Portfolio Assessment and EFL Learners' Writing Ability: Does Self-Regulation Have a Role to Play?

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Abstract

Due to the scarcity of quantitative studies as to the effect of portfolio assessment on EFL learners' writing performance and the significant impact of the interaction between portfolio assessment and self-regulation strategy, the present study aimed to explore whether portfolio assessment has any notable effect on improving Bachelor of Arts (BA)English as a foreign language (EFL) students' paragraph writing ability and whether this effect differs within high/low self-regulated learners or not. To do so, 60 intermediate female students were chosen out of 145 learners through the administration of a standard version of the Oxford Placement Test (OPT). The participants were randomly assigned to one control (30 participants) and one experimental group (30 participants). The experimental group was assigned into two groups of high and low self-regulated learners, (15 participants for each group), based on Magno's (2009) Academic Self-regulated Learning Scale (A-SRL-S) questionnaire. Participants of the control group were taught and assessed based on traditional teaching and assessment, whereas those in the experimental group were taught and assessed via portfolio-based instruction and assessment techniques. The analysis of the results of the study revealed that portfolio assessment has a significant effect on improving writing ability (p=0.001). The results also showed that high self-regulated learners have taken more advantage of portfolio assessment than the low self-regulated ones (p = 0.000). The results obtained from the present study can have beneficial contributions to teaching, curriculum development, and testing.

Keywords: portfolio assessment, high/low self-regulation, writing ability, EFL learners

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INTRODUCTION

Writing is one of the most difficult language skills to master in EFL contexts (Rattanadilok Na Phuket & Othman, 2015; Watcharapunyawong & Usaha, 2013). Kukurs (2012) believes even native speakers fail to master creating and arranging ideas and also converting these ideas into meaningful words and texts. The development of curriculum and instruction practices in teaching resulted in the increasing use of learner-centered communicative trends in the classroom. These trends, including process writing, process reading, communicative competence, and whole language (Hassaskhah & Sharifi, 2011), are distinguished from previous practices due to their emphasis on language function and meaning and the process of learning.

With the shift of thought on the nature of writing from product to process approaches, new approaches required to evaluate learners' writing ability. These techniques have been named as alternative or valid strategies for writing evaluation (Tabatabaei & Assefi, 2012). In expansion to the two labels for these new strategies for assessment, different marks, for example, casual assessment, coordinate assessment, performance assessment, and illustrative assessment have been utilized (Javaherbakhsh, 2010). One sort of valid assessment is portfolio assessment. Foreign language teaching and learning is one of the regions where portfolio assessment is being used. Proponents of the process approach to writing believe that conventional assessment methods are frequently incongruent with English as a Second Language (ESL) classroom writing rehearses. The standardized written test given toward the finish of the school term is viewed as especially a direct opposite to the process way to deal with writing (Berimani & Mohammadi, 2013)

The skill to write proficiently is becoming more and more important and the instruction of writing is believing to have an increasing function in the second language (L2) teaching context (Chelli, 2006). Farhady, Jafarpour, and Birjandi (2006) believe that there is a close relationship between language teaching and testing, and it is not possible to work either

without taking the other into account. Assessment of the development of writing is similarly turning into the worry of the specialists in the field. According to Wiliam and Thompson (2008), one of the methods that integrate teaching with assessment and testing is portfolio assessment. The basic elements of portfolio assessment are teachers' given feedback, peer assessment, and self-evaluation. The development of portfolio evaluations haves been roused to some reach out by a craving to align writing evaluation with present psychological and social perspectives of writing (Hassaskhah & Sharifi, 2011; Graziano-King, 2007; Virgin & Bharati, 2020). Likewise, new comprehension of the learning process demonstrates that evaluation and learning are firmly fixing to each other. These new patterns of language evaluation should be joined into classroom-based evaluation rehearses (Ghoorchaei, Tavakoli, & Nejad Ansari, 2010).

According to Graham (2006), skillful writing is one of the most important factors for learners' academic achievement. Understanding how learners manage to self-regulate text composing and to distinguish the strategies they utilize to initiate and control their academic writing activities is an essential factor for learners' academic success. Students use various techniques to manage their actions in facing writing, from general cognitive strategies—such goal setting, planning, and revising—to contextual and behavioral strategies –such as environmental structuring, and in seeking social assistance (Harris, Santangelo, & Graham, 2010).

The learning strategies construct includes three main kinds of scales: cognitive, meta-cognitive, and resource management strategies. Similar to Schunk's (2005) definitions of meta-cognitive and cognitive processes in self-directed learning, cognitive strategies emphasize on learners' use of techniques by which they process information or knowledge gained from written or spoken text. Meta-cognitive strategies include the strategies that learners use to monitor or manage their cognition, such as goal planning or the controlling of one's comprehension. They are assessed by two subscales: planning and monitoring. Resource management refers to one's ability to control time, effort, or resources, and is assessed

by four subscales, which are time and study environment, management, effort management, peer learning, and help-seeking (Pintrich, Smith, Garcia, & McKeachie, 1993). The learning strategies construct is associated with performance or preferred control stage and self-reflection stage in a three-step self-regulation cycle, proposed by Zimmerman (2000). Zimmerman & Schunk (2011) defines self-regulated learning as an active process, whereby individuals set goals to handle and control emotions, thoughts, and behaviors for learning, a process which is determined by the context where learning takes place.

Zimmerman and Kitsantas (1999) presented self- regulation in writing. In their study, the learners who shifted in their writing revision activity from process to outcome goals outperformed the learners who focused on outcome goals in their writing. After Zimmerman and Kitsantas's (1999) study, few studies have addressed self-regulated strategies in writing (Hauth, 2012).

No studies have addressed the interaction between portfolio assessment and self-regulated learning. Despite its potential benefit to learners, using writing portfolios is not much popular in the Iranian language learning context. Learners are usually given numerical grades for their end of term writing assignments, which may not indicate their writing ability properly. Thus, the focus of the current study was to investigate the effect of portfolio assessment within high and low self-regulated learners' writing ability. Besides, the researchers aim to reveal whether this possible effect differs within high or low self-regulated learners. As a result, this investigation helps to enhance our understanding of the suitability of portfolio assessment for learners of these two proficiency levels and whether this way of assessment inspires them toward autonomy and self-regulation.

LITERATURE REVIEW
Portfolio Assessment

The discrepancy between what is required and what is derived from traditional forms of assessment and even standardized testing has triggered L2 scholars to explore alternatives. One of these options is portfolio assessment, which is considered as "a viable alternative to standardized testing" (Moya & O'Malley, 1994, p. 13), is accepted more widely by students (Reardon, 2017), and is one of the "commonly employed alternative assessments in EFL/ESL classrooms" (Al-Mahrooqi & Denman, 2018, p. 4853). Several researchers have studied the effectiveness of using portfolio assessment instrument. Hedge (2000) believed that portfolio assessment is viewed as a more comprehensive portrait of learners' writing skills. Elahinia (2004) studied the impact of portfolio assessment on Iranian EFL writing achievement and he concluded that portfolio assessment had a significant positive impact on the writing performance of English language learners. A portfolio assessment can also be used to provide a description of learners' extent of knowledge as well as their learning experiences (Gámiz-Sánchez, Gallego-Arrufat, & Crisol-Moya, 2016). Another importance of portfolio assessment is that after self-evaluating themselves, learners will be able to gain an understanding of their learning style; subsequently, they attempt to flourish it and gain independence in their learning (Gipps, 1997). Portfolio assessment is not just limited to real classroom settings; it has found its way in virtual classes as well and it might even become more popular in the future (Chang, 2008).In addition, not only do portfolios focus on writing as a product, but they show its process as well; which is why they received much interest from teachers at the outset of its introduction (Hirvela & Sweetland, 2005). Furthermore, portfolio assessment can be used in writing classes to reduce and remove the teaching-testing incoherence (walker & Perez Riu, 2008), prevailing in most writing classes. Using this way of assessment in classes also helps to enhance students' achievement in writing ability.

In the context of Iran, different scholars have considered portfolio assessment. For example, because of the scarcity of quantitative studies concerning the effectiveness of portfolio assessment on EFL learners' writing ability, Roohani, and Taheri (2015) underscored an urgent need for more systematic research in the area. The current study attempts to further study the area of portfolio assessment, which has so far yielded conflicting findings. In another example, Fahed Al-Serhani (2007) studied the effectiveness of portfolio assessment on language learners' writing skills in general and the production skills of purpose, content, organization, vocabulary, sentence structure, and mechanics in particular, and he found a positive relationship between them. In a similar vein, Ghoorchaei, Nejad Ansari, and Tavakoli (2010) investigated the effectiveness of portfolio assessment on Iranian EFL learners' writing performance. They compared two groups in their study; one experimental group that was taught and assessed through a portfolio and a control group that was taught based on the traditional trends of teaching writing. The findings suggested that portfolio assessment empowered students' learning of writing. They provided both quantitative and qualitative data.

To investigate the effectiveness of portfolio assessment on the improvement of writing ability, Hassaskhah and Sharifi (2011) tried a time-series design. They used a traditional-based instruction in the first half of the semester, and a portfolio-based instruction in the second half, with five pretests and five posttests. The result of their study showed that there is a close relationship between teaching and testing, and the portfolio has a positive effect on learners' writing performance.

Besides, Moradan and Hedayati (2011) have the effectiveness of portfolio assessment on Iranian EFL learners' writing skills. They came to this conclusion that there is a significant difference between the performance of the two experimental groups and that of the control group on the post-test. Likewise, Roohani and Taheri (2015) have done an investigation on the effect of portfolio assessment on EFL learners' expository writing improvement and found that the participants in the

experimental group outperformed those in the control group in terms of their expository writing ability in general, and the sub-skills of focus, support, and organization in particular.

Self-Regulated Learning

According to Panadero (2017), self-regulated learning (SRL) includes some very important aspects of learning, among which one can refer to the cognitive, meta-cognitive, behavioral, motivational, and emotional/affective aspects. "It is, therefore, an extraordinary umbrella under which a considerable number of variables that influence learning (e.g., self-efficacy, volition, and cognitive strategies) are studied within a comprehensive and holistic approach. For that reason, SRL has become one of the most important fields of research within educational psychology" (Panadero, 2017, p. 1). The present study draws upon the model presented by Zimmerman (1986). Regarding the effect of self-regulation on the learning context, several studies have been done. Zimmerman and Martinez-Pons (1986) conducted a study in which they examined the effect of self-regulation strategies on a group of students, and they seek to examine the relationship between the use of self-regulation strategies and educational achievement. Among 80 students who participated in the study, two groups of the study were formed; 40 high achievement learners, and 40 low achievement learners. Results have revealed that from the 14 types of strategies for self-regulation, the high achiever group indicated significantly greater use of these strategies than the low achiever group in 13 of the 14 strategy types. Moreover, the results indicated that the high achiever participants relied more on social sources for assistance compared to the low achiever ones, particularly by seeking social assistance from their teachers, peers, and other adults.

Hauth (2012) investigated the effect of self-regulating strategies on the academic area of writing. Participants were also evaluated on their strategy knowledge and social validity. The findings of his study indicated that all participants progressed in their writing measures of length, quality,

sentences, and paragraphs. Moreover, strategy data showed that all participants learning the essay strategy enjoyed using this strategy and reported seeing the usefulness of continued strategy use.

Nash-Ditzel (2010) studied the impact of teaching strategies based on self-regulation and reading techniques on the learners' reading ability. He found that the teaching techniques used in the study could significantly promote the learners' reading ability. He further proved that the knowledge and ability to use reading strategies help learners to self-regulate while reading.

Kaplan, Lichtinger, and Gorodetsky (2009) conducted a study on the use of 14 self-regulated writing strategies between 211 participants from different educational centers. To assess students' strategy use, the authors designed a self-report questionnaire. Their questionnaire included meta-cognitive, motivational, and behavioral strategies for writing. They found that contextual features made use of special techniques more related to learners' goal orientation for engagement. By the same token, the findings of Muhammad and Abu Bakar (2015) revealed that there is a significant relationship between self-regulated-learning and academic progress among undergraduate learners in Malaysia. They also found that self-regulated learning significantly improves educational progress. The present research seeks to find a link between portfolio assessment and EFL learners' writing ability via a possible role played by self-regulation.

Writing proficiently in a second language would require more and higher cognitive skills to be able to write well. Kellogg (2001) expressed that the process would involve a test of a person's memory, language repertoire, and thinking ability simultaneously. He continued that it demands rapid retrieval of domain-specific knowledge about the topic from long-term memory. This process mainly begins with understanding the topic to write about and processing it to be translated in the second language then convert this knowledge to meaningful words. The framework of Kellogg (2001) also reveals the same direction of the trend of learning towards self-regulation. Before the writing task is regulated through

strategies, the writer requires to have a deep understanding of the conceptualization of what to write about. The current study would like to introduce the direction of the learning approach to self-regulation in the context of paragraph writing in English.

Being able to write skillfully is becoming more and more important, and writing instruction is believed to have an increasing role in second language education context (Chelli, 2006). Likewise, the assessment of the construct of writing is becoming the concern of the researchers in the field as well. The advent of portfolio assessment as a direct method of writing assessment has been stimulated to some extent by a hope to bring writing assessment in line with new cognitive and social views of writing (Graziano-King, 2007; Hassaskhah& Sharifi, 2011). Also, a new understanding of the learning process indicates that evaluation and learning are closely linked to each other. These current approaches to language assessment need to be integrated into classroom-based tests and evaluations (Ghoorchaei, et al., 2010). The main weak point of the traditional method was that they just focused on writing as a product, while alternative assessments emphasized both product and process. That is why portfolios gained prominence among teachers when they were introduced (Hirvela & Sweetland, 2005).

PURPOSE OF THE STUDY

The overall objective of this study is to determine the effectiveness of portfolio assessment on the improvement of Iranian BA EFL university students' paragraph writing ability. The participants of the study were divided into high and low self-regulated ones based on their self-regulation level to see whether this effect differs within high and low self-regulated learners or not.

In light of the above discussion, this study attempted to investigate the following research questions (RQ):

1. Does portfolio assessment have any significant effect on Iranian BA EFL university students' paragraph writing ability?

2. Does the effect of portfolio assessment on Iranian BA EFL university students' paragraph writing ability differ within high/low self-regulated learners?

Accordingly, the following null hypotheses were formulated: $H0_1$: Portfolio assessment does not have any significant effect on Iranian BA EFL university students' paragraph writing. $H0_2$: The effect of portfolio assessment on Iranian BA EFL university students' paragraph writing ability does not differ within high/low self-regulated learners.

METHOD
Participants
After administrating the Oxford Placement Test (OPT) among 145 Iranian BA EFL students and analyzing the collected data, 60 participants were chosen for the study. The participants of the study were intermediate female BA university students majoring EFL in at Islamic Azad University, Sari Branch, Mazandaran, Iran. They were all sophomores and ranged from 20 to 26 years in age. They were randomly assigned to one control (30 participants) and one experimental group (30 participants). The participants of the experimental group were given a questionnaire to differentiate between high and low self-regulated learners. Based on their performance on the questionnaire of Magno's (2009) Academic Self-regulated Learning Scale (A-SRL-S), they were assigned into one high and one low self-regulated learner groups,15 participants for each group.

Instrumentation
The proficiency test
Oxford Placement Test (version one) was administered to make sure the participants were relatively homogeneous regarding their second language proficiency. The test includes 60 items, measuring the skills of listening, grammar, vocabulary, and reading. As its name suggests, it aims to place participants in suitable programs, according to their true level of English proficiency. Regarding the target age, this test can be used to check

university-level students. It has been designed in such a way that its degree of difficulty increases through the test, but generally, it can determine students' levels from beginner to advanced. Although the test can be delivered both via the Internet and through paper, the study utilized the paper format. The participants were given 30 minutes to answer the items. To estimate the reliability of the test, Kuder-Richardson Formula 20 was used based on 50% of all participating students. The results indicated the reliability coefficient of .90, which, based on Piedmont (2014), shows the homogeneity of the test.

A Writing Test
To identify the ability of the participants in writing, a test of writing was given to them as a pretest. It was a written test in which the participants were asked to write about a topic that was developed by the researcher. The same writing test, which once given to students as a pretest (a teacher – made writing test), was given to the students as a post-test.

Writing Test Criteria
In this study, the ESL Composition Profile (Jacobs, et al., 1981) as a reliable rating scale was used to score the students' writings. In this scale, the composition profile is used to score the students' performance on writing components. The writing assignments were rated on these components. The rubric includes five different parts, each of which focuses on an area of learners' writings. The first part gives criteria for assessing the content of writings. The second part introduces criteria for scoring the writing assignments based on their organization such as being well-organized, having logical sequencing, and fluent expression. The third part has some criteria for the assessment of the writings' vocabulary. The last two parts represent products to evaluate the learners' writings based on the use of language and mechanics.

Academic Self-regulated Learning Scale (A-SRL-S)

Academic Self-regulated Learning Scale (A-SRL-S) was taken in order to discriminate high self-regulated learners from low self-regulated ones. The A-SRL-S was developed by Magno (2009), according to the model of Zimmerman and Martinez-Pons (1986). The A-SRL-S is a questionnaire includes 55 items that measure learners' academic self-regulation under seven subscales: Memory strategy, goal-setting, self-evaluation, seeking assistance, environmental structuring, responsibility, and organizing. The instruction to fill the questionnaire was modified to reflect activities on paragraph writing in English.

Data Collection Procedure

The researcher administered a writing test as a pretest in both control and experimental groups. It was a written test in which the students were asked to write about a topic that was developed by the researcher. The participants' writings were rated by 2 raters.

The control group received conventional writing instruction, whereby the teacher made all of the decisions and the participants had to follow up on the trend by the teacher. Then, the participants were asked to write a paragraph on the topic taken from their coursebook. Their performance was rated based on the scoring profile of Jacobs al. (1981), and then the rated paper was given back to the learners.

The participates in the experimental groups (15 low and 15 high self-regulated learners) were taught and assessed based on portfolio assessment. At first, the participants were informed of the nature, purpose, benefit, and the design of the portfolio assessment. The participants were taught based on their coursebook, and then they were asked to write a paragraph on the topic given from their coursebook. The learners' performance was rated and given back to them, the participants were asked to reflect on their writing based on the feedback they received, after 10 minutes of self-assessment or peer assessments, and finally, they were asked to revise their writing based on the received feedback and resubmit their assignments.

The researchers took a copy of the learners' writing paper and prepared a file to keep the copies of learners' writing in order, both the draft and the revised paper. The participants were also asked to prepare such a file for themselves and put all their assignments in order, and reflect their writings based on the given feedback.

After twelve sessions of instruction, the groups of the study -the control and the experimental groups- were given writing post-test. The post-test was rated by 2 raters based on the scoring profile of Jacobs al. (1981).

Data Analysis

To analyze the collected data, a set of statistical tests was performed. Shapiro-Wilk test of normality was performed to test the normality of the collected data in the pretest and posttest; therefore, the Kruskal-Wallis H test was also used as it was found to be an appropriate test for mean comparison of the writing pretest scores of the two groups. Then, to analyze the collected data in the posttest, Mann-Whitney U Test was used for the comparison of the writing scores of the control and the two experimental groups; portfolio assessment in high self-regulated learners, and portfolio assessment in low-self regulated learners.

RESULTS
Comparing the Pretest Scores of the Control and Experimental Groups

In order to prove that the assigned groups were homogenous in terms of their writing ability, the pretest scores of the two groups were compared to each other. To choose the appropriate test, the test of normality was run for the pretest scores of the two groups.

Table 1: The test of normality for the writing pretest scores of the two groups

	Shapiro-Wilk		
	Statistic	df	Sig.
Control Group Pretest	.769	30	.000

Portfolio Group Pretest	.741	30	.000

The result of the Shapiro-Wilk test of normality in Table 1shows that the data were not normally distributed for the two groups of scores (p<.05). Therefore, the suitable test to compare the means would be the Kruskal-Wallis H test, which is a rank-based nonparametric test (Vargha & Delaney, 1998) and "a non-parametric equivalent of one-way ANOVA" (Lim, Tripathi, & Tang, 2020, p. 4). The descriptive statistics of the two groups are shown in Table 2.

Table 2: Descriptive statistics for the writing pretest scores of the two groups

	N	Min	Max	Mean	Std. Deviation	Variance	sig.
Control Pretest	30	52.00	67.00	61.5000	4.26493	18.190	.08
Portfolio Pretest	30	50.00	67.00	61.8333	4.17780	17.454	.07

Based on Table 2, the mean scores for the control and experimental or portfolio groups are 61.50 and 61.83 respectively. The writing pretest scores of the learners in both groups were significantly different from each other (p>.07), indicating that the learners were at the same level of proficiency at the outset of the program. The next table shows the result of the inferential test.

Table 3: The result of the Kruskal-Wallis H Test

	Pre-scores
K-W H	6.433
Df	1
Asymp. Sig.	.092

According to Table 3, there were no significant differences between the groups in terms of their writing ability because the observed value (p=.092) was higher than the critical value (Sig=.000), (X^2 = 6.43, p>.05). Accordingly, the two groups were homogenous in terms of their writing scores.

Comparing the Post-test Scores of the Control and the Experimental Groups

Before comparing the two groups on their posttest of writing, the researchers checked the normality to choose the appropriate test. The result of the Shapiro-Wilk test of normality showed that the data are not normally distributed for the two groups of scores (p<.05). Thus, a suitable test for mean comparison would be the Mann-Whitney U test. The descriptive statistics of the two groups are shown in Table 4.

Table 4: Descriptive statistics for the writing scores of the control and the portfolio groups

	N	Min	Max	Mean	Std. Deviation	Variance	sig.
Control Post-test	30	52.00	67.00	61.9667	3.50845	12.309	.06
Portfolio Post-test	30	54.00	79.00	64.3333	4.22091	17.816	.00

The mean and standard deviation of the control and experimental groups are 61.96, 3.50, and 64.33, 4.22 respectively. Table 4 demonstrates that the portfolio group outperformed the control group significantly (p<.00), which shows that the portfolio assessment had a significant influence on the participants' writing ability.

Table 5: The result of the Mann-Whitney U test for the comparison of the writing scores of the control and the portfolio groups

	Post-scores
Mann-Whitney U	316.500
Wilcoxon W	781.500
Z	-2.001
Asymp. Sig. (2-tailed)	.045

According to Table 5, the portfolio group performed significantly better on the posttest of writing than the control group did (U=316.50, p< .05). Hence, the results safely reject the first null hypothesis that portfolio

assessment does not have any significant effect on Iranian BA EFL university students' paragraph writing.

As it is proved above, portfolio assessment had a significant effect on Iranian BA EFL university students' paragraph writing ability. Then the researchers aimed to examine whether this effect differs within high and low self-regulated learners. The descriptive statistics of the two groups are shown in Table 6.

Table 6: Descriptive statistics for the paragraph writing scores of the high/low self-regulated learners

	High_Low	N	Mean	Std. Deviation	Std. Error Mean	sig.
Portfolio Post-test	high	15	67.0667	3.99046	1.03033	.00
	low	15	61.6000	2.22967	.57570	.08

The mean and standard deviation of the high and low groups are 67.06, 3.99, and 61.60, 2.22 respectively. Table 6 also indicates the significantly better performance of high self-regulated learners compared with the low self-regulated ones (p<.00). This means that self-regulation has a role to play in enhancing Iranian EFL learners' writing ability. In order to compare the two groups together, the Mann-Whitney U test was run.

Table7: The result of the Mann-Whitney U test

	Portfolio_post
Mann-Whitney U	2.500
Wilcoxon W	122.500
Z	-4.608
Asymp. Sig. (2-tailed)	.000

Based on Table 7, there was a statistically significant difference between the high and low groups on their posttest of writing who received the portfolio assessment (U=2.5, p<.05). Therefore, the second null hypothesis, stating that the effect of portfolio assessment on Iranian BA EFL university

students' paragraph writing ability does not differ within high/low self-regulated learners, was rejected.

DISCUSSION

This research was conducted to examine the effectiveness of portfolio assessment on high/low self-regulated Iranian BA EFL university students' writing ability. To this end, the researchers conducted the present research and followed statistic routines and came up with the result that was elaborated comprehensively in the previous section.

By posing the first research question, the researchers sought to prove the effectiveness of using portfolio assessment on language learners' writing skill. As it is stated, portfolio encourages students to improve their participation and autonomy by allowing them to select their own work to take control of revision and providing them an opportunity to make substantive revision and to be granted the time to progress as writers, to take risk with their work and to seek advice from peers (Hassaskhah & Sharifi, 2011).

Comparing the post-test of the control and experimental groups revealed that there was a significant difference between the performances of the two groups. No notable difference was found in the pretest and posttest of the control group, who received traditional assessment. The data provided in Table 5revealed that on the posttest of writing the portfolio group significantly outperformed the control group.

Analyzing the data of the second research question revealed a significant difference in performance of high and low self-regulated learners. There was a statistically significant difference between the high and low groups on their posttest of writing who received the portfolio assessment. Therefore, the results proved that the learners' learning strategy – in this case being high self-regulated– has a very significant effect on how much the learners benefit from portfolio assessment.

Furthermore, although portfolio assessment had a positive influence on both high and low self-regulated learners writing course achievement,

analyzing the results indicated that the mean score of high self-regulated learners was higher than the mean score of low self-regulated learners. This shows that high self-regulated learners outperformed low self-regulated ones in the post test of writing. Accordingly, we can conclude that high self-regulated learners took more advantage of portfolio assessment than the low self-regulated ones. The results are in accordance with Roohani and Taheri's (2015) findings, which stated that the portfolio practice, compared with traditional program, enhanced the students' expository writing ability in terms of the sub-skills of focus, support, and organization.

Fahed Al-Serhani (2007) proved that portfolio assessment not only enhanced learners' writing performance, but also it improved the product skill of purpose, content, organization, vocabulary, sentence structure, and mechanics. Thus, the results of their study are in line with the results of the present one as well. In addition, the results of the study also support the findings of Elahinia, (2004), who studied on the effect of portfolio assessment on Iranian EFL learners' writing achievement and the students in experimental group outperformed those in control group on writing test given at the end of the study. As a result, she concluded that portfolio assessment improves the language learners' writing performance.

The results of the first research question proved that portfolio assessment helps learners to enhance their writing ability, and the results of the second research question proved this effect differed within high and low self-regulated learners. In other words, learners' learning strategy, and in particular, self-regulation strategy and their level of self-regulation strategy influenced how much the learners benefit from portfolio assessment, and high self-regulated learners took more advantage of portfolio assessment in improving their writing ability. Despite the differences in the skills covered, the results of this study can extend the finding of Nash-Ditzel (2010), who investigated the effect of self-regulation on improving EFL learners' reading ability and proved that self-regulation instruction aimed at EFL reading comprehension significantly contributed to learners' ability to make

correct within-text inferences when they are reading and English text as their foreign language.

The results are also in line with Muhammad and Abu Bakar's (2015) findings because in their study the use of self-regulation strategies was proved to be significantly related to academic achievement.

The significant difference in the participants' performance underscores the role to be played by them in making a decision about the content to learn and warns syllabus designers not to consider them merely as knowledge recipients. According to Moya and O'Malley (1994), a single measure fails to assess the learners' academic processes, skills, and knowledge, especially in the evolution of writing ability. This was a motive to include portfolio as an alternative way of assessing learners, which resulted in improving their performance. In the same vein, the results of this study were in line with those of Roohani and Taheri (2015) who pointed out that upon the paradigm shift from traditional trends of evaluating writing tasks to alternative approaches of writing assessment, portfolio assessment has been appealing to many language teachers as a tool for evaluating and enhancing L2 learners' writing quality.

CONCLUSION AND IMPLICATIONS

The present study aimed at comparing the impact of the portfolio assessment on Iranian BA EFL university students' writing ability. In addition, it set out to explore if the possible effect would be different among high and low self-regulated learners. The findings of the first research question revealed that there was a notable difference between the results of the pre-test and post-test. Accordingly, it can be concluded that portfolio assessment has a significant effect on the writing accuracy of Iranian BA EFL students' paragraph writing ability. The results showed that utilizing portfolio assessment in the experimental group led to a better writing performance of the students in the post-test. Therefore, it can be concluded that portfolio assessment can be used not only for revising students' writing, but also for instructional purposes.

The findings of the current study have several implications for syllabus designers, material developers, and language teachers. Regarding the application of portfolio assessment, this study may be beneficial for syllabus designers because they can inspire them in designing a portfolio-based syllabus as portfolio plays an important role in engaging collaboration of the learners' opinion into instructors' decision-making. The present study proved that this approach was useful and applicable, so syllabus designers should pay attention to learners' rights to develop their own goals, suggestions, and criticism while designing syllabuses. Therefore, the findings of this study state that language syllabus should be flexible and pay attention to the students' engagement in goal setting and decision-making.

The present study can also be beneficial for material developers because they should consider learners' performance and let them manipulate and modify their writings as it makes learners capable of improving. Furthermore, the findings of this study can be of interest to language teachers. The findings can give them the insight that developing an alternative way of assessment, including portfolio assessment helps both teachers and students recognize their own weaknesses and strengths and provides revising where and when needed.

In addition, the findings of this study can be applied to all educational fields, where the goal is to make learners independent and critical thinkers. Learners can be encouraged to assess themselves, to use appropriate learning strategies, and to help themselves improve the sense of responsibility to be aware of their own learning. This conducts students to have a better understanding of meaningful learning and to be an autonomous learner.

Despite all these implications, the study may fail to be generalizable because the number of participants was limited and all of them were studying at the same university. Although the study focused on both genders in equal numbers and within one language proficiency level, other researchers are recommended to include other levels of linguistic ability,

possibly in groups with different numbers, to ensure whether the number of participants and their linguistic level can have any significant differences. While doing so, future researchers can also add an interview section to their study to enrich their results.

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