

CHAPTER - III

RESULTS

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The obtained data were scored, grouped and analysed both in terms of parametric and non-parametric statistics to see whether they supported the underlying assumptions and hypotheses. In the analysis of the data, while putting it to statistical analysis, care was taken that the meaning of the data was not lost in the process of its numerical transformation, classification and organization.

3.1. Home Adjustment:3.1.a. Effect of sex difference on home adjustment:

Given in table 5 are means and standard deviations of home adjustment scores for the adolescent boys and girls.

Table - 5:

Means and Standard Deviations of Home Adjustment Scores for Adolescent Boys and Girls.

Sex	N	Means	Standard Deviations
Boys	669	4.65	2.83
Girls	631	3.49	2.66

Table 5 shows that in terms of mean problem scores, the adolescent girls have less problems ($M = 3.49$) in their home adjustment than the adolescent boys ($M = 4.65$).

Table - 6:

Relationship between Sex Difference and Home Adjustment.

Sex		Home Adjustment					Total
		Exce- llent	Good	Ave- rage	Unsatis- factory	Very unsatis- -factory	
Boys	(f)	080	180	307	056	046	669
	(%)	11.96	26.90	45.89	08.37	06.88	
Girls	(f)	164	226	117	083	041	631
	(%)	25.99	35.82	18.54	13.15	06.50	
Total	(f)	244	406	424	139	087	1300
	(%)	18.77	31.23	32.62	10.69	06.69	

$\chi^2 = 123.79$; $df = 4$; $P < .001$

Table 6 indicates that, in home adjustment area, highest percentage (45.89) of boys are found under "average" category whereas highest percentage (35.82) of girls are found under "good" category. Girls seem to be higher in proportion under the positive categories i.e., "excellent" and "good". Boys seem to be higher in proportion under "average" category. Girls are higher in proportion (13.15) than boys (08.37) under "unsatisfactory" category. Under extreme negative category

i.e., "very unsatisfactory", both boys (6.88) and girls (6.50) are almost equal in proportion. Percentage distributions of boys and girls under different categories of home adjustment are graphically shown in Figure 4 (P.162).

3.1.b. Effect of locus of control on home adjustment:

Table 7 gives the means and standard deviations of home adjustment scores for the 'internal' and 'external' adolescents.

Table - 7:

Means and Standard Deviations of Home Adjustment Scores for the 'Internal' and the 'External' Group:

I-E Locus of Control (Score range : 00 to 17)	Sex	N	Means	Standard Deviations
Internal (00 to 09)	Boys	377	4.25	2.70
	Girls	315	3.04	2.42
External (10 & above)	Boys	292	5.17	2.90
	Girls	316	3.94	2.81

Table 7 shows that in terms of mean problem scores, both boys (M = 4.25) and girls (M = 3.04) with internal orientation (ILC) are better adjusted than boys (M = 5.17) and girls (M = 3.94) with external orientation (ELC).

Table - 8:

Relationship Between I-E Locus of Control and Home Adjustment.

I-E Locus of Control (Score Range: 00 to 17)	Home Adjustment					Total
	Exce- llent	Good	Ave- rage	Unsatis- factory	Very unsatis- factory	
Internal (f) (00 to 09) (%)	158 22.83	228 32.94	217 31.36	059 08.53	030 04.34	692
External (f) (10 & above)(%)	086 14.14	178 29.28	207 34.05	080 13.16	057 09.37	608
Total (f) (%)	244 18.77	406 31.23	424 32.62	139 10.69	087 06.69	1300

$\chi^2 = 33.91; df = 4; p < .001$

Table 8 reveals that highest percentage (32.94) of 'internals' is under "good" category whereas highest percentage (34.05) of 'externals' is under "average" category. Under positive categories i.e., "excellent" and "good", 'internals' (ILC) seem to be higher in proportion than 'externals' (ELC). Starting from "average" category and down toward "unsatisfactory" and "very unsatisfactory" categories 'externals' seem to be higher in proportion than 'internals'. Percentage distributions of ILC and ELC groups under different categories of home adjustment are graphically shown in Figure 5 (P.165).

3.1.c. Effect of purpose-in-life on home adjustment:

Below (Table 9) are given the means and standard deviations of home adjustment scores for the four PIL groups.

Table - 9:

Means and Standard Deviations of Home Adjustment Scores for the Four PIL groups.

Purpose-in-Life (PIL) in terms of Quartiles (Score Range: 40 to 140)	Sex	N	Total	Mean	Standard Deviations
HPIL (117 & above)	Boys	176	318	3.44	2.34
	Girls	142		2.50	2.07
MHPIL (107 - 116)	Boys	180	321	4.17	2.60
	Girls	141		2.85	2.05
MLPIL (95 to 106)	Boys	158	329	4.93	2.65
	Girls	171		3.60	2.65
LPIL (40 to 94)	Boys	155	332	6.32	2.91
	Girls	177		4.69	3.02

Table 9 indicates that, ^{the} higher the PIL scores, the ~~lesser~~ is the adjustment problem. In terms of mean problem scores, high PIL group seems to have least adjustment problems whereas low PIL group seems to have considerably high rate of adjustment problems.

Table - 11

ANOVA of Home Adjustment Scores for Sex, Locus of Control and Purpose-in-Life Groups

Source	df	SS	MS	F
Sex (A)	1	582.7242	582.7242	88.545 *
I-E Locus of Control (B)	1	110.8063	110.8063	16.837 *
Purpose-in-Life (C)	3	1022.4081	340.8027	51.785 *
A x B	1	0.0001	0.0001	0.000
A x C	3	19.4683	6.4894	0.986
B x C	3	40.2276	13.4092	2.038
A x B x C	3	8.3431	2.7810	0.423
Error	1284	8450.1069	6.5811	
Total	1299	10234.0846		

* $p < .01$

The Table 11 shows a highly significant main effect of sex, LC and PIL which indicates that home adjustment is a function of sex ($F = 88.545$; $df = 1,1284$; $p < .01$), locus of control ($F = 16.837$; $df = 1,1284$; $p < .01$), and purpose-in-life ($F = 5 = .785$; $df = 3,1284$; $p < .01$).

As regards interaction of sex and locus of control ($F = 0.000$; $df = 1,1284$; $p > .05$); sex and purpose-in-life ($F = 0.986$; $df = 3,1284$; $p > .05$); locus of control and purpose-in-life ($F = 2.032$; $df = 3,1284$; $p > .05$); sex, locus of control, and purpose-in-life ($F = 0.423$; $df = 3,1284$; $p > .05$), all the F values were found to be non-significant. Results in Table 11 indicate rejection of the null hypotheses (nos: 1, 2, 3) and retention of the null hypotheses (nos: 4, 5, 6 and 7).

3.2. Health Adjustment:

3.2.a. Effect of sex on health adjustment:

Presented in Table 12 are means and standard deviations of health adjustment scores for adolescent boys and girls.

Table - 12:

Means and Standard Deviations of Health Adjustment Scores for Adolescent Boys and Girls.

Sex	N	Means	Standard Deviations
Boys	669	4.31	2.64
Girls	631	4.19	2.84

Table 12 indicates that in terms of mean problem scores, both adolescent boys (M = 4.31) and girls (M = 4.19) seem to experience more or less equal degree of adjustment problems related to their health.

Table - 13:

Relationship between Sex and Health Adjustment.

Sex		Health Adjustment					Total
		Exce- llent	Good	Ave- rage	Unsatis- factory	Very unsatis- factory	
Boys	(f)	095	192	170	164	048	669
	(%)	14.20	28.70	25.41	24.51	07.17	
Girls	(f)	031	168	300	108	024	631
	(%)	04.91	26.62	47.54	17.12	03.80	
Total	(f)	126	360	470	272	072	1300
	(%)	09.69	27.69	36.15	20.92	05.54	

$\chi^2 = 88.56; df = 4; p < .001$

Table 13 reveals that adolescent boys are higher in proportion (28.70) under "good" category and adolescent girls are higher (47.54) under "average" category of health adjustment. It also shows that boys are higher in proportion both under 'positive' and 'negative' categories than girls except under the "average" category where girls are almost double in percentage than boys. Percentage distributions of the boys and the girls under different categories of health adjustment are graphically shown in Figure 7 (P.171).

3.2.b. Effect of locus of control on health adjustment:

Table 14 gives the means and standard deviations of health adjustment scores for the 'internal' and the 'external' group.

Table - 14:

Means and Standard Deviations of Health Adjustment Scores for the 'Internal' and the 'External' Group.

I-E Locus of Control (Score Range: 00 to 17)	Sex	N	Mean	Standard Deviations
Internal (00 to 09)	Boys	377	4.20	2.80
	Girls	315	3.98	2.68
Externals (10 & above)	Boys	292	4.46	2.41
	Girls	316	4.42	2.98

Table 14 shows that the 'internals', in terms of mean problem scores, are slightly better adjusted to their health than the 'external' adolescents. Within the 'internal' group, girls seem to be better adjusted to their health than the boys, and within the 'external' group boys and girls do not show much difference in mean problem scores.

Table - 15:

Relationship between Locus of Control and Health Adjustment.

I-E Locus of Control (Score Range: 00 to 17)						Total
	Exce- llent	Good	Ave- rage	Unsatis- factory	Very unsatis- factory	
Internal (f) (00 to 09) (%)	081 11.70	208 30.06	228 32.95	132 19.08	043 06.21	692
External (f) (10 & above)(%)	045 07.40	152 25.00	242 39.80	140 23.03	029 04.77	608
Total (f) (%)	126 09.69	360 27.69	470 36.16	272 20.92	072 05.54	1300

$\chi^2 = 17.01; df = 4; p < .01$

The table (15) shows that highest percentage of both 'internal'(32.95) and 'external' (39.80) groups seem to fall under "average" category. The table further shows that under positive categories of health adjustment like "excellent" and "good", 'internals' (ILC) are higher in percentages and under negative category like "unsatisfactory", 'externals' (ELC) are

higher in percentage. Under the extreme negative category, 'internals' seem to be higher in proportion. Percentage distributions of the ILC and the ELC groups under different categories of health adjustment are shown in Figure 8 (P.173).

3.2.c. Effect of purpose-in-life on health adjustment.

Below (Table 16) are given the means and standard deviations of health adjustment scores for different PIL groups.

Table - 16:

Means and Standard Deviations of Health Adjustment Scores for the Four PIL Groups.

Purpose-in-Life (PIL) in terms of Quartiles (Score Range: 40 to 140)	Sex	N	Means	Standard Deviations
HPIL (117 & above)	Boys	176	3.28	2.17
	Girls	142	3.68	3.11
MHPIL (107 - 116)	Boys	180	4.01	2.67
	Girls	141	3.67	2.61
MLPIL (95 - 106)	Boys	158	4.60	2.52
	Girls	171	4.29	2.67
LPIL (40 - 94)	Boys	155	5.57	2.66
	Girls	177	4.25	2.77

The result (Table 16) shows that, ^{the} higher the PIL score, the lesser is the adjustment problem. Except the HPIL group, within

each PIL group girls seem to be better adjusted to their health than boys. In the HPIL group, adolescent boys seem to experience less adjustment problems related to their health than the adolescent girls.

Table - 17:

Relationship between Purpose-in-Life and Health Adjustment.

Purpose-in-Life (PIL) in terms of Quartiles (Score Range: 40 to 140)	Health Adjustment					Total
	Exce- llent	Good	Ave- rage	Unsatis- factory	Very unsatis- factory	
PIL (f)	047	115	109	040	007	318
(117 & above) (%)	14.78	36.16	34.28	12.58	02.20	
MHPIL (f)	040	103	109	058	011	321
(107 - 116) (%)	12.46	32.08	33.96	18.07	03.43	
MLPIL (f)	027	079	134	072	017	329
(95 - 106) (%)	08.21	24.01	40.73	21.88	05.17	
LPIL (f)	012	063	118	102	037	332
(40 - 94) (%)	03.61	18.98	35.54	30.72	11.15	
Total (f)	126	360	470	272	072	1300
(%)	09.69	27.69	36.15	20.92	05.54	

$$\chi^2 = 105.16; \text{ df} = 12; \underline{p} < .001$$

Result (Table 17) shows that highest percentages of LPIL (35.54), MLPIL (40.73) and MHPIL (33.96) groups seem to fall under "average" category whereas HPIL group seems to be highest

(36.16) under "good" category. Under positive categories i.e., "excellent" and "good", higher PIL groups seem to be higher in percentage and under negative categories i.e., "unsatisfactory" and "very unsatisfactory", lower PIL groups seem to be higher in percentage. Percentage distributions of different PIL groups under different categories of health adjustment are graphically shown in Figure 9 (P.175).

3.2.d. Effects of sex, locus of control, and purpose-in-life on health adjustment:

Table 18 gives the main and interaction effects of sex, locus of control (LC), and purpose-in-life (PIL) on health adjustment.

Table - 18:

ANOVA of Health Adjustment Scores for Sex, Locus of Control and Purpose-in-Life Groups.

Source	df	SS	MS	F
Sex (A)	1	17.9553	17.9553	2.543
I-E Locus of Control (B)	1	4.1288	4.1288	0.585
Purpose-in-Life (C)	3	560.7782	186.9261	26.478 *
A x B	1	3.0471	3.0471	0.432
A x C	3	45.3247	15.1082	2.140
B x C	3	28.8404	9.6135	1.362
A x B x C	3	33.4073	11.1358	1.577
Error	1284	9064.5984	7.0597	
Total	1299	9758.0802		

* $p < .01$

2 x 2 x 4 analysis of variance (Table 18) shows a non-significant main effect of sex ($F = 2.543$; $df = 1, 1284$; $p > .05$) and locus of control ($F = 0.585$; $df = 1, 1284$; $p > .05$), and a significant main effect of PIL ($F = 26.478$; $df = 3, 1284$; $p < .01$) on health adjustment.

The results also show non-significant interaction effects of sex x LC ($F = 0.432$; $df = 1, 1284$; $p > .05$); sex x PIL ($F = 2.140$; $df = 3, 1284$; $p > .05$); LC x PIL ($F = 1.362$; $df = 3, 1284$; $p > .05$); sex x LC x PIL ($F = 1.577$; $df = 3, 1284$; $p > .05$) on health adjustment. The data analysis rejects the null hypothesis (no: 3) and retains the null hypotheses (nos: 1, 2, 4, 5, 6 and 7).

3.3. Social Adjustment:

3.3.a. Effect of sex on social adjustment:

Means, standard deviations of the social adjustment scores for adolescent boys and girls are presented in Table 19.

The Table 20 shows that adolescent boys are socially better adjusted than adolescent girls since highest percentage (38.71) of boys are found under "good" category and highest percentage (37.72) of girls are found under "average" category. Under positive categories like "excellent" and "good", boys seem to be higher in proportion whereas under "average" and "unsatisfactory" category, girls seem to be higher in proportion. And under extreme negative category boys are higher than girls in proportion. Percentage distributions of the boys and the girls under different categories of social adjustment are presented graphically in Figure 10(P.179).

3.3.b. Effect of locus of control on social adjustment:

Below (Table 21) are given the means and standard deviations of social adjustment scores for the 'internal' and the 'external' groups.

Table - 21:

Means and Standard Deviations of Social Adjustment Scores for the 'Internal' and the 'External' Group.

I-E Locus of Control (Score Range: 00 to 17)	Sex	N	Mean	Standard Deviations
Internals (00 to 09)	Boys	377	6.19	3.17
	Girls	315	6.40	2.81
Externals (10 & above)	Boys	292	7.86	3.33
	Girls	316	8.09	2.91

Table 21 indicates that in terms of mean adjustment scores, 'internals' seem to be socially better adjusted than 'externals'. Within the 'internal' and the 'external' group, girls seem to experience more problems in their adjustment to society than the boys.

Table - 22:

Relationship between Locus of Control and Social Adjustment

I-E Locus of Control (Score Range: 00 to 17)	Social Adjustment					Total
	Exce- llent	Good	Aver- age	Unsatis -factory	Very unsatis- factory	
Internal (f)	008	268	222	095	019	692
(00 to 09) (%)	12.72	38.73	32.08	13.73	02.74	
External (f)	029	172	219	141	047	608
(10 & above) (%)	04.77	28.29	36.02	23.19	07.73	
Total (f)	117	440	441	236	066	1300
(%)	09.00	33.85	33.92	18.15	05.08	

$\chi^2 = 66.40; df = 4; p < .001$

In the area of social adjustment (Table 22), highest percentage (38.73) of 'internals' (ILC) are found to be under "good" category whereas more (36.02) 'externals' (ELC) are found under "average" category. Percentages of internals are higher under the positive categories like "excellent" and "good", whereas externals are higher in proportions under the negative categories like "unsatisfactory" and "very unsatisfactory". Percentage distributions of the ILC and the ELC groups under different categories of social adjustment are graphically shown in Figure 11 (P.181).

3.3.c. Effect of purpose-in-life on social adjustment:

Presented below (Table 23) are the means and standard deviations of social adjustment scores for different PIL groups.

Table - 23:

Means and Standard Deviations of Social Adjustment Scores for the Four PIL Groups.

Purpose-in-Life (PIL) in terms of Quartiles (Score Range: (40 to 140)	Sex	N	Means	Standard Deviations
HPIL (117 & above)	Boys	176	5.30	2.72
	Girls	142	6.20	2.51
MHPIL (107 - 116)	Boys	180	6.31	2.85
	Girls	141	6.39	2.64
MLPIL (95 - 106)	Boys	158	7.10	3.03
	Girls	171	7.54	2.70
LPIL (40 - 94)	Boys	155	9.27	3.49
	Girls	177	9.20	2.81

Results (Table 23) show that higher PIL groups are socially better adjusted than the lower PIL groups. The table further shows that within each PIL group, adolescent boys experienced less problems in their social adjustment than adolescent girls.

Table - 24:

Relationship between Purpose-in-Life and Social Adjustment.

Purpose-in-Life (PIL) in terms of Quartiles (Score Range: 40 - 140)	Social Adjustment					Total
	Exce- llent	Good	Aver- age	Unsatis- factory	Very unsatis- factory	
HPIL (117 & above)	(f) 052 (%) 16.35	148 46.54	092 28.93	025 07.86	001 00.31	318
MHPIL (107 - 116)	(f) 037 (%) 11.53	129 40.19	115 35.82	036 11.21	004 01.25	321
MLPIL (95 - 106)	(f) 020 (%) 06.08	113 34.35	119 36.17	064 19.45	013 03.95	329
LPIL (40 - 94)	(f) 008 (%) 02.41	050 15.06	115 34.64	111 33.43	048 14.46	332
Total	(f) 117 (%) 09.00	440 33.85	441 33.92	236 18.15	066 05.08	1300

$\chi^2 = 249.44; df = 12; p < .001$

Results (Table 24) reveal that HPIL (46.54) and MHPIL (40.19) groups are better adjusted than the MLPIL and LPIL groups since highest percentages of higher PIL groups fall under "good" category, whereas highest percentages of MLPIL (36.17) and LPIL (34.64) groups seem to fall under "average" category. Under the positive categories, higher PIL groups

seem to be higher in percentage, and under negative categories, lower PII groups seem to be higher in percentage. Percentage distributions of different PII groups under different categories of social adjustment are graphically shown in Figure 12 (P.184).

3.3.d. Effects of sex, locus of control, and purpose-in-life on social adjustment:

Table 25 gives the main and interaction effects of sex, locus of control (LC) and purpose-in-life (PII) on social adjustment.

Table - 25:

ANOVA of Social Adjustment Scores for the Sex, Locus of Control and Purpose-in-Life Groups.

Source	df	SS	MS	F
Sex (A)	1	24.5238	24.5238	3.085
Locus of Control (B)	1	361.9282	361.9282	45.536 *
Purpose-in-Life (C)	3	1908.4479	636.1493	80.037 *
A x B	1	11.5328	11.5328	1.451
A x C	3	44.5498	14.8499	1.868
B x C	3	46.2523	15.4174	1.940
A x B x C	3	6.8710	2.2903	0.288
Error	1284	10207.0296	7.9494	
Total	1299	12611.1354		

* $p < .01$

The data (Table 25) give a non-significant main effect of sex ($F = 3.085$; $df = 1,1284$; $p > .05$). The results further give a significant main effect of locus of control ($F = 45.536$; $df = 1,1284$; $p < .01$), and purpose-in-life ($F = 80.037$; $df = 3,1284$; $p < .01$) on social adjustment.

The results also indicate non-significant interactions of sex x LC ($F = 1.451$; $df = 1,1284$; $P > .05$), sex x PIL ($F = 1.868$; $df = 3,1284$; $P > .05$), LC x PIL ($F = 1.940$; $df = 3,1284$; $P > .05$), and sex x LC x PIL ($F = 0.288$; $df = 3,1284$; $P > .05$) on social adjustment of Bangladesh adolescents. The results advocate the rejection of null hypotheses (nos: 2, 3) and retention of null hypotheses (nos: 1,4, 5,6 and 7).

3.4. Emotional Adjustment:

3.4.a. Effect of sex on emotional adjustment:

Means, standard deviations of emotional adjustment scores for the adolescent boys and girls are presented in Table 26.

Table - 26:

Means and Standard Deviations of Emotional Adjustment Scores for Adolescent Boys and Girls.

Sex	N	Means	Standard Deviations
Boys	669	13.39	5.95
Girls	631	13.92	5.16

Table 26 shows that the boys (M = 13.39) and the girls (M = 13.92) do not differ in their adjustment to emotionality. They experience more or less equal degree of emotional problems.

Table - 27:

Relationship between Sex and Emotional Adjustment.

Sex		Emotional Adjustment					Total
		Exce-llent	Good	Ave- rage	Unsatis- factory	Very unsatis- factory	
Boys	(f)	002	117	316	162	072	669
	(%)	00.30	17.49	47.23	24.22	10.76	
Girls	(f)	000	070	260	258	043	631
	(%)	00.00	11.09	41.20	40.89	06.81	
Total	(f)	002	187	576	420	115	1300
	(%)	00.15	14.38	44.31	32.31	08.85	

$\chi^2 = 47.44; df = 4; p < .001$

Results (Table 27) indicate that highest percentages of both boys (47.23) and girls (41.20) seem to fall under "average" category. Under the "unsatisfactory" category girls seem to be higher in proportion and under "good" category boys seem to be higher in proportion. Neither of the groups show extreme positive emotional adjustment. Percentage distributions of the boys and the girls under different categories of emotional adjustment are graphically shown in Figure 13 (P.189).

3.4.b. Effect of locus of control on emotional adjustment:

Below (Table 28) are given the means and standard deviations of emotional adjustment scores for the 'internal' and 'external' group.

Table - 28:

Means and Standard Deviations of Emotional Adjustment Scores for the 'Internal' and the 'External' Groups.

I-E Locus of Control (Score Range: 00 to 17)	Sex	N	Means	Standard Deviations
Internal (00 to 09)	Boys	377	12.24	5.77
	Girls	315	12.76	5.01
External (10 and above)	Boys	292	14.88	5.84
	Girls	316	15.09	5.03

Table 28 shows that the 'internals' seem to be emotionally better adjusted than the 'externals'. In terms of mean problem scores, internals experience less problems related to their emotion than 'externals'. Within each locus of control group, both boys and girls seem to experience more or less equal degree of emotional problems.

Table - 29:

Relationship between Locus of Control and Emotional Adjustment.

I-E Locus of Control (Score Range: 00 to 17)	Emotional Adjustment					Total
	Exce- llent	Good	Ave- rage	Unsatis- factory	Very unsatis- factory	
Internal (f) (.00 to .09)	001 (%) 00.14	135 19.51	323 46.68	194 28.03	039 05.64	692
External (f) (10 & above)	001 (%) 00.16	052 08.55	253 41.61	226 37.17	076 12.50	608
Total	(f) 002 (%) 00.15	187 14.38	576 44.31	420 32.31	115 08.85	1300
$\chi^2 = 54.50; df = 4; p < .001$						

Table 29 shows that both the groups showed a tendency toward "average" adjustment ('Internals': 46.68; 'Externals': 41.61 respectively) with 28.03 falling under "unsatisfactory" and 05.64 under "very unsatisfactory" category among the 'internals', and 37.17 under "unsatisfactory" and 12.50 under "very unsatisfactory" category among the 'externals'. Under

both, ^{the} negative categories, 'externals' are found to be higher in proportion than 'internals'. Percentage distributions of the ILC and the ELC groups under different categories of emotional adjustment are shown graphically in Figure 14 (P.191).

3.4.c. Effect of purpose-in-life on emotional adjustment:

Below (Table 30) are presented the means and standard deviations of emotional adjustment scores for different PIL groups.

Table - 30:

Means, Standard Deviations of Emotional Adjustment Scores for the Four PIL Groups.

Purpose-in-Life (PIL) in terms of Quartiles (Score Range: 40 - 140)	Sex	N	Means	Standard Deviations
HPIL (117 & above)	Boys	176	10.28	5.40
	Girls	142	11.45	4.85
MHPIL (107 - 116)	Boys	180	12.72	5.21
	Girls	141	12.69	4.42
MLPIL (95 - 106)	Boys	158	13.98	5.51
	Girls	171	14.25	4.59
LPIL (40 - 94)	Boys	155	17.11	5.59
	Girls	177	16.59	5.16

Table 30 reveals that emotional problems decrease with increase in PIL scores. It indicates that HPIL group seem to experience least emotional problems than the MHPIL group followed by MLPIL and LPIL groups.

Table - 31:

Relationship between Purpose-in-Life and Emotional Adjustment.

Purpose-in-Life (PIL) in terms of Quartiles (Score Range: 40 - 140)	Emotional Adjustment					Total
	Exce- llent	Good	Ave- rage	Unsatis- factory	Very unsatis- factory	
HPIL (f) (117 & above) (%)	001 00.32	095 29.87	153 48.11	058 18.24	011 03.46	318
MHPIL (f) (107 - 116) (%)	001 00.31	050 15.58	165 51.40	092 28.66	013 04.05	321
MLPIL (f) (95 - 106) (%)	000 00.00	031 09.42	146 44.38	126 38.30	026 07.90	329
LPIL (f) (40 - 94) (%)	000 00.00	011 03.31	112 33.74	144 43.37	065 19.58	332
Total (f) (%)	002 00.15	187 14.38	576 44.31	420 32.31	115 08.85	1300
$\chi^2 = 200.91; df = 12; p < .001$						

Table 31 indicates that highest percentages of HPIL, MHPIL, MLPIL, groups seem to fall under "average" category whereas LPIL group is found to be highest in percentage under

"unsatisfactory" category. Higher PIL groups seem to be higher in percentage under "good" category and lower PIL groups seem to be higher in percentage under "unsatisfactory" category. The table further shows that neither the PIL groups shows extreme positive ("excellent") emotional adjustment. Percentage distributions of different PIL groups under different categories of emotional adjustment are shown graphically in Figure 15 (P.193).

3.4.d. Effect of sex, locus of control and purpose-in-life on emotional adjustment:

The main and interaction effects of sex, locus of control (LC), and purpose-in-life (PIL) on emotional adjustment of adolescents are presented in Table 32.

Table 32

ANOVA of Emotional Adjustment Scores for Sex, Locus of Control and Purpose-in-Life Groups.

Source	df	SS	MS	F
Sex (A)	1	3.5999	3.5999	0.140
Locus of Control (B)	1	975.8964	975.8964	38.087 *
Purpose-in-Life (C)	3	5193.4515	1731.1505	67.563 *
A x B	1	5.7196	5.7196	0.223
A x C	3	121.7135	40.5712	1.583
B x C	3	190.4092	63.4697	2.477
A x B x C	3	5.5114	1.8371	0.072
Error	1284	32699.8247	23.6229	
Total	1299	39396.1262		

* $p < .01$

The data analysis (Table 32) shows a non-significant main effect of sex ($F = 0.140$; $df = 1,1284$; $P > .05$). Main effects of locus of control ($F = 38.087$; $df = 1,1284$; $P < .01$) and purpose-in-life ($F = 67.563$; $df = 3,1284$; $P < .01$) on emotional adjustment of the adolescents were found to be significant.

Interaction effects of sex x LC ($F = 0.223$; $df = 1,1284$; $P > .05$), sex x PIL ($F = 1.583$; $df = 3,1284$; $P > .05$), LC x PIL ($F = 2.477$; $df = 3,1284$; $P > .05$), and sex x LC x PIL ($F = 0.072$; $df = 3,1284$; $P > .05$) on emotional adjustment were found to be non-significant. The results (Table 32) advocate rejection of null hypotheses (nos: 2, 3) and retention of null hypotheses (nos: 1,4,5,6 and 7).

3.5 Educational Adjustment:

3.5.a. Effect of sex on educational adjustment:

Table 33 gives the means and standard deviations of educational adjustment scores for the adolescent boys and girls.

Table - 33:

Means and Standard Deviations of Educational Adjustment Scores for Adolescent Boys and Girls.

Sex	N	Means	Standard Deviations
Boys	669	7.36	3.48
Girls	631	6.00	3.28

Table 33 shows that, in terms of mean problem scores, adolescent girls (M = 6.00) seem to be better adjusted to their education than adolescent boys (M = 7.36).

Table - 34:

Relationship between Sex and Educational Adjustment.

Sex	Educational Adjustment					Total	
	Exce-llent	Good	Ave- rage	Unsatis- factory	Very unsatis- factory		
Boys	(f)	011	151	335	153	019	669
	(%)	01.64	22.57	50.07	22.87	02.84	
Girls	(f)	026	213	263	104	025	631
	(%)	04.12	33.76	41.68	16.48	03.96	
Total	(f)	037	364	598	257	044	1300
	(%)	02.85	28.00	46.00	19.77	03.38	

$\chi^2 = 34.38; df = 4; p < .001$

Findings (Table 34) indicate that highest percentages of both boys (50.07) and girls (41.88) are under "average" category. Under "excellent" and "good" category of educational adjustment, girls seem to be higher in proportion. Under "unsatisfactory" category, boys seem to be higher in proportion. Percentage distributions of the boys and the girls under different categories of educational adjustment are graphically shown in Figure 16 (P.197).

3.5.b. Effect of locus of control on educational adjustment:

Given in table 35 are the means and standard deviations of educational adjustment scores for the 'internal' (ILC) and the 'external' (ELC) group.

Table - 35:

Means and Standard Deviations of Educational Adjustment Scores for the 'Internal' and the 'External', Groups.

I-E Locus of Control (Score Range: 00 to 17)	Sex	N	Mean	Standard Deviations
Internal (00 to 09)	Boys	377	6.75	3.41
	Girls	315	6.27	2.99
External (10 and above)	Boys	292	8.13	3.42
	Girls	316	6.73	3.38

Table 35 shows that the 'internals' seem to be educationally better adjusted than the 'externals'. Within both 'internal' and 'external' groups, girls seem to be better adjusted than boys in terms of mean problem scores.

Table - 36:

Relationship between Locus of Control and Educational Adjustment.

I-E Locus of Control (Score Range: 00 to 17)	Educational Adjustment					Total
	Exce- llent	Good	Ave- rage	Unsatis- factory	Very unsatis- factory	
Internal (f) (00 to 09) (%)	024 03.47	214 34.83	303 43.79	109 15.75	015 02.17	692
External (f) (10 & above) (%)	013 02.14	123 20.23	295 48.52	148 24.34	029 04.77	608
Total (f) (%)	037 02.87	364 28.00	598 46.00	257 19.77	044 03.38	1300

$\chi^2 = 46.76; df = 4; p < .001$

Table 36 indicates that highest percentages of both 'internals' (43.79) and 'externals' (48.52) are found under "average" category. As regards other categories, 'internals' (ILC) are found to be higher in proportion under positive categories and 'externals' (ELC) higher under negative categories. Percentage distributions of the ILC and the ELC groups under different categories are graphically shown in Figure 17 (P.199).

3.5.c. Effect of purpose-in-life on educational adjustment:

Means, standard deviations of educational adjustment scores for different PIL groups are shown in Table 37.

Table - 37:

Means, Standard Deviations of Educational Adjustment Scores for the Four PIL Groups.

Purpose-in-Life (PIL) in terms of Quartiles (Score Range: 40 - 140)	Sex	N	Means	Standard Deviations
HPIL (117 & above)	Boys	176	5.41	2.61
	Girls	142	4.69	2.61
MHPIL (107 - 116)	Boys	180	6.67	3.18
	Girls	141	5.07	2.56
MLPIL (95 - 106)	Boys	158	7.77	3.27
	Girls	171	6.02	3.09
LPIL (40 to 94)	Boys	155	9.95	3.19
	Girls	177	7.77	3.62

Table 37 shows that as PIL scores increase, mean problem scores decrease. Higher the PIL score, lesser is the problem. The result (Table 37) further shows that

within each PIL group; adolescent girls seem to be better educationally adjusted than adolescent boys.

Table - 38:

Relationship between Purpose-in-Life and Educational Adjustment.

Purpose-in-Life (PIL) in terms of Quartiles (Score Range: 40 - 140)	Educational Adjustment					Total
	Excellent	Good	Average	Unsatisfactory	Very unsatisfactory	
HPIL (f)	014	145	133	026	000	318
(117 & above) (%)	04.40	45.60	41.82	08.18	00.00	
MHPIL (f)	012	101	168	034	066	321
(107 - 116) (%)	03.74	31.46	52.34	10.59	01.87	
MLPIL (f)	005	084	166	061	013	329
(95 - 106) (%)	01.52	25.53	50.46	18.54	03.95	
LPIL (f)	006	034	131	136	025	332
(40 - 94) (%)	01.81	10.24	39.46	40.96	07.53	
Total (f)	037	364	598	257	044	1300
(%)	02.85	28.00	46.00	19.77	03.38	

$$\chi^2 = 220.40; df = 12; p < .001$$

Table 38 indicates that highest percentage (45.60) of HPIL group is under "good" category whereas highest percentages of MHPIL (52.34) and MLPIL (50.46) are under "average" category

and highest percentage (40.96) of LPIL group is under "unsatisfactory" category of educational adjustment. Under positive categories i.e., "excellent" and "good", higher PIL groups seem to be higher and under negative categories i.e., "unsatisfactory" and "very unsatisfactory", lower PIL groups seem to be higher in proportion. Percentage distributions of different PIL groups under different categories of educational adjustment are graphically shown in Figure 18 (P.201).

3.5.d. Effects of sex, locus of control and purpose-in-life on educational adjustment:

The main and interaction effects of sex, locus of control, and purpose-in-life on educational adjustment of adolescents are presented in Table 39.

Table - 39:

ANOVA of Educational Adjustment Scores for Sex, Locus of Control and Purpose-in-Life Groups.

Source	df	SS	MS	F
Sex (A)	1	847.9181	847.9181	92.708 **
Locus of Control (B)	1	280.9475	280.9475	30.718 **
Purpose-in-Life (C)	3	2288.1967	762.7322	83.394 **
A x B	1	0.6858	0.6858	0.075
A x C	3	90.7017	30.2339	3.306 *
B x C	3	30.7511	10.2504	1.121
A x B x C	3	58.8166	19.6055	2.144
Error	1284	11743.5895	9.1461	
Total	1299	15341.6070		

* $\bar{p} < .05$

** $\bar{p} < .01$

Results (Table 39) reveal significant main effects of sex ($F = 92.708$; $df = 1,1284$; $P < .01$), locus of control ($F = 30.718$; $df = 1,1284$; $P < .01$), and purpose-in-life ($F = 83.394$; $df = 3,1284$; $P < .01$) on educational adjustment of adolescents.

As regards interaction effects, sex x LC ($F = 0.075$; $df = 1,1284$; $P > .05$), LC x PIL ($F = 1,121$; $df = 3,1284$; $P > .05$), Sex x LC x PIL ($F = 2.144$; $df = 3,1284$; $P > .05$) were found to be non-significant. And interaction effect of sex x PIL on educational adjustment was significant ($F = 3.306$; $df = 3,1284$; $P < .05$). Data in Table 39 reject null hypotheses (nos: 1, 2, 3 and 5) and retain null hypotheses (nos: 4, 6, and 7).

3.6. Total Adjustment:

3.6.a. Effect of sex on total adjustment:

Table 40 gives the means and standard deviations of total adjustment scores for the adolescent boys and girls.

Table - 40:

Means and Standard Deviations of Total Adjustment Scores for Adolescent Boys and Girls.

Sex	N	Means	Standard Deviations
Boys	669	36.63	14.56
Girls	631	34.96	12.62

Results (Table 40) reveal that in terms of mean problem scores, girls (M = 34.96) seem to be better adjusted than boys (M = 36.63).

Table - 41:

Relationship between Sex and Total Adjustment.

Sex		Total Adjustment					Total
		Exce- llent	Good	Ave- rage	Unsatis- factory	Very unsatis- factory	
Boys	(f)	018	199	268	144	040	669
	(%)	02.69	29.75	40.06	21.52	05.98	
Girls	(f)	013	171	283	137	027	631
	(%)	02.06	27.10	44.85	21.71	04.28	
Total	(f)	031	370	551	281	067	1300
	(%)	02.38	28.46	42.38	21.62	05.15	

$\chi^2 = 4.92; df = 4; p > .05$

Table 41 shows that highest percentages of both boys (40.06) and girls (44.85) are under "average" category. Boys are found to be higher in proportion under positive i.e., "good" category category. Boys and girls are almost equal in proportion under "excellent" and "unsatisfactory" category, and boys slightly higher under extreme negative i.e., "very unsatisfactory" category. Percentage distributions of the boys and the girls under different categories of total adjustment are graphically shown in Figure 19 (P.205).

3.6.b. Effect of locus of control on total adjustment.

Table 42, gives the means and standard deviations of total adjustment scores for the 'internal' and the 'external' groups.

Table - 42:

Means, Standard Deviations of Total Adjustment Scores for the 'Internal' and the 'External' Groups.

I-E Locus of Control (Score Range: 00 to 17)	Sex	N	Means	Standard Deviations
Internal (00 to 09)	Boys	377	33.63	14.26
	Girls	315	31.77	12.01
External (10 and above)	Boys	292	40.47	14.00
	Girls	316	38.21	13.38

Table 42 shows that in their overall adjustment, internally oriented adolescents seem to be better adjusted than their externally oriented counterparts. Within 'internal' and 'external' groups, adolescent girls seem to experience less problems than adolescent boys.

Table - 43:

Relationship between Locus of Control and Total Adjustment.

I-E Locus of Control (Score Range: (00 to 17)	Total Adjustment					Total
	Exce-	Good	Ave- rage	Unsatis- factory	Very unsatis- factory	
Internal (00 to 09)	(f) 027 (%) 03.90	244 35.26	287 41.47	112 16.18	022 02.18	692
External (10 and above)	(f) 004 (%) 00.66	126 20.72	264 43.42	169 27.80	045 07.40	608
Total	(f) 031 (%) 02.38	370 28.46	551 42.38	281 21.62	067 05.15	1300

$\chi^2 = 69.98; df = 4; p < .001$

Table 45 shows that most of the adolescents from both the groups fall under "average" category (Internals = 41.47; Externals = 43.42). Results also show that under the positive categories, i.e. "excellent" and "good", 'internals' (ILC) are higher and under negative categories, i.e., "unsatisfactory" and "Very unsatisfactory", 'externals' (ELC) are higher in proportion. Percentage distributions of the ILC and ELC groups under different categories

of total adjustment are shown graphically in Figure 20 (P.207).

3.6.c. Effect of purpose-in-life on total adjustment:

Table 44 shows the means and standard deviations of total adjustment scores for different PIL groups.

Table - 44:

Means, Standard Deviations of Total Adjustment Scores for the Four PIL Groups.

Purpose-in-Life (PIL) in terms of Quartiles (Score Range: 40 - 140)	Sex	N	Mean	Standard Deviations
HPIL (117 & above)	Boys	176	27.70	11.62
	Girls	142	28.39	10.64
MHPIL (107 - 116)	Boys	180	33.87	12.59
	Girls	141	30.47	10.16
MLPIL (95 - 106)	Boys	158	38.38	12.47
	Girls	171	35.71	11.10
LPIL (40 to 94)	Boys	155	48.14	13.54
	Girls	177	43.21	12.49

Table 44 indicates that in terms of mean problem scores, HPIL group seems to be better adjusted than the MHPIL, MLPIL and LPIL groups. Within each PIL group, as the results (Table 44) shows, girls seem to experience less adjustment problems than boys.

Table - 45:

Relationship between Purpose-in-Life and Total Adjustment.

Purpose-in-Life in terms of Quartiles (Score Range: 40 - 140)	Total Adjustment					Total
	Excellent	Good	Average	Unsatisfactory	Very unsatisfactory	
HPIL (f) (117 & above)	021	153	115	024	005	318
(%)	06.60	48.11	36.16	07.55	01.57	
MHPIL (f) (107 - 116)	005	112	159	040	005	321
(%)	01.56	34.89	49.53	12.46	01.56	
MLPIL (f) (95 - 106)	004	077	162	075	011	329
(%)	01.22	23.40	49.24	22.80	03.34	
LPIL (f) (40 - 94)	001	028	115	142	046	332
(%)	00.30	08.43	34.64	42.77	13.86	
Total (f)	031	370	551	281	067	1300
(%)	02.39	28.46	42.38	21.62	05.15	

$$\chi^2 = 322.65; \quad df = 12; \quad p < .001$$

Results (Table 45) reveal that HPIL is better adjusted than the other PIL groups. High PIL group seems to be highest in percentage (48.11) under "good" category whereas highest percentage of MHPIL (49.53) and MLPIL (49.24) are found under "average" category and highest percentage of LPIL group (42.77) is found under "unsatisfactory" category. The results further

show that under positive categories, higher PIL groups seem to be higher in percentage and under negative categories, lower PIL groups seem to be higher in percentage. Percentage distributions of different PIL groups under different categories of total adjustment are graphically shown in Figure 21 (P.209).

3.6.d. Effects of sex, locus of control, and purpose-in-life on total adjustment:

Main and interaction effects of sex, locus of control and purpose-in-life on total adjustment are presented in Table 46.

Table - 46:

ANOVA of Total Adjustment Scores for Sex, Locus of Control and Purpose-in-Life Groups.

Source	df	SS	MS	F
Sex (A)	1	2673.6758	2673.6758	19.310 **
Locus of Control (B)	1	6270.2232	6270.2232	45.286 **
Purpose-in-Life (C)	3	48174.9016	16058.3005	115.979 **
A x B	1	8.6851	8.6851	0.063
A x C	3	1349.9399	449.9800	3.250 #
B x C	3	658.5702	219.5234	1.585
A x B x C	3	66.7430	22.2477	0.161
Error	1284	177781.0770	138.4588	
Total	1299	236983.8158		

* $p \leq .05$

** $p \leq .01$

Results (Table 46) revealed significant main effects of sex ($F = 19.310$; $df = 1,1284$; $P < .01$), locus of control ($F = 45.286$; $df = 1,1284$; $P < .01$), purpose-in-life ($F = 115.979$; $df = 3,1284$; $P < .01$).

Regarding interaction effects, sex x LC ($F = 0.063$; $df = 1,1284$; $P > .05$), LC x PIL ($F = 1.585$; $df = 3,1284$; $P > .05$), sex x LC x PIL ($F = 0.161$; $df = 3,1284$; $P > .05$) were found to be non-significant. Interaction effect of sex x PIL ($F = 3.250$; $df = 3,1284$; $P < .05$) on total adjustment of adolescents was found to be significant. The findings reject null hypotheses (nos: 1, 2, 3 and 5) and retain null hypotheses (nos: 4, 6 and 7).

