

The Effect of Interventionist DA versus Interactionist DA on Iranian EFL Learners' Autonomy and Strategy Use in Reading Class

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Abstract

Dynamic assessment (DA), as an interactive assessment approach, tries to assess learners' thinking, learning, and problem-solving skills. DA is a notion elicited from Vygotsky's (1978) cognitive development theory, and it is regarded as a contrast to traditional assessment approaches. Using DA's two techniques, namely interactionist, and interventionist, the current study investigates their effects on Iranian EFL learners' autonomy and strategy use in a reading class. 60 Female elementary level students participated in this research, and they were divided into three groups: the interactionist DA, the interventionist DA, and the comparison groups. Two research questions were explored: Does interventionist DA versus interactionist DA have any significant impact on Iranian EFL learners' autonomy? And, does interventionist DA versus interactionist DA have any significant effects on Iranian EFL learners' strategy use in reading class? Analyzing through ANOVA, the study's outcomes revealed that interventionist DA and interactionist DA have positive effects on learner autonomy and strategy use in doing reading comprehension tasks. The implications of the study are also addressed in the study.

Keywords: Dynamic assessment (DA); interventionist; interactionist; learner-autonomy; strategy-use; reading

1. Introduction

Assessment can be categorized into three main groups: assessment for accountability, assessment for learning, and Dynamic Assessment (DA) (Anton, 2009). Each of the mentioned categories has specific situations to be used in, namely assessment for accountability is a need to generate grades and it is required to make future placement decisions. Additionally, assessment for learning is done to provide support for teaching and learning process. Finally, DA, being noticed as an interactive approach, provides a combination of teaching and assessment activities simultaneously (Sternberg & Grigorenko, 2002).

Luria (1961) initially introduced the term "dynamic assessment", while trying to make contrast between "statistical" and "dynamic" approaches for assessment. The fact that one purely statistical approach of testing "inappropriately assumes that a person's solo performance on a test represents a complete picture of the individual's capabilities" has been reported by Poehner and Lantolf (2005). In contrast, a dynamic approach suggests that "a full picture requires two additional bits of information: the person's performance with assistance from someone else and the extent to which the person can benefit from this assistance" (p. 234).

Another focus of the present study is learner autonomy. Although learner autonomy is a multidimensional and diversified notion, there is presently a way to more practical research appropriate in real-life contexts in language education. Notably, during the past decades, measures, programs, and materials were trying to make a more practical understanding of learner autonomy (Benson, 2010). To determine learner autonomy, different kinds of questionnaires, such as those with the focus on determining readiness for autonomous learning and describing the level of autonomy of individual learners, have been settled. Despite the task's difficulty, measuring learner autonomy has to be possible, at least in principle, because learner autonomy is a matter of degree, suggesting various kinds of scale to which individual learners can be cited (Benson, 2011). Similarly, there is a broader explanation for measuring learner autonomy: by measuring variations and differences within and among pupils, the impacts of different variables, such as teaching materials or specific programs, can be considered. Also, programs that concentrate on encouraging and developing learner autonomy, or need learner autonomy from the contributors, have already been settled (Benson, 2011). More importantly, the amount of technology-based language-learning programs has developed quickly in a reasonably short period, and programs in online communities have received excessive fame. In addition to large-scale programs, more precise materials for raising or encouraging autonomy have been developed for teachers and learners. The primary purpose is to move from the previously top level of philosophical and psychological theory to practice, mainly connecting learner autonomy to formal education.

Reading is the only skill that is usually measured in nearly all English tests. As a result, doing more research on it seems essential. Among different types of learning strategies, reading comprehension techniques have long been distinguished by investigators of second/foreign language reading (Brantmeier, 2002; Janzen, 1996; and Slataci & Akyel, 2002). Reading strategies have been well-defined by several theorists. They are stated as mental operations assumed by readers when they read a text and attempt to comprehend it effectively (Barnett, 1988).

Regarding the significance and importance of three concepts of dynamic assessment, reading strategy use and learner autonomy, and scarcity of research on these three concepts in the Iranian scope of ELT, the present study aims to find out whether interventionist DA versus interactionist DA have any significant effects on Iranian EFL learners' autonomy and strategy use in reading classes.

2. Review of Literature

In this part, related theories, and the previous studies in three scopes of dynamic assessment, learner autonomy and reading strategy use are presented, respectively.

2.1. Dynamic Assessment

Assessment is defined conventionally as a resource for monitoring the setting in which language performance happens (Bachman, 1990). DA is known as a notion inspired by Vygotsky's (1978) cognitive development model. Accordingly, learning occurs throughout social communication in the ZPD. The elementary concept of the model is that a learner's independent performance in a specific task is enhanced when support is being delivered by an adult or a more talented participant.

A model of DA is recognized as test-teach-retest, including three stages (Pohner, 2005). In the test stage, the assessor examines students to specify their current level of performance. In the teaching stage, students participate in supported mediation sessions. Through this stage the assessor performs and directs the students concerning their ZPD. In the retest stage, the assessor retests students to evaluate the extent of learning that has happened. Vygotsky's Zone of Proximal Development suggests that to perceive a student's cognitive development, one must observe them concerning cultural, social, and historical experience. Along with this, there are two levels for every student's performance: Actual Development level (ADL) or zone of current improvement is demonstrated by the learner's performance autonomously, and Zone of Proximal Development level (ZPD) is realized by moving from the previously existent level to upper levels by adults' assistance or guidance or more skilled ones. The overview of these concepts by Vygotsky made investigators study independent problem-

solving level and potential-developmental level as two significant parts of emotional development in the learning process.

DA has been derived from Vygotsky's Sociocultural View of Memory and its essential conceptualization of the ZPD. It refers to a united procedure of teaching and evaluation in an unpredictable, ever-varying, dynamic method. In Williams and Burden's (1997, p.42) terms, DA is a procedure where "evaluation and learning are observed as inextricably connected and not apart." In the idea of Lidz and Gindis (2003, p. 99), DA is a "view to comprehension of individual variations and their conception for comprehension that embeds interposition within the evaluation procedure." Eventually, based on Haywood and Lidz (2007, p. 1) DA is "an interactive view to performing evaluation ... that pays attention to the capability of the student to answer intervention."

As these descriptions, may demonstrate, DA is against any dualistic view of teaching and evaluation since it eliminates well-entrenched, long-lasting boundaries among instruction and evaluation, unifies the two, and provides the background for more learning-friendly action and reaction among a tester (moderator) and their examinees (student). According to Poehner (2008), DA suggests a necessarily various evaluation pattern from what may have traditionally come to mind. This pattern is determined by characteristics like procedure-oriented, interactive, and ZPD- delicate making DA not only instruction with a focus on what a person has learned up to here but a future-oriented instruction that searches the individual's potentialities for a major acquisition.

There seems to be a certain intrinsic incoherence among the targets of learner evaluation and its standards. The target is generally to evaluate the learner's learning capability and to get data beneficial for more efficient instruction. The means, but, are often confined to extending the learner's running operation level. This inconsistency was recognized as early as 1934 (Minick 1987), too. According to Vygotsky, the ordinary learning condition for a learner is socially significant cooperative acting. New cognitive operation and learning capabilities are limited within this individual action and reaction and only later are they interior and converted, becoming the learner's mental procedure. So under the situation of expected efficiency, learners might disclose particular critical actions which have not yet been internalized. According to Vygotsky, these actions belong to the Zone of Proximal Development (ZPD) in counter-distinction to fully developed functions that belong to the zone of actual development. While the conclusions of the stagnant evaluation show us the formerly available strengths of the learner, the resolution of ZPD permits us to measure the learner's capability to indoctrinate from the interplay with a teacher or a more worthy comrade.

2.1.1. Interventionist versus Interactionist Dynamic Assessment

Evaluation might be separated into three primary classes: reliability assessment, learning assessment, and dynamic assessments. While evaluation for reliability is essential to produce degrees and used for later placement intentions, evaluation for learning desire to support teaching and acquisition, and dynamic evaluation is weighed as an interactive approach, incorporating teaching and evaluation operations together. Dynamic assessment is opposed to traditional teaching and examining approaches, because of “prevalent disagreement with traditional means of psychological measurement” (Lidz & Gindis, 2003, p. 99). Rooted in Vygotsky's (1978) idea of the zone of proximal development, dynamic assessment is described as a rising methodology into dialect learning examination (Thorne, 2005). Vygotsky in Russia and Feuerstein in Israel both built up a different option for conventional types of testing. What Vygotsky alludes to as the zone between one's autonomous and intervened performance is to give understanding into the zone of proximal development of one individual.

The term DA was initially presented by Luria (1961), one of Vygotsky's partners, while differentiating "statistical" with "dynamic" ways to deal with the assessment. Poehner and Lantolf (2005) reported that a statistical way to deal with assessment "improperly expect that a man's performance execution on a test speaks to a complete photo of the individual's capacities," though a dynamic methodology infers that "a full picture requires two extra bits of data: the individual's performance with help from another person and the degree to which the individual can benefit by this help" (p. 234).

The idea of measuring the procedure, rather than the item, is only new. For instance, Dearborn's (1921) idea was that the "estimation of the real advance of delegate learning would outfit the best test of knowledge". He expressed further that "[f]or practical reasons most tests now in common use are not tests of the capacity to learn, but are tests of what has been learned " (p. 211). Daniel (1997) claims that “Test performance following intervention is thought to be a more valid indicator of true ability than is initial performance” (p. 1042). The term dynamic assessment started in the space of kids with learning inabilities and anomalous behaviors. Luria's range of exploration (Jantzen & Braemer, 1994), the thought of dynamic assessment was overwhelmingly connected in the area of kids with social hardship (Feuerstein et al., 1979), kids with hearing impairment, or youngsters with learning disabilities.

Clinicians and discourse language pathologists, who investigate the handiness of dynamic assessment, have additionally stretched out such a practice to adults' language disabilities (Navarro & Calero, 2009). Different specialists have widened the utilization of dynamic assessment practices from general instruction to second language assessment and teaching method (Lantolf & Poehner, 2004).

The field of DA covers a wide variety of estimation procedures, which all have distinctive categories, cases like, Budoff's (1967) learning potential assessment, Campione and Brown's (1987) graduated prompts approach, or Carlson and Wiedl's (1979) testing the-limit method, to give some examples. They all share a typical element, that is, the expansion of instructional material inside of assessment to better edge the estimation of learners' capacities, and more precisely, anticipate their learning hardships (Allal & Pelgrims Ducrey, 2000).

Consequently, dynamic assessment is ordered into classes, compared to the sort of mediation. For instance, Daniel (1997) recognized two groups with various mediation forms, where one methodology gives, what he calls, standard intercessions, and the other non-standardized intercessions. Lantolf and Poehner (2004), in expounding a hypothetical structure for dynamic assessment strategies, assign both sorts of intercession as interventionist and interactionist, respectively.

The mediation presented within the assessment of the sort interventionist is institutionalized. It is masterminded keeping in mind the end goal to give the learner intercession, usually from implicit to more explicit. Poehner (2008) outlines that the “[m]ediators are not free to respond to learners’ needs as these become apparent during the procedure but must instead follow a highly scripted approach to mediation in which all prompts, hints, and leading questions have been arranged in a hierarchical manner” (p. 44-45). In contrast to interventionist approaches to dynamic assessment, the interactionist orientation is more inclined to adopt Vygotsky’s interest in “qualitative assessment of psychological processes and dynamics of their development” (Minick, 1987, p. 119). One important component is that the intercession between the learner and the educator is arranged, as opposed to be built up ahead of time. (Lantolf, 2009) further points out that the role of mediation is “continually adjusted according to the learner’s responsivity” (p. 360).

Rubin (1990) during an eight-week test analyzed 394 American high school students who were learning Spanish. Their levels of proficiency range from low to high proficient. All subjects were separated into five groups, three experimental and two control groups. Experimental groups observed some authentic video clips along with getting instruction in listening comprehension methodologies. However, control group one, could just watch the recordings without getting into preparing lessons. At last, control group two had neither the preparation nor the videos. The experimental and control group one outflanked control group two, yet control group one had stable issues contrasted with the experimental groups when the content was troublesome, as they had not received strategy training. Rubin presumed that if authentic materials are utilized along with a few guidelines by the educator, they could be helpful for all language learners. It implies that one of the control groups ought to have been

presented to instructional materials and ought to have gotten the same training in listening techniques as the experimental groups, to set the ground for a reasonable comparison.

Weyers (1999) additionally ran an experiment during two-second semesters for Spanish courses in 1994, at the University of New Mexico, which kept going on for eight weeks. 42 learners joined in both pre-and post-test. Students were then separated into two groups, one experimental group, and one control group. Both groups followed the standard educational modules of the university, yet the experimental group was presented with extra listening, which was an authentic Spanish-language telenovela, María Mercedes episodic TV program. For post-test, the researcher utilized a standard listening test, Level Two 1994 National Spanish Exam, arranged by the American Association of Teachers of Spanish and Portuguese (AATSP).

Level Two was regarded as fitting for the learners at this level of proficiency. Until the end of the semester, the aftereffect of data analysis was supportive of the experimental group and Weyers presumed that exposure to authentic material is helpful in enhancing listening. But, the outcomes might have been bewildering. The measure of exposure to listening materials was not the same for both groups. As the control group had less exposure to listening materials, a considerable distinction might be ascribed to the more presentation of the experimental group.

2.2. Learner Autonomy

Though learner autonomy has expanded interest in language education just in the past few decades, the historical origins of the notion in other areas can go back even further. Nevertheless, since learning, at least in the evolutionary sense, as adaptation has existed from the beginning of life, and language learning for so long, as individuals have used language to join the environment, and autonomous language learning as a point dating back to prehistoric times. While learner autonomy precedes and is free from institutionalized education, because of formal education the inherent attribute has been assumed a name and transported to conscious attention.

Though the interest in learner autonomy has developed considerably in the past few decades, there still appears to be some disparity in the meaning of the concept, particularly in its details. There is, still, an overall contract on a definition first presented in a project report to the council of Europe: autonomy is the capability to manage one's learning (Holec, 1980). The purpose why there is, despite its simple definition, disagreement on the details of learner autonomy is the strangely tricky nature of the concept. As it is specified in the description, rather than a set of visible behaviors, autonomy is a *potential* or an *ability* that exists in the learner. As autonomy is not a simple observable event, it is rather usual that describing it without vibrant empirical evidence causes dispute. Additionally, as learner autonomy is not a

stable, uncompromising characteristic, but a matter of degree (Nunan, 1997), describing it becomes even more difficult since the context that varies a student's situation on that continuum requires consideration. Still, despite the complication and the multidimensionality of the concept, learner autonomy can, and will, be restricted in more detail.

There is a growing amount of works on learner autonomy in reality, and particularly Leni Dam has been productive in supporting learner autonomy in the language classroom. Her involvement in the field is not merely in writing and theory. Nonetheless, during 30 years of personal experience, she has put ideas on learner autonomy into practice with children and adolescents in Danish primary and secondary schools (Dam, 2011). Furthermore, in line with Lienhard Legenhausen, Dam started the LAALE project (Language Acquisition in an Autonomous Learning Environment), in which the effects of teaching in line with the principles of autonomous language learning on students' linguistic development were perceived (Dam, 2011). With the broad work and years of experience, Dam has succeeded in demonstrating that given the right conditions, autonomous language learning is probable and valuable in an institutional setting too.

The issues that help learners' readiness for learner autonomy have been considered. Cotterall (1995) claims that the main problems which influence the amount that a learner shows learner autonomy are learner's opinion about language learning, beliefs and attitudes affecting learning behavior and, in turn, its development.

In the study, the factors, i.e., bands of opinions that affect the improvement of learner autonomy, were required to realize. With factor analysis completed on the questionnaire data that was collected from 139 adult ESL learners, a total of six factors, i.e., clusters of beliefs, were seen that support the development of learner autonomy: role of the teacher, role of feedback, learner independence, learner confidence in study ability, experience of language learning, and approach to studying (Cotterall, 1995). Though it was confessed that the questionnaire may have been defective in some respects, since the six factors are in proportion to the literature on the promotion of learner autonomy, it was determined that learners' opinions about the six factors must be taken into account in teaching (Cotterall, 1995). Specifically, it was stated that it is over examination and consciousness of these beliefs that they can be confronted and, finally, changed (Cotterall, 1995.).

The elementary results as the study mentioned earlier, were put into test in a study by Chan (2001). Particularly, it was examined whether the principles of autonomous language learning could work in Hong Kong tertiary education, the learners in which are usually defined as a dependent, reticent and passive (Chan, 2001). The elementary supposition of the study was that which Cotterall (1995) realized in her study: there are several factors influence a learner's readiness for learner autonomy, such as knowledge, attitudes and previous experiences of learning (Chan, 2001). When Hong Kong tertiary school students' attitudes

and perceptions of learning were discovered, it was realized that, despite their anti-autonomy reputation, the learners showed autonomy in various ways and had adequately positive attitudes to learner autonomy and autonomous language learning (Chan, 2001). Nevertheless, as the outcomes of the study moreover indicated that several learners chose explicit teacher instruction and guidance, it was established that to increase learners' readiness to take more accountability of their learning, learner autonomy must be presented slowly. There must be, in the beginning, a balance between teacher-centeredness and learner-centeredness (Chan, 2001).

2.2.1. Strategy Use in Reading

Reading strategies indicate how readers comprehend a task, what textual cues they appear to, how they figure out what they read, and what they do when they do not understand. Reading strategies vary from simple fix-up strategies such as simply rereading complex segments and predicting the meaning of a strange word from context, to more comprehensive approaches such as summarizing and relating what is being read to the reader's background knowledge. Commonly, investigators believe that strategy use is dissimilar in more and less proficient readers, given that they use the strategies in several ways (Carrell, 1989). Reading comprehension strategies separate the passive, unskilled reader from the active reader. Skilled readers don't just read, they also get involved with the text.

Many studies have shown that educators could teach reading strategies to students, and when they are educated, this can aid them to improve their performance on tests which include comprehension and remembrance of what is read (Carrell, 1989).

2.2.2. Effective Strategies for Teaching Reading

Cunningham and Allington (2007) abridged six strategies: prediction, think-aloud, using text structure, using visual cues, summarization, and answering and questioning. Here are various effective reading strategies verified by investigators. These strategies are separated into several specific techniques.

2.2.2.1. Questioning

The essential step of thinking is asking questions. The questioning process needs readers to ask questions to make meaning, develop understanding, discover answers, solve problems, find information, and realize new information (Harvey & Goudvis, 2000).

2.2.2.2. Prediction

Prediction denotes predicting and understanding what is coming next based on the context. By using the title, table of contents, pictures, and keywords is one prediction strategy. There

are three varieties of prediction, pre-reading, while-reading, and post- (after) reading. While-reading prediction questions differ from post-reading prediction questions in that students can instantly learn the accuracy of their predictions by remaining to read the passage. Contrary to that, post-reading prediction questions usually have no correct answers in that learners cannot continue to read to approve their predictions.

2.2.2.3. Clarification

Clarifying includes the identification and explanation of vague, complex, or unfamiliar parts of a text. Explaining offers the inspiration to decrease confusion through re-reading, check comprehension by repeating the information and thoughts in the text, and the use of external resources (e.g., dictionary or thesaurus) (Doolittle et al., 2006).

2.2.2.4. Skimming

Skimming means reading the text rapidly to get the meaning or overall idea and avoid the details (Beale, 2013). Skimming strategy allows the reader to select whether a text is essential for a specific reader's goals, as the reader can rapidly relate to the text by skimming it.

2.2.2.5. Scanning

Scanning means reading the text wisely to acquire precise information concealed in the text. The emphasis is on the necessary information.

2.2.2.6. Making Connections

Duckworth (2009) established that worthy readers make a relation between previously recognized topics and the topic they are reading. By making links, the learners can motivate their previous knowledge and join the notions in the text to their own experiences.

2.2.2.7. Drawing Inferences

Inferential thinking aids readers in comprehending unacquainted words, drawing conclusions, improving interpretations, making predictions, and even making mental images (Harvey & Goudvis, 2000).

2.2.2.8. Think-aloud

Once educators reveal or shape their reading processes for learners by think-aloud, they frequently stop and guess what will occur next to display how inferring is necessary for comprehending text. Think-aloud enables students to understand the thought processes of a competent reader. This is a brilliant method to demonstrate learners to make inferences as they read. Thinking about how one reads is an instance of using metacognition skills to

develop one's learning. It similarly allows the stressed reader to see that proficient reader are keenly involved in the text and are not solely reading the words.

2.2.3. Culture and Background knowledge

It is vibrant that readers understand texts better when texts are socially acquainted. If there is a gap between the reader's background information or relevant cultural knowledge and the information necessary to comprehend the reading text, the reader will meet problems in making proper predictions.

2.2.4. Summarization

The capability to repeat the keywords in a logical order and hold these details in memory is a significant comprehension strategy named summarization. Summarizing could be based on a single paragraph, a part of the text, or a whole text.

The results of Yang's study (2010) showed that learners could choose suitable reading strategies to be successful in their own reading pace, style, and level. Learners were capable of taking control of their reading – making decisions on what, how, when, and why to read. With mixed learning, learners' on-site reading might be extended by online reading activities after class for different purposes without the limitations of time and location.

McKeown, Beck, and Blake (2009) made a two-year study in which standardized comprehension instruction for representations of two significant approaches was considered and applied. The efficiency of the two experimental comprehension instructional conditions (Content and Strategies) and a control condition were compared. Content instruction concentrated learners' attention on the content of the text over open, meaning-based questions about the text. In strategies instruction, learners were trained particular techniques to help them access to text during reading of the text. The outcomes of the study showed that there was no change between the performances of the two experimental groups for some parts of comprehension. Nevertheless, for story recall and expository learning probes, the learners following content instruction outperformed those following strategy instructions.

Wright and Brown (2006) discovered the potential of reading strategy instruction in raising the learner readers' awareness of the reading strategies, in encompassing the range of strategies they used, and in inspiring students to monitor and show upon their reading. The study's outcomes discovered that strategy training can inspire learner readers to reveal their strategy use and improve their self-confidence in their reading abilities.

3. Research Questions

The present research seeks to find the answer to the following questions:

1. Does interventionist DA versus interactionist DA have any significant effects on Iranian EFL learners' autonomy?
2. Does interventionist DA versus interactionist DA have any significant effects on Iranian EFL learners' strategy use in reading class?

4. Method

This part contains participants, instruments, procedure, and data analysis which are reported respectively here.

4.1. Participants

For this purpose, a total of 60 female EFL learners at intermediate level at an English language school took part in this study with an almost the same proficiency level of the same age of 15 to 25. The participants were selected from among 80 learners who are all female. They were given the homogeneity test of the Preliminary Cambridge English Test (PET). Then participants in the normal distribution between +2 and -2 SD (Standard Deviation) were selected as participants, 60 in total. They were divided randomly into three groups. The first group was the interactionist and the second group was the interventionist group and the third group was the control group. There were 20 learners in each group.

4.2. Instruments

The following instruments were used in this study.

4.2.1. Preliminary Cambridge English Test (PET)

The Preliminary English Test is a standardized test developed to evaluate international learners' English proficiency. The Preliminary English Test is an intermediate level qualification that demonstrates the ability to communicate using English for everyday purposes.

The Preliminary English Test is an exam given to learners whose first language is not English – U.S. citizens and residents and international learners – to decide on English, ESL or reading placement and assessment stages. An accepted alternative to TOEFL, Preliminary English Test is needed for learners who have acquired English as their second or subsequent language, and who has either not taken or not passed TOEFL.

The Preliminary English Test of English Language Proficiency consists of 35 multiple choice questions: Different skills such as Reading, writing, listening and speaking are evaluated. There are three parts in writing, sentence transformations, a short message of 35-45 words and a letter or story about 100 words. For listening there are four parts and, as the participants listen, they write their answers on their question paper. The participants are also given 10-12 minutes for each pair of candidates to show their speaking ability.

4.2.2. Learner Autonomy Questionnaire

The questionnaire used in this study was adapted from the Learning Climate Questionnaire (LCQ) by Williams and Deci (1996). However, as was noted in chapter 5, as the LCQ measures mainly aspects of the promotion of learner autonomy related to the theme the *Emotional climate*, the questionnaire needed to be adjusted so that it covers the multidimensional nature of learner autonomy and its promotion. When adapting the questionnaire, the literature on learner autonomy and, specifically, the promotion of learner autonomy was used as a reference. As was mentioned earlier in chapter 4 about the theories on the promotion of learner autonomy, other scholars tend to approach the issue from varying viewpoints. This is why a compilation of different views was chosen as the theoretical framework of the study instead of one specific theory: a compilation was thought to provide a broader understanding of the issue instead of one viewpoint. Before the LCQ could be adapted to fit the aims of the present study, the concept of the promotion of learner autonomy needed to be operationalized, i.e., given a measurable definition. Since the promotion of learner autonomy is a multidimensional issue with various strategies and features of classroom discourse affecting it, it first needed to be divided into meaningful sub-sections. In this process of operationalization process, it was found out that the promotion of learner autonomy seems to consist of six themes.

4.2.3. Questionnaire on Reading Strategies

The data for this part were collected through a questionnaire adopted from the survey of reading strategies by Mokhtari and Sheorey (2002) that was developed to measure the metacognitive awareness and perceived use of reading strategies of adolescent and adult learners of English as a second language. It, however, proved too difficult to demonstrate that every item outlined in the list would contribute to evaluate the frequency of reading strategy use. After examining each statement in detail and ruling out undesired ones, the researcher finally came up with a modified version of the list tailored to the needs of the study.

The modified reading strategy questionnaire consists of 20 statements, employing a 5-point Likert Scale (with one representing rarely and five almost always). Before administrating the study, the questionnaire was piloted on 35 learners of the same age, sex,

and proficiency level. To ensure the content validity of the questionnaire, it was evaluated by three experienced experts in the field of Applied Linguistics research. They were three Ph.D. holders of Applied Linguistics with more than five years of experience in teaching and testing. The statistical software SPSS (V20.0) was used to analyze the reliability of the statements. Good estimates of the questionnaire were obtained; the overall Cronbach's Alpha for the questionnaire was 0.714.

4.3. Procedure

This study included some stages: homogeneity test, pre-test of learner autonomy and strategy use in reading, intervention (treatment), and post-test of learner autonomy and strategy use in reading. At the homogeneity stage, the researcher gave Preliminary English Test to all the 80 participants to assess their current proficiency level. Then 60 learners who were from the same level of proficiency were selected as the participants. Then they were divided into three groups randomly. Before the treatment, the three groups were given a learner autonomy questionnaire and a questionnaire of strategy use in reading. The first group was taught through interactionist DA, the second one was taught through interventionist DA, and the third group was the control group.

The first group's participants were measured and presented the assistance through interactionist DA procedures. In this group, namely, interactionist DA group, assistance was given through the interaction between the learner and the assessor. The improvement in this approach is greatly a function of the ZPD of the participants.

In the second group, the impact of interventionist DA was examined. Like the other DA group, the participants, in their tasks, received interventions from the teacher to both measure and improve the learners' skills. The learners were given DA-based intervention according to Lantolf and Poehner (2011) Scale. The Lantolf and Poehner's (2011) scale was used to present mediation for each learner's answer. If the student's answer was correct, no help was given. But if the student's answer was not correct, the instructor chose one of the eight forms presented by Lantolf and Poehner's (2011) Scale. These forms are as follow: (1) Teacher pauses; (2) Teacher repeats the whole phrase questioningly; (3) Teacher repeats just the error part of the sentence; (4) Teacher asks a question, for example: what is wrong with this sentence; (5) Teacher points out the incorrect word; (6) Teacher asks either...or... questions; (7) Teacher recognizes the right answer; (8) Teacher explains why.

The third group, which was the control group, was given the normal treatment of the institute, which was not based on either interactionist DA or interventionist DA treatment. At the end of the term, both groups were given a learner autonomy questionnaire and a strategy use questionnaire in reading again as the post-test.

5. Results

First of all to check the normality of the data on both pre-test and post-test, K-S and Shapiro Wilk tests of normality were carried out. Table 1 presents the results obtained from the analysis of these two tests outputs in SPSS. As it is clear from table 1, the data obtained from pre-test and post-test are normal as the p values (.04 & .12 in K-S and .07 & .64 in Shapiro Wilk) are more significant than .05. As the data are normal, parametric statistical analysis was used to find the difference between three groups. In this regard, ANOVA test was conducted.

Table 1. Tests of Data Normality

Group	Kolmogorov-Smirnov			Shapiro Wilk		
	Statistic	df	sig.	Statistic	df	sig.
pre test Data	.212	59	.04	.812	59	.07
post test	.199	59	.12*	.741	59	.64

5.1. The Data Analysis of the First Research Question

In this part, the data dealing with the first research question are analyzed through an ANOVA in SPSS.

5.1.1. ANOVA for Learner Autonomy Pre-test

As mentioned earlier, there are three groups in this study. Before giving treatment to these groups, a learner autonomy pre-test was given to them to see whether they differ in their autonomy level. To answer this question or to find out whether these three groups were different in their autonomy level, an ANOVA was run since the data were parametric. Table 2 shows the descriptive statistics of ANOVA.

Table 2. The Descriptive Statistics of ANOVA for Pre-test

	N	Mean	Std. Deviation	Std. Error	Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Lower Bound		
Interac	20	65	3.241	.874	60.21	70.47	49	94
Intervene	20	67	2.985	.541	61.25	71.20	47	92
Cont	20	66	3.740	.989	60.87	70.40	46	93
Total	60	66	3.354	.744	60.81	70.35	47	92

As seen in Table 2, the means of these three groups are not that much different which can show that the participants were nearly at the same level of autonomy before the treatment. However, to prove it statistically that there is no difference between these three groups, the result of ANOVA should be presented. Table 3 shows the results of ANOVA.

Table 3. The Results of ANOVA for Pre-test

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	212.57	2	106.34	3.587	.14
Within Groups	1475.52	58	28.653		
Total	1688.09	60			

If p value is bigger than the sig level, then it can be said that there is no significant difference between the groups. According to Table 3, there is no statistically significant difference between these three groups ($F(2,58) = 3.587, p \leq .05$). Thus, it can be said that the three groups were nearly the same in terms of autonomy before the treatment.

5.1.2. ANOVA for Learner Autonomy Post-test

After the treatment, again the participants were given the learner autonomy test determine their level of autonomy. To find whether there was a difference between three groups in terms of their autonomy, an ANOVA was run. Table 4 shows the descriptive statistics of ANOVA for the post-test.

Table 4. The Descriptive Statistics of ANOVA for Post-test

	N	Mean	Std. Deviation	Std. Error	Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Lower Bound		
Interac	20	79	4.582	.654	78.31	92.67	54	91
Interven	20	82	2.541	.412	68.47	80.20	57	93
Cont	20	69	3.470	.740	69.98	81.90	50	89
Total	60	76.66	3.412	.584	71.63	83.05	54	91

As seen in Table 4, the means of these three groups are different which can show that the participants were not at the same level of autonomy in different groups after the treatment. However, to prove it statistically that there is a significant difference between these three groups, the result of ANOVA should be presented. Table 5 shows the results of ANOVA.

Table 5. The Results of ANOVA for Post-test

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	223.21	2	148.12	3.21	.006
Within Groups	1562.42	58	28.568		
Total	1785.63	60			

If p value is smaller than the sig level, then it can be said that there is a significant difference between the groups. According to Table 5, there is a significant difference between these three groups ($F(2, 58) = 3.21, p \leq .05$). Thus, it can be said that the three groups were not the same in terms of learner autonomy after the treatment.

To find out where this difference is and what two groups are different with each other, the post hoc test was run. Table 6 shows the results of post hoc test of ANOVA.

Table 6. The Post hoc Test Results

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Interac	Interven	-3.24	3.21	.09	-5.77	-2.10
	Cont	10.14*	1.24	.004	-.96	2.36
Interven	Interac	3.24	3.21	.09	-2.10	-5.77
	Cont	13.2*	.845	.006	-.52	1.84
Cont	Interac	-10.14*	1.24	.004	-2.54	-1.47
	Interven	-13.2*	.845	.006	-2.63	.85

As seen in Table 6, there is no significant difference between the interactionist group and the interventionist group ($.09 \geq .05$) regarding their learner autonomy. However, there is a significant difference between the interactionist group and the control group ($.004 \leq .05$) in their learner autonomy with the interactionist group (Mean=79) being better than the control group (Mean=69). Additionally, there is a significant difference between the interventionist group and the control group ($.006 \geq .05$) in their learner autonomy with the interventionist group (Mean=82) being better than the control group (Mean=69).

The results of this study showed that both interactionist DA and interventionist DA had a significant effect on learner autonomy, while there was no significant difference between the effect of interactionist DA and effect of interventionist DA on learner autonomy.

5.2. The Data Analysis of the Second Research Question

In this part, the data dealing with the second research question are analyzed through ANOVA in SPSS.

5.2.1. ANOVA for Learner Strategy Use in Reading Pre-test

As mentioned earlier, there are three groups in this study. Before giving treatment to these groups, a learner strategy use pre-test was given to them to see whether they differ in their strategy use level. To answer this question or to find out whether these three groups were different in their autonomy level, an ANOVA was run since the data were parametric. Table 7 shows the descriptive statistics of ANOVA.

Table 7. The Descriptive Statistics of ANOVA for Pre-test

	N	Mean	Std. Deviation	Std. Error	Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Lower Bound		
Interac	20	60	3.896	.475	55.21	65.47	44	89
Intervene	20	62	2.225	.696	56.25	66.20	42	88
Cont	20	61	3.411	.557	55.87	55.40	41	88
Total	60	61	3.01	.412	55.81	55.35	42	88

As seen in Table 7, the means of these three groups are not that much different which can show that the participants were nearly at the same level of strategy use before the treatment. However, to prove statistically that there is no difference between these three groups, the result of ANOVA should be presented. The table 8 shows the results of ANOVA.

Table 8. The Results of ANOVA for Pre-test

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	187.57	2	96.34	3.124	.19
Within Groups	1654.52	58	27.653		
Total	1748.09	60			

If p value is bigger than the sig level, then it can be said that there is no significant difference between the groups. According to Table 8, there is no statistically significant difference between these three groups ($F(2, 58) = 3.124, p \leq .05$). Thus, it can be said that the three groups were nearly the same in terms of strategy use before the treatment.

5.2.2. ANOVA for Strategy Use in Reading Post-test

After the treatment, again the participants were given the learner strategy use test to find out their level of autonomy. To find whether there was a difference between three groups in terms of their strategy use, an ANOVA was run. Table 9 shows the descriptive statistics of ANOVA for the post-test.

Table 9. The Descriptive Statistics of ANOVA for Post-test

	N	Mean	Std. Deviation	Std. Error	Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Lower Bound		
Interac	20	74	4.214	.622	74.31	88.67	40	95
Interven	20	77	1.541	.388	68.47	75.20	47	85
Cont	20	64	4.470	.740	69.98	76.90	58	87
Total	60	71.66	3.455	.584	65.63	78.05	51	84

As seen in Table 8, the means of these three groups are different which can show that the participants were not at the same level of strategy use in different groups after the treatment. However, to prove it statistically that there is a significant difference between these three groups, the result of ANOVA should be presented. Table 10 shows the results of ANOVA.

Table 10. The Results of ANOVA for Post-test

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	189.21	2	102.12	2.89	.009
Within Groups	1645.42	58	24.568		
Total	1741.63	60			

If p-value is smaller than the sig level, then it can be said that there is a significant difference between the groups. According to Table 10, there is a significant difference between these three groups ($F(2, 58) = 2.89, p \leq .05$). Thus, it can be said that the three groups were not the same in terms of learner strategy use after the treatment.

To find out where this difference is and what two groups are different with each other, the post hoc test was run. Table 11 shows the results of post hoc test of ANOVA.

Table 11. The Post hoc Test Results

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Interac	Interven	-2.24	2.21	.06	-4.77	-2.45
	Cont	8.14*	1.41	.001	-.85	2.36
Interven	Interac	2.24	2.21	.06	-1.10	-7.77
	Cont	11.2*	.412	.009	-.47	3.84
Cont	Interac	-8.14*	1.41	.001	-1.54	-1.55
	Interven	-11.2*	.412	.009	-1.63	.78

As seen in Table 11, there is no significant difference between the interactionist group and the interventionist group ($.06 \geq .05$) regarding their learner strategy use. However, there is a significant difference between the interactionist group and the control group ($.001 \leq .05$) in their learner strategy use with the interactionist group (Mean=74) being better than the control group (Mean=64). Additionally, there is a significant difference between the interventionist group and the control group ($.009 \geq .05$) in their learner strategy use with the interventionist group (Mean=77) being better than the control group (Mean=64).

All in all, the results of this study showed that both interactionist DA and interventionist DA had a significant effect on learner strategy use in reading, at the same time, there was no significant difference between the effect of interactionist DA and effect of interventionist DA on learner strategy use in reading.

6. Discussion

As seen above, the results of this study revealed that both interactionist DA and interventionist DA had a significant effect on learners' autonomy and strategy use in reading. In addition, the current study also showed that there was no significant difference between the effect of interactionist DA and interventionist DA on learner autonomy and strategy use. Here, it is attempted to review the related literature and find out whether the results of this study are in line or against the previous studies.

The first research in line with the present study is Sadeghi and Khanahmadi (2011), who evaluated the viability of dynamic assessment applied as an instructional assistant in the improvement of Iranian EFL students' grammar. In this research, 60 intermediate, EFL learners were selected. Every session during the treatment, both the experimental and control groups took a grammar test, wherein the experimental group took mediation on test items. The consequences of their study confirmed that dynamic assessment oriented the instruction

developed the learning of L2 grammar expressively. Since the present research proves the positive effect of interactionist and interventionist DA on autonomy and strategy use, it can be claimed that these two studies support each other since both show the positive effect of DA on different aspects of learning a language. Also, Navarro and Mora's (2012) investigation revealed different results. However, the initial finding was an improvement in reading due to dynamic measurement. In this regard, the present investigation proved nearly the same result since learner autonomy and learner strategy use are both some aspects of learning; therefore, it can be said that Navarro and Mora (2012) provide support for the present study.

Another study that is in line with our findings, but is Malmeer and Zoghi's (2014) investigation on DA of grammar on learners with different age groups, claiming that DA can be used as an interactionist method that contains explicit and implicit teaching strategy. Their study revealed that learners are influenced by dynamic assessment differently regarding their age groups. Based on the results, adults would benefit more than teenagers when an interactionist DA is presented. This is mainly because adults love to interact more with each other than teenagers. Also, adult learners and teachers in the interactionist DA lead this group to gain more from this procedure. Also, it is essential to mention that teenagers gain more benefits from the controlled teaching methodologies and techniques, showing better reactions to the methods that aim to create good learning habits through repetition. Another contributing outcome of their study is that through the determined interaction of teachers and students, students have more chances to be aware of their strengths and weaknesses. Their results also discovered that teenagers, will not benefit DA as much as adults do.

The effect of DA and its two types has also been examined in improving L2 learners listening comprehension ability, and their findings are in line with ours. In a study, Barabadi, Khajavi, and Mehri kamrood (2018) integrated interventionist and interactionist DA to see its effectiveness on developing learners listening skills. Based on the results, students outperformed in responding to the listening tests, as the assessment helped test takers understand information based on their potential of learning. Also, the mediation modeling used by test takers proved that more flexible mediation pattern is required to comprehend challenging listening items. Based on this study, we can conclude DA and its types are effective to improving learners' receptive skills.

Another study investigated by Ahmadi Safa and Beheshti (2018) on the effectiveness of DA and its types to developing learners' comprehension skills. Their results support the current study but, at the same time, present a slightly different, adding new claim. Ahmadi Safa and Beheshti (2018) examined the effect of interactionist and interventionist Group Dynamic Assessment (GDA) for developing intermediate EFL learners listening skill. The results revealed that interactionist GDA was the most effective procedure on developing

listening ability. Also, the results showed a significant difference among the three types of dynamic assessment, namely, interactionist, interventionist, and non-dynamic assessment (NDA), on developing learners' listening skills, though all of them were effective.

Last but not least, is the study investigated by Malmir (2020) on the effectiveness of interactionist and interventionist DA on learners' pragmatic comprehension accuracy and speed. According to the outcomes, learners in the DA group outperformed the students in the comparison groups. Also, the results showed that interventionist DA is more effective than interactionist DA in terms of accuracy. However, regarding the speed, the interactionist DA was better than interventionist DA, and there was no difference in the time spent comprehending speech acts or implicatures between the two types. Therefore, it can be concluded that DA and its two types effectively improve L2 learners' pragmatic competence.

7. Conclusion

After collecting data, data analysis was done to see whether interventionist and interactionist dynamic assessment have any significant effect on learner autonomy and strategy use. The results showed that interventionist DA and interactionist DA have positive effects on learner autonomy and strategy use. Besides, there is no significant difference between the effect of interactionist DA and effect of interventionist DA on learner autonomy and strategy use.

The scopes of learner autonomy and strategy use have hardly ever been exposed to studies in the format of dynamic assessments. Based on the reviews, it can be concluded that there has been a rise on researching interventionist and interactionist types of DA and their effects on various fields of ESL and EFL research. It is worth noting that almost all of the studies prove interventionist and interactionist DA's positive effects. However, to develop a conclusive approach for the DA of learner autonomy and strategy use, the findings from research in different contexts and age groups must be combined. On the one hand, several processes dealing with learner autonomy and strategy use provide many chances for feedback interventions which may potentially improve learner autonomy and strategy use. On the other hand, elaborated and learning-oriented feedback is recognized to outperform performance-oriented feedback. This research therefore supports that, as a critical quality of dynamic assessment, effective feedback should be closely related to targeted comprehension processes, namely inferences. As a result, implementing dynamic assessment for increasing learner autonomy and strategy use in an EFL class is recommended to all teachers and other researchers are suggested to focus more on investigating the effectiveness of implementing different procedures of interventionist and interactionist DA in educational contexts for developing learners' skills, and learning strategies.

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