Long-Term Effects of Collaborative Task Planning vs. Individual Task Planning on Persian-Speaking EFL Learners' Writing Performance[1]

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Abstract

This study was aimed to compare long-term effects of collaborative and individual task planning on Persian-speaking EFL learners' writing performance, using Brown and Bailey's (1985) rating scale. Therefore, a group of 90 upper-intermediate EFL learners in collaborative task planning, individual task planning, and control groups took part in the study. In the experimental groups, the participants were required to do task planning before attempting the main task. All the participants took a pretest, posttest, and delayed posttest. ANOVA results indicated task planning produced better writing performance in the experimental groups on the posttest and delayed posttest. Furthermore, repeated measures analyses showed both time and group played a part in the efficacy of the treatment. In fact, the participants of the experimental groups continued to retain the effects of task planning. Results provide further support for the sociocultural theories of L2 development, according to which learning can be strengthened interpersonally.

***Keywords*:** Task Planning; Collaborative Writing; Sociocultural Theory; EFL Writing

1. Introduction

A classroom can be viewed as a small community of learners whose members have the same type of problems and goals. It is a context where large amounts of communication and interaction happen, and students do their best to

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support each other and develop their language and communication skills. It is rightly believed that L2 classroom contexts can be studied within sociocultural theories of L2 development (Lantolf & Thorne, 2006) inspired by the social constructivist theories of human development (Vygotsky, 1978).

It is imperative to mention that sociocultural theories of L2 development think of learners as individuals who are in a larger community. In fact, they put great emphasis on developing interpersonal relationships with other members of the community. To explain his theory of development, Vygotsky (1978) developed the idea of zone of proximal development (ZPD) that provides a supportive learning environment for the novice. This support which is technically called *scaffolding* is provided by the teacher or more competent students (Lantolf & Thorne, 2006). The more experienced learners or the teacher is a mediator between the novice and the knowledge they are trying to understand. Vygotsky (1978) defined ZPD as "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (p. 86).

A plethora of studies have used the sociocultural theory of L2 development as their theoretical foundation. Scholars such as Frawley and Lantolf (1985) examined how L2 learners benefitted from mediation when faced with a difficult task (see DiCamilla, Antón, & Lantolf, 2003; Lantolf, 2004; Lantolf & Frawley, 1984). In addition, there are studies which have examined certain features and microskills using the sociocultural theory of L2 development. For example, Swain and Watanabe (2013) studied the collaborative dialogue among EFL learners who were trying to solve their grammatical and lexical problems (see Storch, 1999). The impact of the theory on socializing was the subject of a scrutiny by Duff (2007). She studied Korean exchange students in Canada. In fact, she examined their experiences of language and literacy socialization when studying in university.

L2 learners' attitudes towards activities within the sociocultural theory of L2 development have been examined by several researchers. For example, Shehadeh (2011) showed that participants of his study had positive attitudes when working in pairs and groups to solve their problems together. In addition, other researchers concluded that their learners had a positive attitude when acting as both novices and experts because they could affect each other's development (e.g., Donato, 1994; Swain & Lapkin, 1998). For example, Swain and Lapkin (1998) maintained that learners who obtained their knowledge through such activities tended to retain it because they were affected by other learners and they were "able to use the language of others (and the mental process that interaction has constructed)" (p. 321).

In most studies focusing on the impact and role of sociocultural theories, the role of task and task planning is central. In fact, task planning has been employed in both L1 and L2 writing development. In the former, planning has been researched extensively among learners of various ages and educational levels (e.g., Galbraith, Ford, Walker, & Ford, 2005; Rau & Sebrechts, 1996). Such research has not only shown that planning prior to composing positively affects text quality, but it has also shown that the effectiveness of different planning activities varies by age and development of the learner (Chai, 2006). Whereas research on the role of planning in L1 writing processes and its effect on L1 writers' texts is extensive, much of the research on planning in L2 writing has focused on characterizing L2 writing processes and comparing them to L1 writing processes.

Studies comparing L1 and L2 writers have indicated that planning activity in L1 and L2 writing may differ qualitatively (Victori, 1999; Whalen & Menard, 1995), but that planning activity is distributed similarly throughout the composing process in both LI and L2 writing (Manchon & de Larios, 2007). On the other hand, some studies comparing L2 writers have indicated differences in planning activity among L2 learners with different proficiency levels (de Larios, Manchon, Murphy, & Marin, 2008), and among L2 writers with different skill levels (Sasaki, 2000, 2004; Skibniewski, 1988; Victori, 1999). Authors of the aforementioned studies had the assumption that planning has a measurable impact on L2 writing quality and aids L2 writers in the production of lexically sophisticated, grammatically complex texts of higher holistic quality. In other words, writing processes are assumed to impact the written product.

Other researchers (e.g., Adams, Alwi, & Newton, 2015; Doboa, 2012; Kormos, 2011; Ong, 2014) studied the issue from other perspectives, too. For example, Ong (2014) studied effects of task factors and conditions on the frequencies of five metacognitive processes of L2 writers during the planning and writing stages. Her participants were asked to report their metacognitive processes, namely generating new ideas, elaborating new ideas, organizing new ideas, thinking of essay structure, and thinking of language aspects of the task. Results showed that the manipulation of the task conditions had a stronger effect than the planning time conditions on L2 writing. She pointed out that effects of task conditions were significant on the frequencies of generation and organization of new ideas during planning and on the frequencies of elaboration and organization of new ideas during writing. However, the effects of planning time were significant only on the frequency of thinking of language aspects of the task during writing (see Kellogg, 1990). Her results also showed that EFL writers in the planning conditions engaged in significantly more on-line planning than their counterparts in the control group.

Adams et al.'s (2015) study, following the cognition hypothesis (Robinson, 2005), scrutinized the role task based instruction plays in enhancing EFL learners' accuracy and complexity in writing in a classroom setting. The results of their analysis proved that task complexity made a positive change in their participants' accuracy of writing, which was in line with the cognition hypothesis. Nevertheless, such predictions did not happen for participants' linguistic complexity which "failed to match predictions of the cognition hypothesis.

As Doboa (2012) pointed out a number of studies have investigated the benefits of collaborative writing by comparing collaborative and individual tasks. For example, Storch (1999) scrutinized effects of collaboration on grammatical accuracy across three different tasks: a cloze exercise, a text reconstruction task, and a composition task. The participants worked in pairs and had an opportunity to discuss their grammatical choices. This caused the task to take more time to complete, but produced more accurate written texts than those working alone. Similarly, Storch (2005) examined the effects of collaboration by analyzing not only the written texts produced, but also the nature of the writing process. She compared dyadic and individual performance on a short composition task. The pairs spent more time on the task and produced shorter texts, but these were syntactically more complex and grammatically more accurate than those written individually.

In similar studies, Storch and Wigglesworth (2007) as well as Wigglesworth and Storch (2009) compared the performance of pairs and individual learners on writing tasks. In both studies, the pairs were assigned more time to complete the task than individual learners. The results of both studies showed that there were no differences in terms of fluency and complexity, but the texts written in pairs were significantly more accurate than those written individually (see Kim, 2008; Kuiken & Vedder, 2002; Nassaji & Tian, 2010; Neumann & McDonough, 2015).

The use of task planning has long been introduced to complement traditional writing classes (Ellis & Yuan, 2004; Johnson, 2011). For example, Ellis and Yuan (2004) investigated the effect of task planning on the written product of a group of L2 writers. They found unstructured pretask planning to positively impact the writing fluency and grammatical complexity of L2 writers' texts. It is interesting to note that previous studies on planning in L2 writing have focused indirectly on online planning through extensive descriptions of effective L2 writing processes. Such studies provide for a rich description of the writing behaviors of effective L2 writers (Johnson, 2011).

These studies have not taken into account all related variables. For example, none of the studies compared individual and collaborative task planning with no planning. What happens when EFL learners are instructed to plan for their

writing, but no emphasis is made on planning before attempting the task. Most of these studies compare task planning between groups and pairs. It can be an interesting question to examine the differences between collaborative task planning and individual task planning.

Another important gap that is seen in most of the above-mentioned studies is little, if any, attention has been paid to the level of proficiency of the participants. It seems that it was either ignored or could not be controlled. Most of these studies fail to provide adequate information about what they did to control the level of proficiency. They either included different levels of proficiency, or they had learners with upper-intermediate and advanced language proficiency. Furthermore, the long-term effects of task planning seem to have been ignored by these studies. It can be another interesting question to investigate and examine what happens to the effects of a treatment such as task planning (whether individual or collaborative) over a longer period of time.

2. The Study

This study was mainly aimed to examine the long-term effects of task planning (collaborative and individual), the independent variable, on Persian-speaking EFL learner's writing performance, the dependent variable. Based on Brown and Bailey's (1985) scale, the researchers obtained a total score for each participant to examine the effects of the independent variable on EFL writing in general. In order to have a clear picture of the long-term effects, first the effects in posttest and delayed posttest were compared. Then using repeated measures analyses, the effects of time and group were analyzed over three time periods (i.e., pretest, posttest, and delayed posttest). It is believed that results have implications for sociocultural theory of L2development as well as ESL/EFL teachers who are always concerned with developing writing skills.

Therefore, the study was intended to provide answer to the following research questions:

1. Does task planning (individual and collaborative) have long-term effects on Persian-speaking EFL learners' writing performance?

2. What type of task planning has more long-term effects on Persian-speaking EFL learners' writing performance?

2.1Participants

The participants were 90 Persian-speaking EFL learners (out of 137) who were learning English in a language institute in Isfahan. In addition, their age ranged from 18 to 25. We selected the participants based on their availability and placed them in two experimental and one control group after taking the Oxford Placement

Test (OPT; Allen, 2004). Although age and gender were not independent variables in the study, attempts were made to include an equal number of both male and female learners to prevent any possible intervening effects. As it was intended to investigate the impact of the independent variable on upper-intermediate Persian-speaking EFL learners, it was essential to conduct a placement test to make sure that the participants were homogenous in terms of their level of proficiency. Table 1 presents the results of Levene's test of homogeneity of variances:

Table 1 *Test of Homogeneity of Variances for Placement Scores*

Levene Statistic	*df*1	*df*2	*Sig.*
.298	2	38	.85

The results of the Levene's test of homogeneity of variance shows that there were no significant differences among the participants of the three groups ($p = .85$). Therefore, ANOVA can be run to analyze the results of the placement test. Table 2 presents the results of one-way ANOVA for the placement test scores:

Table 2 *One-Way ANOVA for Placement Test Scores*

	df	F	Sig.
Between Groups	2	.189	.754
Within Groups	87		
Total	90		

The results of between-groups analysis showed that there was no statistically significant difference at $p > .05$ level among the three groups, $F_{(87, 2)} = .189$, $p = .754$. In other words, the participants of the collaborative task planning (CTP) group ($M = 119.58$, $SD = 2.85$), the individual task planning (ITP) group ($M = 117.98$, $SD = 2.53$), and the control group ($M = 117.21$, $SD = 3.21$) were completely homogeneous in terms of the level of proficiency.

The first experimental group, CTP, included 17 male and 13 female participants. In the second experimental group, ITP, there were 14 male and 16 female EFL learners. Finally, the control group included 14 male and 16 female participants. It is essential to mention that, due to certain limitations regarding class size, we collected the data over a period of six months. The class size was 17, and the researchers had to collect the data in six different classes. Finally, it is essential to mention that two raters with Ph.D. degrees and more than 8 years of experience teaching and scoring writing performances were invited to participate as the raters. It is necessary to emphasize that they were completely familiar with Brown and Bailey's (1985) rating scale. Furthermore, to make sure that the ratings were reliable, interrater reliability was calculated ($r = .86$).

In CTP, the participants worked on planning the assignment in pairs or groups. In ITP, the participants did the planning individually. Finally, in the control group, the participants were not asked to plan before they write (although they were taught the planning as a part of their instruction, but no emphasis was made).

2.2 Materials and Instruments

Zemach and Rumisek's (2005) book was used as the main textbook. The first seven chapters of the book introduced the structure and types of paragraphs. In addition, different ways of planning and brainstorming, such as making a list, mapping, and free writing were introduced. In addition to the textbook, some extra materials regarding planning and brainstorming were given to all the participants of the three groups. In the second part of the book, chapters 8-12, the structure of the essay and some issues regarding essay writing (e.g., unity, cohesion, coherence, and making an outline) were introduced.

Brown and Bailey's (1985) categorical scoring was used to rate the EFL learners' writing assignments. The authors indicated that they used regression analysis and generalizability theory to ensure the reliability of the instrument. Concerning the validity of the instrument, it is imperative to indicate that the authors emphasized that the main purpose of the scale is to measure EFL/ESL writing performance with regard to a variety of dimensions, including grammar, vocabulary, mechanics, and coherence. Furthermore, Shehadeh (personal communication) pointed out that "Brown and Bailey's scoring scale is a tested, valid and reliable scale used widely in the literature." The scale includes detailed descriptions and scoring procedures to avoid any subjectivity when scoring writing performances. Furthermore, in order to prevent the impression that the outcome of the study was mainly a function of subjective decisions, we made sure that the raters did not know about the groups whose assignments they were checking. They only had a general idea of the study, that is, it was a study to examine effects of task planning on writing performance. This prevented any possibility of favouring one group over another. To do so, the assignments were distributed randomly between the raters. They were asked to study Brown and Bailey's (1985) scale carefully to become familiar with the details of the scale. This was done to make sure that there would be little inconsistency in their judgements (as the result of interrater reliability indicated).

Finally, the OPT was used to make sure that the participants were homogeneous. Allen (2004) indicated that the OPT assesses EFL learners' general proficiency in terms of the receptive and productive skills. He pointed out that the OPT can make researchers and language teachers sure of the true level of the learners. Regarding the reliability and validity of the test, it is essential to mention that the OPT is a valid and reliable measure and is a highly effective instrument in

grouping students into appropriate levels. Nevertheless, it was essential to measure the reliability of the test for the sample, as well. The results indicated that the test was reliable ($r = .792$), and that results of the placement test can be counted on.

2.3 Procedure and Data Collection

After deciding on the experimental and control groups, the following steps were taken. At the beginning of the course, the researchers familiarized the participants with different ways of planning and brainstorming. Then, they were given instruction on the organization of the paragraph (units 1-7) and the structure of the essay (units 8-12) from the textbook along with some extra materials mailed to the learners during the course.

In the CTP group, the participants were required to plan together in pairs or groups of three before they started their assignments. In fact, they were instructed to join together and share their ideas and gather as many ideas as they could about the topic and write them on their own notebook. They were asked to edit the list of ideas to prepare the final outline. At this stage, they were encouraged to share their final outline with their partners and make final changes based on their partners' input. Finally, they were supposed to write the assignment and submit it along with the outline. Two points need to be mentioned here. First, the negotiations between the partners were all in English. Second, the participants were instructed not to necessarily have the same final outline and each could look at the topic or main idea from their own perspective, but they were told to benefit from their partners' ideas and comments.

In the ITP group, the participants were asked to plan individually. They were instructed to prepare an outline, like the members of the CTP group, but they were supposed to do it individually. In fact, they were given the topic/main idea and enough time to brainstorm and plan their assignments. Then, they were encouraged to edit their outline. Some participants were asked to read out their outline and the instructor gave them some comments about grammar, choice of vocabulary, or the appropriateness of the ideas. Like participants of the CTP group, they were supposed to hand in the outline along with their assignment.

Finally, the participants of the control group were, first, instructed about planning and brainstorming, which was a part of their textbook. They were given the same topics and main ideas as the CTP and ITP groups. Nonetheless, they were not required to submit their planning along with their assignment. In fact, the participants of the control group received no emphasis on doing planning and outlining. At the beginning of each session, some assignments were checked and problems were negotiated with other students of the class. This procedure was followed for the experimental groups as well.

2.4 Pretest, Posttest, and Delayed Posttest

In order to scrutinize the long-term effects of the independent variable (i.e., task planning) on the dependent variable (i.e., Persian-speaking EFL learners' writing performance), the participants submitted several writing assignments during the course. Their first assignment was considered as the pretest. In fact, they were asked to write a paragraph of, at least, 80 words about friends. After seven sessions during which the structure of the paragraph was presented, they were asked to write a problem-solution paragraph about "Air pollution in their city," which was considered as the posttest. The posttest had the same requirement as the pretest, which was a paragraph of, at least, 80 words. After the posttest, in order to examine the long-term effects of the treatment on the participants' writing performance, the researchers made no emphasis on planning. In fact, the nine sessions after the posttest were exactly the same for all the three groups, and they continued learning about writing different types of paragraphs. In other words, after the treatment, the participants continued with the remaining chapters of the textbook, with no emphasis on planning. Of course, some of the participants continued planning as they had been instructed during the treatment sessions. Finally, in the last session of the course (session 17), the participants took the delayed posttest, which was a paragraph about their plan for the future. It should be noted that the delayed posttest had the same requirements as the posttest.

2.5 Data Analysis

In order to answer the research questions of the study, the mean scores were analyzed using SPSS 21. Descriptive statistics including frequencies, means, standard deviations, and percentages were obtained. First of all, to make sure that the participants were homogenous, a one-way ANOVA was used. In addition, to see if there was a statistically significant difference between the control and experimental groups in the pre, post, and delayed posttest, the researchers used three one-way ANOVAs for each of the tests, with planning as the independent variable and writing performance as the dependent one. If the difference had been significant, post-hoc comparisons, Bonferroni, would be run to identify the specific areas of difference. This would answer the first research question. However, in order to have a better picture of the effects and consider the effects of time and group, one repeated measures ANOVA was run, with time as the independent variable and participants' writing performance as the dependent variable. This would help to answer the second research question.

3. Results

3.1 Results of the Pretest

In order to examine the impact of task planning on the Persian-speaking EFL learners' writing performance, the participants had to write several writing assignments during the course. The first writing of the participants was considered to be the pretest. As mentioned before, Brown and Bailey's (1985) scale was used to rate participants' assignments and a total score was given to each participant. Table 3 presents the results of ANOVA for the pretest with the group as the independent variable and total scores as the dependent variable:

Table 3 *One-Way ANOVA for Total (Pretest)*

	df	F	Sig.
Between Groups	2	1.543	.220
Within Groups	87		
Total	89		

The results show that there was no statistically significant difference at p >.05 level among the three groups, $F_{(87,2)} =1.543$, $p = .220$. In other words, there was no difference among the participants of the CTP group ($M = 48.43$, $SD = 2.40$), the ITP group ($M = 48.73$, $SD = 2.52$), and the control group ($M = 47.67$, $SD =2.35$) in the total scores of the pretest. Therefore, any possible changes in the participants' performances would be due to the effects of the treatment.

3.2 Results of the Posttest

After the eighth session, the participants handed in their problem-solution assignment, which was the posttest. The same scoring procedure was followed for posttest results, as well. Table 4 presents ANOVA results for Total scores of the posttest:

Table 4 *One-Way ANOVA for Total (Posttest)*

	df	F	Sig.
Between Groups	2	10.690	.000
Within Groups	87		
Total	89		

The results showed that there was a statistically significant difference at p >.05 level among the three groups, $F_{(87, 2)} = 10.690$, $p < .000$. In other words, one or more groups, namely the CTP ($M = 81.83$, $SD = 2.70$), the ITP ($M = 79.43$, $S = 2.97$), and the control groups ($M = 78.73$, $SD =2.48$) had a different performance on the posttest. Although the mean scores showed that CTP participants outperformed others, post-hoc comparisons were run to ensure the results.

The results of the post-hoc comparisons showed that participants of the CTP group outperformed those of the ITP ($p = .003$). In addition, the CTP participants outperformed those in the control group ($p < .001$). Nevertheless, there was no significant differences between the ITP and control participants ($p = .967$).

3.3 Results of the Delayed Posttest

To examine the long-term effects of the independent variable (task planning), it was essential for participants to take a delayed posttest after their eighth assignment. In the last session of the course (session 15), the participants handed in their last homework which was taken as the delayed posttest. Table 5 presents ANOVA results for the total scores in the delayed posttest:

Table 5 *One-Way ANOVA for Total (Delayed Posttest)*

	df	F	Sig.
Between Groups	2	26.046	.000
Within Groups	87		
Total	89		

The results showed that there was a statistically significant difference at $p > .05$ level among the three groups, $F_{(87, 2)} = 26.046$, $p < .000$. In other words, one or more groups, namely the CTP ($M = 80.73$, $SD = 2.36$), the ITP ($M = 80.57$, $SD = 2.53$), and the control groups ($M = 76.73$, $SD = 2.39$) had a different performance on the total scores. Post-hoc comparisons were run to locate the difference and examine which group(s) outperformed the others.

The results of the post-hoc comparisons showed that the participants of the CTP and ITP groups outperformed those of the control group ($p < .001$). In addition, the difference between the CTP and ITP groups was completely insignificant ($p = 1.00$).

The results of the delayed posttest indicated that the participants continued to retain the effects of the treatment over a longer term until the delayed posttest. In fact, the results of the posttest and delayed posttest provided a positive answer to the first research question, which was aimed to examine if task planning had long-term effects on the participants' writing performance. The ANOVA analysis did not show if the participants' performances differed significantly over time. To do so, repeated measures analysis was run.

3.4 Results of Repeated Measures ANOVA

As mentioned before and to answer the second research question, which was intended to examine what type of task planning had a more significant effect on the Persian-speaking EFL learners, the results were subjected to one repeated measures ANOVA to examine the effects of time and group on their performance.

Thus, a mixed between-within subjects ANOVA was conducted to assess the impact of two types of task planning (collaborative and individual) on the participants' total scores across three time periods (pretest, posttest, and delayed posttest). Table 6 presents the results of the multivariate tests for total, indicating a significant interaction between group and time, Wilks Lambda = .70, $F_{(2, 86)} = 6.71$, $p < .000$, partial eta squared = .135. Furthermore, there was a substantial main effect for time, Wilks Lamdba = .01, $F_{(2, 86)} = 5002.89$, $p < .000$, partial eta squared = .991, with both groups showing increased performance in total across the pretest, posttest, and delayed posttest:

Table 6 *Multivariate Tests for Total*

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Time	Pillai's Trace	.99	5002.89	2.00	86.00	.000	.991
	Wilks' Lambda	.01	5002.89	2.00	86.00	.000	.991
	Hotelling's Trace	116.35	5002.89	2.00	86.00	.000	.991
	Roy's Largest Root	116.35	5002.89	2.00	86.00	.000	.991
Time Group	Pillai's Trace	.27	6.76	4.00	174.00	.000	.134
	Wilks' Lambda	.75	6.71	4.00	172.00	.000	.135
	Hotelling's Trace	.31	6.65	4.00	170.00	.000	.135
	Roy's Largest Root	.19	8.45	2.00	87.00	.000	.163

The main effect comparing the two types of task planning (collaborative and individual) was highly significant, $F_{(1, 87)} = 21.49$, $p < .000$, suggesting a significant difference in the effectiveness of the two teaching techniques. Table 7 presents the results of the between-subjects effects for total:

Table 7 *Tests of Between-Subjects Effects for Total (Repeated Measures)*

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Intercept	1293209.61	1	1293209.61	169498.35	.000
Group	327.94	2	163.97	21.49	.000
Error	663.78	87	7.63		

4. Discussion: Research Questions Revisited

As indicated by the data analyses of the pretest, posttest, and delayed posttests, it can be claimed that both collaborative and individual task planning affected the Persian-speaking EFL learners' writing performance. Comparing the

results of one-way ANOVAs for total indicated that the collaborative and individual task planning had significant effects on the Persian-speaking EFL learners' writing performances. Of course, it should be noted that although there were no significant differences between the two experimental groups, the participants of the CTP group had a slightly better performance than those of the ITP group on the posttest. Similarly, the results of statistical analyses for both posttest and delayed posttest showed that although both experimental groups had a better performance than the control group, there were no differences between the performances of the participants of CTP and ITP.

In order to explain the finding, it can be mentioned that one of the reasons why task planning created such effects can be the fact that these participants spent more time recycling the information before they attempted the task. This is even more noticeable with the participants of the collaborative task planning as they had more resources (through oral interaction) to think of ideas and then write. It is very probable that collaboration provided the participants with a deeper understanding of the topic and they had more possibilities and perspectives to consider. This was absent in the control group whose participants did not have to plan although they had been instructed to do so as a part of their instruction.

The results of the study are in line with those of Doboa (2012), Kormos (2011), and Ong (2014) who found positive effects of task planning in their studies. The results are different from Kim (2008) and Nassaji and Tian (2010) who did not find any significant effect for either task planning or collaboration.

In addition, the study was mainly intended to see whether task planning (individual and collaborative) had long-term effects on the Persian-speaking EFL learners' writing performance. The results of repeated measures analyses showed that the participants' performances were significantly affected by time and group. In fact, as time passed, the participants of the experimental groups retained the effects of the treatment and performed better in the delayed posttest. Nevertheless, these results showed that time had no effects on the performances of the participants of the experimental groups. In other words, there was no significant difference between the participants of CTP and ITP groups over time. The results of this part of the study are in line with those of Swain (1998) and Swain and Lapkin (1998) whose participants maintained effects of collaboration over time.

In general, the results can be discussed with respect to the sociocultural theories of L2 development (Lantolf, 2000), inspired by Vygotsky (1978). The sociocultural theory of L2 development indicates that L2 learners' linguistic development is strengthened in interaction with other members of the community (e.g., classroom). It is believed that they provide the learner with appropriate levels of assistance, that is, scaffolding. It is generally believed that this assistance happens

in language classrooms when learners work together as pairs or groups (e.g., Donato, 1994; Kim, 2008; Nassaji & Tian, 2010; Swain, 2010; Swain & Lapkin, 2002). It is believed that the participants of the study benefitted from this assistance in their language classroom.

5. Conclusion

The study was mainly intended to scrutinize the long-term effects of collaborative and individual task planning on the Persian-speaking EFL learners' writing performance. The results indicated that planning was effective and revealed there were improvements over time in writing performance for the experimental groups. This has been supported by Doboa (2012) who showed that collaboration has become an essential part of any classroom using communicative techniques. She maintains that this has been theoretically supported by the sociocultural theory of L2 development, proposing that collaboration in writing classes encourages EFL learners to think about their language use and work together to tackle their language-related problems (Swain, 2010). By pooling their linguistic resources to solve the problems encountered, learners engage in language-mediated cognitive activities that are thought to facilitate the coconstruction of language knowledge and a higher level of performance (Donato, 1994; Ohta, 2001; Swain, 2000; Swain & Lapkin, 1998). Doboa (2012) provided evidence that collaborative dialogue (i.e., the dialogue that occurs between learners as they collaborate to solve linguistic problems) mediates L2 learning (e.g., Kim, 2008; Swain, Brooks, & Tocalli-Beller, 2002; Swain & Lapkin, 2002).

The study has certain theoretical and pedagogical implications. From a theoretical point of view, the study contributes to a better understanding of the sociocultural theories of L2 development. As Shehadeh (2011) pointed out, collaboration is central in most EFL contexts (see Doboa, 2012). This emphasizes instruction in which collaborative pair and group work is central to the language classroom (see Bygate, Skehan, & Swain, 2001; Lantolf, 2000), significantly affected by the social constructivist perspectives of language learning (Vygotsky, 1978). In addition, the social constructivist perspective of learning (Vygotsky, 1978) has strengthened this tendency. The sociocultural theory of human development indicates that the child's cognitive and linguistic development is strengthened in his or her interaction with other members of the society. It is believed that they provide the child with appropriate levels of assistance that is called scaffolding. It is generally believed that this assistance (or scaffolding) happens in language classrooms when learners work together as pairs or groups (e.g., Donato, 1994; Kim, 2008; Nassaji & Tian, 2010; Swain, 2010; Swain & Lapkin, 2002). In particular, these researchers have shown that different types of tasks were successfully accomplished by the learners as a collaborative or joint activity, and that such jointly

performed tasks enabled the learners to solve linguistic problems that lie beyond their individual abilities.

The application of task planning, from a pedagogical point of view, presents helpful insights for EFL teachers and learners. It is believed that the results of this study can contribute to a better understanding of the process of writing, especially writing as a process. In fact, from a pedagogical perspective, the findings of the study provide further empirical evidence for the usefulness of task-panning in EFL writing. More specifically, it can be used as a pedagogical tool to encourage student collaboration and create a positive social atmosphere in the classroom. Another potential pedagogical implication of this study is the relevance of task planning to the learning and teaching of writing in foreign language contexts. This is significant because most research on task planning in L2 has focused on L2. The findings of the present study clearly show that task planning can be an important pedagogical tool in the learning and teaching of EFL writing.

Finally, several lines of research can be suggested. First, L2 researchers are encouraged to use collaborative writing to examine its effects on L2 proficiency (Housen, Kuiken, & Vedder, 2012), especially the effects of task planning on grammatical complexity among Persian-speaking EFL learners can be examined. In addition, the effects of collaboration on different skills and features of language can be studied following the works of Ellis (2009), for example. Another line of research that can be supported by collaborative writing is the effect it can have on EFL learners' consciousness in terms of the different types of both writing and grammar and lexis. Finally, the role the level of proficiency might play in collaborative writing can be examined. In this study, the level of proficiency was controlled by including participants from one level of proficiency. It is believed that adding the level as another independent variable can lead to more illuminating results.

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