

C H A P T E R VIII

SOME SPECIFIC STUDIES

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In this chapter, the specific studies investigating the relation of some factors to listening comprehension have been described. They have been divided into two groups. Group A consists of various researches which aim at finding differences in listening comprehension test scores as contributed by some factors, such as sex, area and culture. Group B consists of various studies undertaken with a view to finding out relationship among listening comprehension and other psychometric variables; and some other factors affecting listening comprehension. Studies in both the groups are discussed below.

Group A Studies

It consists of three studies:

- (a) Sex differences in Listening Comprehension.
- (b) Areawise differences in Listening Comprehension.
- (c) Cultural differences in Listening Comprehension.

With a view to finding out differences in test performance if any among various groups, the technique of analysis of variance was applied. The variance technique has proved to be extremely useful in sorting out the contributions of different factors to individual differences in a test performance. That is, it is helpful in understanding ^{how far} the variance in scores of the group are attributable to the factors manipulated and how far to the true individual differences, chance factors, or inaccuracies in measurement. If differences found are attributable to inaccuracy the test becomes unreliable to that extent. But, if enough care is taken to avoid such inaccuracies, then variance technique shows actual or real individual differences among the groups or among various groups if any. To this extent, technique of variance is also a technique of measuring reliability and validity.

In order to study the contribution of sex, area and culture to listening comprehension the data on both forms of the test were arranged in a factorial design of $2 \times 2 \times 5$ with sex, area and culture at 2, 2 and 5 levels respectively, and these scores were analysed by the technique of analysis of variance (F-test). The results have been summarized in Tables 16, 17 and 18. The quick (the Graphical presentation of the area and sex are given in Appendices No. 19 and 20.

TABLES 16 & 17

The results in above table 17 shows that only variables of culture and area are significantly contributing to listening comprehension, while sex is not significant. The data of specific pairs of culture were also further analysed statistically using the formula of 't-test'; and the following Table shows the summary of results.

TABLE 18

The Table shows significant differences only in pairs as shown in the Table. Though culture variable is significant \pm on the whole (as seen from Table 17) only specific pairs are significantly difference, and not each.

TABLE 16

Mean Scores and Standard Deviation Calculated
on the Basis of Raw Scores

Form A

URBAN										RURAL										TOTAL					
Boys					Girls					Boys					Girls					Boys		Girls			
Culture	No.	Mean	SD		No.	Mean	SD			No.	Mean	SD			No.	Mean	SD			No.	Mean	SD	No.	Mean	SD
I	95	108.13	21.13	92	98.53	22.12		84	81.40	20.31	63	71.37	21.40	179	95.16	25.72	155	88.66	24.88						
II	108	59.67	20.21	105	89.79	19.11		100	79.10	20.37	109	72.66	23.80	208	70.21	23.79	214	81.06	24.15						
III	98	90.60	22.41	100	73.00	26.68		34	78.15	23.17	104	86.94	21.23	132	87.70	23.00	204	81.92	23.46						
IV	113	84.04	22.29	106	81.82	28.04		108	72.44	19.77	115	64.72	21.38	221	78.67	24.66	221	77.67	28.23						
V	103	94.32	21.73	100	78.80	16.37		75	73.63	21.02	93	86.79	23.40	178	86.34	23.98	193	89.29	19.57						
Total	517	85.23	25.44	503	88.58	23.67		401	69.12	20.11	484	76.53	23.27	918	82.44	27.58	987	81.66	25.13						
Grand Total: 1905																									

Form B

I	105	84.07	18.26	103	81.10	21.24	98	65.91	23.17	60	61.67	20.58	203	75.30	24.51	163	73.84	23.55	
II	105	89.88	20.05	100	99.40	3.27	109	74.31	29.09	105	59.98	24.99	214	81.95	22.17	205	78.23	29.99	
III	106	83.52	30.04	111	89.19	27.31	62	86.47	20.05	113	73.47	22.19	168	84.61	26.40	224	81.26	26.03	
IV	94	94.65	20.03	103	85.67	25.28	112	79.96	21.85	112	74.43	20.78	206	85.69	22.28	215	81.08	25.63	
V	91	95.39	20.16	91	71.87	17.26	71	83.85	11.83	92	93.33	24.26	162	89.51	22.23	183	82.66	3.12	
Total	501	84.20	21.83	508	87.94	25.17	452	79.31	23.21	482	71.83	25.03	953	83.16	24.20	990	80.66	26.15	
										Grand Total: 1943									

TABLE 17
F-Value of Culture, Area and Sex

Form A						Form B					
	df	Sum of Squares	M. S. S.	F-value	Signi- ficant		df	Sum of Squares	M. S. S.	F-value	Signi- ficant
Culture	4	63556.612	15889.153	28.160	**		4	37095.659	9273.914	16.659	**
Area	1	51503.235	51503.235	91.276	**		1	87715.854	87715.854	157.572	**
Sex	1	705.118	704.118	1.249	NS		1	918.684	918.684	1.650	NS
Error	1898	1070956.475	564.255				1936	1077713.443	556.670		
Total	1902	1186721.440					1942	1203443.642			

TABLE 18
Cultural
Comparison of Groups in Pairs

Form A				Form B			
Sr. No.	Groups in Pairs	Difference between t-value	Remarks	Sr. No.	Groups in Pairs	Difference between t-value	Remarks
1		8.38	Significant at .01	12		12.75	Significant at .01
2	C1 and C2	7.35	"	13	C1 and C2	3.44	"
3	C1 and C3	2.92	"	14	C1 and C3	3.95	"
4	C1 and C4	5.77	"	15	C1 and C4	5.20	"
5	C1 and C5	2.34	"	16	C1 and C5	6.40	"
6	C2 and C3	4.58	"	17	C2 and C3	0.45	Not significant
7	C2 and C4	1.58	Not significant	18	C2 and C4	2.74	Significant at .01
8	C2 and C5	5.39	Significant at .01	19	C2 and C5	2.92	Significant at .01
9	C3 and C4	2.93	"	20	C3 and C4	2.32	Significant at .05
10	C3 and C5	0.70	Not significant	21	C3 and C5	2.51	"
11	C4 and C5	3.77	Significant at .01	22	C4 and C5	0.28	Not significant

Group B Studies

Studies in this group are conducted on small samples. These are aimed at finding relationship if any between listening comprehension and various psychometric variables and other factors affecting listening comprehension. The studies were carried on using either of the two forms. Most of the studies, which we have already noted before in the second chapter of review of literature have examined the relationship between listening comprehension tests and reading comprehension test, and also with intelligence test. This may be due to similarity between two receptive skills mentioned earlier and as a general matter of interest between listening and intelligence. The objectives, in the present study, are to find correlation between:

- (a) Listening Comprehension and Intelligence Test (written form).
- (b) Listening Comprehension and Intelligence Test (Oral Form).
- (c) Listening Comprehension and Reading Comprehension.
- (d) Listening Comprehension and School Achievement.

(e) Listening Comprehension and Socio-Economic Status.

(f) Listening Comprehension and Interest.

(a) Listening Comprehension and Intelligence (Written Form)

The sample for the study consisted of 105 students - 60 boys and 45 girls of a high school in Bhavnagar. The total scores of this listening comprehension test and total scores of Desai-Bhatt Group Intelligence Test were correlated. The intelligence test was given in written form in the sense that the test was read by students as presented. It was found that there was correlation of 0.63. Product-moment formula of correlation was used. The correlation is significantly high. It indicates that there is much in common in between the two but they are not identical. It can be concluded that persons with high intelligence are better listeners, and poor on intelligence are poor listeners, and vice versa.

(b) Listening Comprehension and Intelligence (Oral Form)

It was thought that perhaps intelligence test administered orally presented on tape-recorder (read by a teacher) and listened to by pupils would create a situation

much nearer to listening comprehension test. Hence, same intelligence test was administered orally. The sample consisted of 119, with 64 boys and 55 girls. The procedure for administration of the test was followed as described in the manual. That is, the instructions, practice timings, were given according to manual. All the 100 stems were recorded on the tape. For time gap needed for answering the questions the tape was left blank for that each time. By this procedure, uniformity in administration was achieved. The time for answering questions varied from 10 seconds to 15 seconds for various questions. It was presented only once and continuously. It should be noted here that the presentation was different not only on oral (and visual) dimension, but also different from point of view of timings. Original Desai-Bhatt Group Test of Intelligence is a speed test (45 minutes). Many tasteres cannot attempt all the items in the test when presented in visual form, while here in oral form it was not possible to present in the same way. Each question has been attempted by each one in the sample. The answers of all the 100 items of the test were typed and cyclostyled. Scoring calculations were done according to manuals. The correlation was found to be 0.71, which is quite high. It is higher than that in the written form, as expected. It may be due to the fact that all the tasteres could attempt all the items. Yet, it can be said the result indicates high correlational trend; and same

observations can be deducted as those in case of visual form of intelligence test.

(c) Listening Comprehension and
Reading Comprehension

The sample for the study was of 182, with 87 boys and 95 girls from a high school in Bhavnagar. To find out the relationship between the two, Reading Comprehension Test prepared by Maniar (90) was used.

The correlation, by using product moment formula of correlation, was found to be 0.69. It is again quite high. It can be concluded that students with high reading comprehension ability have high listening comprehension ability too and vice versa. It also indicates that both of them have common factors (may be verbal ones) and comprise of very much similar skills.

(d) Listening Comprehension and School
Achievement in Gujarati Language

To study the correlation between listening comprehension and achievement in Gujarati, the performance on this test was related to the marks obtained by subjects in Gujarati at last annual examination. The total sample for form A consisted of 751 and for form B 732, with almost equal number of boys and girls. The correlation found to be of .40 for sample 751 and of .35 for sample 732 which are

significant, perhaps indicating a common language factor.

(e) Listening Comprehension and
Socio-Economic Status

To study the relation between the socio-economic status and listening comprehension; a socio-economic scale* standardized by Dr. Patel¹ in Gujarati was administered to a sample of 152, with 70 boys and 82 girls. The correlation computed between the two scores was found to be of 0.27. The correlation is positive and is significant at .01 level. It indicates that socio-economic status affects the performance on listening comprehension test. This finding does support the popular belief that students coming from higher status, or better homes are better listeners and pupils coming from lower status or poor homes are poor listeners.

(f) Listening Comprehension and
Interest of Pupils in Content
of Test Materials Listened to

To know whether interest in the listening materials would make any differences in the achievement of boys and girls; scores on two talks, viz., one on cricket in form A (supposed to reflect boys' interest) and another on a decoration of a house in form B (supposed to reflect girls' interest) were analysed statistically. All the boys and

¹ A. S. Patel, Socio-Economic Scale, Department of Psychology, M. S. University, Baroda.²

* The scale can be seen in Appendix No. 17.

of VIIIth class at the age of about 13 of Gujarat girls in forms A and B had attempted the test; and their scores on these items were sorted out. The ^{CR}~~M~~-test was applied to study sex differences in interest. The results are summarized in Table No.

TABLE 19
Interest of Boys and Girls in Listening Talks

Talk-1 on Cricket

	N	M	SD	CR	Level of significant
Boys	917	4.5496	2.0768	10.15	Significant at .05 level
Girls	988	3.6153	1.9277		

Talk-2 on Decoration of the House

	N	M	SD	CR	Level of significant
Boys	893	4.4230	1.8608	2.556	Significant at .05 level
Girls	1050	4.2085	1.8238		

It will be seen from the table that the mean differences between boys and girls in listening to talks of interest are found to be significant. It appears from the results that interest bore significant relationships to the amount comprehended. That is, boys and

girls, differently listen to the matter of their own interest, or that interest appears to play an important role in comprehension. The results are not in tune with Caffrey (26) and Cartier (29). Spearritt (123, pp.7-8) remarked on this: "But contrary to expectations, the interest level of the material for the subjects appears to bear little relationship to the amount comprehended."