THE EFFECT OF METACOGNITIVE STRATEGY TRAINING AND RAISING EFL LEARNERS' METACOGNITIVE KNOWLEDGE ON LISTENING PERFORMANCE

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Abstract

This study investigated the effect of metacognitive strategy training and the degree of metacognitive knowledge on EFL learners' listening comprehension achievement. To this end and to complement the results of previous research, the participants were also involved in a self-rating process through engaging in log writing and completing a performance checklist. The participants were 40 female intermediate students studying English in a language institute in the north of Iran. Paired and Independent sample t-tests were used to compare the performance of the experimental group to that of the control group. Students' listening logs and performance checklists were also investigated for finding traces of raised awareness and increased strategy use. Results proved that strategy training and students' degree of metacognitive knowledge affected their listening achievement. The results were enlightening in that students indicated greater tendency to become more strategic learners as a result of the training they received. An analysis of participants' self- rating corroborated the attained results.

Keywords: metacognitive strategy training, listening comprehension, metacognitive knowledge

In the process of learning a second or foreign language, listening plays a significant role in achieving the proficiency needed in all the other three skills and is viewed as the primary means of second language acquisition" (Rost, 2002 p. 103). Despite its importance, second language listening instruction was generally neglected before the 1970s. The main reasons for this negligence were reported to be mainly based on the assumption that listening comprehension could be acquired automatically and naturally without any explicit instruction. Other reasons included teachers' lack of capability in teaching this skill and last but not least inappropriate and unauthentic materials available and lack of sound methodology at that time for presenting this skill in an appropriate manner (Mendelsohn, 1995). In fact, listening comprehension used to be regarded a passive activity in second language acquisition which did not deserve that much attention (Jung, 2003; Thompson & Rubin, 1996; Vandergrift, 2004). It was neglected and considered as "an overlooked dimension in language acquisition" (Feyten, 1991, p. 173). It had been assumed that a learner's ability to comprehend spoken language would develop entirely on its own, through repetition and imitation. As lately as the 1970s, there weren't any textbooks devoted to teaching the listening skill in a second language. It was believed that the ability to understand spoken language would automatically ameliorate as a result of exposure to the oral discourse.

Since the 1970s, emphasis on acquiring proficiency and communicative competence has shifted language teaching to receptive skills in communication and listening comprehension. For the most innovative methods of language teaching that have emerged in the past decades, "the priority of listening over speaking or the importance given to listening comprehension is a common denominator" (Feyten, 1991, p. 175). Beginning in the 1970s, SLA researchers have understood that the language learner must discriminate between sounds, understand vocabulary and grammatical structures, interpret stress and intonation, retain what has been gathered in all of the above and interpret it within the immediate as well as the larger sociocultural context of the utterance. (Wipf, 1984, p. 345). As Vandergrift states, "to coordinate all of this is no small feat and involves a great deal of mental activity on the part of the listener. Listening comprehension is anything but a passive activity." (1997, p. 38). In addition, throughout the 70s and up to the present, there has been a steadily increasing acknowledgement of the importance of listening comprehension (Brown, 1987; Herron & Seay, 1991; Schwartz, 1992; Field, 1998). Fortunately, now SLA research on listening comprehension recognizes the crucial role of listening comprehension in language learning and seeks to discover how to advance its development. As Herron and Seay (1991) remark, "current debate focuses not so much on whether listening is an important skill but rather on how best to promote its development." (p. 487).

Listening to spoken language includes active and complex processes. Thus, to comprehend information

from oral texts, listeners involve in a variety of mental processes such as focusing on selected aspects of aural input, constructing meaning from passages and relating what they hear to existing knowledge. These mental processes that are activated by listeners to understand spoken language are referred to as listening comprehension strategies. According to Mendelsohn (1995), L2 listeners often do not deal with the listening task in the most effective way. Chamot & Kupper (1989) also found that not a large number of strategies was used by L2 learners while listening. As indicated by Cohen (1998), L2 listeners do not approach listening tasks in an efficient way. As more attention is directed to learner-centered models of L2 instructions, it is necessary for the teacher to be a trainer of listening strategies. In fact, there appears to be a common denominator among L2 listening researchers that listening should be considered as a skill demanding strategy use; it is also believed that training students how to utilize these strategies results in improvement in their listening ability. "Given the importance of listening in L2 learning, students should benefit from the development of effective listening strategies that can help them comprehend more input" (Vandergrift, 1997, p. 495).

Therefore, based on the status of listening instruction, it seems that more emphasis should rest upon strategies. As O'Malley and Chamot remark (1990), strategies are the thoughts and behaviors that learners use to help them comprehend, learn or retain information. Additionally, researchers indicated that strategies and the ability to use them effectively were particularly important in foreign language listening. It has also been suggested that learning strategy instruction may help learners in three ways. Firstly, it can assist students to become better learners. Secondly, skill in using learning strategies helps them in becoming independent and confident learners. And finally, they become more motivated as they begin to understand the relationship between their use of strategies and success in learning languages. (Chamot & Kupper, 1989; Chamot & O'Malley, 1994). Among all of the strategies, metacognitive ones play the most central role in language learning process and its improvement. Anderson (2002) believes that "developing metacognitive awareness may also lead to the development of stronger cognitive skills" (p. 1). O'Malley, Chamot, Stewner-Mazanares, Russo, and Kupper (1985) have also emphasized the importance of metacognitive strategies by stating, "Students without metacognitive approaches are essentially learners without direction or opportunity to review their progress, accomplishment and future directions" (p. 561)..

To accentuate the aforementioned states, the researcher thinks that strategy use is a requisite component of learning a foreign language. It is assumed that not using strategies may cause trouble for learners in understanding oral English texts. Consequently, due to the vital role of strategies in language learning in general and listening comprehension in particular, metacognitive strategies were chosen to be taught in this study.

Over the years of teaching English to EFL students,

the researcher has noticed that learners have often had a hard time understanding oral texts in their listening comprehension classes. It has also been observed that in classes, teachers normally play a listening passage once or twice and move on. In fact, the current way to teach listening comprehension is to expose students to listening materials by repeating an oral text recorded on an audio cassette a few times and then the students are asked to answer the comprehension questions. This method by which listening comprehension is generally taught is referred to as the "Osmosis approach" (Mendelsohn, 1995). This type of instruction, derived from the audiolingual approach, generally relies on mere exposure to input and emphasizes speaking. To sum up, there is no difference between testing listening comprehension and teaching listening comprehension in the EFL situation, particularly in Iran.

As a matter of fact, the way that listening skill is being taught in EFL classes has some immediate effects on students' feelings toward this skill. Many students often become nervous when they listen to oral texts in the target language. Some of them will give up and stop listening whenever they have difficulty understanding what they hear. And still many of them feel that listening comprehension in L2 is a challenge for them. Not understanding every word and not being able to slow down the input to obtain control can contribute to students' fears, anxiety and other common reactions to the listening tasks. These fears often spring from a tacit assumption that they must understand every word. They also emanate from unsatisfactory experiences with approaches and methods to listening activities often taken by textbook and teachers as indicated by Mendelsohn (2001) and Holden (2002).

In spite of the shift from the teacher-centered classroom to the learner-centered classroom and the shift from the interest in the product of language learning to the process, the actual listening activities still remained traditional in approach in EFL listening classes in Iran. These activities do very little to develop metacognitive knowledge through raising learners' consciousness of listening processes. Thus, the researcher assumed that the strategies Iranian EFL learners used to understand oral texts were scanty, causing them to have trouble understanding the text. It was further found that training of listening skill to EFL students is far from enough and students' listening comprehension ability is far behind. To state the problem more specifically, current listening comprehension teaching generally fails to help students to amend their listening proficiency.

Therefore, in order to help the learners to improve their weakness in listening, this research project was set to train the learners to apply effective listening metacognitive strategies to their real learning course. To this end, it was attempted to integrate metacognitive strategy training into the listening classes; and the purpose of the research undertaken was to investigate the effectiveness of training these strategies as well as exploring what actually happens on the part of the learners through keeping track of their strategy use. To

pursue this objective, the study aimed to explore the following research questions: (1) Does metacognitive strategy training have any impact on students' listening performance? (2) Does metacognitive strategy training lead to students' use of these strategies?, and (3) Does metacognitive strategy training have any impact on students' perceptions and attitudes toward listening?

METHOD
Participants
The participants who formed the focus of the study were selected from among 80 students of a language institute called "Shokouh" in the north of Iran. To ensure the homogeneity of the students in terms of language proficiency, 80 subjects participated in a general proficiency test of PET. Then, the mean and standard deviation of the students' scores were obtained. The students whose scores were one standard deviation below and one standard deviation above the mean were selected and others were discarded. As a result, a total of 40 (N=40) students were selected. The participants were composed of intermediate students with the age ranging from sixteen to nineteen and all of them were female. So, the participants were all randomly selected and were equally divided into two groups. Classes were randomly assigned to either the control (N=20) or experimental (N=20) group.

Instrumentation
In this study the data were collected using the following instruments:
PET: One of the steps of the present study was to check the homogeneity of the subjects in terms of language proficiency. To this end, the Preliminary English Test (PET) was administered. It is an exam for those who can use every day written and spoken English at an intermediate level and it covers all four commands of language- reading, writing, listening and speaking. Based on the results of the test, the participants were homogenized to ensure that any result obtained in the study is attributed to the treatment not their language proficiency.

TOEFL test: Since in this study, the subjects' "listening comprehension" ability was in the focus of the study, a test was needed to be used as a pre-test and post-test. Hence, the listening test material was selected from TOEFL Test which has been administered in Iran in 2004. This instrument was used to address Research Question 1.

MALQ: Another survey instrument was the MALQ questionnaire (Vandergrift, et al 2006) which consisted of five factors to measure the subjects' knowledge of Metacognitive strategies and all its items were measured on a 6-point Likert scale. It was used both as the training and measuring instruments. For the aim of training, at the beginning of each session, the items in the MALQ were discussed with students. In fact, it was done to keep

students' metacognitive strategy awareness fresh through the training and also helped the students to use and develop learning strategies. It was also used to measure the change in Metacognitive knowledge about listening. Research Question 2 was explored through this instrument.

Performance checklist for listening: The next instrument, which was used as the self-evaluation instrument, was the "Performance Checklist for Listening "(Vandergrift, 1997). It included metacognitive strategies which were divided into 2 parts, before and after listening. Students were given these checklists to examine which metacognitive strategies were incorporated in each listening task. In addition, by working on the checklist regularly, students learned how to plan, monitor, evaluate and identify problems.

Listening log: In the listening log, subjects were required to write down what they have learned from each session of the listening strategy instruction and their perceptions toward the instruction. Then, to address the third research question, these logs were probed. Through analyzing the logs, the researcher could elicit more information in terms of the effectiveness of the treatment sessions.

Procedure
The chosen scores which belonged to homogeneous students were randomly divided into 2 groups, one as control group and one as an experimental group. In this research, the whole number of students chosen were 40, therefore two groups were formed out of 40 participants. 20 participants were chosen for the experimental group and 20 students for the control group. In both groups, listening comprehension was taught. In control group, the conventional method that teachers use in their classes was used. In experimental group the following method was used.

Experimental group treatment
The treatment took 7 sessions and the procedure of the sessions was as follows:

Session 1:
In the first session, the students were given the pre-test (TOEFL). After taking the test, students were granted the MALQ questionnaire to indicate their opinion for each item by circling the number which best shows their level of agreement with the statements. Of course, the researchers first tried to clarify the purpose of the questionnaire by stating that the statements just describe some strategies for listening comprehension and how students feel about listening in the language they are learning. Hence, there are no right or wrong answers. However, by responding to these statements students can help themselves and their teacher understand their progress in learning to listen. Then, the class went on with discussion about the students' strategies. In other words, students were asked about the strategies that they would employ for the listening tasks as well as their feelings

towards this skill.

Sessions 2,3,4,5 and 6:
The procedure of these sessions which was the same for each session was as follows. Only the experimental group received explicit instruction on metacognitive strategies beginning from the second session. The training framework of the present study was based on O'Malley and Chamot's CALLA model. It was developed as a metacognitive strategy training model. It helps teachers combine language, content and learning strategies in a carefully planned lesson. In the CALLA model, students' prior knowledge and their habit of evaluation of their own learning seem to be the major principles. This model has five instruction phases as explained below (Chamot & O'Malley, 1994, p. 43-44).

(1) *Preparation:* Students prepare for strategies instruction by identifying their prior knowledge about and the use of specific strategies.
(2) *Presentation:* The teacher demonstrates the new learning strategy and explains how and when to use it.
(3) *Practice:* Students practice using the strategy with regular class activities.
(4) *Evaluation:* Students self-evaluate their use of the learning strategy and how well the strategy is working for them.
(5) *Expansion*: Students extend the usefulness of the learning strategy by applying it to new situations or learning for them.

I.   MALQ and some listening strategies
The following procedure was based on the aforementioned model. At the beginning of these sessions, students were given metacognitive awareness by filling out the MALQ questionnaire. The items were also discussed with the students. Next, some other strategies, chosen from TOEFL and other books, were given to the students and were debated.

II.   Listening tasks
After that, the listening tasks started. The listening materials chosen from *Mosaic* book, *Spectrum and Tactics for listening* were used in the class. The procedure for teaching the listening materials, which was the same each time, included the following steps:

Pre-listening: planning/predicting stage
At this stage, the two basic listening processing skills known as "Top-down" processing (Using background knowledge and context) and "Bottom-up" processing (using primarily the individual words uttered) are both extensively practiced. Through this stage, the general topic of the lesson and the vocabulary essential to the discussion of the topic were introduced to the students. In this way, the listening exercises were contextualized for the students, enabled them to make predictions and used their background knowledge while listening. The teacher also tried to elicit pertinent background information from

the students. In addition, the vocabulary lists containing the key words and phrases that might be unfamiliar to the students were given to them before starting the listening exercises.

Performance checklist for listening (Before listening)
After the pre-listening activities, students complete the first part of the checklist, checking whether or not they have considered all the elements, and whether they have performed all the necessary steps for success before they begin to listen.

While-listening: Students develop essential listening skills throughout the text. These skills include listening for key words, details, attitudes, opinions and gist. Students learn to be active listeners by responding questions, making inferences, recognizing information and identifying things. This was specially done for Tactics for listening exercises. For listening passages that were chosen from other books, the following stages were adopted:

First listen: After completing their predictions, students listened to the text for the first time. As they listened, students verified their predictions by placing a check mark beside the predicted information and words. In addition, they noted any other information that they may have understood. At this point, students worked in pairs to compare predictions and information understood. They were also encouraged to discuss points of confusion and the important details that still require special attention.

Second listen: Students listened to the text a second time. They attempted to resolve points of difficulty raised after the first listen, and they also entered newly comprehended information. In order to confirm their comprehension of the text, the teacher engaged the class in a discussion.

Post-listening:
At this stage, for Tactics for listening tasks, students completed exercises such as filling in charts, responding to questions, ordering pictures. Students learned to listen purposefully, disregarding information not relevant to their task. The following skills and tactics were practiced through the exercises:

Listening for details — Listening for key words and phrases / Predicting / Recognizing correct and incorrect information

Listening for gist — Listening for key words / Recognizing information / Making inferences

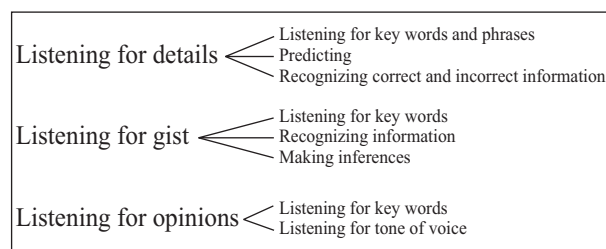Listening for opinions — Listening for key words / Listening for tone of voice

Figure 1. Listening Exercise

The following step was taken for the listening

passages:

Reflection stage**:** Finally, each student completed a personal reflection on the activity, noting any strategies that they would try to use the following time.

Performance checklist for listening (After listening)

After listening and attempting to complete the listening task, students completed the second part, which helped them to evaluate their performance in a systematic fashion, particularly if they had difficulty completing the task. This self-evaluation would help students to adjust their strategies for the second attempt. Room for a written reflection at the bottom of the instrument encouraged students to personally reflect on the process, and concretely state what they would do to improve their performance the next time.

III.   Weekly assignment

The listening logs were used as a weekly assignment with the training group. They were asked to follow the same pedagogical stages and procedures as they had in the

class and do a listening task at home. The researcher asked them to use the strategies that they were taught for the listening exercise. In their logs, they were required to name the strategies that they used as well as noting how successful they felt about accomplishing the task and generally about the treatment sessions. The aim of the logs was to provide additional practice with listening tasks and use of listening comprehension strategies. It was also used as a measuring instrument to address the 3rd question.

Session 7:

Finally, subjects received a post-test. In fact, to examine the effect of metacognitive strategy training on students' listening comprehension, the students took the listening part of the TOEFL test.

Control group treatment

It is important to note here that there was no mention of strategies in the control group. In fact, any strategy-related section explained above was skipped in this class

Table 1. Group statistics listening test
Group Statistics

	Group	N	Mean	Std. Deviation	Std. Error Mean
Result	LCPoCG	20	13.15	13.15	.834
	LCPoEG	20	22.90	22.90	1.028

and only the listening activities based on the conventional method were covered with them. The control group listened to the same texts two times. The procedure, which was the same each time, included the following steps:

The students in this group did not engage in any formal prediction activity, nor were they given an

opportunity to discuss, predict or monitor their comprehension with a classmate. And after the second listening, the class was engaged in a discussion for listening comprehension check. However, no discussion of strategy use took place, nor did students engage in any formal reflection on their approach to listening. At the end of the course the control group, like the experimental

Table 2. Independent sample T-test of listening test

		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	T	df	Sig. (2 tailed)	Mean Difference	Std. Error Difference
Result	Equal variances assumed	.896	.350	-7.363	38	.000	-9.750	1.324
	Equal variances not assumed			-7.363	36.453	.000	-9.750	1.324

group, was given the post-test. And the results of the test of the control group were compared with those of experimental group to find the effects of training.

RESULTS AND DISCUSSION
Independent T-test results

This section presents results from the quantitative analysis of the data derived from the pre-test and post-test

scores of learners' listening test. The descriptive statistics of T-test for comparing the performance of the two groups on listening test at the pre-test stage and post stage are presented in Tables below.

Table 1. illustrates that there is a significant difference between the mean scores of the two groups in the post-test. In the experimental group, the mean is 22.90 and the standard deviation is 4.599. The mean for the control group is 13.15 and the standard deviation is 3.731.

Table 3. Descriptive statistics (Experimental)

	Group	N	Mean	Std. Deviation	Std. Error Mean
Pair 1	LCPrEG	20	14.15	4.545	1.016
	LCPoEG	20	22.90	4.599	1.028

Thus, the mean for the experimental group' scores is higher than the mean for the control group's scores. In order to determine whether subjects' listening performance had been improved as a result of instruction on metacognitive strategies, an independent T-test was performed on the students' scores derived from listening test.

As Table 2 demonstrates, the result was promising since the difference between the experimental and control group scores was insignificant at the pre-test stage. In other

Table 4. Paired samples test

		Paired Differences							
		Mean	Std. D	Error Mean	95% Confidence Interval of the Difference		T	df	Sig. (2 tailed)
					Upper	Lower			
Pair 1	LCPrEG - LCPoEG	-8.750	1.773	.397	-9.580	-7.920	-22.066	19	.000

words, the t-value was insignificant, meaning that in terms of their listening abilities, the two groups were homogeneous at the start. On the other hand, to support or reject the null hypothesis, another t-test was conducted on the post-test scores of both experimental and control groups and it was found that the t observed was (-7.363) at 0.000 level of significance. The difference of mean scores of two groups in the post-test indicates that the experimental group surpassed the control group. It can be concluded that metacognitive strategy training had an impact on improvement of experimental group's listening performance. Thus, it is quite safe to reject the null hypothesis. Hence, it can be claimed

Table 5. Descriptive statistics (control)

	Group	Mean	N	Std. Deviation	Std. Error Mean
Pair 1	LCPrCG	12.75	20	4.745	1.064
	LCPoCG	13.15	20	3.731	.834

that subjects' listening abilities improved through metacognitive strategy instruction. In order to show how each group has performed from the beginning of the instruction to the end, paired sample T-tests were also run for each of the experimental and control group. Below come the results of these paired tests:

Table 6. Paired samples test

		Paired Differences							
		Mean	Std. D	Error Mean	95% Confidence Interval of the Difference		T	df	Sig. (2 tailed)
					Upper	Lower			
Pair 1	LCPrEG - LCPoEG	-.400	2.162	.483	-1.412	.612	-.827	19	.418

Table 3 demonstrates the mean of the learners' scores of the pre and post-test in experimental group. It should be pointed out that pre and post-test occurred with time interval before and after receiving the metacognitive strategy training respectively. The mean for the experimental group rises from 14.15 (pre) to 22.90 (post). So, as it can be observed, the mean for the experimental group showed a remarkable improvement after utilizing metacognitive strategy instruction.

Based on Table 4, the t observed is (-22.066) at 0.000 level of significance which can be concluded that the hypothesis expressing lack of difference between the means of learners' scores is rejected. In other words, there is a significant difference between the pre and post-test means of the experimental subjects before and after adopting strategy training. Thus, it indicates that subjects' listening ability in experimental group improved significantly. And it can be inferred that this command is due to metacognitive strategy training or the kind of instruction the experimental group received.

Table 5 demonstrates the mean of the learners' scores of the pre and post-test in control group. Considering the fact that these learners are deprived of any instruction concerning metacognitive strategies, the

mean of their scores doesn't display any remarkable difference.

Based on Table 6, the t observed was (-0.827) and sig equals 0.418 and since it is larger than 0.05, thus, it can be concluded that there is no significant difference between the pre and post-test results in control group. It's worth mentioning that the control group receives no instruction related to metacognitive strategies.

Findings related to MALQ
Another instrument employed in this study to incorporate metacognitive strategies into the lesson is MALQ, a 21 item questionnaire developed by Vandergrift et al. (2006). In order to respond to the items of the questionnaire, a 6-point Likert scale ranging from "strongly agree" to "strongly disagree" is used. Five distinct factors underlie this instrument: problem-solving, planning and evaluation, mental translation, person knowledge and directed attention. This questionnaire has been used in different contexts as a consciousness-raising instrument to boost students' awareness of the process of listening, to positively affect students' approach to listening tasks, and to augment self-regulated use of comprehension strategies. It has also

Table 7. Tabulation of data received from MALQ

Item	Session 1			Session 7		
	Mode	Frequency	Percentage	Mode	Frequency	Percentage
1	4	11	55	6	13	65
2	5	6	30	6	11	55
3	5	6	30	2	10	50
4	4	8	40	2	9	45
5	5	10	50	5	10	50
6	3	7	35	5	9	45
7	4	7	35	6	9	45
8	3	6	30	1	8	40
9	4	7	35	5	11	55
10	3	8	40	6	14	70
11	6	8	40	2	7	35
12	5	7	35	5	9	45
13	5	9	45	5	9	45
14	4	11	55	6	11	55
15	3	6	30	6	10	50
16	1	7	35	1	8	40
17	5	6	30	5	8	40
18	3	13	65	2	9	45
19	3	10	50	5	9	45
20	4	7	35	5	8	40
21	5	7	35	6	13	65

been used as a research tool as a pretest/posttest to chart the impact of listening strategy instruction and to assess learners' growing awareness of the processes underlying successful L2 listening.

In this study, the MALQ was utilized as both training and measuring instrument. As the training instrument, it was given to the students at the beginning of each session and the including items were discussed with students in reference to each listening task. The

purpose was to raise learners' awareness about L2 listening and keep their awareness fresh about metacognitive strategies. However, to answer the third research question regarding the development of metacognitive awareness and students' use of strategies, the questionnaire was analyzed statistically. To do this, results from the MALQ were first compiled and the differences between the first session and the last session were calculated for all the students. These differences

display changes in metacognitive strategy awareness on each of the five factors identified by Vandergrift et al. (2006).
According to Scoring and Interpretation Guide

developed by Vandergrift et al (2006), all the items except 3, 4, 8, 11, 16, 18 included in the MALQ are strategies for which higher scores are desirable. As Vandergrift states a higher score generally suggests a

Table 8. MALQ scores

Strategy	Session 1		Session 7		Mean Difference
	Score	Mean	Score	Mean	
Planning and evaluation	20	3.33	29	4.83	4.83
Problem solving	27	4.5	31	5.16	5.16
Person knowledge	11	1.83	9	1.5	1.5
Directed attention	14	2.33	14	2.83	2.83
Mental translation	3	2.16	6	2	2

higher perceived use of this strategy. However, for those six aforesaid items a lower score is desirable due to specific reasons.

As for the influence of metacognitive strategy training on the use of individual listening strategy, some findings are discussed below. Table 7 illustrates that there is a significant increase of strategy use for the following items in MALQ: having a plan, focusing harder on the text, using experience and knowledge, having a goal in mind. For instance, as it can be observed, more students (65%) tended to choose code 6 (strongly agree) about the first item on the MALQ, "Before I start listening, I have a plan in my head for how I am going to listen". So, in comparison with the results of the first session, it can be concluded that more students found this strategy effective and almost agreed to use it. Another significant change shown was related to the use of experience, previous knowledge and similar texts. As a result of employing these strategies for the listening tasks in class, students found them helpful in comprehending the texts and they seemed to agree to use them more often (70% strongly agreed). Another result which has been dramatically changed through the treatment was the students' feelings and perceptions toward the listening ability. Before the instruction, most of the students found listening more difficult than the other skills. It was also considered as a challenge for them. Besides, they felt nervous while listening. However, it can be inferred from the results that approximately half of the students gained more confidence in their listening ability and have changed their view toward it.

Considering the five factors underlying the MALQ items, the following results were obtained. According to the mean difference reported in Table 8, the biggest gain was made in the awareness of Planning and Evaluation strategies which can be indicative of students' increased awareness of their use of the related strategies. The second great mean difference was attained from items relating to Mental Translation factor. Since this factor consists of the items representing processes used by more unsuccessful listeners, the result can be indicative of the students' increased awareness of their decreasing use of these listening processes. Then, an increase in problem-solving strategies follows. Items concerning this factor of the MALQ include statements such as "As I listen, I

compare what I understood with what I know about the topic", "I use my experience and knowledge to help me understand". Furthermore, there was little change in the awareness of Directed Attention and Person Knowledge strategies. Based on the result, it can be claimed that there was a slight increase in the perceived use of these strategies.

In sum, based on the results gained from MALQ, it was indicated that the subjects have changed in terms of their use of the strategies which can be emanated from their increased awareness of metacognitive strategies. Although dramatic change could be seen in students' responses to some of the items, no remarkable increase was seen in the use of a few strategies after the instruction. The encouraging fact, though, is that after training, students tend to use more strategies than they used to.

The results support those of some previous studies on strategy instruction. For example, O'Malley et al., (1985b) illustrated that strategy training can be efficient on integrative language tasks for ESL students. Additionally, Thompson & Rubin (1996) found that American students learning Russian who received listening strategy instruction improved remarkably over those who had received no instruction. Vandergrift (1999) has also proposed that teachers can nurture the development of listening strategies for L2 learners. So, the present study has verified the facilitating effect of strategy instruction on the use of EFL listening strategies.

Findings related to the students' Listening Logs
In the present study, participants were required to keep listening logs to write down about their past listening habits, what they have learned from the treatment sessions as well as their perceptions toward the instruction. Results of these listening logs (samples of students' writing) were presented as follows:

In terms of subjects' listening habits, their responses consisted of the following items:

"I used to feel so depressed because I was totally lost in the listening task".
"While listening, I used to try to listen for every spoken word".
"I used to translate English words into Persian

while listening".

"While listening, I always think about the words' Persian meaning first".

"I was sort of weak to listen for phrases or sentences".

"I used to translate every single word but sometimes it just didn't work".

"I never translate in my head as I listen".

"Before these classes I considered listening as the most challenging one among the skills and I felt so nervous".

Furthermore, with respect to what the subjects have learned from the instruction of EFL listening strategies, their responses include the following items:

"I can get rid of my former habit with the help of this strategy (listening for key words) that I learned in the class".

"I've learned to be careful not my mind wanders during listening. I keep telling myself concentrate".

"I learned to infer the word meaning from the context".

"Prediction helped me to focus on specific information instead of trying to understand every word".

"Predictions really helped me comprehend the listening exercise better. Because they guided my mind and actually before starting to listen I was already prepared to be an active listener".

"With the help of prediction, I'm more aware of what to listen t and can pick up more of the conversations and oral texts".

"Before listening, we thought about the topic and tried to recall whatever we knew about it. Then we tried to follow the strategies that we were taught in the class. These strategies really worked for me. They led to better comprehension".

"Before listening we tried to make predictions about the listening tasks. While listening we checked our predictions".

As for subjects' perceptions toward the usefulness of EFL listening strategy instruction, their responses include the following items:

"The strategies I learned were not helping me enough".

"At first, some of my former habits did draw me away from activating the potential strategies in the comprehension process. But, little by little I could make it".

"Getting the main idea is difficult for me because I just pay attention to the words that are familiar to me".

"I listen carefully but sometimes I still can't get every word".

"I don't feel like using strategies since the speakers usually speak too fast for me. Actually, it takes me a lot of time to think about strategies while listening".

"I found selective attention and contextual clues quite useful. But problems come up when I listen to some exercises. In fact, before I can react, it's over".

"I found listening exercises in the class very effective at increasing my comprehension of oral texts".

"I think of listening exercises as a great help for learning English".

"I really liked the stages that we followed for each listening task in the class. They had an effect on my comprehension. I could get more information about the tasks in this way".

The above sentences were samples of students' writing chosen from their listening logs. The intent of the third research question of the present study, as it was mentioned before, was to investigate the effect of listening strategy instruction on students' perceptions toward it. To pursuit of this objective, the participants in the training group were required to keep listening logs as an assignment. The aim of the log was to provide additional practice with aural input and use of listening comprehension strategies. Through these logs, the researcher hoped that learners would become more aware of their learning process and the listening strategies that they used while they listened to oral English texts. It also provided the researcher with an opportunity to assemble participants' perceptions toward the treatment. Actually, through the scrutiny of students' listening logs, the researcher came to some promising results about their perceptions.

Although a few students still complained about the difficult aspect of listening tasks and were not satisfied with the strategies and they found almost no change in their listening abilities, most of the students had more positive impression toward the treatment. The following strategies reported by majority of the students- selective attention, picking up the key words, prediction, having plan in mind, having purpose, employing previous knowledge and information to name a few- were among the most often used strategies which were also considered as the most helpful; as they said they found them efficient in helping to understand listening comprehension texts.

They also liked the listening stages that they followed in the class and they took their effect for granted for listening comprehension. Moreover, participants reported that they used to consider listening more difficult than they do now. In other words, they found listening much easier than before. In fact, these perceptions appeared to cut down their stress. To sum up, listening logs proved to be productive as a source of data. In general, participants showed inclination toward using the strategies and they found them effective for understanding the listening texts. Thus, it can be inferred that metacognitive strategies are indispensable for listening process and they should be integrated into it.

CONCLUSION

The purpose of the study was to investigate the effect of metacognitive strategy training and the degree of metacognitive knowledge on EFL learners' listening comprehension achievement. Results indicated that strategy training and students' degree of metacognitive knowledge affected their listening achievement. The

study was enlightening in that students indicated greater tendency to becoming more strategic learners as a result of the training they received. This implies that raising students' metacognitive awareness through strategy instruction is an effective way of improving their listening comprehension ability. An analysis of participants' self-rating corroborated the attained results. Thus it can be concluded that strategy instruction along with metacognitive awareness-raising techniques are a useful combination for assisting learners to find the right ways of improving their performance in listening tasks.

The findings of the present study have implications for learners, teachers and textbook writers in the realm of TEFL in particular and education in general. It is hoped that this study will trigger more research investigating the impact of different strategy training models on students' performance in different language skills. Studies proving the efficacy of strategy training are likely to persuade English teachers, teacher trainers, course book writers and curriculum designers to be more aware of the advantages of strategy training and include these strategies in their lessons, course books and curricula.

REFERENCES

Anderson, N.J. (2002).Using telescopes, microscopes, and kaleidoscopes to put metacongnition into perspective. *TESOL Matters, 12*(4), pp. 68-72.

Brown, G. (1987). *Twenty-five years of teaching listening comprehension*. London: Longman.

Chamot, A. U., & Kupper, L. (1989). Learning strategies in foreign language instruction. *Foreign Language Annals*, 22, pp. 13-24.

Chamot, A. U., & O'Malley, J. M. (1986). *A cognitive academic language learning approach: An ESL content-based curriculum*. Wheaton: National Clearinghouse for Bilingual Education.

Chamot, A. U., & O'Malley, J. M. (1994). Language learner and learning strategies. In N. C. Ellis (Ed.), *Implicit and explicit learning of languages* (pp. 371- 392). London: Academic.

Cohen, A. D. (1998). *Strategies in learning and using a second language.* New York: Longman.

Feyten, C. M. (1991). The power of listening ability: An overlooked dimension in language acquisition. *Modern Language Journal*, 75(2), pp. 173-180. Retrieved July 1, 2013 from: http://0-www.jstor.org.catalog.library.colostate.edu/stable/328825

Field, J. (1998). Skills and strategies: Towards a new methodology for listening. *ELT Journal,* 52, pp. 110-118. http://dx.doi.org/10.1093/elt/52.2.110

Herron, C.A., & Seay, I. (1991). The effect of authentic oral texts on student listening comprehension in the foreign language classroom. *Foreign Language Annals*, 24, pp. 487-495.

Holden, W.R. (2004). Facilitating listening comprehension: Acquiring successful strategies. *Bulletin of Hokuriku University*, 28, pp. 257-266.

Jung, E. H. (2003). The role of discourse signaling cues in second language listening comprehension. *The Modern Language Journal*, 87, pp. 562-577. http://dx.doi.org/10.1111/1540-4781.00208

Mendelsohn, D. (1995). Applying learning strategies in the second/foreign language listening comprehension lesson. In Mendelsohn, & Rubin, *A guide for the teaching of second language listening*. San Diego, CA: Dominie Press.

Mendelsohn, D. (2001). *Learning to listen*. San Diego: Dominie Press.

O'Malley, J. M., & Chamot, A. U. (1990). *Learning strategies in second language acquisition*. Cambridge: Cambridge University Press.

O'Malley, J. M., Chamot, A. U., Stewner-Mazanares, G., Russo, R., & Kupper, L. (1985b). Learning strategies used by beginning and intermediate ESL students. *Language Learning 35*(1), pp. 21-46.

Rost, M (2002). Input. In *Teaching and researching listening* (pp. 122-136). London: Longman Pearson Education.

Schwartz,A.M.(1992) The effect of interactive video training in listening techniques, metacognition and attribution on the listening comprehension of second language video. Unpublished Dissertation, University of Maryland.

Thompson, I., & Rubin, J. (1996). Can strategy instruction improve listening comprehension? *Foreign Language Annals*, 29, pp. 331-342. Available at: http://dx.doi.org/10.1111/j.1944-9720.1996.tb01246.x

Vandergrift, L. (2004). Listening to learn or learning to listen? *Annual Review of Applied Linguistics*, 24, pp. 3-25. http://dx.doi.org/10.1017/S0267190504000017

Vandergrift, L. (1997). The comprehension strategies of second language (French) listeners: A descriptive study. *Foreign Language Annals*, 30, pp. 387-409.

Vandergrift, L. (1999). Facilitating second language listening comprehension: Acquiring successful strategies. *ELT Journal. 53*(3), pp. 168-176.

Vandergrift, L. Goh, C.M, Mareschal, C.J. & Tafaghodtari,M.H. (2006). The metacognitive awareness listening questionnaire: Development and validation. *Language Learning 56*(3), pp. 431–462.

Wipf, J. A. (1984). Strategies for teaching second language listening comprehension. *Foreign Language Annals*, 17, pp. 345-348. doi: 10.1111/j.1944-720.1984.tb03240.x