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Dynamic Assessment of Iranian EFL Learners' Past Tense Development in the Context of Writing Practice: A Socio-constructive Perspective

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Abstract

This paper attempted to explore the impact of dynamic assessment (DA) in improving EFL students' writing ability. To this end, 60 homogenous pre-intermediate EFL learners from a private high school participated in this study and after administering QPT, the forty students were randomly divided into two equal groups; 20 learners in an experimental group and 20 learners in a control group with the same age and the same English knowledge and background. In the first session of instruction, the pre-test was administered in order to evaluate the learners' writing ability. Then the control group received the traditional approach and the experimental group was exposed to dynamic assessment instruction to learn how to write with more efficiency. The treatment endured 12 sessions. The results of data analysis showed that the experimental group improved significantly. It is indicated that the dynamic assessment procedure is more efficient in teaching writing than the traditional methods. Furthermore, dynamic assessment enhances L2 writing and can play a crucial role in language learning.

Keywords: dynamic assessment, mediation, writing, zone of proximal development (ZPD)

1. Introduction

Writing in L2 is a process that requires exhaustive work for both teachers and students. Teachers need to combine their teaching skills and techniques to provide comprehensive and meaningful input that allow students to obtain communicative competence (Hedge, 2000). As Scarcella and Oxford (1992) point out, writing in a foreign language supplies room for the learners, thereby enhancing their sociolinguistic, grammatical and discourse competence in target language. It is noteworthy that writing is a basic communication skill and a unique asset in the process of learning a second language.

Mediation involves the intentional introduction of signs, often by the teacher, to reorganize ongoing activity (Wertsch, 1985). In much of the existing second language dynamic assessment research, the teacher uses prompts for mediation (Antón, 2003; Poehner, 2008) defined as signs that are directed toward the learner to draw attention to an error and encourage reformulation. A decrease in the quality and frequency of prompts required by a learner over time is taken as indication that the learner is developing and moving from a reliance on other-regulation to self-regulation; that is, achieving a greater degree of independence and self-reliance (Aljaafreh & Lantolf, 1994).

An introduction of dynamic assessment (DA) with its roots in Vygotsky's (1987) socio-cultural theory (SCT) questioned the notion of 'teaching to the test'(Ravitch, 2016; Sacks, 2000), a phenomenon that viewed the learning process as a teaching and testing dichotomy and emphasized the psychometric properties of standardized tests. DA opened up a new dimension of cognitive assessment based on key concepts of SCT, mediation, and zone of proximal development (ZPD), through the integration of instruction and assessment (Sternberg et al., 2008). DA approaches unravel learners' independent and dependent functioning through the quality of mediation in a collaborative context of the mediator- learner's interaction (Poehner, 2008). According to DA researchers (Ableeva, 2010; Poehner et al., 2015), capturing and tracing learner's ZPD in the context of second language learning is possible both in multi-session assessment program and a single interaction, which is called 'micro genesis'(Wertsch, 1985).

1.1 Statement of the Problem

Writing is a basic communication skill and a unique asset in the process of learning a second language. Since writing is a cognitively demanding task, this paper attempts to investigate Iranian EFL learners' perceptions toward the most common writing difficulties. Due to the neglect of the writing skill in the educational process and its challenging nature, writing is considered as one of the most demanding skills for EFL students to learn (Gholamnejad et al, 2013; Jabali, 2018; Kayonde, 2021; Nashta Rahimi & Rahimy, 2017; Ndoricimpa, 2019). Therefore, difficulties faced by L2 students across a wide range of proficiency levels have received great prominence and this current study aims to address this issue meticulously from a relatively fresh perspective.

Taking into account the importance of writing, however, many EFL teachers find teaching writing difficult. This means that there are significant challenges in teaching writing to EFL learners. Indeed, teaching English writing skill involves developing linguistic and communicative competence of the learners which makes it quite a challenging task (Bilal, Tariq, Din, Latif, & Anjum, 2013). In order to master writing, students need proper and genuine instruction and patience. Undoubtedly, teachers have key role and responsibility for learners' writing development.

1.2 Research Question

The research question explored in this research is as follows:

Do dynamic assessment and scaffolding have any effect on Iranian pre-intermediate EFL learners' writing ability?

2. Literature Review

2.1 Dynamic Assessment (DA) and Explicit/Implicit Learning

Some dynamic assessment researchers such as Feuerstein et al. (1953) have preferred to present mediations in a dialogic interaction with a learner while others (Guthke & Beckmann, 2000) have favored quantified and standardized mediations (Poehner, 2008; Poehner & Lantolf, 2013; Sternberg et al., 2008). Lantolf and Poehner (2004) proposed two umbrella terms—interventionist and interactionist—to distinguish DA approaches. While interventionist DA presents predetermined standardized mediations to assist and quantitatively track the learners' ZPD changes, interactionist DA offers fine-tuned mediations in mediator- learner dialogic negotiations to contribute to the learner's micro genetic development (Poehner, 2008). Interactionist DA studies (Ableeva, 2010; Poehner, 2008) have tested the presentation of a wider range of scaffolds to enhance the learner's cognitive development on a one-on-one tutorial basis. On the other hand, interventionist DA is an effective approach to build a ZPD for a large group of learners through the provision of a graded set of prefabricated mediations (Lantolf & Poehner, 2011).

2.2 Explicit/Implicit Learning

According to cognitive psychology, acquiring new cognitive skills occurs through explicit and implicit knowledge processing (Anderson & Fincham, 1994). Explicit knowledge processing refers to the application of rules by being aware of them. On the other hand, implicit knowledge processing involves the application of rules unconsciously without being aware of them. While explicit learning consciously engages learners to detect or apply rules and regularities in input, implicit learning intends to unconsciously involve learners in information processing (Hulstijn, 2005).

2.3 Dynamic Assessment (DA)

Mediation involves the intentional introduction of signs, often by the teacher to recognize ongoing activity (Wertsch et al., 2007). Dynamic assessment is based on Vygotsky's sociocultural theory of learning as popularly known in applied linguistics and second language acquisition research. It is also known as cultural-historical psychology (Lantolf & Thorne, 2006; Poehner, 2018). The closest connection between Vygostky's sociocultural theory and writing or academic writing pedagogy is the focus on process rather than products.

DA seeks to assess a learner's abilities by promoting them at the same time. In DA, learner's abilities are transformed through dialogic collaboration between the learner and the teacher–assessor (Poehner, 2007). Likewise, dynamic Assessment is no longer a new approach to psychological and educational assessment ; in fact, some of its current applications have been around for more than a half a century (Feuerstein et al., 1953; Guthke & Wingenfeld, 1992).

In comparison to standardized test, dynamic assessment is connected to the intelligence evaluation field and its debates inevitably (Murphy & Maree, 2006).The term standardized or static refers to the test in which the rater demonstrates questions to the learner and rates his or her response without any improvement of learner's performance (Tzuriel, 2001). Besides, the most significant criticism against the standardized test is that they are not suitable representatives of learner's cognitive capacity especially the minority who are not from "mainstream" groups of society ,such as social ,cultural, and economic groups (Tzuriel, 2001; Utley et al., 1992). Vygotsky wrote 'developmental processes do not coincide with learning processes. Rather, the developmental processes lags behind the learning process; this sequence results in the zone of proximal development (Vygotsky, 1987). Most importantly, its major contribution to formative assessment is its emphasis on the integration of teaching and assessment into a single activity. Furthermore, experience has shown that the child with the larger zone of proximal development (ZPD) will do much better in school. This measure gives a more helpful clue than mental age does to the dynamics of intellectual progress (Vygotsky, 1986/1934). From this definition it is clear that DA considers abilities to be "malleable and flexible rather than fixed" (Sternberg & Grigorenko, 2002) and focuses "on modifiability and on producing suggestions for interventions that appear successful in facilitating improved learner performance" (Lidz, 1991).

According to SCT, learning is dialogically based. Dialogic interaction enables an expert (such as a teacher) to create a context in which novices can participate actively in their own learning practice and in which the expert can fine-tune the support that the novices are given (Antón, 2003). The interaction between the examiner and the learner indicates how the student involves in the problem-solving process and fosters inferences about mental processes in task engagement. This feature also has its roots in Vygotsky's observation that a body can show what it is only in movement (Lidz & Gindis, 2003). According to Lantolf and Thorne (2006) ,Vygotsky argued that "the only appropriate way of understanding and explaining forms of human functioning is by studying the process, not the outcome of development." In DA, the extent of modifiability is an indicator of the person's potential learning capacity in future.

2.4 Zone of Proximal Development

Zone of Proximal Development (ZPD) is defined by Vygotsky (1987, p. 86) as 'the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers. Within writing pedagogy, the learner ZPD is targeted through tools such as drafting of texts and dialogic feedback by the teacher and peers. This creates an opportunity for assessing the student's responsiveness to the teacher's support which is a key principle in DA and indeed a joint activity is a better predictor of a student's future cognitive. In other words, the ZPD is 'the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers'(Vygotsky, 1987). Applied to language learning ,the concept of the ZPD brings together all of the relevant pieces of the language learning situation including 'the teacher, the learner, their social and cultural history, their goals and motives, as well as the resources available to them ,including those that are dialogically constructed together' (Aljaafreh & Lantolf, 1994). Thus, DA targets what individuals are able to do in cooperation with others rather than what they can do alone (Sternberg & Grigorenko, 2002).

2.5 Mediation

In addition to ZPD, mediation is the central pillars of Vygotsky's theory. Mediation is a process that humans employ in order to regulate the material world, others' or their own social and mental activity by using 'culturally constructed artefacts , concepts and activities'(Lantolf & Thorne, 2006). In other words, any human activity (i.e., higher mental functions) is mediated by objects (e.g., mobile devices) psychological tools(e.g., text, language) or another human being (Wertsch et al., 2007). Mediation also provide the foundation for another of Vygotsky's theoretical goals, namely, building a link between social and historical process, on the one hand, and individuals' mental processes on the other. It is because humans internalize forms of mediation provided by particular cultural, historical, and institutional forces that their mental functioning sociohistorically situated (Wertsch, 2007, pp. 178-192). The value that Vygotsky appended to mediation is considered in a lecture he delivered near the end of his life, where he asserted, "A central fact of our psychology is the fact of mediation" (Vygotsky, 1982, p. 166). He focused on the importance of signs and mechanical drawings; all sorts of conventional signs.

In the context of DA, semiotic mediation plays a critical role. Such mediation comprises consequential use of semiotic tools such as disciplinary concepts and as "artificial formations [that] are social, not organic or individual" (Vygotsky,1981, p. 137) and he covered also "language ;various systems for counting; mnemonic techniques; algebraic symbol systems; works of art; writing; schemes, diagrams, maps, linguistic resources (e.g., defining concepts, explaining phenomena by using proper language). Semiotic mediation may be a parented in various modes of writing such as text commentaries and emails during the mediating process (i.e., the interaction between the teacher and the student). The mediating process does not mean the teacher exclusively affecting the student. As a dialectical process, both the teacher and the student are affected by each other's activity, behavior and the semiotic tools used which move the mediating process forward even though the development of the student's mental functioning is possibly progressing or regressing. In this process, the control of the shared activity is dynamic (i.e., displacing control progressively from the teacher to the student and backwards). Such control is called regulation.

2.6 *Previous Studies on Dynamic Assessment*

A number of researchers in various branches of education have analyzed the use and effect of dynamic assessment on various participants' learning achievement such as Mardani and Tavakoli (2011) who have used an interactionist approach in the sandwich format to group dynamic assessment to study the effect of adding a dynamic assessment to EFL reading comprehension. Sadeghi and Khanahmadi (2011) conducted a research on 60 Iranian male and female intermediate EFL learners to assess the viability of dynamic assessment used as an instructional adjunct in the development of Iranian EFL learners' grammar. XiaoXiao and Yan (2010) in their case study on dynamic assessment of EFL learners' writing process presented a simple framework for English writing instruction based on the principles of dynamic assessment. Their applying of framework indicated that the dialogic means of teaching is a facilitating way in enhancing learners' writing interest and improving their writing competence.

Ebadi and Asakereh (2017) investigated the effect of DA on the development of speaking skill. The findings revealed that DA had a significant impact on the development of participants' cognition and movement toward their self-regulation. In another study by Ebrahimi (2015), it was revealed that implementing DA to enhance oral proficiency, complexity and accuracy were outstandingly improved but fluency was not affected by mediation through DA. The results of the learners' interview assured that dynamic assessment could improve the EFL learners' writing process and their writing confidence (Rashidi & Bahadori Nejad, 2018).

3. Methodology

The purpose behind this study was to investigate the impact of the mediation and dynamic assessment on the writing ability of participants. This study followed an experimental design. This study includes a pre-test and post-test which are administered to control and experimental groups.

3.1 Participants

This study focused on 80 homogenous Iranian EFL learners (i.e. they had the same L2 proficiency level) who were selected from Saba private school in Rasht. The learners ranged from 15 to 16, learning English as a foreign language (EFL). After administrating QPT, the forty students who achieved the lowest and highest scores were eliminated. Besides, the other students were randomly divided into two equal groups, experimental group and control group and each group had thirty participants with the same age and the same English background. While the experimental group received dynamic assessment-based instruction, the control group were provided non-dynamic, traditional instruction on each of their assignments without much interaction.

3.2 Research Materials

In this study, a QPT (Quick Placement Test) was administrated to all participants at the beginning of the study in order to check the level of general language proficiency of participants. With their QPT results, the learners were divided into an experimental and a control group. In this study, pretest (i.e.DA1) was utilized in order to measure the writing ability of the EFL learners before implementing treatment, and after the participants had undergone some treatments, then posttest was used in order to measure the students' growth in knowledge of the particular topic. The learners were asked to write a paragraph about the given subject. The genre which encountered in writing class was the argumentation type. As Hyland (1990) describes "effective argument is as much a matter of organization as content or creativity and constructing meaning involves developing rhetorical steps." The writing tasks required participants to write their essays within the time limit of one hour. Likewise, the learners were asked to write another essay based on the given topics in order to measure the writing skill of the learners and their achievements after the instruction.

3.3 Procedure

First, the QPT was administrated among 60 participants given the fact that all of the participants were supposed to take this placement test. Then, based on the results obtained, 40 students who got the same score were elected. Furthermore, they randomly were divided into two groups, experimental and control group. The treatment was done on experimental group and the control group received the traditional method of teaching. Both groups took a pre-test to demonstrate the earliest differences and similarities in their knowledge in English writing skills.

After the pre-test, the treatment was done which last 8 weeks. All students received an hour and half of instruction per week. At the onset of the treatment sitting, the experimental and control group were given a general topic to write about at paragraph type. Whenever needed and the students faced obstacles in their writing, the mediator intervened and offered prompts, hints and explanations in order to reveal the students' writing potential development. The mediator could clarify the task at the beginning of the session. In fact, it focused on finding out what was expected in the assessment task. Then, the experimental group received mediation and dynamic assessment. During the sessions in which mediation was provided, the mediator asked the learner to identify the problem. This helped the mediator to check the student's self-regulate control. This move happened with all the participants. Often the mediator highlighted the words or sentences in the text indirectly and then supported the students by offering metalinguistic clues in order to enhance the students' conceptual knowledge in language and content both.

Besides the mediator had to explain the problem in the text explicitly if the student did not respond correctly to the feedback given. This move was provided to make the learner understand the nature of the problem thereby enhancing learners' conceptual understanding. If the student was unable to comprehend the concept or a problem in the text, the mediator provided support through exemplifying and then offered an actual answer to the student in order to contribute the correct solution. In this session, the meditational move is considered implicit when the teacher offered hints and asked a question. In other words, the learner was more independent and self-regulated their learning process. Unlike, an explicit move, occurred when the teacher provided concrete solutions to problems. In this sense, the learner was less independent (i.e., other-regulated). Those moves that were implicit were presented before explicit mediation. After 12 treatment sessions, the post test was conducted immediately for two groups. The post test was the same as pre-test (writing task).

3.4 Data Analysis

The students' writing compositions and answers to the pretest and posttest were analyzed for accuracy, lexical items and content. The obtained quantitative data was analyzed using the SPSS in order to reveal any correlation between the use of dynamic assessment instruction and traditional methods of teaching writing in English class. As such, an independent samples t-test was run in order to compare the differences in the performance of the experimental and control groups. In addition, the data were further analyzed for means, deviations and ordinariness of distribution for the scores of pretest and posttest.

First, the descriptive statistics was run to the data collected from QPT, the writing tests, and measures of central tendency along with measures of dispersion as well as inferential statistics namely correlations, independent, and paired samples t-tests were carried out. The parametric independent samples t-test was run to evaluate if there was any significant difference between the two groups in terms of their writing ability at the end of the study. Before running the main statistical analyses for the present study, normality that is the main assumption of the parametric tests was examined for all of the distributions. The descriptive statistics included the calculation of general language proficiency, inter-rater reliability calculations, the participants' writing pre-test and post-test scores, and normality assumption of the parametric tests.

4. Results

4.1 Measure of General Language Proficiency

QPT as a measure of general language proficiency was administered to confirm that the two groups were homogenous in terms of their general foreign language proficiency at the beginning of the study before introducing the specific treatment to the groups. Table 1 presents descriptive data for the participants with regard to their performance on QPT. The QPT was given to 80 EFL learners. The main goal was to select a homogeneous sample. The participants took three sections that included structure, vocabulary, and reading comprehension with a maximum possible score of (60) points. A cut-point of one standard deviation above and below the mean was set and (N = 40) EFL learners whose proficiency scores were within this range (+ 1 SD from the mean) were selected as the main participants of the present study. Descriptive statistics for QPT is available in Table 1.

Table 1. Descriptive statistics for QPT scores of the main population

N	Valid	80
	Missing	0
Mean		32.7500
Median		31.0000
Mode		29.00
Std. Deviation		5.11105
Variance		26.123
Skewness		1.497
Std. Error of Skewness		.309
Kurtosis		2.222
Std. Error of Kurtosis		.608
Range		25.00
Minimum		26.00
Maximum		51.00
Sum		1965.00

Table 1 displays the findings of group statistics for the QPT scores that was administered to select uniform participants with regard to their general foreign language proficiency. Measures of central tendency including mean, median, and the mode together with measures of dispersion such as range, variance, and standard deviation as well as measures of distribution (i.e., Skewness and Kurtosis) were computed for the QPT. Thus, the cut-point of (32.75 + 5.11) was set, and 40 EFL learners whose proficiency scores were within the range of 28 to 36 were selected pre- intermediate EFL learner as the main participants of the present study.

4.2 Inter-rater Reliability Analysis for Writing Pretest and Posttest

Inter-rater reliability (IRR) was run to evaluate the uniformity between the ratings assigned by the two raters and the extent of the agreement between two raters who made the independent ratings for the writing test was measured. In fact, two different scorers who were experienced foreign language teachers did the ratings for the oral production of the participants. The consistency of the two ratters' judgments was examined using interclass correlation coefficient (ICC) analysis that showed a comparatively high level of inter-rater reliability for the writing test scores given in two administrations in the pre-test and post-test. Table 2 shows the descriptive statistics for the scores given by the raters.

Table 2. Item statistics for the scores given by two raters

Item Statistics			
	Mean	Std. Deviation	N
Rater A pretest scores	14.0250	1.83258	28
Rater B pretest scores	14.9750	1.74661	28
Rater A posttest scores	15.8500	1.29199	28
Rater B posttest scores	16.7000	1.30482	28

Table 2 displays the information relating to the interclass correlation coefficient (ICC) calculations and some of the results of the reliability analysis, showing the mean and standard deviation (SD) of the data from each rater for the pretest and posttest. Overall, it appeared that rater (B) measured writing scores slightly higher than rater (A) both in the pretest and posttest. Additionally, the scores assigned by rater B were less variable than scores given by rater (A) for the pretest scores. However, the variation of scores assigned by raters (A) and (B) were almost identical as displayed in Table 2. After computing the means and standard deviation for the scores given by the two raters for both pretest and posttest, "*Single Measures*" were computed separately for the tests of writing. The results are available in Table 3 below.

Table 3. Intra- class correlation coefficients for the scores given by two raters for writing pretest and posttest

	Intra- class Correlation	95% Confidence Interval		F Test with True Value 0			
		Lower Bound	Upper Bound	Value	df1	df2	Sig
Average Measures (pretests.)	.889	.790	.941	9.018	39	39	.000
Average Measures (posttests.)	.825	.670	.908	5.726	39	39	.000

The estimated inter-rater reliability between the two raters for the pretest scores was (r_1=.889), with 95% CI (.790, .941), which was quite wide. Furthermore, the estimated reliability between the two raters for the posttest scores came to (r_2= .825), with 95% CI (.670, .908). Therefore, the reliability of this measurement for the pretests and posttests of writing between the two raters was established.

4.3 The Writing Pretest and Posttest Scores

After assigning the participants into two groups of experimental and control groups, they were given a writing test to examine the possible initial differences between the two groups regarding their writing ability before introducing the specific treatment for the groups. Pretest of writing was administered to the both groups at the beginning of the study. After the treatment, both groups attended the writing posttest. The data were gathered through the pretest and posttest of writing to assess the possible improvements in writing abilities of the two groups. In addition, after introducing the treatment that was dynamic assessment model for the experimental group and conventional method for the control group, both groups attended the posttest of writing. Table 4 displays the descriptive statistics for the participants' writing pretest and posttest scores.

Table 4. The results of descriptive statistics for the writing pretest and posttest scores

	Groups	N	Mean	Std. Deviation	Std. Error Mean
	Control	14	14.6000	1.80351	.40328
Total Pretest Scores	Experimental	14	14.4000	1.62707	.36382
Total Posttest Scores	Control	14	15.8000	1.08094	.24170
	Experimental	14	17.7500	1.14133	.25521

For the writing test that was administered at the beginning of the study, the mean scores for the control and experimental group were ($M_{control}$ = 14.60) and ($M_{experimental}$ = 14.40), respectively. Furthermore, the degree of the dispersion of scores for the control group was slightly higher than that of the experimental group ($SD_{control}$ = 1.80; $SD_{Experimental}$ =1.62). When it comes to the writing test directed to the participants of the two groups at the end of the study, the mean scores for the control and experimental groups were ($M_{control}$ = 15.80) and ($M_{experimental}$ = 17.75), respectively. The degree of the deviation of writing scores around the mean score for the control group was simply (.06) points smaller than that of the experimental group ($SD_{Experimental\ group}$ =1.14, $SD_{control\ group}$ =1.08). Figure 1 illustrates the comparison between the two groups on the pretest and posttest of writing at the beginning and the end of the treatment sessions.

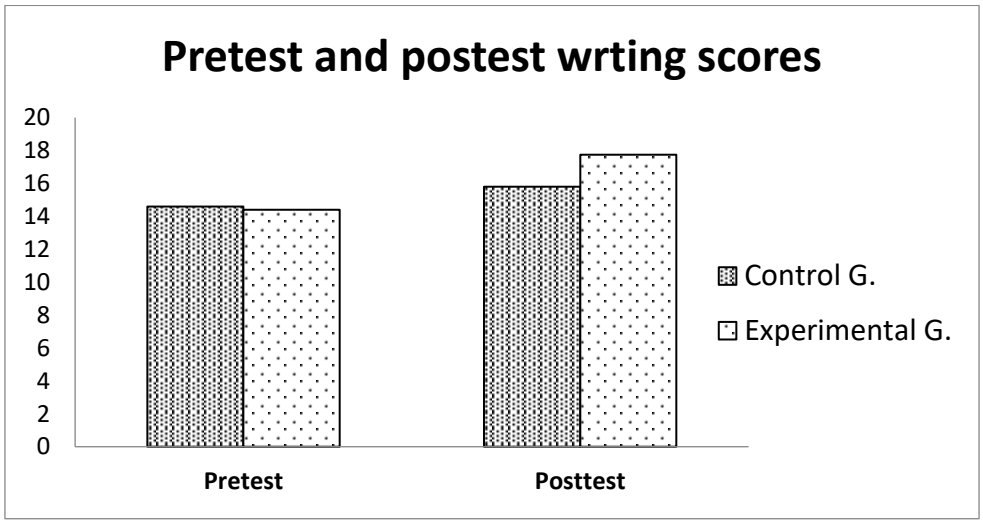

Figure 1. The comparison between the means of the two groups on pretest of writing

4.4 Examining Normality Assumption

Before running the parametric statistical tests, the normality assumption and skeweness analyses, were done through dividing the statistic of skewness by the standard error. Trimmed means were also computed to check out the normality assumption. The results of the skewness analyses and trimmed means are given in Table 5.

Table 5. Results of skewness analyses and trimmed means for the pretest and posttest

		Exp. G.		Cont. G.	
		Pretest	Posttest	Pretest	Posttest
Mean		13.7667	16.6667	13.5667	14.2000
95% Confidence Interval for Mean	Lower Bound	13.3121	16.2394	13.0044	13.2593
	Upper Bound	14.2212	17.0939	14.1290	15.1407
5% Trimmed Mean		13.7963	16.6574	13.5463	14.2500
Median		14.0000	16.5000	13.5000	15.0000
Variance		.674	.595	1.031	2.886
Std. Deviation		.82086	.77152	1.01536	1.69874
Minimum		12.00	15.50	12.00	11.00
Maximum		15.00	18.00	15.50	16.50
Skewness		-.683	-.110	.205	-.662
Kurtosis		.142	-.607	-.947	-.704

The statistic of skewness for the pretest of writing for the experimental group equaled to -.683 and that for the posttest of writing came to -.110. Moreover, the Skewness for the pretest of writing for the control group was .205, and that for the posttest of writing came to -.662. The statistic of Kurtosis for the pretest of writing for the experimental group came to .142 and that for the posttest of writing equaled -.607. In addition, the Kurtosis for the pretest of writing for the control group was -.947, and that for the posttest of writing was -.704. The values for the skewness and kurtosis between -2 and +2 are considered acceptable in order to prove normal univariate distribution (George & Mallery, 2010). Besides, the 5% Trimmed means were computed for the pretest and posttest scores that were within the ranges of 95% confidence interval for the means that are given for the two groups. Therefore, the results of the Skewness analyses trimmed means revealed that normality assumption was met in the distribution of the scores.

4.5 Inferential Analyses of the Data

To see if the differences between the mean scores of the two groups were statistically significant at the beginning and at the end of the study, independent samples t- tests were run to the findings of the writing tests. The results of the analyses are presented in Table 6.

Table 6. Independent samples T- test for the pretest and posttest of writing scores

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Diff.	95% Confidence Interval of the Diff.	
									Lower	Upper
Pretest scores	Equal variances assumed	.24	.62	.36	38	.715	.20	.54	-.89	1.29
	Equal variances not assumed		.36	37.6	.715	.20		.54	-.89	1.29
posttest scores	Equal variances assumed	.25	.61	-2.70	38	.010	-.95	.35	-1.66	-.23
	Equal variances not assumed		.36	-2.70	37.88	.010	-.95	.35	-1.66	-.23

The independent samples t-test was conducted to compare the performance on pretest and posttest of writing for the two groups. The independent samples t-test presented the results of Levene's test for the equality of variances. This tested whether the variances (variation) of scores for the two groups were the same for the writing tests. The outcome of this test determined the correct t-value that SPSS provided for use. Since the Sig. values for the Levene's test for both pretest and posttest were larger than (.05), the first lines in the table, which referred to "*Equal variances assumed*," were used.

For the pretest of writing, there was no significant difference in scores for the *control* (M = 14.60, SD = 1.80) and *experimental group* (M = 14.40, SD = 1.60; t (38) = .36, p = .715, two-tailed). The magnitude of the differences in the means (mean difference = .54, 95% CI: -.89 to 1.29) was small (Eta squared = .0033). In other words, the two groups were approximately at the same level of proficiency in terms of their writing ability in the administered test at the beginning of the study.

Based on the findings of independent samples t-test for the posttest represented in Table 4.5, since the value in the Sig. (2-tailed) column was less than (.05), there was a statistically significant difference in the mean scores on the dependent variable (posttest scores of writing) for the two groups. For the posttest of writing, there was a significant difference in scores for the *control* (M =15.80, SD = 1.08) and *Experimental group* (M = 17.75, SD = 1.14; t (38) = -2.70, p = .010, two-tailed). The magnitude of the differences in the means (mean difference = .95, 95% CI: -1.66 to -.23) was small (Eta squared = .1609). As it was reported, the experimental group outperformed the control group in the posttest of writing. In order to investigate the participants' progress within groups, two paired samples t-tests were also run, which showed the learners' progress in the pretest and posttest of writing that are shown in Table 7.

Table 7. Paired samples statistics for the pretest and posttest scores of writing for the two groups

Groups			Mean	N	Std. Deviation	Std. Error Mean
Control	Pair 1	Pretest scores	14.6000	14	1.80351	.40328
		posttest scores	15.8000	14	1.08094	.24170
Experimental	Pair 2	Pretest scores	14.4000	14	1.62707	.36382
		posttest scores	17.7500	14	1.14133	.25521

The mean score of the control group progressed from (M = 14.60) in pretest to (M = 15.80) in posttest; that of the experimental group for the writing test improved from (M = 14.40) in pretest to (M = 17.75) in posttest. In order to investigate if these differences between pretest and posttest scores of the writing were statistically significant, the statistical paired samples t-tests were run to the results of pretest and posttest of writing for the two groups. The results are represented in Table 8.

Table 8. Paired samples T- test for the pre and posttest of writing for the two groups (Paired differences)

	Groups	Mean	SD	Std. Error Mea	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
					Lower	Upper			
Control	Pretest scores - posttest scores	-1.20	1.37	.306	-1.84	-.55	-3.91	19	.001
Experimental	Pretest scores - posttest scores	-3.35	1.77	.395	-3.17	-1.52	-5.93	19	.000

As depicted in the Tables 7 and 8, both groups had progressed in the posttest of writing. Based on the results of paired samples t-tests, this improvement was statistically significant for both the control and experimental group ($P \leq .05$). In other words, the experimental and control groups made an advancement in the posttest of writing. However, the mean difference between pretest and posttests for the experimental group was (3.35) points that was highly noticeable for the writing test. In contrast, the mean difference between pretest and posttests for the control group amounted to (1.20) that was not noticeable compared to the advancement of the experimental group.

4.6 Results of Research Question Testing

It was found that dynamic assessment procedure had statistically significant effect on Iranian EFL learners' writing ability. In addition, based on the results of paired samples t-test, both groups progressed in the posttest of writing. This improvement was, however, statistically significant for the experimental group that received dynamic assessment procedure of writing instruction ($P \leq .05$). Therefore, the research null hypothesis was rejected suggesting that dynamic assessment procedure has a statistically significant effect on Iranian intermediate EFL learners' writing ability. In fact, statistically significant differences were found between the control and experimental group. Since the two groups were homogeneous in terms of their writing ability at the beginning of the study, these differences between the two groups at the end of the study must be due to the specific treatment (i.e., dynamic assessment procedure) to the experimental group. In other words, the findings suggested that the experimental group who received dynamic assessment procedure outperformed the control group who received conventional instruction of the writing skill in posttest and the progress within the group for the experimental group was higher than that of the control group. The findings emphasized the advantage of providing EFL learners with dynamic assessment procedure rather than conventional method of writing instruction for improving their writing ability.

5. Discussion

The present research aimed at investigating the impact of dynamic assessment procedure on writing ability of the Iranian pre- intermediate EFL learners. According to the results of the statistical analysis, the participants' overall performance on writing was poor before the study; the overall low means on the pretest of the groups assumed that the participants were not good at writing skill in general. However, the experimental group displayed different behavior on the posttest. That is, the participants' writing ability improved significantly after the intervention program.

In other words, there was a significant difference between the performance of the learners in the experimental and control group. The findings showed that the experimental group outperformed the control group. Therefore, regarding the research question, the results indicated that there was a significant difference between the mean score of the groups.

The results of current study are mostly supported by the literature in the field. In some cases, the findings are opposed by some studies. For example, the findings are in line with the findings of Cheng and Warren (2005) who attempted to study the advantages of dynamic assessment procedure in English language programs for undergraduate engineering students attending a university in Hong Kong who were asked to assess the English language proficiency of their peers. The results of their studies yielded that the students could score their peers' language proficiency in a similar fashion to teacher-assessment based on the same assessment criteria.

However, the study conducted by Javaherbakhsh (2010), which investigated the effect of 73 Iranian advanced level learners' assessment on their performance in writing in English showed that the assessment treatment administered to the experimental group had a significant effect on the learners' performance on the posttest of writing. This finding is in line with the finding of the present study as in the present study, the students in the dynamic assessment group were the better in the writing skill compared to the learners in the control group. Regarding dynamic assessment procedure versus conventional method of writing instruction in the present study, the finding of the current study is supported by Storch (2005) who studied the effectiveness of collaborative writing on L2 argumentative essays. Her study analyzed both the final product of their writing task (in terms of fluency, accuracy and complexity) as well as the nature of interaction during the task. The results of her study revealed that collaboration among team members led to many opportunities for idea exchanging and peer feedback that resulted in the outperformance of the peer group in the study.

Accordingly, the study done by Wigglesworth and Storch (2009) to investigate the advantages of dynamic writing assessment in second language contexts among 48 pair writing groups in a number of measures support what was found in the present study. Their study compared and contrasted the writing scripts produced by learners working in pairs based on dynamic assessment procedure with those of learners working individually in under the teacher's conventional method. The results of their study revealed that the group in dynamic assessment procedure reported a positive effect on accuracy as compared to the control or conventional group. Another study that supports the findings of the present study and partly opposes it is done by Chang et al. (2011). They investigated the consistency and difference of teacher-, student self- and peer-assessment among 72 senior high school students in the context of web-based portfolio assessment.

The students carried out portfolio creation, inspection, self-, and peer-assessment. There were significant differences in the results of the three assessment methods. The results of self- and teacher-assessment were discovered to be consistent. They concluded that the teacher- and self-assessment outcomes reflect student achievements appropriately and hence had sufficient validity. Therefore, when self-scoring and peer-scoring are considered in determining semester grades, self-scoring should weigh more. In the study done by Boumediene, Berrahal, and Harji (2016), the effect of the dynamic assessment procedure on writing ability of third year foreign languages learners enrolled at a secondary school in Algeria was investigated. Like the findings of the present study, the findings of the study exhibited a remarkable improvement in English writing performance of the experimental group that received dynamic assessment strategies. Indeed, their study indicated a significant increase in the group's use of writing processes as a result of the dynamic assessment procedure. They concluded that the dynamic assessment model is an effective instructional strategy as well as an evaluation tool. Further, it promotes the learners' English writing performance by focusing efforts on writing products as well as writing processes.

6. Conclusion

This study used a quantitative method to study the effect of dynamic assessment procedure on the Iranian intermediate EFL learners' writing ability. The results of data analyses showed that the experimental group improved significantly from the pre-test to the post-test. It is concluded that the dynamic assessment procedure is more efficient in teaching writing than the traditional method. Based on the findings of the present study, it can be concluded that dynamic assessment procedure enhances L2 writing, and it brings a shift in students' roles from passive learners to active participants and a change in using learning strategies as a result of engaging in dynamic assessment procedure. Furthermore, dynamic assessment procedure is gaining momentum and playing more significant role in language teaching. Students need to collaborate to know their own abilities and how much improvement they are making and what they can do with the abilities they have achieved. As far as education is concerned, students' awareness of their own performance is really important. It goes without saying that dynamic assessment procedure performs a crucial role in language learning and the use of alternative assessment has become a growing trend in L2 learning instructions.

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