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CURRICULUM & TEACHING STUDIES | RESEARCH ARTICLE

Dynamic assessment or schema theory: The case of listening comprehension

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Abstract: Not only is listening considered as an active skill nowadays, but also different approaches are suggested to incorporate it effectively into language classrooms. Our purpose, here, is to compare two approaches claiming to be effective in enhancing EFL learners' listening capabilities including schema theory and dynamic assessment. Through a quasi-experimental design, the researchers recruited two intact classes of EFL learners ($N = 42$) being treated with: schema theory approach and dynamic assessment. Each group participated in 15 sessions of one hour working on their listening abilities using different techniques. The dynamic assessment group employed a pretest-enrichment-posttest design and the schema theory group experienced a pre-listening, listening, and post-listening design using *shadowing* and *semantic maps*. Independent sample *t*-test and mixed between-within Anova were used as the statistical tests. Results showed that both groups' listening comprehension improved over time. The results of statistical tests didn't show a significant difference between the groups regarding their listening comprehension in the posttest in spite of the fact that the schema group attained higher scores in the posttest. The findings may have significant implications for language teachers and teacher educators. Teachers should become aware of the fact that there are different approaches which they can benefit from in teaching listening skills to EFL students.

ABOUT THE AUTHORS

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PUBLIC INTEREST STATEMENT

One of the most important skills in learning every foreign language is listening. Although we are continually being asked. "Can you speak a language?", the ability to listen and comprehend a language is more prominent. In the research literature, different approaches have been suggested to improve this keystone skill. Each and every approach may have its own strengths and weaknesses. In this paper, we compared the effects of two well practiced approaches in teaching listening comprehension including schema theory and dynamic assessment. Schema is related to learners' background knowledge and dynamic assessment targets learners' potential development. The results indicated that the schema group demonstrated higher improvement in listening comprehension compared to the dynamic assessment group.

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1. Introduction

Being considered a passive skill for a while, listening skill is now recognized as an active and interactive process in which the learners use their linguistic and non-linguistic or background knowledge to make meaning (Bdlokcuoglu, 2014; Buck, 2001; Chastain, 1988). Anderson and Lynch stated that (1988):

> understanding is not something that happens because of what a speaker says: the listener has a crucial part in the process, by activating various types of knowledge, and by applying what he knows to what he hears and trying to understand what the speaker means. (p. 6)

The very first person who referred to the word schema was Bartlett (1932) defining it as "The role of background knowledge in language comprehension" (p. 93). Rumelhart (1980) considered background knowledge as schema and defined it as "building blocks of cognition" (p. 34) and "skeleton around which the situation is interpreted" (p. 37). Schema is a structure consisting of individuals' knowledge and past experiences classified into different sections based on similarities facilitating retrieval of saved information and incorporating new information (Anderson, 2012). Moreover, according to Taylor and Crocker (1981), schema is

> A cognitive structure that consists in part of the representation of some defined stimulus domain. The schema contains general knowledge about that domain, including a specification of the relationships among its attributes as well as specific examples or instances of the stimulus domain. (p. 91)

Schema theory highlights the importance of background knowledge claiming that comprehension is the result of interaction between learner's background knowledge and a text in which new information is connected with previously saved information in long-term memory (Cook, 1994; Widdowson, 1994). According to Yang (2010), there are three types of schema applied in information processing: linguistic schema (i.e. linguistic knowledge of a learner), formal schema (i.e. text schema, is comprised of organizational and rhetorical structure of a discourse), and content schema (i.e. background knowledge). Zeng (2007) maintained that listening comprehension occurs as a result of interaction between top-down and bottom-up processes in which language knowledge, world knowledge, and the listening materials interact with each other. Similarly, Rost (2001, p. 7) stated that "listening involves bottom-up processing, in which listeners attend to data in the incoming speech signals, and top-down processing, in which listeners utilize prior knowledge and expectations to create meaning."

It is believed that in teaching receptive skills (listening and readings), it is effective to activate the learners' background knowledge and experience (Tuan & Loan, 2010) since schemas "help processing information by reducing processing load" (Edwards & McDonald, 1993, p. 60). It has been shown that providing learners with videos and visual aids improved their listening skills and facilitated their comprehension (Bdlokcuoglu, 2014; Chiang & Dunkel, 1992; Herron, Hanley, & Cole, 1995; Sadighi, 2006).

On the other hand, for Vygotsky, the concept of praxis was an influential element in his work (see Vygotsky, 1933). As Kinard and Kozulin (2008) state, education is a crucial element in Vygotsky's theory of development as formal instruction gives the possibility to mix abstract and theoretical understanding with everyday practice bringing about a full conceptual knowledge of the world. It is believed that mediation and social communication results in development. Yet, Vygotsky did not express or support sets of teaching and assessment techniques or methods to be tracked in a detailed way (Lantolf & Poehner, 2011). Vygotsky's obligation to praxis is obvious in all of his theories embodied in the concept of zone of proximal development (ZPD) (Lantolf & Poehner, 2011). ZPD

helps mediators and learners to understand "the development that has been completed at the present and that can be inferred from an individual's independent performance – as well as cognitive functions that have not yet fully developed but are still in the process of forming" (Vygotsky, 1978, p. 86). ZPD is important in diagnosing learners' abilities and supporting their development.

A framework which best represents ZPD is dynamic assessment (henceforth, DA). DA is a framework for evaluating an individual's potentials for future development by embedding instruction in the assessment process itself (Sternberg & Grigorenko, 2002). Reuven Feuerstein stated that in DA "what is at stake, is not theoretical elegance, but issues that affect the lives and destinies of real people" (Feuerstein, Miller, Rand, & Jensen, 1981, p. 218). Nevertheless, DA performances consist of "interventionist" and "interactionist" DA (Lantolf & Poehner, 2004). The two types are different in terms of the mediations that a mediator provides to learners (Lantolf & Poehner, 2011). According to Lantolf and Poehner (2011), in interventionist approaches, tasks and materials are selected and analyzed with the goal of predicting kinds of problems learners are likely to encounter. Mediation is then scripted as hints, prompts, and leading questions which varies in its degree of explicitness. Mediation is organized along a scale of most implicit to most explicit, and throughout DA, the mediator tracks the scale accurately, running from hint to hint until the student either answers correctly or the final hint is stretched and the answer is exposed and elucidated. On the other hand, Interactionist DA puts no limitations on mediation requiring the mediator to do everything possible in order to help a learner stretches beyond his/her current independent performance.

Although a handful of researchers have addressed DA in listening skill, recently, it is proven to be an effective tool for improving students' listening skills (Hashemi shahraki, Ketabi, & Barati, 2015; Hidri, 2014; Wang, 2015). Thus, the researchers in this study tried to investigate its effectiveness for improving listening skill; however, it was not possible to employ the interactionist DA since, in this study, the teacher had to manage a group of learners. An interventionist group DA was employed, wherein, according to Poehner (2009), the teacher can provide a group of learners with mediation and help them to co-construct a group ZPD. The main objective of this study was to compare DA and schema theory efficacies in improving EFL students' listening comprehension skills. This study held importance in that it addressed the listening skills, "a mysterious black box" (Rost, 2001, p. 13), and tried to find effective programs for improving "the most frequently used language skill in everyday life" (Celce-Murcia & Olshtain, 2000, p. 102). Moreover, it attempted to follow Chen's (2009, p. 55) belief that listening practices should "shift the attention from test-oriented teaching toward more student-oriented instruction, in which the key focus is on helping students to develop their listening strategies and learn how to actively listen." To fulfill the objectives, some hypotheses were proposed by the researchers:

NH1: Employment of Group DA does not have any effect on EFL learners listening abilities.

NH2: Employment of schema activating listening tasks does not have any effect on EFL learners' listening capabilities.

NH3: There is no significant difference between the group DA and schema activating group regarding improvement of EFL learners listening abilities.

This study addressed the following research questions based on the above hypotheses:

RQ1: Does employing DA have any significant effect on the Iranian EFL learners' listening abilities?

RQ2: Do schema activating listening tasks influence the Iranian EFL learners' listening comprehensions?

RQ3: Is there any significant difference between DA and schema activating listening practices on the Iranian EFL learners listening ability?

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Table 1. Oxford placement test scoring criterion	
Scoring	**Proficiency level**
0–15	Beginner
16–23	Elementary
24–30	Intermediate
31–40	Advanced

2. Method

2.1. Participants

The present study was conducted in a language institute in Mashhad, Northeast of Iran. A convenience sampling procedure was used wherein 42 (18 males, 24 females) learners who had already enrolled in two intact classes took part in the study. Random assignment was used to assign the classes to different treatment groups, an interactionist group DA (20 students) and a schema group (22 students). The students of the two groups were placed at intermediate proficiency level based on their results in the Oxford Quick Placement Test (QPT) (Oxford University Press & University of Cambridge Local Examinations Syndicate, 2001). Their age ranged from 16 to 19 (Mean = 18.3). They all agreed to participate in the study by completing the consent form. The researchers consulted the institute's managers regarding the project's procedures. The participants' exposure to English was only limited to their English classes and all of them were native speakers of Persian. They have participated in English language courses for several years in different language institutes.

2.2. Instruments and materials

2.2.1. Oxford quick placement test

In order to be assured of homogeneity of all the participants in terms of English language proficiency, Oxford Quick Placement Test (OQPT) validated in 20 countries by more than 6,000 students was administered as a time-saving and reliable English language proficiency test developed by Cambridge ESOL and Oxford University Press. Considering practicality, it is quick and easy to administer. The paper and pencil version of this test consist of two parts. The first part, consisting of 40 questions, was taken by candidates who are at intermediate level. According to the guidelines of the test, the students who got a score between 24 and 30 are intermediate, and therefore, they could participate in this research. As can be seen in Table 1, the participants were selected based on the ranking of the test.

2.2.2. Listening test module (IELTS Format)

IELTS listening module was used as a pre- and posttest in this study. The information about IELTS listening section was taken from University of Cambridge ESOL Examinations (UCLES) (2015). The listening tests consisted of 40 questions being answered by listening to four different recordings. The audio files were played once requiring the participants to answer the questions in 30 min. Both social and academic topics in forms of monologs and dialogs in different voices and accents were included. Multiple choice, form completion, note completion, summary completion, sentence completion, and short-answer questions formats were used in the tests. Two parallel tests were administered as the pretest and posttest to assess the participants' listening comprehension at the outset and end of the course. The band score for the tests are given in Table 2.

Table 2. IELTS listening module band scores													
Band Score	**9**	**8.5**	**8**	**7.5**	**7**	**6.5**	**6**	**5.5**	**5**	**4.5**	**4**	**3.5**	**3**	**2.5**
Score/40	39–40	37–38	35–36	32–34	30–31	26–29	23–25	18–22	16–17	13–15	10–12	8–10	6–7	4–5

2.2.3. Audio and video files

A number of audio files of the book *Developing Tactics for Listening* (Richards, 1997) was selected and practiced in both classes. Moreover, some clips and videos were selected from the Internet in line with each audio file topics to be used in the groups.

2.3. Data collection procedures

At the outset, the participants in both groups took the QOPT to assure homogeneity on English language proficiency. Then, they were randomly assigned to DA and schema activation designs practicing their listening skills for 15 sessions of one hour. The learners in both groups participated in the IELTS listening test module as the pretest and posttest.

2.3.1. Dynamic assessment group

Regarding the DA group, the researchers used a pretest-enrichment-posttest interactionist (Poehner, 2008) procedure based on the Vygotskian socio-cultural theory. For this group, we followed Ableeva's (2010) study procedure who performed a DA of learners' listening abilities. The difference lied in the fact that we used Poehner's (2009) suggestion for group dynamic assessment.

In the pretest session (as a non-dynamic stage), the learners participated in the IELTS listening test. After diagnosing learners' capabilities as individuals and a group, they entered into the enrichment phase. As the nature of the class demanded, providence of help in the enrichment phase occurred in the form of group DA.

In the enrichment phase, for each session, the students completed listening tasks taken from *Developing Tactics for Listening* (Richards, 1997). At the beginning of each session, the learners listened to a sound clip without any interruption. They were required to guess the topic and find new vocabularies. There was a discussion for 5–10 min concerning the new clip. All the learners in the class were required to participate. Moving forward, the teacher replayed the listening tasks and paused several times so that he could ask the students about the content. He remained silent in the beginning minutes and observed the learners to diagnose their problems. When the students had difficulties, the teacher intervened by providing the learners with mediation in the form of hints, and contingent assistances to help them as a group. Besides working individually, the learners formed pairs and groups working together on listening activities and the teacher observed them. The hints and prompts provided ranged from the most explicit where the teacher provided a direct answer to the problem and the least implicit where the teacher provided similar examples and asked the others for help. Figure 1 demonstrated the mediational strategies used by the teacher with this group.

Assessment of the learners occurred both at the end of each session by receiving feedback of their performances on different tasks and using an IELTS posttest at the final session. Figure 2 demonstrates the procedure used for this group.

2.3.2. Schema group

According to Rivers (1981), a typical listening comprehension unit consists of pre-listening, listening, and post-listening activities. Learners' knowledge of a particular topic can be activated in the pre-listening stage. In order to activate the learners' schemata, the teacher can use some bottom-up and top-down processing strategies.

Before commencing the treatment, the learners in this group took the IELTS listening module as the pretest. Then, they entered to the treatment phase. Two strategies including *shadowing* (Hamada, 2012) and *semantic maps* (Freedman & Reynolds, 1980; Heimlich & Pittleman, 1986) were employed to enhance learners' listening capabilities in this group.

After the fulfillment of pre-listening tasks, the learners entered into the listening stage where they listened to various tracks. They listened to the tracks twice. First, they listened to them without any

**Figure 1. Mediational strategies
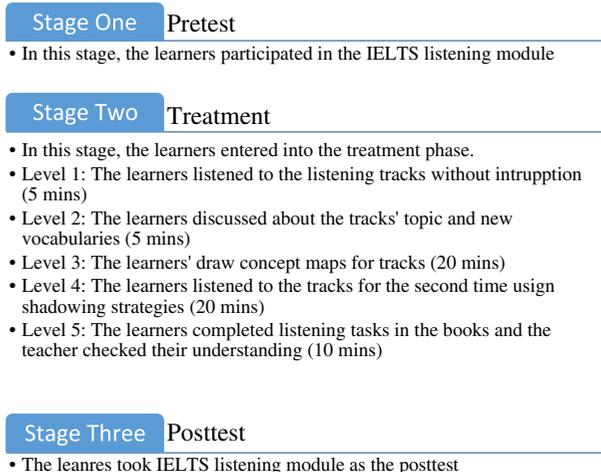(Ableeva, 2010, p. 260).**

**Figure 2. Procedure for group
DA.**
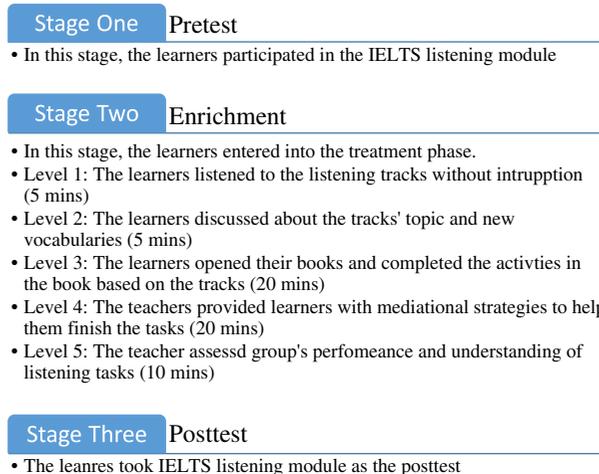
pause and second, they listened to them with some pauses made by the teacher. They discussed the meaning of new vocabularies and the track's topic at the first stage. Then, repeated the tracks once.

Concept mapping was used as an effective strategy to activate learners' background knowledge after listening to the tracks for the first time. The maps were in the form of a set of related vocabularies which were associated to the topic at hand. The teacher and students brainstormed and discussed about the vocabularies associated with the topic of listening tracks. Students formed pairs to find the meaning of new vocabularies and discuss them. After finding new vocabularies, the students draw a map on the board cooperatively. This task took 10 min of class time.

Shadowing is a parrot-style auditory tracking task (Hamada, 2012) used to activate learners' cognitive listening structures by asking them to listen and vocalize the heard speech (Tamai, 1997). This

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Figure 3. Procedure for schema group.

| Stage One | Pretest |

• In this stage, the learners participated in the IELTS listening module

| Stage Two | Treatment |

• In this stage, the learners entered into the treatment phase.
• Level 1: The learners listened to the listening tracks without intrupption (5 mins)
• Level 2: The learners discussed about the tracks' topic and new vocabularies (5 mins)
• Level 3: The learners' draw concept maps for tracks (20 mins)
• Level 4: The learners listened to the tracks for the second time usign shadowing strategies (20 mins)
• Level 5: The learners completed listening tasks in the books and the teacher checked their understanding (10 mins)

| Stage Three | Posttest |

• The leanres took IELTS listening module as the posttest

is usually done with the help of headphones. In this study, the learners didn't have access to individual headphones so the teacher played some tracks for the whole class and required them to repeat them. The instructor used selective shadowing strategy, after drawing concept maps, where the learners listened to certain words and phrases and vocalized them (Murphey, 2001). This task took 15 min of class time at the beginning of each unit.

Then, the learners completed the activities provided in the book related to a specific track. At the end of the session, the teachers checked the activities and asked students some questions to check their understandings.

In the post listening stage, the learners were required to do the activities provided by the book. Upon completion, the activities were checked by the teacher. The teacher asked learners some questions to assure that they have comprehended the listening track. Then, they moved to the next topic. For each session, they received a score. At the end of the study, the learners in this group took the IELTS listening module as the posttest. Figure 3 provided a schematic picture of the procedure used for this group.

2.4. Data analysis procedures
In order to assure normality of learners' scores in DA and schema groups, Shapiro-wilk test was used. Through descriptive statistics, the two groups' performances on the IELTS pretest and posttest were indicated. The effects of the two treatments on the listening performance of the learners and the differences between the two treatments in improving the learners' listening comprehension were examined using a mixed between-within ANOVA and independent sample *t*-test.

3. Results
Results for homogeneity of the two groups in terms of language proficiency are provided. As mentioned, Oxford Placement Test as used to assure homogeneity. To compare groups' scores, an independent-samples *t*-test was run. As indicated in Table 3, there was no significant difference between the schema and DA groups' proficiency scores (t (40) = .386, Sig = .701). This verified groups homogeneity in listening.

Moreover, when analyzing differences between groups using parametric tests (e.g. the independent-samples *t*-test, one-way ANOVA), a common assumption is normal distribution of groups' scores. The Shapiro-Wilk test is a dedicated test for normality and the output is included in the Tests of Normality Table 4.

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Table 3. Descriptive statistics for the groups' language proficiency and results of independent-samples *t*-test

Group	N	Mean	SD	Min	Max	T	d*f*	Sig. (two-tailed)
DA	20	33.7	11.0	17	54	.386	40	.701
Schema	22	35.0	10.7	18	55			

Table 4. Test of normality for IELTS test

Shapiro-Wilk	Statistics	d*f*	Sig.
Schema group	.759	21	.123
DA group	.658	19	.212

If the assumption of normality has been violated, the "Sig." value will be less than .05 (i.e. the test is significant at the $p < .05$ level). If the assumption of normality has not been violated, the "Sig." value will be greater than .05 (i.e. $p > .05$). Based on the Table 4 results, the researcher can claim that IELTS test scores were normally distributed for both groups ($p > .05$).

In order to assess the effects of DA and schema theory on the students' listening comprehension skills, the groups' scores on pretest and posttest were compared. Table 5 showed both groups' listening comprehension improved over time (DA: Pretest M = 11.7, Posttest M = 15.3; schema: Pretest M = 12.0, Posttest M = 16.6). However, in order to statistically examine the groups' performances, a mixed between-within subjects' analysis of variance (ANOVA) was conducted.

Preliminary assumption testing showed no serious violations of homogeneity of inter-correlations and variances. As the results in Table 5 indicated, there was not a significant interaction between time and group (Wilk's Lambda = .948, $F (1, 40)$ = 2.200, Sig = .146, Partial η^2 = .024) which meant the groups' performance improvement over time was not different so much. Considering the effects of the DA and schema interventions, the difference was not statistically significant ($F (1, 40)$ = 1.000, Sig = .399, Partial η^2 = .026), meaning that there was no difference in the effectiveness of the DA and schema theory in improving the students' listening ability. However, there was a significant main effect for time (Wilk's Lambda = .197, $F (1, 40)$ = 163.3, Sig = .000, Partial η^2 = .803) suggesting that both groups' listening comprehension greatly improved and the effect of time (.803) was large according to Cohen (1988) (Table 6).

Table 5. Descriptive statistics for pretest and posttest listening scores

	Listening	Group	N	Mean	SD
Descriptive statistics	Pre-test	DA	20	11.7	2.81
		Schema	22	12.0	2.33
	Post-test	DA	20	15.3	3.66
		Schema	22	16.6	3.03

Table 6. Results of mixed between-within subjects' ANOVA for pretest and posttest listening scores

Multivariate tests (of within subject effect)	Effect	Wilk's Lambda Value	F	Hypothesis d*f*	Error d*f*	Sig.	Partial η^2
	Time	.197	163.3	1	40.000	.000	.803
	Time*group	.948	2.200	1	40.000	.146	.052
Tests of between-subject effect	Group	Type III sum of squares	d*f*	Mean square	F	Sig.	Partial η^2
		15.7	1(40)	15.7	1.000	.323	.024

Figure 4. Comparison of pretest (1) and posttest (2) of DA and Schema groups' listening comprehension.
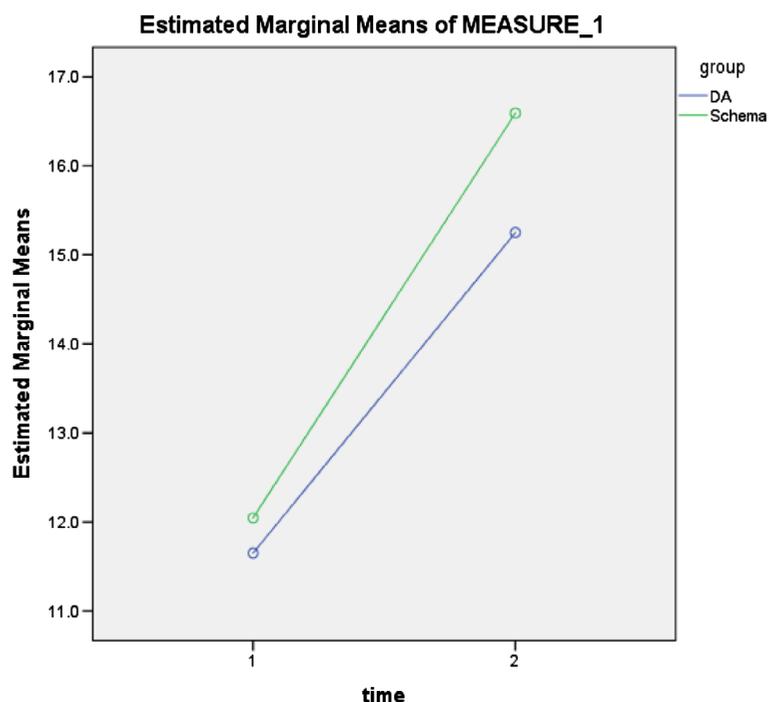

Figure 2 showed the comparison between the two groups' listening comprehension improvements over time. According to the figure, the schema group' listening comprehension had a better improvement compared to the DA group, although there was not a statistically significant difference between the two treatments in improving the students' listening comprehension skill (Figure 4).

These results demonstrated that the first and second null hypotheses proposed above are rejected. Accordingly, based on the results, it was concluded that the learners' listening abilities improved as a result of exposure to group DA and schema activating tasks. However, the results showed that there was no significant difference between the group DA and schema group so the third null hypothesis is confirmed.

4. Discussion

Based on the above results, the participants' listening comprehension in both groups improved after receiving either types of treatments for 15 sessions. Although the statistical analysis showed that there was not a statistically significant difference between the groups' listening scores in the post-test, the students who received schema treatment obtained higher scores on listening than the DA group. Better performance of the schema group can be explained with reference to Nunan's (2007) statement that

> It is beneficial for listening course teachers to bear in mind that activating students' stored knowledge structure (schemata) to enhance comprehension and creating new schemata are far more important than imparting new knowledge of the language system. (p. 33)

Shadowing and concept mapping can help teachers to employ both top-down and bottom-up strategies helping learners in the listening processing and production. Through shadowing, the teachers improved the learner's non-linguistic skills, made them aware of the background knowledge and activated it before the listening tasks which may have helped them comprehend the texts. The teacher attempted to activate and enhance learners' knowledge at the systematic level. The advantages of shadowing in improving foreign language learners' listening comprehension have been

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highlighted by some other researchers including Murphey (2001), Kadota and Tamai (2005), Takizawa (2002), Kurata (2007), and Hamada (2012).

Through concept mapping, the teacher tried to link the systematic level to the schematic level. Cook (1994) states "The mind stimulated by key words or phrases in the text or by the context activates a knowledge schema" (p. 69). The learners in this group delivered vocabulary maps and related phrases so as to provoke their previous knowledge of the topic. This may be in line with other studies including Freedman and Reynolds (1980), Heimlich and Pittleman (1986), and Zimmerman (1997).

The results for the DA group also documented improvement in listening performance. When learners work in collaboration for the same goal, they can solve a particular problem more easily and also improve their autonomy at the same time. The aim of dynamic testing is to help learners progress in their learning which was accomplished based on the results of this study. As maintained by the researchers, testing and teaching are intertwined in DA leading to a joint activity with the aim of activating learners' cognitive and metacognitive processes (Ableeva & Lantolf, 2011). It is used to involve learners in guided performance which necessitates interaction among the participants (Lantolf & Poehner, 2004).

Yet, the lower scores of the DA group can be justified from several perspectives. First of all, as Poehner (2009) delicately argued, the application of DA in classes where the teacher deals with different learners' ZPDs is not clear. In the DA group, the teacher was under the pressure of working with the students and diagnosing their strengths and weaknesses as a group. This may have limited his capability to enhance individual learners' potentials in the listening comprehension. Although the teacher allocated a score for the students' class participation, he could not make sure that all the learners took part in the interactions and also, he could not guarantee that he could find each learner's difficulties and provide appropriate mediation in line with their level of ZPD (Lantolf & Poehner, 2011). Furthermore, dynamic assessment is considered as a testing technique at the first place which can help improve learners' capabilities. This being the case, the learners may not be that much inclined toward listening processes but listening outcomes. The other element which may have led to lower scores in the DA group can be teachers' lack of acquaintance with the idea of mediation. Although the teacher working with the DA group was familiar with the dynamic testing procedures, he was not trained regarding the providence of mediation to the individual students or learners as a group. This resulted in providing hints and mediations without considering their consistency and contingency.

5. Conclusion

Through a quasi-experimental design, the effects of an interactionist group DA and schema activating practices on two groups of 42 Iranian EFL learners were examined. This paper provided a quantitative account of the results in order to answer the posed research questions. Analyses of the quantitative data indicated that, over time, group DA practices, and schema activating strategies improved the learners' listening skills. The data showed that students in the schema group gained higher scores on the listening posttest compared to the interactionist group DA; however, there was no significant difference in the effectiveness of the types of treatments that the students received.

These findings are in line with the studies indicating that activation of students' background knowledge facilitated their listening skills (Bdlokcuoglu, 2014; Chiang & Dunkel, 1992; Herron et al., 1995; Sadighi, 2006). Long (1989) studying the effects of schemata activation with foreign language concluded that prior knowledge played a determining role in listening comprehension. Chiang and Dunkel (1992) also looked at the effect of prior knowledge on a postlecture comprehension test. The researchers stated that the group which activated their prior knowledge performed better in the listening comprehension test. Markham and Latham (1987) also suggested that religious bound background knowledge activation may help learners to listen to passages about their religion and the other religions.

The results were also in line with those studies revealing the effectiveness of DA in improving the students' listening skill (Hashemi shahraki et al., 2015; Hidri, 2014; Wang, 2015). Ableeva (2010) and Ableeva and Lantolf (2011) explored the influences of DA on listening comprehension in a cross-sectional and a longitudinal qualitative study, respectively. Both authors maintained that DA can be used as an effective tool in honing EFL learners' listening abilities.

This study demonstrated the strengths of two important approaches in teaching listening comprehension to EFL learners. Here, the researchers intended to compare the effects of dynamic assessment and schema approaches but it should be noted the both of them can be used simultaneously by teachers in their language classes providing more help to the learners. Regarding DA group, different types of mediational strategies were effectively used by the teachers and learners for the purpose of improving learners' performance. Although primarily designed for individual help, the teacher used these strategies to scaffold a group of learners in this study. These strategies led to higher interaction and meaning negotiations within the classroom discourse. They provided learners with opportunities to collaboratively solve their listening problems and construct a community of practice. The group DA provided an attractive classroom atmosphere for the learners as they were engaging in with their peers and the teacher.

On the other hand, learners in the schema group benefited from shadowing and concept mapping as strategies to enhance their listening abilities. These strategies enabled learners to actively participate in their own learning. These student-centered strategies assigned a peripheral role of facilitator to the teacher and let the learners take the floor in the class. Concept mapping helped learners to predict what they will face in the following stages of a lesson. As a proactive strategy, it enhanced learners understanding of the following stimulus and facilitated implementation of shadowing strategies. Shadowing helped learners to develop and practice both segmental and suprasegmental features of oral language. By carefully following and repeating the tracks, the learners were empowered to improve their listening skills from bottom up and top down perspectives.

The findings of this study can have some implications for second language pedagogy. It was found that both of the practices used in the present study have the potential to inform EFL listening comprehension pedagogy. In fact, teachers, educational authorities, and managers of language institutes need to become aware of the effective listening practices so that they can manage a teaching program which positively affects the learning process. Language teachers can be enlightened on the use of dynamic assessment processes as both an assessment procedure and an instructional approach. They should be taught on how to provide contingent hints and prompts to enhance learners' ZPD. They should be informed on the advantages of using group DA formats in the classroom. Similarly, different approaches to activating learners' schemas should be considered beneficial to learning. Concept mapping and shadowing should be presented to pre-service teachers. Teacher education courses can be responsible for acquainting teachers with effective practices about different language skills.

However, this study suffered from some limitations. First of all, the study lacked a control group which could inform us of the effects of the treatments in a more comprehensive way. In this study, we intended to compare two approaches to teaching listening comprehension and, as a result, statistical significance was a second priority. Those who are interested to make their results more acceptable are recommended to compare the experimental groups with a control group.

Moreover, the sample needs consideration since there were only 42 intermediate students in the study. Students' gender was also controlled in this study. These approaches to teaching listening comprehension can be practiced with both male and female learners. Learners language proficiency was limited to intermediate group. Dynamic assessment and schema approaches may be more effective with higher proficiency groups. Therefore, further research can take the above mentioned shortcomings into consideration and even study and compare the effects of different activities on the learners' listening skill.

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