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## Improving Reading Comprehension in a Foreign Language: Strategic Reader

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### ABSTRACT

*Second language reading comprehension is the most important skill required by students, especially in a foreign language context. One way to help these students improve their reading comprehension is strategy instruction. In the present study, the effect of two strategies, namely, summarizing and students-generated questions have been investigated. The participants in the study were all female intermediate EFL students, between 14 and 39 years old. A quasi-experimental research design was employed with a treatment lasting 5 weeks on three intact groups—two experimental groups and one control group. The results of a one-way ANOVA indicated that there was significant difference between the summary group and the control group, whereas no significant difference was observed between the summary group and the student-generated question group, and also between student-generated question group and the control group. Therefore, it is recommended that EFL teachers ask their students to prepare a reading passage summary to help them improve their reading comprehension.*

### INTRODUCTION

Written words are all around serving different functions such as confusing, depressing, enlightening, amusing, etc. In fact, all of us are dependent on some limited number of letters throughout our lives (Brown, 2000). It is easy to see why the ability to read in a second or foreign language can be considered as one of the most important skills for people in an international setting. Subsequently, there has been a growing focus of the reading in recent years (Kaplan, 2002; Dubin & Bycina, 1991; Grabe, 1991). Reading is probably the most extensively researched language skill (Bachman, 2000); that is, research on reading in a second or foreign language situation primarily began in 1970 with the prominent article written by Goodman (1967) entitled *Reading: A psycholinguistic guessing game*. Since then many research studies have been conducted leading to a significant number of findings (Brown, 2000).

We read for different purposes; sometimes to get the main idea, at times to locate specific information, frequently we read texts to learn something, and every now and then we need to synthesize information to take a critical position. Perhaps most often we read for general comprehension in order to understand main ideas and the relevant supporting information (Kaplan, 2002; Grabe & Stoller, 2001; Grabe, 1991). That is the reason why Katims (1997) suggests that reading without comprehension is worthless.

Reading experts such as Anderson and Pearson (1984) and Aebersold and Field (1997) argued that the best way to teach reading is through bottom-up methodology in which reading takes place by matching sounds and letters. The students are taught to focus on language knowledge, vocabulary, and structure of a passage while reading. Ferhan (1999) states that top-down processing is more effective (now known as a psycholinguistic theory about learning in which the prior knowledge of the reader was deemed to be very important). However, other experts such as Kintsch (2005), Eskey and Grabe (1988), and Grabe and Stoller (2002) proposed an interactive approach to reading involving both bottom-up and top-down processing. Proponents of this approach believe that based on the situation, the reader decides which approach is more beneficial. More specifically, if the required background knowledge about the text is available to readers, they will benefit from a top-down approach. Conversely, if they do not have this subject area specific knowledge that is necessary to understand the passage, then a bottom-up approach would be more helpful (Hedge, 2008; Harmer, 2001; Brown, 2000; Dubin & Bycina, 1991).

More recently, however, approaches to the teaching of reading have focused on the importance of acquiring those strategies that help students become strategic readers while coping with difficult passages (Alderson, 2005). Researchers have discovered that successful L2 learners use more learning strategies and utilize them more frequently than their less successful classmates; this strategy use has been shown to occur before, during, and after L2 tasks (Grabe & Stoller, 2001; Kaplan, 2002; Oxford, Cho, Leung, & Kim, 2004). Kaplan (2002) asserts that one of the most important features of reading is that it is strategic, that is, while reading, the reader assesses whether he has achieved his purpose for reading or not. If not, he should adapt different monitoring activities, which is the hallmark of a good reader.

It is, however, important to emphasize that input is different from intake and the strategies that are taught are not exactly the ones students will employ. In addition to teaching strategies, teachers should help them pay heed to what they are doing (Robinson, 2005). Since reading comprehension is not an observable phenomenon, assessing one's comprehension and development of the skill through the use of those strategies illustrating comprehension seems important (Brown, 2000). Therefore, the responsibility of the teacher also changes and it is not sufficient only to teach the strategies, but equally practice and utilize them in every lesson persistently to affect achievement. In fact, the ultimate goal is to develop strategic readers who can employ these strategies automatically to improve their performance on comprehension and recall tests (Farrel, 2001; Grabe & Stoller, 2001).

The past three decades have witnessed a large body of second language research on language learning strategies (see, for example, Anderson, 2003; Ehrman, Leaver, & Oxford, 2003; Macaro, 2006; Lan & Oxford 2003; McDonough, 1999; MacIntyre, 1994; Purdie & Oliver, 1999; Yamamori, Isoda, Hiromori, & Oxford, 2003). While some of them have overtly sought to move the theoretical understanding of language learning strategies forward, they had more practical goals, that is, to investigate ways of empowering language learners to become more autonomous and successful in their learning. Overall, strategy specialists usually believe that learners with strategic knowledge of language learning become more efficient, creative, and flexible, thus they acquire a language more easily.

Various definitions of strategy have been proposed up to now, but the following strategy definitions are more in line with the present study. Weinstein, Husman, and Dierking (2000) define learning strategies as "any thoughts, behaviors, beliefs, or emotions that facilitate the acquisition, understanding, or later transfer of new knowledge and skills" (p. 727). Similarly,

O'Malley and Chamot (1990) define learning strategies as “the special thoughts or behaviors that individuals use to help them comprehend, learn, or retain new information” (p. 1).

Generally speaking, a strategic reader uses strategies such as previewing a text, scanning, skimming, predicting the upcoming information, summarizing, guessing the meaning of new words, generating questions about the text, recognizing text organization, etc (Grabe & Stoller, 2001). Brown and Palincsar (1984) have introduced four main reading strategies for explicit and direct strategy instruction, including summarizing, questioning, predicting, and clarifying. However, two of the most useful strategies are those in which the student summarizes orally what he has read about a passage or answers questions about the passage (Brown, 2000; Ur, 1996). Moreover, Alderson (2005) states that if students generate their own questions and summarize the lesson, they will learn more effectively and improve their reading comprehension.

Although reading has been scrutinized a lot by different experts, no magic formula to the good efficient reading have yet been found (Ziahosseiny, 2009). Unfortunately, in Iran, the typical reading classroom scenario is that the teacher first reads the passage and then, more often than not, translates said passage to the mother tongue before asking students to answer the questions related to the passage posed by the author. In fact, most of these students do not know what the actual purpose of reading is. Subsequently, when they can translate the text literally, they think that they have comprehended the passage. Of course, as Kaplan (2002) argues, this translation technique can have a purpose in reading, but it is nonetheless a skill outside of the standard reading purposes. In this study, the researcher focuses on two strategies: summarizing and generating questions while reading a text.

## **LITRERATURE REVIEW**

### **Generating Questions**

Conventionally, students are instructed to focus on language knowledge, vocabulary, and the structure of a passage while reading. However, since reading comprehension is an interactive process, teachers can encourage learners to be active while reading a text. To help learners become critical and strategic readers, teachers can encourage them to ask questions and find the answers to the questions posed (Hedge, 2008). Traditionally, the questioner is the teacher and the student only provides the answer. That is why many students are not able to generate good questions. However, generating questions has been proven a helpful reading strategy and students should engage in such behaviors to ensure that they have read the text carefully (Hervey, 2006). Doing so leads them to a higher level of thinking and reflection upon their own learning (Chuck, 1995).

Questioning, especially student-generated questions, is a useful strategy that improves student reading comprehension. Based on Bloom's taxonomy (Department of Education and Skill, 2005) questions can be posed at different levels—from knowledge to evaluation. There is evidence that engaging learners with generating their own questions leads to better learning (Hardy, Bates, Casey, Galloway, K. W., Galloway, K. R., Kay, Kirsop, & McQueen, 2014). For example, while some students at the elementary level could ask knowledge-based wh-questions (e.g., who, what, when, where), others could generate more challenging questions requiring higher order thinking skills such as synthesis, application, or evaluation. However, students may need help to start generating their own set of questions. To pave the way, the teacher may

support them by giving some guidelines (Nuttall, 1996). He or she could encourage them to work in small groups to check their understanding and to construct key questions. Then, the class could select a set of appropriate questions to be answered by the students. Following constructive training, students could bring their own questions into the class and evaluate their collective level of comprehension (Hedge, 2008).

It is important to note here that generating questions is a strategy that can be done at different phases of reading (pre-reading, while-reading, and post-reading) (Grabe & Stoller, 2001). In the first phase, questions can provide students with a reason for reading, whereas in the while-reading phase, a guide-o-rama which can be in the form of a series of questions can lead students through the reading selection and indicate what information is important. Finally, in the post-reading phase, students can answer the questions and then, working in small groups, verify their responses—a kind of self-assessment (Dubin & Bycina, 1991). Nuttall (1996) and King (1992) claim that finding answers to the questions relevant to a difficult text can help students comprehend the text more fully because students work at the text level and take part in the process of linking their prior knowledge to new information. If students are accustomed to self-generated questions, they will equally develop an awareness of their level of comprehension (King, 1992).

### **Summarizing**

When teachers teach reading, they do not exclude the other skills. They do provide variation in teaching methods to enable students to read more efficiently. In fact, some activities may well require the integration of two or more skills (Nuttall, 1996), and using integrated-skill instruction can be paramount as students move to higher levels of language proficiency (Grabe, 2001). Summary is one such strategy that integrates reading with writing or speaking (Nuttall, 1996; Dubin & Bycina, 1991). Nuttall (1996) considers summarizing as an invaluable reading strategy “which demands full understanding of the text” (p. 206). Indeed, it is a kind of cognitive strategy that helps students structure new input and show that they have understood the passage (Oxford, 1990). In summarizing, students make a reduced, shorter version of the passage wherein the main ideas of the passage are included in the summary (Alderson, 2005). For beginners, it can be as simple as giving a title to the passage, even in L1. However, as the students advance in their language knowledge, summarizing can be made in L2 and students can write complete sentences or paragraphs (Oxford, 1990). Shih (1992) also calls for academic tasks such as summarizing to help L2 learners get meaning from the text. She emphasizes that students can use this strategy to organize, reduce, and rehearse the significant information from the text so as to smooth the progress of recall.

Thus, in the post-reading phase, the teacher could ask students to take notes and write a summary. As homework, students could be asked to provide a summary and then report said summary orally in the next class session (Dubin & Bycina, 1991). Overall, there is evidence that summary writing improves both reading and writing abilities (Grabe, 2001). In this context, it is worth pointing out that questioning is a bottom-up process, while summarizing tends to be more of a top-down process. Summarizing can thus be more enjoyable for those students who are daunted by an analytical bottom-up approach (Nuttall, 1996).

## Empirical Studies on Summarizing and Learner-Generated Questions

In both second and foreign language research, studies indicate that learning strategies play a considerable role in successful language learning. For instance, Riley and Lee (1996) pointed out that when readers were asked to write a summary of a passage rather than simply recall it, more main ideas were produced. Bensoussan and Kreindler (1990) compared the effect of summarizing and responding to short-answer questions on reading comprehension improvement. They trained one group of advanced students to summarize and the other group to respond to short-answer questions. Results indicate that there was no significant difference between the reading comprehension achievements of the students. On the other hand, Oded and Walters (2001) worked on the difference between students' performance on reading comprehension by assigning two tasks of writing a summary and listing the examples in the text. Findings indicate that students who did the summary task performed better on the comprehension task. It also showed that summary writing would help students perform better on comprehension tasks, and instead of considering it as a test method, it should be looked at as a learning instrument. Song (1998) also conducted research on the use of strategies, including summarizing, questioning, predicting, and clarifying in reading comprehension with first year university students in Korea. The findings indicate that these strategies could improve the reading development of students.

Moreover, Yu's (2008) research revealed that summarization promoted and better predicted reading comprehension abilities, especially if it was done in L1 (here Chinese). He also found low correlation between multiple-choice questions and summarization task. King (1992) conducted a study on college students who were divided into three groups: those who viewed a lecture and took notes, those who generated their own questions about the lecture and, finally, those who wrote summaries of the lecture. In the immediate testing, the third group—the summarizers—outperformed in recalling the lecture better than the other two groups, and the self-questioners, in turn, recalled the lecture content more than the note-takers. However, on another retention test held one week later, the self-questioners performed better than the other two groups. It was concluded that for long-term retention, self-questioning may be a more practical strategy than summarizing.

There are also several studies conducted to find out the effect of student-generated questions on improving comprehension. For instance, Rosenshine, Meister, and Chapman (1996) concluded that teaching cognitive strategies such as generating questions helps students improve their comprehension. Furthermore, seeking to improve reading comprehension through story grammar in which students read a paragraph aloud, found the main idea, and turned it into a question with a question word, Lubliner (2004) concluded that students who were instructed to use self-generated questions improved a lot at the end of the research period. Similarly, in a study about student questioning, Taboada and Guthrie (2006) found out that students' questions had positive association with their reading comprehension.

While many of the studies done to date relate to different aspects of reading and different strategies that can be used to improve students' reading comprehension ability, nearly none of them directly compared the combined effect of the two strategies here investigated, namely, summary telling and student-generated questions on the reading comprehension ability of the intermediate EFL students. Moreover, most of these students used only summary writing, while this study intends to ask students to both write and tell the summary.

Since English is a foreign language in Iran, reading is considered as the most important skill. Therefore, English teachers are expected to become familiar with efficient strategies deemed important in reading. In the present study, summary telling and student-generated questions are selected because it is believed that summarizing a text is indeed a difficult process which needs a high level of processing that leads to better understanding and a richer memory of the text (McNamara & Kintsch, 1996; Kintsch, 1994). Furthermore, several available experiments indicate that instruction in generating questions has positive effects on reading comprehension for elementary school, middle school, high school, and college students (King & Rosenshine, 1993; Nolte & Singer, 1985).

Thus, the present study intends to find the effectiveness of these two types of strategies, namely, summary telling and student-generated questions on Iranian intermediate EFL students' performance in a reading comprehension test. These two strategies will be compared to ascertain the most effective strategy. The study asks the following three questions:

1. Does summary telling have any effect on students' reading comprehension performance?
2. Do student-generated questions have any effect on students' reading comprehension performance?
3. Is there a difference between the effect of summary telling and student-generated questions on students' reading comprehension performance?

## METHOD

### Participants

The participants of the study were 54 female, intermediate-level EFL students studying in a language institute in Iran. Based on a placement test, there were three intact groups (ages 14-39). Participants were randomly assigned into two experimental groups and one control group. Of the two experimental groups, one group (n=19, ages 14-34) was assigned to study the passages given to them, write a summary, and learn to be able to present it orally (summary group= SG). The second group (n=19, ages 14-39) had to generate and write questions while studying the passage, and learn the passage so that they could answer questions posed by the teacher (student-generated question group= SQG). Finally, the control group (n=15, ages 14-26) was assigned to study the passages and be prepared so that they could answer the teacher's questions about the passages (control group= CG).

### Materials

Six short passages were selected, three of them were about famous people and the other three were on general subjects. Their length ranged between 156 and 232 words, and the Flesch Reading Ease indices were ranging from 49.6 to 72.8. Then 23 multiple-choice questions were prepared based on these six passages. Multiple-choice questions were applied to assess the improvement of students' comprehension; students could be assessed objectively for it was likely that they understood the text without being able to express it in L2. A pilot study of the questions indicated that the questions could discriminate between the better readers and the less skilled readers. Thereafter, the questions were administered to a small sample of students to investigate

whether they could answer the questions without having a text. They did not do well on the test and could only answer three or four random questions; as they revealed after the exam, it was mostly by chance. However, the questions answered by most students were omitted. In the end, 20 questions were selected. Ten more questions on general everyday subjects were also added to the pre-test. Comprised of 30 questions—20 real questions and 10 false questions—the final test version was employed both as pre-test and post-test.

## Procedure

No general proficiency test was conducted because students were placed in intermediate level classes based on a placement test administered by the language center. In all, the experiment was conducted in five sessions with a two-week interval between the first and the second session so that the questions in the pretest would not have any effect on the students' text performance. Classroom teachers were given detailed written directions before test administration. In the first session, the pretest was conducted for all three classes with a 30-minute allotted time. The procedure for each class was different and is explained below:

1. **Summary Group:** This group was one of the two experimental groups tasked to study the passages, write a summary, and be prepared for an oral presentation of the summary for the next session. In each session (sessions two, three, and four), they were given two passages and were asked to prepare the summaries for the next session. They were also assigned to hand in the written summaries to the teacher in the next session; moreover, two or three of them presented their summaries orally in the classroom each session.
2. **Student-Generated Questions Group:** This group was the second experimental group, and was tasked to study the passages, generate five questions for each passage, and be prepared to answer questions posed by the teacher in the next session. In each session (sessions two, three, and four), they were given two passages and were asked to write questions for the next session. They were also assigned to hand in their written questions to the teacher.
3. **Control Group:** This group was assigned only to study the passages that were given to them and be prepared to answer questions posed by the teacher in the next session. In each session (sessions two, three, and four), they were given two passages and were asked to be ready for the next session.

Finally, in the fifth session, a post-test was administered in all three classrooms and after 30 minutes, all the papers were collected.

## Data Analysis

After conducting the experiment, the exam papers were marked. Each paper received 2 marks, one for 20 major reading comprehension questions, and the other for the 10 general false questions. The data were then fed in the SPSS program version 18 for further investigation. First, since the number of participants in each group was less than thirty, the researchers made sure that the classes were samples derived from a normal distribution. Mean, mode, and median were thus calculated and it was observed that they were nearly the same. Moreover, a histogram of the

post-test (mean=10.30, SD= 3.93) indicated that the group could be considered as a sample from normal distribution. Thus, it was concluded that parametric inferential statistics could be applied in this study.

## RESULTS

The first question this study explored focused on whether summary telling has any effect on students' reading comprehension performance. Thus, a paired t-test was calculated (Table 1). As the result of the paired sample t-test shows, the t-observed value exceeds the t-critical value for 2-tailed tests at the .05 level of significance. Therefore, it can be concluded that there is significant difference between the pre-test and post-test performance of the group assigned to tell summaries with the mean difference of 9.473.

**Table 1.** Paired Sample T-Test for SG Performance

	mean	SD	SEM	t-observed	df	t-critical	Sig. (2-tailed)
<i>Pair 1 pretest-posttest</i>	-9.473	3.82	.876	10.809	18	1.734	.000

In order to probe the second research question dealing with the possible effect of student-generated questions on students' reading comprehension performance, the mean score of the pre-test and post-test of the second group was compared through a paired sample t-test (Table 2). Results indicate that the mean score of pre-test and post-test differ a lot (mean= 7.315) and the t-observed value (9.761) exceeds the t-critical value (1.734) for 2-tailed tests at the .05 level of significance. Therefore, there is significant difference between the pre-test and post-test performance of the group assigned to generate questions.

**Table 2.** Paired Sample T-Test for SQG Performance

	mean	SD	SEM	t-observed	df	t-critical	Sig. (2-tailed)
<i>Pair 1 pretest-posttest</i>	-7.315	3.266	.749	9.761	18	1.734	.000

Another paired sample t-test was also conducted to find any difference between the mean value of the pre-test and post-test of the control group (Table 3). As shown, there is a significant difference between the mean score of pre-test and post-test (mean= 5) and the t-observed value (6.847) goes beyond the t-critical value (1.753) for 2-tailed tests at the .05 level of significance.

**Table 3.** Paired Sample T-Test for CG Performance

	mean	SD	SEM	t-observed	df	t-critical	Sig. (2-tailed)
<i>Pair 1 pretest-posttest</i>	-5	2.921	.730	6.847	15	1.753	.000

To answer the third research question, which examined the existing difference between the effect of summary telling and student-generated questions on students' reading comprehension performance, a one-way ANOVA was calculated (Table 4).

**Table 4.** One-Way ANOVA for the Three Groups' Post-Test Performance

	Sum of Squares	df	Mean Square	F	Sig. (2-tailed)
Between Groups	238.417	2	119.209	10.431	.000
Within Groups	582.842	51	11.428		
Total	821.259	53			

As the results indicate, the F ratio (10.431) for the means of the three groups proved to be significant at the .05 level. Thus, a post hoc Scheffe test was applied to investigate where the difference lies (Table 5).

**Table 5.** Scheffe Test Result for One-Way ANOVA for the Three Groups

	Mean Difference	Standard Error	Sig
SG — SQG	2.526	1.096	.080
SQG — CG	2.710	1.147	.071
CG — SG	-5.236	1.147	.000

*Note.* SG: summary group, SQG: student-generated question group, CG: control group.

As the calculations indicate, there is significant difference between SG and CG, but there is no significant difference between SQG and CG, or between SG and SQG. To make sure the three groups were the same level of performance in the pretest and that the difference in the post-test performance was not because of their different performance in the pretest, a one-way ANOVA test was conducted (Table 6).

**Table 6.** One-Way ANOVA for the Three Groups' Pre-Test Performance

	Sum of Squares	df	Mean Square	F	Sig. (2-tailed)
Between Groups	5.063	2	2.532	1.443	.246
Within Groups	89.474	51	1.754		
Total	94.537	53			

Again, as the results indicate, the F ratio (1.443) for the means of the three groups confirmed the fact that at the .05 level of confidence, there is no significant difference between the groups; that is, the three groups performed equally in the pretest.

## DISCUSSION

The main purpose of this study was to investigate the effectiveness of two cognitive reading strategies, namely, summary telling and student-generated questions on Iranian intermediate EFL students' performance in a reading comprehension test. Choo, Eng and Ahmad (2011) emphasize that strategy instruction is effective. Their students were involved in the process working together by asking questions, summarizing, predicting, and clarifying.

According to the study conducted by Carrel (1992) on the awareness of text structure, there was evidence that finding relations between ideas and between main ideas and details can help L2 readers recall the text better. It is, therefore, assumed that summarizing involves finding the relations between the main idea and the supporting ideas in the text. This may be because in summarizing a text, learners work back and forth between the text, the paper they are writing, and the requirements of the assignment (i.e., rereading, rewriting, and continually reflect on and compare aspects of these elements). Thus, the summary group was expected to outperform the other two groups in the post-test.

As the results of the calculations indicate, all three groups improved in their post-test; however, we should consider that while administering the pre-test, the participants had not studied the reading passages, and the main purpose of administering the pre-test was to make sure that students could not answer the main questions without studying the texts as these texts were new to them. Thus, this researcher expected a significant difference between their performance in pre- and post-test.

The one-way ANOVA and Scheffe results for post-test demonstrated that there was a significant difference between the summary group and the control group due to the fact that the former had to study the passages with great involvement and attention which, in turn, provided a deep level of understanding. However, the findings indicate that the difference between the summary group and student-generated question group, and the difference between student-generated question group and the control group was not significant. Yet, considering the mean values of these three groups in the post-test (SG mean= 12.73, SQG mean= 10.21, CG mean= 7.50), we can conclude that the test performance of the students who were assigned to tell summary is much better than the other two groups. Moreover, the SQG outperformed the control group. Thus, it can be concluded that although the findings showed no significant difference, there are indeed some differences awaiting explanation.

All the participants were female and all were studying at the intermediate level. The only difference that seemed important here was their age. Since age is an important factor in creating cognitive differences between people, it was assumed that the difference between the three groups exists because of their age differences (SG mean =19.89, SQG mean = 22.842, CG mean = 17.26). Therefore, a one-way ANOVA was calculated to find whether there exist any age differences between these three groups (Table 7).

**Table 7.** One-Way ANOVA for the Three Groups' Age

	Sum of Squares	df	Mean Square	F	Sig. (2-tailed)
Between Groups	263.468	2	131.734	4.985	.011
Within Groups	1321.249	50	26.425		
Total	1584.717	52			

Since the results of the test indicated that there is significant difference between the groups, a Scheffe test was conducted to find where the difference exists (Table 8).

As the results indicate, there is a significant difference between the mean age of SQG and CG. In the post-test of the reading comprehension performance, however, no significant difference between these two groups was found. Although the study by Byrd (1985) revealed that students' age affects their summarization ability, the findings of this study show that age does not play an important role because the difference between the age mean is not so great (SG mean =19.89, SQG mean = 22.842). Thus, the researcher looked for alternative explanations.

**Table 8.** Scheffe Test Result for One-Way ANOVA for the Three Groups

	Mean Difference	Standard Error	Sig
SG — SQG	-2.947	1.667	.220
SQG — CG	5.575	1.775	.011
CG — SG	-2.628	1.775	.342

*Note.* SG: Summary Group; SQG: Student-generated Question Group; CG: Control Group.

Another reason could be the fact that the student number in each group was limited (under 30). If this study could be conducted with a larger sample, the differences may become significant. The present research findings affirm Bensoussan and Kreindler's (1990) results, showing that there was no significant difference between the group using summarization for reading comprehension and the group responding to short-answer questions in their reading comprehension achievement. Conversely, King (1992) found out that while watching a lecture, those who wrote summaries performed better than those who generated their own questions in a recalling test just after the lecture. But one week later, those who generated their own questions outperformed the other groups. There are also several studies showing that student-generated questions have positive effects on improving reading comprehension (Lublinter, 2004; Rosenshine, Meister, & Chapman, 1996; Taboada & Guthrie, 2006). However, the results of this study indicate that there was no significant difference between those who made their own questions and those in the control group. Since these two groups had significant difference in their age, it can be concluded that this might be because their age mean values were great (SQG mean = 22.84, CG mean = 17.26). Thus, it can be surmised that cognitive ability is effective because the difference between the two means is very large. Because of these rather contradictory results, it is suggested that similar research be done with a larger sample.

In the meantime, it is recommended that EFL teachers ask their students to engage in summarizing while reading a text to improve their comprehension. Generally, the aforementioned strategies can be used in class because although the difference between the SQG and CG was not significant, the former group improved more than the latter group. The same rationale could equally be applied to the SG and SQG groups respectively. In this study, since students were at the intermediate level, they were expected to know how to summarize or generate questions on their own. But if such strategies are going to be used in beginners or pre-intermediate levels, the teacher's modeling may change the results.

### LIMITATIONS, SUGGESTIONS FOR FURTHER RESEARCH AND CONCLUSION

In the present study, only female participants took part, which limits the generalizability of results. Future studies need to be conducted with male students to get a more comprehensive view of the effect of the aforementioned strategies on Iranian students. Oxford (1990) believes that the types of strategies used by different learners vary due to different factors, such as awareness, stage of learning, task requirements, teacher expectations, age, sex, nationality/ethnicity, general learning style, personality traits, motivation level, and purpose for learning the language. The participants taking part in this research were of the same sex, nationality, stage of learning, but it was difficult to balance them for general learning style, personality traits, and the

like. Therefore, to obtain a holistic picture of the effect of these strategies, it is suggested that more individual factors are considered in future studies before firm conclusions can be drawn.

This study sought to provide some evidence on the effectiveness of two cognitive strategies and explore which one is the most effective. It was found that summary telling was effective, although it did not have a significant difference with student-generated questions. On the whole, most research studies done on the effect of strategies in language learning proved that they are effective and key to learner autonomy. Thus, it is important for English teachers to help improve their students' reading comprehension skill via appropriate strategy use.

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