EFL Learners' Metacognitive Awareness of Global Reading Strategies and L2 Reading Comprehension Skills: The Efficacy of Reciprocal Teaching

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ABSTRACT

Reading has the power and potential to facilitate language learning process and it also plays a critical role in enhancing learners' way of thinking. With reference to the crucial place of reading in the process of language learning, the present study was guided by two concepts, namely reciprocal teaching, and global reading strategies, and it was aimed to examine the impact of strategy instruction, conducted through reciprocal teaching, on Turkish EFL learners' perceived use and metacognitive awareness of global reading strategies and L2 reading comprehension. 23 tertiary EFL learners took the Metacognitive Awareness of Reading Strategies Inventory (MARSI) twice, while reading comprehension tests were administered three times to all the participants. The data obtained through the reading comprehension tests were analysed by computing one-way ANOVA with repeated measures, and a paired samples t-test was run to analyse MARSI findings. The results revealed that reciprocal teaching has facilitative effects on improving the participants' L2 reading comprehension and fostering their perceived use and metacognitive awareness of global reading strategies. In this connection, it can be suggested that reciprocal teaching should be included in the agenda of EFL teachers to help learners become accomplished readers in L2.

INTRODUCTION

The importance of reading in people's lives is emphasized in a famous quote by Gustave Flaubert (1857, as cited in Sartre, 1989, p. 255): "Do not read, as children do, to amuse yourself, or like the ambitious, for the purpose of instruction. No, read in order to live." Correspondingly, Krashen (2004) pays attention to the power of reading to improve spelling, grammar, writing and vocabulary, and he points out that reading is also crucial to develop better thinkers. He also argues that individuals do not read and write well enough though they are able to read and write, so in fact "there is not a literacy crisis" (Krashen, 2004, p. 23). In this connection, it can be noted that sources of motivation should be introduced to individuals who have less enthusiasm for reading.

Both Grabe (2002) and Harmer (2001) put a strong emphasis on the critical role of teachers in encouraging learners to read extensively. To be more precise, Harmer (2001, p. 68) proposes "four main motives" to encourage learners to read in English. Firstly, the importance of reading in acquiring language is underlined. Because learners are able to be exposed to L2 while reading books, passages or even booklets, making the reading process more captivating will affect L2

learning process positively. Besides the possible positive effect of reading on language acquisition, it is pointed out by Harmer (2001, p. 68) that teachers should introduce and make use of English texts since they basically allow learners to practice the reading skill and study language. Moreover, as the final possible outcome of using English texts in class, their being models for future writing is stressed. Grabe (2002, p. 277) also notes that teachers should help learners establish fluency in reading by encouraging them to read extensively, should model reading skills and strategies clearly, and facilitate student performances in comprehending texts. In addition, it is pointed out that teachers ought to provide students with many opportunities for practice.

These suggestions are, in fact, the characteristics of teachers proposed in the comprehension-enhancing approaches, and reciprocal teaching, cooperative learning and reading recovery are the most famous ones among these approaches. In reciprocal teaching, four comprehension strategies, namely predicting, questioning, clarifying, and summarizing, are utilized to read a text effectively (Palincsar & Brown, 1984, p. 120). The teacher first models the sequence of the activity, then guides learners to be active leaders in making use of four comprehension strategies while comprehending the text.

The four strategies included in reciprocal teaching method are also described as global and support reading strategies by Mokhtari and Reichard (2002). That is to say, in the study of Mokhtari and Reichard (2002), reading strategies are divided into three main categories: global reading strategies, problem-solving strategies and support reading strategies. Specifically, global reading strategies are those facilitating one's general understanding of the text and fostering one's reading comprehension and monitoring. For this reason, global reading strategies as well as the comprehension strategies emphasized in reciprocal teaching method are of great value in improving strategic reading and being proficient readers in L2.

A variety of studies have been conducted to investigate whether strategy instruction, given through reciprocal teaching, reveals encouraging results and it is concluded that reciprocal teaching is useful for improvement of reading comprehension skills and use of reading strategies (Hamdani, 2020; Lysynchuk et al., 1990; Sari, 2021; Taka, 2020). Furthermore, regarding global reading strategies, recent studies have been carried out to identify global reading strategies (Bishop, Reyes & Pflaum, 2006; Mokhtari & Reichard, 2002; Mokhtari & Sheorey, 2002), evaluate awareness of global reading strategies (Alkhateeb et al., 2021; Kung & Aziz, 2020) and examine how global reading strategies influence reading comprehension (Ilustre, 2011). However, what remains comparatively unknown is the efficacy of reciprocal teaching in enhancing EFL learners' use and awareness of global reading strategies and fostering L2 reading comprehension. In this regard, the present study aimed to investigate the impact of strategy instruction, carried out through reciprocal teaching, on the English language teacher candidates' metacognitive awareness and perceived use of global reading strategies and L2 reading comprehension.

THEORETICAL LENS

Reciprocal Teaching

Reciprocal teaching is first proposed by Palincsar and Brown (1984, p. 124) and by their definition it is "a procedure during which teacher and learners take turns leading a dialogue concerning sections of a text." However, despite its revealing encouraging results and supportive implications for teaching, the study of Palincsar and Brown (1984) was conducted in L1 setting, so in fact, they developed reciprocal teaching method for learners having difficulty in reading in

their mother tongue. Alternatively, as Salatacı and Akyel (2002, p. 3) also stated, first Cotterall (1990, 1993) put forward a practical framework to employ reciprocal teaching in ESL context and Song (1998) was the first researcher who used reciprocal teaching in EFL setting for strategy training. Reciprocal teaching was found to be beneficial to improve learners' L2 reading comprehension (Cotterall, 1990; Salatacı & Akyel, 2002; Song, 1998, Spörer et al., 2009). And more specifically, it is suggested by Song (1998, p. 45) that less skilled readers can benefit more from reciprocal teaching than more skilled readers and strategy instruction may result in better profits in learners' improving general understanding of the texts and their ability of making logical inferences based on the content of the passages. Considering these conclusions, it can be stated that "reciprocal teaching is a well-suited method to assist L2 learners reading in L2" (Cotterall, 1990, p. 68).

In the light of the primary framework proposed by Palincsar and Brown (1984), the procedures held in the studies of Cotterall (1990, 1993), Dokur (2017), Salatacı and Akyel (2002), Song (1998), Spörer et al. (2009), reciprocal teaching procedure can be stated as follows:

1. The teacher gives the reading text to each student.
2. The teacher and students solely look at the title of the text and make predictions on the content of the text. At this stage, the teacher encourages students to remember what they know about the possible content of the text, that is, students' background knowledge is tried to be activated.
3. Students read the first paragraph of the text silently.
4. The teacher models how to ask questions about incomprehensible points in the paragraph, how to clarify blurred points, how to summarise the paragraph and state the main idea of the paragraph, and how to predict the content of the following paragraph respectively. The teacher can repeat modelling at the following stages because it may take time to make students feel confident about taking roles, so the teacher should be patient and pay regard to wait time.
5. A volunteer student is asked to be the leader who will guide the same procedure: firstly, the leader lets students read the paragraph silently, and then asks a leading question about incomprehensible points in the paragraph and encourages students to ask more questions.
6. The leader seeks or provides clarification for unclear points (e.g., unknown words, problematic grammar structures that inconvenience students' understanding).
7. The leader states the main idea of the paragraph and summarises the content of the paragraph.
8. Lastly, the leader makes predictions about the content of the following paragraph and asks a volunteer student to be the next leader.

Global Reading Strategies

According to Grabe (2009, pp. 5-10), individuals read various types of texts for several reasons, e.g., reading forms to fill them out, reading text messages or e-mails to get in touch with others, reading novels or magazines for pleasure or reading articles for the purpose of getting information on a given topic. Furthermore, Grabe (2009, pp. 1-3) emphasizes the benefits of and the reasons for reading in L2 by directing attention to the fact that around the world individuals do not read in only their mother tongue, but instead there are many people who are able to read in more than one language.

Thanks to the recent research studies conducted on L2 reading (Freiermuth & Ito, 2021; Namaziandost, 2019; Shin, 2019), reading instruction in L2 environments has improved considerably, too. Especially, the studies conducted on strategy instruction to assist learners in being accomplished readers have contributed a lot to the field of L2 reading (Barnett, 1988; Block, 1986; Carrell, 1989; Jafari & Shokrpour, 2012; Kara, 2015; Kuru Gönen, 2015; Yapp, 2021). Accomplished readers are "the learners continuously adjusting their reading behaviours to accommodate text difficulty, task demands and other contextual variables" and by doing so, they in fact minimize comprehension problems because of their monitoring the reading process cautiously (Koda, 2005, p. 204). In this connection, it can be noted that teaching reading strategies can be included into the agenda of L2 courses since they facilitate learners' L2 reading comprehension (Koda, 2005) and help them become accomplished readers (Grabe, 2009).

Both by Mokhtari and Reichard (2002) and Mokhtari and Sheorey (2002), reading strategies are classified into three categories, i.e., global reading strategies, problem solving strategies and support reading strategies, which is a similar categorization to that of Carrell (1989). The categorization proposed separately by Mokhtari and Reichard (2002) and Mokhtari and Sheorey (2002) were formed within the development of Metacognitive Awareness of Reading Strategies Inventory (MARSI) and the Survey of Reading Strategies (SORS). In their studies, the researchers examined reading strategies in detail by directing attention to the gap of an instrument in the literature to evaluate learners' metacognitive awareness and perceived use of these strategies, and they developed MARSI and SORS, which are made up of 30 items questioning three types of reading strategies. Global reading strategies are the ones that necessitate general understanding of a text and enhance reading comprehension whereas the other two categories focus on more specific strategies utilized to remove comprehension deficiencies. The current study was framed within the frame of global reading strategies because the aim was to investigate the impact of strategy training on EFL learners' reading comprehension skills, together with their metacognitive awareness of reading strategies.

Related Work

Besides the studies examining the effect of reciprocal teaching on learners' reading comprehension skills (Doolittle et al., 2006; Hamdani, 2020; Kula & Budak, 2020; Lysynchuk et al., 1990; Sari, 2021; Spörer et al., 2009, Taka, 2020), on L1 and L2 reading (Salataci & Akyel, 2002), and language proficiency of young EFL learners (Dokur, 2017), several studies have been also conducted on L2 learners' use and metacognitive awareness of reading strategies (Alkhateeb et al., 2021; Ilustre, 2011; Kung & Aziz, 2020; Yüksel & Yüksel, 2012; Zhang & Wu, 2009). In this part of the study, the studies conducted within the framework of reciprocal teaching and global reading strategies are discussed.

Ilustre (2011) examines to what extent participants' awareness towards metacognitive reading strategies or their beliefs about reading is associated with reading comprehension. The results revealed a positive correlation between participants' reading comprehension scores and use of problem-solving strategies, which means that the participants who got higher scores from the reading comprehension tend to utilize problem-solving strategies more frequently. However, regarding global and support reading strategies, no correlation was found. Although this finding could not be interpreted a very optimistic result in respect of global reading strategies, it emphasizes a need for raising learners' awareness towards global reading strategies as well as

support reading strategies. Besides, learners can be exposed to strategy instruction to be more aware of reading strategies and become accomplished readers (Grabe, 2009).

Taka's (2020) study is a recent example of a research study guided by the motivation of utilising a different way of teaching reading, namely reciprocal teaching, to facilitate EFL learners' L2 reading skills. In his study, whether reciprocal teaching is effective in teaching reading to Indonesian EFL learners was examined, and the data were collected through a pre-test and a post-test (Taka, 2020). The findings revealed that reciprocal teaching made a positive contribution to the process of teaching reading in the Indonesian EFL context (Taka, 2020). In a similar vein, in the study of Hamdani (2020), the efficacy of reciprocal teaching in enhancing the university students' reading ability was investigated. However, different from that of Taka (2020), Hamdani's (2020) quasi-experimental study involved an experimental and a control group. The experimental group was instructed via the reciprocal teaching, whereas the control group was exposed to direct reading thinking activities (Hamdani, 2020). The findings showed that "reciprocal teaching method is more effective than that of directed reading thinking activity on reading comprehension" (Hamdani, 2020, p. 32).

Though it is not a study focusing specifically on reciprocal teaching, the study of Yüksel and Yüksel (2012) is another study which aimed at exploring learners' metacognitive awareness regarding reading strategies. The researchers administered the Survey of Reading Strategies (SORS) (Mokhtari & Sheorey, 2002), and the fact that it was conducted in Turkish EFL context makes it contextually more crucial. The findings showed that 34 % of the participants usually used reading strategies. However, problem-solving strategies were employed most frequently while support reading strategies were the least frequently used type of reading strategies, so although the participants reported that they often utilized global reading strategies and they were aware of them, it can be concluded from the results that there was a need for guiding learners to become better comprehenders.

This need can be fulfilled by carrying out a training, particularly designed for the betterment of learners' strategy use or improvement of their metacognitive awareness towards reading strategies (Muñiz-Swicegood, 1994; Sung et al., 2008). In the present study, the participants were instructed through reciprocal teaching and how the instruction affected their use of global reading strategies and reading comprehension skills was examined utilizing two data collection tools (i.e., Metacognitive Awareness Reading Strategies Inventory (MARSI) developed by Mokhtari and Reichard (2002) and reading comprehension tests). Connectedly, the purpose of the study was to examine the possible effects of strategy training which was carried out by using reciprocal teaching method on participants' metacognitive awareness of global reading strategies, strategy use, and reading comprehension skills. Considering the study aim, the following research questions were determined:

Research Question 1: To what extent do the participants' perceived use and metacognitive awareness of global reading strategies change after strategy instruction?

Research Question 2: Are there any significant differences among the three reading comprehension scores of the participants?

METHODOLOGY

Research Design

The research design of the current study was quantitative in nature because the data were collected via close-ended data sources, i.e., questionnaire and comprehension tests. Creswell (2015, p. 621) defines quantitative research as follows:

"an inquiry approach useful for describing trends and explaining the relationship among variables found in the literature. To conduct this inquiry, the investigator specifies narrow questions, locates, or develops instruments to gather data to answer the questions, and analyses numbers from the instruments, using statistics. From the results of these analyses, the researcher interprets the data using prior predictions and research studies. The final report, presented in a standard format, displays researcher objectivity and lack of bias".

The present research study aimed to examine to what extent strategy instruction, conducted through reciprocal teaching, influence EFL learners' perceived use and metacognitive awareness of global reading strategies and L2 reading comprehension; thus, the focus was on describing the efficacy of reciprocal teaching in terms of global reading strategies and L2 reading comprehension. In parallel with this purpose, an inventory was administered twice, and the participants took three reading comprehension tests. The collected data were analysed using statistics and interpreted considering the related work, as suggested by Creswell (2015) and Creswell and Creswell (2018).

Participants

The participants of the current study were determined in two folds. Firstly, a total of 80 students, enrolled in the Department of English Language Teaching at a state university in Turkey, took a reading proficiency test which was included in *Complete IELTS Bands 5 – 6.5* course book published by Cambridge University Press (Brook-Hart & Jakeman, 2012). The scores were calculated out of 40 and a categorization was performed in accordance with the IELTS General Training Reading Band Scores. The results revealed a cumulation around Bands 4 and 4,5, but in the second phase of the participant determination, both more and less proficient L2 readers were included in the participants of the present study. Table 1 shows the distribution of the participants:

Table 1. Distribution of the Participants

IELTS Band Score	N
3	2
3,5	4
4	5
4,5	6
5	4
5,5	2

As displayed in Table 1, the numbers of less proficient L2 comprehenders and more proficient L2 comprehenders were equally distributed, and the total number of participants was determined as 23. Of the participants, 17 were female and 6 were male. They were all monolingual speakers of Turkish and have been exposed to English for nearly 11 years. However, none of them had taken any strategy instruction before.

Data Collection Tools and Procedure

Metacognitive Awareness of Reading Strategies Inventory

Metacognitive Awareness of Reading Strategies Inventory (MARSI), developed by Mokhtari and Reichard (2002), was utilized to discover participants' awareness in respect to their use of global reading strategies. MARSI specifically investigates metacognitive awareness and perceived use of reading strategies. It consists of three types of strategies, namely global reading strategies (GLOB), problem-solving strategies and support reading strategies. 13 items of the inventory focus on global reading strategies while 8 of them questions problem-solving strategies and 9 items are on support reading strategies. However, since the primary aim of the present study was to investigate use of global reading strategies, only the items examining participants' metacognitive awareness and perceived use of global reading strategies were examined in detail. The participants were supposed to respond to the items by choosing one of the statements, ranging from 'I never or almost never do this' to 'I always or almost always do this'.

The reliability analyses, i.e., for the first and second administration of MARSI, were carried out on the "global reading strategies" factor, comprising 13 items. Cronbach's alpha showed that the GLOB subscale of the inventory reached acceptable reliability, $\alpha = 0.75$ in the first administration, and the reliability of the subscale was found to be .77 in the second administration. These findings showed that MARSI is a suitable instrument as well as a reliable inventory to be used within the context of the present research study since the α results were found to be at the recommended value (Streiner, 2003, pp. 102-103).

Reading Comprehension Tests

Three reading comprehension tests were administered throughout the present study: in the beginning, after the fifth week and at the end of the study. The tests were included in Cambridge University Press Empower B2 Upper Intermediate workbook (Doff et al., 2015). The aim to utilize the available comprehension tests was to ensure that reading comprehension scores of the participants were examined through the standardized tests and all tests were in the same level. Additionally, readability scores of each text were calculated according to two different formulas: Flesch Reading Ease and Flesch-Kincaid Grade Level. Besides determining readability scores of the texts, expert opinions were taken before administering the tests as well. The experts agreed on the suitability of the tests; therefore, in consequence of experts' feedback and readability scores, the tests were found to be appropriate. Table 2 shows the readability scores of the texts.

Table 2. Readability Scores of the Texts in Reading Comprehension Tests

Text	Flesch Reading Ease Score	Flesch-Kincaid Reading Age
First Text	62,9	9,9
Second Text	62,2	9,1
Third Text	63,6	9,0

All three tests consisted of one reading text and 4 reading comprehension exercises. Though the first three exercises in the reading comprehension tests comprised matching, true / false, completing the sentences, and ticking the most appropriate answer activities, the last exercise specifically focused on summarizing.

Data Collection Procedure

The study ended in subsequent 10 weeks. MARSI was administered before the strategy instruction started and after the instruction was completed, whereas the reading comprehension tests were administered three times. Table 3 shows the procedure of the study:

Table 3. Procedure of the Present Study

Week 1	• Deciding on the participants • Informing the participants about the overall procedure of the study • Gathering the consent forms • Administrating the participants' background and demographic information questionnaire
Week 2	• Administration of MARSI • Administration of the first reading comprehension test
Week 3	• Training (2 sessions in a week, each session will last 50 minutes)
Week 4	• Training (2 sessions in a week, each session will last 50 minutes)
Week 5	• Training (2 sessions in a week, each session will last 50 minutes)
Week 6	• Administration of the second reading comprehension test
Week 7	• Training (2 sessions in a week, each session will last 50 minutes)
Week 8	• Training (2 sessions in a week, each session will last 50 minutes)
Week 9	• Training (2 sessions in a week, each session will last 50 minutes)
Week 10	• Administration of MARSI • Administration of the third reading comprehension test

Data Analysis

The data obtained through the three reading comprehension tests were analysed by computing one-way ANOVA with repeated measures, and the findings were demonstrated in the form of descriptive statistics. And, regarding the results of MARSI, a paired samples t-test was run to indicate the impact of the strategy training on the participants' metacognitive awareness and perceived use of global reading strategies. The reason why the paired samples t-test was chosen as the way of analysis can be explained through the participants' being a homogenous group. Moreover, the reliability of the inventory was calculated, and Cronbach's alpha results were displayed as well.

FINDINGS AND DISCUSSION

MARSI

The purpose of administering MARSI (Mokhtari & Reichard, 2002) was to explore to what extent the participants were aware of global reading strategies and what the participants' perceived use of global reading strategies was. Furthermore, with the aim of examining the effect of strategy training on the participants' metacognitive awareness and perceived use of global reading

strategies, the inventory was administered both in the second week and the tenth week, namely before the training started and after it was completed.

Descriptive statistics were run to analyse the data obtained through the inventory individually, and besides, a paired samples t-test was conducted to compare the mean scores of pre- and post-administrations of MARSI to find out whether the training was helpful in developing learners' awareness and perceived use of global reading strategies. In the following table, descriptive statistics of the first and last MARSI administration are indicated.

Table 4. Descriptive Statistics of the Items in MARSI

Items	MARSI (Week 1)			MARSI (Week 10)		
	N	Mean	SD	N	Mean	SD
1. I have a purpose in mind when I read.	23	3,91	,900	23	4,26	,619
3. I think about what I know to help me understand what I read.	23	3,70	,822	23	4,04	,562
4. I preview the text to see what it's about before reading it.	23	3,74	1,137	23	4,09	,848
7. I think about whether the content of the text fits my reading purpose.	23	3,57	1,037	23	4,17	,576
10. I skim the text first by noting characteristics like length and organization.	23	3,09	1,443	23	4,04	,475
14. I decide what to read closely and what to ignore.	23	3,52	,994	23	4,13	,757
17. I use tables, figures, and pictures in text to increase my understanding.	23	2,96	1,461	23	4,13	,815
19. I use context clues to help me better understand what I'm reading.	23	3,57	1,237	23	4,22	,600
22. I use typographical aids like bold face and italics to identify key information.	23	3,52	1,504	23	4,30	,559
23. I critically analyse and evaluate the information presented in the text.	23	3,09	1,041	23	4,09	,733
25. I check my understanding when I come across conflicting information.	23	3,61	,988	23	4,09	,733
26. I try to guess what the material is about when I read.	23	3,96	,706	23	4,30	,559
29. I check to see if my guesses about the text are right or wrong.	23	3,61	1,438	23	4,48	,898

As displayed in Table 4, there was a noticeable improvement in the participants' metacognitive awareness and perceived use of global reading strategies after the training. The mean scores show that the participants had known they employed certain strategies while reading

a text in L2, yet the six-week reciprocal teaching instruction helped them raise more awareness regarding global reading strategies. For instance, the first mean score of the item 19 "I use context clues to help me better understand what I'm reading." was 3,57 but it was found to be 4,22 in the analysis of the post-administration. Similarly, the mean scores of the items "I skim the text first by noting characteristics like length and organization." and "I use tables, figures, and pictures in text to increase my understanding." suggest that the training was useful for the betterment of the participants' metacognitive awareness as well as perceived use of global reading strategies.

To explore whether the increase in the mean scores was statistically significant or not, a paired samples t-test was run. It was found that there is a statistically significant difference between pre-administration (M=3,5013, SD=,57512) and post-administration of MARSI (M=4,1830, SD=,35841) scores with regard to strategy training inventory (t (22) = -6,088, p<.001). Thus, it can be said that the strategy instruction, carried out through reciprocal teaching, was found to be useful for improving the participants' metacognitive awareness and perceived use of global reading strategies, which corroborated the findings of Ilustre's (2011), Kung and Aziz's (2020), and Zhang and Wu's (2009) studies. Though they were carried out in different contexts with participants from varied levels and age, they collectively contribute to the existing literature on metacognitive awareness of reading strategies and correspondingly suggest that strategy instruction has facilitative effects on improving learners' metacognitive awareness and perceived use of reading strategies. In this connection, it can be concluded that the present study had made a modest but critical contribution to the literature by putting reciprocal teaching forward for consideration to enhance EFL learners' metacognitive awareness of global reading strategies and improve L2 reading comprehension skills.

Reading Comprehension Tests

In addition to the aims addressing the betterment of metacognitive awareness and perceived use of global reading strategies, it was also aimed at developing the participants' reading comprehension skills because of the strategy training. Therefore, to investigate to what extent the training affected their reading comprehension skills, the participants took three reading comprehension tests, in the second, sixth and tenth weeks. As it was mentioned previously, each test included a reading passage and four reading comprehension activities, i.e., three text-related standardized questions and one summary-writing activity.

The responses of the participants for the three questions, except the summary-writing one, were checked according to the answer sheet provided in the book. To check and score the summaries, IELTS TASK 1 Writing band descriptors were utilized. The overall score of the tests were calculated on the scale of 30 not to change the scoring rubric of the book. Table 5 presents the descriptive statistics of the three reading comprehension tests individually.

Table 5. Descriptive Statistics of the Reading Comprehension Tests

	N	Minimum	Maximum	Mean	SD
First Reading Comprehension Test	23	16	20	18,13	1,140
Second Reading Comprehension Test	23	15	23	18,83	1,969
Third Reading Comprehension Test	23	15	28	21,74	3,922

As shown in Table 5, there was a gradual improvement in the scores of the participants. Therefore, a one-way ANOVA with repeated measures was conducted to compare the mean scores of three reading comprehension tests, conducted in the second, sixth and tenth weeks, in order to find out whether strategy training has an effect on reading comprehension. The findings revealed that there is a statistically significant difference (F (1,256, 27,625) = 18,480, p<.001) across the three tests, Sphericity assumption was not met, Greenhouse-Geiser results are reported). To detect where the significant difference occurred, pairwise comparisons with Bonferroni adjustment were calculated. The results indicated that while there is a statistically significant difference between the first reading comprehension test (M=18,13, SD=1,140) and the third reading comprehension test (M=21,74, SD=3,922), and between the second reading comprehension test (M=18,83, SD=1,969) and the third reading comprehension test (M=21,74, SD=3,922), there is not a significant difference between the first reading comprehension test and the second reading comprehension test.

Even though no significant difference was found between the first and second reading comprehension tests, the finding, showing that the third reading comprehension test scores of the participants were relatively higher than those of the first and the second, was very encouraging for the current study. The reason why no significant difference was found between the first and second reading comprehension test can be explained through the time interval: the first test was conducted in the second week while the participants took the second one in the sixth week; thus, they had taken only three-week instruction and this period might not be long enough for them to improve their reading comprehension. Nevertheless, considering the statistically significant differences between the first and the second reading comprehension test, and between the second and the third reading comprehension test, it can be concluded that the strategy training was beneficial for improving L2 readers' reading comprehension skills. The results of the current research study regarding the advantage of the strategy training for the improvement of reading comprehension skills confirmed the findings of Taka's (2020) study in which the efficacy of reciprocal teaching for facilitating Indonesian EFL learners' reading skills. Besides, as it was confirmed within Hamdani's (2020) and Sari's (2021) quasi-experimental research studies, reciprocal teaching has more advantageous effects on the improvement of learners' reading comprehension skills, when compared to "direct reading thinking activities" (Hamdani, 2020) and the conventional method (Sari, 2021). Accordingly, it can be suggested that elements of reciprocal teaching can be integrated into L2 courses to foster learners' reading comprehension skills, help them become accomplished readers, and facilitate their metacognitive awareness of reading strategies (Hamdani, 2020; Salatacı & Akyel, 2002; Sari, 2021; Spörer et al., 2009; Taka, 2020).

CONCLUDING REMARKS

The present study was conducted to examine the impact of strategy training, which was carried out through reciprocal teaching, on Turkish EFL learners' metacognitive awareness and perceived use of global reading strategies and L2 reading comprehension skills. In line with the purpose of the study, two research questions were determined and participants took the strategy instruction for subsequent 10 weeks. Data were collected via MARSI (Mokhtari & Reichard, 2002) and three reading comprehension tests. MARSI data were analysed by computing a paired samples t-test, whereas a one-way ANOVA with repeated measures was performed to examine the data obtained through the reading comprehension tests.

The analyses of MARSI yielded statistically significant differences, and even though the number of research studies, investigating the effect of an instruction on the reading strategies, is limited, the findings of the present study were found to be consistent with those of Zhang and Wu (2009) and Yüksel and Yüksel (2012). In these studies, it was also found that global reading strategies were commonly utilized by EFL learners. Similarly, in addition to the apparent increase in the participants' metacognitive awareness and perceived use of global reading strategies as a result of the training, it was determined in the first MARSI implementation that they did not actually fit on the back of a postage stamp. However, as it was mentioned before, these research studies aimed at exploring to what extent the reading strategies were employed by learners of English. They, hence, did not carry out any trainings. In the current study, alternatively, reciprocal teaching was chosen as the way of instruction and a strategy training was conducted to facilitate use of global reading strategies as well as metacognitive awareness of the participants towards these strategies. Taking the significant difference between pre-administration and post-administration of MARSI (t (22) = -6,088, $p<.001$) into consideration, it can be concluded that the training provided worthwhile opportunities for the participants to verify this facilitation.

In line with the MARSI findings, reading comprehension scores of the participants were found to be affected positively by the strategy training, too. Supporting their findings with think-aloud protocols, observations, semi-structured interviews, and a questionnaire, Salatacı and Akyel's (2002) study also examined how the strategy training, carried out through reciprocal teaching, made a difference to reading comprehension skills of Turkish EFL learners. What was found in their study was comparably encouraging with regard to the efficacy of reciprocal teaching: the participants' reading comprehension scores and use of metacognitive reading strategies improved after the instruction. In a similar way, Spörer et al. (2009) conducted their research study to find out the impact of three different strategy instruction methods on reading comprehension skills and strategy use of elementary-school students. Because its findings agreed with those of the present research study and Salatacı and Akyel's (2002) study, it can be suggested that when learners of English take an instruction, specifically designed to foster the use of reading strategies, it is quite possible that they gain more awareness towards the strategies and more success in comprehending the texts in the English language. Especially considering that these strategies are to be utilized "for enhancing comprehension and overcoming comprehension failures" (Palincsar & Brown, 1984, p. 118), they take on a new significance.

IMPLICATIONS FOR TEACHING

The present study was guided by two main concepts: reciprocal teaching and global reading strategies, and the purpose was to investigate the impact of strategy instruction which was held through reciprocal teaching on EFL learners' perceived use and metacognitive awareness of global reading strategies and reading comprehension. The findings revealed that reciprocal teaching has facilitative effects on the participants' reading comprehension, which has been also confirmed within recent studies on reciprocal teaching (Hamdani, 2020; Sari, 2021; Taka, 2020). Besides, it was seen that strategy instruction positively influenced the participants' perceived use and metacognitive awareness of reading strategies, which corroborated the findings of Kung and Aziz's (2020) study.

Even though reciprocal teaching was first proposed for readers having difficulty in reading in their mother tongue (Palincsar & Brown, 1984), it was also utilised within both ESL environment (Cotterall, 1990, 1993) and EFL context (Song, 1998), and it was found facilitative

in remedying reading deficiencies. In this connection, considering both the findings of the current study and the abovementioned studies, it can be suggested that reciprocal teaching be integrated into L2 courses to improve learners' L2 reading comprehension and use of global reading strategies. Teachers should at least consider adding one step of reciprocal teaching (i.e., predicting, questioning, clarifying, and summarizing) to give a new impulse to reading courses. In this way, learners can be also encouraged to become more active and motivated to take the responsibility of their learning (Hamdani, 2020).

Besides, as it was noted by Kung and Aziz (2020), integrating metacognitive reading instruction into the reading classes should be considered by English language teachers. However, teachers should also be supported both theoretically and practically concerning the integration of metacognitive elements into their classes to ensure the most proper instructional technique.

SUGGESTIONS FOR FURTHER RESEARCH

The present study was conducted with 23 freshmen, enrolled in the ELT Department of a state university in Turkey; therefore, they were not complete beginners in the English language. The very first suggestion can be carrying out a strategy training with L2 learners who are less proficient or have certain reading disabilities, which can shed more light on the efficacy of the earliest reciprocal teaching because Palincsar and Brown put forward it for L1 learners with reading deficiencies (1984). Moreover, the impact of reciprocal teaching on reading comprehension in L1 can be investigated because, as it has just been mentioned, originally this method was formed to help learners having certain problems while reading in their mother tongue. By doing so, L1 reading processes can be understood better and to what extent there is a correlation between L1 and L2 reading processes might be investigated. Similarly, if translated into the Turkish language, MARSI (Mokhtari & Reichard, 2002) can be administered to the native speakers of Turkish. Thereby, whether there is a transition between L1 and L2 regarding the use of reading strategies can be explored, too.

On the other hand, whether reciprocal teaching is useful for other skills of the language may be examined as well. Because learners are required to express their predictions, questions, clarifications, and summaries verbally in the reciprocal teaching procedure, their speaking skills may be affected implicitly in a positive manner because of reciprocal teaching. Thus, the effect of reciprocal teaching on EFL learners' speaking skills can be determined as the starting point of a further research study.

LIMITATIONS

The data were collected quantitatively through two data collection instruments in the current research study, and the whole procedure lasted ten weeks. Even though the results were found to be encouraging for the further use of reciprocal teaching in EFL environments, a longitudinal and qualitative study can be designed to examine the delayed effect of reciprocal teaching on the participants' use and awareness of global reading strategies as well as reading comprehension scores.

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