The Effect of Concurrent and Cumulative Group Dynamic Assessment on Homogeneous and Heterogeneous EFL Learners' Auditory Memory in Listening Tasks

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(Received: 2021/7/9; Accepted: 2021/11/9)

Abstract

Group Dynamic Assessment (G-DA), introduced by Poehner (2009), applies mediation through *concurrent* and *cumulative* approaches. This study investigated the effect of the two approaches on Iranian homogeneous and heterogeneous EFL learners' auditory memory in listening tasks. Eighty female intermediate EFL learners were chosen as the participants of the study. They were assigned to two groups of forty homogeneous and forty heterogeneous learners. Then, each group was divided into two experimental groups with twenty participants in each. Homogeneous and heterogeneous participants were assessed through both concurrent and cumulative approaches. To find out the main and interaction effect of concurrent and cumulative G-DA and homogeneity and heterogeneity of EFL learners, the post-test scores of the participants were analysed through a two-way ANOVA. The results indicated that G-DA approaches on the one hand and homogeneity and heterogeneity of EFL learners on the other, had both significant main and interaction effect on EFL learners' auditory memory. For the independent effect of both approaches, a one-way ANOVA was also used. The results indicated that cumulative G-DA had more significant effect than concurrent one on heterogeneous EFL learners' auditory memory. ANOVA analysis also proved that the two approaches did not differ in their effect on homogenous learners.

Keywords: approach, interaction, dynamic assessment, mediation

Introduction

Assessment has always been practiced as an indispensable part of any educational system. It is carried out to meet different purposes. For McNamara (2001), assessment is an activity through which the assessor gains some information about the learners' current level of knowledge. This traditional view sees assessment as a means to provide the examinees with a record of their past achievements. Assessment and instruction, in this view, have been regarded as two distinct activities. In recent years, following the theoretical paradigm shift which led to the introduction of Dynamic Assessment (DA), the two fields have begun to become more unified. DA challenges the traditional views and practices in assessment and emphasizes the unification of instruction and assessment as a single activity. Moreover, DA assesses not only the learners' development but also works as a way of improving it. In other words, as Poehner (2005) argues, DA provides learners with mediation throughout the assessment procedure, it can bring development to the students by itself .

DA is an approach which, as Vygotsky (1980) and Lantolf and Poehner (2008) claim, diagnoses where the learner is in terms of his current level of development and then tries to promote development by offering him specific mediation which helps the learner remove obstacles to problem solving. Stanley (1993) explained DA in a very clear format. He clarified that First, the examiner tests the learner while he is working on his own (static mode). Second, the examiner provides a controlled help and instruction (dynamic mode) while the child is working on a task. Third, a post-test is given while the learner is again working alone (static mode) on the task. Fourth, the examiner compares the test and retest measurements to establish the learners' zone of proximal development. And finally, at the Fifth level, the examiner analyzes the learner's performance on the given task.

Rogoff (1984) describes ZPD as Vygotsky's most famous concept. He argues that ZPD refers to the layer of knowledge which is just beyond what the learner is currently capable of doing. Cooperating with another more knowledgeable person can better help the learner move into the next layer. This means, a learner can solve problems of performance by working

through his or her independent limitations and cooperating with the teacher who provides the required assistance.

DA is conducted either on the individual leaners one by one or on a group of learners. In the former, learners are assisted individually during or before the assessment while in the latter, a group of learners are simultaneously exposed to mediation. Poehner (2009) introduced Group- Dynamic Assessment (G-DA) as an approach to DA. For him the major impediment to the implementing of individual DA in L2 classrooms was that these situations do not allow one-to-one interactions. In G-DA, he further explains, mediation which is the distinguishing feature of DA, is offered in either *concurrent* or *cumulative* manner.

Group and one-to-one DA approaches, as Poehner (2009) argues, are similar to each other in having general principles of dynamic assessment in common. They both help learners co-construct a ZPD. However, G-DA must also take group's ZPD into account. Poehner further explains that in group dynamic assessment a group of learners work on a task that no individual can complete it alone. For that activity or task to be done all members require mediation. Poehner (2009) asserts that group dynamic assessment should be used to investigate social mediation and interaction in the context of classroom. There is a general consensus among practitioners that the mediator can negotiate with several students at the same time in order to construct multiple ZPDs, paving the way for the development of the whole group in their ZPD.

In G-DA, the teacher is required to engage the learners in interaction so as to contribute to the development of all members of the group. As Poehner (2009) argues, dealing with an entire group does not mean that the teacher should not provide the individuals with mediation, but that it means every assistance should consider the group. Bearing this in mind, Poehner (2009) proposes two approaches of *primary* and *secondary* G-DA. The *primary* interactants include the teacher and one of the students who receive his/her mediation and the *secondary* interactants are other students who listen and benefit from the teacher-student exchanges. Because the interaction takes place in class and in front of other students, it has mediating effect for other learners who are present as the secondary interactants.

Poehner (2009) differentiated between *concurrent* and *cumulative approaches to* the implementation of G-DA. In *concurrent* G- DA, the teacher interacts with the entire group. The teacher offers assistance in response to an individual. The interaction shifts rapidly between primary (teacher and a learner) and secondary (other learners) interactants as one learner's question or comment sets the stage for another's contribution. In this way, concurrent G-DA appears to be similar to whole class instruction, but of course the absence of extended one by one interactions does not preclude development within individuals' ZPDs. In *cumulative* G- DA, the teacher carries out some one by one DA interactions as the group works together to solve a problem. That is, individuals one by one, as primary interactants, get engaged in an interaction with the teacher.

One serious hurdle which G-DA faces is to make sure that group ZPD is appropriately established. That is to say, a group of leaners might respond quite differently to mediation due to their ability differences and these difference may hinder the progress of G-DA in class contexts. As a result, the first consideration in G-DA which must be taken into account is finding a common ground where learners can equally enjoy the assistance. In G-DA where the EFL learners are simultaneously exposed to assistance, homogeneity and heterogeneity of learners is of paramount importance. As far as the researchers' knowledge of DA helps, and as Poehner (2009) claims, almost no serious work has been done to come up with a theory of group in G-DA. He further continues that in G-DA a number of learners are placed together to form groups and then they are assigned tasks to perform. In other words, the ability of the learners is not taken into account in assigning the learners to different groups. Homogeneous and heterogeneous EFL learners, in terms of their language ability, might differently be affected by the two approaches of *concurrent* and *cumulative* G- DA.

The homogeneity and heterogeneity of EFL learners in language classes where the instruction of the class requires cooperative activities may hinder language learning. Baer (2003) believes that when cooperative learning is applied in language classes, homogeneous grouping becomes more effective than heterogeneous grouping Some researchers have different ideas about the effects of heterogeneous and homogeneous ability-grouping in language learning. For example, Slavin (1983) argues that heterogeneous grouping of

the language learners in terms of their abilities can better work to the advantage of learners. However, some other researchers support homogeneous grouping. For example, Baer (2003) has indicated that students in homogeneous groups outperform perform the learners in heterogeneous groups.

Whether it is practiced individually or collectively, DA has already proven to be of constructive value in helping the EFL leaners in improving their language skills. The present paper has focused its attention on listening where the EFL learners' weak auditory memory can simply cause perception and problems. Chastain (1976) argues that language students face an insurmountable obstacle if they cannot remember what they have just heard. To develop the students' auditory memory, the teacher should see to it that they hear as much language as possible. He further explains that all language activity that is understandable promotes increased auditory memory. Without auditory memory, we wouldn't be able to process, remember or recall information. Cusimano (2010) explains that Auditory memory is the ability of the memory to take in the orally presented information, to process that information, save it in one's mind and then recall what one has heard. The problem of learners with auditory memory weaknesses is that they just pick up only pieces of what is being said and understand only little of what is presented by the teacher. Afterwards they get the ability to recall only a small part or none of what was said. Cusimano further argues that learners with auditory memory weakness will often face problems in gaining a good understanding of words, remembering terms and information that has been presented orally. These students, he says, will also experience difficulty processing and recalling information that they have read to themselves. To help listeners overcome their auditory memory problems in listening assessments, a mediator is required to provide the learners with required assistance. This mediation can help them not only experience a breakthrough in their assessment but also face an improvement in their recall ability in listening tasks.

Therefore, the present study addresses a rather wide gap which has, to the best of the researches' knowledge, been ignored in G-DA practice. The current study tried to find out if homogeneous and heterogeneous EFL

learners, respond the same or differently when they are mediated through *concurrent* or *cumulative* approaches to G-DA. In other words, it intends to see if *concurrent* and *cumulative* approaches to G-DA have the same or different effect on homogeneous and heterogeneous EFL learners.

Different researchers have turned attention to the impact of DA on L2 development. They have mainly focused their attention on the effect of DA and G-DA on the improvement of a language skill. Among them, the following are assumed to be the pioneers: Lantolf (2000), Poehner and Lantolf (2005), Lantolf and Thorne (2006), Poehner (2007), Poehner (2008), Poehner (2009), Lantolf (2009), Poehner and Lantolf (2010), Poehner and Lantolf (2013) Ableeva (2008). A number of other studies have also been done in the field of group dynamic assessment:

Hashemi Shahraki, Ketabi, and Barati (2015) studied the effect of group dynamic assessment on intermediate learners' pragmatic knowledge of conversational implicates listening tasks. They identified that the mediational strategies could nurture the development of this knowledge. Their findings showed that G-DA enhanced the development of listening comprehension ability especially the pragmatic understanding of conversational implicates among intermediate EFL learners.

Mowla, Alibakhshi, Kushki, and Bavarsad (2017)studied the impact of concurrent and cumulative Group-Dynamic Assessment in instructing articles in English. Results of their research indicated that both ways to G-DA proved to be effective in helping the learners achieve more knowledge in English articles. Additionally, it was proven that the concurrent group performed better than the cumulative one.

Mirzaei, Shakibaei, and Jafarpour (2017) explored the effect of *cumulative* group dynamic assessment on depth of vocabulary knowledge in an EFL context. In their study, the split-plot ANOVA results showed that the implementation of interactionist cumulative group dynamic assessment helped the learners outperform the non-dynamic assessment group on both immediate and delayed post-tests. Additionally, the data analysis showed that the participants could increase their depth of vocabulary knowledge by cumulative group dynamic assessment.

Farahani and Moghadam (2020)studied the impact of *cumulative* G-DA on the learning of congruent and non-congruent collocations among Iranian

intermediate EFL learners. The results of their study showed that cumulative G-DA was much more effective in the learning of congruent and non-congruent collocations. Obviously, it was found that there were significant differences between the learners' scores on congruent and non-congruent posttest. Finally, it was concluded that the scores obtained from congruent collocations were higher than the non-congruent collocations test scores.

The studies which were touched upon above have all tried to investigate the effect of G-DA assessment on L2 development in one way or another. The gap which the current study intended to fill has been ignored or has not drawn the researchers' interest. This study, as stated earlier was after finding the main and also the interaction effect of *concurrent* and *cumulative* G-DA (mediation type) and the homogeneity and heterogeneity (group type) of EFL leaners on EFL learners' auditory memory in listening tasks. Bearing all this in mind the following research questions were posed:

RQ1. What is the significant main effect of group-type in G-DA on the improvement of Iranian EFL learners' auditory memory in listening tasks?

RQ2. What is the significant main effect of mediation-type in G-DA on the improvement of Iranian EFL learners' auditory memory in listening tasks?

RQ3. Is there a significant interaction effect of group -type and mediation -type in G-DA on Iranian the improvement of Iranian EFL learners' auditory in listening tasks?

Method

Participants

Through purposive sampling, eighty female Iranian intermediate EFL learners from intact class groups in Pardis Institute of Foreign Languages in Marand, Iran were chosen to be the participants of the current study. The participants, ranging from 17 to 19 in age, were then divided into two groups of forty homogeneous (Group1) and forty heterogeneous EFL learners (group 2). The criterion for homogeneity and heterogeneity of the participants was their language proficiency which was determined through the participants' educational background and achievements in the institute. To make sure, their final term exam scores during four past semesters of EFL learning were calculated. Learners with a mean score of approximately 90 out of 100 and over 90 were assigned to homogeneous group and those

with scattered mean scores of over 90 and lower 90 were assigned to heterogeneous group.

Homogeneous participants were then assigned to two groups of twenty EFL learners to form two experimental groups (Group 1A & 1B) since the two groups were supposed to be mediated differently through concurrent and cumulative approaches. The purpose was to find out if the two approached differed or not in their effect on homogeneous EFL learner.

Heterogeneous participants were also put into two experimental groups (Group 2A & 2B) with twenty learners in each. The reason again was to assist the learners differently through concurrent and cumulative approaches. The purpose was to see if mediation types (concurrent and cumulative) differed in their effect on heterogeneous EFL learners with different language proficiency.

Instrumentation

The participants' scores during the past four semester of language learning in the institute were calculated so as to decide upon their homogeneity and heterogeneity. According to their proficiency levels, they were put in different groups. Participants in homogeneous and heterogeneous groups attended two listening sessions and received pretest, mediation and posttest. In both pretest and posttest, they were asked to answer recall questions. The recall questions consisted of communicative stimulus- response tasks, transcribing tasks, and listening recall task (cloze passage). In communicative stimulus- response tasks, the test-takers were given a monologue and then were asked to answer some questions which checked their recall ability. In transcribing task, the participants listened to a monologue and wrote down as much as they could recall. And finally, in listening recall (cloze passage) the learners were given a written version of a monologue with randomly deleted content words. They were required to supply the missing words.

Three Scaffolding strategies of *advanced organizers*, *frontloading vocabulary* activity, and *opinion gap* activity were used as mediation tools in both concurrent and cumulative approaches. Through *advance organizers* new information or new points are presented to the learners. They are some kind of simplified introduction to a lesson that acquaint the learners with the subject matter and relate new information to what the learners already know. *Frontloading vocabulary* or vocabulary pre-teaching is another strategy through which, as Alber (2011) explains, the learners are introduced to a list of a new vocabulary items and expressions that are included in a passage or in a listening extract. The third Strategy is what Prabhu (1992) calls

opinion- gap activity in which the learners present their personal ideas and opinions so as to complete a task.

Procedure

The participants in all four groups were asked to sit in two listening sessions. The first session for each group was supposed to be a preparatory and practice session intending to acquaint the participants with the process, mediation, and also with the strategies. For the ease of effort, scores obtained from the second posttest of all four groups were analyzed. The class management in each session was run with the fixed order of pretest-mediation-posttest in accordance with the Sandwich Model of dynamic assessment. Each session lasted for two hours. Pretest had kind of diagnostic purpose for the teacher to have a conscious knowledge on the content and also the problems they thought to face in the listening process.

On the first day, the research began with homogeneous experimental group one (Group 1A). The participants in this group were asked to listen to a monologue from American English File, Book 4. The listening was about "five tricks used by advertisers". This pretest phase was run with no mediation. To examine the participants' recall ability, they were immediately given some recall questions. The questions included *transcribing*, *condensing*, and *listening recall*. In *transcribing* questions, the learners were required to listen to the monologue and then continue the incomplete sentences taken out from the listening extract. In *condensing* questions, the participants were asked to reduce the content of the monologue to the main points. In *listening recall* type of questions, they were given a written version of the monologue with some key words missing and then they were asked to supply the gaps with correct words. The answer sheets were collected for a quick analysis so that the teacher could be more sensitive and attentive to the more difficult and problematic parts of the listening material.

After a short interval, the teacher called the participants' attention to work on the orally presented material. He provided the participants with some mediation or assistance about the content through the pre-planned strategies. The mediation which the participants in experimental group one were exposed to was in accordance with the *concurrent* group dynamic assessment. In other words, since concurrent approach is similar to whole class instruction, the teacher, as the primary interactant used *advance organizers, frontloading vocabulary, and opinion gap* activity as three mediation tools. First, through advance organizers, he tried to familiarize the participants with the content of the listening material through outlining and

also giving them some background knowledge about the subject. Second, through *frontloading vocabulary* strategy, the teacher tried to acquaint the homogeneous participants with some key vocabulary items embedded in the monologue. He did not ask the learners to attend to and answer his questions and explanation one by one. If any student raised any questions about an item, he explained it and other students acted as secondary interactants listening to his explanation to a student. And finally, through *opinion gap activity*, the teacher asked some participants to give their personal ideas about tricks in advertisements. When the teacher talked with a learner, other learners, as secondary interactants, just listened. Just as the participants passed through the mediation phase, they were given exactly the same recall questions as they had been given in the pretest of the study. The answer sheets were collected for later correction.

On the same day, participants in the second homogeneous experimental group (Group 1B) went through quite the same procedure; pretest-mediation-posttest, with the only difference that for the mediation phase, the teacher made use of *cumulative* approach to provide the learners with assistance. Pretest was conducted with no mediation or assistance. Posttest was given after the learners were assisted and given some elaborations on the listening material through the three mediation tools as used with the first homogeneous group. Here, in cumulative approach, the teacher and learners acted as primary interactants since the teacher performed a series of one by one dynamic assessment. In other words, he preferred to address the learners rather individually because he wanted to adjust the level of his assistance to that of a learner.

The strategies were supposed to provide the participants with a relative clarification of the listening material. The participants in this group were exposed to the same listening materials and the same questions which the participants in group 1A had been exposed to.

On the second day, participants in homogeneous experimental groups (group 1 & 2) were called to sit respectively in their second session of listening. Quite like the first day, participants went through the same procedure; pretest-mediation - posttest. The only difference was that a new listening content from American English File conversation book was given to the learners to work on. The posttest scores obtained from the second sessions of listening were collected to be analyzed through SPSS.

On the third day of research, it was time for the heterogeneous participants in two experimental groups of A&B to sit in their first listening recall exam session. The procedure which homogeneous participants had gone through was similarly and exactly applied to the participants in two

heterogeneous experimental groups (Group 2A & 2B). The first group was assisted through *concurrent* approach and the second group was helped through *cumulative* approach to G-DA. The three mediation tools of *advance organizers*, *frontloading vocabulary*, and *opinion gap* activity were used to assist and familiarize the participants with the content. The same listening content which the homogeneous learners had been exposed to, was played for the heterogamous participants

Finally, on the fourth day, the second session of listening recall exam for both groups of heterogeneous participant (group A & group B) was conducted using a new listening content. This time again the procedure was the same. The scores obtained from the posttest of the second sessions of listening were collected to be analyzed through SPSS.

Design

This quasi-experimental study, which followed the Sandwich Model of Sternberg and Grigorenko (2002), had a pretest-mediation-posttest design. This was the main structure to apply dynamic assessment, but since the current study applied G-DA, the teacher made an attempt to use Poehner's (2009) *concurrent* and *cumulative* procedures for mediation and interaction with the learners.

Data Analysis

The present study claimed that group type (homogeneity and heterogeneity) and mediation type (*concurrent* and *cumulative* group dynamic assessment) could have a significant main and interaction effect on EFL learners' auditory memory when G-DA is applied on listening tasks in EFL classes. To prove the aforementioned claim, the posttest scores in all four groups were analyzed through a two- way ANOVA. Two-way ANOVA was run to find out: 1) the main effect of homogeneity and heterogeneity in G-DA on EFL learners' improvement of auditory memory in listening tasks, 2) the main effect of concurrent and cumulative approaches in G-DA on Iranian EFL learners' auditory memory in listening tasks, and 3) the interaction effect of group type and mediation type on Iranian EFL learners' auditory memory in listening tasks. A one- way ANOVA was also run for both groups in order to see how mediation type and group type separately affected homogeneous and heterogeneous EFL learners.

Results

The homogeneous and heterogeneous EFL learners seemed to respond differently when G-DA was practiced through *concurrent* and *cumulative* approaches. However, to have statistical justification, a two-way ANOVA was conducted. The participants' final posttest scores were entered into SPSS for quantitative analysis. First descriptive statistics was conducted on the participants' post-test scores.

Table1
Descriptive Statistics: Results of Posttest for all Independent Variables

Group-type	Meditation-type	Mean	Std. Deviation	N
Homo.	concurrent	17.92	.86260	20
	cumulative	17.37	1.02437	20
Hetero.	concurrent	14.80	1.504	20
	cumulative	16.60	1.02084	20
Total	concurrent	17.26	1.14907	40
	cumulative	16.0875	1.80415	40
	Total	16.67	1.61500	80

Table1 represents the descriptive statistic of all independent variables in terms of the participants' mean scores and standard deviation. This table provides a comparison between the mean scores all homogenous and heterogeneous participants mediated through *concurrent* and *cumulative* approaches. As shown in the table, the mean score of the homogeneous participants assisted through concurrent mediation was 17.92 and those assisted through cumulative approach was 17.37, with the respective standard deviation of .86260 and 1.02437. For the heterogeneous participants assisted through concurrent approach, the mean score was 14.80 and those assisted through cumulative approach, the mean score was 16.60, with the standard deviation of 1.504 and 1.02084 respectively. In total, a noticeable difference is seen between the mean scores of heterogeneous participants.

Levene's Test of Equality of Error Variance (Table 2) was conducted to examine the equality of error variance of the learners' recall scores in both homogeneous and heterogeneous groups.

Table 2
Levene's Test of Equality of Error Variances

F	df1	df2	Sig.
2.743	3	76	.069

As shown in Table 2 the error variance of both groups is equal and no statistical difference is observed since F>0.50.

A two-way ANOVA (Table3) was used to find out if the two independent variables of group-type (homogeneity and heterogeneity) and mediation-type (concurrent and cumulative) had an interaction effect and also main effect on the dependent variable of auditory while conducting G-DA:

Table 3
Tests of Between-Subjects Effects

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	111.475[a]	3	37.158	29.860	.001	.541
Intercept	22244.450	1	22244.450	17875.529	.002	.996
Group-type	83.862	2	41.931	33.696	.004	.470
Meditation-type	21.721	1	21.721	12.792	.003	.273
Group-type * meditation-type	11.321	1	11.321	8.621	.007	.115
Error	94.575	76	1.244			
Total	22450.500	80				
Corrected Total	206.050	79				

Table 3 shows both main effect and interaction effect of independent variables of group-type (homogeneity & heterogeneity) and mediation-type (concurrent and cumulative) on dependent variable of auditory memory. According to the findings in Table 3, we clearly understand that both group-

type and mediation–type as our two independent variables had statistically significant main effect on the auditory memory of EFL learners since the *p value* for group-type was p=.004 and for the mediation–type p=.003. On the other hand, an interaction between mediation-type and group-type as independent variables could be demonstrated with the p=.007.

To find out the effect of concurrent and cumulative approaches of mediation on homogeneous and heterogeneous groups of EFL learners' auditory in group dynamic assessment, two one-way ANOVAs were also used. Through one-way ANOVAs the homogenous and heterogeneous EFL learners' posttest scores were analyzed the results of which are shown in Tables 4 and 5.

Table 4
One-way ANOVA on Expert-Novice Mediation Type in Homogeneous Group

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	2.011	9	.223	.839	.587
Within Groups	7.989	30	.266		
Total	10.000	39			

Table 5
One-way ANOVA on Expert-Novice Mediation Type in Heterogeneous Group

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	5.871	9	.652	4.740	.001
Within Groups	4.129	30	.138		
Total	10.000	39			

As shown in Table 4 and Table 5, mediation –type as an independent variable, had no significant effect on the homogenous EFL learners' mean scores. But as for the heterogeneous EFL learners, mediation-type had statistically significant effect on their mean scores. The statiscal analysis indicated that the heterogeneous EFL learners mediated through cumulative approach achieved higher mean score than the learners mediated through concurrent approach.

Discussion

In line with the studies done so far in the field of group dynamic assessment, this study also intended to have its focus on the effect of G-DA

on L2 development. This study took one step forward and turned its attention to the impact of *concurrent* and *cumulative* approaches to G-DA on the homogeneous and heterogeneous EFL learners' auditory memory in listening tasks. This research intended to address a rather wide gap in the field of G-DA. In conducting G-DA through *concurrent* and *cumulative* approaches, the homogeneity and heterogeneity of the FFL learners have widely been downplayed by most of the researchers in the field of DA. In this paper, the researchers intended to see how EFL learners' homogeneity and heterogeneity could affect and also determine the approach through which the EFL learners could better be mediated.

The findings of the current study showed that homogeneity and heterogeneity of EFL learners on the one hand, and the two approaches of G-DA on the other, had both main and interaction effect. The two-way ANOVA and also one-way ANOVAs provided justifiable answers to the three research questions of the current study. Question one and two which addressed the main effect of homogeneity /heterogeneity and the two *concurrent* and *cumulative* approaches were positively answered. In other words, the two independent variables (group -type and mediation- type) had a significant main effect on EFL learners' auditory memory. Homogeneous and heterogeneous EFL leaners responded differently. Homogenous EFL learners were seen to have a slightly better reaction to the application of G-DA through *concurrent* and *cumulative* approaches and the type of approaches did not significantly affect the EFL learners' performance. This could be due to the fact that homogeneous EFL learners with almost the same level of language proficiency could equally get benefitted whether they performed as primary interactants or secondary interactants. Quite on the contrary, the heterogeneous EFL learner in two groups responded differently to the *concurrent* and *cumulative* approaches. The results proved that mediation type had a different effect on the heterogeneous EFL learners. Heterogeneous EFL learners mediated through *cumulative* approach performed much better than the heterogeneous EFL learners who were assisted through *concurrent* approach. It can be implied that heterogeneous EFL learners needed to act as primary interactant. That is to say, they required that the teacher assist each in accordance with their language proficiency. According to the findings of this study the best suited approach for the heterogeneous EFL learners could be *cumulative* approach. For the homogeneous EFL learners, both approaches could be applied since they did not differ much in their effect on the learners.

This study claims to extend and modify the results of some studies which have been done previously in G-DA. It, for instance, extends Poehner's study (2009) on G-DA which introduced *concurrent* and *cumulative* approaches to the application of G-DA. In his study, Poehner does consider the homogeneity and heterogeneity of EFL learners. He does not concern himself on applying the two approaches on different learners with different language proficiencies. His work is just an introduction to the two different approaches to G-DA.

Moradian, Rashidi Mofrad, and Norolahi (2016) examined the effect of cumulative G-DA on learning passive structures. Results of their study proved that learning passive structures through cumulative G-DA was facilitated to a great extent. The researchers have focused their attention on the effect of cumulative approach to G-DA. The current study made an extension by adding concurrent approaches and comparing it with cumulative approach to G-DA.

Another example is the study which Karimi and Alizadeh conducted on the effect of the two approaches on homogeneous EFL learners. Karimi and Alizadeh Oghyanous (2018)investigated the effect of two types of cumulative and concurrent G-DA on learning non-congruent English collocations by L1-Persian learners of L2 English. In their study, only homogeneous EFL learners have been mediated through concurrent and cumulative approaches. This study has included heterogamous EFL learners as well, in receiving mediation through the two approaches to G-DA.

It should be mentioned that some interesting observations were also made during the interactions with the learners while the participants were being mediated through concurrent and cumulative approaches. It was observed that *frontloading vocabulary* worked a lot to the learners' advantage in putting an introductory image of new words in their minds. It was also observed that most EFL learners found it rather difficult to hold some large amount of information in their minds. They had difficulty in recalling the presented information. Mediation could easily help the memorization of larger units of language. Learners also found that what they discussed in *opinion-gap* activity had much in common with what they listened to in their listening tasks. It was also observed that much cooperation and interaction occurred while the teacher applied mediation through cumulative approach. Heterogeneous EFLlearners found themselves in a stress-free context when the teacher had primary interaction with them. In other words, when the mediation was geared to their language proficiency, it left a positive and more constructive trace in their minds.

According to the finding of the current study, the researchers believe that when assessment and instruction are integrated through G-DA and an appropriate type of mediation in accordance with the homogeneity and heterogeneity of the EFL learners is applied, the EFL learners can out-perform their current level of language proficiency.

Findings of this study may offer some helpful suggestions for all those who are active in language instruction and assessment. Teachers can conduct G-DA if they intend to have more interactive classes in which the teacher is not only the presenter of knowledge but rather a mediator who tries to boost the active involvement of the learners in learning process. Teachers can also apply G-DA as a teaching tool. It may also provide language teachers with a framework to be applied when they have listening tasks in their classes. This study may change teachers' attitude to assessment. Teachers can apply DA to create stress-free assessment atmosphere in their classes since in DA, the learners are not left alone in the process of assessment. Teachers can also be familiarized with the application of some strategies for mediation.

Like other studies, the current study also faced some problems. Applying different strategies in one session was demanding and time-consuming for the teacher. Learners also seemed to be quite tired and bored with the prolonged instruction and assessment. In real classes, teachers are recommended to apply only one or two of the strategies so as not to bore the learners more. It was also noticed that the border between cumulative and individual dynamic assessment was rather fuzzy. In other words, cumulative G-DA sometimes overlapped with individual DA. Other researchers are recommended to replicate this study using different participants at different levels of proficiency in other contexts.

In spite of the fact that there exists a rich research literature in assessment, dynamic assessment and G-DA in particular, has not been paid enough attention. A dearth is felt in the field. Poehner (2009) believes that lack of a theoretical approach to the concept of group learning and group assessment has caused a scarcity of DA works. G-DA is taking new steps in bridging this gap in psychological and educational settings on both theoretical and practical issues (Poehner, 2009). As with the studies of G-DA in listening context, few exclusive research has been conducted to date. One more issue in respect of DA which merits particular attention is exposing EFL learners to the same type and strategy of mediation in L2 classes. L2 practitioners should take into account the fact that homogeneity and heterogeneity of EFL learners can be regarded as leading factors in applying G-DA.

Homogeneity and heterogeneity of EFL learners deserve to be studied with more scrutiny within some more research projects on different language skills. Also an urgent need is felt in the field of G-DA regarding the effect of concurrent and cumulative G-DA as two mediation types in EFL classes. Researchers are humbly advised to do some more research on the effect of *cumulative* and *concurrent* approaches to G-DA on both homogeneous and heterogeneous EFL learners' command on other language skills so as to add more worthwhile findings to the DA literature.

Declaration of interest: none

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