

The Effect of Reading Strategy Instruction on Reading Self-efficacy and Reading Attitudes: A Case of Young Female Iranian EFL Learners

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Abstract: The literature on foreign language reading instruction has witnessed a significant bulk of research reporting the effectiveness of strategy instruction in improving reading outcomes. However, few studies have investigated the effects of reading strategy instruction on reading affective variables among young English as a Foreign Language (EFL) learners. The aim of this study was to investigate the effect of teaching second language (L2) reading strategies on young Iranian EFL learners' reading self-efficacy and reading attitudes. To this end, a sample of 48 Iranian EFL learners, aged 11-13, was recruited through convenience sampling and randomly assigned to an experimental group (N = 25) and a control group (N = 23). Using a quasi-experimental design, the researchers employed an experimental group that received a 12-week reading strategy instruction and a control group that were taught with the regular method without any strategy instruction. The Reading Self-Efficacy Questionnaire (RSEQ) and Reading Attitude Questionnaire (RAQ) were administered to measure the reading self-efficacy and reading attitudes of the participants as pre-test and post-test of the study. The strategy instruction intervention for the present study was based on Cognitive Academic Language Learning Approach (CALLA). The findings of the study indicated that the learners in the experimental group significantly outperformed those of the control group in terms of L2 reading self-efficacy. However, it was revealed that there was no significant difference between the reading attitudes of the two groups at the end of the semester. Overall, it may be concluded that EFL practitioners can incorporate teaching of reading strategies into their classrooms in order to help learners to gain both confidence and competence to address reading tasks more effectively.

Keywords: Reading Strategy Instruction, Reading Self-efficacy, Reading Attitude, EFL, Quasi-Experimental Design.

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Introduction

Second language (L2) reading comprehension may be known as the most achievable and most important skill for EFL learners (Carrell, 1984). However, L2 reading is a complex process requiring decoding written symbols, recognizing words, and finally comprehending written texts (Alderson, 2005; Koda, 2007). L2 reading comprehension is a multi-dimensional process in which the reader should have sufficient lexical knowledge, be able to compose the sentences, and invoke one's schematic knowledge to comprehend the printed text (Koda, 2007). Moreover, effective reading comprehension also involves the employment of a number of specific modes of operations known as "reading strategies" so as to understand a passage (Kern, 1989, p. 135). Skilled L2 learners are claimed to know how to use effective strategies in comprehending texts and how to interact with passages more productively (Anastasiou & Griva, 2009; Lau & Chan, 2003).

Reading strategies are generally considered as deliberate and goal-directed processes which help learners to reconstruct meaning from texts (Afflerbach, Pearson, & Paris, 2008). These strategies are considered as a sub-category of broader language learning strategies that are reported to positively influence and enhance language learning process (Oxford, Cho, Leung, & Kim, 2004). Reading strategies are conceptualized as "a plan of mental actions to achieve a reading goal" (Bimmel, Van Den Bergh, & Oostdam, 2001, p. 510). They are also considered as 'the mental operations or comprehension processes that readers select and apply in order to make sense of what they read' (Abbott, 2006, p. 637) and have been viewed as "special ways of processing information that enhance comprehension, learning or retention of the information" (O'Malley & Chamot, 1990, p. 1). According to Sheorey and Mokhtari (2001), reading strategies can be divided into three divisions: metacognitive, cognitive, and support reading strategies. Metacognitive reading strategies refer to deliberate and planned procedures which learners utilize in order to supervise, plan, self-manage, and improve their reading. Cognitive reading strategies are more concerned with direct manipulation of reading tasks. Such reading strategies encompass inferencing, note-taking, grouping, deduction, and transferring. Support reading strategies include support mechanisms employed by learners to address reading problems. These strategies include making use of dictionaries and other materials and underlining the text. However, these strategies cannot be

acquired by L2 learners automatically and naturally (Pressley, 2008). They usually require explicit, pedagogic intervention by the language practitioners so that the students can learn a repertoire of strategies and gain the procedural knowledge on how to use them appropriately in various contexts (Jiang & Grabe, 2011). The effectiveness of teaching reading strategies in helping less proficient readers to become more active, competent, and responsible readers has been approved in L2 reading research (e.g., Zhang, 2008).

As the other variable under the investigation of the present study, reading self-efficacy builds on the main premises of the general notion of self-efficacy in educational research. Self-efficacy is conceptualized as the individuals' perceptions and beliefs in their own capability in doing something successfully (Bandura, 1986). These perceptions influence the degree to which learners devote attention, effort, and perseverance to doing particular tasks (Bandura, 1982). Additionally, self-efficacy perceptions significantly impact learners' performance through affecting their decision making, sustained efforts, and their affective aspects (Pajares, 2003). According to Bandura (1982, 1986), sources of self-efficacy include mastery experience (one's prior experience of success), vicarious experience (observing and modelling others' successful performance), persuasions (others' opinion or attitudes towards our capability), and psychological states (feelings such as fear, stress, and anxiety).

An intricate and multidimensional affective construct, attitude is defined as "a learned predisposition to respond in a consistently favorable or unfavorable manner with respect to a given object" (Fishbein & Ajzen, 1975, p. 6). Motivated by this broad construct of attitude, reading attitude has been also conceptualized as "a system of feelings related to reading which causes the learner to approach or avoid a reading situation" (Alexander & Filler, 1976, p. 1). Reading attitude is a mental situation involving affective aspects (i.e., feelings and emotions) influencing the reading comprehension outcomes (Smith, 1990). Reading attitude has been defined as a multi-dimensional construct including three main components of affect (emotion), cognition (thought and belief), and conation (intention for action) (Mathewson, 1994; McKenna, 1994; van Schooten, de Glopper, & Stoel, 2004). Readers' attitudes affect the performance in L2 reading by influencing the extent to which a learner is engaged in the reading process as well as the amount of rehearsal and practice that a learner carries out in order to become a better reader (Kush, Marley, & Brookhart, 2005). Negative reading attitudes may make L2 readers unwilling to read in L2 or even avoid reading L2 texts (McKenna, Stratton, Grindler, & Jenkins, 1995). Moreover, reading attitude is argued to be molded, shaped, and changed with the learner's involvement in experiencing different

reading tasks. According to Yamashita (2013), “reading attitude is an acquired predisposition; it is shaped by readers’ individual experiences” (p. 249). Reading attitude, considered as feelings and emotions pertaining to reading, is argued to affect reading behavior and understanding of the text (Mathewson, 1994). From this perspective, one may hypothesize that reading strategy instruction might affect L2 readers’ attitudes.

Given the importance and effectiveness of second language (L2) reading strategies in enhancing L2 reading, a significant bulk of empirical studies has verified the beneficial role of explicit teaching of L2 reading strategies in improving L2 reading skills and competencies (e.g., Aghaie & Zhang, 2012; Akkakoson, 2013; Çubukçu, 2008; Plonsky, 2011). Explicit instruction of reading strategies can help L2 learners to foster their performance on exams involving comprehension and remember what is being read (Brown & Palincsar, 1989; Carrell, Pharis, & Liberto, 1989). Numerous studies in L2 literature have also confirmed that reading strategy instruction not only enhances students’ reading comprehension competencies but also increases their self-awareness of the strategies of L2 reading comprehension (e.g., Davis, 2010; Wright & Brown, 2006). Also, previous research reveals that reading strategy instruction affects reading comprehension and reading self-efficacy (e.g., Anastasiou & Griva, 2009; Keskin, 2014; Li & Wang, 2010; Naseri & Zaferanieh, 2012; Shang, 2010).

Although the use of reading strategies has been widely acknowledged and appreciated by numerous L2 researchers (Grabe, 2009), the ultimate success in strategic reading depends not only on what strategies to be used but also how the strategies are used by L2 readers (Jiang & Grabe, 2011). As a result, several strategy instruction models have been proposed in L2 literature (Chamot & O’Malley, 1996; Cohen & Weaver, 2005; Oxford, 2011). As a prominent strategy instruction model, Cognitive Academic Language Learning Approach (CALLA) was designed and used in the United States in order to remedy the learning inadequacies of L2 learners (Chamot & O’Malley, 1996). Numerous strategy researchers have used CALLA and claimed that this model is effective to be employed at various educational levels and contexts in foreign language learning (Chamot, Barnhardt, El-Dinary & Robbins, 1999). CALLA includes three main components including content topics, academic language development, and direct teaching of learning strategies (Chamot & O’Malley, 1994). The content is chosen from the topics that are in line with the learners’ proficiency levels and their disciplines. As for topic selection, it is suggested that the interest and motivation of learners be also taken into consideration (Chamot & O’Malley, 1994). One key feature of CALLA is that explicit strategy instruction can be integrated into regular

language instruction programs. The explicit strategy instruction can help L2 students to learn a set of strategies which can be used for particular learning tasks (Chamot & O'Malley, 1994). Explicit strategy instruction using CALLA is carried out by first making decisions about content goals and learning tasks; and then identifying proper strategies compatible with the content and tasks (Chamot & O'Malley, 1994). CALLA has also been employed by various researchers investigating the impact of the strategy instruction on reading ability and reading strategy use. The results of most of these studies indicated that strategic instruction employing CALLA has positively affected reading comprehension and reading strategy use (Çubukçu, 2008; Plonsky, 2011; Takallou, 2011). The strategy instruction treatment employed in this study was based on CALLA.

Although a burgeoning body of empirical studies have used CALLA as a framework for L2 reading strategy instruction, there is a paucity of empirical studies exploring the effects of this model for reading strategy instruction on young learners in EFL contexts (Manoli, Papadopoulou, & Metallidou, 2016). Reading comprehension is argued to be a difficult skill for young learners, as they need to simultaneously process much information in order to comprehend the text (Hammer et al., 2014). Reading comprehension, conceptualized as the competence to extract meaning from the printed text and interpret the text most appropriately (Grabe, 2004), is a cognitive process which requires a number of variables including schematic knowledge, systemic knowledge, fluency, and critical thinking (Teng, 2019). As a result, aiding young learners in acquiring the necessary reading competencies appears to be difficult for their teachers (Teng, 2019). The significance of conducting strategy-instruction studies involving younger L2 learners has been called for by numerous researchers (e.g., Chamot, 2005; Macaro & Erler, 2008; Manoli, et al., 2016) since the vast majority of studies have recruited older students. Also, one key variable which has been reported to affect the outcome of strategy instruction programs is the age of the participants (Hamp-Lyons, 1985). Moreover, as the influential role of affective variables has been recently recognized in foreign language learning (Dörnyei & Ryan, 2015), the importance of affective variables in L2 reading has received much research attention by numerous L2 researchers (Grabe, 2009; Li & Wang, 2010). In this line of research, numerous empirical studies have focused on the effects of reading strategy programs on both reading comprehension and reading self-efficacy as one key affective variable in L2 reading (Anastasiou & Griva, 2009; Keskin, 2014; Li & Wang, 2010; Shang, 2010). However, it seems that research into the effect of reading strategic instruction on affective variables

(i.e., reading self-efficacy, reading anxiety, reading motivation, and reading attitudes) has been essentially lacking on the research agenda in L2 reading. Additionally, with regard to the Iranian EFL context, it seems that most Iranian EFL teachers employ rather traditional and teacher-oriented reading instruction methods, and they pay less little attention to explicit teaching of strategies in their L2 courses. Given the fact that the role of context in language learning in general (e.g., Lantolf, 2000) and in strategy use in particular has been acknowledged as a key moderating variable (Oxford, 1996; Takeuchi, Griffiths, & Coyle, 2007), the conduction of replication studies on strategy instruction and strategy use in different contexts is warranted (Oxford, 2011). Against this background, the present study was set to investigate the effects of L2 reading strategy instruction, set within CALLA model, on young Iranian EFL learners' reading self-efficacy and reading attitudes. More particularly, the study intends to answer the following research questions:

1. Does second language reading strategy instruction significantly enhance Iranian EFL learners' reading self-efficacy?
2. Does second language reading strategy instruction significantly change Iranian EFL learners' reading attitudes?

Literature Review

The investigation of language learning strategies has been the focus of much attention by numerous L2 researchers (Zhang, Thomas, & Qin, 2019). These researchers have predominantly considered "good" language learners as those who possess strategic behavior in doing L2 tasks and activities (Oxford, 1996; O'Malley & Chamot, 1990; Plonsky, 2011). From this perspective, good readers are the learners who are strategic and competent in goal setting, information processing, and self-evaluation as well as self-monitoring of their reading activities (Afflerbach & Cho, 2009; Kung, 2019).

The body of research underscoring the explicit instruction of reading strategies in L2 learning lends support to the effectiveness of teaching reading strategies not only in improving reading comprehension cognitive outcomes but also in affecting reading-related affective variables such as self-efficacy, anxiety, motivation, and attitudes (e.g., Aghaie & Zhang, 2012; Li & Wang, 2010; Shang, 2010). The bulk of such studies has investigated the effect of reading strategy instruction on reading comprehension as the main dependent variable. Therefore, research into the impact of reading strategy instruction on affective variable of L2 reading seems to be lacking. However, the current review has mainly

concentrated on some illustrative studies to ground the intended objective of the present study. As an example, Li and Wang (2010) investigated the relationship between reading self-efficacy and reading strategy use among Chinese EFL learners. The participants of this study were 182 Chinese sophomore English majors. The findings indicated that reading self-efficacy was positively correlated with reading strategy use. In other words, it was revealed that EFL learners with higher reading self-efficacy were more willing to use reading strategies than less self-efficacious readers.

In another study, Shang (2010) explored EFL learners' employment of reading strategies, their perceived effect on self-efficacy, and the correlations between the use of reading strategies and perceived self-efficacy on their reading comprehension. The participants of the study were 53 Taiwanese English-major freshmen. To answer the research questions of this study, both quantitative and qualitative research methods were employed. Findings of the study revealed that metacognitive strategy was the most frequently-used reading strategy. Then, compensation and cognitive strategies were the second and the third frequently used reading strategies, respectively. Moreover, it was found that reading strategy use was positively correlated with self-efficacy beliefs. Nevertheless, no correlation was found between reading strategy use and reading comprehension.

In another study, Aghaie and Zhang (2012) investigated the effect of explicit reading strategy instruction on EFL students' reading performance. Using a quasi-experimental design involving a control group and an experimental group, the researchers investigated the effects of a four-month period of explicit instruction of cognitive and metacognitive reading strategies on reading performance and strategy use. The results of the study revealed that explicit strategy-based instruction improved both reading comprehension and reading strategy use. Additionally, the results indicated that strategy instruction improved autonomous reading behaviors of the participants.

Having carried out a correlational study, Ghonsooly and Elahi (2010) investigated the relationship among reading self-efficacy, reading anxiety, and reading comprehension among Iranian EFL learners. The participants of the study were 150 English majors at three universities in Iran. The findings of this study revealed that the learners' reading self-efficacy was negatively correlated with their reading anxiety. Also, it was found that there was a positive correlation between reading self-efficacy and reading comprehension.

Similarly, Naseri and Zaferanieh (2012) investigated the relationship between reading self-efficacy, reading strategy use, and reading comprehension among Iranian EFL learners.

A number of 80 Junior and Senior EFL students participated in this correlational study. Michigan reading comprehension test, Reading Strategy Use Questionnaire, and a Reading Self-efficacy Questionnaire were given as the instruments of the study. The findings of the study revealed that positive correlation existed between reading self-efficacy and reading comprehension and also between reading self-efficacy and reading strategy use. It was also revealed that cognitive strategies were the most frequently used reading strategies.

In another study, Ahmadian and Pasand (2017) also investigated the relationship between online reading metacognitive strategy use and reading self-efficacy among Iranian EFL learners. The role of gender was also investigated as the moderator variable of the study. A number of 63 homogeneous sophomore EFL learners were the participants of the present study. To collect the required data, Online Survey of Reading Strategies and reading self-efficacy questionnaire were administered to the participants. The results of the study revealed that problem-solving online metacognitive reading strategies were the most frequently used strategies, whereas support strategies turned out to be the least frequently used strategies. Moreover, it was revealed that there was a significantly positive correlation between the learners' perceived use of metacognitive online reading strategies and their reading self-efficacy. It was also found that females were more willing to use more global online reading strategies, whereas males had more reading self-efficacy in reading online texts.

In a more recent study conducted in Iranian EFL context, Zarei (2018) examined the relationship among reading strategies, reading self-efficacy, and reading comprehension of EFL learners in the Iranian context. A sample of 119 graduate and undergraduate English major students served as the participants of this study. A Michigan Test of English Language Proficiency was employed to homogenize the participants in terms of their general English proficiency and reading comprehension. Moreover, the two scales of Metacognitive Awareness of Reading Strategies Inventory and Reading Self-Efficacy Questionnaire were administered as the instruments of the study. The findings of this study indicated that there was a significant relationship between reading strategy use and reading comprehension. In addition, reading strategy use and reading self-efficacy were positively correlated. Finally, a positive correlation was found between reading self-efficacy and reading comprehension.

Method

The procedure reported in the present study is a part of a bigger project in which the effects of a reading strategy instruction on several cognitive and affective L2 reading dependent

variables were investigated (Fathi & Afzali, 2020). This paper, however, reports the details related to the purpose of the present study with reading self-efficacy and reading attitudes as the two dependent variables of the study.

Participants

To achieve the objectives of the present paper, two intact classes of young Iranian EFL learners ($n = 48$) were selected using convenience sampling from a language center in Tehran, Iran. The participants ranged from 11 to 13 years old and were all female. The two intact groups were randomly assigned into an experimental group ($N = 25$) and a control group ($N = 23$). To guarantee the homogeneity of the experimental and the control groups in terms of general English proficiency level “Oxford Placement Test” (OPT) (Allan, 2004) was given to the students of both groups. The reason for the administration of OPT and ensuring the homogeneity of the groups was the fact that global language proficiency of the participants is argued to influence the L2 affective variables (Dornyei & Ryan, 2015; Gardner & MacIntyre, 1993; Oxford, & Ehrman, 1992). The results obtained from OPT indicated that the learners were of lower intermediate level of language proficiency (B1). The two classes were taught by the same teacher who employed the same coursebook and materials. The experimental intervention (i.e., reading strategy instruction) lasted for a period of 12 weeks.

Instruments

English Proficiency Test

Oxford Placement Test (OPT) (Allan, 2004) was given to both groups in order to determine the homogeneity of the participants in terms of their general English proficiency. OPT is claimed to be the appropriate test to identify the English proficiency level of any number of learners at all levels (Allan, 2004). OPT consists of a 6 rating scale; students whose score fall between 0-17 are labeled as basic (A1), and students whose scores fall between 18-29 are viewed as elementary students (A2). Those whose scores lie between 30 and 39 are in the lower intermediate group (B1). Those with the scores of 40-47, are considered as upper intermediate (B2) and the students with the scores 48-54, and 54-60 are labeled as advanced (C1) and very sophisticated (C2) levels respectively. The reliability index of OPT as estimated by Cronbach’s alpha was reported to be 0.82 in this study.

Reading Self-Efficacy Questionnaire (RSEQ)

To measure L2 reading self-efficacy of the participants, Reading Self-Efficacy Questionnaire (RSEQ), adapted from Ghezlou, Kordi, and Nasri (2014), was administered to the participants. This questionnaire was developed based on Li and Wang's (2010) Reading Self-Efficacy Questionnaire, Ghonsooly and Elahi's (2010) EFL Learners' Self-efficacy in Reading Comprehension, and Horwitz's (1988) Beliefs about Language Learning (BALL) Reading Strategies Questionnaire. RSEQ includes 16 items in Likert-scale format ranging from (1=strongly disagree) to (5=strongly agree). The reliability coefficient of RSEQ in this study, measured by Cronbach's alpha, was reported to be 0.80 in the present study.

Reading Attitude Questionnaire (RAQ)

Reading Attitude Questionnaire designed by Yamashita (2007) was employed to measure the reading attitude of the participants. RAQ includes 22 items and was developed to assess two dimensions of reading attitude – affect (feeling) and cognition (thinking) – in a five-point Likert-scale format. Factor analysis of data from 300 EFL learners had yielded five underlying factors. Two factors indicated the affective dimension of reading attitudes (Comfort and Anxiety). The other three factors represented the cognitive dimension (Intellectual Value, Practical Value, and Linguistic Value). The validity of this scale has been approved by a large-scale study conducted by Stoeckel, Reagan, and Hann (2012). The internal consistency of RAQ in the present study, estimated by Cronbach's alpha, turned out to be 0.78 in this study.

Procedure

Before conducting the experimental treatment, OPT was administered to the participants of the study to ensure their homogeneity. Then, to accomplish the objective of the study, a 12-week strategy instruction program focusing on reading strategy instruction was integrated into the regular reading instruction of the experimental group. During the first session of the experimental treatment, the instructor discussed reading strategy instruction to the participants very briefly and provided them with an overview of the procedure of the whole intervention period according to the adopted strategy instruction model in the study.

The strategy instruction intervention for the present study was based on Cognitive Academic Language Learning Approach (CALLA) (Chamot & O'Malley, 1994) framework which constitutes five key stages including preparation, presentation, practice, evaluation, and expansion. In this framework, the instruction gradually moves from a highly explicit

instruction to a more implicit teaching of using strategies to learning tasks so that the language learners can begin to accept more responsibility in selecting and implementing appropriate learning strategies. This cycle reiterates when new strategies are added to students' strategic repertoires. The detailed description of each stage accompanied by its relevant activities for the reading strategy-based instruction is presented in Table 1.

Table 1. *Description of Reading Strategy-based Instruction*

Stage	Purpose	Example activities
1 Preparation	<p>To aid students in identifying the strategies they have already employed in different reading tasks and to raise their consciousness of the potential effects of employing strategies and their successful learning.</p> <p>By activating learners' background knowledge about their present employment of reading strategies, the teacher is able to identify the needs of the learners for teaching reading strategies.</p>	<p>group discussions on strategies employed recently for reading tasks, collective or individual talks about particular strategies employed for particular reading tasks, stimulated recall procedures in which learners verbalize their thinking when they carry out a specific task, self-report scales or inventories on employed reading strategies.</p>
2 Presentation	<p>The teacher explains and models different reading strategies and provides the students with details about the features, effectiveness, and different uses of various strategies.</p>	<p>The teacher himself thinks aloud while reading a text shown on the overhead projector.</p> <p>While reading, he showed the use of strategies like predicting the content according to the title, using pictures to activate schematic knowledge of the headings, paying particular attention to topics and bold-faced or italicized text, self-assessing comprehension and planning on how unknown words, grammar, or information can be addressed, assessing how successful the individual has been in text comprehension.</p> <p>Afterwards, the teacher can request that students to reflect on the strategies they observed, and the teacher can further explain the strategies with providing the technical name for each strategy, and discuss how a particular strategy can be employed more productively. This acts as a kind of modeling for students by which they could imagine themselves carrying out a particular reading task successfully.</p>

Stage	Purpose	Example activities
3 Practice	Students are provided with the opportunity of practicing the reading strategy with authentic reading tasks. The practice may occur repeatedly when the learners are engaged in doing group work with peers.	A number of learners may read a story, talk about unknown words in the text and try to guess the meanings from the context, and take turns summarizing the key points of the story. Strategy inventories can be practiced with different reading tasks, and may include any repertoire of language modalities.
4 Evaluation	Students are provided with chances to self-assess their success in employing reading strategies, thereby increasing their metacognitive awareness of their own improvement in L2 reading. Students are given activities which enhance their self-assessment competence.	Self-evaluative discussions after practicing new strategies, keeping journals in which learners keep the outcomes of their own using of reading strategies, preparing an inventory of strategies employed, and using open-ended self-report scales in which learners can comment on the effectiveness of various reading strategies.
5 Expansion	Students try to expand and transfer their learned strategies to other similar contexts and reading tasks. They may also create their own personal combinations of reading strategies. Up to this stage, the objective of strategy-based instruction has been accomplished, the learners have gained adequate competence to use strategies independently and have the self-regulated capacity to take the responsibility of their own learning.	Students use the previously taught strategies or their own individual mixtures of reading strategies while reading short stories outside the class.

To fulfill the objectives of the study, about an hour was needed to be devoted to the experimental treatment in each session. Using the CALLA framework, the participants of the experimental group were mainly required to make use of the titles of the passages to predict their content, to guess the meaning of the unknown words by the use of the context and by their schematic knowledge, and to practice other L2 reading strategies such as skimming, scanning, and summarizing. More particularly, about 5 to 10 minutes was devoted to the preparation stage of teaching each strategy. During this warm-up stage, the instructor asked the students to think about the pictures of the passage, predict the content of the passage, and provide some keywords describing the pictures. The teacher wrote down the students'

keywords on the board and then he himself provided a general summary of the passage very briefly. In the presentation stage (about 7 minutes), first the teacher played the tape of the text and the students were required to listen to the audio file very carefully. Afterwards, the instructor modeled the reading of each paragraph employing the think-aloud procedure so as to show how to guess the meaning of the unknown words, how to skim and scan the text, and how to summarize the paragraphs. In the practice stage, word contextualization, jigsaw, and discussion tasks were employed. In the word contextualization task (about 5 minutes), the instructor provided the students with a wordlist taken from the text. The students were required to answer questions about the words included in the wordlist. They were encouraged to employ their background knowledge, information of word structure, and inferences. For the jigsaw (about 15 minutes), the instructor organized the experimental class into groups of three or four, and each group was required to concentrate on particular paragraphs. Each group summarized their assigned paragraphs and cooperated in addressing unfamiliar sentence structures or words. The teacher also provided the students with necessary helps. As for the discussion task (about 15 minutes), the teacher asked students to think about the different aspects of the text (e.g., positive or negative) and to have a discussion on these aspects. Since some of the students were not able to discuss them orally, they were allowed to prepare a written discussion of those aspects. In the expansion stage, the students were assigned outside-class homework (i.e., short stories) for which they were required to employ the previously taught strategies or their own individual mixtures of reading strategies while reading short stories outside the class. In the evaluation stage, students were engaged in self-evaluation and peer-to-peer evaluation of the taught and employed strategies by exchanging their ideas or opinions of their strategy use in reading tasks.

In the meantime, the control group students were taught traditionally without receiving any explicit instruction of L2 reading strategies. More specifically, the procedure adopted for the control group was to make the students read a text aloud and translate it. During the sessions, the teacher taught the new vocabularies and provided the students with oral comprehension questions following passage reading.

To collect the data to investigate the dependent variables under the investigation of the present study, the Reading Self-Efficacy Questionnaire (RSEQ) and Reading Attitude Questionnaire (RAQ) were administered to measure reading self-efficacy and reading attitudes of the participants as pre-test and post-test of the study.

Results

In order to statistically analyze the data, the Statistical Package for Social Sciences (SPSS) version 20.0 was employed. As pointed out above, OPT was administered to guarantee the homogeneity of the students of the experimental and control groups with regards to general language proficiency before starting the reading strategy-based instruction. For the analysis of the OPT scores, an independent-samples t-test was carried out to compare the OPT scores for the students of experimental and control groups. As presented in Table 2, the results indicated that there was not a statistically significant difference in the OPT scores for the experimental group ($M = 35.72$, $SD = 10.05$) and the control group ($M = 36.11$, $SD = 9.84$); $t(46) = -.642$, $p > 0.05$, revealing that the two groups were not statistically different in terms of general English proficiency prior to conduction of the treatment.

Table 2. Results of the OPT for Each Group

Groups	M (SD)	T	Sig.
Experimental	35.72 (10.05)	-.642	.412
Control	36.11 (9.84)		

Afterwards, in order to investigate the effect of the L2 reading strategy instruction program on the participants' reading self-efficacy and reading attitudes, one-way between-groups analysis of covariance (ANCOVA) was carried out to compare the effects of the two types of L2 reading instructions employed in the control group and the experimental groups on the two reading affective variables (i.e., self-efficacy and attitudes) under investigation. According to Pallant (2013), ANCOVA can be used when there is a pre-test/post-test design (e.g. comparing the impact of two different interventions, taking before and after measures for each group). In this analysis, the scores on the pre-test are considered as a covariate to 'control' for pre-existing differences between the groups. For the two conducted ANCOVAs to answer the two research questions of the present study, the independent variable was the type of intervention (i.e. strategy-based instruction or traditional), and the dependent variables were the scores on the two scales (i.e., RSEQ and RAQ) administered at the end of the course. The scores of participants on the pre-tests of each scale were considered as the covariate in this analysis. For each ANCOVA analysis, preliminary checks were conducted to ensure that there was no violation of normality, linearity, homogeneity of variances, homogeneity of regression slopes, and reliable measurement of the covariate.

Table 3. Descriptive Statistics for Pre- and Posttests Scores

Groups	Scales	Pre-test		Post-test	
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Experimental	Self-efficacy	20.14	4.94	24.26	5.76
	Attitude	31.36	7.73	33.84	8.20
Control	Self-efficacy	19.76	5.30	20.39	4.54
	Attitude	29.86	7.90	32.56	7.98

Research Question 1: Does second language reading strategy instruction significantly enhance Iranian EFL learners' reading self-efficacy?

As seen in Table 3, there was a significant difference between the reading self-efficacy scores of the experimental group in the pre-test ($M = 20.14$, $SD = 4.94$) and those in the post-test ($M = 24.26$, $SD = 5.76$). Similarly, there was a significant difference between the reading self-efficacy scores of the control group in the pre-test ($M = 19.76$, $SD = 5.30$) and those in the post-test ($M = 20.39$, $SD = 4.54$). Nevertheless, after adjusting for the pre-test scores of reading self-efficacy, there was a statistically significant difference between the two groups on post-test scores of reading self-efficacy, $F(1, 45) = 6.82$, $p = 0.012$, partial eta squared = 0.132) (see Table 4). This result indicates that the participants in the experimental group improved their reading self-efficacy significantly more than those in the control group, suggesting that the L2 reading strategy instruction has been conducive in fostering reading self-efficacy of the Iranian EFL learners.

Table 4. The Results of ANCOVA for Reading Self-efficacy

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Covariate (pre-test)	909.893	1	909.893	47.086	.000	.511
Between-subjects	131.862	1	131.862	6.824	.012	.132
Within-subjects	869.586	45	19.324			

Research Question 2: Does second language reading strategy instruction significantly improve Iranian EFL learners' reading attitudes?

With regard to the effect of strategy instruction on reading attitudes, the descriptive statistics (see Table 3) demonstrates that the mean score of the experimental group for reading attitudes was 31.36 in the pre-test and this mean score increased to 33.48 on the post-test. Likewise, the reading attitude mean score for the control group was 29.86 on the pre-test and this value was raised to 32.56 on the post-test. After adjusting for the pre-test scores of reading attitudes, the results of ANCOVA (see Table 5) indicated that there was not a statistically significant difference between the two groups on post-test scores of reading

attitudes, $F(1, 45) = 0.034$, $p = 0.855$, partial eta squared = 0.00). This finding revealed that second language reading strategy instruction failed to significantly improve Iranian EFL learners' reading attitudes.

Table 5. *The Results of ANCOVA for Reading Attitude*

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Covariate (pre-test)	2654.192	1	2654.192	252.609	.000	.849
Between-subjects	.356	1	.356	.034	.855	.001
Within-subjects	472.821	45	10.507			

Discussion

The present study was carried out to investigate the effect of teaching L2 reading strategies on the reading self-efficacy and reading attitudes of young Iranian EFL learners. CALLA was adopted as the strategy instruction model for the strategy instruction of the experimental group, lasting for twelve weeks. The findings of this study indicated that the participants of the experimental group significantly outperformed those of control group in reading self-efficacy, suggesting that the reading strategy instruction contributed to improving L2 reading self-efficacy of the young Iranian EFL learners. In the light of this finding, it can be argued that explicit reading strategy instruction might have given further competence, confidence, and self-assurance to the participants of the experimental group. More particularly, the CALLA framework especially through its practice, evaluation, and expansion stages can provide the students further experiences of mastery, verbal persuasion, and favorable self-affirmation, all of which have contributed to increasing the students' reading self-efficacy. In the same vein, the teacher himself tried to implement the reading strategies in the presentation stage of the framework, thereby providing a kind of vicarious experience for the L2 readers. This vicarious experience gained from observing teacher's modeling of used strategies might have increased reading self-efficacy of the participants. This result echoes the findings of a bulk of previous empirical studies which support the assumption that the use of L2 reading strategies is positively correlated with reading self-efficacy of the EFL learners (Ahmadian & Pasand, 2017; Ghonsooly & Elahi, 2010; Li & Wang, 2010; Liao & Wang, 2018; Naseri & Zaferanieh, 2012; Shang, 2010; Zarei, 2018; among the others). Also, this finding is in line with those of Keskin (2014), stating that employing metacognitive reading strategies could improve reading self-efficacy.

However, concerning the second research question, the findings of the present study revealed no significant difference between the control group and the experimental group in terms of reading attitudes. It is claimed that any kind of instruction might affect learning attitude, motivation, and learning behavior (Ellis, 1997). From this perspective, one may argue that since either of the experimental and control groups received a kind of reading instruction (traditional or strategy-based), no significant difference in reading attitudes was found between the two groups. This finding is partially in line with that of Yamashita (2013). As the reading attitudes are shaped over time (Yamashita, 2013), a twelve-week strategic instruction is relatively short and may not be sufficient for the strategic instruction to significantly affect the reading attitudes of the experimental group more than the control group. It is also argued that attitude is considered as a sophisticated affective variable which is concerned with an acquired predisposition, molded over time, to react or respond to something consistently (McKenna, 1994). From this perspective, reading attitude addresses a set of positive and negative feelings and emotions which makes the reader approach or avoid reading tasks (Alexander & Filler, 1976). In addition to the duration of the course, other plausible variables such as motivation and anxiety might have affected the reading attitude of the participants. Therefore, the levels of students' reading anxiety and reading motivation for the participants of both groups may have been taken into account in order to lead to a more proper comparison of the reading attitude of the two groups.

Conclusion

The objective of this research was to investigate the effect of strategy instruction on affective variables for a group of young EFL learners. More specifically, the effect of teaching L2 reading strategies on young Iranian EFL learners' reading self-efficacy and reading attitudes was explored. The results revealed that reading strategy instruction significantly contributed to improving the reading self-efficacy of the participants. However, reading strategic instruction had no significant effect on the reading attitude of the young EFL learners. Given the significance of self-efficacy beliefs in reading achievements (Anastasiou & Griva, 2009), the findings of the present study lend support to adopting reading strategy instruction programs in L2 classrooms. In the light of these findings, EFL practitioners might be recommended to pay more serious attention to strategic reading instruction as the proper use of reading strategies can assist EFL readers to gain reading self-efficacy thereby improving their reading competencies.

From the pedagogical point of view, it can be proposed that EFL practitioners incorporate teaching of reading strategies into their classrooms in order to help learners to gain both confidence and competence to address reading tasks more effectively. To fulfill this objective, the practitioners themselves should be educated on how to teach strategically. Unless language teachers are provided and educated with the necessary knowledge and awareness of effective strategic instruction in L2 reading, they will be less likely to teach those strategies effectively (Zhang & Wu, 2009). Consequently, teacher education programs might be suggested to take the initiatives to train pre-service EFL teachers on how to apply reading strategies properly in their own classroom. From a more global perspective, further attention should be directed to L2 strategic instruction by foreign language policy makers, syllabus designers, and curriculum planners in Iran wherein teaching strategies may not have received necessary and sufficient attention in EFL pedagogy. With respect to the particular participants of the present study, reading strategy instruction might be offered from the earlier stages of L2 instruction for the young L2 learners in Iran. The integration of strategy instruction in L2 curriculum will encourage young learners to acquire progressively heightened degrees of self-regulation and autonomy (Macaro & Erler, 2008), which helps them to become more proficient in using L2 in a variety of contexts (Chamot, 2005).

In order to gain more comprehensive insights into the effect of reading strategy instruction on affective variables such as reading self-efficacy and reading attitudes, future researchers are recommended to employ qualitative data collection procedure to uncover the participants' perceptions and actual reading strategy use before and after the reading strategy-based instruction program. Since little empirical evidence supports the assumption that actual strategy use occurs in classrooms (Pressley, 2008), the investigation of the actual use of strategies by L2 learners might be more accurate by employing qualitative and think-aloud protocol research procedures. Additionally, the effect of reading strategy instruction on other non-cognitive variables such as reading motivation and reading anxiety might call for further empirical studies. Also, future researchers may recruit bigger samples with differing language proficiency levels to raise the external validity of the findings. Finally, because the participants of the present study were young EFL learners, the major concern is which kind of instructional program is more appropriate for such learners (Macaro & Mutton, 2009). As a result, the use of longitudinal research designs is likely to shed more light on this concern.

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Appendices

Appendix A. Reading attitude questionnaire items

	Items	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	I can become more sophisticated if I read English.					
2	I can get various kinds of information if I read English.					
3	Reading English is troublesome.					
4	Reading English is useful for my future career.					
5	I feel anxious if I don't know all the words.					
6	I can acquire vocabulary if I read English.					
7	Reading English is useful to get a good grade in class.					
8	I can acquire broad knowledge if I read English.					
9	I feel relaxed if I read English.					
10	I sometimes feel anxious that I may not understand even if I read.					
11	I can develop reading ability if I read English.					
12	Reading English is useful to get credit for class.					
13	Reading English is dull.					
14	I get to know about new ways of thinking if I read English.					
15	I can improve my sensitivity to the English language if I read English.					

16	I feel tired if I read English.					
17	I feel anxious when I'm not sure whether I understood the book content.					
18	I feel refreshed and rested if I read English.					
19	Reading English is useful to get a job.					
20	I don't mind even if I cannot understand the book content entirely.					
21	Reading English is enjoyable.					
22	I get to know about different values if I read English.					

Appendix B. Reading Self-efficacy Questionnaire

Items		Strongly agree	Agree	Partially agree	Disagree	Strongly disagree
1	I am the best student in my reading class					
2	I don't need the help of any one in my reading tasks					
3	No matter how much challenging the reading task is. I do try to handle it enthusiastically					
4	My reading teacher considers me an intelligent reader					
5	I have the courage to answer the most difficult reading questions					
6	I enjoy reading authentic texts such as novels or poems					
7	Browsing the net and understanding it is one of my favorites					
8	I can handle comprehending English newspapers and magazines					
9	I don't feel stressful while answering reading questions					
10	I need the help of my reading teacher or a proficient reader while doing a reading task					
11	When I can't understand the text, I use different strategies to take care of that					
12	I can handle the most difficult texts full of unknown words or structures					
13	Reading is not a boring task to me anymore					
14	I can concentrate on the reading tasks					

	quite well					
15	I can read and understand the text within the proposed time limit					
16	In my idea, reading can improve my writing and speaking skills					