

Comprehension Strategy Instruction and Iranian High School EFL Learners' Reading Anxiety and Reading Comprehension

Mohammad Khatib*

Associate Professor of TEFL, Allameh Tabataba'i University, Iran

Seyran Jannati

M.A. in TEFL, Allameh Tabataba'i University, Iran

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Abstract

The present study was conducted to examine empirically and systematically the effect of explicit instruction of comprehension strategies on EFL learners' reading anxiety and reading comprehension in Iranian high schools. To this end, two intact classes (65 students) participated in this study as members of control and experimental groups. The experimental group underwent 10 sessions of reading strategies training based on McNamara, Ozuro, Best, and O'Reilly's (2007) 4-pronged Comprehension Strategy Framework. Data were collected through the employment of Saito, Garza, and Horwitz's (1999) Foreign Language Reading Anxiety Scale (FLRAS) and Preliminary English Test (PET) multiple-choice reading comprehension tests. All the students filled the FLRAS questionnaire and took the reading comprehension test two times, once as a pre-test one week before the beginning of instruction and the other as a post-test one week after the instructional treatment. After the post-test, a group of 7 students who received instruction participated in the focus group interview. T-tests were used to analyze the obtained statistical data. It was revealed that explicit reading strategy instruction was quite beneficial in improving EFL high school students' comprehension and reducing their anxiety level, while reading anxiety and reading comprehension were negatively correlated. The results of the interview with the focus group revealed the positive effect of strategy training on learners' reading comprehension and alleviating reading anxiety. This study rendered some educational implications for materials developers and instructors to invest on reading as a fundamental skill in education.

Keywords: learning strategy, reading comprehension strategy, foreign language anxiety, foreign language reading anxiety (FLRA)

Authors' emails: mkhatib72@yahoo.com; jannati.seyran@yahoo.com

INTRODUCTION

Throughout the last few decades, cognitive variations in learning a second/foreign language have become increasingly significant in learning/teaching a foreign language. Despite the fact that all language learners are engaged in the process of 'learning', their approach to learning may be quite different. According to Brown (1994), cognitive variations in language learning entail both variations in learning styles and in strategies. In 1980s, there were two distinguishable areas of focus in the realm of language learning/teaching: 1) individual differences in language learning and 2) learner centeredness in language learning (Gardner, Temberly, & Masgoret, 1997). These conceptions and notions, in turn, inaugurated a new line of studies on learning strategies which are regarded as one of the individual difference variables among learners.

Reading as a complex cognitive activity requiring a set of processes and strategies is one of the most important academic tasks that students deal with. Reading is defined as a communicative act or the transformation of text into discourse by an individual; therefore, both text and context are two key elements in defining the act of reading and whenever one recreates discourse from a written text, he is involved in the act of reading (Grellet, 1981).

Most current researches in EFL/ESL reading such as Andreassen and Braten (2011), Maasum and Maaruf (2012), and Sporer, Brunstein, and Kieschke (2009) have focused on learning strategy training and its facilitative role in comprehension. In Oxford's (1990) definition, "learning strategies are operations employed by the learner to make learning easier, faster, more enjoyable, more self-directed, more effective, and more transferable to new situations" (p. 8). In other words, teaching learners how to learn or strategy training would help in making a classroom an effective milieu for learning (Brown, 1994).

Strategy training in reading comprehension has become an important facet of literacy education. Research suggests that less competent learners may improve their comprehension through training in effective reading strategies evidenced by more successful readers. Some comprehension strategies may be used by students either unconsciously or through their exposure to reading tasks while others require explicit instruction. Moreover, according to researches, there is a positive relationship between teaching productive reading strategies and reading comprehension (Anderson, 2005; Grabe, 2004).

Saito, Garza, and Horwitz (1999) argue that reading in a second or foreign language can be anxiety provoking to some students. Research findings on foreign language anxiety appear to support the existence of this skill-specific anxiety which may affect the performance and achievement of language learners (Matsuda & Gobel, 2004; Sellers, 2000).

Based on what has already been mentioned, the present research attempted to examine empirically and systematically the effect of explicit instruction of comprehension strategies on EFL learners' reading anxiety and reading comprehension in Iranian high school context.

LITERATURE REVIEW

Strategy Instruction and Reading Comprehension

Readers make use of reading strategies to facilitate the process of reading comprehension. In Ellis' (1994) view, "strategy consists of mental or behavioral activity related to some specific stage in the overall process of language acquisition or language use" (p. 529). Cook (2001) offers a general definition of the term as follows: "a strategy is a choice that the learner makes while learning or using the second language that affects learning" (p. 26).

Scholars (e.g. Hosenfeld, Arnold, Kirchofer, & Wilson, 1981; McNamara, Ozuro, Best, & O'Reilly, 2007) have proposed different models of skill-specific strategies instruction to facilitate learning process. To assist students in reading, Hosenfeld et al. (1981) offered a model of reading strategy instruction, engaging learners in identification of their own strategies followed by direct instruction on reading comprehension strategies. Also, McNamara et al. (2007) proposed a 4-pronged comprehension strategy framework (see Figure 1) that consists of monitoring comprehension and reading strategies in the center of the framework and four categories of strategies that comprise the prongs of the framework, including: (a) Preparing to read; (b) Interpreting words, sentences and ideas in text; (c) Going beyond the text by connecting the text with their prior knowledge; and (d) Organizing, restructuring, and synthesizing information in the text. Moreover, preparing to read includes setting or recognizing the goals of reading and using pre-reading strategies to guide the reading process. The strategies in the interpretation prong help the reader focus on and understand the words in

the text and, in essence, to develop a coherent text-based level of understanding. Therefore, the general premise in this framework is that metacognition is at the core of reading strategy use. In fact, "metacognitive reading strategies induce and support the use of monitoring, which in turn facilitates the use of various reading strategies" (McNamara et al., 2007, p. 467).

It is noteworthy that this reading strategy framework addresses strategies for comprehending text, not decoding text.

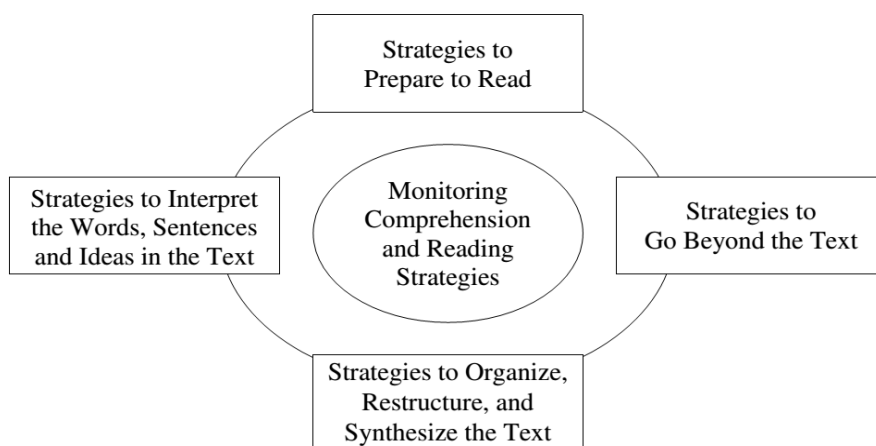


Figure 1. The 4-pronged framework for reading comprehension strategies

Several scholars (e.g. Andreassen & Braten, 2011; Maasum & Maaruf, 2012; Sporer et al., 2009) have attempted to improve learners' reading comprehension through instruction of the use of elaboration or, meaningful association of new information with prior knowledge. In a training study, Andreassen and Braten (2011) attempted to examine the effect of explicit reading comprehension strategy instruction in Norway. The results indicated the positive effect of instruction on strategic competence and comprehension performance. Empowering learners with metacognitive reading strategies, Maasum and Maaruf (2012) arrived at the similar results.

Sporer et al. (2009) carried out a study to investigate the effects of three different forms of strategy instruction (reciprocal teaching, teacher-guided instruction, and traditional instruction) on learners' reading

comprehension. The findings indicated that the reading performance of the students in reciprocal teaching group performed better than those in instructor-guided and traditional instruction groups.

Anxiety and Reading Comprehension

The significance of affect in the quality of education is beyond question and requires investigation. As Zembylas (2005) contends, "Emotion is the least investigated aspect of research on teaching, yet it is probably the aspect most often mentioned as being important and deserving more attention" (p. 466). One of the significant emotions in the affective realm is anxiety. Scholars have provided different definitions for the construct of anxiety. Psychologists define anxiety as "a state of apprehension, a vague fear that is only indirectly associated with an object" (Scovel, 1978, p. 34).

The construct of anxiety has been a focus of research in foreign and second language contexts. MacIntyre and Gardner (1994) contend that foreign language anxiety refers to "the feelings of tension and apprehension specially associated with second language context including speaking, listening and learning" (p. 283). Oxford (1999) considers "concepts such as low self-esteem, low tolerance of ambiguity, problems with identity, competitiveness, fear of risk-taking, shyness, and classroom activities and methods" as the possible sources of foreign language anxiety (as cited in Kuru Gonen, 2007, p. 1030). In addition to these, Horwitz (2001) pinpoints that the sources of foreign language anxiety may vary according to culture.

Previous studies on skill-specific anxiety have found the existence of foreign language reading anxiety and its impact on cognitive abilities and performance of learners (Saito et al., 1999; Sellers, 2000). Psychologist Zbornik (2001) defines reading anxiety as "a specific, situational phobia toward the act of reading that has physical and cognitive reactions" (as cited in Jalongo & Hirsh, 2010, p. 434). According to Saito et al. (1999), reading anxiety is a specific type of anxiety distinct from the more general types of foreign language anxiety that have been linked to oral performance. Therefore, foreign language reading anxiety refers to the feeling of apprehension and worry that learners experience when they have to read in a non-native language.

Saito et al. (1999) was the first to reveal that reading anxiety exists as a phenomenon distinct from the more general foreign language

anxiety. In fact, this study introduced the construct of foreign language reading anxiety and offered a scale for its measurement (Foreign Language Reading Anxiety Scale, FLRAS). It also indicated a negative relationship between reading anxiety and student performance as measured by final grades. Finally, it was found that although general FL anxiety was independent of target language, different target languages provoked varying levels of reading anxiety. In line with Saito et al.'s (1999) study, Sellers (2000) and Wu (2011) attempted to confirm empirically that reading anxiety does exist as a separate and distinct phenomenon in language learning. Moreover, they tried to assess the relationship between reading anxiety and reading comprehension. The findings of these studies supported those of Saito et al.'s (1999) and also indicated that highly anxious students tend to recall less passage content than those students who reported to experience minimal anxiety.

In another study, Hsu (2004) explored the effect of FLRA on reading comprehension and the causes of foreign language reading anxiety. Interestingly, FLRA did not affect learners' comprehension of difficult texts. The contributing factor to foreign language reading anxiety was found to be limited English knowledge rather than reading passages. Jafarigohar and Behrooznia's (2012) study demonstrated a significant negative relationship between FLRA and reading comprehension among Iranian distance EFL learners. Also, it was found that females suffered more from anxiety than males.

Huang (2012) conducted a study to identify the sources of foreign language reading anxiety among Chinese college students. The results indicated that some possible factors could be their "lack of background knowledge and psychological factors such as anxiety, fear, bad reading habit and low interest in foreign language, etc" (p. 1520). To alleviate reading anxiety and enhance the English teaching efficiency, a number of strategies were used which proved effective. This finding was in contrast to those of a study conducted by Capan and Pektas (2013) who investigated the relationship between FLRA and reading strategy instruction in relation to various learner-related variables. The findings revealed that reading strategy training resulted in an increase in learners' FLRA levels.

PURPOSE OF THE STUDY

Following the literature, reading comprehension is of paramount importance in language learning which leads to academic success. The present study attempted to shed some light on the effect of reading strategy training on Iranian high school EFL learners' reading comprehension and reading anxiety. It also intended to investigate the relationship between reading anxiety and reading comprehension, and how anxiety affects learners' performance. The present study was intended to investigate the following research questions:

1. Does comprehension strategy instruction affect the reading comprehension of students?
2. Does comprehension strategy instruction affect the reading anxiety of EFL learners?
3. Is there any significant relationship between reading comprehension and reading anxiety?
4. How does comprehension strategy instruction affect EFL students' reading anxiety and reading?

METHOD

Participants

Sixty five Iranian EFL learners participated in this study as members of two intact classes. They were randomly divided into control and experimental groups with 31 learners in the treatment group and 34 learners in the control group. The participants were all 17 years old, junior high school students and female who studied at Shahed high school in Mahabad, West Azarbayjan province who were selected through convenience sampling.

Instrumentation

The instruments of the study were the following:

McNamara, Ozuro, Best, and O'Reilly's (2007) 4-pronged Comprehension Strategy Framework

This framework is elaborated on in the literature review section.

Foreign Language Reading Anxiety Scale (FLRAS)

FLRAS developed by Saito, Garza, and Horwitz (1999) was used to measure the level of reading anxiety experienced by the EFL learners during the reading activity. It is comprised of 20 items, each of which is answered on a 5-point Likert scale, ranging from "Strongly agree" to "Strongly disagree". The theoretical range of scores on this measure is 20 to 100. Thereby, a higher score received from the FLRAS indicates a higher level of reading anxiety.

No pilot application was made because the scale has showed high internal reliability and high validity across studies (Brantmeier, 2005; Huang, 2012; Wu, 2011). Saito et al. (1999) reported an alpha coefficient of .86 for internal consistency in the FLRAS. Cronbach's alpha reliability indices for the pretest and posttest of anxiety in the current study were .78 and .81, which are in accordance with the findings of previous studies.

The Multiple-choice Reading Comprehension Tests

In this study, two multiple-choice reading comprehension tests were administered. Each multiple-choice reading comprehension test contains four short reading passages, each followed by five multiple-choice questions. The allowed time was 60 minutes.

Considering that the participants were all students of junior high school, for the purpose of this study, part four of the reading section of Preliminary English Test (PET) which is one of the Cambridge ESOL exams was used. Part four of PET includes a passage followed by 5 multiple-choice comprehension questions. The Cronbach's Alpha reliability indices for the pretest and posttest of reading comprehension were .84 and .88.

Focus Group Interview

For the qualitative part of the study which aimed at finding out the reactions of learners to anxiety and also investigating the effect of comprehension strategy instruction on reading anxiety, the researcher carried out a focus group interview with 7 participants who received instruction. According to Richardson and Rabiee (2001), a focus group interview typically involves 6 to 12 participants that are purposive, although not necessarily representative, and have something to say about a specific topic. The small size of the group provides the opportunity for everyone to take part in the discussion and express their opinions.

Data Collection Procedure

The data of the present study were collected through Foreign Language Reading Anxiety Scale (FLRAS) and multiple-choice reading comprehension tests. All the students filled the FLRAS questionnaire and took the reading comprehension test two times, once as a pretest and once as a post-test. The pre-test was administered one week before the beginning of instruction and the posttest was taken one week after the instructional treatment. After the post-test, a group of 7 students from the instructed group participated in the focus group interview.

The treatment was offered over ten sessions, 60 minutes each session. During this period, the control group followed the routine of their class and the experimental group beside their own classes for English course at school underwent reading strategies training.

During these 10 sessions, EFL learners in the experimental group were introduced to a number of strategies based on McNamara et al.'s (2007) 4-pronged Comprehension Strategy Framework which were considered to be effective for high school EFL learners. Each session would start with introduction and explicit explanation of strategies followed by careful modeling to provide a better representation of strategy use. At the end of each explicit teaching phase, EFL learners were provided with worksheet activities to practice the strategies they had learned and apply them to reading passages.

The following strategies were taught throughout this period: (1). Asking questions; (2) Using titles and subtitles; (3) Skimming; (4) Scanning; (5) Guessing unknown words or prediction; (6) Checking references; (7) Inferring; (8) Text organization; (9) Paraphrasing; and (10) Summarizing.

While the experimental group underwent the aforementioned treatment, the focus of the control group was on the course book as is the routine in schools. The teacher provided students with brief explanation of grammatical points in each unit, followed by the meaning of new lexical terms and answering the questions in the practices covered in the course book.

Data Analysis

Data analysis was done quantitatively and qualitatively based on the nature of the research questions. As for the quantitative part, the collected data was fed into SPSS and a number of t-tests were used for analyzing the obtained statistical data.

For the qualitative part of the study which aimed at finding out the physical, emotional and verbal reactions of learners to the anxiety-provoking situations and also investigating the effect of comprehension strategy instruction on reading anxiety and reading performance, the researcher carried out a focus group interview with the participants. This interview was recorded and transcribed by the researcher for conducting content analysis to figure out the characteristics of anxiety in terms of occurrence, duration, intensity, and degree of hindrance. Following the literature, these were considered as significant features of anxiety (Scovel, 1978; Saito et al., 1999).

RESULTS

In order to deal with our research questions, assumptions of normality were checked and met. The ratios of skewness and kurtosis over their respective standard errors are within the ranges of +/- 1.96.

Pretest of Anxiety

An independent t-test was run to compare the experimental and control groups' mean scores on the pretest of anxiety in order to prove that both groups enjoyed the same level of anxiety prior to the administration of the treatment. As displayed in Table 1, the experimental ($M = 10.71$, $SD = 2.09$) and control ($M = 10.16$, $SD = 2.08$) groups showed almost the same level of anxiety in the pretest.

Table 1. Descriptive statistics for the pretest of anxiety by groups under study

Group	N	Mean	Std. Deviation	Std. Error Mean
Experimental	31	10.71	2.09	.37
Control	34	10.16	2.08	.35

The results of the independent t-test [$t(63) = 1.06$, $p > .05$, $r = .13$ representing a weak effect size] (Table 2) indicated that there was not

any significant difference between the two groups' mean scores on the pretest of anxiety. Thus, it can be concluded that they enjoyed the same level of anxiety prior to the administration of the treatment.

Table 2. Independent samples t-test for the pretest of anxiety by groups under study

Levene's Test for Equality of Variances		t-test for Equality of Means							
F	Sig.	T	Df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
							Lower	Upper	
Equal variances assumed	.32	.57	1.06	63	.29	.55	.51	-.48	1.59
Equal variances not assumed			1.06	62.38	.29	.55	.51	-.48	1.59

It should be noted that the assumption of homogeneity of variances was met (Levene's $F = .32$, $P > .05$). That is why the first row of Table 2, i.e. "Equal variances assumed" was reported.

Pretest of Reading

An independent t-test was run to compare the experimental and control groups' mean scores on the pretest of reading in order to prove that both groups enjoyed the same level of reading ability prior to the administration of the treatment. As displayed in Table 3, the experimental ($M = 6.58$, $SD = 2.50$) and control ($M = 6.11$, $SD = 1.88$) groups showed almost the same means on the pretest of reading.

Table 3. Descriptive statistics for the pretest of reading by groups under study

Group	N	Mean	Std. Deviation	Std. Error Mean
Experimental	31	6.58	2.50	.44
Control	34	6.11	1.88	.32

The results of the independent t-test [$t(63) = .84$, $p > .05$, $r = .10$ representing a weak effect size] (Table 4) indicated that there was not any significant difference between the two groups' mean scores on the pretest of reading. Thus, it can be concluded that they enjoyed the same level of reading ability prior to the administration of the treatment.

Table 4. independent samples t-test for the pretest of reading by groups under study

Levene's Test for Equality of Variances		t-test for Equality of Means								
									95%	
		F	Sig.	T	Df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	Confidence Interval of the Difference	
									Lower	Upper
Equal variances assumed		2.62	.11	.84	63	.40	.46	.54	-.62	1.55
Equal variances not assumed				.83	55.61	.40	.46	.55	-.64	1.57

It should be noted that the assumption of homogeneity of variances was met (Levene's $F = 2.62$, $P > .05$). That is why the first row of Table 4, i.e. "Equal variances assumed" was reported.

Research Question 1

An independent t-test was run to compare the experimental and control groups' mean scores on the posttest of reading in order to probe the effect of comprehension instruction on the improvement of the reading comprehension of EFL learners. As displayed in Table 5, the experimental group ($M = 9.45$, $SD = 2.99$) showed a higher mean than the control group ($M = 6.14$, $SD = 2.37$) on the posttest of reading.

Table 5. descriptive statistics for the posttest of reading by groups under study

Group	N	Mean	Std. Deviation	Std. Error Mean
Experimental	31	9.45	2.99	.53
Control	34	6.14	2.37	.40

The results of the independent t-test [$t(63) = 4.94$, $p < .05$, $r = .52$ representing a large effect size] (Table 6) indicated that there was a significant difference between the two groups' mean scores on the posttest of reading. Thus, it can be concluded that the first null-hypothesis was rejected. The experimental group, after receiving comprehension instruction, outperformed the control group on the posttest of reading comprehension.

Table 6. Independent samples t-test for the posttest of reading by groups under study

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	2.98	.08	4.94	63	.00	3.30	.66	1.96	4.63
Equal variances not assumed			4.89	57.15	.00	3.30	.67	1.95	4.65

							Lower	Upper
Equal variances assumed	.00	.95	4.26	63	.00	1.98	.46	1.05 2.90
Equal variances not assumed			4.26	62.17	.00	1.98	.46	1.05 2.91

It should be noted that the assumption of homogeneity of variances was met (Levene's $F = .00$, $p > .05$). That is why the first row of Table 4.8, i.e. "Equal variances assumed" was reported.

Research Question 3

A Pearson's correlation was run to probe any significant relationship between EFL learners' reading comprehension and reading anxiety. The results [$r(65) = -.12$, $p < .05$, representing a weak effect size] (Table 9) indicated that there was not any significant relationship between the two variables. Thus the third null-hypothesis was supported. However, the negative Pearson value indicated that anxiety and reading comprehension were negatively correlated.

Table 9. Pearson correlation for the relationship between reading comprehension and reading anxiety

		Reading Comprehension
Reading	Pearson Correlation	-.12
Anxiety	Sig. (2-tailed)	.34
	N	65

In regard to the correlation between reading comprehension and reading anxiety, no significant relationship was found, suggesting that they were two different concepts.

Research Question 4

The data elicited from the participants in the focus group interview shed further light on the above-mentioned findings, for the results of statistical analyses are limited in nature. The main themes emerging from the

qualitative data were EFL learners' physical reactions to reading anxiety, environmental factors and their perspective regarding the effectiveness of comprehension strategy instruction.

The physical reactions of EFL learners were investigated when they encountered a passage followed by a number of comprehension questions. One of the interviewees remarked that "*Before the instruction on reading strategies, my mind went blank and I easily forgot what I had read whenever I saw a reading passage in front of me*". A pounding heart, 'butterflies' in the stomach, sweating, and being overwhelmed by worries about their performance were among the reactions that the participants referred to. These and some other physical and cognitive reactions were pointed out by Zbornik (2001). Another interviewee referred to the atmosphere of the class and the kinds of interaction between the teachers and the EFL learners which can contribute to the feeling of anxiety. She stated that "*I was worried about your teaching. I didn't think that learning strategies can facilitate reading comprehension*". This supported Wu's (2011) proposition that teachers have a significant role in alleviating learners' FLRA level. As Kuru Gonen (2007) contends, "creating a low-anxiety learning environment is important to reduce anxiety and tension that inhibit language performance" (p. 1036).

In line with the results of the statistical analyses, the interviewees reported positive comments about the effect of reading strategies instruction. One interviewee remarked that

Learning about different reading strategies was very useful. It promoted my confidence and helped me in understanding English texts. For example, I used to read the text word by word and it took a lot of time, but now I know how to scan and skim a lengthy passage.

Another student stated that "*Familiarity with different text organizations was helpful, now I know how information is organized in a text and what will come next*". Next interviewee confirmed the previous ones regarding the efficiency of the instructed strategies and argued that

In high schools, strategy instruction is neglected. We just read to get good grades on the exams. You know, the English section of our university entrance exam has some reading passages and we have time limit, and most of students cannot manage their time to answer this section.

In fact, this student pointed out the difference between what students learn at high school with respect to reading English texts and what they need to learn. This divergence may lead to higher FLRA level among students. As apparent, English courses at high school should equip EFL learners with reading strategies to improve their reading proficiency and consequently, reduce or control their FLRA level. According to McNamara (2011) utilizing adequate strategies ensures deep and proper understanding of reading texts.

DISCUSSION

The fact that the results of the present study indicated a significant improvement in the instructed group's reading performance at the time of post-test confirms the findings of previous researches which demonstrated that explicit reading strategy instruction leads to better performance (Anderson, 2005; Grabe, 2004). Our findings also echo Ahmadi and Pourhossein's (2012) study which indicated that reading strategies have a significant positive impact on the English reading comprehension proficiency since they assist learners in reading process. Likewise, Pressley and Harris (2006) found reading strategies beneficial in helping students perform better on reading comprehension tests. Dreyer and Nel (2003) arrived at the same results in their study of the effect of strategic reading instruction on learners' achievement. They found that students who received strategic training instruction attained both statistically and practically significantly higher marks on the reading comprehension. Moreover, Antoniou and Souvignier (2007) also found that explicit training had positive effects on reading comprehension, reading strategy knowledge and reading self-efficacy of students.

The result of the second research question would have a valuable contribution to the literature, since limited number of researches has been carried out in this area. Findings of the present study regarding the effect of reading strategy instruction on foreign language reading anxiety are in contrast to Capan and Pektas' (2013) study which indicated that exposing learner to training on different reading strategies would lead to an ascend in the FLRA level of the participants. Wu (2011) found no significant difference in the FLRA level of the students who had participated in reading courses. Likewise, Ghonsooly and Barghchi (2011) reported the same results in their introspective study of L2 reading anxiety. Possible

explanations for these studies may be the short period of instruction on reading strategies, the efficiency of the selected strategies, the atmosphere of the classes and the level of affiliation between the instructor and students.

Regarding the correlation between reading comprehension and reading anxiety, no significant relationship was found. This result is congruent with previous studies which explored the possible relationship between reading anxiety and reading comprehension. The results of Saito et al.'s (1999) study and that of Sellers (2000) are in line with the present study. Tsai and Li (2012) reported a negative correlation between reading anxiety and reading performance of Taiwanese EFL learners. No significant difference was found in the reading comprehension of students with high and low levels of reading anxiety. Working on relatively the same issue, Wu (2011) discovered that reading comprehension performance of the participants did not correlate with their reading anxiety. The results of the study conducted by Shariati and Bordbar (2009) indicated that reading anxiety and reading comprehension do not seem to be related in a meaningful way. Likewise, Jafarigohar and Behrooznia (2012) found a significant negative relationship between FLRA and reading comprehension. Therefore, we can assume that students with different levels of reading anxiety do not seem to exhibit a significant performance difference on reading comprehension tests. However, neither positive, nor negative significant correlation was found from the study of Brantmier (2005). Findings indicated lack of significant correlation between reading anxiety and reading comprehension. In fact, this study indicated that anxiety may be a factor involved in the reading process, but it does not hinder comprehension. This issue seems to contradict aforementioned studies in that they consider reading anxiety as a significant factor which deleteriously affects reading comprehension. Similarly, Chen (2007) reported a lack of significant relationship between FLRA level and reading performance.

Moreover, the focus group interview supported the results of statistical analyses and pinpointed the positive effect of strategy training on learners' reading comprehension which is in line with many studies in literature on reading strategy (Ahmadi & Pourhossein, 2012; Anderson, 2005; Grabe, 2004).

CONCLUSION AND IMPLICATIONS

This study investigated the effect of explicit reading strategy instruction on the Iranian high school students' EFL reading comprehension and Foreign Language Reading Anxiety (FLRA). In line with previous research (e.g. Wu, 2011), explicit strategy training was quite beneficial in improving high school EFL learners' reading comprehension and reducing their FLRA level. This finding echoes the result of Andreassen and Braten's (2011) study on the effects of explicit reading comprehension instruction on students' strategy use, reading motivation, and comprehension performance. Furthermore, comparing the FLRAS post-tests of the two groups indicated a significant decrease in the instructed group's FLRA level. This finding is significant since, to the researcher's best knowledge, no study has ever tried to investigate this issue in the context of high school. Of course, instructed EFL learners' views regarding the use and effect of reading strategy training provided more support for the above-mentioned findings and offered the present researcher valuable insights into the nature of strategy instruction which can help in improving the quality of language learning and more specifically, reading.

In the light of the findings, the following implications can be proposed. First, teachers should try to facilitate positive emotional states in EFL learners and avoid developing unrealistically high expectations of learners' performance. Another option is helping students deal with anxiety-provoking situations and attempt to alleviate their anxiety. An open discussion in which EFL learners can talk about their experiences of anxiety and the sources of their anxiety in response to foreign language reading can be helpful in this case and would provide teachers with invaluable information based on which they can make some modifications in their instruction and classroom management so as to deal with EFL learners' needs and assist anxious readers control and reduce their FLRA level. Moreover, as the study indicated, equipping EFL learners with effective reading strategies through explicit instruction results in considerable FLRA reduction and better performance. Finally, it is a good idea that materials developer consider adding one section to high school course books which deals specifically with reading strategies to not only ensure that reading strategy instruction is not overlooked, but also give teachers a clear plan to follow in their teaching and fulfill the needs of the learners.

It is recommended that future researchers increase the sample size, include both genders in different EFL contexts, and investigate the difference between the explicit and implicit approaches to reading strategy instruction in the long run. Furthermore, many fundamental questions concerning foreign language reading anxiety, such as the sources of FLRA, and its relation to other variables, such as motivation, self-efficacy, and background variables require in-depth investigations.

Bio-data

Mohammad Khatib is Associate Professor of Applied Linguistics at Allameh Tabataba'i University. His areas of interest include language skills, methodology, and second language acquisition.

Seyran Jannati has an M.A. in TEFL from Allameh Tabataba'i University. Her main research interests include language skills, teacher education, discourse analysis, and language testing.

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