

The Effect of the Self-Questioning Strategy as a Generative Learning Strategy on Iranian Intermediate EFL Learners' Reading Comprehension

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Abstract: This study examined the effect of self-questioning strategy as a generative learning strategy on the Iranian English as a Foreign Language (EFL) learners' reading comprehension performance. The participants in this study were seventy five undergraduate students from two universities, Garmsar Payame Noor University and Sabzevar Tarbiat Moallem University, majoring in English. Out of the total seventy five students, only sixty students met the criterion of scoring between two standard deviations above and two standard deviations below the mean of Teaching of English as a Foreign Language (TOEFL) proficiency test and were chosen as intermediate subjects of the current study. The selected students were pre-tested on a reading comprehension test. This resulted in thirty students at Payame Noor University and thirty at Sabzevar Tarbiat Moallem University were chosen and assigned to two groups of the experimental and control, respectively. They were given the same texts taught by the researchers during four sessions. In the control group, learners were allowed to use their own self-preferred strategies. But the experimental group was taught how to apply the self-questioning strategy. Then, both groups were post-tested on the achievement of the instructed texts. The results revealed that the use of the self-questioning strategy did have a significant effect on the readers' comprehension performance and the learners

in the experimental group outperformed the learners in the control group. Also, significant differences were found favoring the male learners in the comprehension level after using the self-questioning strategy.

Keywords: strategy, self-questioning, comprehension, intermediate EFL learner

INTRODUCTION

In the last few years, significant changes have occurred in the field of foreign language teaching. Views have changed with regards to both what should be taught – the linguistic content of syllabuses – and how we should teach – the techniques and procedures needed to transform this content into language skills. Thus, although oral proficiency is still accorded priority in most general purpose language programs, at least in the early stages, there is no longer any strong conviction that the learners should spend a long time on mastering the spoken form of the language before being exposed to its written form. *Reading* has come to play a much greater part in the program.

Reading is one of the most important skills for second/foreign language learners. It is not something that every individual learns to do. An enormous amount of time, money, and effort is spent today on teaching reading around the world. In fact, it can be said that more time is spent on teaching reading than any other skill. Furthermore, reading skills are important for being academically successful. Reading is a non-exhaustive skill because it is intimately a part of our daily existence (Nunan, 1991). It enables the learners to work at their own pace and to increase their world knowledge. It also helps them to consolidate their knowledge of the language.

There are some important reasons indicating that reading is an important factor in learning. According to Chastain (1988), one major advantage of reading is the speed of reading, which is an important psychological and cognitive variable in learning a complex and new skill which

can be controlled by language learners. The second benefit of reading is that learners can read in their own privacy. This is another important psychological variable for learners who are worried about reciting in front of other learners.

Most researchers believe that using reading strategies such as note-taking, visualization, prediction, inferring, summarization, etc. increase student's comprehension. One of the newest reading strategies is self-questioning strategy which is also known as question generation and questioning. In this strategy, students are taught how to pose and answer questions about a text while reading for better comprehension. Chin (2002) believed that student-generated questions contain substantial educational potential in directing students' learning and guiding their construction of knowledge. He asserted that students' questions, especially those posed at a higher cognitive level, can promote conceptual talks that pertain to important concepts, thereby leading to enhanced learning.

How Self-Questioning Is Viewed?

In the related literature, self-questioning has been defined as asking questions about the text and the author's intentions and seeking information to clarify and extend their thinking before, during and after reading by the student herself or himself. The Self-questioning strategy is an important reading comprehension strategy in which learners ask and answer questions about a reading text in order to comprehend and recall it better. As Taboada and Guthrie (2006) believed that self-questioning is a reading strategy in which learners attempt to comprehend and recall a reading text through asking and answering high-level questions about a reading text.

REVIEW OF RELATED LITERATURE

Comprehension strategies are very important in reading comprehension. Research shows that good readers use

comprehension strategies to facilitate the construction of meaning. Researchers believe that using such strategies help students to become metacognitive readers, so they will be able to monitor their own comprehension. One of such strategies is self-questioning. Some of the studies carried out on self-questioning, are presented below:

Thorndike (1917) advocated that “students can be guided to find the answers to give questions, or to give a summary of the matter read, or to list the questions which it answers ...” (p. 332) to comprehend a text. Students create questions, predict the answers to those questions, search the answers to those questions as they read, and paraphrase the answers to themselves. He concluded that the self-questioning strategy helps students to create their own motivation for reading.

The effect of self-questioning or generating question strategy has been most widely studied for reading of reading texts, as expository (non-fiction) and narrative texts, and in different levels such as elementary, middle, high schools, and college. The Self-questioning strategy is presented as a reading or study strategy, that is used by students individually while reading texts about specific content matter (history, for instance). Researchers agree that training self-questioning skills improves students’ text comprehension and learning performance and can be more effective than responding to teacher-made questions (Rosenshine, Meister, & Chapman, 1996). Also, Rosenshine et al. (1996) suggested that instructing self-questioning is effective in improving comprehension so that the instructional effect has been evident in students’ accuracy in answering test questions, better free recall of text, and identification of main ideas.

Some studies, such as Dunlap (1999) in the area of self-questioning, supported this idea that using questioning skills as a pre-, during, and post-reading strategy is effective to improve comprehension of expository (non-fiction) texts. He examined the writing and comprehension skills of the second grade students using the Question Answer Relationship strategy for pre-reading, during reading, and post-reading, as well as writing, and compares their progress to other second grade students not using the same strategy. He concluded that using questioning skills as a pre-, during, and

post-reading strategy is effective to increase comprehension of expository text. Also, he found that the self-questioning strategy is effective for the students, especially those who have problems with the second language acquisition.

On the other hand, the effects of self-questioning approaches have been studied less often for literature reading. A well-known study is that of Janssen (2002) in which he examined the self-questioning strategy as a means of enhancing students' understanding of texts, especially literary texts. The results indicated that self-questioning as a reading strategy enhances reading comprehension and equips readers to become more involved in the reading (particularly of literary texts) and develop deeper understanding needs continued investigation in and out of classrooms. In addition, he asserted that training students to ask questions is an advantage in reading comprehension improvement.

One investigation was designed by Davey and McBride (1986) to evaluate the effect of post-passage question generation on the elementary school students' reading comprehension performance. The finding of the study showed no interactions between reading skill and the effects of question-generation activity.

Another investigation based on the students' age and ability level is an examination of the effects of the self-questioning strategy on middle school students with below-grade-level reading comprehension skills by Nolan (1991). It demonstrated that a self-questioning plus prediction treatment is more effective for answering comprehension questions accurately among the middle school students.

According to Anderson and Briddle (1975, as cited in Anderson, 1978), the self-questioning strategy is also effective in reading prose. He suggested that there is strong evidence that answering adjunct questions immediately after reading a short section of prose improves students' comprehension and retention.

In line with this view, in an experiment about self-questioning as a reading strategy for comprehension improvement of prose texts in English as a Second Language (ESL) for Filipinos, Miciano (2002) concluded that self-

questioning in ESL reading may not have a significant effect on comprehension of a prose text in English. He suggested that the type of question directly related to comprehension because high-level questions involve higher cognitive skills that lead to a comprehensive processing of a text. The findings showed that despite the number and type of questions asked, the self-questioning strategy is not effective in comprehending prose texts.

In a study on the use of self-questioning in reading comprehension, Wong (1985) concluded that, when students receive adequate training on how to generate their own questions, their use of self-questioning during or after reading usually resulted in improved comprehension. According to him, self-questioning is one of the reading strategies that required students to activate their background knowledge and integrate it with the new information for better understanding.

Another study, done by Taboada and Guthrie (2006), investigated the relationship between student-generated question and prior knowledge with reading comprehension. The results showed that students' questions were positively associated with their reading comprehension. Additionally, the relationship between student-generated questions and reading comprehension when taking into account the influence of prior knowledge was explored and it was revealed that questioning facilitates the use of prior knowledge but does not itself require prior knowledge more than that any student would bring to the text.

Other studies like King (1989, 1991) proved the effectiveness of self-questioning. She has extended the research on self-questioning by examining the effectiveness of this strategy for comprehending orally presented materials in lectures. In these studies, high school and college students used a guided self-questioning procedure to process expository materials presented in lecture format.

King (1991), in a study on the effects of strategic questioning on the problem-solving performance of children, indicated the superior results for children in the guided questioning strategy group.

In another study, King (1992) examined the effect of self-questioning, summarizing, and note taking on immediate and delayed recall of lectures among college students. She concluded that although there are no significant differences in lecture comprehension among the strategies, retention of the lecture was easier for the self-questioning group. On immediate recall, the summarizers' performance was better than the self-questioners, whose performance was better than the note takers', indicating a progressive generative effect. The self-questioners performed best on the delayed tests, indicating that deeper processing may occur in more generative tasks such as self-questioning.

Additionally, Rosenshine et al. (1996), in a study, attempted to review some intervention studies on the effectiveness of self-questioning as a cognitive strategy. They concluded that teaching students to generate questions on the text they have read resulted in improved comprehension.

THEORETICAL FRAMEWORK

Generative Learning Theory

The generative learning theory was found by Wittrock (1974). His work explained and prescribed teaching strategies to maximize reading comprehension. As he stated, this model facilitates learning when, during encoding; learners use their memories of events and experiences to construct meanings for the text.

The learner's role in this model is an active role. In his theory, Wittrock emphasized one very basic assumption: The learner is not a passive recipient of information in the learning process; instead, she or he has an active role, as "effective instruction causes the learner to generate a relationship between new information and previous experience" (Wittrock, 1974, p. 182); that is, she or he receives information and is actively engaged in the learning process to understand the information found in the environment of

learning. The importance of asking the learner to generate his or her own meaning is clearly summarized by Wittrock's statement that "although a student may not understand sentences spoken to him by his teacher, it is highly likely that a student understands sentences that he generates himself" (Wittrock, 1974, p. 182).

Also, Grabowski (2001, p. 723) suggested that "for generative learning, the learner is the key – the controller of whether the information is learned or not." This is what Harlen and Osborne (1985, p. 137) called it, "learning through the person."

The Active Processing Theory

According to the active processing theory, the quantity of self-asking questions helps students to improve their performance of reading comprehension or problem solving, not their quality. The theory suggests that when students are engaged actively with the text as they ask questions during reading comprehension or problem solving, it makes them focus their thinking on the reading material, and hence improves their performance of reading comprehension and problem solving.

The active processing theory is supported by the evidence that when students pose questions by themselves, it facilitates their understanding better than those questions asked by the instructors or teachers. Besides, asking more questions during reading or problem solving leads to active engagement with the text which in turn results in better comprehension and retention (Huang, 2006).

Similarly, Singer (1978) believed that the active processing theory posits that since readers have to interact with the text longer and more deeply, in order to formulate and pose questions about it, they develop a deeper understanding and longer retention of the text. In support of this, Wittrock (1974, 1990, as cited in King, 1992) observed that generative learning and study strategies, such as self-questioning, would be more conducive to learning.

Metacognitive Theory

Metacognition is defined as “thinking about thinking” (Anderson, 2002, as cited in Karbalaei 2010). According to Wong (1985), it was Flavell (1976) who “developed the theoretical notion of metacognition that refers to one’s awareness of one’s own cognitive processes and products and self-regulation” (p.229).

The metacognition theory suggests that self-questioning strategy helps students to monitor their understanding of the reading material (King, 1989; Nolan, 1991; Oztungor & Guthrie, 2004, as cited in Huang, 2006). Therefore, Huang (2006) claimed that the right self-asking questions is a metacognitive strategy that should help students concentrate on the important parts of the material they read. When students use a questioning-answering-questioning cycle, they can effectively “analyze the content, relate it to their prior knowledge, and finally evaluate it and reassign their cognitive resources accordingly” (p. 106). By using this strategy, which is a comprehension-monitoring process, students not only know what they have learned but also make them aware of what they have not yet learned. When students fail to answer the questions post by themselves, they can take remedial action by asking themselves the related questions, or asking questions of other information sources.

Schema Theory

The schema theory suggested that our knowledge and expectations about the world will strongly affect our ability to understand new information by providing a framework within which that new information might fit.

The basic principle underlying the schema theory is that texts themselves, either spoken or written, do not carry meaning. Rather, they provide guides or clues to be used by listeners or readers in reconstructing the original meanings of speakers or writers.

The schema theory emphasizes the role of readers’ prior knowledge in text comprehension. In this theory it is

assumed that comprehension during reading can be blocked not only by lack of prior knowledge, but also by failing to activate prior knowledge. This theory believes that students' reading comprehension or problem solving depends on their ability to activate prior knowledge (or called schema) in their minds (Chin & Chia, 2004; Wong, 1985, as cited in Huang, 2006).

The schema theory is another basis for the predicted efficacy of self-questioning. Formulating questions about the text stimulates students to activate their schema, their relevant knowledge, thereby facilitates the connection between what is already known and the new information in the text and finally results in better text comprehension. As mentioned by Huang (2006),

The right questions asked by students themselves should be able to trigger the related concepts and experiences in students' minds, help students integrate their knowledge with the ideas in the reading material, and as a result, achieve better reading comprehension or problem solving (p. 106).

RESEARCH QUESTIONS

Based on the information given above, the following research questions are posed to achieve the objective of this study.

- Q1. Is there any relationship between EFL learners' reading comprehension performance and the use of self-questioning as a reading or study strategy?
- Q2. Is there any significant difference between males and females' reading comprehension performance by using of self-questioning as a reading strategy?

NULL HYPOTHESES

The following null hypotheses may be stated as the subject of the present research:

- No (1): The use of self-questioning/question generation as a generative learning or study strategy has no effect on Iranian EFL learners' reading comprehension improvement.
- No (2): The use of self-questioning/question generation as a generative learning or study strategy makes no significant difference in males and females' reading comprehension performance.

RESEARCH DESIGN

The design of this study is a kind of quasi experimental design. The independent variable was self-questioning instruction, the dependent variable was reading score, and gender was a moderator variable.

METHODOLOGY

Participants

Seventy five undergraduate EFL students, both male and female, majoring in English course at Sabzevar Tarbiat Moallem University and Garmsar Payame Noor University, Iran, were selected as the participants of this study.

Materials and Procedure

The texts used in the study were chosen from the reading texts in Complete Course for the TOEFL Test book by Longman (2001). About ten texts were taught during the treatment. The practiced questions in class were written by the researcher and the original comprehension questions that followed the passages were used in the pre- and post-tests.

The proficiency test used in the study was a TOEFL test, selected from Complete Course for the TOEFL Test book by Longman (2001), which was administered in both classes

to ensure the homogeneity of the subjects of the study from their overall English proficiency.

The reading comprehension pre-test consisted of six texts, selected from the ten texts which were taught in both classes during the treatment with fifty questions. The texts were selected from Complete Course for the TOEFL Test book by Longman (2001).

The reading comprehension post-test of the study was a kind of achievement test which was the same as the pre-test in all aspects except the presentation order of the texts to avoid the effect of retention. It was administered in both classes in the fifth session to determine if the treatment affected on the subjects' reading comprehension performance.

From the total of seventy five participants, sixty students met the criterion of scoring between two standard deviations above and two standard deviations below the mean were selected as the intermediate students who were the participants in the current study. From among this population, thirty students at Garmsar Payame Noor University and thirty students at Sabzevar Tarbiat Moallem University were assigned to the experimental and control groups, respectively. It is worth saying that the selection of the classes as the experimental or control group was random. In each group, the same ten texts were taught by the researcher. Before that, a pre-test, consisted of six reading texts that were taught by the researcher during the treatment, was administered to be certain that there is no significant difference among the students from the reading comprehension performance perspective.

The experimental group was taught how to apply the self-questioning strategy. They learned how to ask and answer questions about the text to comprehend it. At the first session, the traditional reading comprehension strategies were reviewed by the researcher and the students. The students talked about the common strategies they applied to comprehend a text. Then, the researcher introduced the strategy – self-questioning – by practicing it with some examples so that the students themselves could be ready for generating questions about the reading texts. The selected texts were given to them to practice the newly introduced strategy at home.

The strategy was worked on and practiced for three other sessions so that the students could apply it automatically when reading a text. Therefore, the students were asked to read the texts at home and try to pose questions and then answer them while reading the texts. The questions posed by each student were practiced in the class, the student asked his or her questions and the other students were supposed to answer them.

In the control group the same reading materials were practiced but no strategy was introduced. The students were told to apply their own self-preferred comprehension strategies. Working on the reading texts took four sessions, each forty five minutes, just the same as in the experimental group.

The post-test was administered in both classes at the fifth session to consider if there has been any difference in the reading performance of the two groups.

RESULTS

Results of the Pre-Test

After selecting the subjects involved in the study based on the results of the TOEFL proficiency test, a reading comprehension test was administered in both classes to examine if there is any significant difference between the two groups in terms of their reading comprehension performance. The descriptive data is shown in Table 1.

Table 1 Descriptive Statistics of the Reading Pre-test

Test	N	Minimum	Maximum	Mean	Std. Deviation
Y1	30	27	46	36.17	4.807
X1	30	24	46	33.83	4.345
Total	60				

Note. N = Number of Students; Y1= Experimental Group Pre-test; X1 = Control Group Pre-test

To make certain that there is no significant difference, a T-test was carried out and the results, as shown in Table 2, indicated that the reading comprehension difference among the subjects in both groups is not significant before the treatment because the obtained degree of structural significance is greater than .05.

$$\alpha = .064 > .05$$

Table 2 T-test for the Reading Pre-test

	Mean	Std. Deviation	Std. Error Mean	t	df	Sig. (2 tailed)
Pair Y1-X1	2.30	6.545	1.195	1.952	29	.064

Results of the Reading Comprehension Post-Test for Both Groups

The subjects in both, the experimental and control groups, took the same reading comprehension post-tests after the instruction. The descriptive data is shown in Table 3.

Table 3 Descriptive Statistics of the Reading Post-test

Test	N	Minimum	Maximum	Mean	Std. Deviation
Y3	30	30	47	39.03	5.149
X3	30	25	46	35.77	5.649
Total	60				

Note. Y3= Experimental Group Post-test; X3 = Control Group Post-test

The data gathered on the comparison between the pre- and post-tests in each – experimental or control – group was analyzed separately to determine the development of each group in the post-test and to decide whether this development, if any, has been produced by the treatment or not and a t-test was carried out.

Table 4 T-test for the Development of the Experimental and Control Groups

	Mean	Std. Deviation	Std. Error Mean	t	df	Sig. (2 tailed)
Pair1 Y3-Y1	2.87	5.625	1.027	2.792	29	.009
Pair2 X3-X1	1.90	5.155	.941	2.019	29	.053

Note. Y3 = Experimental Post-test; Y1 = Experimental Group Pre-test; X3 = Control Group Post-test; X1 = Control Group Pre-test.

The comparison indicates that there is an improvement in the subjects' reading comprehension scores of the experimental group in the post-test because, as Table 4 shows, the obtained level of significance is less than the probability value ($\alpha < .05$).

$$\alpha = .009 < .05$$

It can be concluded that the experimental group's reading comprehension performance develops in post-test.

But in the control group the change in subjects' post-test scores was not so considerable. This could be seen clearly in Table 4, the obtained level of significant for pre- and post-tests in the control group, 0.059, is more than the probability value.

$$\alpha = .053 > .05$$

Investigation of the First Null Hypothesis

To determine whether the development in comprehension performance of the experimental group is the result of self-questioning strategy instruction, the researcher carried out an independent samples t-test and compared the post-tests of two groups.

Table 5 T-test for the Reading Post- tests in the Experimental and Control Groups

	Mean	Std. Deviation	Std. Error Mean	t	df	Sig. (2 tailed)
Pair1 Y3-X3	3.27	7.051	1.370	2.385	29	.024

Note. df = Degree of freedom; Sig = Level of Significance; Y3 = Experimental Group Post-test; X3 = Control Group Post-test.

As it is clear from Table 5, the estimated probability of the null hypothesis being true is less than .05 ($\alpha < .05$). Also, the observed ratio (t_{obs}) of 2.385 is greater than 2.021 which means that the difference between our groups is greater than the value required to reject the null hypothesis ($t_{critic} = 2.021$) at .05 level of significance. So, it is concluded that the mean scores' difference is probably not just a chance alone and the use of the self-questioning/question generation as a generative learning or study strategy did have some effect on the Iranian EFL learners' reading comprehension performance. The researcher turned to the table of t-values in Ary, Jacob, and Rezvanieh (1996, p. 551).

$$\alpha = .024 < .05$$
$$t_{obs} = 2.385 > t_{critic} = 2.021$$

So, the first null hypothesis is rejected, meaning that using of the self-questioning/question generation strategy as a generative learning or study strategy did have some effect on the Iranian EFL learners' reading comprehension performance.

Investigation of the Second Null Hypothesis

To determine the difference in the males' and females' performance on the reading comprehension a t-test was carried out. The results are shown in Table 6.

Table 6 Descriptive Statistics of Gender in the Experimental Group Post-test

Gender	N	Mean	Std. Deviation
Male	9	42.67	3.873
Female	21	37.48	4.895
Total	30	38.03	5.149

Note. N = Number of Students; Std. Deviation = Standard Deviation.

As far as the influence of gender is concerned, there is a significant difference between the mean scores of the males and the females. As illustrated in Table 6, the mean scores of the males and the females are 42.67 and 37.33, respectively. It shows that the males compared to the females scored higher on the reading comprehension test.

To determine the difference in the males' and the females' performance on the reading comprehension a t-test was carried out. The results are shown in Table 7.

Table 7 T-test comparing the Genders' Performance in the Experimental Group

	Sig.	M. Difference	Std. D. Difference	t	df	Sig. (2-tailed)
Y3 (Equal Variances is assumed)	.604	5.19	1.843	2.816	28	.009
(Equal Variances is not assumed)		5.19	1.676	3.098	19.119	.006

Note. Y3 = Experimental Group Post-test; M. Difference = Mean Difference; Std. D. Difference = Standard Deviation Difference.

As shown in Table 7, the obtained α is .009 which is less than the critical value ($\alpha < .05$). Also, the t_{obs} , at .05 level of significance, is 2.816 which is greater than the t_{critic} (2.048).

$$\alpha = .009 < .05$$
$$t_{\text{obs}} = 2.816 > t_{\text{critic}} = 2.048$$

In other words, the change from the pre-test to the post-test was not the same for the male and the female participants. Therefore, the second null hypothesis stating that there is no difference in the males and the females' performance in using the self-questioning strategy can be rejected. That is, the male outperformed the females after using this strategy.

DISCUSSION AND CONCLUSION

The current study investigated the effect of the self-questioning strategy as a generative learning strategy on reading comprehension performance of the EFL learners in the Iranian context. Generally speaking, as it is clear from the results, the participants in the experimental group did better in the post-test.

The result of the T-test of the mean scores of the pre- and the post-test in the experimental group indicates that the self-questioning strategy may affect the students' comprehension performance, because the significance value of the pre- and the post-tests in the experimental group is .009 ($\alpha = .009 < .05$).

On the other hand, it can be said that the general improvement of the subjects in the post-test performance is the result of the exposure to the texts, but the T-test of the post-tests in both – the experimental and control – groups indicated that the improvement is because of the learning and using the self-questioning strategy. The level of significance of both groups' post-tests is .024 ($\alpha = .024 < .05$). At the probability value of .05, t_{obs} is 2.385 ($t_{\text{obs}} = 2.385 > t_{\text{critic}} = 2.021$). So, there is a significant difference between the average of the control and the experimental groups' scores, and the self-questioning strategy does affect the EFL learners' reading comprehension performance.

The data from this study indicated that the students in the experimental group, being taught how to use the self-

questioning strategy while reading a text, significantly outperformed the students in the control group in the reading comprehension. Therefore the first null hypothesis, stating that the self-questioning strategy has no effect on the reading comprehension performance of the Iranian EFL learners, was rejected.

The statistical analyses of the second null hypothesis depict that there is a significant difference between the male and the female subjects' performance; therefore, the second null hypothesis, stating that there is no difference between the male and the female subjects' performance was also rejected. The analyses display that the males compared to the females scored higher on the reading comprehension post-test. It seems that the males made the most use of the self-questioning strategy training given to the experimental class. Oxford and Ehrman (1995) argued that understanding gender differences is important for teachers and researchers, and it is important for them to know that gender differences may often be a mask for a deeper difference of the personality type and the career choice. They also stated that the males and the females should be encouraged and allowed to develop the most effective learning approaches they can, and neither should be pushed into a gender-stereotyped set of strategies.

Like any other study, this research has certain limitations. The main limitation of the study was of time constraint. Since the experiment was conducted in class; the researcher had to make sure that the study would not upset the syllabus of the course. So, the researcher was forced to limit the experiment to four sessions. Another limitation was the number of participants. The study involved the minimum number of students required for an experimental study. So, generalization of the findings to other EFL learners is one of the shortcomings of this study.

Further experimental research is needed to determine the effect of self-questioning as a generative learning strategy on the Iranian EFL learners' reading comprehension improvement. This study explored the effect of self-questioning as a generative learning strategy on global

reading comprehension performance among the Iranian EFL learners, so future studies can investigate the effect of self-questioning on students' comprehension performance in such different types of comprehension questions as display, referential, and inferential questions, separately.

Another research is needed to prove the generalization of this study and to refine teaching strategies. The previous studies show that with longer lasting treatment duration, stronger results will be concluded. So, future studies should investigate the effect of self-questioning for a longer period and with more texts so that the findings can be generalized to other EFL learners.

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