences between the first-born (13.64) and the last-born (10.56), as well as between boys (13.19) and girls (11.76) on the whole. It turned out that the

first-born were more adjusted personally than the last-born. However, closer observation and results of L.S.D. Test in (PA) Table 8(c) reveal that among both boys and girls, the first-born differed from the last-born, while boys and girls differed only in case of the first-born and not so significantly in case of the last-born.

It may be recalled here from earlier results that only birth order played a significant role in social adjustment (SA. Table 8) while in case of family adjustment neither sex nor birth order played a role (FA. Table 8), but here in case of personal adjustment both sex and birth order contributed significantly as shown in (PA) Table 8.

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

As seen above in Table 8 as well as in Table 1 earlier, the last-born scored significantly different (lower) from the first-born. Table 1 also shows that last-born differed from middle-born, but not from second-born. It was thought to study the position of the last-born in comparison to the second and middle born combined. Thus, the following (PA) Tables 9(a), (b) and (c) summarise these results.

Group IX : Last-born Vs. Second-born and Middle-born
 Sex Vs. Birth Order (Personal Adjustment)

(PA) Table 9(a) - Showing Mean Scores of Each Group

Birth Order	Boys		Girls		Total	
	No.	Mean	No.	Mean	No.	Mean
Last-born	158	11.00	138	10.04	296	10.56
Second-born and Middle-born	327	11.64	313	11.68	640	11.66
Total	485	11.43	451	11.18	936	11.31

(PA) Table 9(b) - Showing Results of L.S.D. Test

Source	df	SS	MS	F.Ratio	Remarks
Sex	1	15.01	15.01	0.084	Not Sig.
Birth Order	1	248.60	248.60	14.76	Sig. at .01
S X O	1	53.55	53.55	3.17	Not sig.
Within	932	15429.92	16.84		
Total	935	15747.08			

(h) C

It would be seen that sex was not significant nor its interaction with birth order, but only the main effect of birth order, being significant. Thus, the last-born children with a score of 10.56 (who were not different from the second-born with a score of 10.39 but different from middle-born with a score of 12.84) were also significantly different (lower) from the combined group of the second and middle born group (11.68) on personal adjustment. Only two levels of birth order being significant, there was no need to apply L.S.D. Test.

Comparing with earlier results on family and social adjustment in these conditions, neither sex nor birth order nor their interaction was significant.

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

Since, it has been found that only child scored higher (14.60) than other first-born (13.41) who scored higher than the last-born (10.56) on personal adjustment, it was again logical to study the position of the last-born in comparison to the only child group expected to be higher on the basis of the above reasoning. The actual results for this comparison have been presented in (PA) Tables 10(a), (b) and (c) below.

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Group X : Last Born Vs. Only Child (Personal Adjustment)
 Sex Vs. Birth Order

(PA) Table 10(a) - Showing Mean Scores of Each Group

Birth Order	Boys		Girls		Total	
	No.	Mean	No.	Mean	No.	Mean
Last Born	158	11.00	138	10.04	296	10.56
Only Child	50	16.82	50	12.38	100	14.60
Total	208	12.40	188	10.66	396	11.57

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

Source	df	SS	MS	F.Ratio	Remarks
Sex	1	298.61	298.61	14.77	Sig. at .01
Birth Order	1	1221.55	1221.55	60.44	Sig. at .01
S X O	1	262.52	262.52	12.98	Sig. at .01
Within	392	7922.90	20.21		
Total	395	9705.58			

(PA) Table 10(c) - Showing Results of L.S.D. Test

Birth Order-wise

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

Sex-wise

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

It is evident from above statistical results also that the last-born group (1056) differed significantly from the only child born group (14.60). Further, boys scored higher (12.40) than girls (10.66). At the same time, there was significant interaction between sex and birth order, which is accounted for by the results of the L.S.D. Test in Table 10(c) which shows that both among boys and girls, the last born differed from the only child, while boys differed from girls only in case of the only child group and not in case of the last-born.

It would be recalled from earlier results that birth order was significant for family and social adjustment in this case.

It should be noted that only those comparisons among birth order positions that have been thought of some importance have been examined and discussed specifically and separately in above sections and others can be examined from results in earlier (PA) Table 1(a), (b) and (c). More truly, all types of comparisons can be studied from results in Table 1.

III. Analysis for Comparison Between Family Sizes

The preceding section has been devoted to the discussion on the personal adjustment as related to the birth order position of boys and girls, and first-born has been found to be best of personal adjustment in contrast to the second-born

found to be best on family adjustment and social adjustment. Equally important variable influencing the adjustment processes is the family size. It has been herein found that the family size of two children contributed most to family and social adjustment. The contribution of the family size to personal adjustment has been now studied and discussed in the following section. In order to study the role of the family size, the data obtained were classified according to the scores on personal adjustment obtained by boys and girls coming from families of various sizes ranging from one to six or more children in the family, and these were analysed statistically at each of the four birth orders, viz. the first-born, the second-born, the middle-born, and the last-born as given below. As observed earlier, it should be noted that the first-born in F1 are same as the only children and that the last-born in each family size have been separated out from second-born and middle-born for analysis purpose.

Data on personal adjustment of the first-born boys and girls have been represented in (PA) Tables 11(a), (b) and (c) below, thus (a) showing mean scores, (b) showing the summary of results of analysis of variance, and (c) showing results of L.S.D. Test.

Group XI : First-born Boys Vs. First-born Girls
 Sex Vs. Family Size (Personal Adjustment)

(PA) Table 11(a) - Showing Mean Scores of Each Group

Family Size	Boys		Girls		Total	
	No.	Mean	No.	Mean	No.	Mean
F1	50	16.82	50	12.38	100	14.60
F2	60	10.56	60	14.91	120	12.74
F3	35	15.11	35	13.28	70	14.20
F4	35	15.31	35	13.60	70	14.45
F5	35	16.51	35	10.28	70	13.40
F6	35	15.08	35	10.37	70	12.72
Total	250	14.58	250	12.71	500	13.64

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

Source	df	SS	MS	F.Ratio	Remarks
Sex	1	438.04	438.04	608.4	Sig. beyond .01
Family Size	5	319.88	63.98	88.86	Sig. beyond .01
S X F	5	28.74	5.75	8.0	Sig. at .05
Within	488	352.39	0.72		
Total	499	1139.05			

(PA) Table 11 (c) - Showing Results of L.S.D. Test

Family Size-wise :

All sub-group pairs are significant except the following :

<u>Boys</u>	<u>Girls</u>	<u>Total</u>	
F1-F5	F3-F4	F1-F3	F3-F4
F3-F4	F5-F6	F1-F4	F5-F6
F3-F6		F2-F5	
F4-F6		F2-F6	

Sex-wise :

All pairs of boys and girls in each family size were significantly different.

It would be seen from the above (PA) Table 11(b) that sex, family size and their interaction were significant. First-born boys were more adjusted than first-born girls, as pointed out also earlier (PA. Table 3). F1 was the most adjusted (14.60) though F1, F3 and F4 were almost nearer; next was F5 group (13.40) and last was F6 Group (12.72) being nearer to F2 group (12.74) on the whole.

Though the family size was a significant factor, there was not any general trend of increase or decrease in personal adjustment with increase in size of family, as it was in family and social adjustment on the whole. However, same order was not

maintained separately on personal adjustment by boys and girls in each family size, and among boys F1 was the most adjusted and among girls F2 was the most adjusted, thus accounting for the significant interaction between sex and family size.

(b) Second-born Children From
Various Family Sizes

Like above results for the first-born, the results for the second-born have been presented in (PA) Table 12(a), (b) and (c) for boys and girls from each family size, excepting second-born in F2 that has been treated as last-born.

Group XII : Second-born Vs. Second-born
Boys Girls (Personality Adjustment)
Sex Vs. Family Size

(PA) Table 12 (a) - Showing Mean Scores of Each Group

Family Size	Boys		Girls		Total	
	No.	Mean	No.	Mean	No.	Mean
F3	31	10.19	41	9.95	72	10.05
F4	67	10.94	67	10.40	134	10.67
F5	27	8.07	26	9.19	53	8.62
F6	25	11.36	24	12.79	49	12.06
Total	150	10.34	158	10.45	308	10.39

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

Source	df	SS	MS	F.Ratio	Remarks
Sex	1	.92	.92	0.081	Not Significant
Family Size	3	321.06	107.02	9.49	Sig. at .01
S X F	3	51.44	17.14	1.52	Not Significant
Within 300		3381.26	11.27		
Total 307		3754.68			

(PA) Table 12 (c) - Showing Results of L.S.D. Test

Family-size-wise

Group	Boys	Girls	Total
F3 - F4	Not Significant	Not Signi.	Not Significant
F3 - F5	Not Signi.	Not Signi.	Signi. at .05
F3 - F6	Not Signi.	Signi. at .05	Signi. at .05
F4 - F5	Not Signi.	Not Signi.	Signi. at .05
F4 - F6	Not Signi.	Signi. at .05	Signi. at .05
F5 - F6	Signi. at .05	Signi. at .06	Signi. at .05

Sex-wise

In F3	:	B - G	Not Significant
In F4	:	B - G	Not Significant
In F5	:	B - G	Not Significant
In F6	:	B - G	Not Significant

The analysis shows that in this case only the family size was a significant factor, not the sex nor the interaction. Strangely here most adjusted were children from F6 (12.06), then stood in order F4 (10.67) and F3 (10.05) both being almost equal, and last was F5 group (8.62). Again, the family size did not exhibit any general trend, though it was contributing significantly.

(c) Middle-born Children From
Various Family Sizes

Similar data for the middle-born children have been presented in (PA) Tables 13 (a), (b) and (c) to examine the contribution of sex and family size. It would be observed that F4, F5 and F6 provided necessary scores

Group XIII : Middle-born Boys Vs. Middle-born Girls
Sex Vs. Family Size (Personal Adjustment)

(PA) Table 13 (a) Showing Mean Scores of Each Group

Family Size	Boys		Girls		Total	
	No.	Mean	No.	Mean	No.	Mean
F4	30	11.50	30	10.20	60	10.85
F5	55	10.09	40	13.75	95	10.57
F6	92	14.75	85	13.54	177	14.16
Total	177	12.75	155	12.94	332	12.84

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

Source	df	SS	MS	F.Ratio	Remarks
Sex	1	3.20	3.20	0.33	Not Signi.
Family Size	2	689.18	344.59	35.78	Sig. at .01
S X F	2	396.77	198.38	20.60	Sig. at .01
Within	326	3139.71	9.63		
Total	331	4228.86			

(PA) Table 13 (c) - Showing Results of L.S.D. Test

Family Size-wise

Group	Boys	Girls	Total
F4-F5	Sig. at .05	Sig. at .01	Not Signi.
F4-F6	Sig. at .01	Sig. at .01	Sig. at .01
F5-F6	Sig. at .01	Not Signi.	Sig. at .01

Sex-wise

In F4	: B - G	Not Significant
In F5	: B - G	Significant at .01
In F6	: B - G	Not Significant

It would be noted from these tables that sex was not a significant factor, but family size as well as its interaction with sex was significant. F6 was most adjusted group (14.16), while F4 and F5 were almost equal (10.85 and 10.57) next to F6. Among the boys, the order was F6, F4 and F5, while among the girls, the groups stood in order as F5, F6 and F4, some pairs being significant, some not, as shown in Table 13(c); all this accounted for significant interaction.

(d) Last-born Children From
Various Family Sizes

(PA) Tables 14 (a), (b), and (c) present the results of the last-born boys and girls from various family sizes. It would be noted that second-born of F2, third-born of F3 and so on have been treated as the last-born.

Group XIV : Last-born Boys Vs. Last-born Girls
Sex Vs. Family Size (Personal Adjustment)

(PA) Table 14 (a) - Showing Mean Scores of Each Group

Family Size	Boys		Girls		Total	
	No.	Mean	No.	Mean	No.	Mean
F2	32	10.43	31	9.48	63	9.96
F3	27	9.62	21	10.66	48	10.08
F4	25	11.44	24	11.70	49	11.57
F5	42	12.83	31	8.16	73	10.84
F6	32	10.00	31	10.77	63	10.38
Total	158	11.00	138	10.04	296	10.56

(PA) Table 14 (b) - Showing Analysis of Variance for Above Data

Source	df	SS	MS	F.Ratio	Remarks
Sex	1	68.29	68.29	3.23	Not Significant
Family Size	4	91.21	22.80	1.08	Not Significant
S X F	4	358.35	89.58	4.24	Signi. at .05
Within	286	6040.18	21.11		
Total	295	6558.03			

(PA) Table 14 (c) - Showing Results of L.S.D. Test

Family Size-wise

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

Sex-wise :

In F2	: B - G	-	Not Significant
In F3	: B - G	-	Not Significant
In F4	: B - G	-	Not Significant
In F5	: B - G	-	Significant at .01
In F6	: B - G	-	Not Significant

In this case, neither the sex nor the family size was found significant. Somehow their interaction was significant. Thus, though main effects on the whole were not apparently significant, each factor seemed to have played significant role at one or the other level of the other factor. Thus, among the last-born, F5 boys were most adjusted, while among girls F4 were most adjusted and so on; some pairs were significantly different, others not, as shown by Table 14 (c), all this accounting for significant interaction.

SUMMARY OF RESULTS

1. The overall analysis of data on personal adjustment warranted the following inferences :
 - (a) Boys on the whole showed greater personal adjustment than girls.
 - (b) Birth order was found to be a significantly effective factor contributing to personal adjustment. On the whole, the first-born turned out to be most adjusted personally, next best was the middleborn and the almost of equal standing were the last-born and the second-born.
 - (c) There was significant interaction between sex and birth-order. It might be said that among boys, the first-born were most adjusted, while among girls, the middle-born were most adjusted, and that sex by itself

would perhaps not be a contributing factor as in other adjustment processes, but used to show significance while interacting with the birth order.

(d) Family size also played a significant role in personal adjustment. Family size of one child seemed to be most contributory, and then there appeared a general trend for personal adjustment to decrease with the increase in family size, except with F6 which somehow stood second best.

(e) However, there was also significant interaction between sex and family size; F1 boys were most adjusted in contrast to most adjusted F2 girls.

2. The analysis of data to compare the significance of various birth orders revealed the following findings :

- (a) Comparing the first-born with all other later-born siblings on personal adjustment, it was found that -
- (i) there were significant sex differences; boys scored higher than girls;
 - (ii) birth order was a significant factor; the first-born were more adjusted than the later-born;
 - (iii) there was however significant interaction between sex and birth order; the first-born boys differed significantly from the first-born girls, but there were not sex differences among the later-born.

- (b) Comparison between the only child group and the other first-born groups revealed that -
 - (i) boys scored significantly higher than girls on the whole;
 - (ii) only child group scored significantly higher than the other first-born group;
 - (iii) however, there was also significant interaction between the two, as explained in the next finding (c).
- (c) The separate analysis of data of only born boys and only born girls as compared with other first-born boys and girls showed that the only born boys differed from other first-born boys, but there ^{were} ~~was~~ no differences between the only born girls and other first-born girls.
- (d) The further analysis of data of first-born boys and girls reared with same sex or mixed sex revealed unexpectedly that there were no differences in personal adjustment between the first-born of mixed sexes ~~xx~~ and of same sex.
- (e) Comparing the only child group with the later-born group, it was observed that -
 - (i) boys scored somewhat higher than girls;
 - (ii) only child group score significantly higher than the later-born;

- (iii) there was significant interaction between the two variables.
 - (f) Comparing the first-born with the last-born, it was found that -
 - (i) boys scored significantly higher than girls;
 - (ii) the first-born were significantly higher than the last-born;
 - (iii) there was also significant interaction.
 - (g) Comparing the last-born with the aggregate of the second-born and the middle-born, it was noted that -
 - (i) there were no sex differences;
 - (ii) aggregate of second and middle-born stood higher than the last-born.
 - (iii) there was no interaction.
 - (h) Comparing the last-born with the only child group, it was revealed that -
 - (i) the only child group was more adjusted than the last-born group;
 - (ii) boys were more adjusted than girls;
 - (iii) there was also significant interaction.
3. The analysis of data to compare the significance of the size of the family at each birth order enabled the investigator to draw the following conclusions on personal adjustment :

(a) Within the first-born -

- (i) there were significant sex differences; boys scored higher than girls on personal adjustment;
- (ii) family size was the significant factor in personal adjustment; F1 size contributed maximum to personal adjustment, though there was no specific trend in decrease with increase in size.
- (iii) family size interacted significantly with sex.

(b) Within the second-born -

- (i) only the family size was a significant factor; not sex nor interaction. F6 turned out to be most adjusted.

(c) Within the middle-born -

- (i) sex did not play any role;
- (ii) family size was significant;
- (iii) there was significant interaction.

(d) Within the last-born -

- (i) neither sex nor family size showed significant effect independently;
- (ii) however, both interacted significantly.

It would be seen in general that family size was mostly a significantly contributing factor also in personal adjustment, though not showing a particular trend as shown in family and social adjustment; and sex was not much independently, but interacting effectively.