

CHAPTER FIVE
PRESENTATION AND ANALYSIS OF DATA

I SECTION ONE : DESCRIPTIVE CHARACTERISTICS OF SCORE DISTRIBUTION

The present chapter is devoted to the presentation and analysis of data along with a brief discussion on them. It consists of six sections dealing with - 1. descriptive characteristics of score distribution, 2. comparison of literacy skills between the adult learners and the school children, 3. relationship between each selected variable and literacy achievement, 4. relationship between each selected variable and awareness level, 5. relationship between each selected variable and functionality, 6. problems faced in the organization of RFLP centers.

A. READING TEST - ADULT PARTICIPANTS

TABLE 5.1: FREQUENCY DISTRIBUTION OF SCORES OF THE READING TEST

Sl. No.	Class intervals scores	Mid point	f	d	fd	fd²
1	11-14	12.5	7	-7	-49	343
2	15-18	16.5	14	-6	-84	504
3	19-22	20.5	16	-5	-80	400
4	23-26	24.5	19	-4	-78	312
5	27-30	28.5	27	-3	-81	243
6	31-34	32.5	33	-2	-66	132
7	35-38	36.5	38	-1	-38	38
8	39-42	40.5	31	0	0	0
9	43-46	44.5	27	1	27	27
10	47-50	48.5	17	2	34	68
11	51-54	52.5	13	3	39	117
12	55-58	56.5	12	4	48	192
13	59-62	60.5	11	5	55	275
14	63-66	64.5	5	6	30	180
			N=270		-243	2831
<hr/>						
Mean = 36.91		Median = 36.473		Mode = 35.599		

The value of mean was slightly greater than that of median and mode; hence the distribution was positively skewed. The standard error of the mean = 0.53. The 'true' mean = $36.91 \pm (0.53 \times 2.58)$ which lies between 35.55 and 38.27 (at 0.01 level). Therefore, the obtained mean was considered as reliable because of its very narrow range.

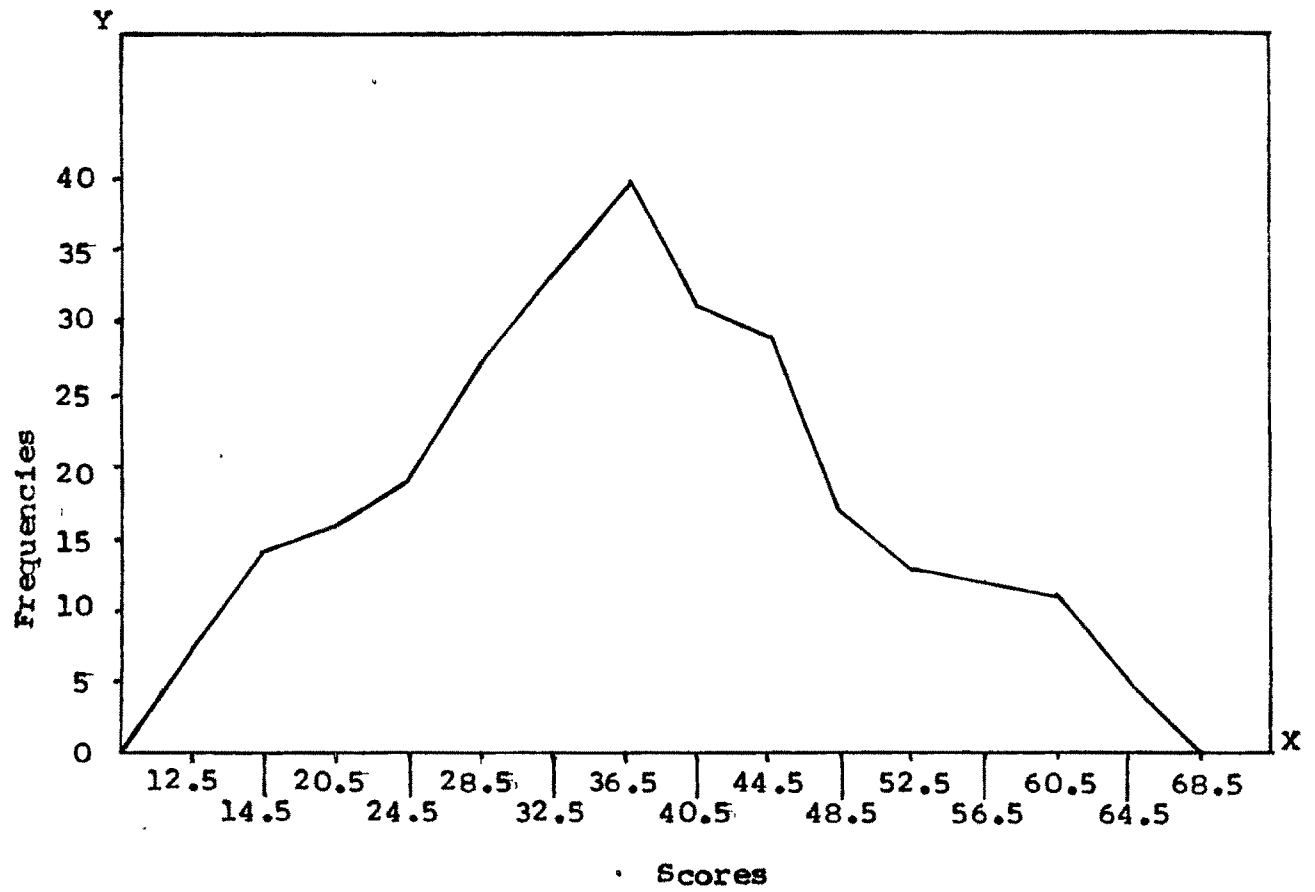
The standard error of the median = 0.67. The 'True' median = $36.47 \pm (0.67 \times 2.58)$ which lies between 34.75 and 38.19 (at 0.01 level). This is a narrow range. Thus, the obtained median was reliable as the true median was found within a narrow range.

The distribution was a slightly positively skewed. The value of skewness was 0.1054. The negligible positive skewness indicated that the distribution approached almost the normal form.

The value of kurtosis of the distribution was 0.2517. The frequency distribution was slightly leptokurtic, i.e., more peaked than normal. See frequency polygon in Fig.1.

The standard deviation = 12.44. The quartile deviation = 8.52. The standard error of standard deviation = 0.38. The 'True standard deviation = $12.44 \pm (0.38 \times 2.58)$, which lies between 11.46 and 13.42 (at 0.01 level).

Fig.1: Frequency Polygon for the Distribution of Scores of Reading Test - Adult Participants



B. WRITING TEST - ADULT PARTICIPANTS

TABLE 5.2: FREQUENCY DISTRIBUTION OF THE SCORES OF WRITING TEST

Sl. No.	Class intervals	Mid point	f	d	fd	fd ²
1	6-7	6.5	6	-7	-42	294
2	8-9	8.5	9	-6	-54	324
3	10-11	10.5	14	-5	-70	350
4	12-13	12.5	19	-4	-78	312
5	14-15	14.5	21	-3	-63	189
6	16-17	16.5	25	-2	-50	100
7	18-19	18.5	30	-1	-30	30
8	20-21	20.5	32	0	0	0
9	22-23	22.5	28	1	28	28
10	24-25	24.5	26	2	52	104
11	26-27	26.5	20	3	60	180
12	28-29	28.5	15	4	60	240
13	30-31	30.5	13	5	65	325
14	32-33	32.5	7	6	42	252
15	34-35	34.5	5	7	35	245

N=270

Mean = 20.2

Median = 20.22

Mode = 20.26

The mean value was slightly less than that of median and mode. The frequency distribution was slightly negatively skewed. Standard error of the mean = 0.2848. The 'True' mean = $20.2 \pm (0.28 \times 2.58)$, which lies between 19.48 and 20.92 (at 0.01 level). This range is very narrow; thus the obtained mean was considered as reliable.

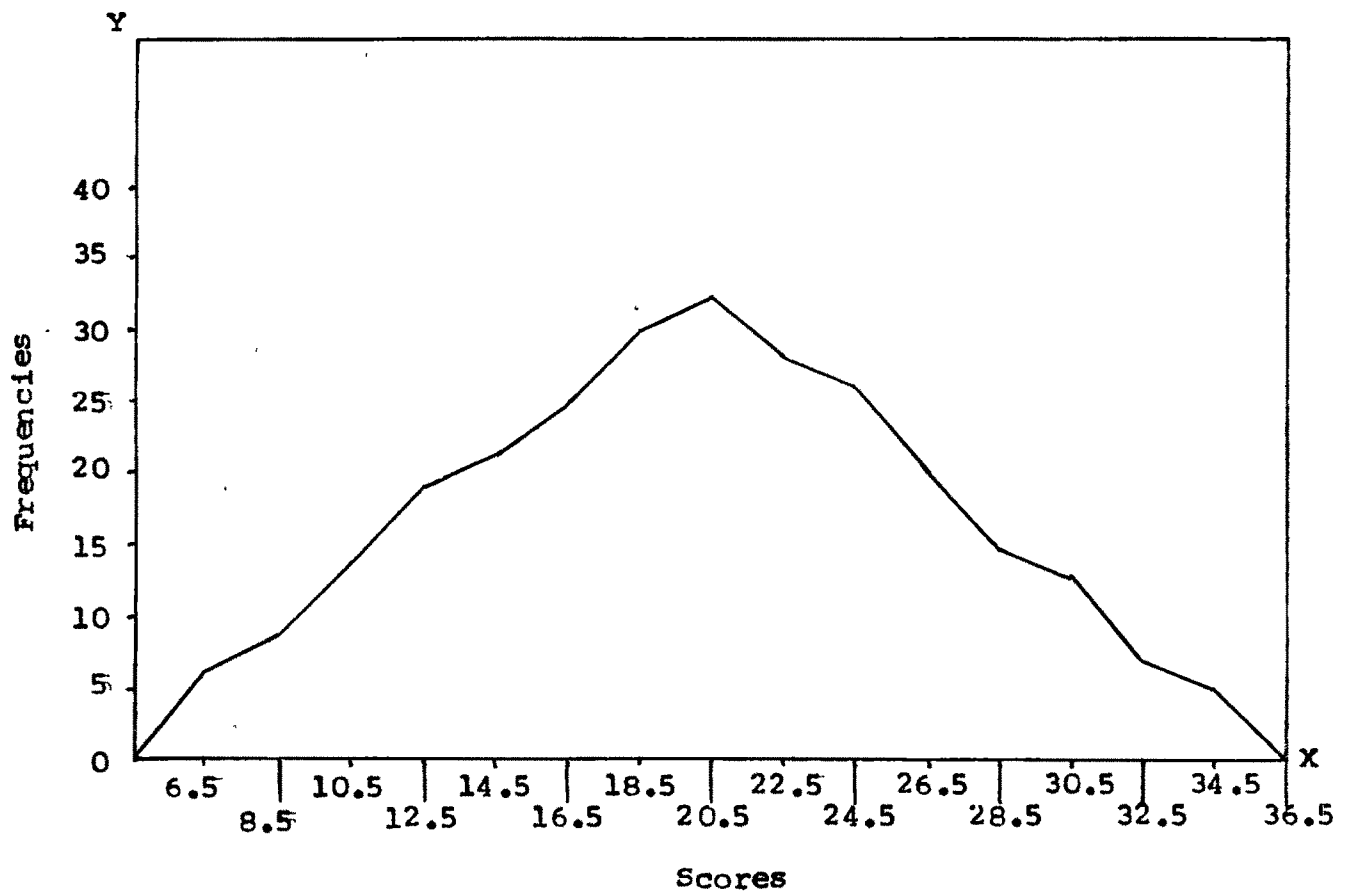
The standard error of the median = 0.35. The 'True' median = $20.22 \pm (0.35 \times 2.58)$, which lies between 19.32 and 21.12 (at 0.01 level). This is a very narrow range. Thus, the obtained median was reliable as the true median was found within a very narrow range of 19.32 and 21.12.

The frequency distribution was a slight negatively skewed. The value of skewness was (0.0906). This negligible negative skewness indicated the distribution as nearly normal.

The kurtosis value of the distribution was 0.2632 which was mesokurtic. See frequency polygon in Fig.2.

The standard deviation = 6.62. The quartile deviation = 4.76. The standard error of the standard deviation = 0.20. The 'True' standard deviation = $6.62 \pm (0.20 \times 2.58)$, which lies between 6.11 and 7.13 (at 0.01 level). This range is very narrow, thus the obtained standard deviation was reliable as the true standard deviation was in a narrow range.

Fig.2: Frequency Polygon for the Distribution of Scores of Writing Test - Adult Participants



C. ARITHMETIC TEST - ADULT PARTICIPANTS

TABLE 5.3: FREQUENCY DISTRIBUTION OF SCORES OF THE ARITHMETIC TEST

Sl. No.	Class intervals	Mid point	f	d	fd	fd ²
1	1-2	1.5	6	-7	-42	294
2	3-4	3.5	7	-6	-42	252
3	5-6	5.5	17	-5	-85	425
4	7-8	7.5	18	-4	-72	288
5	9-10	9.5	18	-3	-54	162
6	11-12	11.5	23	-2	-46	92
7	13-14	13.5	35	-1	-35	35
8	15-16	15.5	33	0	0	0
9	17-18	17.5	29	1	29	29
10	19-20	19.5	27	2	54	108
11	21-22	21.5	22	3	66	198
12	23-24	23.5	15	4	60	240
13	25-26	25.5	13	5	65	325
14	27-28	27.5	7	6	42	252
			N=270		-60	2700

Mean = 15.07

Median = 15.18

Mode = 15.40

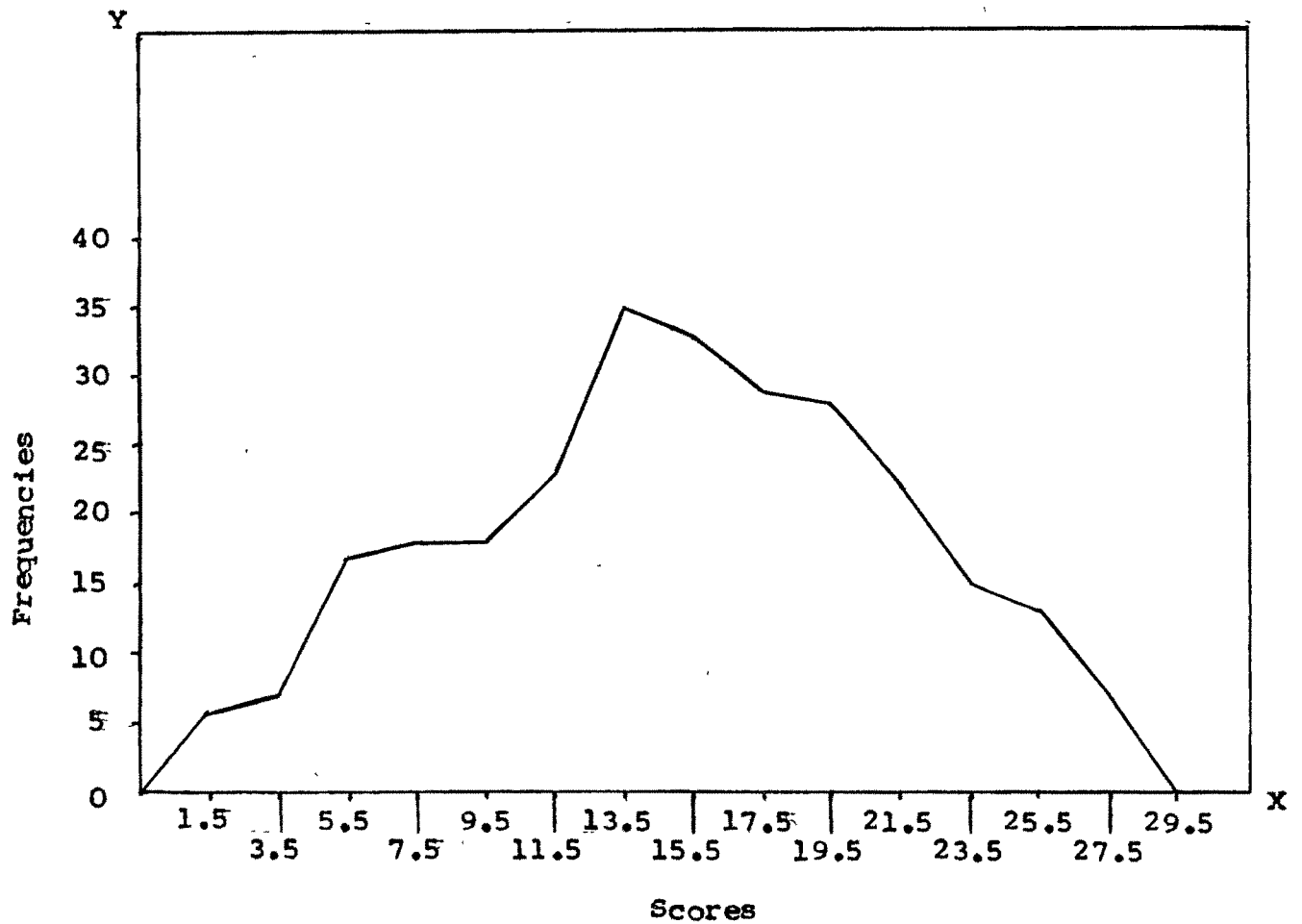
The mean value was slightly less than that of the median and mode. The frequency distribution is slightly a negatively skewed. The standard error of the mean = 0.27. The 'True' mean = $15.07 \pm (0.27 \times 2.58)$ which lies between 14.38 and 15.76 (at 0.01 level). The range was very narrow. Thus, the obtained mean was reliable as the true mean was within a narrow range.

The standard error of median = 0.33. The 'True' median = $15.18 \pm (0.33 \times 2.58)$ which lies between 14.33 and 16.03 (at 0.01 level). This range was narrow; thus, the obtained median was considered as reliable. The distribution was slightly negatively skewed. The skewness value was (-0.0524). Hence, the distribution approached almost the normal form.

The kurtosis value of the distribution was 0.22 which was slightly leptokurtic (i.e., the frequency distribution was more peaked than normal). See frequency polygon in Fig. 3.

Standard deviation = 6.309, quartile deviation = 3.98. Standard error of the standard deviation = 0.192. The 'True' standard deviation = $6.309 \pm (0.19 \times 2.58)$, which lies between 5.819 and 6.799 (at 0.01 level). This range is very narrow. Thus the obtained standard deviation was reliable as the true standard deviation was within a narrow range.

Fig.3: Frequency Polygon for the Distribution of Scores of Arithmetic Test - Adult Participants



D. AWARENESS - ADULT PARTICIPANTS

TABLE 5.4: FREQUENCY DISTRIBUTION OF AWARENESS SCORES OF THE ADULT PARTICIPANTS

Sl. No.	Class intervals	Mid point	f	d	fd	fd ²
1	10-14	12	4	-5	-20	100
2	15-19	17	2	-4	-8	32
3	20 - 24	22	9	-3	-27	81
4	25 - 29	27	16	-2	-32	64
5	30 - 34	32	29	-1	-29	29
6	35 - 39	37	23	0	0	0
7	40 - 44	42	56	1	56	56
8	45 - 49	47	81	2	162	324
9	50 - 54	52	30	3	90	270
10	55 - 59	57	20	4	80	320
			N=270	$\sum fd = 272$		
				$\sum fd^2 = 1276$		

Mean = 42.10

Median = 44.20

Mode = 48.40

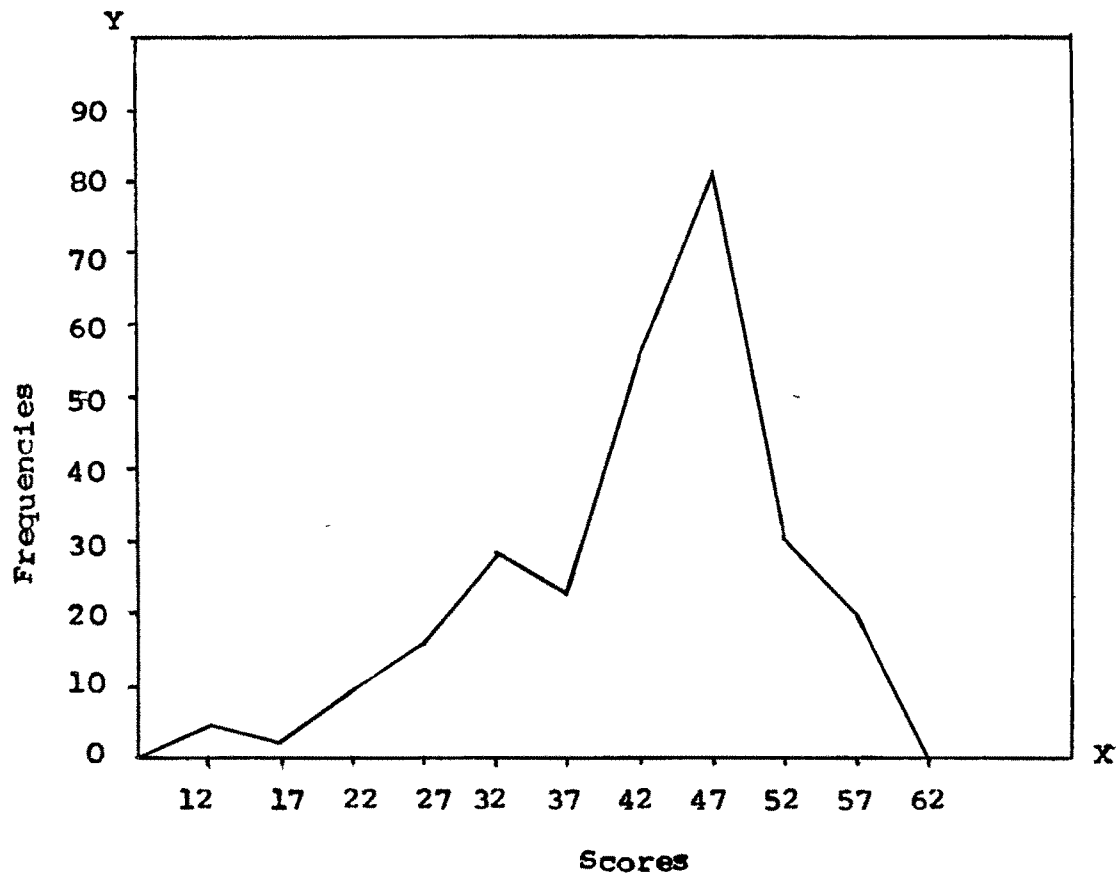
The mean value was less than that of median and mode. Hence the frequency distribution was considered as negatively skewed. The standard error of the mean = 0.74. The 'True' mean $42.10 \pm (2.59 \times 0.74)$, which lies between 40.21 and 43.88 (at 0.01 level). This is a very narrow range, as such, the obtained mean was reliable as the true mean was within a narrow range.

The standard error of the median = 0.935. The 'True' median = $44.2 \pm (2.59 \times 0.935)$, which lies between 41.79 and 46.61 (at 0.01 level). This was a narrow range. Thus, the obtained median was considered as reliable as the true median was within a narrow range. The distribution was slightly negatively skewed. The skewness value was 0.911.

The kurtosis value of the distribution was 0.235. The frequency distribution was slightly leptokurtic, i.e., it was more peaked than the normal. See the frequency polygon in Fig. 4.

The standard deviation = 9.63. The quartile deviation = 13.57. The standard error of the standard deviation = 0.535. The 'True' standard deviation = $9.63 \pm (2.59 \times 0.535)$, which lies between 8.24 and 11.02 (at 0.01 level). This range was very narrow. Thus, the obtained standard deviation was reliable as the true standard deviation was within a narrow range.

Fig.4: Frequency Polygon for the Distribution of Awareness Scores - Adult Participants



8. FUNCTIONALITY - ADULT PARTICIPANTS

TABLE 5.5: RESPONSES IN NUMBERS AND PERCENTAGES TO FUNCTIONALITY QUESTIONS BY THE RFLP GROUP

Facilities	Do you know?		Did you know before joining the center?		Were you taught at the center?		Have you made use of it?		No occas- Tried but could use it		Did not Have used it	
	Yes No		Yes No		Yes No		Yes No		also but not			
	2	3	4	5	6	7	8	9	10	11		
A. COOPERATIVES/BNKS												
1. Loans for housing	160 (59.26)	110 (40.74)	30 (18.75)	130 (81.25)	130 (48.14)	140 (51.85)	35 (21.88)	20 (12.50)	80 (55.62)	16 (10.00)		
2. Loans for handcart, rickshaws, autorick-shaws, sewing machines, panshops, etc.	88 (32.59)	182 (67.41)	2 (2.27)	86 (97.73)	75 (27.78)	195 (76.22)	18 (20.45)	22 (25.00)	28 (31.82)	20 (22.73)		
3. Savings account	236 (87.41)	34 (12.59)	8 (3.39)	228 (96.61)	230 (85.19)	40 (14.81)	91 (38.56)	34 (14.41)	56 (23.73)	55 (23.31)		
4. Loans for pumpsets, buffaloes, poultry, hybrid seeds etc.	192 (71.11)	78 (28.89)	2 (1.04)	190 (98.96)	190 (70.37)	80 (29.63)	88 (45.83)	20 (10.42)	60 (31.25)	24 (12.50)		

contd...

TABLE 5.5 (Contd.)

	1	2	3	4	5	6	7	8	9	10	11
B. POST AND TELEGRAPH											
1. Sending letters		225 (83.33)	45 (16.67)	156 (68.44)	69 (31.56)	199 (73.70)	71 (26.30)	50 (22.22)	0 (0.00)	71 (31.56)	104 (46.22)
2. Sending money orders		139 (51.48)	131 (48.52)	3 (2.16)	136 (97.84)	136 (50.37)	134 (49.63)	36 (25.90)	0 (0.00)	60 (43.17)	43 (30.94)
3. Sending telegrams		124 (45.93)	146 (54.07)	24 (19.35)	100 (80.65)	108 (40.00)	162 (60.00)	63 (50.81)	0 (0.00)	30 (24.19)	31 (25.00)
4. Savings account		214 (79.26)	56 (20.74)	4 (1.87)	210 (98.13)	210 (77.78)	60 (22.22)	67 (31.31)	12 (5.61)	57 (26.64)	78 (36.45)
C. PLACES WHERE HEALTH, AGRICULTURE AND OTHER FACILITIES ARE AVAILABLE											
1. Free medical care		174 (64.44)	96 (35.56)	5 (2.87)	169 (97.13)	165 (61.11)	105 (38.89)	37 (21.26)	3 (1.72)	9 (5.17)	125 (71.84)
2 Vaccination/Innoculation		194 (71.85)	76 (28.15)	42 (21.64)	152 (78.36)	140 (51.85)	130 (48.15)	38 (19.59)	4 (2.06)	22 (11.34)	130 (67.01)
3. Family planning programs		231 (85.56)	39 (14.44)	126 (54.55)	105 (45.45)	229 (84.81)	41 (15.19)	112 (48.48)	0 (0.00)	34 (14.72)	85 (36.80)

contd..

TABLE 5.5 (Contd.)

1	2	3	4	5	6	7	8	9	10	11
4. Fertilizers, hybrid seeds and insectici- des	171 (63.33)	99 (36.67)	18 (10.53)	153 (89.47)	163 (60.37)	107 (39.63)	113 (66.08)	14 (8.19)	35 (20.47)	9 (5.26)
5. Artificial insemination and animal care	92 (34.07)	178 (62.93)	8 (8.70)	84 (91.30)	84 (31.11)	186 (68.89)	42 (45.65)	11 (11.96)	31 (33.70)	8 (8.70)
6. Licences for handcarts, auto- rickshaws, cycle-rickshaws pan-beedi shop etc.	98 (36.30)	172 (63.70)	0 (0.00)	98 (100.00)	98 (36.30)	172 (63.70)	3 (3.06)	4 (4.08)	80 (81.63)	11 (11.22)
7. Ration cards	230 (85.19)	40 (14.81)	112 (48.70)	178 (51.30)	210 (77.78)	60 (22.22)	5 (2.17)	7 (3.04)	41 (17.83)	177 (76.96)

F. READING TEST - SCHOOL CHILDREN

TABLE 5.6: FREQUENCY DISTRIBUTION OF SCORES OF THE SCHOOL CHILDREN IN READING TEST

Sl. No.	Class intervals (scores)	Mid point	f	d	fd	fd ²
1	31-33	32	9	-5	-45	225
2	34-36	35	13	-4	-52	208
3	37-39	38	7	-3	-21	63
4	40-42	41	23	-2	-46	92
5	43-45	44	10	-1	-10	10
6	46-48	47	31	0	0	0
7	49-51	50	39	1	39	39
8	52-54	53	28	2	56	112
9	55-57	56	41	3	123	369
10	58-60	59	33	4	132	528
11	61-63	62	36	5	180	900
			N=270		356	2546
Mean = 50.95 Median = 51.82 Mode = 53.56						

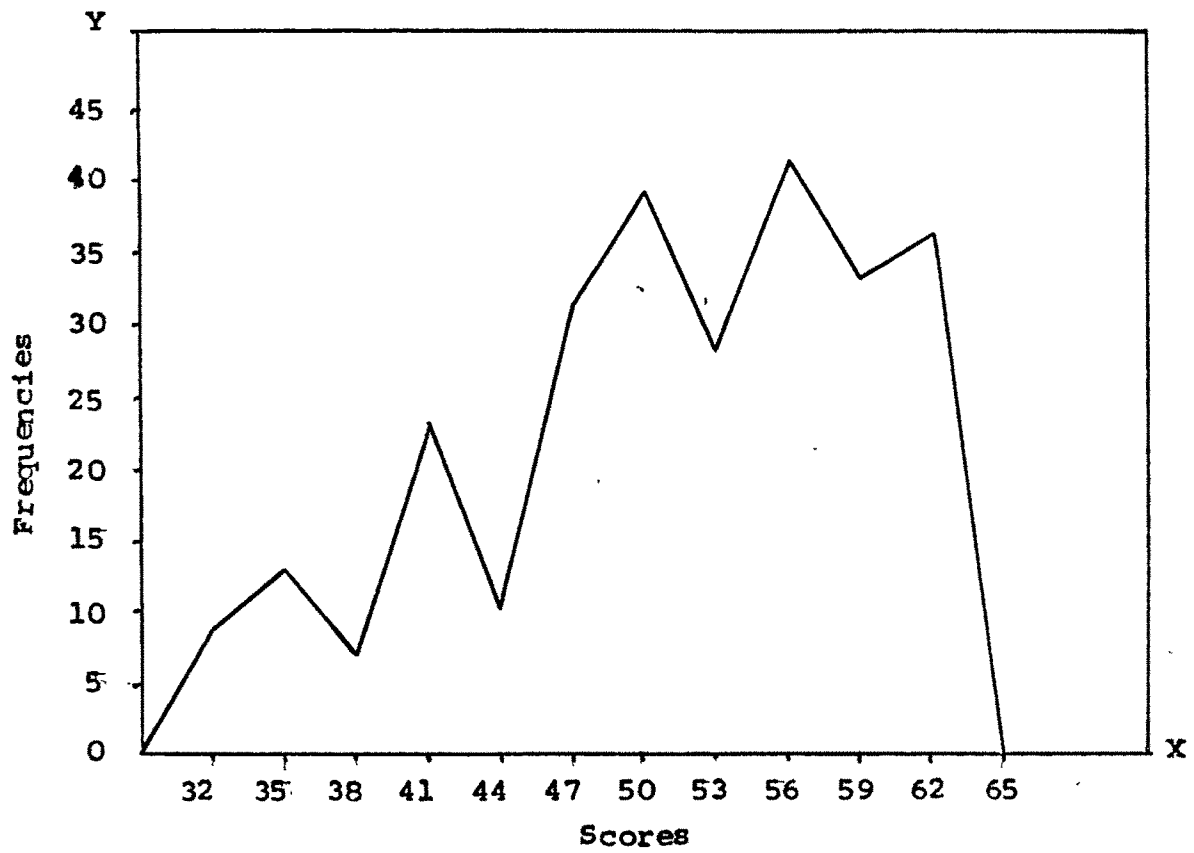
The mean value was less than those of median and mode. Hence, the distribution was slightly negatively skewed. The standard error of the mean = 0.50. The 'True' mean = $50.95 \pm (0.50 \times 2.58)$, which lies between 49.66 and 52.24 (at 0.01 level). This is a narrow range. Thus, the obtained mean was reliable because the true mean was within a narrow range.

The standard error of the median = 0.63. The 'True' median = $51.82 \pm (0.63 \times 2.58)$, which lies between 50.20 and 53.44 (at 0.01 level). This is a narrow range. Thus, the obtained median was reliable, because the true mean was within a narrow range. The distribution was negatively skewed because the scores were massed at the high end of the scale and spread out gradually toward the low end. The skewness value was 0.31.

The kurtosis value was 0.256. The frequency distribution was leptokurtic, i.e., more peaked than normal. See frequency polygon in Fig. 5.

The standard deviation = 8.31. The quartile deviation = 5.80. The standard error of the standard deviation = 0.35. The true standard deviation = $8.31 \pm (0.35 \times 2.58)$, which lies between 7.41 and 9.21 (at 0.01 level). This is a narrow range. The obtained standard deviation was reliable because the true standard deviation was within a narrow range.

Fig.5: Frequency Polygon for the Distribution of Scores of School Children in Reading Test



G. WRITING TEST - SCHOOL CHILDREN

TABLE 5.7 : FREQUENCY DISTRIBUTION OF SCORES OF THE
SCHOOL CHILDREN IN WRITING TEST

S1. No.	Class intervals (scores)	Mid point	f	d	fd	fd ²
1	14-15	14.5	8	-5	-40	200
2	15-17	16.5	5	-4	-20	80
3	18-19	18.5	10	-3	-30	90
4	20-21	20.5	23	-2	-46	92
5	22-23	22.5	31	-1	-31	31
6	24-25	24.5	26	0	0	0
7	26-27	26.5	36	1	36	36
8	28-29	28.5	31	2	62	124
9	30-31	30.5	34	3	102	306
10	32-33	32.5	31	4	124	496
11	34-35	34.5	35	5	175	875
N=270					332	2330
Mean = 26.95 Median = 27.28 Mode = 27.94						

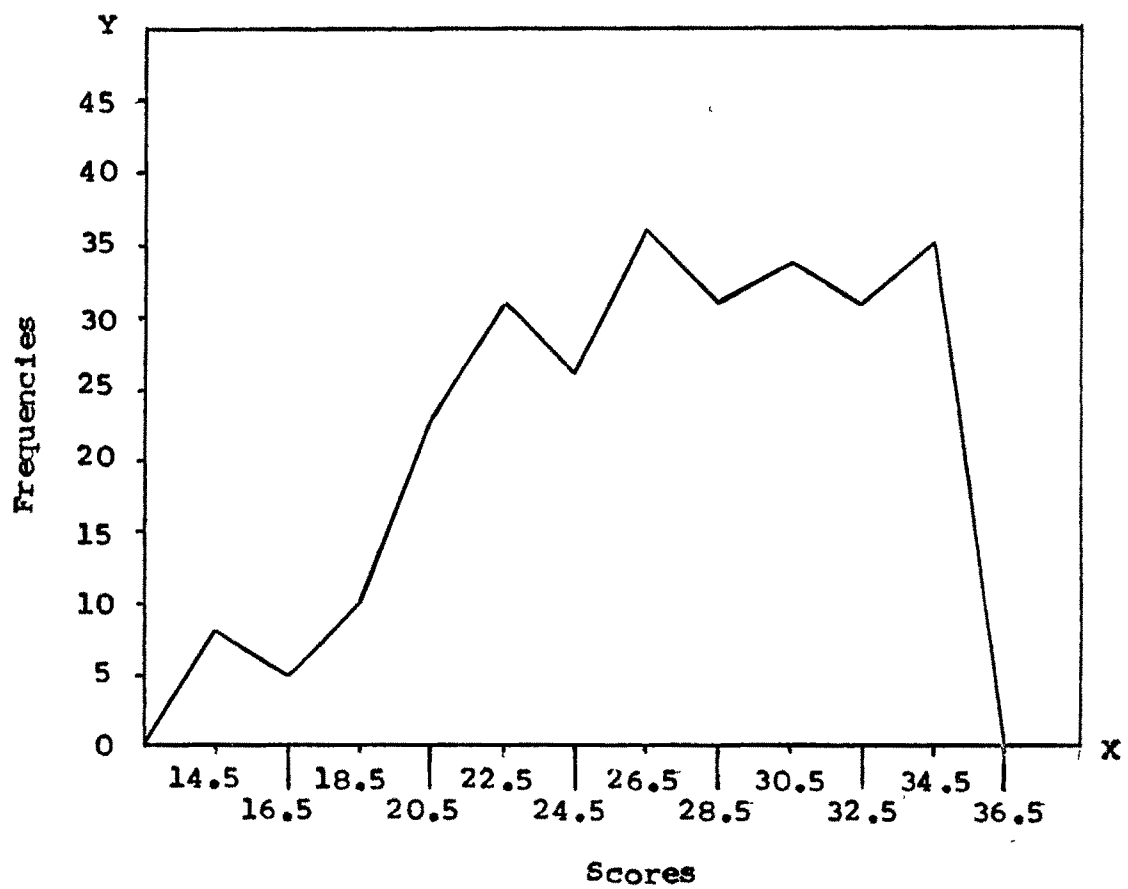
The mean value was slightly less than those of median and mode. The distribution was slightly negatively skewed. The standard error of the mean = 0.32. The 'true' mean = $26.95 \pm (0.32 \times 2.58)$, which lies between 26.13 and 27.77 (at 0.01 level). This range was narrow. The obtained mean was reliable. The true mean was within a narrow range.

The standard error of the median = 0.47. The 'True' median = $27.28 \pm (0.40 \times 2.58)$, which lies between 26.25 and 28.31 (at 0.01 level). This range was found to be very narrow. Thus, the obtained median was reliable. The skewness distribution value was 0.061. This small value indicated a slightly negative skewness.

The kurtosis value was 0.301. The distribution was platykurtic, i.e., less peakedness than normal. See frequency polygon in fig.6.

The standard deviation = 5.34. The quartile deviation = 4.26. The standard error of the standard deviation = 0.23. The 'True' standard deviation = $5.34 \pm (0.23 \times 2.58)$, which lies between 4.75 and 5.93 (at 0.01 level). The range was narrow. Thus, the obtained standard deviation was reliable as the true standard deviation was within the narrow range.

Fig.6: Frequency Polygon for the Distribution of Scores of School Children in Writing Test



H. ARITHMETIC TEST - SCHOOL CHILDREN

TABLE 5.8: FREQUENCY DISTRIBUTION OF SCORES OF THE SCHOOL CHILDREN IN ARITHMETIC TEST

S1. No.	Class intervals (scores)	Mid point	f	d	fd	fd ²
1	1-2	1.5	4	-6	-24	144
2	3-4	3.5	8	-5	-40	200
3	5-6	5.5	15	-4	-60	240
4	7-8	7.5	20	-3	-60	180
5	9-10	9.5	22	-2	-44	88
6	11-12	11.5	25	-1	-25	25
7	13-14	13.5	33	0	0	0
8	15-16	15.5	34	1	34	34
9	17-18	17.5	29	2	58	116
10	19-20	19.5	25	3	75	225
11	21-22	21.5	24	4	96	284
12	23-24	23.5	14	5	70	350
13	25-26	25.5	12	6	72	432
14	27-28	27.5	5	7	35	245
			N=270		187	2663

Mean = 14.98

Median = 14.97

Mode = 15.15

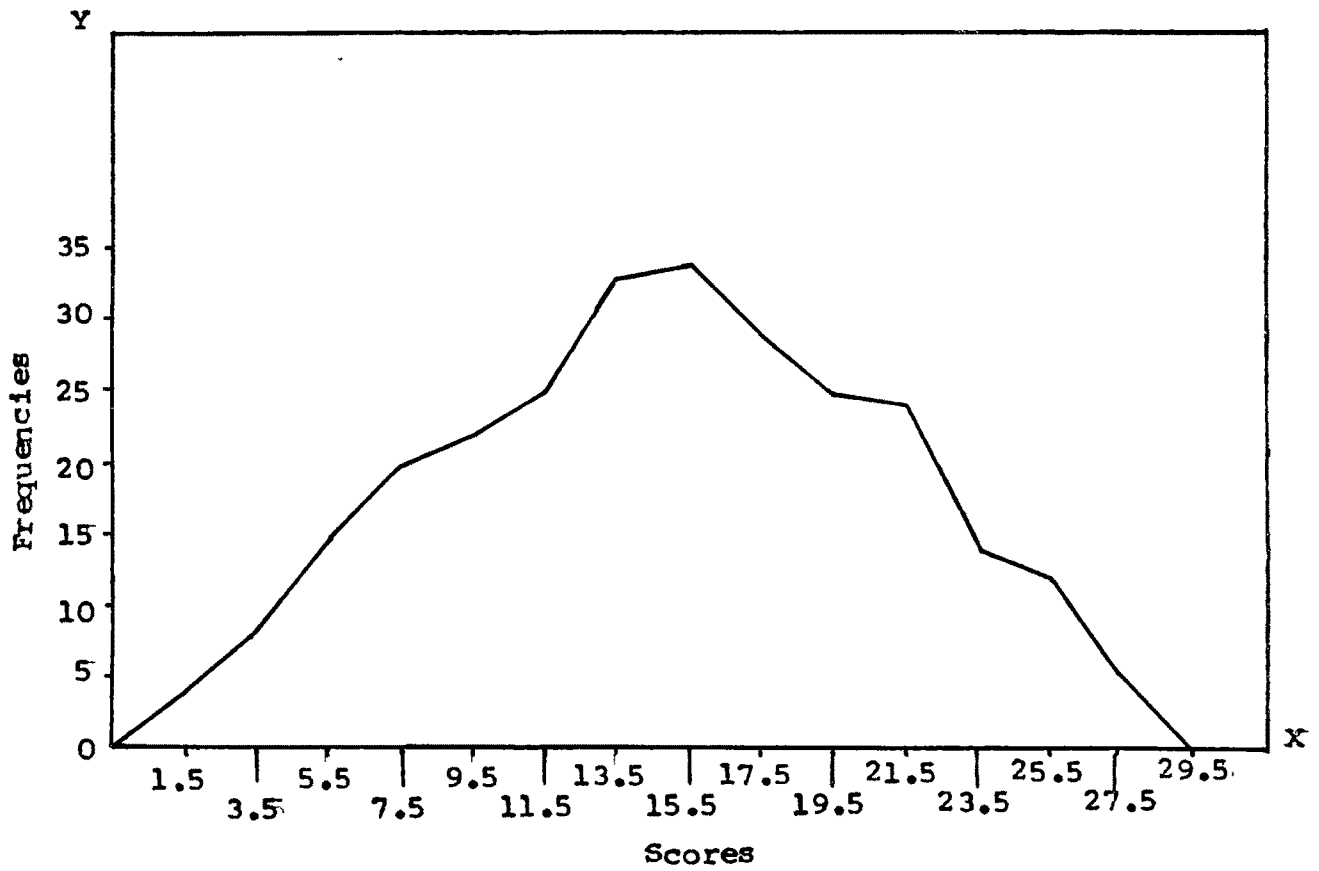
The mean value was slightly less than those of median and mode. The distribution was slightly a negatively skewed. The standard error of the mean = 0.37. The 'True' mean = $14.88 \pm (0.37 \times 2.58)$, which lies between 13.93 and 15.83 (at 0.01 level). The obtained mean was reliable as the 'True' mean was within a narrow range.

The standard error of the median = 0.46. The 'True' median = 14.97 (0.46×2.58), which lies between 13.79 and 16.15 (at 0.01 level). The 'True' median was within a narrow range. Thus, the obtained median was reliable as the true median was within a narrow range. The value of skewness was (-0.043). The distribution was slightly negatively skewed, but its negligibility made it almost a normal distribution.

The kurtosis value of the distribution was 0.275. The distribution was slightly platykurtic, i.e., flatter or less peakedness than normal. See frequency polygon in fig.7.

The standard deviation = 6.14. The quartile deviation = 4.57. The standard error of the standard deviation = 0.26. The 'True' standard deviation = $6.14 \pm (0.26 \times 2.58)$, which lies between 5.47 and 6.81 (at 0.01 level). It is within a narrow range. Thus, the standard deviation was reliable because the 'True' standard deviation was within a narrow range.

Fig.7: Frequency Polygon for the Distribution of Scores of School Children in Arithmetic Test



II SECTION TWO : COMPARISON OF LITERACY SKILLS BETWEEN THE ADULT LEARNERS AND THE SCHOOL CHILDREN

The International Institute for Adult Literacy has published report (Literacy Project, 1971) on the various world literacy projects, observation of which indicates that the majority of world literacy projects syllabi were equivalent to the third and fourth standard of the elementary school. It was deemed that the literacy skills acquired by the adult learners of RFLP also would more than likely be of similar level. Thus, it was compared with a test of the third standard level school children.

A. PROCEDURE IN COMPARING THE LITERACY SKILLS BETWEEN ADULT LEARNERS AND SCHOOL CHILDREN

Whether or not the performance of both groups -
1. adult learners of RFLP and 2. third standard school children differed significantly, was studied. The following procedure was adopted.

Large random sample of 270 of unrelated groups of the third standard primary school children was drawn. The means of the test results were derived from them. Then, a standard error of the difference between the unrelated means was calculated with the following formula.

$$\sigma_{\bar{d}} = \sqrt{\sigma_{M_1}^2 + \sigma_{M_2}^2} \quad \text{where, (Guilford, 1956)}$$

$\sigma_{\bar{d}}$ = Standard error of the difference
between uncorrelated means.

$\sigma_{M_1}^2$ = Standard error of the mean of the
first sample

$\sigma_{M_2}^2$ = Standard error of the mean of the
second sample.

The standard error (SE) of the difference between the two means was computed by calculating the standard error of the two means themselves with the following formula.

$$\frac{\sigma}{\sqrt{N}} = \text{SE of the mean}$$

After calculating D and the standard error of D, the 't' ratio was estimated by applying the formula

$$t = \frac{D}{\sigma_M^d \text{ or } SE_D}, \text{ where,}$$

σ_M^d or SE_D = Standard error of the difference between the two sample means.

The significance of the mean as a deviation from the hypothesized value of the mean was tested by taking 't' value from the table with d.f. 538 ($n_1 + n_2 - 2 = 270 + 270 - 2 = 538$). It was checked whether the obtained 't' value reached the required 't' value at 0.05 and 0.01 levels of significance. If the obtained 't' value did not reach the required value for the chosen level of significance (at 0.01 level), the deviation was to be attributed to chance and the hypothesis was to be accepted. If the obtained 't' value reached the required value for the chosen level of significance, the hypothesis was to be rejected.

B. THREE HYPOTHESES NOS. 1 to 3 - LITERACY DIFFERENCES BETWEEN THE RFLP ADULTS AND SCHOOL CHILDREN

HYPOTHESIS NO.1: There exists no difference in the achievement of reading skills between the RFLP participants and the school children.

The mean achievement score of the RFLP participants was 36.91 and its standard deviation was 12.44 while the mean achievement score for school children was 50.95 and its standard deviation was 8.31. The mean achievement score of school children was higher than that of the RFLP participants.

TABLE 5.9: PERCENTAGES OF MEAN SCORES OF THE RFLP PARTICIPANTS AND OF SCHOOL CHILDREN IN THE LITERACY TESTS

Name of the Test	Maximum score	Mean score		Percentage of mean score	
Reading test	63	PRFLP	36.92	PRFLP	58.59
		S.C	50.95	S.C	80.87

Writing test	35	PRFLP	20.20	PRFLP	57.71
		S.C	26.95	S.C	77.0

Arithmetic test	37	PRFLP	15.07	PRFLP	55.81
		S.C	14.88	S.C	55.11

PRFLP = Participants of RFLP, S.C = School children

Table 5.9 and figure 8 indicate a higher achievement by the school children than the RFLP participants in the literacy tests. Figure 9 with two ogives for scores of 1. The PRFLP and 2. the school children provides a comparison between the two groups. The cumulative percentage curve of the school children lies to the right of the cumulative percentage curve of the PRFLP. An observation at the figures show that the children's scores are consistently higher than the adult participants. Differences in achievement between the two groups are shown by the distances separating the two curves at various levels.

Fig.8: Bar Diagram Showing the Mean Literacy Scores of the RFLP Participants and School Children Literacy Tests

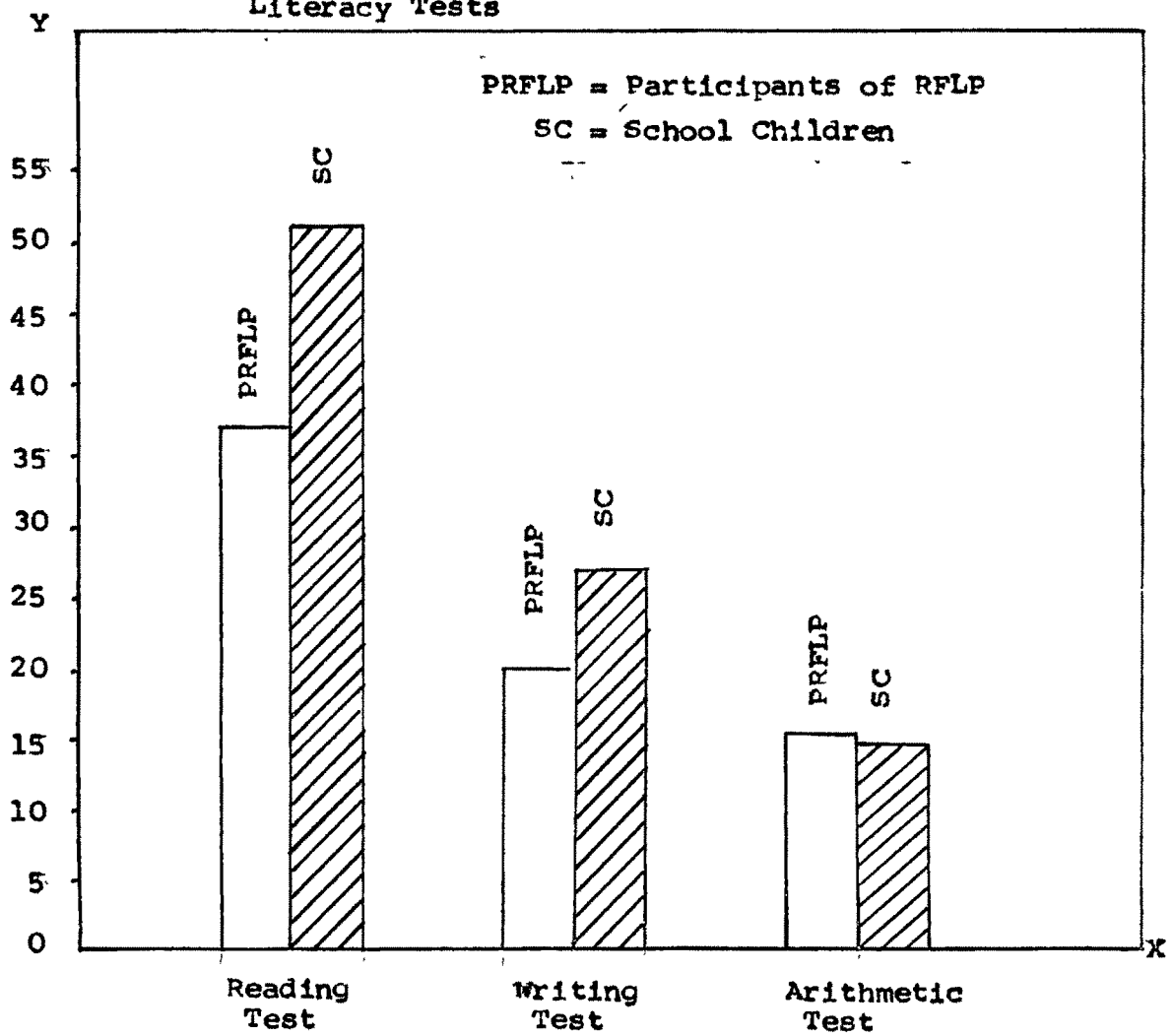


Fig.9: Ogive Curves for the Scores Obtained by RFLP Participants and School Children in the Reading Tests

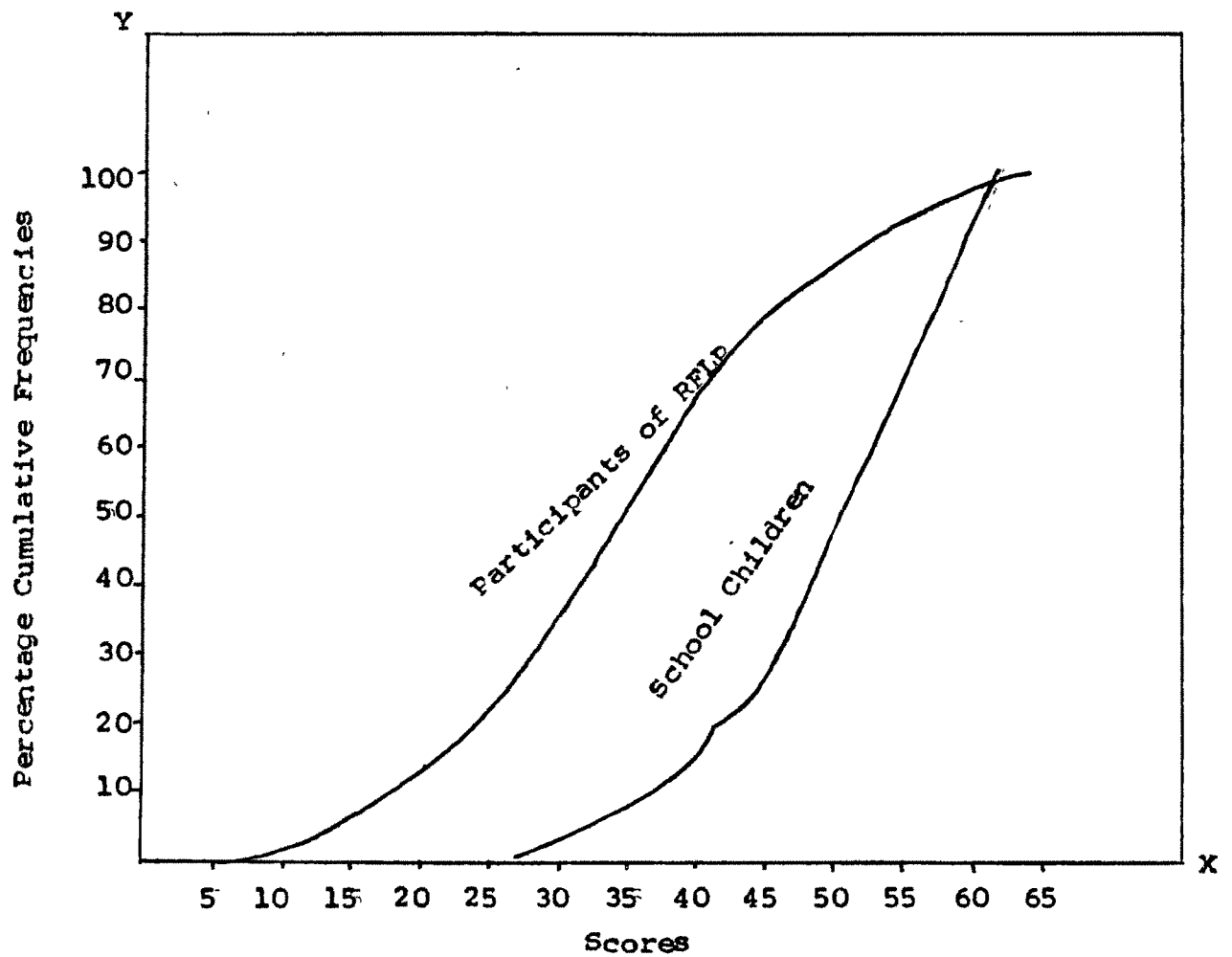


TABLE 5.10: COMPARISON OF READING SKILLS BETWEEN THE RFLP GROUP AND SCHOOL CHILDREN

Group	N	Mean	S.D	SE _M	SE _d	't'
RFLP	270	36.01	12.44	0.53		
School children	270	80.95	6.31	0.50	0.728	19.28

The obtained 't' value is 19.28. The table value for d.f. 538 is found to be 1.96 at 0.05 level and 2.58 at 0.01 level. The obtained value is found to be higher than the tabled value at 0.01 level. Hence, the difference is significant beyond 0.01 level. The null hypothesis is therefore not accepted. The achievement of the school children is higher than the RFLP group.

As described earlier that the reading speed and comprehension both constituted the score of the reading test. Hence, their collected data were analysed and the results are discussed.

TABLE 5.11: PERCENTAGE OF WORDS READ CORRECTLY BY THE RFLP GROUP

No. of respondents who took the test	Total No. of words in the passage	Average No. of words read correctly	Percentage of words read correctly
270	135	105.3	78

**TABLE 5.12: PERCENTAGE OF WORDS READ CORRECTLY BY THE
SCHOOL CHILDREN**

No. of respon- dents who took the test	Total No. of words in the passage	Average No. of words read correctly	Percentage of words read correctly
270	135	107	79.26

A comparison of Tables 5.11 and 5.12 indicates the average percentages of words read correctly by the RFLP and school children groups were 78, and 79.26 respectively. The RFLP group and the school children, both have reasonably well acquired the minimum reading skills. But the percentage of words read correctly by the children is higher than by the RFLP group.

**TABLE 5.13: WORDS READ CORRECTLY BY THE RFLP GROUP
(PER MINUTE)**

Sl. No.	Words read correctly per minute	No. of respondents	Percen- tages
1	0 *	6	2.2
2	1-10	21	7.8
3	11-20	32	11.9
4	21-30	36	13.5
5	31-40	76	28.1
6	41-50	66	24.3
7	51-60	28	10.6
8	61-70	5	1.6
		270	100.0

* Could not attempt test.

TABLE 5.14: WORDS READ CORRECTLY BY THE SCHOOL CHILDREN
(PER MINUTE)

S1. No.	Words read correctly per minute	No. of respondents	Per- centages
1	1-10	8	3.0
2	11-20	21	7.8
3	21-30	26	9.6
4	31-40	32	11.8
5	41-50	52	19.3
6	51-60	72	26.7
7	61-70	39	21.8
		270	100.0

Of the RFLP group, approximately 64% read more than 30 words per minute, 12% read more than 50 words per minute; 77% could read words ranging from 21 to 50 words per minute. A majority of 78% of the participants seem to have achieved reading skills at varying degrees, i.e., 21 to 70 words. The negative aspect is that 19.7% read slowly and haltingly between the words; 2.2% were unable to read anything from the passage.

Seventynine percent of the school children read more than 30 words per minute, 48% read more than 50 words per minute. Only 40% of them could read between 21 to 50 words per minute. A majority of 89% of them had achieved reading skills of varying degrees, i.e., 21 to 70 words.

Contrastingly, there was not any one in the school children group who was unable ^{to} read the passage at all. However, there were some readers on the low side, 10% of them read 21 to 30 words per minute. Only 11% read slowly and haltingly.

TABLE 5.15: AVERAGE READING SPEED OF THE RFLD GROUP

S1. No.	Words read per minute	Frequency	Time taken to complete the passage (mins.)	Total time taken by all to complete the passage (mins)
1	0	6	-	-
2	1-10	21	26	546
3	11-20	32	9	288
4	21-30	36	5	180
5	31-40	76	3 1/2	266
6	41-50	66	3	198
7	51-60	28	2 1/2	70
8	61-70	5	2	10
		270		1560

Average reading speed 23.39 per minute.

TABLE 5.16: AVERAGE READING SPEED OF THE SCHOOL CHILDREN

S1. No.	Words read per minute	Frequency	Time taken to complete the passage (mins).	Total time taken by all to complete the passage (mins.)
1	10 or below	8	26	104
2	11-20	21	9	94
3	21-30	26	5	65
4	31-40	32	3 1/2	56
5	41-50	52	3	78
6	51-60	72	2 1/2	90
7	61-70	59	2	59
		270		546

Average reading speed 33.34 per minute.

The tables 5.15 and 5.16 show that the RFLP group could read the test passage with an average speed of 23.39 words per minute and the school children with a speed of 33.34 words per minute. The school children's higher average reading speed indicates their higher achievement than that of the RFLP group.

TABLE 5.17: COMPREHENSION SCORES OF THE RFLP GROUP

Sl. No.	Comprehension scores	Frequency	Total score for all respondents
1	0	6	0
2	1	11	11
3	2	11	22
4	3	34	102
5	4	28	112
6	5	47	235
7	6	45	270
8	7	25	175
9	8	24	192
10	9	10	90
11	10	13	130
12	11	16	176
		270	1515

Average comprehension score = 5.6

TABLE 5.18 : COMPREHENSION SCORES OF THE SCHOOL CHILDREN

Sl. No.	Comprehension scores	Frequency	Total score for all children
1	0	5	0
2	1	11	11
3	2	12	24
4	3	33	99
5	4	25	100
6	5	46	230
7	6	41	246
8	7	25	175
9	8	28	224
10	9	16	144
11	10	12	120
12	11	16	176
		270	1549

Average comprehension score = 5.74

As described earlier, the comprehension test was administered on the RFLP group and school children after they had completed reading the passage. The average comprehension scores of the RFLP group and school children were 5.6 and 5.74 respectively. Though the difference between the comprehension mean scores was not much, the observable trend was that the RFLP group lagged slightly in comprehension than the school children. This indicates that generally the participants understood about half of what they read.

HYPOTHESIS NO.2: There exists no difference in the achievement of writing skills between the RFLP group and the school children.

The mean achievement score of the RFLP group was 20.2 and the standard deviation was 6.62. The mean achievement score of the school children was 26.95 and the standard deviation was 5.34. The higher achievement of the school children than the RFLP group is very obvious in Table 5.19 and figure 10.

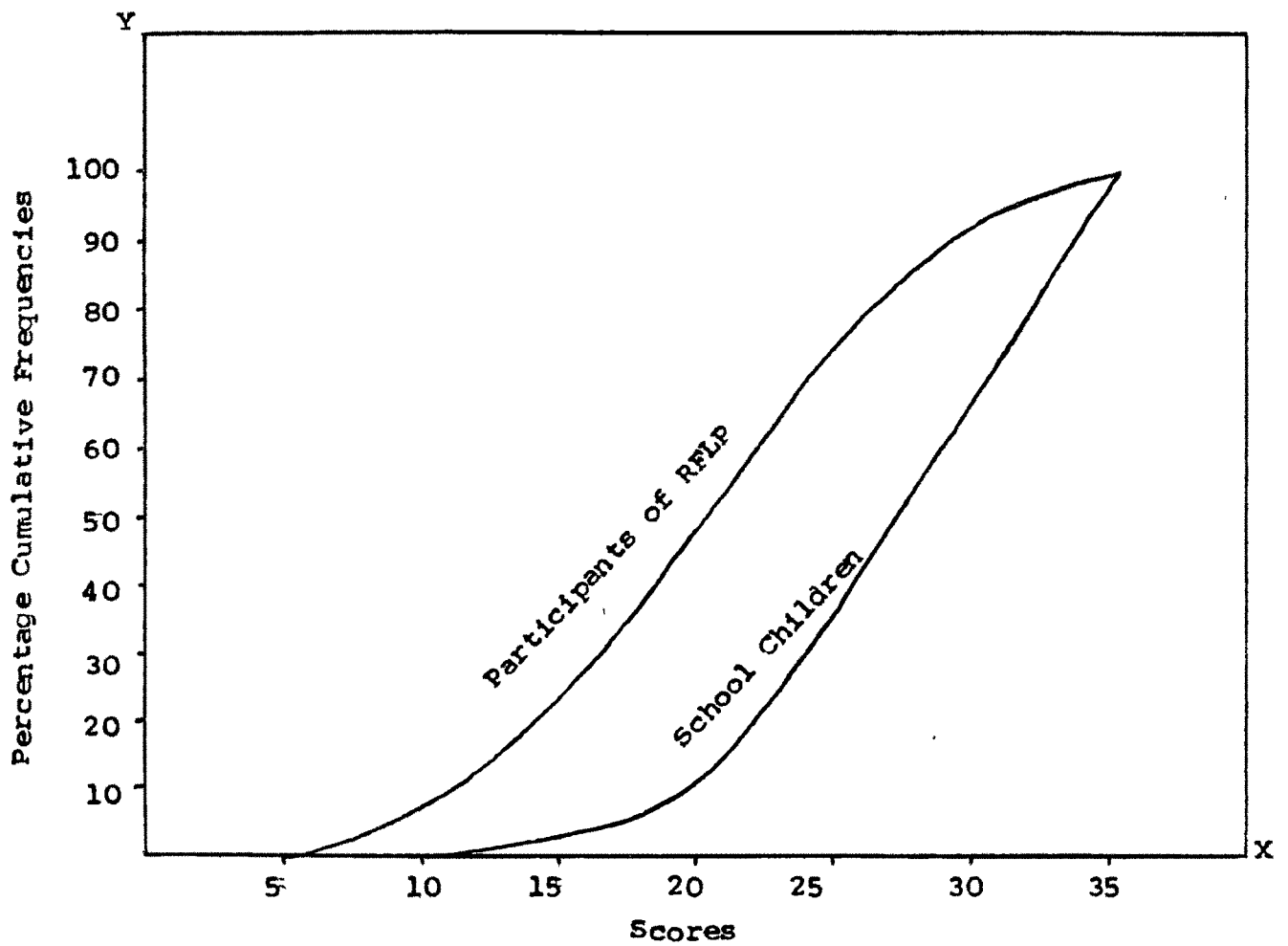
Two ogives for the writing test scores are plotted on the same coordinate in figure 10. The ogive for the school children lies to the right of the ogive for RFLP participants. They indicate the scores of children as consistently higher than those of adult participants. The distances separating the two curves at various levels indicate the differences in the achievements of both groups.

The ogives, representing the scores on writing test are plotted on the same coordinate axes in Fig.10 provide a useful overall comparison of the two groups - RFLP group and school children. The ogive representing the school children lies to the right of the ogive representing the RFLP group. It shows the score of school children as consistently higher than those of the adult participants. Differences in achievement between the two groups are shown by the distances separating the two curves at various levels.

TABLE 5.19: COMPARISON OF WRITING SKILLS BETWEEN THE RFLP GROUP AND SCHOOL CHILDREN

Group	N	Mean	SD	SE _M	SE _d	't'
RFLP	270	20.2	6.62	0.28		
School children	270	26.95	5.34	0.32	0.425	15.88

Fig.10: Ogive Curves for the Scores Obtained by
RFLP Participants and School Children in
Writing Test



The obtained 't' value was 15.88. The table value for d.f. 538 was 1.96 at 0.05 level and 2.58 at 0.01 level. The obtained value was higher than the table value at 0.01 level. Hence, the difference was significant beyond 0.01 level. The null hypothesis was therefore not accepted. The achievement of the school children was higher than the RFLP group.

TABLE 5.20: NUMBER OF WORDS WRITTEN CORRECTLY BY THE
RFLP GROUP (PER MINUTE)

S1. No.	No. of words written correctly per minute	No. of respondents	Perce- tage
1	0	8	3.1
2	1-2	28	10.2
3	3-4	57	21.3
4	5-6	54	20.0
5	7-8	47	17.4
6	9-10	42	15.4
7	11-12	34	12.6
		270	100.0

TABLE 5.21 : NUMBER OF WORDS WRITTEN CORRECTLY BY THE
SCHOOL CHILDREN (PER MINUTE)

S1. No.	No. of words written correctly per minute	No. of respondents	Perce- tage
1	1-2	28	10.4
2	3-4	44	16.3
3	5-6	52	19.3
4	7-8	64	23.6
5	9-10	45	16.7
6	11-12	37	13.7
		270	100.0

From the RFLP group, approximately 3.1 percent were unable at all to write the dictation; 10.2 percent wrote 1 to 2 words per minute; 41.3 percent wrote between 3 and 6 words. So, 45.4 percent of the respondents could write more than 6 words per minute.

From the school children group, all could take the dictation. 10.4 percent were able to write 1 to 2 words per minute; 35.6 percent between 3 and 6 words. So, 54 percent of this group could write more than 6 words per minute.

TABLE 5.22: AVERAGE WRITING SPEED OF THE RFLP GROUP

No. of respondents	270
No. of words written	111702
No. of mistakes committed	1569
No. of words written correctly	110133
Total time taken for writing (in minutes)	27519
Average speed	4.0

TABLE 5.23: AVERAGE WRITING SPEED OF THE SCHOOL CHILDREN

No. of respondents	270
No. of words written	12960
No. of mistakes committed	1502
No. of words written correctly	11458
Total time taken for writing (in minutes)	2289
Average speed	5.0

The average writing speed per minute was 4 and 5 words per minute for the RFLP group and the school children respectively. The school children performed better than the RFLP group.

HYPOTHESIS NO.3 : There exists no difference in the achievement of Arithmetic skills between the RFLP group and School children

The mean achievement score of the RFLP group was 15.07 and the standard deviation was 6.29 while the achievement score of the school children was 14.88 and the standard deviation was 6.14. The difference between the mean scores of these two groups is very small.

In contrast to the reading and writing of both groups, which have been discussed preceedingly, the difference between the mean achievement scores of both groups in arithmetic was negligible. See table 5.24 and figure 11.

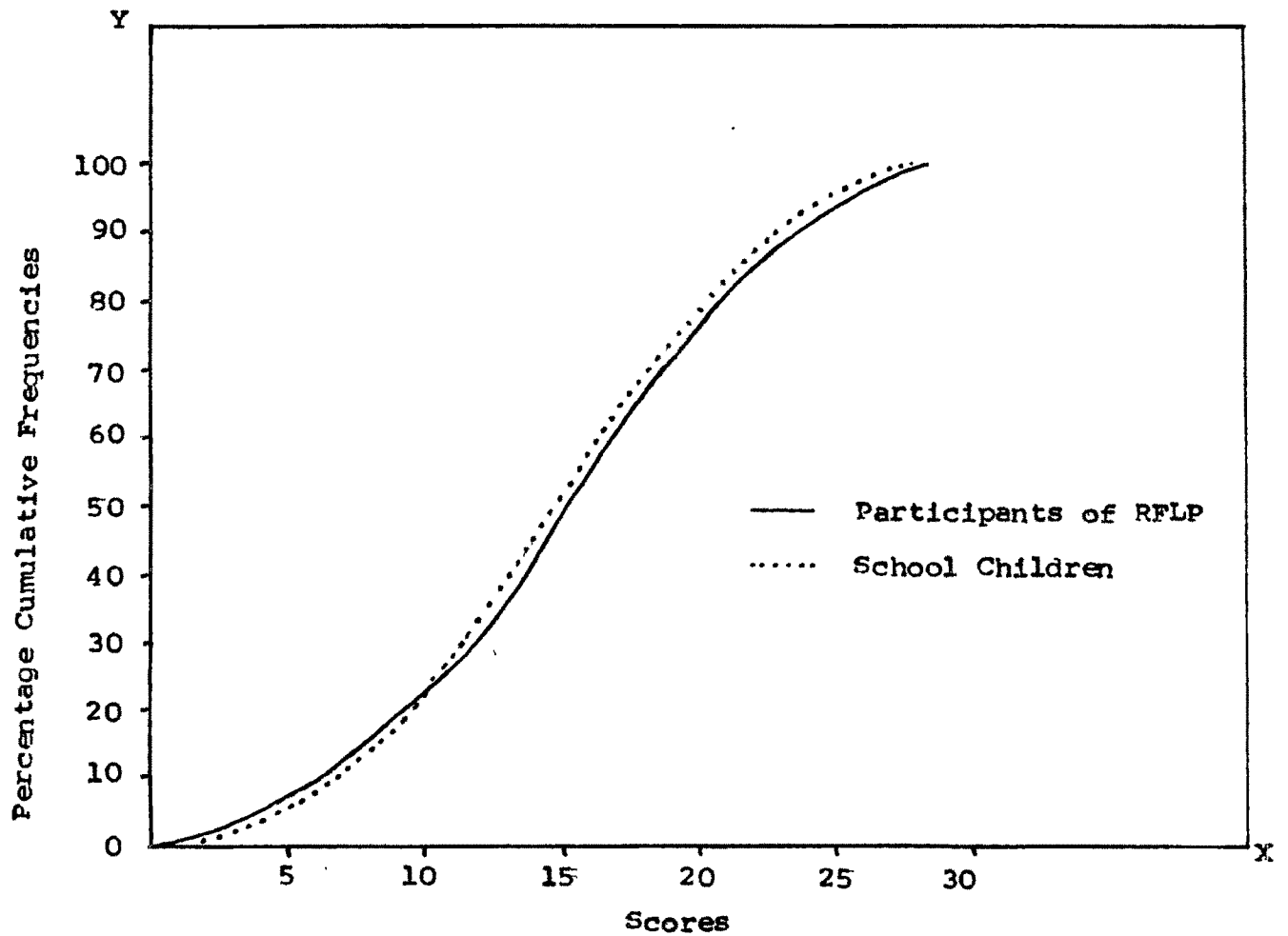
Figure 11 shows two ogives for the performance of arithmetic test by both the groups RFLP and school children. The cumulative percentage curve of the school children overlaps the like of RFLP group to a great extent; the almost overlapping distribution of each-other indicates insignificant difference between the achievements of both groups in arithmetic.

TABLE 5.24: COMPARISON OF ARITHMETIC SKILLS BETWEEN THE RFLP GROUP AND SCHOOL CHILDREN

Group	N	Mean	SD	SE _M	SE _d	't'
RFLP	270	15.07	6.292	0.27		
School Children	270	14.88	6.14	0.37	0.458	0.41

The obtained 't' value was 0.41. The table value for d.f. 538 was 1.96 at 0.05 level and 2.58 at 0.01 level. The obtained value 0.41 was less than the table value both at 0.05 and 0.01 levels. The difference was not significant at

Fig.11: Ogive Curves for the Scores Obtained by RFLP Participants and School Children in Arithmetic Test



the chosen level. The null hypothesis was therefore accepted. It was concluded that no differences existed in the achievement of arithmetic skills between the RFLP group and school children of third standard.

TABLE 5.25: MEAN SCORE OF THE RFLP GROUP AND SCHOOL CHILDREN IN LITERACY TESTS

Name of the test	Mean score of the RFLP group	Mean score of the school children
Reading test	36.92	50.95
Writing test	20.20	26.95
Arithmetic test	15.07	14.88

The mean score of the RFLP group in reading and writing were significantly lower than the mean score of the children. Hence, it may be concluded that the school children had attained a higher achievement level in reading and writing skills than the RFLP participants. Conversely stated that the attainment of the RFLP participants in reading and writing was lesser than their counterparts of the formal school system.

Although the syllabus content for instructions to both, the formal school system children and the adult was of the same level, the RFLP groups attainment was lower than that of the formal school children.

One of the reasons for relatively lower reading and writing skills among the RFLP group could be that their classes were usually conducted at nights, the lessons are crowded into a one or one and one-half hour sessions, and were conducted by non-professional teachers.

Another reason for the higher achievement of school children in reading and writing could be that they attended classes regularly for longer duration of three years. This ^{have} may/been more effective in their learning than by the adult groups.

There was no difference in the achievement of arithmetic skills between the RFLP group and school children of third standard. The probable explanation for this could be that the maturity level of the adults helped them to solve arithmetic problems better than the children. The maturity in thinking for adults may have be compensated by the long period of training which the school children received in the school. The practical worldly knowledge may have helped adults whereas the quick grasping and mechanical arithmetic skills may have helped the children to solve the problems. These may be some reasons which have led to the attainment of equal arithmetic skills by the adult participants and third standard school children. The arithmetic mean values of the RFLP group and the school children were 15.67 and 14.88 respectively. The difference that existed between these two mean values was so small that it was statistically insignificant.

III SECTION THREE: RELATIONSHIP BETWEEN EACH OF THE SELECTED VARIABLES AND LITERACY ACHIEVEMENT

A. FIVE HYPOTHESES NOS. 4 to 8 - RELATIONSHIP BETWEEN EACH OF THE SELECTED VARIABLES AND LITERACY ACHIEVEMENT

HYPOTHESIS NO.4: There exists no relationship between the achievement of literacy skills and the age of the participants

All the respondents of the RFLP group were categorized according to three age groups, viz., very young adults (15-25 years), young adults (26-35 years), middle aged adults (over 35 years). The frequencies of respondents falling in these age groups were 100, 130 and 40 respectively.

The attainments of the adult participants of the RFLP in literacy (reading, writing, and arithmetic scores put together) were studied in relation to their age distribution.

CHI-SQUARE TEST: On the basis of performance in reading, writing and arithmetic test, the participants of the RFLP program were classified into (1) high, (2) medium, and (3) low achievers according to the age group to which they belong.

On the basis of hypothesis formulated, one expects to find no significant relationship between age and literacy achievement. To test this proposition, the chi-square test of independence in contingency table was applied.

TABLE 5.26: RELATIONSHIP BETWEEN AGE AND LITERACY ACHIEVEMENT

Sl. No.	Age groups	Literacy achievement			Total
		Low Below 43	Medium 43-84	High Above 84	
1	Very young (15-25 years)	20 (20.4)	35 (34.4)	45 (41.1)	100
2	Young (26-35)	28 (31.8)	43 (44.7)	59 (53.4)	130
3	Middle age (over 35)	18 (9.8)	15 (13.8)	7 (16.4)	40
		66	93	111	270

(Figures in parentheses are expected frequencies)

d.f. = (3-1) (3-1) = 4

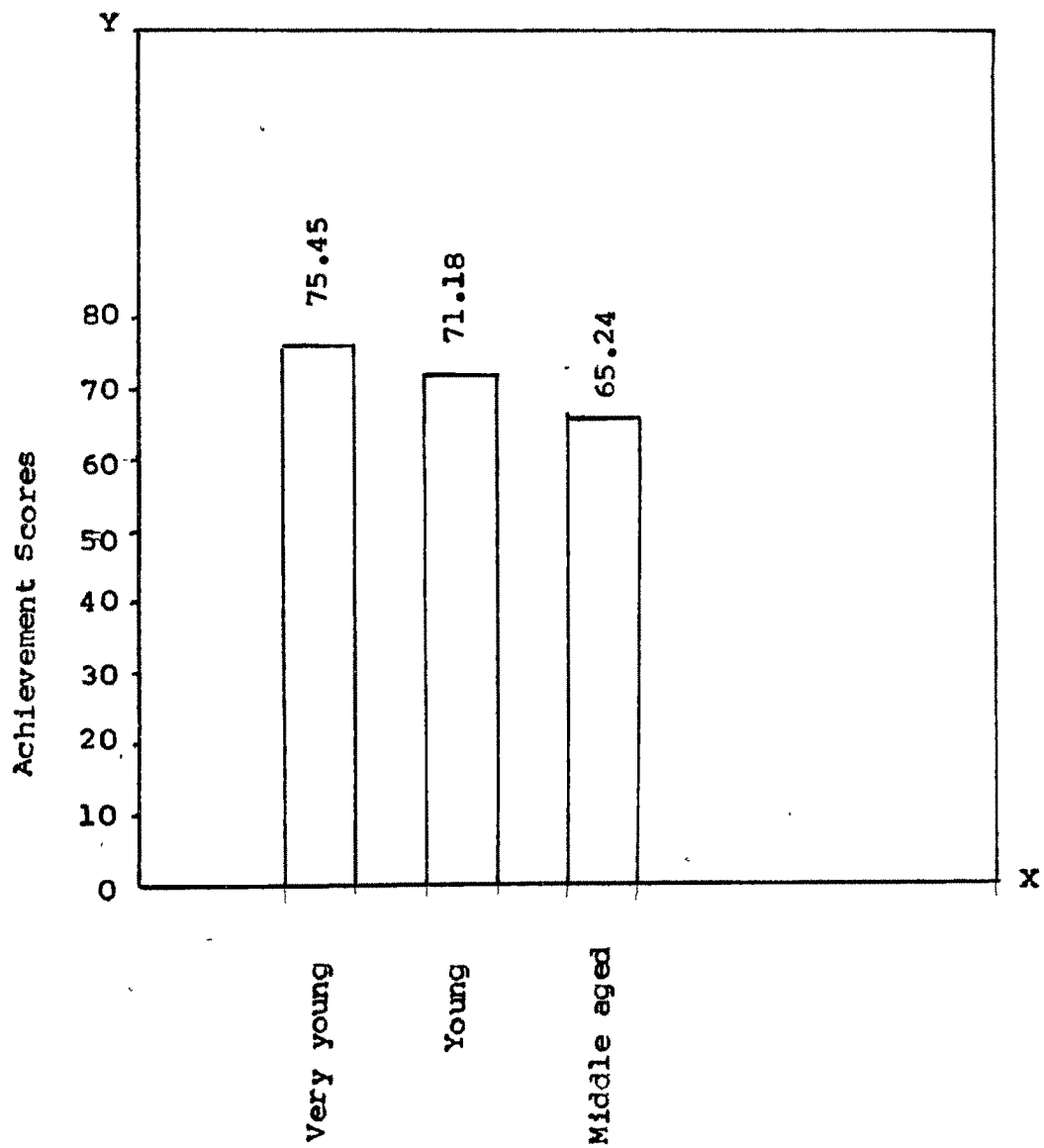
$\chi^2 = 13.97$ (Significant at 0.01 level).

The chi-square test of independence between the literacy achievement and age yielded a value of 13.97. For 4 df, the table values were 9.488 at 0.05 level and 13.277 at 0.01 level respectively. The observed result was significant beyond 0.01 level. Therefore, the null hypothesis was not accepted. Thus, age and literacy skills were found to be significantly related to each other.

ACHIEVEMENT LEVEL: Fig. 12 indicates that the very young age group had the highest literacy mean score of 75.45 followed by the young age group 71.18, and the middle aged group 65.24. The middle aged group had the lowest literacy mean score. As the age advances, the achievement level tends to decrease.

This finding is corroborated by a pilot study conducted by the Directorate of Adult Education (DDAE, 1973).

Fig.12: Bar Diagram Showing the Mean Literacy Achievement of Participants of Different Age Groups



This study revealed "the age of participants in literacy program was inversely related to their literacy attainment". That is, "the participants of younger age group faired better in literacy test as compared to those in older age group". The reasons for low achievement by the elder people may be because of their low retentional power, poor motivation to learn, lack of interest in literacy.

HYPOTHESIS NO.5: There exists no relationship between the achievement of literacy skills and the caste groups of the participants

The participants of the RFLP group were divided into three major caste groups, viz., 1. scheduled castes (SC), 2. backward castes (BC) and 3. forward castes (FC). This classification was in line with classifications of the state governments. The frequencies of the respondents in these caste groups were 112, 110 and 48 respectively.

CHI-SQUARE TEST: On the basis of their performance in reading, writing, and arithmetic tests, the participants were classified into three categories - 1. high, 2. medium, and 3. low achievers according to the caste groups to which they belonged.

TABLE 5.27: RELATIONSHIP BETWEEN CASTE AND LITERACY ACHIEVEMENT

Sl. No.	Caste groups	Literacy achievement			Total
		Low	Medium	High	
1	S.C	52 (38.1)	38 (34.4)	22 (39.4)	112
2	B.C	30 (37.5)	32 (33.8)	48 (38.7)	110
3	F.C	10 (16.4)	13 (14.8)	25 (16.9)	48
		92	83	95	270

(Figures in parentheses are expected frequencies); df = 4

$\chi^2 = 21.36$ (significant at 0.01 level).

The obtained chi-square value was 21.36. For 4 d.f., the table value were 9.488 at 0.05 level and 13.277 at 0.01 level respectively. Thus, the calculated chi-square value was significant beyond 0.01 level of confidence and the null hypothesis was not accepted. There appeared to be a positive association between the caste groups of the participants and their literacy achievement.

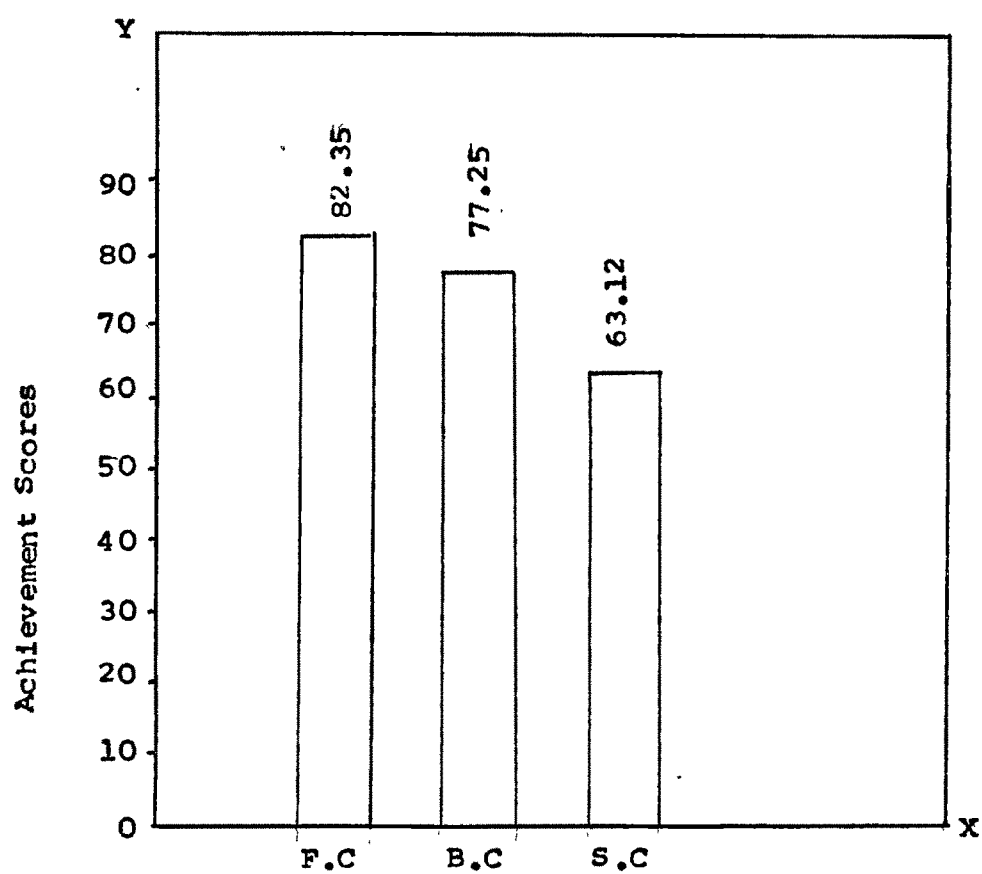
ACHIEVEMENT LEVEL : Among the three caste groups as shown in Fig. 13, the forward castes obtained the highest mean literacy score of 82.35 followed by the backward castes (77.25). The literacy achievement was low in the scheduled castes (63.12). The different levels of attainment of mean literacy skills among the caste groups may be for the following reasons:

In the caste hierarchy, forward castes have been enjoying the privilege of having education. These people have shown a desire to become literate and to catch up with their own caste people who with more education were enjoying better privileges of life.

The next place went to the backward castes in the descending order of mean literacy skills. This may be due to their engagement in such activities which required functional contact with the outside world and vigorous use of literacy skills. Another important contributory factor may be that these castes have been striving for higher level of living through attainment of education.

The schedule castes showed mean literacy scores of 63.12 indicating rather low literacy achievement level. The schedule castes, which are considered as lower castes in the Indian society, are largely engaged in manual labor and have not had proper environments for improving their literacy skills.

Fig.13: Bar Diagram Showing the Mean Literacy Achievement of Participants of Different Caste Groups



HYPOTHESIS NO.6: There exists no relationship between the achievement of literacy skills and the family income of the participants

The participants by their monthly family income were grouped into three - 1. below Rs. 300/-; 2. between Rs. 301 to Rs. 500/-; 3. above Rs. 500/-. Another dimension of participants, i.e., their performance in reading/writing/arithmetic tests was also classified into three groups - 1. high, 2. medium, and 3. low. Both dimensions were arranged ordinally for correlations.

CHI-SQUARE TEST: The relationship between the family income of the participants and their literacy achievement was tested for independence with the chi-square technique.

TABLE 5.28: RELATIONSHIP BETWEEN INCOME AND LITERACY ACHIEVEMENT

Sl. No.	Monthly family income	Literacy achievement			Total
		Low	Medium	High	
1	Below Rs.300/-	48 (31.7)	32 (40.8)	22 (29.5)	102
2	Rs. 500/-	25 (38.6)	63 (49.6)	36 (35.8)	124
3	Above Rs.500/-	11 (13.7)	13 (17.8)	20 (12.7)	44
		84	108	78	270

(Figures in parentheses are expected frequencies); $df = 4$
 $\chi^2 = 26.72$ (significant at 0.01 level).

The chi-square test yields a value of 26.72. For 4 d.f, the table value was 9.4888 at 0.05 level and 13.277 at 0.01 level respectively. The calculated chi-square value was significant beyond 0.01 level. Hence, the null hypothesis was disproved. The inference was not there was a significant relationship between the literacy achievement and the family income of the participants.

ACHIEVEMENT LEVEL: An examination of Fig.14 indicates that the mean achievement score values increase with the increase in the family income. The mean literacy achievement score value was 68.60 for participants with the low family income and the highest literacy mean achievement score value of 83.52 was for the group of participants with the highest family monthly income.

Generally, the monthly family income seemed to have in an influence on the outlook of the family members. It raised their economic status, which in turn enhanced their social status. At this point they realized that the literacy will further enhanced their socio-economic status. Their higher income provides them a cushion of better sustaining themselves. Thus, they were motivated to learn the literacy skills which would enable them to earn more. Their desire to become literate and to retain literacy skills for their immediate benefit may be the probable convincing reason of better achievement in literacy skills by those in higher income group.

HYPOTHESIS NO.7: There exists no relationship between the marital status and the literacy achievement of participants.

The adult women participants were divided into two groups 1. married and 2. unmarried. The frequencies of the respondents falling in these two groups were 128 and 142 respectively.

CHI-SQUARE TEST: The chi-square test in contingency tables was employed to examine the significance of the relationship between the literacy achievement of the participants and their marital status.

Fig.14: Bar diagram showing Mean Literacy Achievement of Participants of Different Income Groups

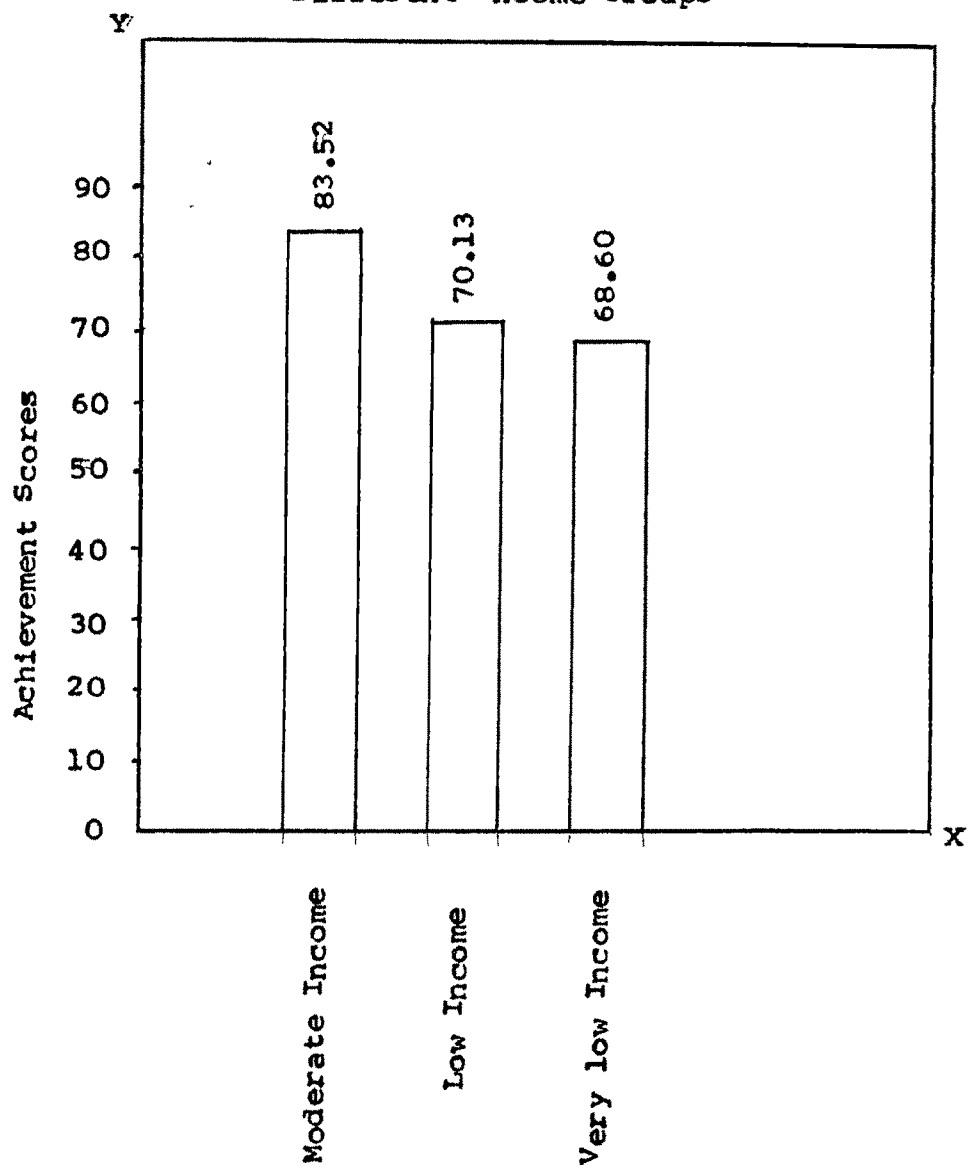


TABLE 5.29: RELATIONSHIP BETWEEN MARITAL STATUS AND LITERACY ACHIEVEMENT

Sl. No.	Marital status	Literacy achievement			Total
		Low	Medium	High	
1	Married	57 (44.1)	38 (36.5)	33 (47.4)	128
2	Unmarried	36 (48.9)	39 (40.5)	67 (52.6)	142
		93	77	100	270

(Figures in parentheses are expected frequencies); $df = 2$

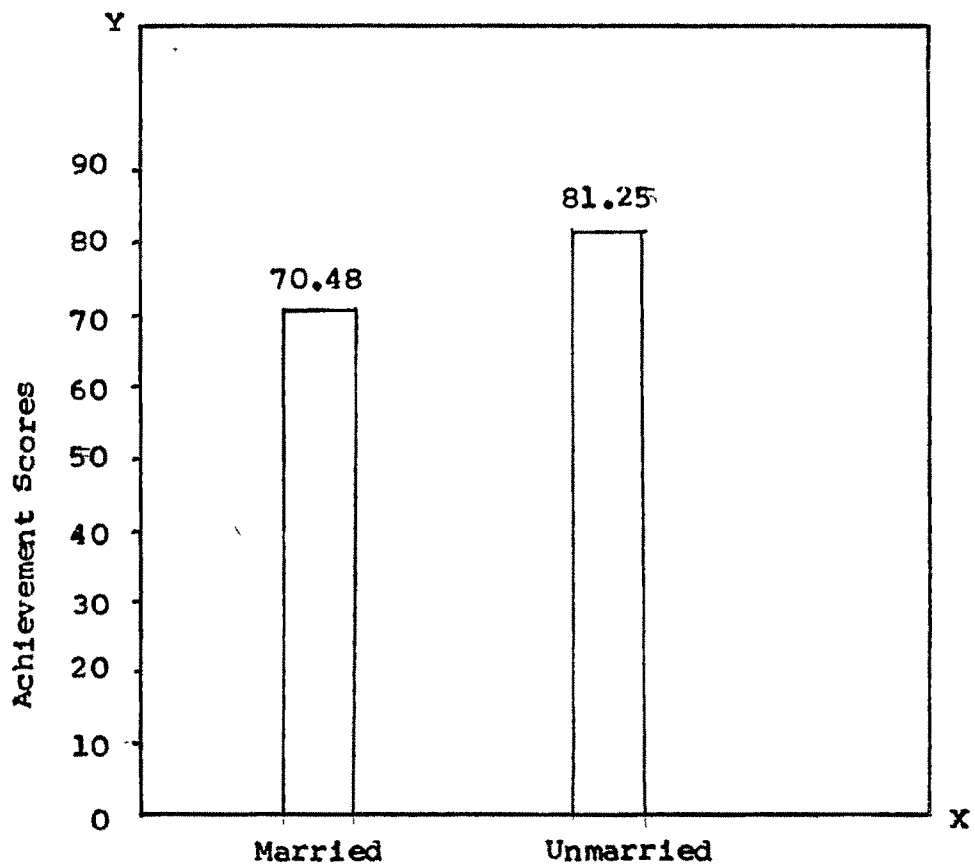
$\chi^2 = 19.50$ (at 0.01 level).

The chi-square test of independence between the literacy achievement and marital status yielded the value of 19.50. For 2 df ., the table values were 5.991 at 0.05 level and 0.210 at 0.01 level. The observed result was significant beyond 0.01 level. Therefore, the null hypothesis was not accepted. It may be concluded that there was a positive association between the literacy achievement of the participants and their marital status.

ACHIEVEMENT LEVEL: As it appeared from figure 15, the mean achievement score of the married group was 70.48 whereas the mean achievement score of the unmarried group was 81.25. It indicated that the unmarried women performed better than the married ones. The achievement level tended to decrease when the women were married.

The probable reason for the decrease in the literacy achievement by the married women was that they are pre-occupied with house chores and other responsibilities such as towards attending to their husbands, children, etc. As such,

Fig.15: Bar diagram Showing Mean Literacy Achievement of Married and Unmarried Participants



they may tend not to reinforce their learning. The unmarried women were devoid of such extra responsibilities. Therefore, they could learn better because their minds absorbed better.

HYPOTHESIS NO.9: There exists no relationship between the achievement of literacy and occupation of the participants

CHI-SQUARE TEST: The participants occupation-wise were divided into four groups (labour, cultivation, caste, occupation and service). The relationship between the occupation and their literacy achievement was tested for independence by means of the chi-square technique.

TABLE 5.30: RELATIONSHIP BETWEEN OCCUPATION AND LITERACY ACHIEVEMENT

Sl. No.	Occupation	Literacy achievement			Total
		Low	Medium	High	
1	Labor	46 (30.0)	21 (24.4)	21 (33.6)	88
2	Cultivation	22 (25.9)	35 (21.1)	29 (29.0)	76
3	Caste occupation	13 (18.4)	15 (15.0)	26 (20.6)	54
4	Service	11 (17.7)	14 (14.4)	27 (19.8)	52
		92	75	103	270

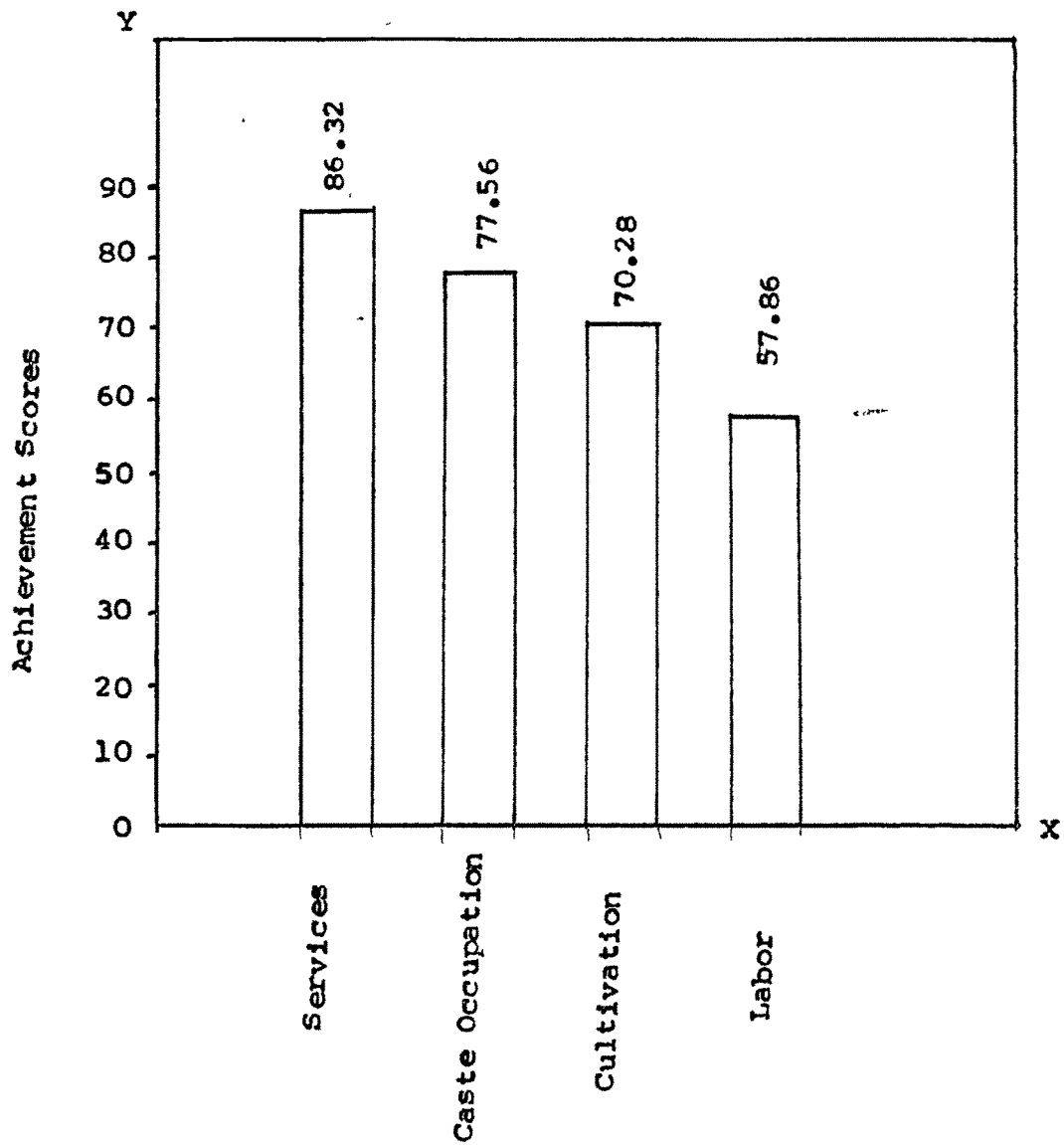
(Figures in parentheses are expected frequencies); $df = 6$;
 $\chi^2 = 23.20$ (significant at 0.01 level).

The chi-square analysis for the relation between the occupation and literacy achievement gave a chi-square value of 23.20. Six degrees of freedom was significant at 0.01 level. Hence, the null hypothesis was not accepted. It

appeared that there was a positive association between the occupation and the literacy achievement of participants.

ACHIEVEMENT LEVEL: As revealed by fig.16 the mean achievement score of the service occupation group was the highest (86.32) followed by the 'caste occupation' group (77.56). The mean achievement score of the labor occupation group was the lowest (57.86) followed by 'cultivation' occupation group (70.28). Persons who were in service, such as, in domestic private or government etc., may have been aware that the literacy would help them to carry out their work more effectively. This awareness on their part might have made them to achieve highest literacy. The probable reason for the labour occupation group to have obtained low literacy may be due to improper frame of mind, which again may have been either because of improper atmosphere and facilities at home.

Fig.16: Bar diagram Showing Mean Literacy Achievement of Participants from Different Occupations



**IV SECTION FOUR: RELATIONSHIP BETWEEN SELECTED VARIABLE
AND AWARENESS LEVEL**

A. AWARENESS - ANALYSIS: Thirty nine items were identified under 'awareness', which was divided into five areas namely, 1. social awareness, 2. political awareness, 3. agriculture and animal husbandry awareness, 4. health and family planning awareness, and 5. legal awareness. Each areas description is as under:

1. 'Social Awareness' consisted of twelve items which were: a. the name of program which the participants were attending; b. financier of the RFLP, c. about giving dowry, d. about accepting dowry, e. whether allowing a Harijan to draw water from the well, f. approval of dowry system, g. approval of untouchability, h. approval of child marriage, i. approval of drinking alcohol, j. approval of gambling, k. approval of bonded labor and l. about compulsory education.

2. The area of 'political awareness' had four items. They were about a. minimum age for voting, b. name of M.L.A. of the respondent's constituency, c. name of Chief Minister of Tamilnadu, and d. the respondent voting against her choice for a candidate.

3. 'Agriculture and Animal Husbandry Awareness' included three items. They were about a. place to take a buffalo for insemination, b. where to take a diseased animal, and c. knowledge of the improved seeds.

4. The area of 'Health and family planning consisted fourteen items. They were about a. and b. superstition of witch doctor, c. not taking bath in winter, d. washing hands before meals, e. rinsing hands after urination, f. cleaning hands with soap after bowel movement, g. urinating at any

place outside the toilet, h. defecating at any place outside the toilet, i. throwing rubbish in the streets, j. spitting at any place, k. adoption of family planning, l. if smoking is desirable, m. importance of protecting water from diseases, and n. necessity of vaccination.

5. The area of 'Legal Awareness' consisted six items, which were about a. and b. minimum age for boys' and girls' marriage, c. minimum wage, d. knowledge of one's rights, e. respondent's reaction of not receiving the minimum wage, and f. reaction to the harassment by a government official.

TABLE 5.31: RELATIONSHIP BETWEEN THE LEVEL OF AWARENESS AND THE FIVE VARIABLES

CATEGORIES OF AWARENESS ITEMS

SA = Social awareness; PA = Political awareness;

LA = Legal awareness;

AAHA = agricultural & animal husbandry awareness;

HFFA = health & family planning awareness.

Sl.No. of the item	Category	Participants knowing the item		Participants not knowing the item	
		No.	Percentage	No.	Percentage
1	2	3	4	5	6
1	PA	140	51.85	130	48.15
2	AAHA	125	46.30	145	53.70
3	LA	84	31.11	186	68.87
4	LA	86	31.85	184	68.15
5	PA	227	84.07	43	15.93
6	PA	229	84.81	41	15.19
7	LA	124	45.93	46	54.07
8	HFFA	182	67.41	88	32.59
9	LA	121	44.81	149	55.19

contd..

TABLE 5.31 (Contd.)

1	2	3	4	5	6
10	HEPA	180	66.66	90	33.34
11	LA	134	49.63	136	50.37
12	PA	169	62.59	101	37.41
13	LA	136	50.37	134	49.63
14	SA	157	58.15	113	41.85
15	SA	81	30.00	189	70.00
16	AAHA	162	60.00	108	40.00
17	HEPA	189	73.33	72	26.67
18	HEPA	189	70.00	81	30.00
19	HEPA	172	63.70	98	36.30
20	HEPA	176	65.19	94	34.81
21	HEPA	131	48.52	139	51.48
22	HEPA	149	55.18	121	44.82
23	HEPA	209	77.41	61	22.59
24	HEPA	188	69.63	82	30.37
25	HEPA	138	51.11	132	48.89
26	SA	142	52.59	128	47.41
27	SA	151	55.92	119	44.08
28	SA	216	80.00	54	20.00
29	SA	225	83.33	45	16.67
30	SA	214	79.26	56	20.74
31	SA	199	73.70	71	26.30
32	SA	249	92.22	21	7.78
33	SA	235	87.04	35	12.96
34	SA	163	60.37	107	39.63
35	HEPA	234	86.66	36	13.34
36	HEPA	139	51.48	131	48.52
37	HEPA	167	61.85	103	38.15
38	AAHA	189	70.00	81	30.00
39	SA	164	60.74	106	39.26

B. AWARENESS KNOWLEDGE : The present study tried to ascertain the level of awareness achieved by the learners. Scores obtained by the learners in awareness show that none of the items was answered by 100 percent respondents. The maximum number of respondents (92.22%) were aware of the item No. 33.06 was gambling a good habit? The minimum number of respondents (30%) were aware of the item No. 15, 'who is financing RFLP'?

TABLE 5.32: LEARNERS BY THEIR AWARENESS SCORES IN PERCENTAGES

Sl.No.	Score	Learners (Frequency)	Learners (in percentage)
1	10-14	4	1.5
2	15-19	2	0.7
3	20-24	9	3.3
4	25-29	16	6.0
5	30-34	29	10.7
6	35-39	23	8.6
7	40-44	36	20.7
8	45-49	81	30.0
9	50-54	30	11.1
10	55-59	20	7.4
		270	100.0

The scores of the learners in awareness as observed from table 5.32 show that there were no respondents who had secured less than score of 10 (out of 62) in awareness. Approximately, 25 percentage of the respondents obtained a score below 30 and 75 percentage of the respondents had scores of above 30 for 'awareness'. 48.5% of the learners could obtain a score of more than 44. This indicates the participants' high level of achievement of 'awareness'. This may

also be interpreted as an evidence of some positive contribution made by the RPLP centers towards the learners' acquisition of awareness.

The investigator attempted to ascertain whether or not the learners have really grasped the practical application of 'awareness' rather than their theoretical knowledge only about it. Six such questions with hypothetical situations were asked in the schedule for learners to react. The topics of such life situational questions are specified as under:

1. On superstition (Q.10).
2. Regarding a denial of minimum wages (Q.11).
3. If a local leader asking someone to vote for a candidate who is not of the voter's choice (Q.12).
4. If someone from government causes harassment (Q.13).
5. About dowry the bride price (Q's 26 & 27).
6. About untouchability (Q.28).

By observing table 5.33 the responses to the question 'would you advise your friend/relative suffering from the disease to go to the witch doctor for treatment?' reflected four positions - 1. acceptance of witch doctor (10.37%), 2. feel helplessness (7.04%), 3. undecided (15.92%), and 4. opposition to witch doctor (66.66%). A negligible 10.37% of the learners in the sample perceived witch doctor as curer of diseases. Two thirds (66.66%) of the learners were opposed to acceptance of witch doctor as a curer of diseases. Apparently, the level of awareness about superstition was high among the learners.

TABLE 5.33: SCHEDULE SHOWING LEARNERS' REACTIONS TO THE LIFE SITUATIONS IN THE AWARENESS'

No. of item as check-list	Item description of life situation about	Acceptance of the old practice without an attempt to change it	Feel helplessness in charging the custom	Undecided on the issue	Refusal to follow the old practice
1	2	3	4	5	6
10	<u>SUPERSTITION</u> Would you advise your diseased friend/relative to go to a witch doctor for treatment?	28 (10.37)	19 (7.04)	43 (15.92)	180 (66.66)
11	<u>DENTAL OF MINIMUM WAGE</u> What would you do if you do not receive the minimum wage?	89 (32.96)	26 (9.62)	21 (7.77)	134 (49.63)
12	<u>BEING UNABLE TO VOTE ACCORDING TO ONE'S OWN WILL</u> What would you do if some local leaders pay you some money and ask you to vote for a particular candidate whom you disliked?	94 (34.81)	4 (1.48)	3 (1.11)	169 (62.59)

contd....

TABLE 5.33 (Contd.)

1	2	3	4	5	6
13	<u>HARASSMENT BY SOMEBODY HAVING FORMAL AUTHORITY</u> What would you do if some government officials don't attend to your needs and instead they harass you for a bribe?	83 (30.74)	39 (14.44)	12 (4.44)	136 (50.37)
26	<u>DOWRY</u> Would you give dowry for your daughter's marriage?	92 (34.07)	34 (12.59)	2 (0.74)	142 (52.59)
27	Would you accept dowry for your son's marriage?	101 (37.01)	15 (5.55)	4 (1.48)	150 (55.92)
28	<u>UNTOUCHABILITY</u> Suppose, a Harijan comes from an outside village to settle down in your village, would you allow him to draw water from the village well?	51 (18.88)	1 (0.37)	2 (0.74)	216 (80.00)

The second situation presented to the respondents as the denial of minimum wages. The responses to the question were classified into four categories; 1. Those who accepted the practice (32.96%), 2. those who felt helpless (9.62%), 3. those who were indecisive (7.77%) and 4. those who refused to follow the practice and would insist on getting the minimum wage (49.63%). So, nearly 50% of the respondents seemed to have attained awareness about the minimum wage.

The item to assess their awareness for political applicability was 'What would you do if some local leaders pay you some money and ask you to vote for a particular candidate whom you don't like?' The different responses for this item were: 1. those who would vote according to the local leaders' wishes (34.81%), 2. those who felt helplessness (1.48%), 3. those who had no definite stand on the issue (1.11%), and 4. those who would exercise their franchise according to their wish (62.59%). The latter group had expressed a high level of awareness about voting intelligently rather than unintelligently by depending on other's choice.

For the question 'what will you do if some government officials do not attend to your needs and instead harass you for a bribe?', the answers were as follows: 1. those who accepted the situation (30.74%), 2. those who felt helplessness in the situation (14.44%), 3. those who were indecisive (4.44%), and 4. those who would take action to rectify the situation (50.37%). The last group exhibited evidence that they have attained awareness as to their right of getting the work done without having to pay a bribe and without being subjected to harassment. Table 5.33 shows that 50.37% of the learners expressed their readiness to take positive action to rectify the situation.

Regarding the question 'would you give dowry for your daughter's marriage?' The four classifications were - 1. those who accepted the practice of dowry (34.7%), 2. those who found themselves helpless of the custom (12.59%), 3. those who were indecisive (0.74%) and 4. those who refused to fall in line with the practice (52.59%).

For the second question about dowry, 'would you accept dowry for your son's marriage?', the responses were - 1. those who accepted the practice of dowry (37.01%), 2. those who found themselves helpless (5.55%), 3. those who were indecisive (1.48%) and 4. those who opposed to fall in line with the dowry practice (55.92%). So, less than 50% reflected a low level of awareness, whereas more than 50% had gained awareness in it.

Regarding the untouchability question, 'suppose a Harijan comes from an outside village to settle down in your village, would you allow him to draw water from the village well?', the responses were - 1. those who would disallow (18.88%), 2. those who felt helpless (0.37%), 3. those who were indecisive (0.74%), and 4. those who would allow (80%). A large majority of respondents in the sample had a high awareness and disapproved untouchability.

C. FIVE HYPOTHESES NOS. 9 to 13: RELATIONSHIP BETWEEN EACH OF THE FIVE VARIABLES AND AWARENESS

HYPOTHESIS NO. 9: There exists no relationship between the awareness level and the age of participants.

All the respondents were divided into three age groups, viz., 1. very young adult (15-25 years), 2. young adults (26-35 years), 3. middle aged adults (over 35 years). The frequencies of respondents falling in these age groups were 100, 130, and 40 respectively.

The RFLP participants' performance on awareness schedule was classified by the quartile deviation principle into three groups. They were 1. low awareness group, 2. middle group, and 3. high awareness group.

CHI-SQUARE TEST: On the basis of hypothesis formulated, one expects to find no significant relationship between age and awareness level. To test this proposition, the chi-square test of independence in contingency table was applied.

TABLE 5.34: RELATIONSHIP BETWEEN AGE AND AWARENESS LEVEL

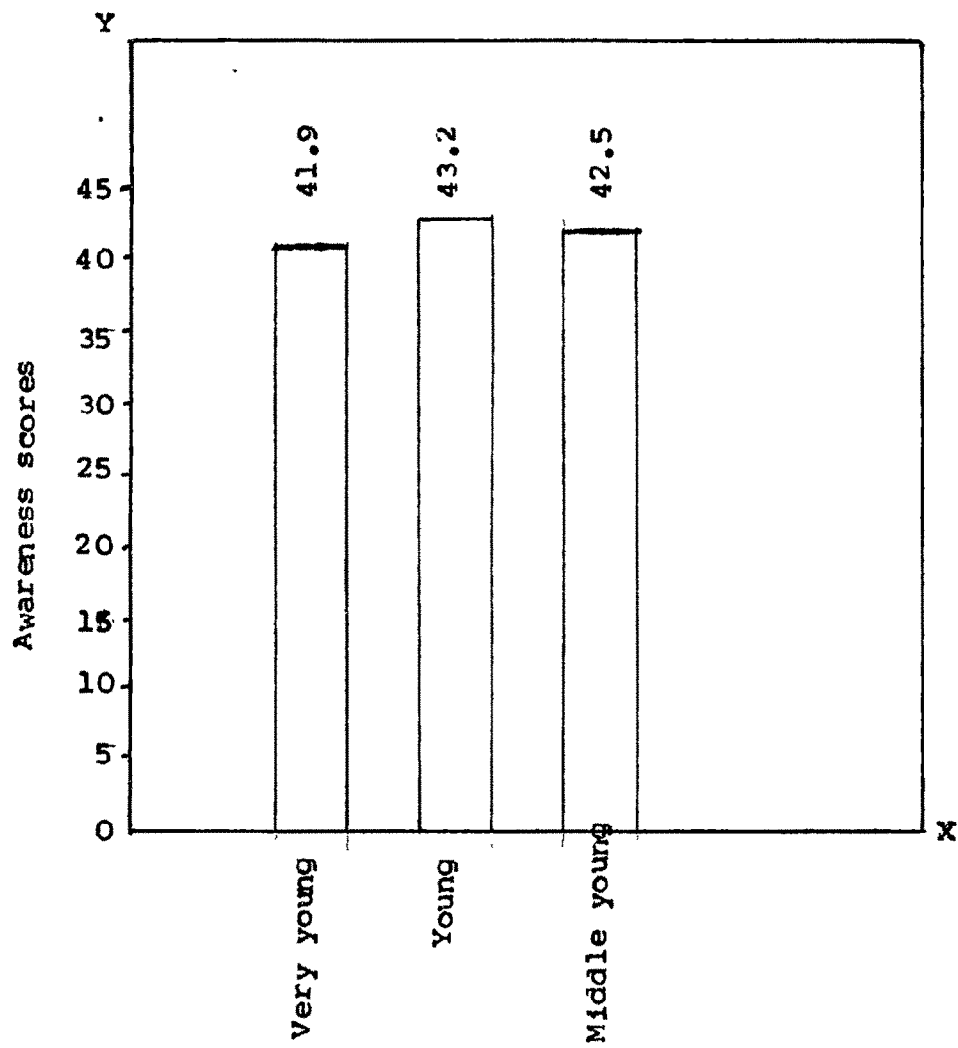
Sl. No.	Age groups	Awareness levels			Total
		Low	Medium	High	
1	Very young (15-25 years)	30 (26.7)	45 (41.1)	25 (32.2)	100
2	Young (26-35 years)	30 (34.7)	52 (53.4)	48 (41.9)	130
3	Middle age (over 35)	12 (10.2)	14 (16.4)	14 (12.9)	40
		72	111	87	270

(Figures in parentheses are expected frequencies); $df = 4$;
 $\chi^2 = 4.547$ (not significant).

The obtained chi-square value was 4.547. For 4 $df.$, the table values were 9.488 and 13.277 at 0.05 and 0.01 levels respectively. The observed result was not significant either at 0.01 level or 0.05 level. Therefore, the null hypothesis was accepted. It appeared that there was no association between the awareness level and the age of participants.

AWARENESS LEVEL : Figure 17 indicates that the young age group of adults had a slightly higher level of awareness score (43.2). The very young age group had awareness mean

Fig.17: Bar diagram Showing Average Level of Awareness Among Participants of Various Age Groups



score of 41.9 and the middle age group had awareness mean score of 42.5. Thus, a close observation of the mean awareness scores of the three age groups showed that the difference between their mean scores is almost negligible.

HYPOTHESIS NO.10: There exists no relationship between the caste and the awareness level of the participants.

The castes were divided into 1. schedule castes, 2. backward castes, and 3. forward castes depending upon the birth of the participants in a particular caste. The usual practice followed by the governments in categorizing SC, BC and FC was followed here.

CHI-SQUARE TEST: The chi-square test in contingency tables was employed to examine the significance of the relationship between the caste and the awareness level of the participants.

TABLE 5.35: RELATIONSHIP BETWEEN CASTE AND AWARENESS LEVEL OF PARTICIPANTS

Sl. No.	Caste groups	Awareness levels			Total
		Low	Medium	High	
1.	S.Cs	53 (38.6)	38 (35.3)	21 (38.2)	112
2.	B.Cs	30 (37.9)	35 (34.5)	45 (37.5)	110
3.	F.Cs	10 (16.5)	12 (15.1)	26 (16.4)	48
		93	85	92	270

(Figures in parentheses are expected frequencies); $df = 4$;
 $\chi^2 = 25.303$ (significant at 0.01 level).

A chi-square test for the relation between the awareness level and the caste group yielded a value of 25.303. For 4 df, the table values were 9.488 and 13.277 at 0.05 and 0.01 levels respectively. The calculated χ^2 value was significant beyond 0.01 level. Therefore, the null hypothesis was not accepted. It may be concluded that the caste and the awareness levels were related with each other.

AWARENESS LEVEL: Among the 3 caste groups as shown in figure 18 the forward castes obtained the highest mean awareness score of 52.9 followed by the backward castes (44.8). The mean awareness was found to be very low for the scheduled castes (34.3).

The reason for the higher level of awareness among the forward castes may be that they had more opportunities for the exposure of the various aspects outside the non-formal education center; also because of their higher socio-economic status. The scheduled castes which were said to have lower socio-economic status may not have had such scope. Therefore, they tended to be so.

HYPOTHESIS NO.11: There exists no relationship between the awareness level and the marital status of participants.

The participants were divided into married and unmarried groups. Their number was 128 and 142 respectively.

CHI-SQUARE TEST: The chi-square test in contingency tables was employed to examine the significance of the relationship between marital status and the awareness level of the participants.

Fig.18: Bar diagram showing the average Level of Awareness of Participants of Different Caste Groups

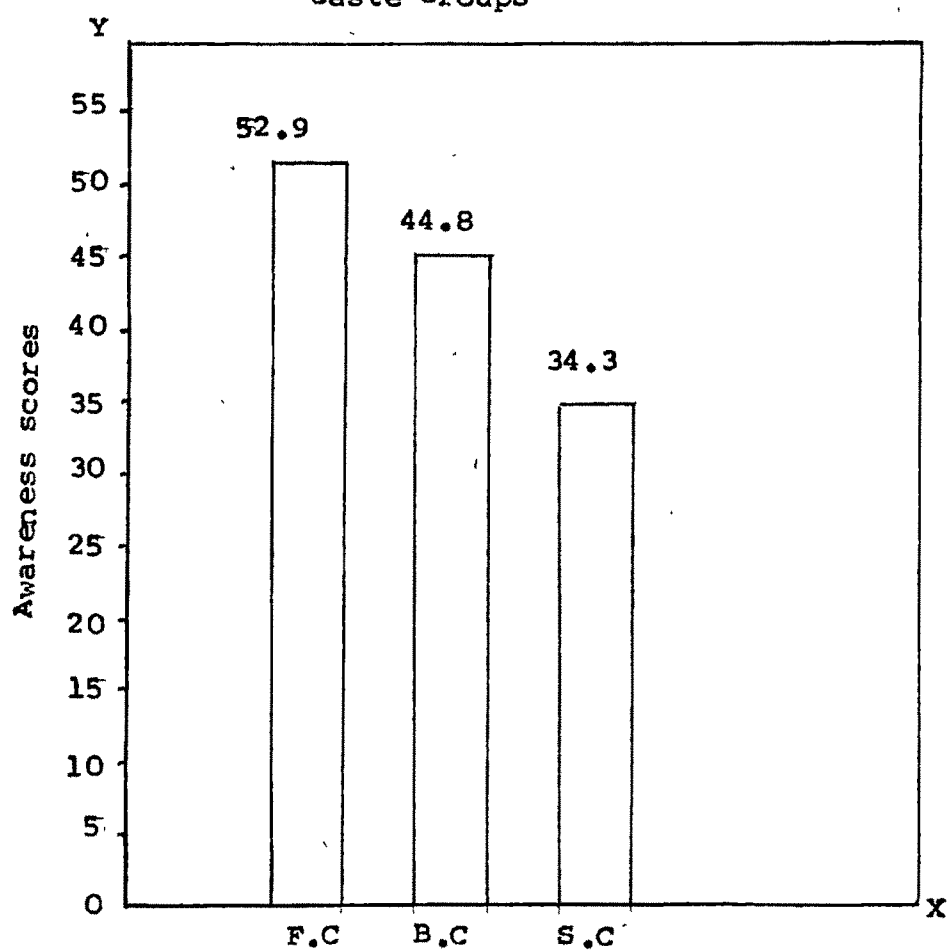


TABLE 5.36: RELATIONSHIP BETWEEN MARITAL STATUS AND AWARENESS LEVEL OF PARTICIPANTS

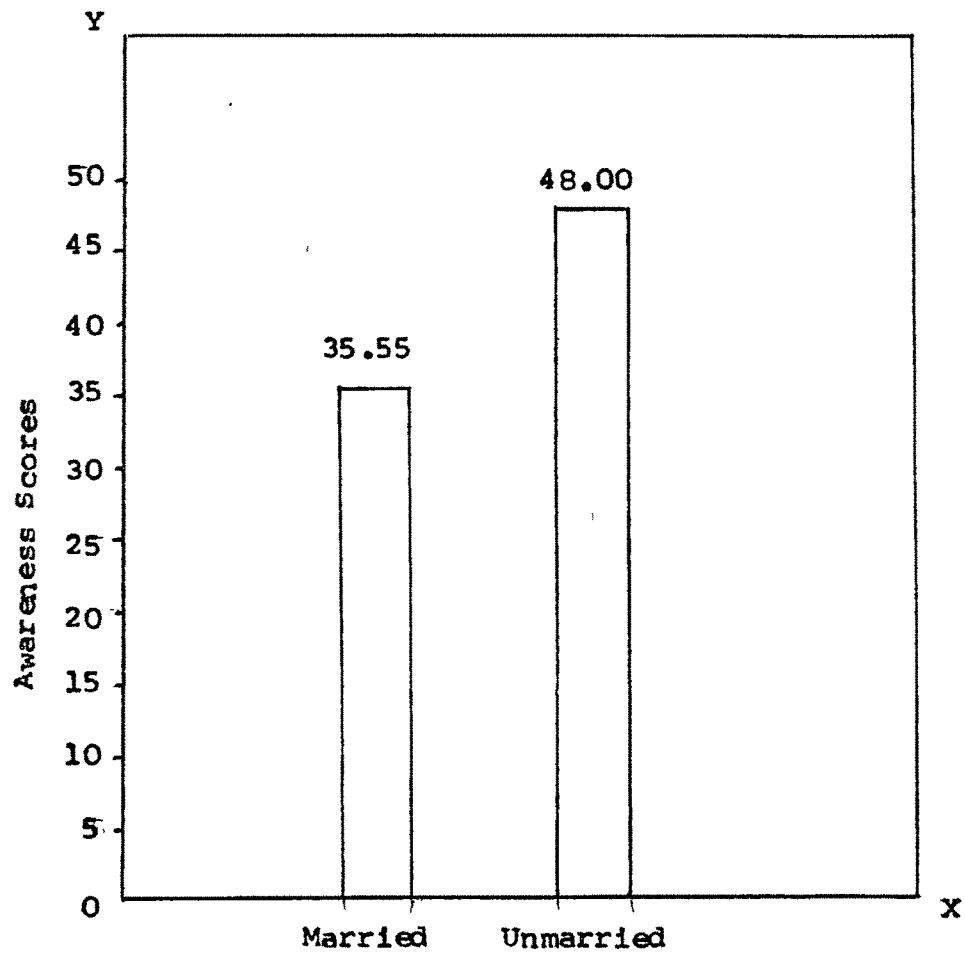
Sl. No.	Marital status	Awareness levels			Total
		Low	Medium	High	
1	Married	28 (31.8)	70 (55.9)	30 (40.3)	128
2	Unmarried	39 (35.2)	48 (62.1)	55 (44.7)	142
		67	118	85	270

(Figures in parentheses are expected frequencies);
 $df = 2$; $\chi^2 = 12.628$ (significant at 0.01 level).

To test the extent of association between the awareness level and marital status of the participants, a chi-square test was carried out. The obtained chi-square value was 12.628. For 2 df, the table values were 5.991 and 9.210 at 0.05 and 0.01 levels respectively. The observed result was significant beyond 0.01 level. Hence the null hypothesis was not accepted at 0.01 level. This showed that the two factors were not independent of each other but were associated. This test established the conclusion that the awareness level and marital status of the participants were significantly related.

AWARENESS LEVEL : Among the two marital status groups as shown in figure 19, the unmarried group obtained the higher mean awareness score (48.00). The married group obtained a lower mean awareness score (35.55).

Fig. 19: Bar diagram Showing the Average of Awareness Among Married and Unmarried Participants



Unlike married women, the unmarried participants were devoid of many responsibilities such as attending to the needs of husbands, children, parents in-laws, and other household chores. Therefore, their minds seemed to be free from taxation and they grasped more. Hence the unmarried group might have had higher awareness level.

HYPOTHESIS NO.12: There exists no relationship between the awareness level and the family monthly income of the participants.

The participants were divided into three groups by their monthly family income, namely - 1. Below Rupees 300/-; 2. Rs. 301-500/-; 3. above Rs. 500/-. On the basis of their performance on 'awareness', they were classified into three categories - 1. low awareness level, 2, medium awareness level, and 3. high awareness level.

CHI-SQUARE TEST : The relationship between the family income of the participants and their awareness level was tested for independence by means of the chi-square technique.

TABLE 5.37: RELATIONSHIP BETWEEN FAMILY INCOME AND AWARENESS LEVEL

Sl. No.	Family income	Awareness levels			Total
		Low	Medium	High	
1	Below Rs.300/-	50 (34.8)	38 (33.6)	14 (33.6)	102
2	Rs. 301-500/-	32 (42.3)	39 (40.9)	53 (40.9)	124
3	Above Rs.500/-	10 (15.0)	12 (14.5)	22 (14.5)	44
		92	89	89	270

(Figures in parentheses are expected frequencies);

$df = 4$; $\chi^2 = 10.8$ (significant at 0.01 level).

The chi-square test yielded a value of 30.8. For 4 d.f, the table values were 9.488 and 13.277 at 0.05 and 0.01 levels respectively. The calculated chi-square value was found to be significant beyond 0.01 level. Hence, the null hypothesis was disproved. From this finding, it may be concluded that there is a significant relationship between the awareness level and monthly family income of the participants.

AWARENESS LEVEL: As seen in figure 20, the mean awareness score of the family income above Rs.500/- group was the highest (45) followed by the income group Rs. 301-500/- (43). The mean awareness score of the family income group below Rs. 300/- was the lowest (39.75). The awareness level seemed to increase along with the increase in the family monthly income. In other words, the higher the family income, the higher was the awareness.

HYPOTHESIS NO.13: There exists no relationship between the awareness level and occupation of participants.

CHI-SQUARE TEST : The participants were divided occupationally into four groups (1. labor, 2. cultivation, 3. caste occupation, and 4. service). The relationship between the occupation and their awareness level was tested for independence by means of the chi-square technique.

Fig. 20: Bar diagram Showing the Average Level of Awareness Among Participants with Varied Income Levels

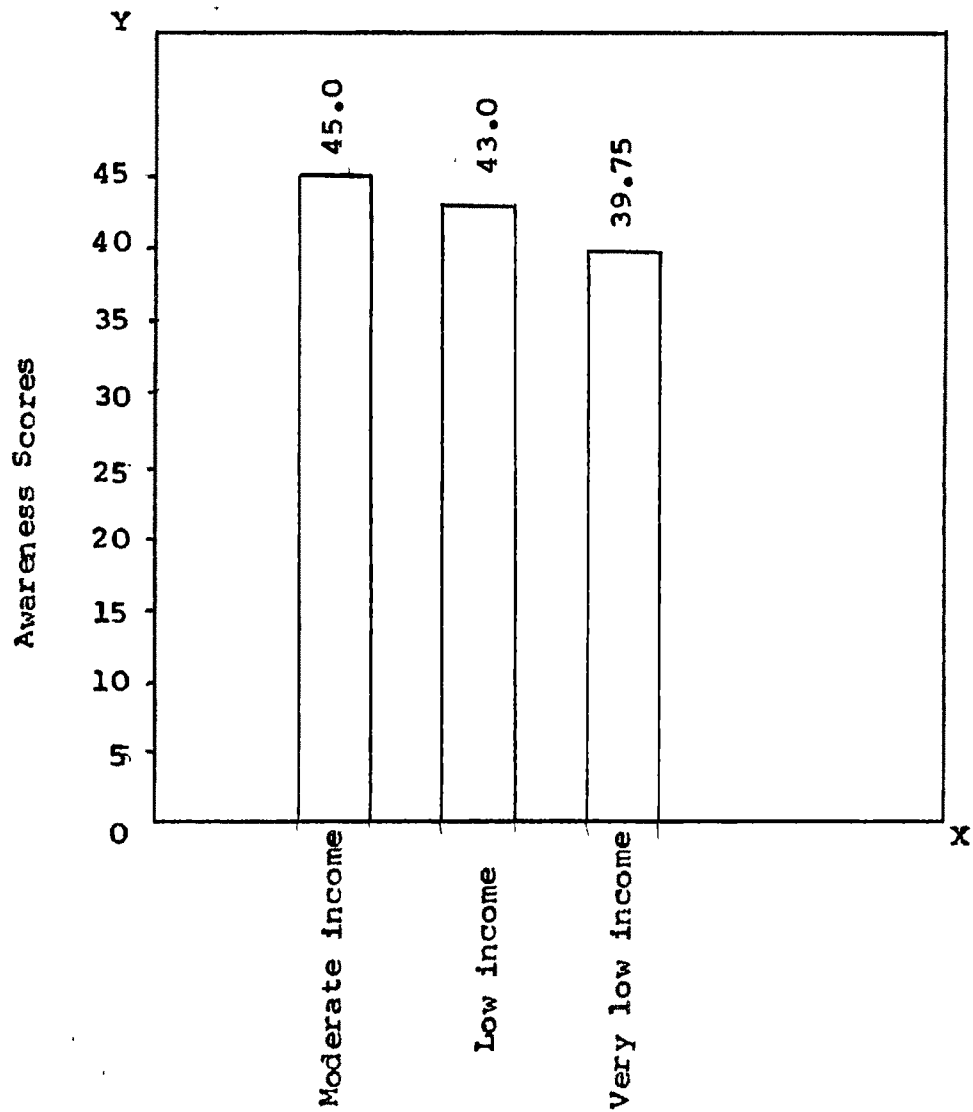


TABLE 5.38: RELATIONSHIP BETWEEN OCCUPATION AND AWARENESS LEVEL

Sl. No.	Occupation	Awareness levels			Total
		Low	Medium	High	
1	Labor	40 (29.3)	25 (27.0)	23 (31.6)	88
2	Cultivation	23 (25.3)	25 (23.4)	28 (27.3)	76
3	Caste occupation	15 (18.0)	18 (16.6)	21 (19.4)	54
4	Service	12 (17.3)	15 (16.0)	25 (18.7)	52
		90	83	97	270

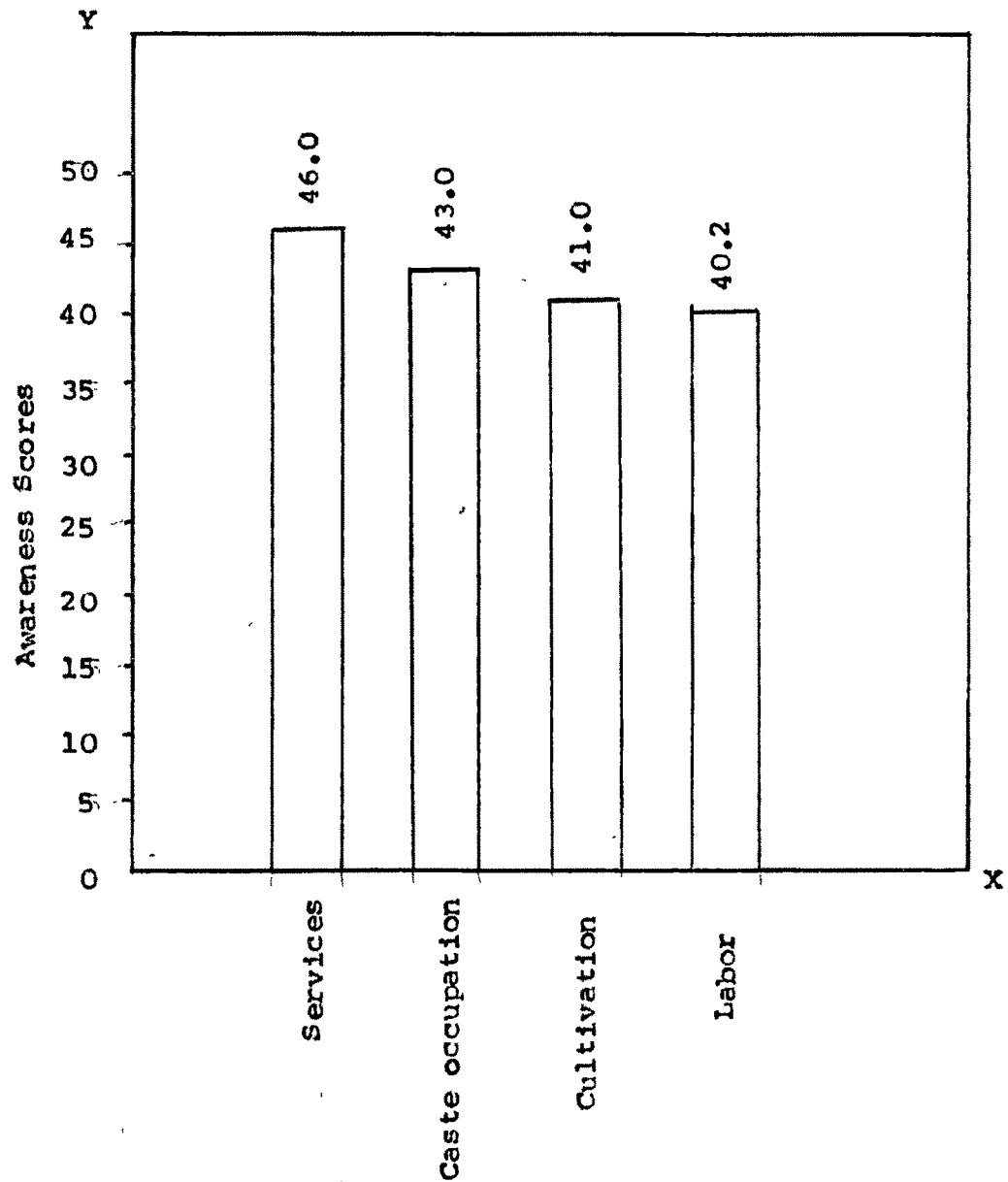
(Figures in parentheses are expected frequencies);

df = 6; $\chi^2 = 11.291$ (not significant).

The obtained chi-square value was 11.291. For 6 df, the table values were 14.067 and 18.475 at 0.05 and 0.01 levels respectively. The observed value was not significant even at 0.05 level. Therefore, the null hypothesis was accepted, i.e., there was no relationship between the awareness level and occupation of the participants.

AWARENESS LEVEL : Figure 21 indicated that the mean awareness score of the Service occupation group was the highest (46) followed by the caste occupation group (43). The mean awareness score of the labor occupation group was the lowest (40.2) followed by cultivation occupation group (41). Although the mean awareness score did not vary much between the different occupation groups, the trend seemed to be that the service occupation group had obtained highest awareness level while the labor occupation group had obtained the lowest awareness level. As the labor occupation group belonged to lower socio-economic status, this group may not have been exposed to the varietal enriching situations to have enhanced their awareness level.

Fig. 21: Bar diagram Showing the Average Level of Awareness Among Participants from Different Occupations



V SECTION FIVE: RELATIONSHIP BETWEEN EACH SELECTED VARIABLE AND FUNCTIONALITY

A. FUNCTIONALITY ANALYSIS : There were fifteen items of functionality, which were grouped in three areas - A. Cooperative and Banks; B. Post and Telegraphs; and C. Places of health, agriculture and other facilities available.

The 'A' area consisted four items which were about; 1. savings account; 2. loans for housing; 3. loans for hand-carts, rickshaws, sewing machines, pannshops, and opening other business; 4. loans for pumpset, buffaloes, cows, poultry, hybrid seeds, etc.

The 'B' area of posts and telegraphs consisted of four items which were about sending - 1. letters; 2. money orders; 3. telegrams; and 4. savings accounts.

The 'C' area questions related to the places of the availability of several programs namely: 1. free medical care; 2. vaccinations and inoculations; 3. family planning program; 4. fertilizers, hybrid seeds, and insecticides; 5. artificial insemination and animal care; 6. licences for handcarts, autorickshaws, pan-beedi shop, etc; and 7. ration cards.

B. KNOWLEDGE ABOUT FACILITIES : There was not even one facility which was known to all 100% respondents. However, more than 80% of respondents knew the following facilities; 1. loans for pumpsets, buffaloes, poultry, hybrid seeds, etc., (87.41%); 2. family planning programs (85.56%); 3. ration cards (85.19%), and 4. sending money orders (83.33%).

More than 60% of the respondents did not know about the facilities of 1. savings accounts in cooperatives and banks

(67.41%); 2. licences for handcarts, auto-rickshaws, cycle-rickshaws, paan-beedi shop, etc. (63.70%) and; 3. artificial insemination and animal care (62.93%).

Regarding the savings account facility being offered by the post office as well as by the cooperatives/banks 79.26% of the respondents knew of its availability in the post office, whereas only 67.41% of the respondents knew of such facility being available in the cooperatives/banks.

The responses of respondents about their knowledge of the facilities indicate that there was not one item which was completely unknown. All the fifteen facilities were known to, at least, 32.59%, of the learners.

C. KNOWLEDGE ABOUT THE FACILITIES PRIOR TO THEIR JOINING IN RFLP: The learners may have possibly attained some level of functionality prior their joining the RFLP. Column 4 of table 5.5 indicates their such prior knowledge. Family planning program was known to 54.55%; and about ration cards, 48.70% of the respondents knew before they had joined the RFLP centers. Very small percentage of learners knew about other facilities prior joining the centers. No learner knew about the licences for handcarts, auto-rickshaws, cycle-rickshaws, paan-beedi shop, etc., prior joining the centers. The percentage of those who had learned about the facilities after joining the RFLP centers was higher than those prior joining the RFLP.

D. TEACHING ABOUT THE FACILITIES IN RFLP CENTERS: Table 5.5 indicates that the percentage of respondents who said that they were taught facilities in the centers is higher than those who answered that they were not taught in the centers. Thus, the RFLP centers had contributed to the enhancement of learners' functionality.

E. FUNCTIONALITY APPLICATION : Functionality in this context means - 1. the knowledge of where the facilities are available, how to obtain them and, how to utilize them most advantageously; and 2. an efficient application of the acquired knowledge by an individual to profit economically and to advance himself in life. It is not merely obtaining information but also applying it in life.

In order to have some idea of applicability of the functionality aspect by the learners, they were asked about the number of the 15 facilities which they had utilized successfully. Majority of the learners had availed themselves of the facilities of ration cards (76.96%), free medical care (71.84%), vaccination/innoculation (67.01%). Other percentages of the usage of post office facilities by the learners were: sending letters (46.22%), operating saving accounts (36.45%); and sending money orders (30.94%). Less than 30% of learners had made use of the remaining nine facilities.

F. FIVE HYPOTHESES NOS. 14 to 18 - RELATIONSHIP BETWEEN EACH OF THE FIVE VARIABLES AND FUNCTIONALITY

HYPOTHESIS NO.14 : There exists no relationship between the age and functionality level of the participants

With the use of quartile deviation principle, the participants were divided into three categories. Those with 1. low functionality level, 2. medium functionality level, and 3. high functionality level.

CHI-SQUARE TEST: The chi-square test of independence in contingency table was applied to test the scores.

TABLE 5.39: RELATIONSHIP BETWEEN AGE AND FUNCTIONALITY LEVEL

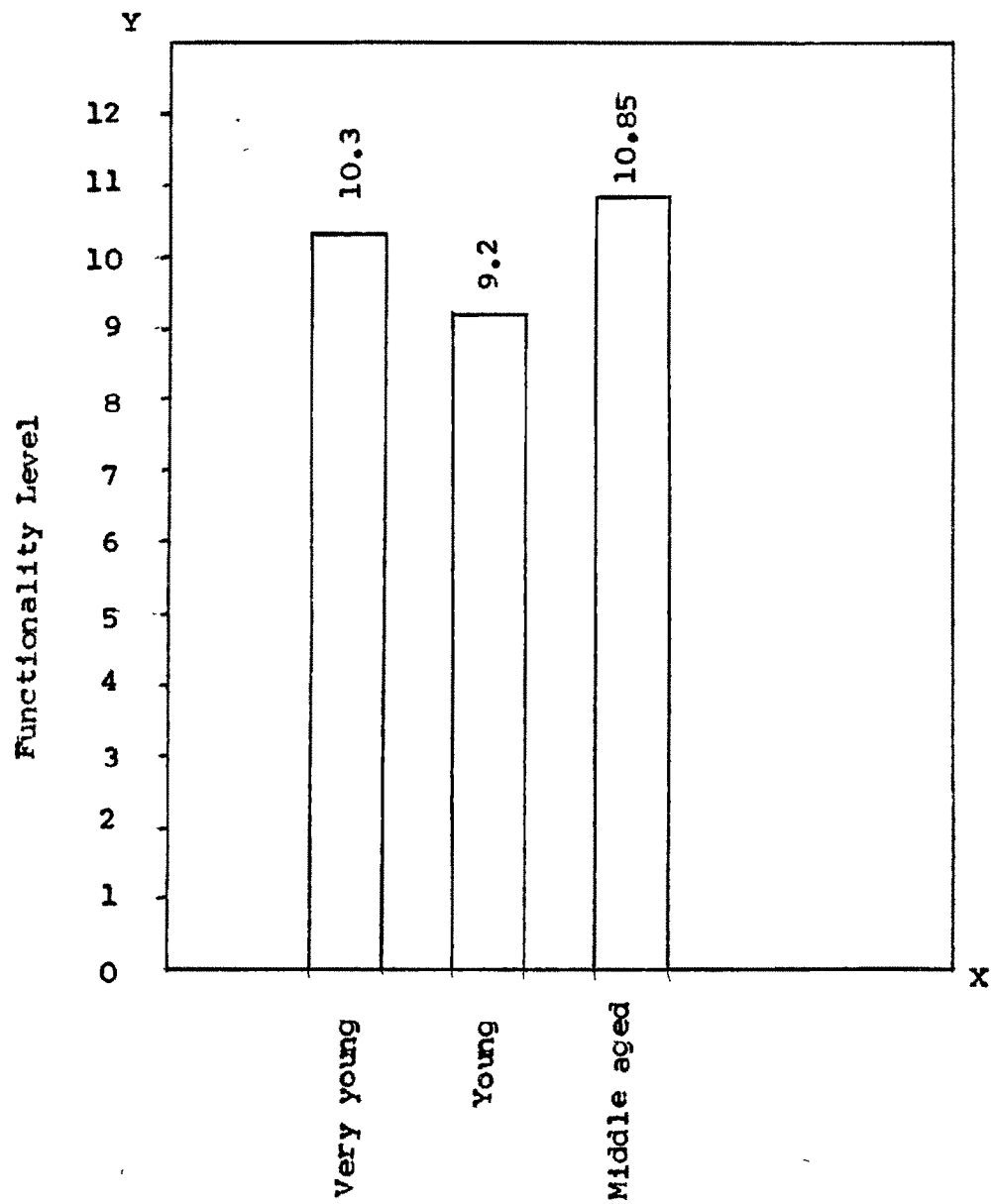
Sl. No.	Age	Functionality			Total
		Low	Medium	High	
1	Very young (15-25 yrs)	26 (26.3)	44 (37.8)	30 (35.9)	100
2	Young (26-35 yrs)	34 (34.2)	45 (40.1)	51 (46.7)	130
3	Middle aged (Over 35 yrs)	11 (11.0)	13 (15.1)	16 (14.4)	40
		71	102	97	270

(Figures in parentheses are expected frequencies);
 $df = 4$; $\chi^2 = 3.199$ (not significant).

THE CHI-SQUARE test of independence between the age and functionality level yielded a value of 3.199. For 4 df, the table values of 9.488 and 13.277 at 0.05 and 0.01 levels respectively, the calculated value was not significant either at 0.01 level or 0.05 level. Therefore, the null hypothesis was accepted. It appears that there was no association between the functionality level and the age of participants.

FUNCTIONALITY LEVEL : Figure 22 indicates that the young age group of adults had a slightly higher level of functionality mean score (10.85) than the mean functionality score (10.4). The very young age group had functionality mean score of 10.3 and the middle age group functionality mean score of 9.2. Though the young age group of adults showed higher functionality mean score than the other two groups, it may be observed that the mean functionality scores of the 3 age groups hardly showed any difference; in other words, the difference between their mean scores was negligible.

Fig.22: Bar diagram Showing the Average Level of Functionality Among the Participants Belonging to different Age Groups



HYPOTHESIS NO.15: There exists no relationship between caste and functionality level of the participants

CHI-SQUARE TEST: The chi-square test of independence in contingency table was applied to test the scores.

TABLE 5.40: RELATIONSHIP BETWEEN CASTE AND FUNCTIONALITY LEVEL

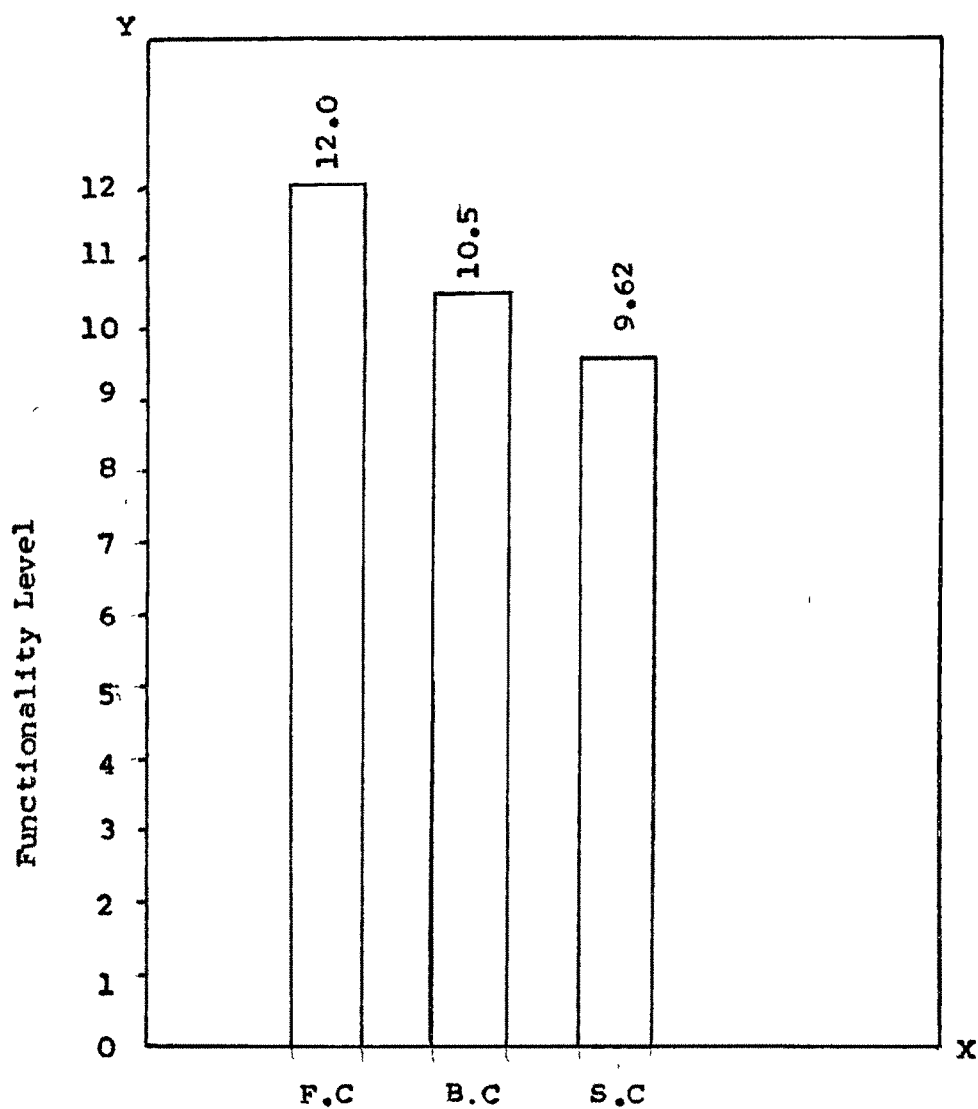
Sl. No.	Caste	Functionality			Total
		Low	Medium	High	
1	SCs	50 (39.0)	40 (36.5)	22 (36.5)	112
2	BCs	32 (38.3)	37 (35.9)	41 (35.9)	110
3	Forward castes	12 (16.7)	11 (15.6)	25 (15.6)	48
		94	88	88	270

(Figures in parentheses are expected frequencies); df = 4;
 $\chi^2 = 19.336$ (significant at 0.01 level)

A chi-square test for the relation between the functionality level and the caste groups yielded a value of 19.336. For 4 df, the table values were 9.488 and 13.277 at 0.05 and 0.01 levels respectively. The observed chi-square value was significant beyond 0.01 level. Therefore, the null hypothesis was not accepted. It may be concluded that the caste and the functionality levels were related with each other.

FUNCTIONALITY LEVEL : Figure 23 indicates that the forward castes obtained the highest mean functionality score of 12 followed by the backward castes (10.5). The mean functionality level was low for the scheduled castes (9.62). Thus, the trend indicates that the forward castes had a higher functionality level

Fig.23: Bar diagram Showing the Average Functionality Level Among the Participants Belonging to Different Caste Groups



and the scheduled castes had lower functionality level. The functionality level of backward castes remained between the two.

HYPOTHESIS NO.16: There exists no relationship between the marital status and functionality level of the participants

CHI-SQUARE TEST : The chi-square test of independence in contingency table was applied to test the scores.

TABLE 5.41: RELATIONSHIP BETWEEN MARITAL STATUS AND FUNCTIONALITY LEVEL

Sl. No.	Marital status	Functionality			Total
		Low	Medium	High	
1	Married	32 (34.1)	65 (52.6)	31 (41.2)	128
2	Unmarried	40 (37.9)	46 (58.4)	56 (45.8)	142
		72	111	87	270

(Figures in parentheses are expected frequencies; $df = 2$; $\chi^2 = 10.598$ (significant at 0.01 level)).

To test the extent of association between the functionality level and marital status of the participants, a chi-square test was carried out. The obtained chi-square value was 10.598. For 2 df, the table values were 5.991 and 9.210 at 0.05 and 0.01 levels respectively. The observed result was found to be significant beyond 0.01 level. Hence, the null hypothesis was not accepted at 0.01 level. This showed that the two factors were not independent of each other but were associated. This test established the conclusion that the functionality level and marital status of the participants were significantly related.

FUNCTIONALITY LEVEL : Among the two marital status groups as shown in figure 24, the unmarried group obtained the higher mean functionality score (11.5). The married group obtained a lower mean functionality score (9.18).

HYPOTHESIS NO.17: There exists no relationship between the family income and functionality level of the participants

CHI-SQUARE TEST: The chi-square test of independence in contingency table was applied to test the scores.

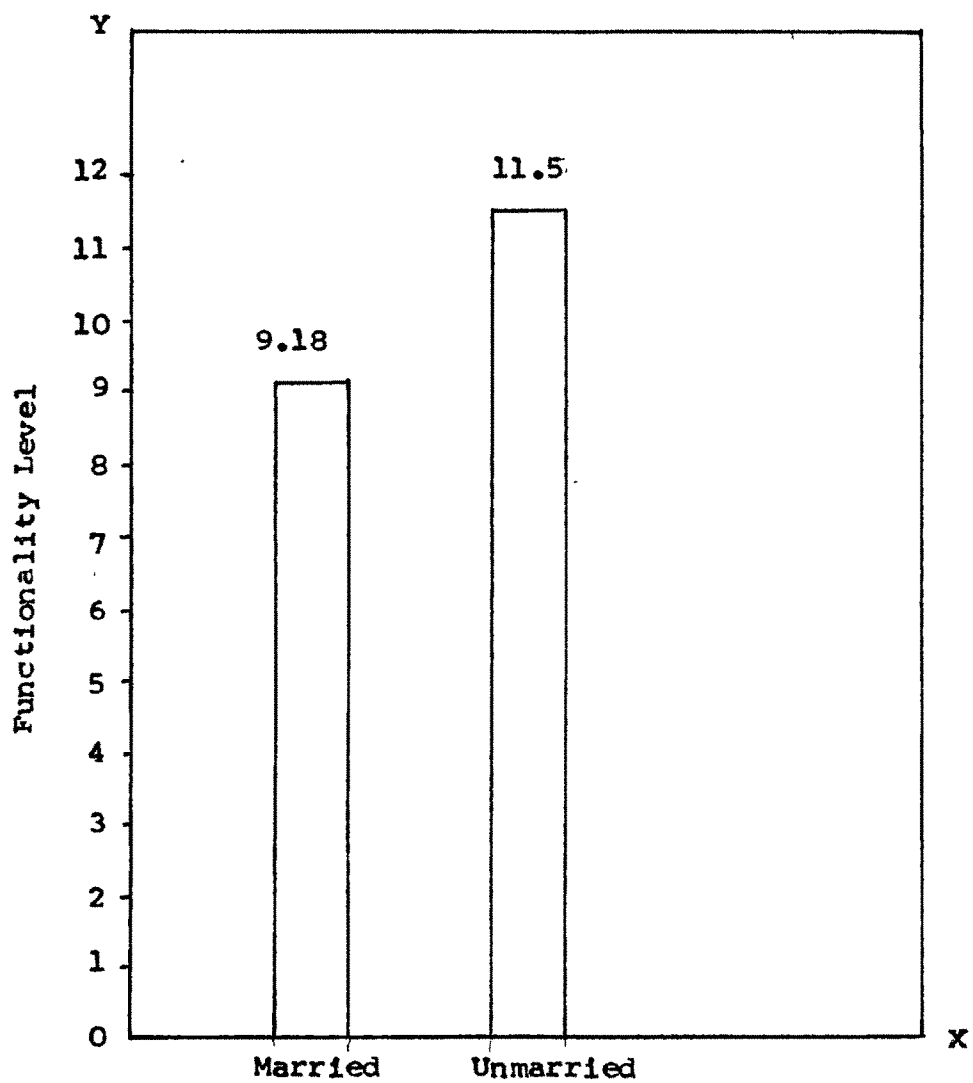
TABLE 5.42: RELATIONSHIP BETWEEN FAMILY INCOME AND FUNCTIONALITY LEVEL

Sl. No.	Income	Functionality			Total
		Low	Medium	High	
1	Below Rs.300/-	50 (36.3)	40 (35.5)	12 (30.2)	102
2	Rs.301-500/-	34 (44.1)	41 (43.2)	49 (36.7)	124
3	Above Rs.500/-	12 (15.6)	13 (15.3)	19 (13.0)	44
		96	94	80	270

(Figures in parentheses are expected frequencies); df = 4;
 $\chi^2 = 27.202$ (Significant at 0.01 level).

A chi-square test for relationship between the income and the functionality level yielded a value of 27.202. For 4 df, the table values were 9.488 and 13.277 at 0.05 and 0.01 levels respectively. The calculated chi-square value was found to be significant beyond 0.01 level. Hence, the null hypothesis was disproved. From this finding, it may be

Fig. 24: Bar diagram Showing the Average Level of Functionality Among the Married and Unmarried Participants



concluded that there was a significant relationship between the functionality level and monthly family income of the participants.

FUNCTIONALITY LEVEL : As seen in figure 25 the mean functionality score of the family income above Rs. 500/- group was the highest (11.95) followed by the income group of Rs. 301-500/- (10.3). The mean functionality score of the family income group below Rs. 300/- was the lowest (9.87). The difference between the mean functionality scores of the three groups did not seem to be much. The functionality level seemed to increase along with the increase in the family monthly income. In other words, the higher the family income and higher was the functionality level.

HYPOTHESIS NO. 18: There exists no relationship between the occupation and functionality level of the participants

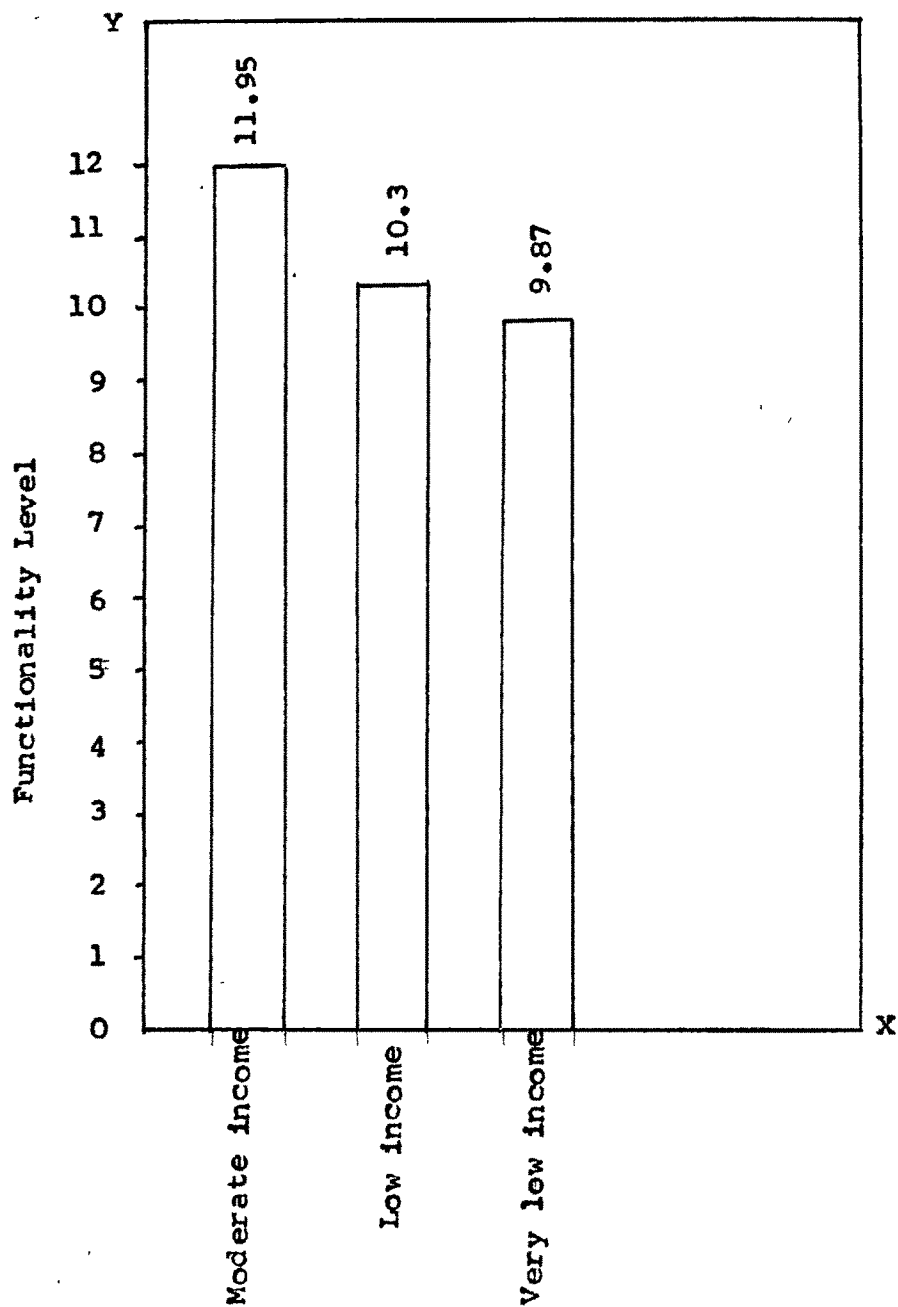
CHI-SQUARE TEST : The chi-square test of independence in contingency table was applied to test the scores.

TABLE 5.43: RELATIONSHIP BETWEEN OCCUPATION AND FUNCTIONALITY LEVEL

Sl. No.	Occupation	Functionality			Total
		Low	Medium	High	
1	Labor	38 (28.7)	26 (28.3)	24 (31.0)	88
2	Cultivation	22 (24.8)	28 (24.5)	26 (26.7)	76
3	Caste occupation	14 (17.6)	17 (17.4)	23 (19.0)	54
4	Service	14 (16.9)	16 (16.8)	22 (18.3)	52
		88	87	95	270

(Figures in parentheses are expected frequencies); $df = 6$;
 $\chi^2 = 8.486$ (not significant).

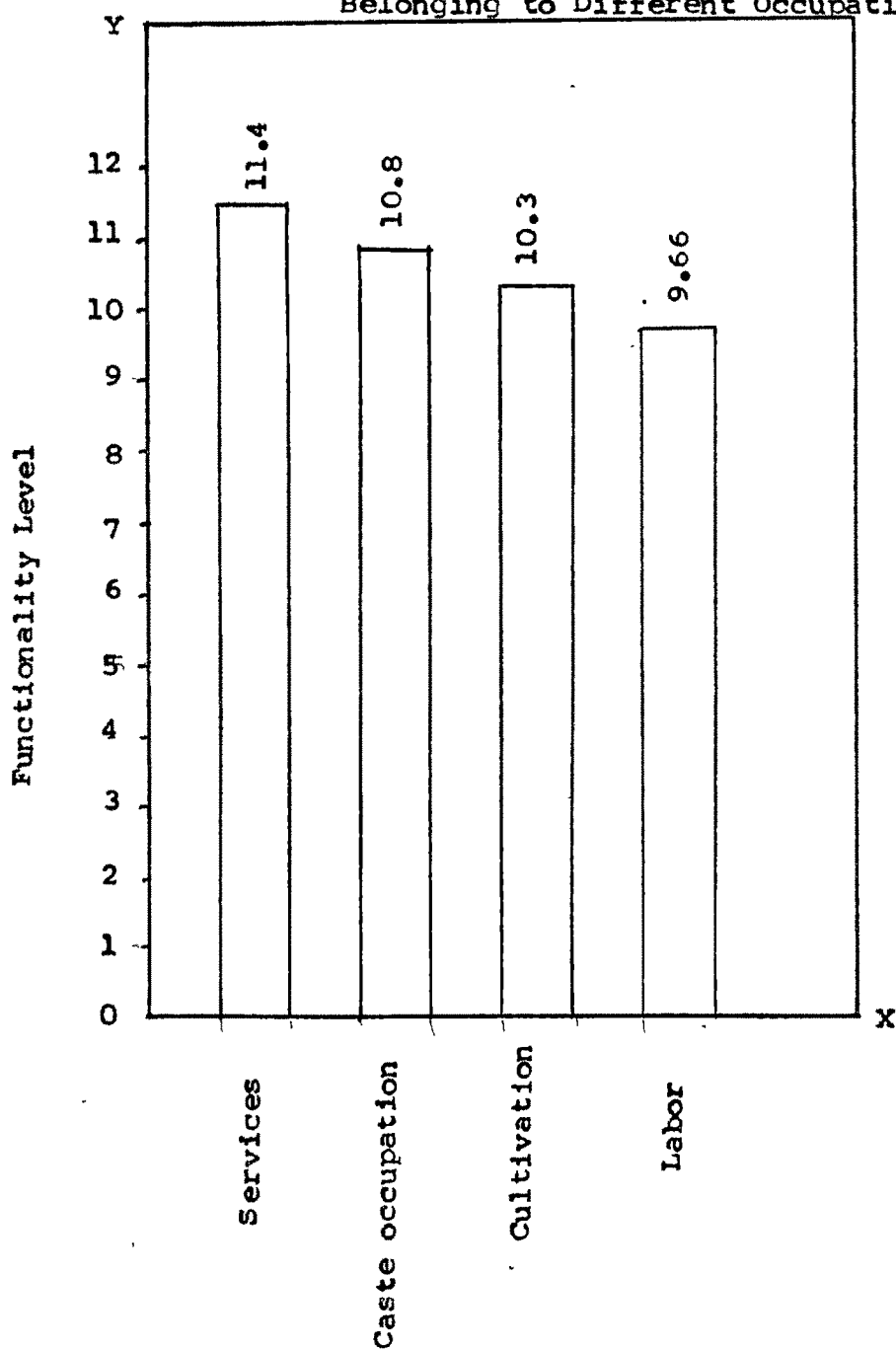
Fig. 25: Bar diagram Showing the Average Level of Functionality Among the Participants at Different Income Levels



A chi-square test for the relation between the occupation and functionality level yields a value of 8.486. For 6 df, the table values were 14.067 and 18.475 at 0.05 and 0.01 levels respectively. The observed value was not significant even at 0.05 level. Therefore, the null hypothesis was accepted. From this, it may be said that there was no relationship between the functionality level and the occupation of the participants.

FUNCTIONALITY LEVEL : Figure 26 indicates that the mean functionality score of the service occupation group was the highest (11.4) followed by the caste occupation group (10.8). The mean functionality score of the labor occupation group was the lowest (9.66) followed by cultivation occupation group (10.3). Although the mean functionality scores of the three groups did not show much difference, the trend seemed to be that the service occupation group had obtained highest functionality level and the labor occupation group had obtained the lowest functionality level.

Fig. 26: Bar diagram Showing the Average Level of Functionality Among the Participants Belonging to Different Occupations.



VI SECTION SIX: THE PROBLEMS FACED IN THE ORGANIZATIONS OF RFLP CENTERS

The information obtained on the items of the check-list from 110 respondents is given in ^{table} 5.45. The maximum number (107) of the respondents checked the item with serial number 4 'inadequate lighting in the classroom' which ranked first.

The problem which ranked second as item no.20 read as 'lack of functional training'. The third rank item was the serial no.17, which read as 'lack of teaching professional skills to the learners'. Two items with serial numbers 14 and 26 were equal, as such, ranked as 4.5, and which read as 'irregular attendance of the learners' and 'lack of cooperation from the community'.

For the subsequent problems, which were ranked as 6th to 28th may be observed from table 5.45. The minimum (48) of respondents checked item no. 19 'lack of well qualified instructors for conducting the classes', which ranked last. The entire list of items in the problem check-list has been arranged in the rank order of 1-28 and presented in table 5.44.

The data were analysed again to know whether the rank orders differed significantly between the three groups - 1. animators, 2. supervisors, and 3. village leaders. For this purpose, a null hypothesis was formulated for testing.

A. HYPOTHESIS NO. 19: The ranking of problems faced in the organization of RFLP centers do not agree between the animators, supervisors, and village leaders.

Table 5.46 indicates number of checks for each item, rank order, and sum of ranks.

III. PROBLEMS CHECK-LIST - RELATIONSHIPS

TABLE 5.44: RANKWISE PROBLEM CHECKLIST

Rank No.	Sl. No.	Description of items in the problem checklist
1	4	Inadequate ventilation in the classroom
2	20	Lack of functional training
3	17	Lack of teaching professional skills to the learners
4.5	14	Irregular attendance of the learners
4.5	26	Lack of cooperation from the community
6	15	Lack of motivation of learners to attend center
7	11	Lack of wall maps-and charts as Visual aids
8	12	Lack of good blackboard in the center
9	10	Lack of globe
10.5	21	Lack of adequate supervision from the supervisor
10.5	25	Lack of functional training for supervisors
12	1	Lack of proper classroom
13	28	Factions in the village
14	2	Lack of sufficient space for the classroom
15	5	Inadequate seating arrangements in the classroom
16	8	Lack of calm atmosphere for concentration by the learners
17	18	Low honorarium for animators
18	3	Inadequate lighting in the classroom
19	9	Lack of desks and benches for learners
20.5	6	Lack of drinking water facilities for the learners
20.5	27	No help from village leaders
22	7	Lack of clean surroundings in and around the center
23	24	Low salary for supervisors
24	23	Too many centers for supervisors
25	16	Absence of learners during the peak farm operation periods-sowing and harvesting
26.5	13	Low enrolment of learners in the center
26.5	22	Having a large area to supervise
28	19	Lack of well qualified instructors for conducting the class

**TABLE 5.45: RESPONSES OF ANIMATORS, SUPERVISORS, AND
VILLAGE LEADERS ON ITEMS OF CHECKLIST**

Sl.No. of the item in the checklist	No. of respon- dents who checked the item	Percentages of respon- dents who checked the item	Rank order of the item
1	90	81.81	12
2	85	77.27	14
3	69	62.72	18
4	107	97.27	1
5	77	70.00	15
6	64	58.18	20.5
7	61	55.45	22
8	76	69.09	16
9	67	60.90	19
10	93	84.54	9
11	96	87.27	7
12	94	85.45	8
13	53	48.18	26.5
14	100	90.90	4.5
15	99	90.00	6
16	56	50.90	25
17	101	91.81	3
18	70	63.63	17
19	48	43.63	28
20	103	93.63	2
21	92	83.63	10.5
22	53	48.18	26.5
23	58	52.72	24
24	59	53.63	23
25	92	83.63	10.5
26	100	90.90	4.5
27	64	58.18	20.5
28	86	78.18	13

Formula

$$S = \sum R_1^2 - \frac{(\sum R_1)^2}{N} = 65628 - \frac{(1218)^2}{28} = 12645$$

$$W = \frac{S}{\frac{1}{12} K^2 (N^3 - N)} = \frac{12645}{\frac{1}{12} \times 9 (28^3 - 28)} = \frac{12645}{16443} = 0.769$$

Transformed value of $\chi^2 = K (N-1) W = 3 \times 27 \times 0.769 = 62.289$. The table value of χ^2 at 0.01 level for 27 df is 46.96. The calculated χ^2 value was significant at 0.01 level. Hence, the null hypothesis was not accepted. It was concluded that there was an agreement between the animators, supervisors, and village leaders.

TABLE 5.46: RANKING OF ITEMS IN THE PROBLEMS CHECKLIST BY THE ANIMATORS, SUPERVISORS, AND VILLAGE LEADERS

Sl. No.	Description of the items in the problem checklist	No. of persons who checked the item	Animators			Supervisors			Village leaders			Sum of ranks		
			Animators			Supervisors			Village leaders			Animators		
			3	4	5	6	7	8	9	10	11	R ₁	R ₂	R ₃
1														
2														
1	Lack of proper classroom	39	10	41	13	2	12	27.0	729.00					
2	Lack of sufficient space for the classroom	36	10	39	14	2	14	30.0	900.00					
3	Inadequate ventilation in the classroom	27	7	35	20	11.5	18	49.5	2450.25					
4	Inadequate lighting in the classroom	47	10	50	3.5	2	1	6.5	42.25					
5	Inadequate seating arrangements in the classroom	35	6	36	15	16	17	48.0	2304.00					
6	Lack of drinking water facilities for the learners	25	5	34	21	20.5	19.5	61.0	3721.00					
7	Lack of clean surroundings in and around the center	23	4	34	22	24.5	19.5	66.0	4356.00					
8	Lack of calm atmosphere for concentration by the learners	33	5	38	16	20.5	15	51.5	2652.25					
9	Lack of desks and benches for learners	30	4	33	17.5	24.5	21	63.0	3969.00					
10	Lack of globe	43	6	44	9	16	8.5	33.5	1122.25					

contd...

TABLE 5.46 (contd.)

1	2	3	4	5	6	7	8	9	10
11	Lack of wall maps and charts as visual aids	44	6	46	8	16	6	30.0	900.00
12	Lack of good blackboard in the center	45	7	42	6.5	11.5	11	29.0	841.00
13	Low enrolment of learners in the center	21	4	28	23	24.5	27	74.5	5550.25
14	Irregular attendance of the learners	48	8	44	2	7.5	8.5	18.0	324.00
15	Lack of motivation of learners to attend center	50	9	49	1	4.5	2	7.5	56.25
16	Absence of learners during the peak farm operation periods - sowing and harvesting	20	4	32	24	24.5	22.5	71.0	5041.00
17	Lack of teaching and professional skills to the learners	47	6	48	3.5	16	3.5	23.0	529.00
18	Low honorarium for animators	30	3	37	17.5	27.5	16	61.0	5721.00
19	Lack of well qualified instructors for conducting the classes	16	3	29	28	27.5	26	81.5	6642.25
20	Lack of functional training	46	9	48	5	4.5	3.5	13.0	169.00

contd....

TABLE 5.46 (contd.)

1	2	3	4	5	6	7	8	9	10
21	Lack of adequate supervision from the supervisors	42	5	45	10	20.5	7	37.5	1406.25
22	Having a large area to supervise	19	7	27	25.5	11.5	28	65.0	4225.00
23	Too many centers for supervisors	19	7	32	25.5	11.5	22.5	59.5	3540.25
24	Low salary for supervisors	18	8	31	27	7.5	24	58.5	3422.25
25	Lack of functional training for supervisors	41	8	43	11	7.5	10	28.5	812.25
26	Lack of cooperation from the community	45	8	47	6.5	7.5	5	19.0	361.00
27	No help from village leaders	29	5	30	19	20.5	25	64.5	4160.25
28	Factions in the village	40	6	40	12	16	13	41.0	1681.00
$\sum R_1 = \sum R_1^2 =$									
1218 65628.00									

251
251

Table 5.46 indicates the number of checks, i.e., ranking of items in the problems checklist by the animators, supervisors, and village leaders, i.e., Nos. 1-28 for each item (rank order and the sum of ranks). As there were more than 2 categories of ranks, Kendall's coefficient of concordance (W) was employed. The calculated value of ' W ' was 0.769 for which the transformed value of χ^2 was 62.289. This value was significant at 0.01 level for 27 d.f. The table value of χ^2 at 0.01 level for 27 d.f. was 46.96. The calculated χ^2 value was significant beyond 0.01 level. Hence, the null hypothesis was not accepted. It was concluded that there was a significant agreement between the respondents of the 3 groups - animators, supervisors and village leaders with regard to the problems faced in RPLP centers.