

## THE IMPACT OF AUDIO-ENHANCED READING IN READING COMPREHENSION

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### **Abstract**

This study analyzes the direct effect of audio-enhanced reading (reading while listening simultaneously) on the reading comprehension of thirty five Iranian males studying English as a Foreign Language in an intensive program in an institute. The study also examines the potential relationship of the listening tasks under study and subjects listening comprehension (on both control and experimental groups). The process for the experiment entailed the administration of fifteen reading passages between 150 to 220 words in length each followed by a 7-item multiple choice comprehension test as well as using Person to Person video tape in language lab during the course. The result did not indicate any superiority of the experimental group over the control one. The subjects understood the passages equally well. Results of correlation coefficients showed some significant relationship between the subjects' comprehension skills and their performance on the simultaneous listen-read passages. That is, the subjects with higher listening comprehension skills performed better at the simultaneous reading while listening than those with lower listening comprehension scores.

Research Project

1-Audio-enhanced: Reading while listening simultaneously

2-Reading: Perceiving a written text in order to understand its contents

3-Comprehension: The understanding that results in the process of silent reading

4-EFL: English as a Foreign Language

## INTRODUCTION

Reading is not only one of the most important skills in language learning, but also one of the main objectives of learning English in our universities. To develop reading ability within the language learners, different methods (among which the most important one is reading method) have been implemented since the beginning of the twentieth century.

Varzgar (1991) stated, "Reading is one of the most important skills in college education" (P.18). Similarly, Rivers (1981) believes that "Reading is the most important activity in any language class, not only as a source of information and a pleasurable activity, but as a means of consolidating and extending one's knowledge of the language"(P.259).For many students of English as a second/foreign language, reading English is both the primary means by which they become acquainted with the content of the subject area they are studying and the most important way in which they continue to develop their knowledge of the language itself (Celce-Murcia,1979). The other component of the reading programs, reading comprehension, should focus on as much exposure to reading materials as time and individual student ability allow.

An acceptable interactive reading involves direct extraction of meaning from the written discourse. Mature reading for comprehension is not mediated by sounds, but requires active participation on the part of the reader. "The reader's mind in reading is as active as in speech." (Widdowson. 1990. P. 214).

Much of the basis for reading ability may derive from active discussion work as well as through concentrating interaction with a text on one's own. Reading to understand does not necessarily mean reading with speed and students never involve reading with lack of attention and concentration. Nevertheless, reading effectively is reading with both comprehension and speed.

Considering the pivotal role of listening comprehension in the acquisition of a second/foreign language and the effective use of audio-aids in teaching tasks, and in spite of the fact that basic skills are interrelated, the importance of listening cannot be underestimated. In teaching English teaching practitioners have always been discussing the theoretical and practical perspectives related to the four

skills. One of the fundamental topics of discussion has been the teaching of these four skills in an integrated form.

Certain writers, notably Sticht (1972) quoted by Widdowson (1990), stated "reading and listening perhaps better, reading interaction and conversational interaction, that is, reading and listening are not two separate skills, but one, holistic ability to comprehend by language." (P.293)

Listening and reading with understanding are receptive decoding skill. It is clear that, it is possible to hear, but not listen. Similarly, it is possible to listen, but not to understand. When the student hears something while he is simultaneously reading he may not need to use listening comprehension skills very much-when listening to materials he knows by heart- he does at least have to rely on his ear. However, hearing familiar material certainly has value as a sort of easy transition between listening for perception and listening for comprehension, nor between listening as a supplement to reading (Ur. P. 52).

Listening to a text and reading it at the same time is something that is frequently done in the foreign language classroom. The teacher reads out a story, and the students follow her words in their text books. This is certainly a valid technique for presenting new material and aiding reading, and it does help the students to get used to how the language sounds, and to the correspondence between orthography and pronunciation. Consequently, a lot of listening material and various types of activities and teaching aids in teaching listening comprehension have been proposed by many teaching practitioners. Among them, tape recorders as audio-aids have been the one which has been mostly used in language teaching situations.

On the effectiveness of such aids on the listening comprehension, some observations and researches have been carried out by scholars such as: Muller (1980), Gunther (1980), Edasawa (1990), Kellerman (1992), which mostly indicated that pure listening activities are more effective than the other types of activities. There has been another study by Schepis, Margaret Ladd (1995), which looked at the effectiveness of audio-enhanced at three variable speeds on the reading comprehension of adult Japanese students learning English as a second language. The results did not indicate any superiority of the simultaneous mode of the subjects under the experimental conditions.

Also another study has been conducted by Patricia S. Koshkinen. et. al.(2004) that explored the impact of book-rich classroom environments and home reading, with and without an “audio model” on reading motivation, comprehension, and fluency. In this study use of “audio models” provided particular benefits for students learning to speak English. Therefore, the purpose and intension of this study is to investigate the relative advantage and disadvantage of some techniques and materials such as audio-enhanced program within the context of specific needs in EFL students at the intermediate level.

### **Design and Methodology**

In order to appropriately investigate the effects of audio-enhanced program on the reading comprehension, the following method and design are adopted for the present study.

### **Subjects**

The subjects in this study were seventy students studying English at a Language Institute in Mashhad. The sample population was chosen among the total population of 145 subjects through the administration of the relevant pre-test which will be explained shortly. The sample population was randomly assigned to two control and experimental groups. The range of their age was 14 to 18 with an average of 15.5.

### **Instrumentation**

To make sure that the present work would enjoy the needed appropriateness, two instruments were applied: 1. A Nelson 200 A Reading Comprehension Test, provided by W.S. Fowler and Norman Coe, which functioned as per-test, too. 2. A Nelson 200 B Reading Comprehension Test as the independent variable. The pre-test functioned as a control measurement, that is, a basis for illustrating the different test scores between the exams and showing the process of the subjects learning during the teaching period and treatment. At the end, a post-test, which served as an independent variable, was used to asses the impact of audio-enhanced program on the student reading comprehension.

## Design

It seemed that the experimental design best suited this study was:

<i>Randomization</i>	<i>Experimental Group</i>	<i>T1</i>	<i>X</i>	<i>T2</i>
	<i>Control Group</i>	<i>T1</i>		<i>T2</i>

On the basis of the mentioned design, the two groups of subjects served as control and experimental one. Both groups with thirty five subjects met every other day, an hour and half per session, for five weeks totally 23.5 hours. Following the regular program with the subjects in control group, the researcher guided them with their mispronunciations of words, asked them comprehension questions, inferential or non-inferential, wanted them to give the meanings of words in English, helped with possible idioms found in the text, and helped them to remove their misinterpretation of sentences or paragraphs. The same procedure was followed by experimental group; the only difference was that the experimental group was exposed to the audio-enhanced program, i.e. they had to read and listen to the text simultaneously. In each session the experimental group was introduced to a different reading text mostly was chosen from Headway series books which were accompanied by its correspondent tape. They were asked to follow the text and read it while listening simultaneously to its correspondent tape playing to them. By the end of the text they were asked comprehension questions.

At the end of the course a post-test was administered to both experimental and control groups. The post-test which served as an independent variable was the one that assessed the impact of audio-enhanced reading program on the subjects reading comprehension.

## Data Analysis and Discussion of the results

Having obtained the data on the basis of the learner's performance on the reading comprehension, the results of the test was used for statistical computation, to analyze and describe the data, and to calculate the mean score and the standard deviation. Tables 1 and 2

illustrate the scores of the two groups according to the computed results of the post-test.

In order to see if there is any significant difference between the results of the two groups, a T-test is applied (table 3).

The T-test comparison of group means of the reading comprehension reveals no significance at the  $p=0.05$  level of significance which serves as an appropriate level for educational purpose. The T. value of 1.33 is less than the T. critical of 1.96 at the 0.05 level of significance. Naturally, regarding the subjects' test scores in post- test and comparing them with their pre-test scores; it becomes explicit that the subjects both in control and experimental groups have shown improvement in reading comprehension (Table 4). The experimental group by the means of 74.5 and standard deviation of 6.75 in pre-test achieved the mean of 77.95 and standard deviation of 7.3 in post-test, at the same time the control group received the means of 70.95 and standard deviation of 8.15 in pre-test and the means of 74.75 and standard deviation of 12.38 in post-test. Although both groups have shown improvement, it is irrelevant to the subject matter. This little improvement is attributed to the natural order of learning.

The research also examined the potential relationship of the subjects' listening comprehension and their performance on the simultaneous listen-read passages (Table 5). Instructions were conducted based on Person to Person video tape, and the subjects were tested at the end of the course.

Results of coefficient correlation show some significant relationship between the subjects' listening comprehension skills and their performance on the simultaneous listen-read passages. That is, the subjects with higher listening comprehension skills performed better at the simultaneous reading than those with lower listening comprehension scores. And once more it was confirmed that audio-enhanced reading program does not affect the learner's reading comprehension.

### **Conclusion**

On the basis of T-test one might conclude that the difference between means is not great enough to prove the hypothesis of effecting audio-enhanced program on the students' reading comprehension at the intermediate level. In other words, the learners who were introduced

to the audio-enhanced program scored almost the same in reading comprehension test as those who were instructed through normal reading activities. The results of this study show that the audio-enhanced program is far more effective in improving listening comprehension. Since the four language skills are interrelated, it can be used to test reading comprehension through listening, as in conventional cloze procedure. Teachers who are not native speakers of English should specially try to use tape or cassette recorder, which has been recorded by native speakers, in reading classes. Students can profit from audio-enhanced reading for better pronunciation and improving their understanding of relationship between sound and letters. Furthermore, all language learners can use them without the teacher's help.

**Table 1: Scores obtained from experimental group of reading comprehension**

Student	X	X <sup>2</sup>	Student	X	X <sup>2</sup>
1	70	4900	19	74	5476
2	82	6424	20	84	7056
3	84	7075	21	70	4900
4	78	6074	22	78	6074
5	80	6400	23	82	6724
6	64	4096	24	80	6400
7	74	5476	25	76	5776
8	74	5476	26	86	7397
9	84	7056	27	84	7056
10	80	6400	28	80	6400
11	82	7624	29	60	3600
12	84	7056	30	54	2916
13	74	5476	31	80	6400
14	86	7397	32	74	5476
15	84	7056	33	78	6074
16	80	6400	34	80	6400
17	74	5476	35	70	4900
18	84	7056			

X=77.95

X<sup>2</sup>=214132

X=77.95

SD=7.3

**Table 2: Scores obtained from control group of reading comprehension**

X2	X	Student	X2	X	Student
2704	52	19	8100	90	1
8100	90	20	5476	74	2
7056	84	21	6400	80	3
8100	90	22	5776	76	4
5776	76	23	7056	84	5
4624	68	24	2500	50	6
6400	80	25	7056	84	7
7396	86	26	3364	58	8
7744	88	27	8100	90	9
4096	64	28	8464	92	10
4096	64	29	4096	64	11
6084	78	30	4900	70	12
3136	56	31	7056	84	13
3364	58	32	4900	70	14
5476	74	33	2500	50	15
5184	72	34	6400	80	16
7056	84	35	7724	82	17
			5476	74	18

X=2616 X2=200736 X=74.75 SD=12.38

**Table 3: T-test comparison of groups' means in reading comprehension post-test**

	Subject:	Mean	Sad
Experimental Group	35	77.95	7.3
Control Group	35	74.75	12.38

T. value=1.33

P. value=0.05

T. critical=1.96



**Table 4: T-test Comparison of Groups Means in Reading Comprehension Pre/Post-test**

	Pretest		Post-test	
	EX. Group	C. Group	EX. Group	C. Group
Subjects	35	35	35	35
Means	74.5	70.95	77.95	74.75
SD	6.75	8.15	7.3	12.33

T. critical=1.96

T. value=1.33

P. value=0.05

**Table 5: The Coefficient of Correlation between Listening Comprehension and Reading Comprehension**

X(L.C.)	Y(R.C.)	X <sup>2</sup>	Y <sup>2</sup>	XY	X (L.C.)	Y (R.C.)	X <sup>2</sup>	Y <sup>2</sup>	XY
90	70	8100	4900	6300	74	82	5476	6724	6068
80	84	6400	7056	6720	76	78	5776	6074	5928
84	80	7056	6400	6720	50	64	2500	4096	3200
90	84	8100	7056	7560	92	80	8464	6400	7360
64	82	4096	7624	5248	70	84	4900	7056	5880
84	74	7056	5476	6212	70	86	4900	7397	6020
50	84	2500	7056	4200	80	80	6400	6400	6400
82	74	7724	5476	6068	74	84	5476	7056	6216
52	74	2704	5476	3848	90	84	8100	7056	7560
84	70	7056	4900	5880	90	78	8100	6074	7020
79	82	5776	6724	6263	68	80	4624	6400	5440
80	76	6400	5776	6080	86	86	7396	7396	7396
88	84	7744	7056	7392	64	80	4096	6400	5120
64	60	4096	3600	3840	78	54	6084	2916	4266
56	80	3136	6400	4480	58	74	3364	5476	4292
74	78	5476	6074	5772	72	80	5184	6400	5760
84	70	7056	4900	5880					

R.C.: reading comprehension

L.C.: listening comprehension

$$r = \frac{N(\sum xy) - (\sum x)(\sum y)}{\sqrt{[N(\sum x^2) - (\sum x)^2][N(\sum y^2) - (\sum y)^2]}} = 0.3867$$

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