Research Paper

Effect of Group Dynamic Assessment on the Development of Learners' Listening Comprehension: A Case of Female Iranian EFL Learners

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Abstract

This study aimed to examine the impact of Group Dynamic Assessment (G-DA) on the listening comprehension of Iranian intermediate EFL learners. To this purpose, through the Preliminary English Test (PET) 140 Iranian EFL female learners in four English Language Institutes of Ahvaz, Iran, were tested, and 80 of them were selected as the sample of the study using convenience sampling. They were taught through group dynamic assessment. After the pretest and treatment sessions, the participants were given the listening comprehension post-test and the resultant scores were statistically analyzed to detect their development from pretest to post-test. The obtained results revealed that Group Dynamic Assessment (G-DA) had a positive impact on the participants' listening comprehension. This finding implies that EFL teachers may need to consider the positive impact of dynamic assessment on EFL learners' listening comprehension improvement and provide them with more opportunities to interact. They may also need to create a change in the traditional models of listening comprehension assessment which emphasize psychometric quantification of students' performances.

Keywords: *EFL learners; Group Dynamic Assessment; listening comprehension*

تأثیر ارزیابی پویای گروهی بر رشد درک شنیداری فراگیران: زبان آموزان زن ایرانی زبان انگلیسی

این مطالعه با هدف بررسی تأثیر ارزیابی پویای گروهی (G-DA) بر درک شنیداری زبان آموزان ایرانی زبان انگلیسی متوسط انجام شد. بدین منظور، از طریق آزمون مقدماتی زبان انگلیسی 140 (PET) نفر از زبان آموزان زن ایرانی زبان انگلیسی در چهار مؤسسه زبان انگلیسی اهواز مورد آزمون قرار گرفتند و ۸۰ نفر از آنها با استفاده از نمونه گیری در دسترس به عنوان نمونه پژوهش انتخاب شدند. آنها از طریق ارزیابی پویا گروهی آموزش داده شدند. پس از انجام جلسات پیش آزمون و درمان، پس آزمون درک شنوایی به شرکت کنندگان داده شد و نمرات به دست آمده برای تشخیص رشد آنها از پیش آزمون تا پس آزمون مورد تجزیه و تحلیل آماری قرار گرفت. نتایج بهدستآمده نشان داد که ارزیابی پویای گروهی (G-DA)تأثیر مثبتی بر درک شنیداری شرکتکنندگان داشت. این یافته نشان میدهد که معلمان زبان انگلیسی ممکن است نیاز داشته باشند که تأثیر مثبت ارزیابی پویا بر بهبود درک شنیداری زبانآموزان زبان انگلیسی را در نظر بگیرند و فرصتهای بیشتری برای تعامل برای آنها فراهم کنند. آنها همچنین ممکن است نیاز به ایجاد تغییر در مدل های سنتی ارزیابی درک شنیداری داشته باشند که بر کمی سازی روان سنجی عملکرد دانش آموزان تأکید دارد.

کلمات کلیدی: زبان آموزان زبان انگلیسی، ارزیابی پویای گروهی، درک شنیداری

Introduction

Many testing experts (e.g. (Alderson, Percsich, and Szabo, 2000) have long welcomed standardized diagnosis tests as valid, reliable, and practical despite their limited scope in uncovering the latent cognitive and metacognitive skills and sub-skills in the same way dynamic assessment (DA) does. Alternatively, attaching learning to a socio-cultural context is another approach that calls for participants to be part of a learning activity where much support is needed to diagnose the LP of these learners. Basically, according to Vygotsky (1986), leaners can show signs of successful learning in the presence of a more competent peer who can engage them in mediation activities and tasks using specific strategies and skills to move from their actual to the proximal zone of development (Lantolf and Poehner, 2007).

Types of Dynamic Assessment
Interactionist Dynamic Assessment (I-DA)

Poehner (2008) maintains that Interactionist Dynamic Assessment (I-DA) follows Vygotsky's tendency for cooperative interaction. Ableeva (2008) believes that during an interactionist dynamic assessment, leading questions, hints, or prompts are not pre-planned; instead, they stem from mediated dialogue between the examiner and the examinee in which the examiner responds to the examinee's needs and continually re-adjusts his/her mediation. Mardani and Tavakoli (2011) point out that in this approach, assistance emerges from the interaction between mediator and learner, and thus is very sensitive to the learner's zone of proximal development.

Group Dynamic Assessment (G-DA)

Grounded in the socio-cultural theory (SCT) of Vygotsky, Group DA is claimed to have the capacity to capture learners' ZPD in groups (Lantolf and Poehner, 2011). According to Poehner (2009), G-DA consists of two different approaches: concurrent and cumulative. Based on the concurrent approach, though mediation is provided for an individual learner, the exchange that is initiated by the first interactant in the form of a question or comment can create an occasion for another's contribution. In cumulative G-DA, students are primary interactants, interacting with their teacher.

Computerized Dynamic Assessment (C-DA)

This new approach was devised by Tzuriel and Shamir (2002). Working in the domain of cognitive psychology, these authors sought to evaluate young children's seriation thinking abilities, believed to be central to success in learning mathematics.

Interventionist Dynamic Assessment

Following an interventionist model, if learners fail to respond correctly to a series of tasks, hints are provided that are arranged from implicit ('try again') to explicit (pointing out important features of a task or offering reminders of relevant principles). Teachers are also present during the administration of the test and are free to provide supplemental support similar to interactionist DA (e.g., check learner understanding of the task, offer different hints and explanations), which is also reported in the final diagnostic. According to Tzuriel and Shamir (2002), the procedure provides more in-depth diagnoses of learner abilities and creates more learning opportunities when teachers are present than when mediation is provided exclusively by the computer.

The aim of the present study was to check the possible impact of Group Dynamic Assessment (G-DA) on the listening comprehension of Iranian intermediate EFL learners. Thus, the following research question was addressed:

RQ. Does the Use of group dynamic assessment have any significant effect on Iranian EFL learners' listening comprehension?

Review of Literature

Simultaneous evaluation of the impact of different types of dynamic assessment on EFL learners' listening comprehension has never been conducted as far as the related literature discloses. Actually, most of the studies done in connection with the dynamic assessment and various language skills has focused on speaking and writing performance. As an example, Anton (2009) investigated DA procedures for the speaking and writing skills of five students in a Spanish diagnostic test for an advanced level. The DA procedures for writing were conducted following Aljaafreh and Lantolf (1994) model in which the mediator offers assistance that ranges from implicit prompts to explicit corrections. Although Antón reported that, through the DA procedures, the mediator was able to obtain a richer and deeper description of the learners' existing and potential language abilities, the DA procedures for writing were carried out only once after the timed test, and the interaction between the students and the assessor seemed very limited (i.e., asking questions). In addition, Antón does not provide the details of the DA procedures followed during the mediation.

There are a few other studies which specifically focus on writing in the context of English as a foreign language. Two papers are worth mentioning here, although they are in the context of English language learning rather than disciplinary learning (e.g., biology). The first one is by Alavi and Taghizadeh (2014), who conducted their research with Iranian undergraduate students in the context of an IELTS test. The authors followed an implicit-to-explicit feedback approach to mediation with the participants. Their foci were on writing content and organization skills and strategies. The study followed a pre-test-train-post-test design and conducted statistical analyses of the learner performance in essay writing. The authors found that, as in previous studies, the participants had different zones of proximal development (i.e., learning potential) in the areas focused on, and DA had positive effects on the learners. They argue that explicit teacher feedback was the most effective during the mediation process. This paper, however, lacks detailed data about the actual mediation process or interaction between the teacher and the learners. The second study of relevance is Ebadi and Rahimi (2019), which was also conducted in the IELTS academic writing test context with three undergraduate Iranian university students. The DA procedures were conducted via Google Docs synchronously and asynchronously. The authors found that DA sessions had positive effects on the participants' general academic writing development in relation to coherence and cohesion, lexicon, grammatical range, and accuracy, which are the marking criteria used in the IELTS test. They also tracked participants for the transfer of learning, which showed the participants' maturing writing abilities. They reported positive perceptions of the participants about DA. The above-reviewed papers report that DA enhances students' linguistic skills by responding appropriately to the potential of learners' zone of proximal development through teacher mediation as indicated by the improvement in the students' independent performance and the decreasing amount of assistance needed by them. However, all of these studies were conducted on learning certain formal features of a foreign or second language, and there have been only a few studies on listening from a DA perspective. Also, none of the researchers appear to have used a comprehensive theory of language use such as SFL, a need highlighted about a decade ago by Gardner (2010). The Socio-Cultural Theory of mind (SCT) (Vygotsky, 1986), which overtly foregrounds the process in lieu of the product, has shown its merit that language learning is both social and cultural, rather than individual, and that for learning to take place effectively, it has to be undertaken by a mediator or a more competent peer in a socially and culturally contextualized setting (Poehner and Lantolf, 2005). Advocates of DA (e.g., Ableeva, 2008; Anton, 2009; Haywood, 2012; Sternberg and Grigorenko, 2002) have claimed that DA is not essentially meant to help students to obtain better scores; rather, it is

aimed at diagnosing the ZAD and ZPD. However, there should be some caution against the ways actual scores are perceived on the assumption that such scores do not inform much about the amount of mediation that learners need. In order to have a more comprehensive diagnosis of the learners' ability, the mediated score that learners get should signal the amount of mediation that they undergo and respond to in the ZPD (Lantolf and Poehner, 2011; L. Vygotsky, 1986). The diagnosis of developmental processes (Poehner and van Compernolle, 2020) is thought to predict individuals' future performance where instruction and assessment are seamlessly merged into one unified activity to the extent that such diagnosis helps ultimately perform solo. Learners sometimes do not profit much from mediation, and therefore, it cannot be conducive to much more learning, especially when their ZAD is well developed and the ability is already matured. When learners with an actual low ability fail to make great leaps in getting higher scores in the mediated performance, this puts into question the efficiency of using DA (Hidri, 2019).

Method

Design of the Study
To achieve the purpose of the study, a quasi-experimental design was used. A quasi-experimental design is a design in which nearly all the elements of a true experimental design are present, and just one or two (usually randomization) are missing. Due to the fact that choosing a random sample is next to impossible, the design of the study was quasi-experimental. Within this design, one control group and one experimental group represented the independent variables of the study, and listening comprehension represented the dependent variable.

Participants
Preliminary English Test (PET) was given to approximately 140 Iranian EFL learners, and 80 of them were selected as the sample of the study. They were selected from four English Language Institutes of Ahvaz, Iran, and their level of general English proficiency was intermediate. Their age range was probably between 18 and 32 years old. All the participants were females, and they were native speakers of Persian. The non-random availability sampling method was used to choose the sample of the study. The selected students were assigned to two groups: an experimental group and a control group.

Instruments
Two instruments were used in this study. The first instrument was the Preliminary English Test (PET). It was used to select homogenous participants. According to this test, the learners who score between one standard deviation (SD) above and one SD below the mean were regarded intermediate. The test included 60 multiple-choice items, and based on it, the learners whose scores are 18 to 28 are elementary; those whose scores are 32 to 39 are pre-intermediate; the students whose scores are 42 to 48 are intermediate; the learners whose scores are 48 to 54 are known as the advanced learners, and those whose scores are 55 to 60 are very advanced learners.The second instrument was the listening section of a sample TOEFL Junior Standard Test which primarily serves to determine the proficiency level of the test takers. This listening comprehension test was used as the pretest and an equivalent test taken from another sample TOEFL Junior Standard Test was used as the post-test.

Procedures
Data collection procedures
To do this research, 80 homogenous students were first selected, and assigned to two equal groups of 20; an experimental group and a control group. Then, the pretest of listening was

administered in order to measure the listening level of the students before the treatment. As for treatment, in the experimental group, the teacher asked each participant in each session to answer the first question and ensured that other participants were actively listening by keeping a close eye on what they were doing. If the learner's answer was correct, the teacher asked her to discuss the answer and delve into why it was correct, and if the answer was incorrect, the teacher provided her with a correct form. Actually, the teacher offered hints, leading questions, explicit feedback and recommendations which were in harmony with the DA. In the control group, each session, the teacher asked the participants to listen to the short animation video and share their understanding in their own groups, and then separately answer the test items. In this group, the teacher did not join the groups to interact or mediate their performance in listening comprehension test items. Instead, she gathered the learners' test papers and announced their scores in the following session. Finally, the teacher gave the listening comprehension post-test to the learners of both the experimental and the control groups. The whole treatment lasted 15 sessions of 45 minutes. In the first and the second sessions, the PET and pretest of listening was administered.

Data Analysis procedures
In order to analyze the collected data and to run parametric tests, IBM SPSS Statistics 23 was used. First, the Shapiro-Wilk test was employed to measure the exact normality of the data. Second, to detect the developments of the participants of both groups from pretest to post-test, a paired-samples t-test was administered.

Results
The research question of the study was: Does using group dynamic assessment have any significant effects on Iranian EFL learners' listening comprehension? One-way ANCOVA was conducted to capture the possible differences between the listening comprehension post-test scores of the learners in the GDA and CG. Tables 1 and 2 present the obtained results.

Table 1
Descriptive Statistics for Comparing the Post-test Scores of the Learners in the GDA and CG

Groups	Mean	Std. Deviation	N
GDA	29.90	3.07	20
CG	25.30	3.11	20
Total	27.60	3.84	40

Table 1 shows that the post-test mean score of the CG (M = 25.30) was less than that of the GDA (M = 29.90). To find out whether this difference in the post-test scores of the GDA and CG learners was a significant one or not, one had to look down the *Sig.* (2-tailed) column in front of Groups in Table 2:

Table 2
*Results of One-Way ANCOVA for Comparing the Post-test Scores of the Learners in the GDA and CG*

Source	Type III Sum of Squares	*Df*	Mean Square	*F*	*Sig.*	Partial Eta Squared
Corrected Model	548.85	2	274.42	379.58	.00	.95
Intercept	20.45	1	20.45	28.29	.00	.43
Pretest	337.25	1	337.25	466.48	.00	.92
Groups	234.77	1	234.77	324.73	.00	.89

Error	26.75	37	.72
Total	31046.00	40	
Corrected Total	575.60	39	

In Table 2, in front of Groups, under the *Sig.* column, the *p* value was smaller than the specified level of significance (.000 < .05), indicating that the treatment (group dynamic assessment) was effective in improving the GDA learners' listening comprehension. Under Partial Eta Squared, the corresponding value was .89, which shows that the treatment accounted for 89% of the variance in the listening comprehension post-test scores of the GDA and CG learners. The results obtained for this part are shown in Figure 1 below.

Figure 1
Post-test mean scores of the GDA and CG learners
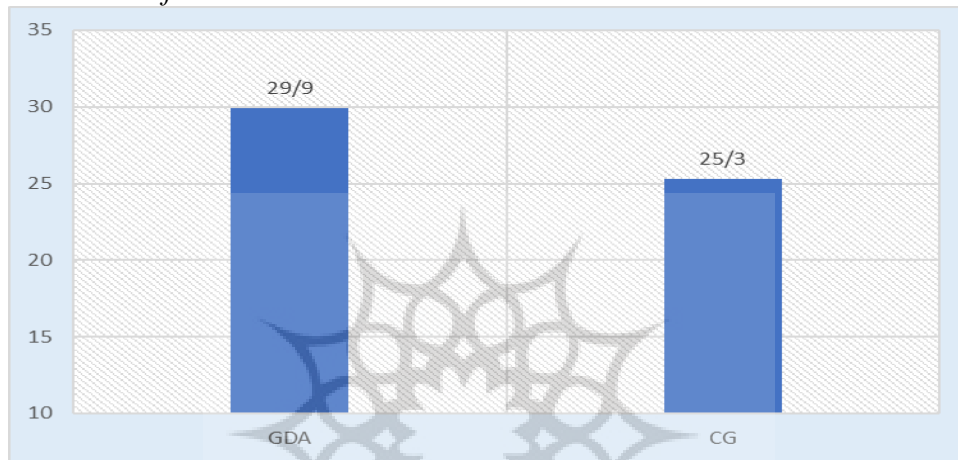
It is clearly seen in Figure 1 that the difference between the post-test scores of the GDA and CG learners was substantial; in consequence, it could be inferred that group dynamic assessment positively (and significantly) influenced intermediate Iranian EFL learners' listening comprehension.

Discussion
This section belongs to the discussion of the findings of the study with regard to the posed research question.

The Effect of Group Dynamic Assessment on Listening Comprehension
The results of the data analysis showed that group dynamic assessment (GDA) had a positive and meaningful impact on Iranian intermediate EFL learners' listening comprehension. A theoretical explanation for this observation could be that group DA, which is grounded in the sociocultural theory (SCT) of Vygotsky, may have capacitated learners' zone of proximal development (ZPD) in the context of the group. That is to say, exchanges initiated by the first interactant in the form of a question or comment can create an occasion for another's contribution. In the context of the present research, the participants' ZPD in the GDA group have been enhanced in the following way: If their answer was correct, they were asked to discuss the answer and delve into why it was correct, and if the answer was incorrect, the examiner provided them with a correct form of mediation and instruction. The enhancement of ZPD contributes to the transformation of potential ability, listening comprehension here, to actual competent performance. The findings of the study regarding the impact of GDA on listening comprehension could also be explained

through the concept of intermental development zone (IDZ), proposed by Mercer (2000), who considered ZPD as being a dynamic rather than a static concept representing an individual's mental state at any given point. Such explanation takes account of the changing state of both the teacher's and learners' knowledge during the educational activity in the classroom. In other words, this zone is constantly reconstituted as the teacher and their learners continue the dialogue in a shared activity like discussion. This is in line with Holzman (2018), who interpreted ZPD as being actively and socially created rather than being an entity existing in psychological-cultural social space and time. Such view of ZPD as dynamic and socially constructed seems by nature more aligned with the purpose of DA. Another justification for this finding seems to be the point that GDA takes account of the group's ZPD and pushes ZPD of the group forward, while simultaneously benefitting each one of the group members. GDA might also pave the way for the group to take a step beyond the present capabilities of each one of the individual members of the group (Poehner, 2009).

The findings of the study, indicating the statistically significant effect on L2 listening comprehension as a result of GDA practice, confirm that of Gibbons (2006), who found that GDA and teacher's interactive mediation results in a more specialist L2 ability. Consistent with this piece of finding, Zeng, Lai, Cheng, and Chen (2018) confirmed the positive influence of the graduated prompting assessment for the students' academic performance. Kozulin and Garb (2002) also found a significant positive impact for group dynamic assessment of L3 learners and its potentiality for offering more information about students' abilities. One possible explanation for such impact might be related to the fact that predetermined mediations which were provided through DA procedures for learners in a group might favor other learners in a group and assist learners to experience cognitive changes and internalize new knowledge. This is consistent with Vygotsky's (1978) sociocultural theory postulates indicating that individuals could internalize some rules as a result of their mediated interactions with the symbols, tools, and peoples of a specific culture.

Conclusions

The present study was designed to shed light on our understanding of the relative effect of one type of dynamic assessment; namely, group dynamic assessment on the listening comprehension of Iranian EFL learners. The findings verified that listening comprehension ability of the participants improved from pretest to post-test, meaning that GDA was effective for the learners' listening comprehension development. Accordingly, teachers are advised to implement DA in their educational contexts.

It is worth mentioning that although caution should be exercised in generalizing the findings to the non-Iranian language learners, the fact that this finding strengthened the positive role of dynamic assessment in listening comprehension development would highlight the general effectiveness of dynamic assessment in language learning. Not only the results of the present study highlighted that dynamic assessment is effective in language learning, it also became evident that theories and principles behind dynamic assessment are valid in promoting learning. Accordingly, teachers and curriculum developers may creatively use theories and principles behind dynamic assessment for the purpose of language instruction, including the receptive skill of listening comprehension. As a final word, the findings of the study imply that EFL teachers may need to consider the positive impact of GDA on the listening comprehension improvement EFL learners and provide their learners with more opportunities to interact and receive mediation and assistance. The findings may also suggest a change in the traditional models of listening comprehension assessment which emphasize psychometric quantification of students' performances and offer no opportunities for learner-teacher interaction and developmental perspectives.

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