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# The Effect of Visual Advance Organizer and Types of Passages on EFL Learners' Listening Comprehension

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Testing the comprehension of spoken language is of primary importance. A lot of factors may affect the performance of EFL learners on listening comprehension tests, among which are the use of visual advance organizers, and types of listening passages (dialogues or monologues). As B-Ikeguchi (1997) states a few studies have been carried out on the effects of these factors on EFL learners' listening comprehension with controversial results. And even fewer studies have concentrated on the effects of these factors on EFL learners' performance on listening comprehension tests, which is the purpose of this study. In the present study, 180 advanced EFL learners were randomly selected by administering the Oxford Placement Test (OPT). The subjects were randomly assigned to three groups each consisting of 60 students. As far as the performance of subjects on listening comprehension test was concerned, the following results were obtained: 1) There was a significant difference between the presence vs. lack of visual advance organizer; 2) There was a significant difference between the uses of short-interval vs. long-interval advance organizer; 3) There was a significant difference between different types of listening passages (dialogues vs. monologues); and 4) There was no significant interaction between the use of visual advance organizer and different types of listening passages.

Keywords: Advanced EFL Learners, Visual Advance Organizer, Time Lapse, Types of Listening Passages.

Language teaching has undergone a lot of changes during the past decades. As the language teaching methods have varied greatly over the time, the attitude of foreign language teachers toward listening and classroom techniques concerning teaching and testing listening comprehension has changed too.

Listening comprehension is the most important and fundamental of four skills in language learning. It plays a significant role in the lives of people. As Mendelsohn (1994) mentions, we spend 40-50% of our communication time on listening. In contrast, only 25-30% is used in speaking, 11-16% in reading, and about 9% in writing. Listening is a critical element in the competent language performance of adult second language learners, whether they are communicating at school, at work, or in the community. Through the normal course of a day, listening is used nearly twice as much as speaking and four to five times as much as reading and writing (Rivers, 1981).

Byrnes (1984) has highlighted the valuable insights gained from studies of child language acquisition that emphasize the pivotal role listening comprehension plays in native language development. It is evident that children listen to respond to language before they learn to talk. When it is time for children to learn how to read, they still have to listen so that they gain knowledge and information to follow directions. But listening remains one of the least understood processes in language learning despite the recognition of the critical role it plays both in communication and in language acquisition (Morley, 1991). As language teaching has moved toward comprehension-based approaches, listening to learn has become an important element in the adult ESL classroom (Lund, 1990).

In any classroom, students have to listen carefully and attentively to lectures and class discussions in order to understand and retain the information later (Morley, 1991). Brown et al. (1985) note:

Listening per se is occasionally referred to as a "passive" skill. This interpretation oversimplifies the definition of listening; a listener is far from passive as he receives, analyzes, and interprets the oral signals that come his way, recreating the message of the speaker. Perhaps at this point we should define listening as more than just being in the environment of speech sounds. More carefully specified, listening is attending to and interpreting oral language. The student should be able to hear oral speech in English, segment the stream of sounds, group them into lexical and syntactic units (words, phrases, sentences), and understand the message they convey (pp. 73-74).

Actually, listening comprehension activities are mostly accompanied by a number of materials or in classrooms. These include the use of audio materials (tape-recorders), visual advance organizers (illustrations, and pictures), different types of listening passages (monologues or dialogues), etc. All of these materials and are used very often in teaching situations, but little attention is paid to their effectiveness. In other words, a few studies have been carried out examining the effects of these factors on EFL learners' listening comprehension. And even fewer studies have concentrated on the effects of these factors on EFL learners' performance on listening comprehension tests, which was the purpose of this research.

Language practitioners try to find the best ways of evaluating listening comprehension in the field of language testing. Language testing has got different functions and objectives. According to Bachman (1990), the most prevalent use of language tests is for purposes of evaluation in educational programs. In order to use language tests for this purpose, one must assume that information regarding educational outcomes is necessary for effective formal education, that appropriate changes or modifications in the program are possible, and that educational outcomes are measurable (p. 78).

The issue of the use of audio materials and visual advance organizers (illustrations and pictures) is something which has

puzzled researchers for many years. Most research on this issue has conflicting results (Canning-Wilson, 2000; Feak and Salehzadeh, 2001; Lonergan, 1992; Skehan, 1998). Lonergan (1992) asserts that, "The combination of sound and vision is dynamic, immediate, and accessible. This means that communication can be shown in a context, and the many factors in communication can be perceived easily by viewer and language learners" (p. 4).

Read (2002) mentions that different forms of visual input is now used in listening assessment.

One area which is now being addressed is the form of the input. The standard method of presenting the stimulus material for a listening test, especially large-scale and high-stakes ones, is by means of a pre-recorded audiotape. However, given the routine use of videos and other visual material in the contemporary language classroom, there has been increasing interest in providing various forms of visual input in listening assessment (p. 107).

The strategies developed by the students are different depending on whether the passage is accompanied by visuals or not. When learners can both see and hear, it seems that less attention is focused on purely linguistic cues; when only audio is available, some internal linguistic cues, particularly if the word is a cognate, facilitate the inference of words that are not specific to the theme of the passage and have a more general meaning. In addition, the effect of time lapse between introducing the visual advance organizers and their related material is a controversial issue.

The aim of present study was to determine whether the use of visual advance organizer (pictures), the time lapse in providing the visual advance organizer (short-interval or long-interval), and the different types of listening passages (dialogues or monologues) have any effect on the performance of Iranian advanced EFL learners in listening comprehension tests. The most important point is that no extensive study has concentrated on the effect of these factors simultaneously on listening comprehension.

### **Research Questions**

There were three research questions.

- Q1: Is there any relationship between the use of visual advance organizer (pictures) and Iranian advanced EFL learners' performance on listening comprehension tests?
- Q2: Is there any relationship between the different types of listening passages (dialogues vs. monologues) and Iranian advanced EFL learners' performance on listening comprehension tests?
- Q3: Is there any interaction between the use of visual advance organizer (pictures) and the different types of listening passages (dialogues vs. monologues)?

# Research Hypotheses

There were three research hypotheses:

- H01: There is no relationship between the use of visual advance organizers (pictures) and Iranian advanced EFL learners' performance on listening comprehension tests.
- H02: There is no relationship between the different types of listening passages (dialogue vs. monologue) and Iranian advanced EFL learners' performance on listening comprehension tests.
- H03: There is no interaction between the use of visual advance organizers (pictures) and types of listening passages (dialogues vs. monologues)?

### Method

### **Participants**

The participants of this study were 180 adult advanced EFL learners studying at Marefat Private English Institute in Tehran. The criterion for choosing these subjects was an Oxford Placement Test (OPT) of proficiency, the reliability and validity of which was estimated before. By using this criterion, 180 advanced proficiency level subjects were chosen for the study.

The subjects were randomly assigned to three groups, each consisting of 60 students: 1) those who only listened to the tape, i.e. the audio group (group A), 2) those who listened to the tape, and had access to the pictures, i.e. visual advance organizer, simultaneously (group B), and 3) those who listened to the tape, and were given the pictures twenty minutes before the test (group C).

### Instrumentation

Two tests were used in this study: OPT and a listening test. First, the subjects were chosen by the use of the OPT and then, they were given the listening test.

# The Oxford Placement Test

Since the OPT was going to be used as the placement test for the study, it was needed to be validated so that the results of the test would be used with much confidence. The 1992 version of the OPT was utilized.

In order to estimate the reliability, the split-half technique was utilized, so the questions were divided into odd and even numbers and the total score for each part was calculated and entered into SPSS. The formula used for estimating the reliability was Pearson-Product Moment formula. With a value of r=0.72 and a two-tailed p-value of less than .01, it could be concluded that

correlation coefficient between the two grand odd and even halves was significant. In other words: r = 0.72; n = 60; p < 0.01.

For estimating the validity, criterion related validity technique was utilized. For this purpose, the same subjects were given a TOEFL test of proficiency (1995). Then, the correlations between the two sets of scores, i.e., OPT and TOEFL were estimated. The results showed that the correlation between OPT and TOEFL was 0.62 with p-value less than 0.01. In other words: r = 0.62; n = 60; p < 0.01.

### The Listening Comprehension Test

There were totally 30 multiple-choice questions, four passages (two dialogues and two monologues). All of the passages were played just once. So for longer passages, the researcher divided them into two halves and gave the participants the chance to listen to the first half and answer the related questions. Then, after a pause, they were given the chance to listen to the second half and answer the rest of the questions. This procedure meant to decrease the memory load of the participants.

For reliability, the questions in the listening test were divided into odd and even halves and for each half one score was given. The correlation was estimated using Pearson-Product Moment formula. The results showed that the correlation was significant: r = 0.67; n = 60; p < 0.01.

For validity, again criterion related validity was used. Therefore, it was correlated with the scores of the listening part of OPT. The correlation was also significant: r = 0.68; n = 60; p < 0.01.

### The Visual Advance Organizer

The pictures were black and white, and were taken from different scenes of the passages by special computer software. For the first passage three pictures, for the second passage two pictures, for the third passage four pictures and for the last passage three pictures were shown. These pictures were distributed among the participants depending on the types of the groups.

#### **Procedure**

First, the subjects were homogenized by giving them the OPT test; those who obtained 120 and more were defined as the advanced EFL learners. Then, were randomly assigned to one of the three groups (A, B, and C) mentioned above. Each group was tested separately and there was a one-week interval between the placement and the listening test. After assigning the participants to three groups, the listening comprehension test was administered to them. Of course, before listening to passages, they were given a little information about the contents of the listening passages and a little time to take a look at the questions so that they could know where to look for the necessary information in the passages. This was done for all of the groups. Also, it should be mentioned that the participants had no time limit in answering the questions.

The participants in group A just listened to the passages and answered the questions; so they only used their ears for understanding the passages. The ones in group B, listened to the passages and at the same time had access to the pictures (visual advance organizer); they occasionally had a look at the pictures while listening to the passages or answering the questions. The ones in group C were given the pictures twenty minutes before, the tape was played and then they answered the questions. The test lasted about 35-40 minutes for all of the three groups.

### The Design of the Study

Since there was no treatment, the design of the study was ex post facto. The dependent variable was fixed: EFL learners' performance on the listening comprehension test. The measurement for it was interval scale. Both between and within comparisons were supposed to be made in this study. Between group comparisons included: 1) comparing the performance of the subjects who had access to the visual advance organizers and those who did not; 2) comparing the performance of the subjects to whom the visual advance organizers were provided with short or long intervals. The only within group comparison included

comparing the performance of the same subjects while listening to monologues and dialogues. Therefore, the suitable statistical test would be ANOVA.

The design of the study can be summarized as follows:

Significance Level: 0.05

Dependent Variable: EFL learners' performance on the listening comprehension test.

Measurement: Interval or scale.

Independent Variables: Advance Organizer with three levels (no advance organizer, short-interval advance organizer, long-interval advance organizer); Types of the listening passages with two levels (monologues vs. dialogues).

Measurement: Nominal.

Between or within Measure: The first one (advance organizer) was between-subjects measure, and the other one (types of the passages) was a within-subjects measure.

Statistical Procedure: Mixed factorial ANOVA.

### Results

Having collected the data, the SPSS software was utilized for data analysis. In order to test the hypotheses, mixed factorial ANOVA was used, and the effects of advance organizer (no advance organizer, short-interval advance organizer, and long-interval advance organizer), different types of the passages (monologues and dialogues), and their interaction were tested. Of course, before embarking on the ANOVA, it was important to check the data for anomalies such as extreme values or distorted distributions. This was done by checking the boxplots.

Figure 1 shows that the data set did not have any outliers or extreme values. Thus the ANOVA could be used without omitting any cases.

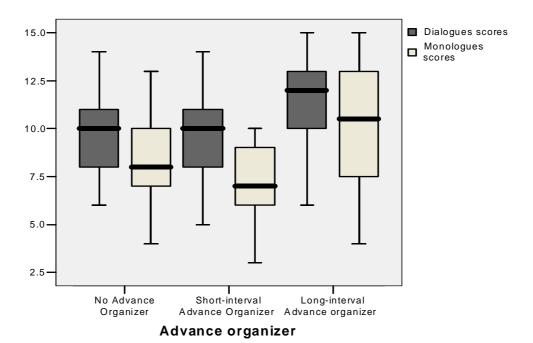


Figure.1. Variation of listening comprehension scores across the levels of independent variables

Table 1 shows the descriptive statistics for the two categories.

As the table shows, generally the mean scores in the dialogue groups are higher than the ones in the monologue groups. In the dialogue groups the subjects in the long-interval advance organizer group had a higher mean score compared to the other two groups (no advance organizer and short-interval advance organizer). The same is true in the monologue groups. From this, it can be concluded that there was a significant effect for the type of the passages (dialogues or monologues), and the advance organizer. This is indicated in Table 2.

Table 1
Descriptive statistics of listening comprehension scores across independent variables

### **Descriptive Statistics**

	Advance organizer	Mean	Std. Deviation	N
Monologues scores	No Advance Organizer	8.23	2.360	60
	Short-interval Advance Organizer	7.25	1.810	60
	Long-interval Advance organizer	10.13	3.089	60
	Total	8.54	2.739	180
Dialogues scores	No Advance Organizer	9.68	1.780	60
	Short-interval Advance Organizer	9.62	1.984	60
	Long-interval Advance organizer	11.52	2.467	60
	Total	10.27	2.264	180

Table 2 tabulates the source of variation, the sums of squares, degrees of freedom (df), mean square, F ratio and p-value (Sig.). Note that for this model of ANOVA, each F ratio was the Mean Square for the source divided by the Mean Square for Error.

The two rows, type, and type\*advance organizer are the ones of most interest, since these show the main effect and interaction. Note the p-value for each F ratio. There was a significant main effect for the type factor. Despite the main effect of this within-subjects factor, there was not any significant interaction between type and advance organizer; the p-value was given as 0.07.

The results can be summarized as follows:

- 1) There was a significant main effect of the Type factor: F (1, 177) = 90.56; p< 0.05.
- 2) There was not any significant interaction between Type and advance organizer factors: F(1, 177) = 3.03; p > 0.05.

Table 3 shows that there was a significant main effect for the advance organizer factor: F(1, 177) = 25.15; p< 0.05.

Table 2
Tests of within-subjects contrasts

Measure: MEASURE\_1

Source	type	Type III Sum of Squares	df	Mean Square	F	Sig.
type	Linear	270.400	1	270.400	90.563	.000
type * advorgan	Linear	18.117	2	9.058	3.034	.071
Error(type)	Linear	528.483	177	2.986		

Table 3
Tests of between-subjects effects

Measure: MEASURE 1

Transformed Variable: Average

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Intercept	31847.211	1	31847.211	4223.758	.000
advorgan	379.206	2	189.603	25.146	.000
Error	1 33 4, 58 3	177	7.540		

In table 4, the mean scores for the combination of both advance organizer and type are shown. It shows that subjects that were provided with the advance organizer 20 minutes before the listening test had higher mean scores compared to the other two groups. Also, it shows that generally all three mean scores in dialogues were more than the three in the monologues, meaning that subjects totally performed better on the dialogues compared to monologues.

To discover the precise location of differences, it was needed to perform a post-hoc comparison of the means. If no difference among the means was found in the ANOVA procedure, it could be stopped at that point. That is, it is not appropriate to search for differences among sets of means unless the F ratio is significant. When there is a significant difference among the means, a post-hoc comparison is possible to identify precisely where that difference lies .

Table 4
Marginal means for the advance organizer by type

### 3. Advance organizer \* type

Measure: MEASURE\_1

				95% Confidence Interval		
Advance organizer	type	Mean	Std. Error	Lower Bound	Upper Bound	
No Advance Organizer	1	8.233	.320	7.603	8.864	
	2	9.683	.271	9.149	10.218	
Short-interval Advance	1	7.250	.320	6.619	7.881	
Organizer	2	9.617	.271	9.082	10.151	
Long-interval Advance	1	10.133	.320	9.503	10.764	
organizer	2	11.517	.271	10.982	12.051	

The Post-hoc test was done only for advance organizer because only this factor had three levels and the other factor (type) had only two levels so could not be tested by Tukey Test.

Table 5 shows the results which are summarized below.

- 1) There was a significant difference (p< 0.05) between long-interval advance organizer group and the other two groups, i.e., no advance organizer and short-interval advance organizer groups.
- 2) There was not any significant difference (p < 0.05) between any advance organizer and short-interval advance organizer groups.

Table 5
Post hoc tests

### **Multiple Comparisons**

Measure: MEASURE\_1 Tukey HSD

		ı			l	
(I) Advance exemine	(J) Advance organizer	Mean Difference	Std. Error	C:~	95% Confidence Interval	
(I) Advance organizer		(I-J)	Sta. Elloi	Sig.	Lower Bound	Upper Bound
No Advance Organizer	Short-interval Advance Organizer	.53	.354	.302	31	1.36
	Long-interval Advance organizer	-1.87*	.354	.000	-2.70	-1.03
Short-interval Advance	No Advance Organizer	53	.354	.302	-1.36	.31
Organizer	Long-interval Advance organizer	-2.39*	.354	.000	-3.23	-1.55
Long-interval Advance	No Advance Organizer	1.87*	.354	.000	1.03	2.70
organizer	Short-interval Advance Organizer	2.39*	.354	.000	1.55	3.23

Based on observed means.

 $<sup>^\</sup>star\text{-}$  The mean difference is significant at the .05 level.

In the following table homogeneous subsets are shown. Short-interval advance organizer and no advance organizer are in one subset and long-interval advance organizer in the other one.

Table 6
Homogeneous subsets

#### MEASURE\_1

Tukey HSD						
		Subset				
Advance organizer	N	1	2			
Short-interval Advance Organizer	60	8.43				
No Advance Organizer	60	8.96				
Long-interval Advance organizer	60		10.83			
Sig.		.302	1.000			

Means for groups in homogeneous subsets are displayed. Based on Type III Sum of Squares

The error term is Mean Square (Error) = 3.770.

- a. Uses Harmonic Mean Sample Size = 60.000.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.
- c. Alpha = .05.

Figure 2 shows the profile of different groups and types.

### Estimated Marginal Means of MEASURE\_1

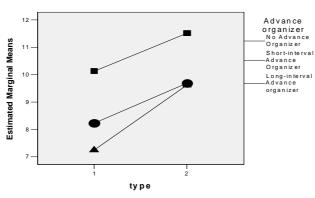


Figure 2. Profile plots

It can be seen that there is no interaction between the two factors. Therefore, the first two null hypotheses were accepted at p < 0.05, and the third one was rejected.

### Discussion

The most important finding of this study was the significant effect of the use of visual advance organizer. This finding confirms Skehan's (1998) view:

The use of visual support can function to make a task easier, since the opportunity to refer to material which is important during the task is extremely useful, and more important, releases processing resources for use in other directions. In this case, the 'prop' provided by the visual (or other) support functions to save memory, and the constant need to re-access material from long-term memory (p. 177).

Specifically, there was a significant difference between the group without advance organizer and the group with long-interval advance organizer. But there was no significant difference between the group without advance organizer and the group with shortinterval advance organizer. This showed that when the learners were given the advance organizer 20 minutes earlier than the listening task, they had the time to take a look at them, relating the pictures to the short instructions given to them, and also to the background knowledge they had, which led to the formation of a kind of mental image for the passages they were going to listen. However, short-interval advance organizer was not effective because the learners did not have the time to take a look at the pictures and relate them to the instructions given about each passage. One could probably say that the use of short-interval advance organizer divided the focus of ears and eyes. Therefore, they are not necessarily helpful and may even hinder performance. This can also be examined by studying the effect of watching films

with or without the subtitles. Therefore, the teachers should be careful in using advance organizers in the most effective way, i.e., with an interval of some length.

Another important finding of the study was that there was a significant difference between dialogue and monologue passages. The learners did better on the dialogues than monologues. This finding accords with Shohamy and Inbar's findings (1991). It seems that dialogues are better understood by the EFL learners since in the dialogues the speakers use different ways of making each other understood such as repetitions, silence, pauses, clarifications, fillers, etc. These pauses and fillers are important in listening comprehension, because they allow more processing time for the listener to interpret the input (Rubin, 1980). Similarly, redundancies in dialogues can also give listeners more time to process the input, and they also serve to give listeners another chance to interpret the input if they missed it the first time. Numerous studies (Blau, 1990; Cervantes & Gainer, 1992; Chaudron, 1983; Chiang & Dunkel, 1992; Conrad, 1989; Parker & Chaudron, 1987; Pica, Young, & Doughty, 1987) conducted with L2 listeners found that texts with redundant language were helpful for learners in comprehending aural input. This is different from a monologue in which one person speaks with no pauses in a drab, monotonous way. As Messick (1996) mentions these pauses, fillers, and redundancies are natural parts of spoken language, and are part of the target language use domain, and to exclude them in a listening text threatens the construct validity of that test.

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