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# THE IMPACT OF TEACHING CRITICAL THINKING ON IRANIAN EFL LEARNERS LISTENING COMPREHENSION ABILITY

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#### **ABSTRACT**

The present investigation was an attempt to study the effect of teaching critical thinking on Iranian EFL learners' listening comprehension ability. To that end, an OPT test was administered to 100 university students learning English language in institutes. Learners who scored between one above and below the standard deviation were selected. 40 learners were selected and they were divided into experimental and control group, each group contained 20 learners. A listening comprehension test was administered to both groups as a pre-test to take their initial knowledge of listening comprehension. The listening section of the TOEFL test was selected to test the listening ability of the participants. A critical thinking questionnaire was also distributed among the participants. The experimental group received treatment in order to help them improve their critical thinking beliefs in ten sessions. The control group received no treatment. Finally both groups sat for the post-test of the same listening comprehension test. The results were analyzed through ANCOVA and it was explored that critical thinking had a positive effect on Iranian EFL learners' listening comprehension ability.

Keywords: Critical Thinking, Listening Comprehension Ability, Learner's Belief

#### INTRODUCTION

According to Galvine and Terrell (2001), listening "is an active process that includes receiving, interpreting, evaluating and responding to a message. It takes effort and concentration" (p. 110). It is the process of receiving, creating meaning from, and responding to input. It contains the ability to recollect information, as well as utilize them to communicate. In other words, it involves construction, retention and reaction to meanings we receive. In so doing, it interrelates attention, awareness, working memory, our schemata and setting context. Evidently, listening process and effective listening comprehension are easily interfered by linguistics and extra-linguistics phenomenon. Therefore, listeners need to be tuned in so that they overcome listening comprehension inefficiency. Concerning listening improvement, Kamali and Fahim (2011) asserted that listening and critical thinking go hand in hand. According to critical thinker theorists, critical thinking is an important way through which teachers can let learners decide, devise and employ their potential ability. Wood states that critical thinkers are able to implement the process of logical thinking to confirm and disconfirm hypothesis, to discern what is true, what is false and separate facts from opinions (Wood, 2002). It leads learners to think logically, manipulate proof and accordingly open previously hidden views for them. As a result, critical construct has received chief attention in SLA area. Dewey (1933) refers to critical thinking as "active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and the further conclusions to which it tends" (p. 118). Likewise, Chafee (1988) states that critical thinkers put their efforts purposefully and explore the world carefully to clarify and optimize their perception. According to Lai (2011), critical thinking is in association with ability, disposition and background knowledge. With reference to ability, Lai (2011) states that critical thinkers are able to analyze argument, evaluate and make decision (Ennis, 1985; Facione, 1990; Halpern, 1997; cited in Lai, 2011). Critical thinking dispositions cover broad-mindedness, fairness and flexibility (Bailin et al., 1999; Facione, 1990; cited in Lai, 2011). In accord with Lai (2011), background knowledge is one of the essential factors in helping one to think critically. This domain knowledge is at the core of reasonable judgments. Theoretically speaking, this cognitive ability is one of several skills necessary to benefit both teachers and

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learners toward a better education system. By teaching how to better judge and solve problems, teachers can help students in improving their skills which ultimately result in their achievements.

# Statement of the Problem

Listening involves a complex process that allows us to understand and interpret spoken messages in real time by making use of a variety of sources such as phonetic, phonological, prosodic, lexical, syntactic, semantic, and pragmatic (Lynch, 1998). Without listening, learners cannot effectively express themselves and receive attentions from speakers that is effective communication. More importantly, listening is one part of the L2 learning in which nearly most of L2 learners face and have problems. It is also one of the fundamental means of communication. Comprehension skills can effectively be improved through increasing learners' critical skill (Kamali and Fahim 2011).

# Purpose and Significance of the Study

The purpose of the present study aims at realizing whether EFL learners' critical thinking affect listening comprehension ability or not. Since critical thinking is a prerequisite to learning on the whole, and language learning in particular it is of significance to both learners and teachers. Due to the relationship between critical thinking and learning a foreign language and consequently on achieving better marks in testing, it has positive wash-back effects. It contributes to all stakeholders in the process of teaching and learning.

#### Review of the Related Literature

De Boo (1999) and Gardner and Jewler (2000) pointed out that critical learners are successful in problem-solving activities. Similarly, Villavicencio (2011), studied critical thinking in relation to achievements, reported that critical thinking significantly positively correlate with learners' proficiency. In one study, Kamali and Fahim (2011) reported a significant relationship between critical thinking and reading abilities of learners. Concerning listening improvement, Kamali and Fahim (2011) asserted that listening and critical thinking go hand in hand. It is necessary that listeners are able to analyze the speakers and the setting to critically judge the interlocutor's intention. In another study, Rebuck (2008) showed that authentic listening is motivational and increase learners' interest and their perception in listening. Generally speaking, studies indicate that personal characteristics play an important role in learning process (Dewey, 1993; Pajares, 2003). Compared with other students, high critical thinker performs critically in learning. To make it simple, critical learners are more active in their learning, and particularly listening in this context.

#### MATERIALS AND METHODS

To find answers to the research question, a questionnaire and a test were employed. In order to conduct the study, 100 senior students from different Institutes participated in the study. They mostly age from 21 to 25. The students have studied English Language at least 3 years at the institutes. To study learners' critical thinking beliefs, a Critical Thinking questionnaire was employed. The scale was originally developed by Peter (2000). The present questionnaire was improved and suited for Iranian EFL learners. The questionnaire consists of 30 items using a 5-point Likert scale. Students were asked to read items and select an option ranging from never to always in terms of their critical thinking beliefs. The listening section of the TOEFL test was selected for this study.

# Data Analysis Procedure

SPSS software was used to analyze the results obtained in this research. For the present research and the hypothesis that was going to be tested, ANCOVA was considered appropriate.

Pre-test/post-test experimental designs are an example of the type of situation where this technique is appropriate. The researcher assesses each person on some continuous measure at Time 1 and then again at Time 2, after exposing them to some experimental manipulation or intervention.

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**Table 1: Descriptive Statistics for the Proficiency Test** 

N	Mean	SD
100	32	10.32

A descriptive statistical analysis was done on the collected data of OPT test. The results are shown in table 1.

**Table 2: Number of Students Participated in Pre-test and Post-test Case** 

	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
Pre- test*group	40	100%	0	0%	40	100%
Pre- test*group	40	100%	0	0%	40	100%

Table 2 represents the number of participants in the present research. All participants took part in pre-test and post-test in this study.

Table 3: Descriptive Statistics for the Pre-test and Post-test

Group		Pre-test	Post-test	
Experimental	Mean	59.9	68.4	
	N	20	20	
	SD	4.8	4.7	
Control	Mean	58.45	58.1	
	N	20	20	
	SD	5.64	5.2	
Total	Mean	59.15	63.25	
	N	40	40	
	SD	5.216	7.121	

The descriptive statistical analysis done on the collected data of pre-test and post-test is shown in the table 3. The mean and standard deviation of each group are included. In this study, in order to investigate the research hypothesis "critical thinking has no effect on Iranian EFL learners' listening comprehension ability", the differences between mean scores of pre-test and post-test of control and experimental group were calculated through ANCOVA.

Before running ANCOVA, the following hypotheses were examined:

- ☐ Linear relationship between variables (pre-test and post -test)
- ☐ Equality of variances
- ☐ Homogeneity of regression

In order to examine the equality of variances, Levine's Test of Equality of Error Variances of the dependent variable is equal across groups.

Table 4: Levine's Test of Equality of Error

F	df1	df2	Sig
.26	1	38	.61

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According to table 4 the calculated F is not meaningful. So there is equality of variances and ANCOVA can be run.

**Table 5: Test of between – subjects' effects** 

Source	Type III Sum	df	Mean Score	F	Sig
	of Square				
Corrected	1879.82	3	626.61	230.95	.00
Model					
Group (a)	17.86	1	17.86	6.6	.015
Pretest (b)	802.94	1	802.97	95.95	.00
Group pretest	.41	1	.41	.15	.7
(ab)					
Error	97.68	36	2.71		
Total	46200	40			

As table 5 shows, between subjects effect (a, b) is not significant (F=0.15, sig=0.7). It shows that the data supports homogeneity of regression. Therefore, covariance should be run just for between – subjects effect of post-test and the group to show whether mean scores of the two groups are the same or not. The result of this analysis is demonstrated in table 6.

Table 6: Mean and Corrected Mean of Listening Comprehension Ability

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Source	Posttest	Corrected Mean			
	$\mathbf{M}$	SD	M	SE	
Experimental	38.4	4.7	37.77	.36	
Control	28.1	5.11	28.72	.36	

Table 6 shows the corrected means of dependent variable of listening comprehension ability. The data demonstrate that the means of experimental group are upper than control group. Sum of analysis of covariance (ANCOVA) of listening comprehension ability in experimental a control group after eliminating between-subjects effect is demonstrated in table 7.

**Table 7: Sum of Analysis of Covariance** 

Source	Type III Sum of Square		M	F	Sig	Eta
Corrected Model	1879.415	2	939.71	354.48	.00	.95
Pretest	818.52	1	818.52	308.76	.00	.89
Group	805.48	1	805.48	303.84	.00	.89
Error	98.08	37	2.65			
Total	46200	40				

As it can be seen, the corrected model (F = .00, F = 354.48) is statistically significant. The results (F = 303.84, F = .00, Eta = .89) show that there is a difference between two groups. It means that there is a significant difference between experimental and control group.

#### Conclusion

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Based on the findings of this study, the results of ANCOVA analysis revealed that English listening Critical thinking had significant impacts on English listening final performance. That is, it was a significant predictor of English listening final performance. Those participants with a stronger sense of English listening critical thinking achieved accordingly as measured by their English listening final performance, and therefore the null hypothesis is rejected.

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