

The Effect of Reciprocal Teaching on Iranian Pre-intermediate EFL Learners' Reading Comprehension

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ABSTRACT

Reciprocal Teaching (RT) is a kind of reading strategy that facilitates the teaching of English reading comprehension. It consists of four main reading strategies: predicting, questioning, clarifying, and summarizing (Palincsar & Brown, 1984). The lack of good reading comprehension skills is exacerbated by the central role of reading comprehension in higher education achievement (Ahmadi & Gilakjani, 2012). It is, however, postulated that one solution to poor reading comprehension skills seems to be the teaching of reading comprehension strategies. Accordingly, the present study aimed to investigate the effects of reciprocal teaching on Iranian pre-intermediate EFL learners' reading comprehension. In doing so, a quasi-experimental pretest posttest control group research design was used. Of 43 participants who initially took part in the present study, thirty-one female Iranian pre-intermediate EFL students whose age ranged from 14 to 20 years old at Royan English Language Institute in Gorgan, Golestan Province, Iran, were randomly selected and divided into one control group and one experimental group. The homogeneity of their proficiency level was established using an Oxford Quick Placement Test (OQPT) (2004). All students in both groups participated in a reading comprehension test as the pretest. The pretest was piloted and adapted from the Objective Placement Test of Interchange by Cambridge English Language Assessment (Lesley, Hansen, & Zukowski, 2008). The experimental group utilized RT strategy two times a week typically 50 minutes in duration for three weeks, and the control group was taught based on the nonreciprocal teaching strategy. At the end of the treatment, the posttest, similar to the pretest was administered to both groups. Having used an independent samples t-test, the data analysis showed that the RT group outperformed the participants who did not receive RT strategy in their reading comprehension ability. The findings indicated that RT had a significantly positive effect on the EFL learners' reading comprehension. Based on the findings of the present study, it is suggested that students can think about their reading process, improve a plan of action, monitor their own reading in order to construct their own knowledge, and self-evaluate their reading process. They are able to become autonomous readers, which is the aim of teaching reading for EFL students.

KEYWORDS: Reciprocal Teaching; Reading Comprehension.

INTRODUCTION

Nowadays, learning foreign languages has become an essential requirement to the acquisition of professional and academic success as the bulk of scientific studies are published in English (Kowsary, 2013). So, if learners want to communicate effectively, they need the four skills of listening, speaking, reading, and writing. Of all these four skills, reading is considered as the most fundamental and essential skill for learners in both a classroom context and extracurricular activities outside the classroom (Carrell, 1989; Grabe & Stoller, 2002). Due to the importance of the reading skill and the existing need in improving this skill, teachers should search the best techniques to equip their teaching instruction, methods, and resources to enhance it (Tarshaei & Karbalaei, 2015). In addition, reading is a significant activity used in the learning process, but it becomes more useful when the readers can comprehend what they read. "Given the importance of reading in our daily lives, there is little wonder why assisting English language learners in understanding reading comprehension texts has always been a major preoccupation for reading researchers and teachers" (Baleghizadeh, 2011, p. 1669).

Besides, Panmanee (2009) asserts that the main problem for poor English reading comprehension is possibly due to the traditional teaching reading method of some teachers. For instance, readers are asked to read aloud sentence by sentence and then answer the teacher's questions or work with their teacher to translate it. In order to encourage and activate readers to read interactively, teachers need to find effective training for readers to use different strategies for different goals order to help them promote reading comprehension. One of the prominent strategies that could enhance students' reading comprehension and ability to monitor what they want to learn is RT (Ahmadi & Nizam Ismail, 2012; Davidson, 2015; Jafarigohar, Soleimani, & Soleimani, 2013; Ostovar-Namaghi & Shahhoseini, 2011; Palincsar & Brown, 1984; Saadati, 2011; Yoosabai, 2009) which was first posited by Palincsar in 1982. RT is a conversation that takes place between teachers and students in order to jointly construct the perception of the text, and students' reading comprehension can be improved by teaching four specific reading strategies such as summarization, question generation, clarification, and prediction (Palincsar & Brown, 1984).

Fereihat and Al-Makhzoomi (2012) state that RT with students in an EFL university setting makes them have more interaction on reading text and more streamlined ways lead to striking progress in the quality of their reading comprehension. Furthermore, Yoosabai (2009) indicates that RT allows a teacher to model and give the readers enough practice on these four main strategies (summarizing, questioning, clarifying, and predicting) to construct the meaning of a text in a social setting. In other words, readers can monitor their own thinking through the reading process. RT promotes reading comprehension and improves readers to be better in comprehending of the texts and helps them reach the significant goal of RT, becoming independent readers. In a nutshell, regarding the previous studies mentioned, there is a dearth of research in the context of Iran on reciprocal teaching; therefore, the present paper aimed to investigate the effect of reciprocal teaching on Iranian pre-intermediate EFL learners' reading comprehension.

REVIEW OF THE RELATED LITERATURE

Reciprocal teaching, designed by Palincsar and Brown (1984), has been defined in many different ways. They believe that RT is an instructional procedure designed to improve students' comprehension of text. According to Palincsar and Brown (1984), RT is a method used to develop comprehension of text in which teacher and students "take turns leading a dialogue concerning sections of a text" (p. 124), in which four specific reading strategies are incorporated into the method such as prediction, questioning, summarizing and clarifying (Palincsar & Brown, 1984). Every English teacher has his or her own style of teaching. RT is one of the methods used by English teachers in reading class. Carter (2007) defines RT as the following:

RT parallels the new definition of reading that describes the process of reading as an interactive one, in which readers interact with the text as their prior experience is activated. Using prior experience as a channel, readers learn new information, main ideas and arguments. Most important, readers construct meaning from the text by relying on prior experience to parallel, contrast or affirm what the author suggests. All excellent readers do this construction. Otherwise, the content would be meaningless, alphabetic scribbles on the page. Without meaning construction, learning does not take place. RT is a model of constructivist learning. (pp. 65-66)

The purpose of this strategy is to enhance reading comprehension through the use of student/teacher collaboration and help novice readers become mature by teaching them the strategies employed by mature readers to analyze meanings in text (Greenway, 2002).

FOUR MAIN STRATEGIES OF RECIPROCAL TEACHING

Reciprocal teaching focuses on four key reading strategies: predicting, questioning, clarifying, and summarizing. Each strategy is useful for readers to comprehend a text and can be used separately or combined according to the situations, problems, and reading purposes the readers face (Palincsar & Brown, 1984). Each of these strategies is explained as follows:

Predicting: "Predicting involves looking for clues in the structure and content of a passage that might suggest what will occur next. It can activate prior knowledge and encourages students to continue passage to determine if their predictions are correct" (Yawisah, 2013, p.27). The predicting strategy facilitates the use of text organization as students learn that headings, subheadings and questions embedded in the text are useful means of predicting what might occur next (Jafarigohar et al., 2013). It occurs not only at the beginning of a text, but throughout. Predicting helps the reader to learn about the structure of written texts as well (Hampson-Jones, 2014).

Questioning: Questions are built an essential information. Readers can be taught to make questions about the text at many levels, from questions that can be quickly answered by using the text just read, to questions that need to

an inference to be made or to apply information from the text to new problems or situations, which may not have an immediate answer (Hampson-Jones, 2014). Is used to check student's understanding of what they are reading and helps them to identify what important in the text is. Questioning provides a context for exploring the text more deeply and assuring the construction of meaning. To make up questions, the words who, how, when, where, and why are used (Yawisah, 2013).

Clarifying: "It involves the identification and clarification of unclear, difficult, or unfamiliar aspects of a text. These aspects may include awkward sentence or passage structure, unfamiliar vocabulary, unclear references, or obscure concepts" (Doolittle, Hicks, Nichols, Triplett, & Young, 2006, p. 107). According to Hampson-Jones (2014), readers are taught to be alert to such stumbling blocks and to reread, read ahead, ask for help, discuss or take any other steps needed to restore meaning. "Clarifying occurred only if there were confusions either in the text or in the student's interpretation of the text" (Palincsar & Brown, 1984, p. 122).

Summarizing: "It was engaged in to state to the teacher or the group what had just happened in the text and as a self-test that the content had been understood" (Palincsar & Brown, 1984, p. 122). This strategy enables students to identify, state, paraphrase and integrate the main important information in the text, organize them and find out the relationships between them (Jafarigohar et al., 2013, p. 193).

THEORETICAL FRAMEWORK FOR USING RECIPROCAL TEACHING

In two decades ago, many studies have been done on reading instruction to find more effective ways to upgrade reading comprehension of EFL learners. However, in recent years, more research is concerned with teaching students to use comprehension strategies. One of these strategy-instruction approaches to reading is RT. "RT and direct explanation approach present a more open framework for instruction in which teacher provide modeling of comprehension strategies, followed by teacher-assisted student practice of the strategies" (Leung, 2005, p. 11). RT is an instructional procedure in which small groups of learners learn to improve their reading comprehension through "scaffold instruction". Furthermore, "using RT as an instructional strategy has been theoretically grounded and provides students with the zone of proximal development in which they are presented with comfortable challenge so that they can participate much more fully and maturely in the learning" (Leung, 2005, p. 16). The theory of RT strategy presents three key features: The zone of proximal development, scaffolding and explicit instruction, and cooperative learning. The concepts of them for RT are provided.

THE ZONE OF PROXIMAL DEVELOPMENT

According to Vygotsky,

At any particular point time, children have a circumscribed zone of development, a range within which they can learn. At one end of this range are learning tasks that they are able to complete on their own; at the other end are learning tasks that they are unable to complete, even with assistance. In between these two extremes is the zone most productive for learning, i.e., the zone of proximal development (ZPD), the range of tasks in which children can achieve if they are assisted by a more competent other. (as cited in Leung, 2005, p. 17)

Vygotsky (as cited in Leung, 2005, p. 17) emphasizes that students should participate in challenging tasks that they can successfully complete with appropriate help. So, it is essential for teachers to make instructional materials and environments that lie within their students' ZPD.

SCAFFOLDING AND EXPLICIT INSTRUCTION

According to Wood, Bruner, and Ross (1976) scaffolding is "a process that enables a child or novice to solve a problem, carry out a task, or achieve a goal which would be beyond his unassisted efforts" (p. 90). In an educational context, it means "support given by a teacher to a student when performing a task that the student might otherwise not be able to accomplish" (Van de Pol, Volman & Beishuizen, 2010, p. 274). This support can be in designing questions, and giving feedback, examples, or comments. The teacher is providing scaffolding, when he or she models the thought processes and uses in determining what is the most significant in an informational selection learners are about to read. Additionally, the teacher intently monitors the class "when enough instructional input has been provided to allow the learner to make progress towards an academic goal, and thus the teacher provides support only when the student needs it" (Leung, 2005, p. 18).

Furthermore, RT provides scaffolding through explicit instruction including, the modeling and explanation of the four main strategies (summarizing, questioning, clarifying, and predicting), guided practice, autonomous practice, and the application of the strategies by the students themselves (Yoosabai, 2009). According to Rosenshine

and Meister (1994), it is easy to memorize strategies, but it is difficult to transfer or apply autonomous strategic thinking. Teachers need to show their students how to do this through explicit instruction that involves limiting tasks to make them manageable, motivating the learners, pointing out critical features, and demonstrating solutions to problems.

COOPERATIVE LEARNING

According to Johnson, Johnson, and Holubec (as cited in Jafarigohar et al., 2013, p. 193), cooperative learning as “the instructional use of small groups so that students work together to maximize their own and each other’s learning”. There are three commonly recognized types of cooperative learning groups. Each type of group has its own purpose, namely informal cooperative learning groups, formal cooperative learning groups, and cooperative based groups (Johnson & Johnson, as cited in Tran, 2013, p. 101).

Informal cooperative learning are short-term and ad-hoc groups in which students are required to work with each other to achieve a shared learning goal. These ad-hoc groups may be organized “on-the-fly” as an aid in direct teaching. It may be used to help students engage in the learning task, and focus their attention on the material they are to learn through focused-pair discussions before and after a lecture (Johnson et al., 2008). Based on Johnson et al. (2008), formal cooperative learning groups forms “the basis for most routine uses of cooperative learning. Groups are assembled for at least one class period and may stay together for several weeks working on extended projects” (p. 22). These groups are where students learn and become comfortable applying the several methods of working together cooperatively.

Cooperative base groups are “long-term, stable groups that last for at least a year made up of individuals with different aptitudes and perspectives”. They provide a context in which students can support each other to complete assignments and make academic progress. The group members make sure everyone is completing their work and hold each other accountable for their contributions. Implementing cooperative base groups in such a way that students meet regularly for the duration of a course completing cooperative learning tasks can provide the permanent support and caring that students need “to make academic progress and develop cognitively and socially in healthy ways” (Johnson, Johnson, & Smith, 1998, p. 17). In addition, in cooperative learning, collaboration between students who generate questions and discuss ideas freely with their classmates where students sometimes take on teaching roles to help other students learn can be an effective way to promote learning and can improve student’s ability to work with others (Leung, 2005). “As the teacher moves into the position of observer and permits the students to take on the teacher-role within their small groups, the students discuss their metacognitive thinking while they practice the four reading strategies to comprehend the text” (Oczkus, 2003, p. 1). Usually, learners can make better sense and comprehend an idea presented by the teacher when one of his/her peers demonstrates the concept of the text, using their grade and age proper level to clarify and condense the gaps for students that are confused (Goodman, 1967).

In summary, based on the above-mentioned literature, many EFL learners are not aware of this RT strategy to improve their reading comprehension. So, the present paper aimed to investigate the effects of reciprocal teaching on Iranian pre-intermediate EFL learners’ reading comprehension. To achieve this objective, the following research question was formulated:

- Does reciprocal teaching have any significant effect on Iranian pre-intermediate EFL learners' reading comprehension?

METHODOLOGY

To check the validity and reliability of the pretest in practice, to identify, and improve the problematic questions, the pretest was piloted. Piloting the instruments is an important aspect of a research, given that any problems relating to the content, wording, layout, length, instructions, or the coding can be uncovered in the pilot study. Finally, a pilot study may uncover issues related to the sample size (variability), non-response rate and more practical issues (Bird, 2009). In the present study, of 18 female students who initially participated in the pilot study, 11 students studying English at Aseman Language Institute in Gorgan, Golestan Province, Iran were conveniently chosen to take the pretest. In order to make sure of the learners’ homogeneity, Oxford Quick Placement Test (OQPT) was administered. Based on the guidelines of the test, the students who got a score between 24-30 were considered as lower-intermediate and therefore, they could participate in the pretest. The test consisted of eight reading passages and 30 multiple-choice questions. The test was adapted from the Objective Placement Test of Interchange by Cambridge English Language Assessment (Lesley et al., 2008).

DESCRIPTIVE STATISTICS, SCORING SYSTEM, AND RELIABILITY STATISTICS OF THE READING COMPREHENSION TEST

As shown in Table 1, the descriptive statistics of the pilot testing are represented. It is shown that the mean and standard deviation of the participants are 16.18 and 2.32, respectively.

Table 1 *Descriptive Statistics of Reading*

Group	N	Mean	Std. Deviation	Min.	Max.
Pilot Testing	11	16.18	2.32	13	22

Since all the items were multiple choice test, correct responses and incorrect ones were assigned 1 and 0, respectively. Kuder-Richardson (as cited in Bachman, 1990, p. 176) developed a formula to measure the reliability of dichotomous items (one that is scored as either right or wrong). It involves the means and variances of the items that constitute the test. Kuder-Richardson formula 20 (KR-20) is a special case of Cronbach's Alpha, the reliability index of which is represented in Table 2. Since the reliability index $r = .89$ exceeded; it sounds reliable enough to be considered as a test for the pretest study.

Table 2 *Reliability Index of the Reading Comprehension Test for Pre-Intermediate Group*

Group	N	Cronbach's Alpha
Pre- intermediate	11	.89

THE PROCESS OF QUANTITATIVE AND QUALITATIVE REVISION OF TEST ITEMS

Although the reliability index for the reading comprehension test was .89, it was necessary to evaluate and analyze the test items. The first deciding criterion to include, exclude, or revise an item was item facility index defined as the proportion of the participants who answer each question correctly to all the participants. Therefore, too easy ($I > .8$) or too difficult ($I < .3$) items were either deleted or revised. Table 3 shows item difficulty index, its evaluation, and conclusion.

Table 3 *Item Difficulty Index as Proposed by (Birjandi&Mosallanejad, 2010)*

Item Difficulty Index	Item Evaluation	Conclusion
$I < .3$	too difficult	Modify the Item
$.3 \leq I \leq .8$	Average	Accept the Item
$I > .8$	too easy	Modify the Item

The item facility indices of all the items for the pre-intermediate learners are presented in Table 4. As can be seen in Table 4, items 18, 21, and 25 were marginally regarded as difficult items for pre-intermediate learners, so they were partially revised by the researchers. Moreover, item 5 has item facility index of 1 which is considered as an easy item, so it was excluded. The content validity of the test was cross-checked by two PhD holders in Applied Linguistics.

Table 4. Item Statistics for Pre-intermediate Learners

Item	Mean	Item	Mean
1	.37	16	.38
2	.31	17	.38
3	.44	18	.25
4	.38	19	.38
5	1.00	20	.50
6	.38	21	.25
7	.38	22	.44
8	.38	23	.44
9	.50	24	.44
10	.44	25	.21
11	.38	26	.38
12	.44	27	.44
13	.38	28	.31
14	.31	29	.31
15	.50	30	.44

MAIN STUDY PARTICIPANTS

The total population of the present study was 65 Iranian EFL learners studying English at Royan English Language Institute in Gorgan, Golestan Province, Iran. It was announced in the institute that those students willing to take part in an extra reading class register for it. Of 65 female students, forty-three students registered of whom 31 students whose age ranged from 14 to 20 years old were selected as pre-intermediate level whose scores ranged from 24-30 based on Quick Oxford Placement Test (OQPT) (2004). Their native language was Persian. After the participants were homogenized, they were divided into one experimental and one control group. Notably, the researchers utilized reciprocal teaching in the experimental group, and nonreciprocal teaching in the control group.

Table 5. Distribution and Characteristics of Participants in Each Group

Groups	Number	Age Range	Gender
Experimental	16	14 – 20	Female
Control	15	14 - 20	Female

INSTRUMENTS AND MATERIALS

To collect the data, two types of instruments were utilized. These instruments include: English Language Proficiency Test, Pretest and Posttest. Each of these instruments is explained as follows:

Table 6 Research Instruments and Materials

Category	Title	Purpose	Item
Language Proficiency Test	Oxford Quick Placement Test (2004)	To ensure that all of the participants are at the same level.	40
Pretest (reading comprehension)	Interchange Objective Placement Test (2008)	To determine whether participants were homogenous in terms of their reading skill.	8

Posttest (reading comprehension)	Interchange Objective Placement Test (2008)	To determine whether the treatment (i.e., reciprocal teaching) was effective. One for control group that did not receive any feedback	8
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OXFORD QUICK PLACEMENT TEST

In order to be assured of the homogeneity of all the participants in terms of English language proficiency, Oxford Quick Placement Test (OQPT) which is a time-saving and reliable English language proficiency test developed by Cambridge ESOL and Oxford University Press (2004) validated in 20 countries by more than 6000 students was administered. Considering practicality, it is quick and easy to administer. There are two versions of OQPT: a paper and pen (P&P) version and a computer-based (CB) version which is an adaptive multiple-choice test marked by computer. In the present study P&P version consisting of two parts was used. The first part, consisting of 40 questions, is taken by candidates who are at or below intermediate level. The participants of the present study were taken only the first part due to their proficiency level. According to the guidelines of the test, the students who got a score between 24-30 are lower-intermediate, and therefore, they could participate in this research. As can be seen in Table 7, the participants were selected based on the ranking of the test. The test ranking is as follows:

Table 7. *Oxford Quick Placement Test Ranking*

Level	Paper and pen test score
	Part 1 score out of 40
0 beginner	0-15
1 elementary	16-23
2 lower intermediate	24-30
3 upper intermediate	31-40

PRETEST

The pretest was used as the other required instrument in the present study. It was used to determine whether the participants were of the same level of ability in terms of their reading comprehension. It consisted of eight reading passages and 29 multiple-choice questions. The test was adapted from the Objective Placement Test of Interchange by Cambridge English Language Assessment (Lesley et al., 2008). The test was divided into three sections: listening, reading comprehension, and language use. The time to complete the test was 50 minutes for 70 items. Consequently, the test time for the reading comprehension section was approximately 20 minutes. In this study, to investigate the participants' reading comprehension ability, only the English reading comprehension part of the Objective Placement Test of Interchange (2008) was used as both the pretest and posttest.

POSTTEST

The pretest and posttest questions were the same, just the order of reading passages from pretest to posttest was counterbalanced to minimize the practice effect. After conducting the pretest, the researchers randomly chose one of the classes as an experimental group and the other one as a control group. The passages in the experimental group were taught using reciprocal teaching, but those in the control group were taught using nonreciprocal teaching. The researchers compared the two groups. The only difference between the experimental group and the control group was that in the experimental group the participants were provided with the researchers' feedback in RT as the treatment.

INSTRUCTIONAL MATERIALS

The book taught was Top Notch (2A) by (Saslow&Ascher, 2006) which sounds appropriate for pre-intermediate level of EFL learners. According to the syllabus, each unit includes seven parts, namely Communication goals, Vocabulary, Grammar, Conversation strategies, Listening, Reading and Writing. According to the aim of the present study, just the reading part of five units were covered during 5 sessions, and the 6th session was the exam session.

PROCEDURES

In order to conduct the research and to test the research hypothesis, a number of steps were taken; there were five important steps that had to be taken:

The first step was to make sure of the learners' homogeneity, so Oxford Quick Placement Test (OQPT) was administered which consisted of 60 items in the form of multiple choice questions. Since the participants of the

present study were at pre-intermediate level, they were supposed to choose the correct answer from among the alternatives for the first 40 questions. The time allotted to complete the instruments was 20-30 minutes. Based on the results of the test, it was found out that 31 participants were approximately at a similar English proficiency level (pre-intermediate).

The second step was to check the validity and reliability of the pretest in practice, to recognize and develop the problematic questions, the pretest was piloted. Accordingly, 11 female students were selected to take the pretest. The test consisted of eight reading passages and 30 multiple-choice questions. It was adapted from the Objective Placement Test of Interchange by Cambridge English Language Assessment (Lesley et al., 2008). At the end, the researchers concluded that one item which had an item facility index of 1 was excluded.

The third step was to administer the pretest. It was carried out one day before the treatment in order to measure the students' performance before receiving any reciprocal teaching instruction. It consisted of eight reading passages and 29 multiple-choice questions.

In the fourth step, the participants were divided into two groups, i.e., the experimental and control groups. Whereas one class received treatment during the session (experimental group), the other class did not receive any treatment (control group). Treatment materials consisted of five reciprocal teaching reading lessons and strategy training exercises. The class was held twice a week and five treatment sessions and each consisted of a 50-minute reading lesson, including 15-minute strategy training, 25-minute modifying reciprocal teaching reading practice for the experimental group and the last 10 minutes was for the feedback and reflection. During the treatment sessions, the students were given feedback by the researchers. In the first session of experimental group, each of the four reading strategies, i.e., predicting, questioning, clarifying, and summarizing, was introduced to them. Firstly, prediction strategy was introduced as a means of forecasting what the author is going to talk about so as to help the students to think about what they have already known about the topic in preparation for what might be coming next. This was implemented to activate students' prior knowledge. Secondly, when introducing questions, students were instructed in the types of questions teachers might ask: wh-word questions (who, what, when, where, how, and why). Thirdly, the students were taught the strategy of clarifying by identifying words or ideas that may be ambiguous or hard to understand. They marked them in the text while reading so that they could come back to them to determine meaning. Lastly, the students were taught to use the following rules when summarizing: (a) leave out minor or unimportant points; (b) combine similar ideas into categories; (c) state the key ideas of the text. The teacher gradually released this responsibility to the students, and had them play the role of the teacher. On the other hand, in the control group, the researchers used a traditional method, that is, they explained everything to students by translating each sentence instead of helping students to read the text by improving their thinking ability about the meaning of the text. Students were asked to read aloud sentence by sentence and then answer the teacher's questions or work with their teacher to translate it. In this way of teaching, there was only little interaction between students and the text. In the last session (fifth step), the posttest was given to the participants in both groups. It was conducted after the treatment in order to measure the gains they make due to reciprocal teaching. The posttest was the same as the pretest just one item was excluded, but it was counterbalanced to minimize the practice effect.

RESULTS

The results of the present study are divided into three parts. The first part belongs to the results of Oxford Quick Placement Test (OQPT) which was administered to 43 female EFL learners to homogenize them in terms of their language proficiency out of whom 31 were deemed homogenous based on the rubric. The second part includes the results of an independent samples t-test between pretests of the control group and the experimental group, as well as, the results of an independent samples t-test between posttests of the experimental group and the control group.

ANALYSIS OF OXFORD QUICK PLACEMENT TEST

In order to homogenize the participants to see whether they enjoy the same homogeneity, Oxford Quick Placement Test was administered. As can be seen in Table 8 there is no significant difference in the scores for the reciprocal group ($M=25.87$, $SD=2.60$) and nonreciprocal group ($M=25.80$, $SD=2.17$). In other words, it can be concluded that the groups were homogeneous in terms of their English proficiency prior to the treatment.

Table 8. *Descriptive Statistics for Oxford Quick Placement Test*

	Group	N	Mean	Std. Deviation	Std. Error Mean
OQPT	Nonreciprocal	15	25.80	2.17	.56231
	Reciprocal	16	25.87	2.60	.65112

To put it precisely, an independent samples t-test was carried out to find out whether any differences existed between the two groups. Table 9 indicates that ($t(29) = -.087, \alpha = .05, p = .93$). It can be concluded that before the intervention, the two groups were homogeneous in terms of their language proficiency, and no significant difference was observed since the p value is not below the significant level, that is, $\alpha = .05$.

Table 9. Independent Samples Test for Oxford Quick Placement Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper	
OQPT	Equal variances assumed	.224	.639	-.087	29	.93	-.07500	.86542	-1.84	1.69
	Equal variances not assumed			-.087	28.64	.93	-.07500	.86032	-1.83	1.68

ANALYSIS OF THE PRETEST

Since language proficiency is composed of different skills, and reading is considered as one of these skills, the results of the participants' performance on proficiency test could not be used to decide whether they were at the same level of reading comprehension skill, too. To achieve this goal, the reading comprehension pretest was administrated. As can be shown in Table 10 there is no significant difference in the scores for the reciprocal group ($M=15.50, SD=2.60$) and nonreciprocal group ($M=15.80, SD=2.56$).

Table 10. Group Statistics for the Reading Comprehension as a Pretest

Group		N	Mean	Std. Deviation	Std. Error Mean
Pretest	Nonreciprocal	15	15.80	2.56	.66332
	Reciprocal	16	15.50	2.60	.65192

Table 11 illustrates that ($t(29) = .32, \alpha = .05, p = .74$). It can be, hence, inferred that before the intervention the two groups were homogeneous in terms of their language proficiency, and no significant difference was observed because the P value (.74) is not below the significant level ($\alpha = .05$).

Table 11. Independent Samples Test for the Pretest

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper	
Pretest	Equal variances assumed	.134	.717	.32	29	.74	.30000	.93052	-1.60	2.20
	Equal variances not assumed			.32	28.92	.74	.30000	.93005	-1.60	2.20

ANALYSIS OF THE POSTTEST

In order to find out whether the reciprocal teaching had any effect on the reading comprehension of the participants, the posttest was administered. To do the analysis, an independent samples t-test was utilized. Table 12, illustrating the descriptive statistics, demonstrates that the reciprocal group ($M=18.87$, $SD=3.48$) outperforms the nonreciprocal group ($M = 16.33$, $SD = 2.74$). It is shown that the mean difference between the experimental and control group is ($18.87-16.33=2.54$). In order to find out whether this difference is statistically significant or not, an independent samples t-test was to be run.

Table 12. Group Statistics for the Posttest

	Group	N	Mean	Std. Deviation	Std. Error Mean
Posttest	Nonreciprocal	15	16.33	2.74	.70823
	Reciprocal	16	18.87	3.48	.87023

As can be seen in Table 13, the results of an independent samples t-test show that there is a significant difference between the reciprocal and nonreciprocal groups. In other words, ($t(29) = 2.24$, $\alpha = .05$, $p = .03$). It can be interpreted that reciprocal teaching had significant effects on the reading comprehension.

Table 13. Independent Samples Test for the Posttest

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		f	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Posttest	Equal variances assumed	.589	.449	-2.24	29	.032	-2.54	1.13	-4.85	-.22895
	Equal variances not assumed			-2.26	28.19	.031	-2.54	1.12	-4.83	-.24408

According to the results obtained from the statistical data analysis presented in Table 13, it is concluded that the participants who received RT treatment outperformed participants who did not receive RT strategy in their reading comprehension ability.

DISCUSSION

In 1984, reciprocal teaching was posited by Palincsar and Brown. It is a method used to develop the comprehension of the text in which the teacher and the students take turns leading a dialogue concerning sections of a text, in which four specific reading strategies are incorporated into the method such as prediction, questioning, summarizing and clarifying. As a result, RT develops reading comprehension and promotes readers to be better in reading and assists them reach the most important goal of RT, becoming independent readers. The finding of the present study is in agreement with Palincsar and Brown (1984) and supports the result of the study, which showed that reciprocal group outperformed the nonreciprocal group. There have been several studies in the related literature focusing on the positive effect of reciprocal teaching on learners' reading comprehension (Choo, Eng, & Ahmad, 2011; Johnson et al., 1998; Saadati, 2011; Salehi&Vafakhah, 2013; Wisaijorn, 2003; Yoosabai, 2009). Regarding the quantitative finding, the data revealed that the participants in the experimental group significantly enhanced their reading ability after being taught through reciprocal teaching. In the present study, the participants were trained to utilize the four key strategies and to recognize what strategies to use, when, why, and how to use each of them. They learned to predict, generate questions, identify the main idea of a paragraph, clarify unclear words, phrases, or sentences, and summarize their reading. The four key strategies helped them overcome difficulties when reading texts as they planned and monitored their comprehension, and evaluated their planning and its outcome. For these reasons, it can be concluded that the participants in the reciprocal teaching group benefited from practicing all four main strategies and their processes. Therefore, reciprocal teaching is a kind of reading instruction that facilitates the teaching of English reading comprehension. This finding is in accordance with studies from Palincsar and Brown (1984),

Johnson et al. (1998), and Wisaijorn (2003) at different levels of learning, from primary schooling to university, and with their investigation of the use of reciprocal teaching in training students in reading. They all found that reciprocal teaching enhanced students' reading comprehension.

Moreover, the teacher's respectful attitude and the large class sizes usually do little to encourage student - teacher or student - student open dialogue, which is an important feature of the RT. Some researchers (Davidson, 2015; Frances & Eckart, 1992; Jafarigohar et al., 2013; Ostovar-Namaghi & Shahhoseini, 2011; Yoosabai, 2009) give evidence to such justifications. These researchers reported the better reading comprehension of students exposed to the RT compared to using nonreciprocal teaching. They also added that RT not only improves reading comprehension, but also offers students the opportunity to use English to serve many of language functions and notions that are typical of the communicative approach. In many traditional classroom contexts, there is, as always happens, a heavy emphasis on rote learning, involving all students doing the same language activity, irrespective of abilities, interests, and needs. According to the finding of the present study, the researchers suggest that understanding and confidence in the use of *predicting*, *questioning*, *clarifying* and *summarizing*, not just a memorization of them, is an invaluable element in RT which permits the students to adapt and employ their abilities in a range of situations as appropriate.

In a like manner, the finding of this study is in line with Salehi and Vafakhah's (2013) findings, who investigated the difference between reciprocal teaching only and explicit teaching of strategies before reciprocal teaching on reading comprehension of Iranian female EFL learners. The result of statistical analysis indicated that reciprocal teaching can improve reading comprehension of EFL learners. This also accords with the earlier observations of the present study, which showed that students with instruction in reciprocal teaching had greater improvement in comparison to students receiving nonreciprocal teaching in performance reading test. Thus, the researchers suggest that RT could provide an alternative way in helping EFL learners improve English reading comprehension.

Alternatively, in Iranian research setting, one of the best studies in the scope of RT was done by Saadati (2011). It showed the improvement of the participants in their reading ability which is the same result as the present research offered. It is noticeable that this study was done in private English language institute, but Saadati (2011) conducted her study in high school context with more participants. However, both studies reached the same result. Therefore, it is another evidence to support the present study. In spite of the time consuming demands of preparation and implementation involved in RT, the researchers considered it to be, once again, an invaluable teaching technique as it provided the study subjects with adequate chance to take responsibility for their own learning, i.e., RT encourages the EFL students to be an autonomous learners and a discoverer of knowledge, with the EFL teacher as a facilitator.

CONCLUSION

The results of the present study have shown that reciprocal teaching has an important effect on the English reading comprehension. According to Ahmadi and Gilakjani (2012), RT improves the reading ability of both the proficient and less proficient students. Students use the four key strategies (*summarizing*, *questioning*, *clarifying*, and *predicting*) and know what strategies to use, and when, why, and how to use each of them. They learn to predict, generate questions, identify the main idea of a paragraph, clarify unclear words, phrases, or sentences, and summarize their reading. The four key strategies help them overcome difficulties when reading texts as they plan and monitor their comprehension and investigate their planning and its outcome. For these reasons, it can be concluded that RT is a type of reading procedure that facilitates the teaching of English reading comprehension. It leads students to think about their reading process, improve a plan of action, monitor their own reading in order to construct their own knowledge, and self-evaluate their reading process.

Conflict of Interest

The authors declare no conflict of interest.

REFERENCES

- Ahmadi, M. R., & Gilakjani, A. P. (2012). Reciprocal teaching strategies and their impacts on English reading comprehension. *Theory and Practice in Language Studies*, 2(10), 2053-2060.
- Ahmadi, M., & Nizam Ismail, H. (2012). Reciprocal teaching strategy as an important fact or of improving reading comprehension. *Journal of Studies in Education*, 2(4), 153-173.
- Bachman, L. F. (1990). *Fundamental considerations in language testing*. Oxford: Oxford University Press.
- Baleghizadeh, S. (2011). The impact of student's training in questioning the author teaching on EFL reading comprehension. *Procedia-Social and Behavioral Science*, 29(1), 1668-1676.

- Bird, D. K. (2009). The use of questionnaires for acquiring information on public perception of natural hazards and risk mitigation: A review of current knowledge and practice. *Natural Hazards and Earth System Science*, 2(3), 1307- 1325.
- Birjandi, P., & Mosallanejad, P. (2010). *Exploring new reading strategies*. Tehran: Sepahan Publication.
- Carrell, P. L. (1989). Metacognitive awareness and second language reading. *Modern Language Journal*, 73(2), 121-134.
- Carter, C. (2007). Why reciprocal teaching? *Educational Leadership*, 54(6), 64-68.
- Choo, T., Eng, T., & Ahmad, N. (2011). Effects of reciprocal teaching strategies on reading comprehension. *The Reading Matrix*, 11(2), 140-149.
- Davidson, J. (2015). *Improving reading comprehension through reciprocal teaching* (Unpublished doctoral dissertation). Northwest Missouri State University: Missouri.
- Doolittle, P., Hicks, D., Nichols, W., Triplett, C., & Young, C. (2006). Reciprocal teaching for reading comprehension in higher education: A strategy for fostering the deeper understanding of texts. *International Journal of Teaching and Learning in Higher Education*, 17(2), 106-118.
- Frances, S. M., & Eckart, J. A. (1992). The effects of reciprocal teaching on comprehension. *Education Resources Information Center (ERIC)*, 11(1), 1-51.
- Fereihat, S., & Al-Makhzoomi, k. (2012). The effect of the reciprocal teaching procedure (RTP) on enhancing EFL students' reading comprehension behavior in a university setting. *International Journal of Humanities and Social Science*, 2(5), 279-291.
- Goodman, K. (1967). Reading: A psycholinguistic guessing game. *Journal of the Reading Specialist*, 6(1), 126-135.
- Grabe, W., & Stoller, F. (2002). *Teaching and researching reading*. England: Longman Pearson Education.
- Greenway, C. (2002). The process, pitfalls and benefits of implementing a reciprocal teaching intervention to improve the reading comprehension of a group of year 6 pupils. *Educational Psychology in Practice*, 18(2), 113-137.
- Hampson-Jones, F. E. (2014). *Reciprocal teaching: Investigation of its effectiveness as a method of whole class reading comprehension instruction at key stage two* (Unpublished doctoral dissertation). Institute of Education, University of London: London.
- Jafarigohar, M., Soleimani, H., & Soleimani, Z. (2013). The effects of reciprocal teaching vs. think-aloud on reading comprehension of pre-intermediate students in Iran. *International Journal of English and Education*, 2(1), 191-202.
- Johnson, D. W., Johnson, R. T., & Holubec, E. (2008). *Cooperation in the classroom*. Edina, MN: Interaction Book Company.
- Johnson, D.W., Johnson, R. T., & Smith, K. A. (1998). Cooperative learning returns to college what evidence is there that it works?. *Change: The Magazine of Higher Learning*, 30(4), 26-35.
- Kowsary, M. A. (2013). *The relationship between reading aloud strategies and comprehension among the Iranian EFL learners in pre-intermediate levels* (Unpublished M.A. thesis). Hakim Sabzevari University: Sabzevar.
- Lesley, T., Hansen, C., & Zukowski, J. (2008). *Placement and evaluation package: Interchange, passages*. Cambridge: Cambridge University Press.
- Leung, W. G. (2005). *Reciprocal teaching to improve English reading comprehension of a group of form three students in Hong Kong* (Unpublished M.A. thesis). University of Hong Kong: Hong Kong.
- Oczkus, L. D. (2003). *Reciprocal teaching at work: Strategies for improving reading comprehension*. Newark, DE: International Reading Association.
- Ostovar-Namaghi, S. A., & Shahhosseini, M. R. (2011). On the effect of reciprocal teaching strategy on EFL learners' reading proficiency. *Journal of Language Teaching and Research*, 2(6), 1238-1243.
- Palincsar, A. S., & Brown, A. L. (1984). Reciprocal teaching of comprehension- fostering and comprehension-monitoring activities. *Cognition and Instruction*, 1(2), 117-175.
- Panmanee, W. (2009). *Reciprocal teaching procedure and reading instruction: Their effects on students' reading development* (Unpublished M.A. thesis). Prince of Songkla University: Thailand.
- Rosenshine, B., & Meister, C. (1994). Reciprocal teaching: A review of the research. *Review of Educational Research*, 64(4), 479-530.
- Saadati, Z. (2011). *The effect of reciprocal teaching on reading comprehension of Iranian EFL learners* (Unpublished M.A. thesis). Islamic Azad University, Science and Research, Tehran, Iran.

- Salehi, M., & Vafakhah, S. (2013). A comparative study of reciprocal teaching only (RTO) and explicit teaching of strategies before reciprocal teaching (ET-RT) on reading comprehension of EFL learners. *Australian Journal of Basic and Applied Sciences*, 7(2), 148-155.
- Saslow, J. & Ascher, A. (2006). *Top Notch: English for today's world*. 2A. England: Pearson Longman.
- Tarshaei, G., & Karbalaei, A. (2015). The effect of three phase approach on Iranian EFL learners' reading comprehension. *European Online Journal of Natural and Social Sciences*, 4(2), 362-372.
- Tran, T. D. (2013). Theoretical perspectives underlying the application of cooperative learning in classrooms. *International Journal of Higher Education*, 2(4), 101-115.
- Van de Pol, J., Volman, M., & Beishuizen, J. (2010). Scaffolding in teacher–student interaction: A decade of research. *Education Psychology Review*, 22(1), 271–296.
- Wisajorn, P. (2003). *Teaching reading comprehension to Thai EFL students: Reciprocal teaching procedure in small group work* (Unpublished doctoral dissertation). University of Canberra: Australia.
- Wood, D., Bruner, J. S., & Ross, G. (1976). The role of tutoring in problem solving. *Journal of Child Psychology and Psychiatry*, 17(2), 89-100.
- Yawisah, U. (2013). Reciprocal teaching: One of the methods for poor comprehenders. *Pedagogy*, 1(1), 22-28.
- Yoosabai, Y. (2009). *The effects of reciprocal teaching on English reading comprehension in a Thai High-school classroom* (Unpublished doctoral dissertation). Srinakharinwirot University: Thailand.