An Investigation into the Impact of Language Learning Strategy Instruction on the Less Successful Iranian EFL Learners' L2 Achievement

Hassan Soodmand Afshar[1*] iD *& Mahsa Bayat*[2]

Abstract

The present study investigated the impact of language learning strategy instruction on the enhancement of less successful Iranian English as a Foreign Language (EFL) learners' L2 achievement. To this end, 40 less successful EFL students took part in the study, 20 of whom were trained based on CALLA (Cognitive Academic Language Learning Approach) and the rest formed the control group. A complete TOEFL PBT test was administered to the 40 participants of the study to homogenize them in terms of language proficiency. The results of two independent samples *t*-tests and two separate paired samples *t*-tests indicated that explicit strategy instruction had a significant positive impact on L2 achievement of less successful Iranian EFL learners as the participants in the experimental group significantly outperformed their counterparts in the control group. The results of the current study might contribute to the educational policymakers, materials writers, syllabus designers, curriculum developers, and foreign language teachers to incorporate learning strategies in their policies, curricula, syllabi, materials, and instructional tasks if they intend to boost EFL learners' L2 achievement.

Keywords: EFL learners, language learning strategies, language learning strategy instruction, less successful learners, L2 achievement

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1. Corresponding author, Ph.D., Bu-Ali Sina University, Hamedan; *Email: soodmand@basu.ac.ir*
ORCID ID: https://orcid.org/0000-0003-1070-0249
2. MA, Bu-Ali Sina University, Hamedan

1. Introduction

Learning strategies, known as conscious notions and actions taken by learners to accomplish a learning objective effectively, have been identified as a helping tool for all language learners in general (Soodmand Afshar et al., 2010) and less successful language learners, in particular, to perform better in the long journey towards learning a foreign language (Chamot & Harris, 2019). In today's world, studying constructs that may improve the acquisition of additional languages, has received attention for enhancing the quality and outcome of language learning experiences. Among such constructs, language learning strategies can be considered as a powerful tool to develop the language learning process (Magogwe & Oliver, 2007). Griffiths (2008) maintains that language learning strategies are physical or mental activities and actions deliberately selected by the language learners with the aim of regulating their own learning.

Looking at the issue from another angle, it could be argued that more frequent use of language learning strategies can be associated with higher autonomous learning and self-regulation. According to Oxford (2017), language learning strategies are employed by learners who are agentic, self-regulated, and autonomous. Hence, it can be asserted that autonomous learners are able to use classroom learning opportunities efficiently, and are more prepared to continue their learning out of the classroom due to their strategic knowledge (Wong & Nunan, 2011).

In fact, strategic learners have the declarative, procedural, and conditional knowledge of their own learning, a high understanding of a task objective, and the competence to organize the strategies to meet the requirements of the tasks (Chamot & Harris, 2019). In this sense, it can be argued that strategies play a crucial role within the process of learning since they involve the learners directly and consciously in the learning process (Lopez-Jimenez, 2014). Thus, making foreign language learners strategically competent by explicitly instructing them how to use them is deemed essential (Oxford, 2017).

Therefore, given the significance of strategies in the process of learning in general and in the field of foreign/second language learning and teaching in particular, and drawing mainly upon Cognitive Academic Language Learning Approach (CALLA), this study was set out to investigate the effect of instructing language learning strategies specifically on L2 achievement of the less successful Iranian EFL learners' overall.

2. Literature Review

2.1. Theoretical Framework

2.1.1.Learning Strategies

Several scholars have tried to describe learning strategies in the field of education, each one probing a different facet of the concept. O'Malley and Chamot (1990), for example, regard learning strategies as the specific measures that students take in order to help them comprehend, learn and memorize new information.

Chamot (2005) mentions two main reasons why learning strategies are regarded as significant factors in the process of learning. Firstly, learning strategies can play a crucial part in gaining a clear picture of the entailed cognitive, affective, and social processes in language learning. Secondly, they can assist weaker students to become more successful language learners. Further, Oxford (2017) asserts that learning strategies, selected and used consciously, are dynamic and complex actions and thoughts taken by learners in specific contexts to organize various facets of learning for the purpose of learners' better performance of tasks, improvement of their learning processes, and enhancement of their long-term proficiency.

2.1.2.Language Learning Strategies

In an early definition, Cohen (1990) describes language learning strategies as "processes which are consciously selected by learners and which may result in actions taken to enhance the learning or use of a second or foreign language through the storage, retention, recall, and application of information about that language" (p. 4). Similarly, Oxford (1990) states that language learning strategies "are specific actions taken by the learners to make learning easier, faster, more enjoyable, more self-directed, more effective and more transferable to new information" (p.8).

However, later, these general and broad definitions were adopted and interpreted in various conflicting senses. Dörnyei and Skehan (2003) followed by Tseng, Dörnyei, and Schmitt (2006), for instance, highlighted the importance of the learners' innate capability of self-regulation. According to Rose (2012), this movement toward the self-regulation ability is not in contradiction with the essence of learning strategies. More recently, referring to the interdependency between learning strategies and self-regulation.

Given the crucial role that the language learning strategies can play in successful foreign/second language learning, they should be included in L2 education programs and explicitly instructed simply because they have been found to be teachable and attributable to success in learning (Oxford, 2017).

2.1.3. Language Learning Strategy Instruction

Language learning strategy instruction is defined as any intervention which concentrates on the strategies frequently employed and applied by language students to improve their proficiency, to enhance the performance of a specific task, or both (Hassan et al., 2005). According to Chamot (2005), language learning strategy instruction "includes the development of students' awareness of their strategies, teacher modeling of strategic thinking, identifying the strategies by name, providing opportunities for practice and self-evaluation" (p.123).

O'Malley and Chamot (1994) state that the goal of learning strategies instruction is to assist all students to become successful language learners. When students become informed of the learning processes, they will be able to regulate these processes, and will be inclined to be more accountable for their own learning.

2.1.4. Cognitive Academic Language Learning Approach (CALLA)

In this study, language learning strategy instruction is operationalized through CALLA which comprises five stages, including preparation, presentation, practice, evaluation and expansion. This learner-centered approach emerged from new understandings of the cognitive psychological perspective of learning process in 1980s and 1990s (Herrera & Murry, 2011).

The essential element of the cognitive approach is to enhance the classroom-level learning strategy use (O'Malley & Chamot, 1994). Cognitive strategies entail the manipulation of intellectual and physical material to be learned. These strategies are recognized as resources at hand that can be employed to learn a second language through initiating, repeating, grouping, deducting, elaborating, inferencing, summarizing, and some techniques like auditory representation, elaboration, keyword method, transfer, and note taking (Oxford, 2003). CALLA is explained in more detail in 3.2.3.

2.1.5. Less successful learners

Oxford (1990) believes that less successful learners are poor strategy users who

lack organized strategies with negative attitudes and beliefs toward them. Chamot (2004) argues that "less successful learners do use learning strategies, sometimes even as frequently as more successful peers, but their strategies are used differently" (p. 116). Rubin (1975) believes that less successful learners are different from their successful counterparts in terms of such factors as study habits, learning preferences, persistence and language behaviors. In addition, Anderson (2008) emphasizes the crucial role of strategy regulation, the ability that less successful learners apparently lack.

2.2. Empirical Studies

One of the first experimental studies in assessing the effect of language learning strategy instruction is the one conducted by O'Malley and Chamot (1990) in which they taught 75 ESL learners how to apply learning strategies to three various forms of tasks and whose performance was compared to the ones in the control group. A two-week period intervention for the same types of tasks was administered to the experimental group. The results of the study showed that the explicit embedded learning strategy instruction was effective. Moreover, the participants in the experimental group who were strategy-instructed performed significantly better than those in the control group in giving verbal reports presented from written memos.

In addition, Macaro (2001) studied the impact of writing strategies instruction in six classes of British secondary school students of French. The experimental group participants were subjected to five months of intervention on various types of writing strategies, including metacognitive strategies. The results revealed that the experimental group made significant progress in the grammatical accuracy of their written works. Moreover, changes in their approach to writing were reported as they had become less dependent on their teachers, more selective in their usage of dictionary, and more precise about their writing tasks.

In another investigation, Graham and Macaro (2008) explored the impact of strategy instruction on self-efficacy and listening performance of 68 lower-intermediate French learners in England. The results of the study indicated that the learners' confidence about listening and their listening proficiency were both enhanced after the instructional program.

In the same vein, Cubukcu (2008) investigated the effectiveness of strategy instruction on 130 third-year university students' reading comprehension in Turkey. The training program was provided for five weeks. The effectiveness of the instruction was explored by examining the participants' progress in reading comprehension and vocabulary. The results of the study revealed that the experimental group receiving strategy instruction showed significantly better performance than the control group.

In another study, Vandergrift and Tafaghodtari (2010) examined the impact of strategy instruction on L2 listening of 106 French as a Second Language (FSL) students. The experimental group participants were subjected to the guided attention to the metacognitive processes that underlie successful L2 listening comprising planning, predicting, evaluating, monitoring, and problem solving. The findings indicated that the experimental group participants performed significantly better compared to their counterparts in the control group on the final listening comprehension.

Moreover, Kamp et al. (2016) explored the impact of metacognitive strategy instruction on the creative generation of strategies of two groups of students in the Netherlands. The learners in the control group were subjected to the brainstorm lesson and those in the experimental group were exposed to the newly developed instruction lesson in a pretest–posttest control group design. The results of the study showed that in the experimental group, the 50-minute strategy instruction had positive effect on participants' fluency (i.e., "ways of generating many different ideas", flexibility (i.e., "thinking in many different directions") and originality (i.e., "original, unusual or infrequent ideas") (Runco, 2010, as cited in Kamp et al., 2016, p. 558).

Furthermore, Manoli et al. (2016) examined the immediate and delayed impact of strategy instruction on 99 Greek-speaking EFL learners' reading comprehension. While the control group participants were exposed to no training, a three-month strategy instruction within the direct explanation framework was administered to the experimental group of the study. It was found that the experimental group learners' reading performance was improved both in the immediate and delayed posttest conditions as compared to that of the participants in the control group.

In a more recent study, Ngo (2019) explored the changes in 27 Vietnamese

learners' listening comprehension after an eleven-week experience of strategy instruction. Most of the participants interviewed in the experimental group reported a better gain in choosing appropriate strategies in listening tasks after the strategy instruction intervention. Moreover, the findings of the study showed significant progress in the learners' listening under the intervention impact.

In another investigation, Brevik (2019) explored the impact of reading comprehension instruction and scaffolded strategy drills. In this study, 60 video recorded English as a second language (L2) lessons in Norway were analyzed based on the Language Arts Teaching Observation Protocol. Evidence revealed that the reading instruction was successful and that when English teachers prioritized instruction of reading comprehension, the authentic L2 texts were used, which was effective in developing and scaffolding critical literacy and meta-discursive awareness.

Language learning strategies instruction has also caught the attention of Iranian EFL researchers. For one, Ahmadi and Mahmoodi (2012) explored the strategy instruction effectiveness on the learners' strategy use and their English language achievement overall. The participants comprised 57 students assigned to the two groups of control and experimental. The findings of the study revealed a significant difference between the control and experimental groups in terms of strategy use. Also, a significant positive relationship was found between the participants' use of strategies and their English achievement.

In addition, Eivazi and Khoshnevis (2017) examined the impact of strategy instruction on the cohesion and writing accuracy of Iranian EFL learners. The study participants comprised 50 Iranian EFL learners. The participants in the experimental group received a 10-week instruction according to the Self-regulated Strategy Development (SRSD) model. The analyses of the writing tests of the experimental and control groups indicated a positive impact of instruction on the participants' writing ability.

In a recent study, Fathi et al. (2020) investigated the impact of listening strategy instruction on 52 Iranian EFL learners' listening anxiety, listening comprehension ability, and listening self-efficacy. The experimental group participants received the listening strategy instruction based on Yeldham and Gruba's (2014) framework. The findings of the study indicated that the

participants' listening comprehension ability was improved significantly after the intervention. However, their listening anxiety was reduced due to the listening strategy instruction. They also found that listening strategy implementation failed to enhance the participants' listening self-efficacy.

In contrast to the findings of the preceding studies, Mehrpour et al. (2012) reported no significant impact of strategy instruction on 53 Iranian pre-university students' reading performance; however, they found that implementation of strategy instruction raised the reading strategy awareness of the participants in the experimental group.

Based on what was reviewed above, it could be stated that although the bulk of the studies conducted on strategy instruction show a positive impact (e.g., Brevik, 2019; Eivazi & Khoshnevis, 2017; Fathi et al., 2020; Graham & Macaro, 2008; Manoli et al., 2016; Ngo, 2019; Vandergrift & Tafaghodtari, 2010), some others (e.g., Mehrpour et al., 2012) show no significant impact of strategy instruction which might legitimize and justify the conduct of a new study (i.e., the current study) on the topic in the EFL context of Iran to possibly resolve the contradictions observed simply because the outcome of research on factors of individual differences including language learning strategies and strategy-based instruction might be context-specific and situation-oriented.

As it was mentioned earlier, during the last century, the trends of teaching and learning foreign languages have undergone a drastic transformation. The focus of language teachers has shifted towards empowering the learners (Plonsky, 2011). Learning strategies are believed to enable students to become more accountable for their own learning and progress and are one of the most significant factors justifying individual differences in learning a foreign language (Skehan, 1989). Thus, learning strategies can be claimed to play a crucial part in successful teaching and desirable learner outcome. According to Bruinsma (2004), one of the learners' important challenges is the necessity to create appropriate learning habits and to employ proper learning strategies according to the specific academic environment.

The effectiveness of language learning strategy instruction has been extensively explored in different contexts (e.g., Cubukcu, 2008; Graham & Macaro, 2008; Macaro, 2001; Ngo, 2019; Vandergrift & Tafaghodtari, 2010, to name only a few). Although many studies (e.g., Ahmadi & Mahmoodi, 2012;

Eivazi & Khoshnevis, 2017; Fathi et al., 2020) have been conducted on language learning strategies instruction in the EFL context of Iran, to the best of the researchers' knowledge and investigation, no study could be found to have investigated the role of explicit strategy instruction in enhancing *less successful* EFL learners' L2 achievement. Moreover, the studies already conducted on language learning strategies instruction in the EFL context of Iran, have mainly dealt with specific language skills (e.g., listening, writing, reading, etc.) and not on L2 achievement overall.

Thus, to fill the search gap felt in terms of the main two reasons stated above, the present study examined the effects of strategy instruction on L2 achievement of EFL students, the findings of which might provide some practical implications and suggestions for EFL policy makers, program planners, materails developers, and educators to pinpoint the effective impact of language learning strategy instruction in increasing EFL learners' L2 achievement.

Therefore, based on what was mentioned above, the following research question was formulated for the present study:

Does language learning strategy instruction significantly affect L2 achievement of less successful Iranian EFL learners?

3. Method

3.1 Participants

The study participants comprised 40 (26 females & 14 males) less successful EFL learners within the age range of 21-30 majoring in English language translation in Payam-e-Noor university of Hamedan. The participants were selected according to convenience sampling, whose informed consent was also obtained. The learners so selected were randomly divided into two groups, namely, experimental and control groups. In fact, the participants of this study were selected from among those in a parallel large-scale study whose GPAs fell below one standard deviation below the mean that were regarded as less successful learners.

3.2 Instruments

3.2.1 TOEFL Tests

To homogenize the participants in terms of language proficiency, a complete TOEFL PBT test encompassing 140-multiple-choice items developed by Philips (2003) was administered to the 40 participants of the study. The reliability of this test was reported by Philips (2003) to be 0.95. The TOEFL scores of the participants before the treatment were also regarded as their pre-treatment score of L2 achievement. Moreover, a parallel test of TOEFL from the same source was selected and administered at the end of the strategy instruction period to the participants as their post-treatment score of L2 achievement.

3.2.2 Grade Point Averages (GPAs)

This study is, in fact, part of a large-scale parallel study that comprised 1608 participants. In order to identify successful and less successful EFL learners in the large-scale study, the total GPAs of the participants were collected from their universities. Then, the participants whose GPAs fell above one standard deviation above the mean (N=180) were regarded as successful students, and those whose GPAs' fell below one standard deviation below the mean (N=270) were regarded as less successful students. The 40 participants of the present study were thus sampled out of the 270 less successful learners in the large-scale parallel study as explained.

3.2.3 Model of strategy instruction used in the present study

In order to teach EFL learners how to use learning strategies, the researcher made use of the Cognitive Academic Language Learning Approach (CALLA) developed by Chamot and O'Malley (1994). As pointed out by Chamot and O'Malley (1994), the main aim of this five-stage instructional model is to help language learners become autonomous and also to boost the academic language learning abilities of learners specially those of limited English proficiency.

This model has five stages or phases, namely, *preparation, presentation, practice, evaluation* and *expansion.* In the first phase, i.e., *preparation,* the participants' background knowledge on their language learning experience and language learning strategies are activated (Chamot & O'Malley, 1994). In the present study, in this step, the researchers tried to identify the strategies the participants had already used to raise their metacognitive awareness about their

own learning before presenting a new strategy. For instance, a task was given to them, and they were asked to describe the strategies they used to meet the challenge, a kind of think-aloud protocol.

In the second phase, i.e., *presentation,* the new strategy is explained, and the participants are informed when and how to use the new strategy (Chamot & O'Malley, 1994). In this phase, the researchers introduced strategies to the study participants by giving the names of the strategies, explaining how the given strategy would help, and modelling them often through thinking-aloud technique.

In the third phase, i.e., *practice,* the participants practice using the new strategy (Chamot & O'Malley, 1994). In this step, the study participants got engaged in various activities (e.g., collaborated in small groups, read literature, and developed writing reports) to practice new strategies.

In the fourth phase, i.e., *evaluation,* the participants self-evaluate their own use of the new strategy (Chamot & O'Malley, 1994). After completing a task, the study participants' performance was evaluated by comparing their performance on a task completed without using strategies and a similar task in which strategies were applied, using checklists to assess their degree of confidence in using strategies, and holding debriefing discussions about how to use strategies.

In the fifth phase, i.e., *expansion,* the participants extend the practicality of the new strategy by relating it to the new tasks and activities (Chamot & O'Malley, 1994). In this phase, the researchers provided the study participants with the opportunity to convey the strategies to new tasks by the help of follow-up activities in which they applied strategies, and reflected on tasks where the newly-acquired strategies could be used.

It should be noted that the CALLA model is not linear; rather, it is recursive in nature. That is, teachers and learners always have the choice to review prior phases of instruction as required. This model improves the learning strategies in a self-evaluation phase to make the learners reflect on their strategy use before ransferring the strategies to new tasks (Chamot, 2005).

3.3 Procedure

In this study, a sample of TOEFL test was administered to a group of 40 less

successful EFL learners, identified in a large-scale study as explained earlier, whose informed consent was also obtained. The EFL learners' scores of TOEFL was considered as their pre-treatment test. The learners so selected were randomly assigned to two groups of 20 students each, namely, experimental and control groups. The experimental group participants received their treatment based on the principles of CALLA as discussed above in seven weeks through seven one-hour sessions, whereas the participants in the control group received no special explicit instruction on language learning strategies although the strategies focused on in both groups were the same. The strategies instructed were those 50 strategies included in the Strategy Inventory for Language Learning (SILL), developed by Oxford (1990). After termination of the treatment, we administered another sample of TOEFL test to the participants as their post-treatment test. We, then, compared the results of the two tests to see whether instructional intervention had any significant impact on L2 achievement of experimental group learners.

3.4 Data analysis

We ran two independent samples *t*-tests to check the participants' L2 achievement before and after the treatment. We also conducted two separate paired samples *t*-tests to check the instructional gains of the participants in both groups.

4. Results

In order to answer the research question of the study, we ran two separate independent samples *t*-tests. We conducted an independent samples *t*-test to compare the means of the two groups on the TOEFL test prior to the treatment; however, to examine the normality of the distributions, we first ran Shapiro-Wilk normality test, the results of which indicated that the P values gained for the experimental and control groups respectively (z=0.49, 0.98) were higher than the critical value (.05). Thus, the normality of the distribution for pretest scores (both experimental and control groups) was supported (Tabachnick & Fidell, 2007). Consequently, running independent samples *t*-test was legitimatized. Table 1 indicates the descriptive statistics of the pretest of the two groups.

Table 1
Descriptive Statistics of the Groups' Pretest

	Group	N	Mean	Std. Deviation	Std. Error Mean
Pretest	Experimental	20	353.25	82.14	18.36
	Control	20	357.65	79.23	17.71

As shown in Table 1, the mean and standard deviation of the experimental group in the TOEFL pretest were 353.25 and 82.14 respectively, while those of the control group were 357.65 and 79.23, respectively. Table 2 demonstrates the results of the independent samples *t*-test on the pretest of the two groups.

Table 2
Independent Samples t-test on the Pretest of the Two Groups

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% CI	
		F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	LL	UL
Pretest	Equal variances assumed	.13	.71	-.17	38	.86	-4.40	25.52	-56.06	47.26
	Equal variances not assumed			-.17	37.95	.86	-4.40	25.52	-56.06	47.26

As shown in Table 2, the difference between the two mean scores turned out not to be significant (*t*=.38, *P*=.86>.05), which implies that there was no significant difference between the L2 achievement of the two groups prior to the treatment. Thus, it can be stated that any difference between the two groups at the end of the study would, most probably, be due to the results of the treatment.

Following the termination of the treatment, the posttest of the study (i.e., another TOEFL test) was administered to the groups. An independent samples *t*-test was conducted to compare the means of the two groups after the treatment; however, to examine the normality of the distributions, a Shapiro-Wilk normality

test was conducted, the results of which revealed that the P values gained for the experimental group (z=0.85) and the control group (z=0.98) were higher than the critical value (.05). Thus, the normality of the distribution for posttest scores (both experimental and control groups) was supported (Tabachnick & Fidell, 2007). Consequently, running independent samples *t*-test was legitimatized. Table 3 shows the descriptive statistics of the posttest scores of the two groups in TOEFL.

Table 3
Descriptive Statistics of Groups' Posttest Scores

	Group	N	Mean	Std. Deviation	Std. Error Mean
Posttest	Experimental	20	425.65	68.77	15.37
	Control	20	358.35	78.27	17.50

As indicated in Table 3, the mean and standard deviation of the experimental group in the TOEFL posttest were 425.65 and 68.77 respectively, while those of the control group were 358.35 and 78.27 respectively. Table 4 shows the results of the independent samples *t*-test on the TOEFL posttest of the two groups.

Table 4
Independent Samples t-test Comparing the Posttest Scores of the Two Groups on TOEFL

		Levene's Test for Equality of Variances		t-test for Equality of Means						95% CI	
		F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference		LL	UL
Posttest	Equal variances assumed	.19	.66	2.88	38	.006	67.30	23.30		20.13	114.46
	Equal variances not assumed			2.88	37.38	.006	67.30	23.30		20.10	114.49

As it is evident in Table 4, the variances were homogeneous (F=0.19, P=0.66>0.05), and the difference between the mean scores was found to be significant (t (38) = 2.88, P=0.00<0.001). Thus, it can be concluded that the

participants in the experimental group (M=425.65, SD=68.77) performed significantly better compared to their counterparts in the control group (M=358.35, SD=78.27).

In addition, we conducted two separate paired samples *t*-tests to check the instructional gains of the participants in both groups. Table 5 shows the descriptive statistics of the paired samples *t*-test for the two groups.

Table 5
Paired Samples Statistics Showing Instructional Gains after the Treatment

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pretest (experimental)	353.25	20	82.14	18.36
	Posttest (experimental)	425.65	20	68.77	15.37
Pair 2	Pretest (control)	357.65	20	79.23	17.71
	Posttest (control)	358.35	20	78.27	17.50

As displayed in Table 5, the mean and standard deviation of the experimental group's pretest scores in TOEFL were 353.25 and 82.14, respectively, whereas the mean and standard deviation of their posttest scores in TOEFL were 425.65 and 68.77, respectively. Moreover, the mean and standard deviation of the control group's pretest scores were 357.65 and 79.23, respectively, while the mean and standard deviation of their posttest scores were 358.35 and 78.27, respectively, which show a substantial increase in the mean score of the participants in the experimental group in comparison to that of their counterparts in the control group who showed no noticeable improvement in this respect.

Furthermore, Table 6 demonstrates the results of the paired-samples *t*-test for comparing the pretest and posttest scores of the two groups in TOEFL.

Table 6
Paired Samples t-test

	Paired Differences					T	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% CI				
				LL	UL			

Pair 1	Pretest (experimental) - Posttest (experimental)	-72.40	37.48	8.38	-89.94	-54.85	-8.63	19	.000
Pair 2	Pretest (control) - Posttest (control)	-.70	72.58	16.22	-34.66	33.26	-.04	19	.966

As it is depicted in Table 6, there exists a significant difference between the pretest and posttest scores of the experimental group concerning their L2 achievement measured by TOEFL (t (19) =-8.63, p < .05). Consequently, it can be posited that strategy instruction had a significant positive effect on L2 achievement of Iranian EFL learners in the experimental group.

Moreover, as shown in Table 6, there exists no significant difference between the participants' pretest and posttest in control group regarding their L2 achievement (t (19) =-0.04, p > .05).

5. Discussion

The study sought to explore the impact of strategy instruction on L2 achievement of less successful Iranian EFL learners. The evidence showed that explicit strategy instruction had a significant positive impact on L2 achievement of Iranian EFL learners as the participants in the experimental group performed significantly better than their counterparts in the control group. That is, the explicit learning strategy instruction and practice that the experimental group received might have most probably contributed to their higher L2 achievement. The findings of the study in this respect support the results of other empirical studies on the impact of strategy instruction (e.g., Ahmadi & Mahmoodi, 2012; Brevik, 2019; Cubukcu, 2008; Eivazi & Khoshnevis, 2017; Fathi et al., 2020; Graham & Macaro, 2008; Kamp et al., 2016; Li, 1998; Macaro, 2001; Manoli et al., 2016; Ngo, 2019; O'Malley & Chamot, 1990; Vandergrift & Tafaghodtari, 2010).

In contrast to these findings, Mehrpour, Sadighi, and Bagheri (2012) found no significant impact of the instruction of strategies on reading performance of the learners. One possible justification for these results can be due to the factors affecting strategy use. Corroborating this, Chamot (2005) maintains that strategy use depends on the context of learning and is sensitive to the learners' internal processing preferences. In other words, it could be argued that strategy instruction

might be context-dependent, learner-specific, and even associated with learners' language proficiency level and age which call for the need to do more investigations to shed more light on the issue.

Support for the finding of the study come from Vandergrift and Tafaghodtari (2010) who hold that most of the literature on strategy instruction "advocates informed strategy training—that is, making learners aware of specific strategies, demonstrating how these might be useful, and then providing conscious practice in using these strategies" (p. 487). Oxford (2001) states, strategy instructions "are aimed at 'self-management in language learning and self-reliance in language use' in other words, autonomy" (p. 1). Chamot (2004) also maintains that to have more motivated and successful students, strategy instruction should start as early as possible. Thus, it might be asserted that strategy instruction can provide learners with the necessary knowledge and tools in the learning process and L2 achievement if presented in a principled manner and at an appropriate time.

In addition, Chamot (2004) points out that a plethora of factors influence language learning strategies instruction, including raising learners' knowledge of the strategies they adopt, modelling strategic thinking by the teacher, learners' practicing of the new strategies, learners' self-evaluation of the strategies adopted, and practicing strategy transfer to new tasks. Furthermore, Chamot (2005) asserts that students should gain the capability to assess how effectively a strategy has functioned, select the strategies for the task at hand, and choose the appropriate strategies actively according to the tasks given.

Therefore, it can be argued that strategy instruction models should aim at improving effective learning, making learners autonomous, and training them in self-managed learning. Echoing this, Chamot (2005) maintains that students should learn to generalize the strategies acquired by expanding their strategic knowledge and skills which would eventually make them more competent language users. This implies that EFL learners should be made conscious of the significance of language learning strategies and the correct ways of their implementation.

Moreover, the notable role of teachers should not be ignored in instructing the learners how to use various strategies and raising their awareness of the concept. Kumaravadivelu (2001) maintains that language teachers should be asked to plan

an executable instruction considering their own educational context and their learners' requirements. Thus, it is important that EFL teachers become more active in their classrooms by making their students aware of more convenient and fruitful ways of learning, applying explicit instructions on how to adopt the strategies, and supplying the students with opportunities to practice strategies. In addition, EFL teachers should not ignore the learners' favored strategies in their teaching and, accordingly, present tasks to make learners use language learning strategies maximally.

As a result, taking into account the multiple benefits of strategy instruction, one might assert that strategy instruction is beneficial for learners specifically in enhancing their own personal growth which might consequently contribute to the learning process. In addition, teachers are recommended to inform their students on the value and usage of different language learning strategies.

Further, it might be asserted that the model (i.e., CALLA) adopted in the present study for strategy instruction is a feasible and beneficial one. As O'Malley and Chamot (1994) maintain, the CALLA model is built on a self-evaluation phase in order for the students to reflect on their use of strategies based on raising their awareness about their own strategic competences and processes and help them to adopt strategies that would enhance their language learning.

6. Conclusion and Implications of the Study

The findings of the study suggest that language learning strategy training affected the learners' L2 achievement and success. The findings provide empirical support for those of previous studies on language learning strategy instruction.

The study might yield some implications. Firstly, it is suggested that the teachers of foreign languages come to know and acknowledge the crucial role language learning strategies can play in achieving the teaching goals. The current situation of language learning strategies practice in Iran calls for the need for learners' more frequent adoption of foreign language learning strategies, especially those found in various studies, including those in the large-scale parallel study to have contributed to successful language learning. Hence, it is crucial that teachers make efforts to help students choose the most effective strategies for the given tasks as students are supposed to learn about the use of strategies which they find appropriate to accomplish various tasks in the target

language.

Secondly, Iranian EFL learners in general and less successful learners, in particular, should be exposed to strategy instruction to have more chances to drill strategies and to be encouraged to have regular progress evaluations.

Next, foreign language educational policymakers, material writers, curriculum developers, and syllabus designers are also suggested to incorporate learning strategies in their policies, materials, curricula, and syllabi by including activities that involve the actual use of learning strategies in the target language. Language learning strategies can even be taught in a separate course. Strategy-based instruction might thus help Iranian EFL learners become more active learners and provide a shortcut to the long journey of foreign language acquisition.

Further studied are suggested to investigate the issue (i.e., the impact of strategy instruction) using various instruments in mixed methods studies seeking learners' perception of strategy instruction especially in terms of such variables as proficiency level, attitude, age, gender, etc. Next, the participants in the study were selected in accordance with convenience sampling. Future studies are suggested to be conducted selecting less successful learners based on random sampling.
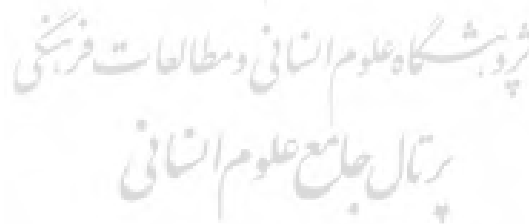
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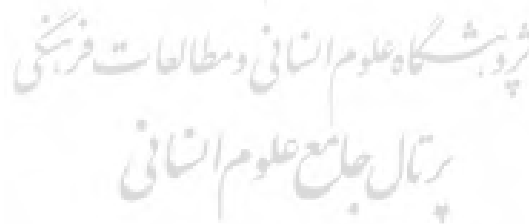
About the Authors

Hassan Soodmand Afshar (the corresponding author) is Professor of Applied Linguistics, teaching M.A. and Ph.D. courses at Bu-Ali Sina University, Hamedan, Iran. He has published extensively in both accredited international journals (e.g., *System, Journal of English for Academic Purposes, Thinking Skills and Creativity, Research Papers in Education, The Language Learning Journal, Reflective Practice, Journal of Intercultural Communication Research, Issues in Educational Research, The Qualitative Report, e-FLT*, etc.) and various local journals. His recent (2020) book chapter in Routledge series, "Thinking Skills and Creativity in Second Language Education" (edited by Li Li), has caught the attention of the readers. He is also the vice-president and a member of the Board of Directors of TELLSI (Teaching English Language and Literature Society of Iran) since 2012. Additionally, he is the Editor-in-chief of TEL journal. His research interests include teacher education, psychology of language education, language learning strategies, ESP/EAP, criticality and reflectivity, and research methods.

Mahsa Bayat is an M.A. graduate of TEFL from Bu-Ali Sina University, Hamedan, Iran. Her research interests include language learning strategies, ESP/EAP and teacher education.