



The Impact of Note-Taking Strategy on Self-Regulated and Non-Self-Regulated Iranian EFL Learners' Listening Comprehension

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Abstract

Note taking is a popular and effective strategy which mounts the students' ability to remember, comprehend, and keep the material in mind. The present study aimed at investigating the impact of note-taking strategy (using the Cornell note-taking method) on 30 self-regulated and 30 non-self-regulated Iranian EFL learners' listening comprehension in the intermediate level of English language proficiency. All the participants were chosen among female EFL intermediate learners at Safir Language Institute in Tehran, in varied ages, between 22 and 28. In order to make sure that the participants were truly homogenous with regard to their proficiency level, a Nelson Language Proficiency Test was administered. The study was conducted through pretest and posttest on two groups. Data collection procedure was completed by the learners' obtained scores in the listening section of TOEFL test. The findings based on the analysis of Paired Samples t-test and ANCOVA revealed the value of note-taking strategy during listening on both self-regulated and non-self-regulated learners' listening comprehension. However, self-regulated learners outperformed non-self-regulated ones. This study could be helpful for teachers who face problems in their learners' listening comprehension.

Keywords: note taking strategy, self-regulated and non-self-regulated learners, listening comprehension

INTRODUCTION

Listening comprehension has been described as a collaborative, interpretive process in which listeners participate in an active construction of meaning (Pazokizadeh, 2013). 'Listening' is defined in its broadest sense, as a process of getting what the speaker really says; creating and representing meaning; negotiating meaning with the speaker and replying; and creating meaning through contribution, imagination and empathy (Wang, 2011). Listening is an active process of choosing and integrating related information from auditory input. This process is controlled by personal goals which are critical to listening. It means that listening behavior is interfered with the current and habitual motivational orientation of a person, with his or her attitudes, interests and the person's relating self-

monitoring skills and control believes (Pazokizadeh, 2013). Effective listening requires the incorporation of the selected information into the cognitive schemata of the receiver.

One of the cognitive strategies from which students benefit is note-taking. Note-taking is an important academic skill" (Crawford, 2016, p.9). It is often taken to be the unique characteristic of learning at university (Van de Meer, 2012). Taking lecture notes is broadly accepted as a useful strategy for increasing student attention and retention of academic discourse (Aminifard & Aminifard, 2012). They also believe that note-taking is automatically pleasing for the lecture-listener and is commonly viewed as a way to ease the process of learning and retention of lecture material (Aminifard & Aminifard, 2012). Note-taking is a widespread and effective strategy which promotes the students' ability to remember, realize, and keep the material in mind. Today, it is very common for teachers to use the note taking strategy in EFL listening classes owing to the fact that taking notes can help students catch the main points with no trouble and in turn advance their listening comprehension effectively (Zohrabi & Esfandiari, 2014).

Self-regulated students "are able to regulate their own learning perform and learn better than their peers who lack self-regulatory capabilities (Kolovelonis & Goudas, 2013, p.194) and are more likely to be successful in school and become lifelong learners compared to non-self-regulated learners" (Kolovelonis & Goudas, 2013, p.194). Self-regulated learners are meta-cognitively, motivationally, and behaviorally active members in their own learning process (Kolovelonis & Goudas, 2013). Newman (1994) claims that non-self-regulated learners do not ask many questions due to two factors; 1) they do not know what to ask, 2) they are worried about how they will look. Saad, Boroomand, and Abbasnasab, (2012) claim that successful learners are active in employing these self-regulated learning strategies (metacognitive self-regulation, time and study area management, effort regulation, peer learning, and help seeking). Lin and Gan (2014) claim that teachers should pay attention to how English majors arranged students learning steps and what English majors used to get listening comprehension. The significant relationship between metacognitive awareness of listening and self-regulated learning showed that the college teachers should be aware of the students' English learning achievement, and help the students to improve their listening.

REVIEW OF THE RELATED LITERATURE

Listening Comprehension

Listening comprehension used to be regarded as a passive activity and researchers did not pay a lot of attention to it (Birjandi & Rahimi, 2012). It had been assumed that a learner's aptitude to understand spoken language would develop completely on its own through repetition and imitation (Birjandi & Rahimi, 2012). The focus of earlier listening comprehension materials was first on testing students' ability to listen to oral discourse and then to respond the following questions based upon the incoming information (Carrier, 2003). Nonetheless, in the last few years the attention in teaching the listening skill has grown. Today, it is not considered as an ignored skill anymore. Many people, such as learners, need the listening skill in various settings such as travel, school, and

work (Birjandi & Rahimi, 2012). Listening comprehension is viewed theoretically as an active process in which entities focus on nominated aspects of aural input, form meaning from passages, and associate what they hear with current knowledge (Gilakjani & Ahmadi, 2011). The schema is described by Gilakjani and Ahmadi (2011) as a data structure for characterizing the basic concepts stored in memory.

Nowadays, it is broadly approved that listening comprehension is one of the most important aspects of L2 acquisition. Nonetheless, it is difficult for all language learners to follow all parts of the whole chunk of the target language, the sorts and the amount of difficulty varies from one learner to the other (Pazokizadeh, 2013). According to Wang (2011), listening is a multipart, active process in which the listener must differentiate between sounds, understand lexis and grammatical structures, understand stress and intonation, retain what was gathered in all of the above, and take it within the immediate as well as the larger sociocultural context of the utterance. Coordinating all of this includes a great deal of mental activity of the part of the listener. As Wang, (2011) claims that on the basis of research work by many scholars, the nature of listening comprehension is presented to us. Just as William Littlewood (1981, as cited Wang, 2011) states, the nature of listening comprehension means that the learner should be inspired to involve in an active process of listening for meaning, using not only the linguistic hints but also his nonlinguistic knowledge.

According to Pazokizadeh (2013), in successful listening, understanding is not something that occurs because of what a speaker says: the listener has a vital part to play in the process, by activating several kinds of knowledge, and by applying what he knows to what he hears and trying to understand what the speaker means. Underwood (1989) defines listening as the action of listening carefully to and trying to get meaning from something we hear. Mendelsohn (1994) defines listening comprehension as the capability to understand the spoken language of native speakers. In listening to spoken language, the ability to interpret the speaker's meaning is required of a knowledgeable listener, in addition to other abilities like processing the linguistic forms such as speech speed and fillers, coping with listening in an interaction, understanding the whole message enclosed in the discourse, comprehending the message without understanding every term, and identifying different genres. Listeners must know how to process and how to estimate what the illocutionary force of an utterance is that is, what this string of sounds is proposed to mean in a particular setting, under a particular set of circumstances – as an act of real communication.

Rahimi and Abedi (2014) claim that listening comprehension is the least explicit and the most difficult language skill to tackle with. For helping language learners to listen more knowledgeably and to maximize the competence of listening instruction in both EFL and ESL settings, latest studies have focused on the ways skillful listeners process oral input and spoken messages. The findings of these studies show that both cognitive and affective factors influence the way listeners handle their listening task and overcome its difficulty.

Note-taking

Note-taking, as a helpful strategy to help students' attention and preservation of the academic discourse, has been known as significant in educational institutions, mainly in colleges and universities. Teachers place a great stress on the significance of taking notes because they believe that note-taking is one of the essentials to gaining acceptable grades in examinations (Lin, 2006). Therefore, college students try to progress note-taking strategies in order to take notes during a listening activity or a lecture. Note-taking is a process that happens at the same time with the listening process. Consistent with what they listen to, note-takers need to take down some notes in their own ways. Boran and Yi (2012) believed that note-taking involves four skills, that is to say; listening, cognitive processing, recording passage content in written form and reviewing noted Information. Note-taking aids listeners to understand and unite their interpretations of new data into their cognitive structure. Note-taking activity is a beneficial strategy to enable the process of learning and recalling lecture materials. During this process three kinds of knowledge are activated; which are situational knowledge, linguistic knowledge, and background knowledge (Kilickaya & Cokal-Karadas, 2009).

According to Carrell, Dunkel and Mollaun (2004), students' responses to the question about the use of note-taking shows that it has a positive influence on students. Most of them believe that note-taking is more beneficial for lecture in class than in test. Moreover, note-taking assistances students to comprehend the lecture presented in class. In most academic listening activities, students are permitted to take notes when they listen to a lecture and reply questions at the same time (e.g. TOEFL, IELTS) or utilize note-taking itself as a measure of listening ability (e.g. the Occupational English Test); consequently, it has been considered authoritative to examine the relationship between L2 learners' note-taking and their subsequent listening test performance (Amini Asl & Kheirzadeh, 2016).

Dror (2007) claims that note-taking is the first and recognized cognitive technology. It forms cognitive techniques and increases cognitive abilities (Dror & Harnad, 2008). Despite the fact that partakers depend enormously on their information achievement and representative proficiencies (Amini Asl & Kheirzadeh, 2016), their note-taking output is just around 20–40% in an ordinary lecture circumstance (Amini Asl & Kheirzadeh, 2016). In this way, a lot of learning is reliant on using suitable strategies during information acquisition. According to Piolat and Boch (2004), note-taking is a procedure to write details and helps listeners to remember material. Nevertheless, this is oversimplification of note-taking process. In fact, cognitive processing is very significant in note-taking; there are five cognitive processes in note-taking, i.e. listening, understanding, analysis, choice, and composing (Lin, 2006). Since listeners listen to the gist of lecture and take notes; in fact, note-taking makes them more dynamic by implicating listeners in higher-order cognitive abilities, for example, evaluation, decision-making, interpretation, and summarizing.

Based on Aminifard and Aminifard (2012), note-taking is beneficial for two reasons. First, note-taking helps lecture learning by activating attentional mechanisms and involving

the learner's cognitive processes of coding, integrating, synthesizing, and transforming aurally obtained input into a personally meaningful form. Second, note-taking is helpful because the notes taken help as an external source of information that permits later revision to stimulate remembrance of the information heard. Zohrabi and Esfandiari (2014) maintains that note-taking is apparent by examinees as a strategy that assists remembering the lecture content.

Self-regulated Learning

Zimmerman (1990 as cited Hu, 2016) defines self-regulated learning (SRL) with three distinctive topographies: learners' use of self-regulated learning strategies, their thoughtfulness to self-evaluative feedback about learning effectiveness, and their self-generated motivational processes. He discriminates academic self-regulation from mental ability, like intelligence, or an academic skill, such as reading proficiency. He suggests that it is a self-directive process through which learners renovate their mental abilities into academic skills (Zimmerman, 1998 as cited Hu, 2016).

Zimmerman (2002) defines self-regulation as ones' ability to plan thoughts, feelings and actions which result in gaining his/her goals. Highly regulated people can be likeminded to various situations and come up with a solution while approaching a task in a confident stubborn purposeful mode. From a social cognitive viewpoint, self-regulatory processes and beliefs involve three cyclical phases: forethought, performance or volitional control, and self-reflection (Zimmerman, 2002), the forethought phase occurs before efforts to learn and sets the stage for learning. Performance or volitional control processes happen during learning efforts and concerns concentration and performance. Self-reflection processes happen after learning efforts and influence learners' reactions to that experience. As a result, these self-reactions complete the self-regulatory cycle by impelling forethought of subsequent learning efforts (Zimmerman, 1998).

Zimmerman (2002) claims there are two individual but closely related categories of forethought: task analysis that includes goal setting and strategic planning, and self-motivational beliefs. Self-motivation beliefs which exist under the forethought processes of goal setting and strategic planning involve self-efficacy, outcome expectations, intrinsic interest or valuing and goal orientation (Zimmerman, 2002).

Two key forms of performance or volitional control processes that have been studied are self-control, counting self-instruction, attention focusing, that aids learners to concentrate on the task and apply their effort (Hu, 2016) and self-observation, that refers to a person's tracking of specific aspects of their own performance and the influences of the performance (Hu, 2016). The two self-reflective processes that are strictly related to self-observation are self-judgment and self-reaction (Bandura, 1986).

Self-judgment concerns evaluating one's own performance and making causal acknowledgement (Hu, 2016). Self-evaluative and attritional self-judgments are thoroughly linked to two forms of self-reaction: self-satisfaction and adaptive or defensive implications. Favorable self-reactions consecutively produce positive

forethought about oneself as a learner such as greater self-efficacy, a tougher learning goal orientation (Dweck, 1988) and better intrinsic interest in the task (Hu, 2016). These relations between self-reflection and forethought processes complete the cycle of academic self-regulation (Zimmerman, 1998).

RESEARCH QUESTIONS

Based on the purpose of the study, this study made an attempt to investigate the following research questions:

RQ1: Does note-taking have any statistically significant effect on the listening comprehension of self-regulated Iranian EFL learners?

RQ2: Does note-taking have any statistically significant effect on the listening comprehension of non-self-regulated Iranian EFL learners?

RQ3: Is there any statistically significant difference between the effect of note-taking strategy on self-regulated and non-self-regulated Iranian EFL learners' listening comprehension?

For each of the abovementioned research questions, a null hypothesis was assumed.

METHOD

Participates

A sample of 120 female adult EFL intermediate learners at Safir Language Institute in Tehran, took part in this research. Participants were in varied ages, between 22 and 28. In order to make sure that the participants were truly homogenous with regard to their proficiency level, a Nelson Language Proficiency Test was administered.

Instruments

Nelson Language Proficiency Test

Nelson 350(A) test was implemented for the purpose of homogenizing the subjects regarding their proficiency level. It included fifty multiple-choice items to assess the lexical, grammatical and phonological knowledge of the participants. The validity and reliability of the Nelson test have been estimated several times by other researchers in the EFL context and it is considered as highly valid and reliable test of English proficiency (Yaghoubi & Ahmadi, 2014). The reliability of the Nelson test as measured by Cronbach's alpha in this thesis was 0.81. Its administration 75 minutes.

Motivated Strategies for Learning Questionnaire (MSLQ)

The MSLQ (Pintrich & De Groot, 1990) is a self-reporting tool with 81 items: 50 items for motivational beliefs scales and subscales and 31 items for self-regulated learning strategies which is based on the motivational model of expectancy times values with the objective of measuring different motivational components and the use of learning

strategies in a given course or subject matter. It uses a seven point Likert scale ranging from 1 “not at all true of me” to 7 “very true of me” with no specific labels for the other response categories. In order to estimate the reliability of MSLQ in this study, Chronbach Alpha was used and it was estimated to be 0.86. The validity of the questionnaire was checked by three experts.

Listening Section of TOEFL iBT

In the present study, the listening section of TOEFL iBT Quick Prep Volume 3 was used as the pre-test in order to check their listening comprehension, (The numbers of the questions are exactly like the original numbers of the whole test). The audio files are available in the PDF version of Quick Prep Volume 3 and on the Quick Prep Web site at (<http://www.ets.org/toefl/quickprep>). Using Cronbach's Alpha, the reliability of the pre-test was estimated to be 0.83. For the post-test Volume 4 was used and using Cronbach's Alpha, the reliability of the post-test was estimated to be 0.86. The participants could listen to each recording only once in a 10- minute time limit.

Procedure

This study started in December, 2016 at Safir language institute the branch of Andisheh. The experimental sequence of the study was carried out over a period of 90-minute, 10 sessions. First 120 participants passed the Nelson Language Proficiency Test. Later 60 homogenized participants whose English language proficiency was checked, had to answer the MSL questionnaire.

Before questionnaire administration, subjects were asked to undergo a briefing session lasting about 30 minutes. This session was to provide them with some information on the objective of the study and how to answer the questionnaire items. For each question of the questionnaire, about a minute was adequate. After collecting the questionnaires, they were checked for any invalid ones. Then, after checking the results of the questionnaire, the participants were divided in two equal groups. One group consisted of self-regulated learners and the other were non-self-regulated ones. Before starting the instructional treatment, the participants were pre-tested to assess their prior knowledge of listening comprehension using the listening section of a volume of TOEFL iBT.

Students in both groups were taught how to take notes using the Cornell method (Darrow, 2005 as cited Tsai and Wu, 2010), “a method utilizing a two column format in which a paper is folded lengthwise. Approximately one third of the space on the left of the fold is for the recording of main ideas, and the remaining space for recording details. While listening to the audio inputs, students were taught how to transform discrete words into meaningful paragraphs in order to properly summarize the main ideas of the passage” (Tsai and Wu, 2010, p.124). The note-taking process was modeled by the instructor at the beginning of the study.

There was a treatment of 10 sessions. The main instrument for the treatment was chosen according to the materials of a study by (Pazokizadeh, 2013, p.23) “a number of TOEFL iBT listening prompts chosen from the ETS TOEFL Listening Prompts Official Booklet

available at ETS website. The Listening samples were rated based on the TOEFL iBT listening scoring rubric (ETS, 2006)". Every session participants had to listen to the audio materials in the class and they had to take notes while listening. Then before any feedbacks by the researcher they were supposed to check their answers with their partners. After each instruction, there was a quick ICQ (Instruction Check Questions) in order to make sure that the learners knew what exactly they were supposed to do. Note-taking was emphasized and bolded. While listening, the researcher monitored them to see if they were taking notes. When 10 sessions of treatment was over, the post-test that was the listening section of a volume of a TOEFL iBT which was identical to the pre-test with the same difficulty was administered to assess the efficacy of the treatment.

Data Analysis

Using both descriptive and inferential statistics, the collected data were analyzed. Concerning descriptive statistics, mean, standard deviation, minimum, maximum, and number were reported, moreover, using Chronbach's alpha, the reliability of the instruments were estimated. With regard to the first two research hypotheses, Paired Samples t-test was used. Regarding the last research hypothesis, an ANCOVA was used.

RESULTS

The First Null Hypothesis

In order to test the first null hypothesis, a Paired-Samples t-test was run on the self-regulated students' pretest and posttest, the results of which are presented in Tables 1 and 2 below.

Table 1. Paired Samples Statistics for Self-Regulated Group

	Mean	N	Std. Deviation	Std. Error Mean
Self-Regulated (Pretest)	5.10	30	1.80	.32
Self-Regulated (Posttest)	13.06	30	2.03	.37

As can be seen in Table 1 above, the mean and standard deviation of the pretest in the self-regulated group were 5.10, and 1.80, respectively whereas the mean and standard deviation of self-regulated group' posttest were 13.06 and 3.03, respectively.

Table 2. Paired Samples Test for Self-Regulated Group

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error	95% Confidence Interval of the Difference				
			Mean	Lower	Upper			
Self-Regulated (Pretest) - Self-Regulated (Posttest)	-7.96	2.47	.45	-8.88	-7.04	-17.66	29	.000

As can be seen in Table 2 above, there exists a significant difference between the participants' pretest and posttest in self-regulated group concerning their listening comprehension ($t_{29} = -17.66$, $p = 0.000$, $p < .05$). That is to say that the EFL learners in the

self-regulated group had a better listening comprehension in their posttest ($M = 13.06$, $SD = 3.03$) than their pretest ($M = 5.10$, $SD = 1.80$). Thus, the first null hypothesis was rejected.

The Second Null Hypothesis

In order to test the second null hypothesis, a Paired-Samples t-test was run on the non-self-regulated students' pretest and posttest, the results of which are presented in Tables 3 and 4 below.

Table 3. Paired Samples Statistics for Non-Self-Regulated Group

	Mean	N	Std. Deviation	Std. Error Mean
Non-Self-Regulated (Pretest)	5.43	30	1.97	.36
Non-Self-Regulated (Posttest)	7.70	30	2.26	.41

As can be seen in Table 3 above, the mean and standard deviation of the pretest in the non-self-regulated group were 5.43, and 1.97, respectively whereas the mean and standard deviation of non-self-regulated group's posttest were 7.70 and 2.26, respectively.

Table 4. Paired Samples Test for Non-Self-Regulated Group

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Non-Self-Regulated (Pretest) – Non-Self-Regulated (Posttest)	-2.26	2.13	.38	-3.06	-1.47	-5.82	29	.000

As can be seen in Table 4 above, there exists a significant difference between the participants' pretest and posttest in non-self-regulated group concerning their listening comprehension ($t_{29} = -5.82$, $p = 0.000$, $p < .05$). That is to say that the EFL learners in the non-self-regulated group had a better listening comprehension in their posttest ($M = 7.70$, $SD = 2.26$) than their pretest ($M = 5.43$, $SD = 1.97$). Thus, the second null hypothesis was rejected.

The Third Null Hypothesis

In order to adjust the effect of the covariate or pretest on the scores of the posttest, ANCOVA was run. However, its assumptions were checked. All four sets of scores of course enjoyed normalcy as demonstrated earlier; hence, this prerequisite need not be discussed. With the first assumption of normalcy in place, the second procedure was testing the homogeneity of variance for which the Levene's test was run; as is shown in Table 5 below, the variances were not significantly different ($F(1,58) = 0.007$, $p = 0.93 > 0.05$).

Table 5. Levene's Test of Equality of Error Variances^a

F	df1	df2	Sig.
.007	1	58	.932

a. Design: Intercept + pre + group

As one covariate is being investigated (pretest), the third assumption of the correlation among covariates did not apply in this case. The fourth assumption is that of homogeneity of regression slopes. Table 6 below shows that the interaction (i.e. Group* Pretest) is 0.188 which is larger than 0.05, thus indicating that the assumption of homogeneity of regression slopes has not been violated.

Table 6. Tests of Between-Subjects Effects (1)

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	472.903 ^a	3	157.634	38.840	.000
Intercept	460.365	1	460.365	113.430	.000
group	92.602	1	92.602	22.816	.000
pre	30.672	1	30.672	7.557	.008
group * pre	7.216	1	7.216	1.778	.188
Error	227.281	56	4.059		
Total	7169.000	60			
Corrected Total	700.183	59			

a. R Squared = .675 (Adjusted R Squared = .658)

With the above assumptions in place, running an ANCOVA was legitimized. According to Table 7 below, the pretest scores (the covariate in the model) came out to be significant ($F = 8.184$, $p = 0.006 < 0.05$) thus demonstrating that prior to the treatment, there was a significant difference between the two groups in terms of their listening comprehension. With the eta squared of 0.126, the pretest covariate accounted for 12% of the overall variance.

Table 7. Tests of Between-Subjects Effects (2)

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Squared	Eta
Corrected Model	465.687 ^a	2	232.844	56.598	.000	.665	
Intercept	455.432	1	455.432	110.704	.000	.660	
group	450.268	1	450.268	109.449	.000	.658	
pre	33.670	1	33.670	8.184	.006	.126	
Error	234.496	57	4.114				
Total	7169.000	60					
Corrected Total	700.183	59					

a. R Squared = .665 (Adjusted R Squared = .653)

b. Computed using alpha = .05

Furthermore, there was a significant relationship between the covariate (pretest) and the dependent variable (the posttest) while controlling for the independent variable ($F = 109.449$, $p = 0.000 < 0.05$). Hence, the third null hypothesis was rejected with those in the self-regulated group who gained a higher mean bearing a significantly higher listening comprehension than those in the non-self-regulated group.

DISCUSSION

The first question of this study sought to scrutinize whether note-taking had any statistically significant effect on listening comprehension of self-regulated EFL learners. The results of a Paired samples t-test showed that instructing note-taking strategy had a statistically significant positive effect on self-regulated EFL learners' listening

comprehension. It is believed that note-taking activity is a beneficial strategy to enable the process of learning and recalling lecture materials. During this process three kinds of knowledge are activated; which are situational knowledge, linguistic knowledge, and background knowledge (Zohrabi & Esfandiari, 2014).

The findings of the present study are supported by findings from previous studies. For example, Zohrabi and Esfandyari (2014) found that note taking during listening was very helpful for improving learners' listening comprehension scores. They concluded that teachers and educators should concentrate on the usefulness of note taking strategy among learners. The results in this regard are also consistent with those of Hayati and Jalilifar (2009) who found a clear association between EFL students' listening comprehension ability and note-taking strategy, and furthermore, the results showed that the group who took notes based on their own method and technique showed lower level of listening comprehension than the group who used Cornell method for taking their notes. It is worth mentioning that, in the current study the Cornell method of note taking strategy was applied to the participants. That is in the current study the main focus was on Cornell method.

The second question of this study aimed at examining whether note-taking had any statistically significant effect on listening comprehension of non-self-regulated EFL learners. The results of a Paired samples t-test showed that instructing note-taking strategy had a statistically significant positive effect on non-self-regulated EFL learners' listening comprehension. The findings in this regard might be justified by the following reasons. Firstly, taking notes essentially brings about marginal learning. Secondly, it can be argued that reviewing the notes, which have been recorded by the students, causes the listeners or students to recall and also fix the knowledge and information in their own long-term memory. According to Karimi (2010), note taking strategy training mainly provides the learners or listeners with a form of security. Moreover, Boran and Yi (2012) believed that note-taking involves four skills, that is to say; listening, cognitive processing, recording passage content in written form and reviewing noted Information.

The results of the study in this respect are also consistent with those of Gur, Dilci, Coskun and Delican (2013) who scrutinized how listening to various lecture forms, namely, narrative, informative and philosophical, by note taking, influences the participants' listening comprehension. In doing so, the researchers adopted a pretest and posttest true experimental design. The results of their study showed that the participants who took notes while listening to the lectures had higher levels of listening comprehension in comparison to other groups.

The third research question of the study intended to explore whether there existed any statistically significant difference between the effect of note-taking instruction on the self-regulated and non-self-regulated EFL learners' listening comprehension. The results of ANCOVA revealed that there was a significant difference between the impact of explicit instruction of note-taking strategy on self-regulated and non-self-regulated EFL learners' listening comprehension development, with those in the self-regulated group gained a

higher mean bearing a significantly higher listening comprehension than those in the non-self-regulated group.

The findings in this regard could plausibly be justified by the premise that note-taking strategy training improves the awareness of learners about planning, monitoring and evaluating, consequently helping to develop self-regulated learning, which, in turn, brings about better listening comprehension performance. In completing a listening task, self-regulated learners can evaluate the challenges of the task, be informed about their own level of proficiency, and accordingly use the appropriate strategies to successfully accomplish the task. According to Boyle (2010), a more efficient tactic to note-taking would be to teach students with weaknesses note-taking strategies and techniques that they might use independent of teacher support. One such independent approach, strategic note-taking, originally might be time concentrated to teach to students, however, in the long run, a technique such as this makes students more self-regulated learners and might take a broad view to multiple settings, such as other general education content-area classes, making the initial time investment valuable.

CONCLUSION

The current study set out to investigate whether: (1) Note-taking had any statistically significant effect on listening comprehension of self-regulated EFL learners, (2) Note-taking had any statistically significant effect on listening comprehension of non-self-regulated EFL learners, and finally, (3) There existed any statistically significant difference between the effect of note-taking on the self-regulated and non-self-regulated EFL learners' listening comprehension

The results of a Paired Samples t-test showed that instruction of note-taking strategy had a significantly positive impact on the self-regulated intermediate EFL learners' listening comprehension development. Moreover, the results of a Paired Samples t-test showed that instruction of note-taking strategy had a significantly positive effect on the non-self-regulated intermediate EFL students' listening comprehension development. Finally, the results of ANCOVA revealed that there was a significant difference between the impact of explicit instruction of note-taking strategy on self-regulated and non-self-regulated EFL learners' listening comprehension development, with those in the self-regulated group gained a higher mean bearing a significantly higher listening comprehension than those in the non-self-regulated group.

Based, it seems necessary that both self-regulated and non-self-regulated intermediate EFL students be made aware of different note-taking strategies in order to take more accountability for their own learning, which is essential for self-regulated learning. That is, EFL teachers in Iran need to enlighten both self-regulated and non-self-regulated intermediate EFL students on how to develop their own level of note-taking and metacognitive strategies while listening to different listening tasks (e.g., lectures, conversations, etc.) in and outside the school.

Syllabus designers and material developers are believed to play an important role in the process of L2 learning through providing a great portion of the input, tasks, and activities. Based on the findings of the present study, a statistically-supported justification is provided for paying a higher level of attention to learners' listening comprehension in general and different listening comprehension strategies in particular, especially note-taking strategies. According to Ornstein (1994 as cited Aminifard & Aminifard, 2012), note-taking should be part of the core curriculum. It is critical for learners to learn note-taking for school, work, and life in general. Finally, the textbooks should be prepared in a way that EFL learners can voice their opinions at different points in improving their learning activities.

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