



The Effect of One-way and Two-way Jigsaw Reading Task on the Writing Performance of Iranian EFL Learners

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Abstract

Writing is viewed as one of the most important language skills both in L1 and L2 learning. The purpose of the present study was to investigate the impact of one way and two-way task types through jigsaw reading activities on the writing performance of Iranian EFL learners. The participants of the study were 90 B.A. Students at the intermediate level and they were studying English in intact classes. These 90 learners were divided into three equal groups of 30 and homogenized prior to the administration of the treatment through giving them a PET as a proficiency test. Following that, a pretest of writing was given to the three groups. Next, the two experimental groups received one way and two-way jigsaw reading activities while the control group did not receive such treatment and followed the conventional method of instruction based on the syllabus set by the university. The length of the treatment was ten sessions and each session was 90 minutes. At the end of the treatment, the participants were given the posttest of writing the scores of which were used to address the research question. The results of statistical analyses indicated that two-way tasks were significantly more effective on the writing performance of the participants.

Keywords: *Reading, Jigsaw, Writing, One-way tasks, Two-way tasks*

Introduction

In Al-Meni's view (2008) writing and correspondence in English have an important, cross cultural, and traditional role to play in the context of organizations, businesses, and governmental initiatives all over the world. It is thought that writing is a key part of education and is described as a significant path of learning language. In the same manner, Leki (2003) emphasized that writing plays a key role in improvement of career. In general, the learning of writing skill

provides an evidence to show that a student has reached a good level of understanding of language. Wigglesworth and Storch (2009) also emphasize the significance of writing and point out the special place it has for both the teachers and students of English language.

One of the most successful methods in teaching language has been task-based language teaching. In this approach teachers offer students task-based activities aiming to enhance students' motivation to learn (Freeman, 2000). As Ellis (2003) points out, task is an important means for interaction and language use. It has a positive influence on speaking abilities of students. Task-based approach is defined by Nunan (2006) as a segment of classroom work that involves students in understanding, interacting, producing and English language while their focus is on taking advantage of their knowledge so that they express meaning with the intention of conveying meaning instead of manipulating form.

Jigsaw projects can be useful in language classrooms because learning is made easier by students' interactions. L2 students are encouraged to play active role in the process of learning. In Adams's view (2013) this method helps establish interactive and interpersonal skills among learners. Additionally, the method increases the students' motivation to learn. In Kagan's view (1989-90), jigsaw tasks give the L2 learners an exceptional team experience providing them with the opportunity to cooperate with one another. This improves their ability to achieve a set objective more quickly.

However, a review of previous research (e.g., Adhami, & Marzban, 2014; Nazari, Negari, Rajabi, & Khalaji, 2016; Sabbah, 2016; Tayeb, 2016; Ganji & Ketabi, 2015; Khodareza & Shabani, 2016; Sodagari & Dastgoshadeh, 2015; Yadollahi & Rahimi, 2015), does not indicate a study that has tried to explore the impact of one-way and two-way task types through jigsaw reading activities on the writing performance of EFL learners. The current study is aimed at filling this gap.

Literature Review

Writing

Writing, as an important language skill, plays a significant role in learning a foreign language and the focus of recent studies (e.g. Crystal, 2003; Leki, 2003; Ibnian, 2011; Zainal & Husin, 2011) is in this domain. Zainal and Husin (2011) declared that writing can be considered as the learned processes that forms the person's experiences into text. Through this process, the writer is allowed to clarify, generalize, explain and convey feelings and concepts. It needs the development of thinking abilities. In the same vein, Applebee (1984) and Emig (1977) describe writing as the externalization and stating of thinking. In addition, they state that separating writing from the purposes and viewpoints of the writer shows the reflective side of writing.

Through writing, which is a significant communication means, the learners are able to express themselves better. Teaching writing as well as learning it in any language has an effect on learners' performance and L2 learning. Consequently, to be able to write in English as a foreign language is regarded as a predictable, skilled educational issue that seeks to comprehend multiple

educational objective and to satisfy particular learning requirements which the L2 learners' development is depending on it.

Writing in L2 for the L2 teachers, who apply a product approach in the process of writing, is focused on the practice of grammatical and syntactic knowledge together with awareness of the different forms of the texts. Writing is regarded as a written product created by the writer's formal language knowledge. Thus, improving writing ability is viewed to originate from learning along with the use of formal linguistic knowledge in producing a written text. Generally, the teaching process begins by the instructor's clarification of linguistic structures. Then, the learners try to practice the same structures together with applying this knowledge in a writing process in order to create an extensive piece of writing (Hyland, 2003).

According to the review of related literature about teaching of writing, in the university context, the main L2 writing instruction is the process- based approach. Basically, the emphasis in process oriented teaching is on the writer since he/she is a producer of the text. During classroom instruction, the instructor proposes some activities, which direct the learners to the process of generating ideas, drafting, and revising the ideas in addition to improving writing strategies to let them find and propose ideas. According to Raimes (1998a), the learner's writing products can be studied, evaluated, and reviewed at each stage. In spite of the framework of these activities in linear sequence, applying the process- based approach has stimulated many L2 instructors to conduct studies in order to compare the product based teaching and its usefulness in the process of English writing instruction not only at the academic level (e.g. Patarapongpaisan, 1996; Vessakosol, 1989) but also at the high school level (e.g., Wisessang, 1996).

The process approaches in writing instruction was developed as a reaction to the traditional approach which their focus is on the form of writing (e.g. Susser, 1994; Tribble, 1996). Writing as a process has changed the general opinion of writing instruction and the way in which learners can have the ability to write. According to Grabe and Kaplan (1996), the classroom instruction has moved away from the traditional obsession with written text model, its syntactic features, organized information, and a linear writing model which forms the process of outlining, writing, and revising, and writing about unreal topics.

Jigsaw Reading

The jigsaw reading technique developed by Elliot Anronson (1971)) is the one from which all class activities can be arranged when it comes to the task of reading. To succeed, a learner will rely on other fellow members in the classroom. Being inquired into by scholars such as Kagan, (1990) and Slavin (1983), it has been widely used to be seen as an efficient means with which writing and reading are instructed. In this technique class members are divided into groups and readings are split into different pieces that can be put together by the groups so as to be able to finish the jigsaw.

As Qiao and Jin (2010) argue, all the group members establish a specialist group taking part in talks until everybody is well-aware of what is going on. Afterwards, learners return to their

own groups communicating the information they have got to all the other members. This technique is appropriate to enhance teamwork capabilities (Qiao & Jin, 2010). Since learners do need to convey a particular piece of information and in doing so elucidate something to others, they are hoped to become more responsible during jigsaw activities.

Concerning research on jigsaw, Nazari, Negari, Rajabi, and Khalaji (2016) carried out a study on the impact of jigsaw task as a kind of a cooperative learning tasks on EFL learners' reading skills ability. Based on the aim of this study, two intact groups were selected randomly and divided to a control group and an experimental group. The participants in experimental group were exposed to the task-based instruction through jigsaw while those in the control group had their own traditional way of reading comprehension instructions. In the first session, they were given a reading test as a pretest. After the treatment sessions which took 18 sessions, a parallel test of reading comprehension was given to them as the posttest. The results of the statistical analysis by Independent pair T-test indicated that the experimental group outperformed the control group. As a result, it was proved that jigsaw task not only enhanced the learners' language skills, but also created a helpful learning environment.

There is a study done by Tayeb (2016) who studied the effect of jigsaw task in EFL learners' writing on the development of EFL learner's willingness to communicate. To achieve the purpose of the investigation, the Iranian EFL learners were chosen as experimental and control groups. The participants in the experimental group were exposed to a type of a cooperative learning, namely Jigsaw technique to develop their writing, and their level of their willingness to communicate in writing tasks measured by Fushino (2010) questionnaire. After the treatment, the writing performances of the two groups on post-test were compared through Independent Sample T-test. Moreover, in order to compare the questionnaire scores of the experimental group before and after the instruction was conducted by Paired Sample T-test. Based on the obtained results, it was concluded that Jigsaw technique had a positive effect on the learners' willingness to communicate and their writing ability.

A study was conducted in Iran by Adhami and Marzban (2014) on the effectiveness of jigsaw task as a kind of cooperative learning on high school EFL learners' reading comprehension. In order to check the homogeneity of all participants regarding their general language proficiency, Nelson Proficiency Test was given to 120 students. Sixty students were selected and assigned in two different classes based on the results of Nelson Proficiency Test. Following the selection of sixty students, they were assigned to two groups, the experimental group and control group containing 30. Students in each group, within the age range of fifteen to nineteen. The students in these groups were given a pretest in the first session. The participants in the experimental group received instruction through jigsaw task for six sessions while those in the control group had their own traditional method. In the last session, both groups' reading comprehension were checked through posttest. The results indicated that the participants in the experimental group outperformed those in the control group. It was proved that jigsaw task had a great effect on Iranian intermediate high school EFL learners' reading ability.

One-Way and Two-Way Tasks

One-way tasks refer to those language tasks that are completed individually and thus information is not shared or in other words information is held by one individual (Ellis, 2003). Therefore, one-way tasks do not require the person doing the task to work with other members (Khodareza & Shabani, 2016). Thus, in one-way tasks there is no interaction and sharing any responsibility in line with finishing the task. There is no chance for the learner to share their information or discuss their experiences in the realm of one-way task since every individual has its own piece of information. As a matter of fact any person is assigned individually to work on an activity in one-way tasks. One-way tasks provide chances to produce output with more modifications compared to two-way tasks (Iwashita, 2001).

On the other hand, two-way tasks are those tasks that need to be carried out by exchange of information between two or more people (Ellis, 2003). In fact, the main element in two-way tasks is the interaction which takes place among the members when the task is being carried out and also in two-way tasks a high level of collaboration is required (Yadollahi & Rahimi, 2014). In other words, two-way tasks and one-way tasks are different in that the learners have chance to engage in group work and activities in the first type. That is, the completion of the two-way task can be done via contribution of collective work. Thus, dividing the responsibility for the completion of a work and the interaction between and among the learners will be done in this type of task. Two-way tasks have different versions including jigsaw activities through which the completion of the task gives a chance to any individual to have a piece of information. Two-way tasks also have other examples including dictation, conscious raising tasks and divergent as well as convergent and cue card activities.

A two-way task instruction method motivates the individual in any type of activity related to learning to share information with the goal of obtaining the target that is finishing the task (Izumi & Izumi, 2004). According to the scholars (Ellis, 2003; Izumi & Izumi, 2004; Mackey, 2012) regarding the one-way task approach there is no interaction among the learners in settings related to learning to do an activity to obtain a target. Non-Reciprocity in one-way task was proposed by Mackey (2012) focusing on these kinds of tasks with no sharing of interaction and information while in two-way tasks learners work collaboratively to complete a given task. Listen and do tasks, fill in the blanks exercises, translation and storytelling are the examples of one-way tasks. Khodareza and Shabani (2016) have studied the effect of one-way and two-way tasks (two vocabulary instruction techniques) on Iranian EFL learners' phrasal verb learning. Sixty EFL learners attending the TEFL course were participated in this study. They were in the second semester of their academic education. To ensure the homogeneity of all participants' general language proficiency, ninety sophomore students were selected and took CELT. Based on the test results, sixty students were selected and divided in two different classes. Following the selection of sixty students, they were assigned to two equal thirty groups, and they were taught through one-way task (OWT) and two-way task (TWT) groups. In the first session, participants in both groups took a forty multiple-choice phrasal verbs test as a pretest. The participants in the first experimental group participated in the treatment, namely, TWT group for 12 sessions and

those in the other experimental group received OWT group instructed on vocabulary, using two-way tasks as input. All participants in the last session took the same version of phrasal verb test as a posttest. Statistical results showed that the participants in experimental group outperformed those in control group. The data were analyzed through paired-samples and independent samples t-tests, and the results indicated that both groups were improved in vocabulary but the effect of two-way tasks on phrasal verbs learning was stronger than that of the one-way task group.

Yadollahi and Rahimi (2014) have conducted a study in order to show how different task kinds have an effect on the level of learners' engagement in form-related changes (FRC) as well as meaning-related changes (MRC). The fifteen Iranian EFL learners were selected. They were taught how to self-correct and peer-correct three kinds of writing tasks such as argumentative, informative, and analytical. Etherpad package was used to help the participants in communication and to share their responses and feedback on their written products. The results of statistical analysis indicated more frequencies of peer-correction than those of self-correction in the case of all task types. As the results of a Chi-square analysis showed, there was significant difference in the number of corrections made by the participants. The results showed that the frequencies of corrections made in the analytical task were more than that of other tasks. The results of another Chi-square test was proved that the students in all task types groups made more changes in meaning-related aspects in comparison with the changes in their written products. Moreover, based on the results of another t-test analysis, there was not a significant difference between form and structure in both individual and collective tasks. Furthermore, the analysis showed that the focus of accuracy and meanings improved in collaborative work. The results of an interview showed that the majority of the interviewees agreed that the writing and editing through collaboration with peers were helpful and useful.

In addition, Sodagari and Dastgoshadeh (2016) examined what kinds of metacognitive strategies L2 learners use in various speaking task types. Sixty EFL advanced learners were randomly selected as a result of an OPT to confirm their homogeneous knowledge. They were randomly assigned into experimental and control groups. In order to see what metacognitive strategies participants used in speaking tasks, the metacognitive strategies questionnaire developed by Oxford (1990) was used. The participants of the experimental group used one-way and two-way speaking tasks following undergoing metacognitive strategies instruction. While those participants in the control group were taught based on practicing one-way and two-way speaking tasks in a traditional way. Finally, after the posttest, through ANCOVA, it was concluded that there was a significant difference between the two groups in terms of the speaking ability and metacognitive strategies. The results of the study indicated that the experimental group outperformed those in the control group. Moreover, the instruction of metacognitive strategies use before oral tasks had a significant effect on EFL learners' speaking skill. The results obtained through ANCOVA as well as the chi-square revealed that the difference between metacognitive strategies in one-way speaking tasks versus two-way speaking tasks was significant.

Ganji and Ketabi (2015) have done a comparative effect of two types of output tasks, such as, reconstruction cloze task and reconstruction editing task on EFL learners' English lexical collocations. The study was intended to investigate whether the collaborative tasks result in more knowledge of the intended collocations than same individual tasks or not. Intact EFL classroom were chosen and the students were supposed to do four editing tasks or four cloze tasks individually or collaboratively. Then, they sat to attend in a vocabulary knowledge scale test at the outset. The findings of the study proved that more knowledge of collocation was achieved through the collaborative completion of the tasks (in pairs) rather than the individual completion of them. The results also showed that there was a significant difference between the effects of these two task types. Based on the obtained result, the editing tasks were proved to be more useful than the cloze tasks in lexical collocations achievement.

Research Question

In line with the purpose of the current study, the following research question was formulated:

Is there any statistically significant difference between the effects of one- way and two-way jigsaw reading on the writing performance of EFL learners?

Method

Participants

This present study had 90 English B.A. students as the participants. These learners were at the intermediate level and were studying English in intact classes. They were in nine different classrooms with about 8 to 14 students in each classroom. The age range of the participants was from 19 to 32 and 47 students were female and the remaining 43 were male students. The participants had already been placed at the intermediate level by passing the previous courses or a placement test given to them before starting the course. They were students from Kabir-Gharb non-governmental university. Table 1 displays the grouping of the study and the number of students in each class and group.

Table 1

Grouping of the Study and the Number of Male and Female Students in Each Group

Female	12 (Group 1)	14(Group2)	15(Group3)
Male	18(Group1)	16 (Group2)	15 (Group3)
Total	30	30	30

Group 1=One-way jigsaw tasks; Group 2=Two-way jigsaw tasks; Group 3=Control

The two experimental groups received one-way and two-way jigsaw reading activities while the control group did not receive such treatment and followed the conventional method of instruction based on the syllabus set by the university.

Instruments

Preliminary English Test (PET)

A proficiency PET was administered to the three groups to make sure that learners were homogenous with respect to their language proficiency. Preliminary English Test (PET), the Cambridge Preliminary English Test, or PET for short, is a qualification in English as a Foreign Language awarded by Cambridge ESOL. The test has these sections:

A-Reading Writing are taken together - 90 minutes

B-Listening - 30 minutes

Speaking - an interview, 10 minutes

Active Reading Skills

The textbook ACTIVE Reading Skills (book 2) was employed in this study as the source of jigsaw reading materials. Book 2 is the intermediate level of a four book series designed especially for adult ESL/EFL students. It has been written by Neil J Anderson which has 12 units each containing two chapters and each chapter has a reading passage which is in line with the topic of the unit. As claimed by author the textbook has the main purpose of helping learners activate prior knowledge, cultivate vocabulary comprehension, and develop reading fluency. To this aim, the reading materials were modified and manipulated by the researcher to prepare the jigsaw reading activities for the current study. To do so, 10 such texts were prepared.

Writing Pretest and Posttest

A writing pretest as well as posttest were administered to the three groups in which the participants were asked to write an essay on a topic chosen from among 50 essay topics taken from the internet in order to ensure that there were no meaningful differences in writing performances of the two groups prior to the treatment. To select the topics, initially, the 50 selected topics were given to three experienced teachers teaching at the university and they were asked to rate the topics from the least appropriate i.e. 1 to the most appropriate i.e. 5. Then the scores for each topic were calculated by adding up the scores and the 20 most appropriate topics were chosen. Following that, the students were provided with these topics and asked to rate them according to the most interesting and least interesting ones. It should be noted that the topics were given to the participants and they were asked to rate them on a Likert scale from 1= I hate this topic. 2 = I do not like this topic. 3 = I like this topic. 4 = I really like this topic. 5 = I love this topic. Next, all the scores for each topic by all the participants were added up and the most popular topic was selected for the purposes of pretest and posttest. The logic behind the selection of favorite topics was that first students would be more willing to write about topics they like and second, some degree of familiarity with topic would secure the topical knowledge of participants and accordingly. For both the pretest and posttest the participants were given 60 minutes to write a 200-word essay on the given topic. Some instructions were given to the participants on how to write the essays in order to make sure that they were on the right track. The instructions included the followings:

- The length of the essay should be within the range of 180 to 200 words
- The time spent on the essay should not be more than 60 minutes
- The essay should have an introductory paragraph as well as two body and a concluding paragraph
- Dictionaries should not be used

The writing tests were scored by two raters based on a scoring scheme which is described in the next section. Moreover, inter-rater reliability was also calculated. The reliability index turned out to be .87 which is a satisfactory level of reliability (Brown, 2007).

Scoring Scheme

The writing tests were scored drawing on a scoring scheme by Wang and Liao (2008) where there are 5 criteria, including Focus, Elaboration/Support, Organization, Conventions, and Vocabulary, each including 5 item descriptors. The maximum score obtained based on the scoring scheme was 25.

Procedure

To conduct the present study 90 intermediate students were selected. These learners were studying in their intact classes and were in nine separate classes consisting of the total number of 90 male and female learners. Each three classes were randomly selected as one of the three groups of the study. To this aim, two of these groups were the experimental and one group was the control group. PET was initially given to the three groups of the study to assure their homogeneity in terms of overall proficiency level. After making sure that the three groups were not different in terms of overall language proficiency, they were given a writing pretest. The procedure in the first experimental group practicing jigsaw reading activities through one-way tasks was carried out in line with Ellis's (2003) definition of one-way tasks as those language tasks which are completed individually and information is not split or in other words information is held by one individual:

The participants were initially given clear instruction and were asked to do the jigsaw reading activities alone and they were not permitted to get help from their partners. The following steps were taken in this group:

- A jigsaw passage was given to the students
- They were taught some of the difficult vocabulary items in the reading materials
- The learners were asked to put the jumbled parts together alone and rebuild the correct version of the test
- At the end, the learners were given a copy of the correct version of the reading to check that they had done the task correctly or not.

The procedure in the second experimental group was jigsaw reading activities through two-way tasks which was unfolded in line with Ellis's (2003) definition of two-way tasks as tasks that should be done by exchanging the information between two or more people. To this aim, in

this experimental group the students were divided into groups of three and one person was appointed as the leader of the group.

- A passage was divided into 3 parts and each person was asked to read one of them.
- Then the leader of the group with the assistance of team members figured out the sequence of the segments and put them together.
- Finally, the completed task was checked and done as a whole class activity and the teacher's assistance.

The length of the treatment was ten sessions and each session was 90 minutes. At the end of the treatment, the participants were given the posttest of writing the score of which were used to address the research question.

Results

The aim of the study was to explore the impact of one-way and two-way task types through jigsaw reading activities on the writing performance of EFL learners. Before the treatment, three groups of the study took a PET test the scores of which were used to make sure that the three groups were not different in terms of overall language proficiency. Table 2 depicts the results of one-way ANOVA on the PET scores for the three groups.

Table 2

Results of One-Way ANOVA on the PET Scores of Three Groups

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	136.256	3	68.421	2.325	.211
Within Groups	189.245	86	22.443		
Total	325.501	89			

As seen in Table 2 there was no significant difference between the three groups of the study ($F=2.325$, $p=0.211$). Then, the participants of the study were given a pretest of writing and upon completing the experimentation, they were given a posttest of writing. Table 3 demonstrates the descriptive statistics of the pretest and posttest scores of the three groups.

Table 3

Descriptive Statistics of the Pretest and Posttest scores of the Three Groups

		N	Mean	Std.		95% CI for Mean		Minimum	Maximum
				Deviation	Std. Error	Lower Bound	Upper Bound		
Pretest	One-way	30	12.42	2.12	.312	11.19	13.12	7.00	18.00
	Two-way	30	12.30	2.14	.517	11.12	13.63	8.00	14.00
	Control	30	11.45	2.31	.712	9.36	13.58	6.00	15.00
Posttest	One-way	30	13.22	3.14	.721	13.09	17.72	11.00	19.00
	Two-way	30	20.22	3.08	.632	19.51	23.26	14.00	24.00
	Control	30	12.89	2.19	.418	10.22	12.59	6.00	17.00

As seen in table 3 the two-way group scored much higher on the writing posttest compared to the one-way and control groups. In order to understand which of the treatment types had a statistically more significant impact on the writing performance of the participants, initially it was decided to run ANCOVA, but one of the assumptions of ANCOVA that is the homogeneity of variances was not met ($F=7.432$, $p=0.002$). Table 4 illustrates the Levene's test of homogeneity of variances for the three groups of the study.

Table 4

Result of Levene's Test of Homogeneity of Variances across the three Groups of the Study

F	df1	df2	Sig.
7.432	2	87	.002

As an alternative to ANCOVA, gain scores were calculated and Kruskal Wallis was administered to the computed scores for finding any effects of the treatments. Table 5 displays the statistics of the gain scores for the three groups of the study.

Table 5

Descriptive Statistics of the Gain Scores for the Three Groups of the Study

	N	Mean	Std. Deviation	Std. Error	Minimum	Maximum	Kolmogorov-Smirnov		
							Statistic	df	Sig.
One-way	30	1.22	3.21	.52	4.00	19.00	.221	29	.001
Two-way	30	8.43	2.35	.36	7.00	21.00	.341	29	.002
Control	30	1.71	3.56	.74	6.00	2.00	.219	29	.000

As the descriptive statistics in Table 5 indicated the gain scores were not normally distributed which meant that the non-parametric test of Kruskal Wallis should be used instead of ANOVA. Table 6 shows the results of Kruskal Wallis test.

Table 6

Result of the Test of Kruskal Wallis on the Gain Scores of the Three Groups

	Groups	N	Mean Rank	Chi-Square	df	Asymp. Sig.
Gain	One-way	30	13.47	49.90	2	.001
	Two-way	30	52.71			
	Control	30	13.23			

Based on the results of the test of Kruskal Wallis there a significant difference was detected among the three groups ($Z=49.90$, $p=0.001$). In order to track the exact place of difference, pairwise comparisons using Mann Whitney U test were carried out among the three groups. The alpha level was adjusted based on Bonferroni method. Accordingly, the alpha level was set from

0.05 to 0.01 as the maximum comparisons were three ($\text{sig}=0.05/\text{number of comparisons}=0.01$). Table 7 shows the results of pairwise comparisons between the three groups of the study.

Table 7

Results of Pairwise Comparisons between the Groups

	Mann-Whitney U	Wilcoxon W	Z	Asymp. Sig. (2-tailed)
One-way Group-Control	124.200	547.723	-.312	.535
Two-way Group-Control	.002	451.200	-5.145	.001
One-way Group-Two way Group	.033	331.179	-4.215	.003

As it is noticed in Table 7, a significant difference was found between two-way jigsaw group and the one-way group ($U=0.033$, $p=0.003$). Moreover, a significant difference was found between the two-way jigsaw group and the control group ($U=0.002$, $p=0.001$). However, no significant difference was found between the one-way jigsaw group and the control group ($U=124.200$, $p=0.535$). The results suggest that the use of two-way jigsaw tasks was statistically more effective on the writing performance of the participants.

Discussion and Conclusion

The current study aimed at investigating the impact of one way and two-way task types through jigsaw reading activities on the writing performance of EFL learners. The results of statistical analyses indicated that two-way tasks were significantly more effective on the writing performance of the participants. The findings of the current study are in line with the previous studies (e.g., Ganji, & Ketabi, 2015; Khodareza & Shabani, 2016; Sodagari & Dastgoshadeh, 2015; Yadollahi & Rahimi, 2015) indicating the superiority of two way tasks.

The results of the present investigation regarding the effectiveness of two-way tasks on writing can be explained on the basis of theories like sociocultural and ZPD presented by Vygotsky (1978). He discussed that learning is assisted by these zones of development. That is more knowledgeable persons who provide scaffolding for less knowledgeable individuals support the learners motivated to learn new things. A strong background is provided by sociocultural theory to describe the superiority of two-way tasks. This theory also substantially deals with social communication that includes dialogues and conversations taking place among individuals. For example, Lantolf and Aljaafreh (1995) who investigated the communications between tutors and ESL learners came to the result that learners improved in the ZPD via the contribution of other group members in tutoring sessions. The appearance of ZPD during group work led the learners towards improvement since the students acted beyond their initial ability in the ZPD with the contribution of peers and because the learners performed with progressing independence. Moreover, the substantial concentration on interaction as a type of supportive means among the learners in two-way task types brings about intimacy and rapport which can create a sense of trust and security. This issue can help learners find stronger support. The results of the present study also remind us of the indispensable role of interaction in the development of

language competence. Apparently, there should be support for the learner in the learning environment to assist him /her to develop his/her language ability. Therefore, the impact of scaffolding as well as interaction on improving language competence in general and writing skill in particular is further founded in the present investigation.

Another explanation concerning the more effectiveness of two-way tasks is the essence of collaboration which exists in such tasks. Collaborative activities have been shown to improve different language skills and components (Pica, 1987 as cited in Izumi & Izumi, 2004). Pica (1987 as cited in Mackey, 2012) in a study found that learners produced more discourse in collaborative work since they could easily take part in communication with other members. Moreover, the findings of a study conducted by NajafiKarimi, Birjandi and Alavi (2015) revealed that collaborative tasks were much more productive than individual ones in learning English phrasal verbs. Undoubtedly, while learners are involved in collaborative activities they are more motivated to learn and also they can simply learn from other individuals who are more knowledgeable (Loschky & Bley-Vroman, 1993). In addition, when the tasks ask for the exchange of information, learners can make more modifications to the discourse which provides more negotiation of meaning and active contribution than the individual tasks. Moreover, two ways tasks can lead to maximum of pushed output and a focus on target structures which can ultimately lead to more improvement in language learning (Loschky & Bley-Vroman, 1993).

The results of the current have implications for teacher educators since they can convey the findings to assist teacher trainees in enhancing their understanding in terms of the significant role of reciprocal or tow-way tasks in the enhancement of language competence and more specifically writing. In addition, syllabus designers can develop tasks or activities to motivate further usage of reciprocal instruction in EFL classes. Teachers also may decide to give more supports to the learners in line with reciprocal teaching in classroom tasks through implementation of different teaching strategies and techniques in their instruction. Therefore, learners' language skills will be boosted. Learners may also be more eager to take part in classroom tasks which involve reciprocal teaching in this way.

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