One Hand Washes the Other and Both Wash the Face: Individuality versus Collaboration in L2 Writing

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Abstract

The aim of this pre-experimental study is twofold: (1) to investigate the comparative effectiveness of individual, pair, and group writing conditions in L2 writing classes, and (2) to explore students' perceptions about each of these conditions. The participants were university-level Turkish EFL learners studying in the English Preparatory Program of a state university. The data for investigating the effectiveness of these writing conditions came from in-class paragraph writing tasks whereas students' perceptions were investigated through an open-ended questionnaire and semi-structured focus group interviews. The quantitative data were analyzed by running descriptive statistics analysis, Wilcoxon signed-rank test, and the Friedman test, and the qualitative data were content analyzed. As the findings indicated, when the participants wrote in groups they outperformed those who worked individually or in pairs regarding the (a) fluency, (b) accuracy, (c) complexity, (d) length, and (e) overall score of the paragraphs. Besides, perceived advantages and disadvantages of both collaborative writing (i.e., pair and group writing) and individual writing were pointed out by the participants. Based on the findings, some pedagogical implications and suggestions for further research are presented.

Keywords: Collaborative writing; individual; group; pair; EFL; writing

1. Introduction

Writing in a second and/or foreign language (L2) is oftentimes considered a challenging, complex, arduous, and a "laborious" process (Nguyen, 2015, p. 707) since it has conventionally been perceived as an individual (in other words, a solitary) activity. In so doing, improving the L2 "writer" has long focused on the individuality of the "writer" per se, and individual writing activities -rather than collaborative activities- have long dominated L2 writing classrooms. Needless to say, a variety of

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challenges which might then create learning barriers for L2 writers might be confronted in individual writing not only in the pre and post writing but also in the while-writing stages.

With respect to the pre-writing stage, when L2 learners write individually, they might have difficulties while brainstorming and organizing their ideas. Especially in cases where learners do not have background knowledge of a given topic or when they cannot activate their schemata, coming up with ideas and then organizing them might pose a problem. During the construction of the text, they may not write fluently or accurately, or they may not use the time effectively. Considering these challenges of individual writing, collaborative writing (i.e., pair and group writing) might provide several opportunities for students to develop the writing ability to write in L2.

For a long time, many teachers drew upon collaboration -that is, pair and group work- mostly in L2 reading and speaking classrooms. Over the years, however, has there been a greater interest in the use of collaboration in L2 writing classrooms, and L2 classroom writing practices have witnessed a shift from individualized writing to collaborative writing. Collaborative writing refers to "the co-authoring of a single text by two or more writers, where the coauthors are involved in all stages of the composing process and have a shared ownership of the text produced" (Storch, 2013, as cited in Storch, 2018, p. 1), and differs from brainstorming in pairs and/or groups and from peer feedback in terms of the active involvement of the coauthors throughout the entire writing process rather than in the pre or post writing stages (Storch, 2018). Using collaborative writing is considered useful for several reasons; nevertheless, most importantly, it increases learning opportunities (Zhang, 2018).

However, in the L2 writing literature, even though there is an array of research which investigated a number of issues including the effects of brainstorming in pairs or in groups, the effect of peer feedback and many others, empirical data are scant regarding the use of collaborative L2 writing. In this regard, this study aims to shed light on the effects of collaboration (pair and group writing, more specifically) on the several areas of a writing product. For the purposes of the study, paragraphs written by Turkish EFL university students are evaluated in terms of the (a) fluency, (b) accuracy, (c) complexity, (d) length, and (e) overall score of the paragraphs. The study also investigates their perceptions toward collaborative and individual writing in L2 writing classrooms.

2. Review of literature

Writing is a sociocultural process as much as it is a cognitive one, and review of the literature indicates that collaborative writing provides remarkable benefits for L2 writers. The benefits of collaboration in writing classes can be viewed from two key perspectives: from (1) a *theoretical* perspective and (2) a *pedagogical* perspective (McDonough, 2004). From a *theoretical* or a *sociocultural* perspective (Vygotsky, 1978), social interaction and collaboration are of paramount importance for learning. Thus, collaborative writing helps achieve learning in a social context by highlighting

the distance between the actual and the potential development (ZPD, the zone of proximal development) with appropriate assistance provided "…in collaboration with more capable peers" (Vygotsky, 1978, p. 86). From a *pedagogical* perspective, on the other hand, pair or group writing facilitates the development of learner autonomy and self-directed learning in addition to creating a learning atmosphere in which learners can feel more confident and less anxious while interacting with their peers (McDonough, 2004).

Given these two frames of mind, collaboration brings several advantages. For example, learners who are engaged with collaborative activities exercise autonomy by having some degree of control over their own learning (Benson, 2011); learn from each other as a result of the interaction with their peers; and learn in a more stress-free atmosphere. The other benefits of collaboration (of pair or group work) in language classrooms could be juxtaposed as "...enhancing student interaction, lowering the anxiety associated with completing tasks alone, raising students' self-confidence, and increasing motivation, risk-taking, and tolerance among learners" (Mulligan & Garofalo, 2011, p. 5).

Based upon the effects of collaboration, the following sections present the review of literature under three main sub-headings: (1) individual versus pair writing, (2) pair versus group writing, and (3) individual versus pair versus group writing.

2.1. Collaborative versus individual writing

Building on different perspectives, an array of research studies investigated the effects of collaborative and individual writing activities as well as students' perceptions toward them. Among these studies, some of them investigated the effects of individual and pair writing activities in L2 classrooms. In a prominent study, Storch (2005) investigated the effects of individual and pair writing comparing the texts written in these two different writing conditions in addition to student reflections on collaborative writing. The comparison of the products showed that pairs produced shorter texts which were better in terms of grammatical accuracy, complexity and task fulfillment. In addition, students' reflections on collaborative writing were mostly positive even though some of them expressed reservations. Likewise, Wigglesworth and Storch (2009) examined the effects of pair writing and individual writing in two different groups in a larger scale study ($N = 96$). To this end, the students were asked to write an essay either in pairs or individually, and their performances were compared in terms of fluency, complexity, and accuracy. As illustrated by the findings, pair writing activities enabled students to compose more accurate texts when compared to individual writing; nevertheless, collaboration had no effect in terms of fluency and complexity. In a similar study by Shehadeh (2011), the effects of pair and individual writing were examined in terms of content, organization, grammar, vocabulary, and mechanics as well as students' perceptions towards these writing conditions. The findings indicated that collaboration significantly helped students improve their overall writing skills in L2 even though it

had various effects on various writing skills, meaning that it contributed to the areas of content, organization, and vocabulary whereas it had no effect on mechanics and grammar. With regard to their perceptions, the findings showed that the majority of the students supported the use of collaborative writing stating that collaboration contributed to promoting self-confidence, improving writing skills, generating ideas and pooling the ideas together, discussing, planning, and generating the text collaboratively, and providing immediate feedback.

2.2. Pair versus group writing

Other studies, on the other hand, focused on the effects of pair writing and small group writing and learners' perceptions. For instance, McDonough (2004) studied the learner-learner interaction during pair and small group activities. The study investigated whether actively participating in these activities contributed to the production of the target forms or not in addition to exploring both instructors' and learners' perceptions. As indicated by the findings, actively participating in these pair and small group activities facilitated the production of the target forms. However, the students pointed out mostly negative opinions as to the usefulness of these activities in terms of learning grammar. They, nevertheless, expressed that peer interaction was beneficial for practicing oral communication skills. Likewise, Fernández Dobao and Blum (2013) explored learners' attitudes and perceptions towards pair writing and group writing. The students either worked in pairs or in groups of four. Students' attitude towards collaborative writing was overall positive and they stated that collaboration was helpful for L2 learning. Out of fifty-five students, only one expressed that he did not find working in pairs helpful whereas working in groups was helpful for him. With reference to their perceptions, a high number of students believed that collaboration had a positive effect on the vocabulary and the grammar of their writing. In addition, the majority of the students enjoyed collaboration whereas only four of them stated that they would prefer working individually.

2.3. Individual versus pair versus group writing

In another line of research, Fernández Dobao (2012) examined the benefits of collaborative writing comparing group, pair and individual work in terms of fluency, complexity, and accuracy of the written products. The findings demonstrated a positive impact for collaboration on linguistic accuracy. In terms of length, however, those working individually produced longer texts than those working in pairs or in groups. However, no remarkable differences were found with regard to syntactic and lexical complexity.

2.4. Statement of the problem and research questions

Succinctly, the empirical data from the literature illustrate that the use of collaboration in L2 writing classrooms yields mostly positive results. Given the studies presented above, it can be put forth that scant knowledge is available

regarding the potential effects of collaborative writing in the L2 learning domain. Furthermore, the effectiveness of individual writing versus pair writing (e.g., Storch, 2005; Wigglesworth & Storch, 2009), or pair writing versus group writing (e.g., Fernández Dobao, 2012) has much been investigated, yet to the best of the researchers' knowledge, there is solely one study comparing the effectiveness of individual, pair, and group writing conditions on L2 writing (only Fernández Dobao, 2012), and it was conducted with American university level students learning Spanish as a foreign language (SFL). So, it means that no studies have attempted such a comparison in the EFL domain. With respect to this, this study is considered to make a contribution to the EFL literature. Finally, despite the abundant research published on writing in a foreign language, there is still a dearth of empirical studies which should document the effects of individual, pair, and group writing on EFL learners' L2 writing accuracy, fluency, length, complexity, and their overall score- especially in the Turkish EFL context.

Bearing these in mind, this study aimed to address this lacuna by (a) bringing the (in)effectiveness of three writing conditions - namely individual, pair, and group writing - into light by focusing on the accuracy, fluency, length, complexity, and overall score of the paragraph writing tasks, and (b) elucidating the perceptions of EFL learners regarding these three writing conditions. Specifically speaking, this study sought to address the following research questions:

R.Q.1. Is there any significant difference among the participants' individual, pair, and group writing conditions regarding the

> (1a) fluency,
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> (1b) accuracy,
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> (1c) complexity,
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> (1d) length, and
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> (1e) overall score of the paragraphs?

R.Q.2. What are the perceptions of the participants towards individual, pair, and group writing activities in L2 writing classrooms before and after the treatment?

3. Method

This study employed an embedded mixed methods design (Creswell, 2014) in which the effects of individual, pair, and group writing on the accuracy, fluency, length, complexity, and overall score of the paragraph writing tasks were investigated, which was followed by the qualitative exploration of students' perceptions towards these three writing conditions.

The study is also a pre-experimental study adopting a posttest-only design (Creswell, 2014). More information has been presented below with respect to the participants and setting, data collection instruments and procedure as well as data analysis.

3.1. Participants and the setting

The participants were 47 Turkish EFL learners (30 female, 17 male) who were enrolled in the English Preparatory Program at a state university in Turkey. They were majoring in ELT and were sampled using convenience sampling. The participants were intermediate level freshmen students at the time of data collection and their ages ranged between 17 and 30 ($M = 18.89$). Originally, there had been more participants enrolled in the course; nevertheless, the international students who had different L1s were excluded from the study for the purposes of the research.

This study was conducted in the English Preparatory School program of a state university in Turkey. In the English Preparatory Program from which the participants were sampled, the students received intensive English instruction adopting a skill-based approach. The class hours for each skill -reading, writing, listening, and speaking- comprised six hours per week; i.e., a total of 24 hours per week. The Writing Skills course was taught by one of the researchers, and the two following course books were used for writing instruction throughout the semester: Great Writing 2 & 3 (Folse, Muchmore-Vokoun, & Solomon, 2010) and Writing to Communicate 2 (Boardman & Frydenberg, 2010).

3.2. Data collection instruments

The data in the present study were triangulated by three data collection instruments: an open-ended questionnaire exploring the participants' preferences for individual or collaborative writing activities, in-class writing tasks (i.e., paragraph writing tasks), and semi-structured focus group interviews.

The demographic information of the participants was collected through a background questionnaire. Following that, an open-ended questionnaire which was developed by the researchers was distributed to them. It included two main questions about the participants' preferences for working individually, in pairs, or in groups in foreign language classes and in foreign language writing classes successively. The questions were followed by a prompt asking further explanations or clarifications for the preferences they stated.

In-class writing tasks consisted of three different paragraphs written by the participants individually, in pairs, and in groups. In fact, starting from the first week of the 14-week semester, the participants were assigned paragraph writing tasks and wrote them in the classroom environment as a course requirement throughout this time period; i.e., they wrote 14 paragraphs throughout the semester. However, the data for this study were collected only from the last three paragraphs which were written individually, in pairs, and in groups consecutively (for the details, please see the Procedure section). For both pair and group writing activities, the participants were matched randomly. For each paragraph writing condition, the participants were given a prompt (see Appendix A for the paragraph writing prompts) and they were

required to narrow down the topic discussing with their friends (especially for collaborative writing activities).

In addition, semi-structured focus group interviews (see Appendix B) were further conducted in order to obtain in-depth information about learners' perceptions towards both individual and collaborative writing in L2 writing classrooms.

3.3. Procedure

This study was conducted over a 14-week semester in the Writing Skills course in the English Preparatory School program. At the beginning of the semester, the instructor had an orientation session with the students by informing them about the course content and materials, and took their consents for the study during the first week. For conducting pair and collaborative writing tasks in the classroom, necessary instructions regarding collaborative writing tasks were also provided by the instructor, and she answered the students' questions regarding these conditions. Prior to the study, the participants were then given an open-ended pre-questionnaire in order to explore their perceptions about writing individually, as a pair, and as a group. The participants were told that they were free to express themselves in any language that they felt comfortable with, and all of them responded to the questions in Turkish.

Afterward, the instructor started the course which she taught over a 14-week semester. In accordance with the course syllabus prepared by the instructor, the participants had a paragraph writing task each week. The in-class writing tasks were written in three different conditions -namely individually, in pairs, and in groups- continuously throughout the semester. The participants wrote paragraphs during an academic term -for 14 weeks- and they continuously worked in three different conditions. The instructor also made sure that each group member actively took part in the writing process when they worked in pairs and in groups, by actively monitoring and guiding them. All the students enrolled for the course ($N = 47$) were required to carry out the activities provided by their instructor during the regular classroom hours, and all the writing tasks were a part of their course requirements; however, only the data obtained from the participants who had provided their consents were used for this study. Data collection for this study started during the 12th week of the semester so that the participants were familiar with each other (for collaborative writing) and got used to working as pairs or groups. Throughout all the sessions -i.e. individual, pair and group work- in the semester, the same routine in a cyclical way was followed and guided by the instructor: Time allotted for brainstorming of the ideas and outlining was 10 minutes, and approximately 40 minutes were allocated for composing the paragraph in the classroom environment.

After gaining experience with these three different writing conditions for a period of 11 weeks, the participants were asked to write a paragraph individually, in pairs and in groups respectively for assessment purposes for the last three consecutive weeks throughout the end of the semester (Week 12: individual; Week 13: pair; Week

14: group). They were asked to write a descriptive paragraph in each condition, and these three paragraphs written by the participants were evaluated analytically by two trained researchers in terms their accuracy, fluency, length, complexity, and their overall score. At the end of the semester, the participants were given a post-questionnaire, and focus-group interviews with randomly chosen participants ($n = 39$) were implemented by two trained researchers. In addition, the interviews were administered in their mother tongue -Turkish- in an informal and a candid atmosphere so that the participants could express themselves freely.

3.4. Data analysis

The quantitative data which came from paragraphs written individually, in pairs, and in groups were analyzed through Statistical Package for the Social Sciences Software (SPSS). More specifically, descriptive statistics analysis and a non-parametric Friedman test followed by a post hoc analysis with Wilcoxon signed-rank tests were used. On the other hand, the qualitative data obtained through focus-group interviews were analyzed using pattern-coding (Dörnyei, 2007). The focus-group interview recordings were transcribed by two trained raters and then coded by using the contextual themes, which were then sorted under certain headings.

The paragraphs written by the participants were analyzed in terms of their fluency, accuracy, complexity, length and overall score. First of all, the sentences and T-units were identified by the researchers, by administering a T-unit analysis (Hunt, 1965). A T-unit refers to "an independent clause and all its attached or embedded dependent clauses" (Storch, 2005, p. 171), and is used for measuring the syntactic complexity. The *fluency* of the paragraphs was analyzed by the total number of words divided by the total number of sentences in the paragraphs (number of words/number of sentences); that is, the number of words per sentence was measured (as in Fernández Dobao, 2012). The *accuracy* -linguistic accuracy- was analyzed by counting the number of mistakes in each paragraph. The *complexity* of the paragraphs, as stated above, was analyzed by dividing the total word count by the number of T-units; that is, T-units per paragraph were found. The *length* was calculated by the total word count in the paragraphs. Lastly, the *overall score* was calculated by using a 20-point customized analytic rubric with four categories (grammar, vocabulary, organization, content), developed by the researchers (see Appendix C), in Hamp Lyons's (2016) words by multiple-trait scoring (Hamp-Lyons, 1986, 1991 as cited in Hamp-Lyons, 2016, p. A1). There were four sections in the rubric as grammar, vocabulary, organization, and content- all of which were scored out of five points. That is, all the paragraphs were scored out of 20 points in total.

In order to investigate the differences across the performances that the participants demonstrated while writing individually, in pairs, and in groups, the Friedman test - the non-parametric equivalent of one-way ANOVA- was used due to the non-normal distribution of the data. If a statistically significant difference was

found as a result of the Friedman test, to further investigate which writing conditions differed from each other, a Wilcoxon-signed rank test was conducted.

For the purpose of inter-rater reliability and in order to determine if there was agreement between the two raters' judgments regarding the paragraphs written by the participants, all the paragraphs were first blind-scored by the raters, and afterward these two raters came together in a meeting in which they discussed if there was agreement between the two raters' judgments regarding the paragraphs written by the participants. All the analyses were made by using blind review; that is, there were no names on the paragraphs while the researchers were scoring the paragraphs.

4. Results

4.1. Results of the open-ended questionnaire

The first item in the open-ended questionnaire aimed to reveal the participants' preferred working style in foreign language classes. As demonstrated by the pre-questionnaire results, prior to the study, the majority of the participants preferred group ($n = 12$) and pair ($n = 10$) work whereas a considerable number of participants preferred to work individually ($n = 8$). The post-questionnaire results, on the other hand, differed from the pre-questionnaire results. At the end of the study, the majority of the participants preferred individual work ($n = 13$) whereas the others preferred pair ($n = 11$) and group ($n = 10$) work.

The second item aimed to find out participants' preferred working style, with a specific focus on their preferences in foreign language writing classes. The pre-questionnaire results illustrated that more than half of the participants ($n = 20$) preferred to work individually, and the others stated that they preferred group ($n = 8$) and pair ($n = 4$) work. At the end of the study, the preferences of the participants did not change much, and the results of the post-test showed that the majority of the participants ($n = 21$) stated that they preferred working individually. The other participants stated that they preferred to work in pairs ($n = 7$) and in groups ($n = 5$).

4.2. Results of the paragraph writing tasks

The participants wrote a total of three paragraphs: individually, in pairs, and in groups for a consecutive three-week timespan. Of all the participants, only the paragraphs of the participants who wrote all three paragraphs were included ($n = 23$) for this analysis. The paragraphs were analyzed in terms of their fluency, accuracy, complexity, length and overall score. Table 1 illustrates the descriptives of these components:

Table 1. Descriptive statistics of the analysis of the paragraphs

Variables	Descriptive Statistics					
	Individual		Pair		Group	
	M	*SD*	*M*	*SD*	*M*	*SD*
Fluency	14.05	*(4.09)*	13.95	*(2.90)*	15.54	*(2.66)*
Accuracy*	10.57	*(5.61)*	5.13	*(2.73)*	3.48	*(1.92)*
Complexity*	23.78	*(8.28)*	34.12	*(11.95)*	34.91	*(20.96)*
Length	141.26	*(33.38)*	147.35	*(37.69)*	151.87	*(28.61)*
Overall score*	12.34	*(2.06)*	15.19	*(1.45)*	16.60	*(1.33)*

Note. Fluency = the number of words per sentence, Accuracy = the number of mistakes, Complexity = T-units per paragraph, Length = the total word count, M = mean, SD = standard deviation.

*significant difference at the p < 0.05 level

4.2.1. Fluency

As demonstrated by the results of the descriptive statistics analyses, the fluency mean scores were the highest when the participants wrote in groups (M = 15.54, SD = 2.66). The paragraphs written individually and in pairs, on the other hand, had a mean score of 14.05 (SD = 4.09) and 13.95 (SD = 2.90) respectively. In order to investigate whether these differences were statistically significant, a nonparametric Friedman test was conducted, yet the analysis revealed there was not a statistically significant difference among three writing conditions, $\chi^2(2)$ = 5.429, p = 0.066.

4.2.2. Accuracy

In order to explore the accuracy of the paragraphs, descriptive statistics analyses were initially performed. First of all, the total number of mistakes in each paragraph was calculated by both researchers and cross-checked for any disagreements that might have occurred. As demonstrated by the results, the participants had the highest number of mistakes; that is, their accuracy was the lowest when they wrote individually (M = 10.57, SD = 5.61). They had comparatively fewer mistakes when they wrote in pairs (M = 5.13, SD = 2.73), and relatively fewer when they wrote in groups (M = 3.48, SD = 1.92). As revealed by the results of the Friedman test, there was a statistically significant difference in the number of mistakes depending on the writing condition, $\chi^2(2)$ = 22.652, p = 0.000. To further investigate the differences among the conditions, a post hoc analysis with Wilcoxon signed-rank test was conducted, and all the differences were significant between individual and pair writing (Z = -3.220, p = 0.001), between individual and group writing (Z = -3.974, p = 0.000), and between pair and group writing (Z = -2.021, p = 0.043) conditions.

Furthermore, the accuracy of the paragraphs was also analyzed by calculating the rate of mistakes in terms of word count. In other words, the total word count was divided by the number of mistakes for each paragraph. The rate of accuracy was the highest in group writing condition (M = 66.34, SD = 49.44) when compared to pair (M = 38.18, SD = 27.05) and individual (M = 18.54, SD = 14.03) writing conditions. The results of the Friedman test also demonstrated that there was a statistically

significant difference regarding the rate of accuracy among three writing conditions, $\chi^2(2) = 24.609$, $p = 0.000$. The results of the post hoc analysis with Wilcoxon signed-rank test indicated a statistically significant difference between individual and pair writing ($Z = -3.102$, $p = 0.002$), and between individual and group writing ($Z = -3.924$, $p = 0.000$) conditions. However, the difference between pair and group writing ($Z = -1.916$, $p = 0.055$) conditions was not statistically significant.

4.2.3. Complexity

The syntactic complexity of the paragraphs was analyzed by dividing the total number of words included in the paragraph by the number of T-units. The results of the descriptive statistics analyses illustrated that participants produced syntactically more complex paragraphs when they wrote in groups ($M = 34.91$, $SD = 20.96$) and in pairs ($M = 34.12$, $SD = 11.95$). The least complex paragraphs, on the other hand, were written when the participants wrote individually ($M = 23.78$, $SD = 8.28$). As the Friedman test results indicated, the difference among individual, pair, and group writing conditions was also statistically significant $\chi^2(2) = 11.626$, $p = 0.003$. A post-hoc analysis with Wilcoxon signed-rank test indicated whereas there was a statistically significant difference between individual and pair writing ($Z = -3.133$, $p = 0.002$), and between individual and group writing ($Z = -1.947$, $p = 0.050$), it did not demonstrate a statistically significant difference between pair and individual writing conditions ($Z = -.578$, $p = 0.563$).

4.2.4. Length

The results of the descriptive statistics demonstrated that participants wrote a mean of 151.87 words ($SD = 28.61$) in groups whereas they wrote a mean of 147.35 ($SD = 37.69$) and 141.26 ($SD = 33.38$) words in pairs and individually respectively. That is, the longest paragraphs were written in a group, which was followed by the pair and individual writing conditions. To further investigate whether the differences in the mean scores were statistically significant, a Friedman test was conducted, and the results did not indicate a statistically significant difference among different writing conditions, $\chi^2(2) = 2.222$, $p = 0.329$.

4.2.5. Overall scores

The overall scores of the paragraphs were calculated by using an analytic rubric while analyzing the paragraphs. The descriptive statistics results showed that the paragraphs written in groups had the highest mean score ($M = 16.60$, $SD = 1.33$), which was followed by the pair ($M = 15.19$, $SD = 1.45$) and individual ($M = 12.34$, $SD = 2.06$) writing conditions. The results of the Friedman test showed that there was a statistically significant difference among three writing conditions in terms of the overall score, $\chi^2(2) = 36.662$, $p = 0.000$. The results of the post hoc test with Wilcoxon signed-rank test also showed that there was a statistically significant difference between individual and pair writing ($Z = -4.212$, $p = 0.000$), between individual and group writing ($Z = -4.111$, $p = 0.000$), and between pair and group writing ($Z = -3.189$, $p = 0.001$) conditions.

4.3. Results of the interviews

Semi-structured focus group interviews administered at the end of the treatment were initially transcribed and then analyzed by content analysis. First of all, the participants were asked in which writing condition they felt more comfortable. One of the participants stated that he/she preferred individual writing because he/she considers writing from an individual perspective:

> *I think that writing is something idiosyncratic. Each individual has a different writing style.* (Interview, Extract 1)

Besides the idiosyncratic nature of writing, other reasons in favor of individual writing included the preference for independent writing. One of the participants stated the following:

> *I do not like the effect of someone else while writing something.* (Interview, Extract 2)

Another participant similarly stated that "*I would like to tell my ideas with my own words and sentences*" (Interview, Extract 3), similar to the participant who stated that he/she can save time when he/she writes individually:

> *Individual writing is more practical while putting the ideas on paper, but in terms of finding the ideas, I enjoyed pair work.* (Interview, Extract 4)

When further asked the advantages and disadvantages of writing individually, the participants stated advantages such as self-improvement and monitoring their self-improvement. Moreover, they think when L2 learners write individually, they can manage their time more effectively. Since they write faster, they think it is time-saving when compared to writing collaboratively. They also stated that they can write effectively and independently, and organizing the writing process is easier this way, as one of the participants maintained: "*Individual writing is more practical while putting the ideas on paper*" (Interview, Extract 4).

The perceived disadvantages of individual writing, on the other hand, are that the participants feel they are more prone to making mistakes while writing. Besides, they stated that they have neither counter ideas, nor a control mechanism when they write individually, adding that they have difficulties while brainstorming. Moreover, they put forward that they might experience some difficulties while writing about topics they are not familiar with, which presents another disadvantage for them to write individually in L2 writing classes.

The participants who stated that they felt more comfortable while writing in pairs pointed out a number of advantages. One of the participants, to exemplify, stated that exchanging information is one advantage of pair writing:

> *When you don't have an idea about what you are going to write, you can exchange information. You can endorse your ideas in a more comfortable and detailed way.* (Interview, Extract 5)

Some others who feel more comfortable with pair writing stated that they could correct each other's mistakes while writing in pairs. Another participant stated that working with a pair helps her/him improve her/his writing:

Sometimes, it might be difficult to get feedback from our instructors. When I worked with my pair, I could improve myself. However, choosing your partner is of crucial importance. (Interview, Extract 6)

When the participants were further asked about the advantages and disadvantages of writing in pairs, the number of advantages stated by the participants outweighed the disadvantages. They stated that writing in pairs helps them to exchange information, make fewer mistakes, brainstorm, and learn from their pairs. Especially in the process of brainstorming and the development of ideas, they think pair writing is advantageous since they think they can become more creative and thereby think and write more creatively. As one noted, "*When you don't have an idea about what you are going to write, you can exchange information. You can endorse your ideas in a more comfortable and detailed way.*" (Interview, Extract 5). Moreover, some participants stated that they alleviate any time pressure when they write in pairs. Most importantly, they stated that they could find each other's mistakes when they write in pairs since they have a chance to correct each other's mistakes. For example, one of them noted the following: "*Sometimes, it might be difficult to get feedback from our instructors. When I worked with my pair, I could improve myself.*" (Interview, Extract 6). On the other hand, regarding the perceived disadvantages of pair writing, the possibility of a clash of ideas, conflicts, and discrepancies, and ineffective time management were among the points raised by the participants in the interview sessions. A participant, for example, stated that pair writing can be "time-consuming" due to the fact that they spend more time in brainstorming sessions.

Apart from those who preferred individual or pair writing, there were also some participants who stated that they feel much more comfortable when they write their paragraphs as a group. Regarding the advantages of writing as a group, the participants stated that they could write more creatively and harmonize different ideas. "*Everyone comes up with a different idea, and these ideas are synthesized*" (Interview, Extract 7) said a participant during the interview. Similarly, another participant stated that while writing in groups, "*One can create a much more pleasant paragraph by blending everyone's ideas.*" (Interview, Extract 8).

The majority of the participants also stated that when they write in groups, they make fewer mistakes, write in a shorter time, and they use a wider range of vocabulary. Besides, they stated that they can learn vocabulary from each other. However, as one of the participants noted, learners can benefit from group writing only if the labor is divided effectively among the group members. In terms of the disadvantages of group writing, among the commonly stated disadvantages were potential conflicts among group members and the unequal distribution of roles within the group. As one of them noted, they might feel dissatisfied due to playing an inactive role within a group. Moreover, they stated that having many different ideas

within the group could be one of the disadvantages of writing as a group. For example, one of the participants stated that "*As the number of group members increases, so does the number of problems*" (Interview, Extract 9). Some other participants also stated that it can be time-consuming because of ineffective time management.

All in all, the results of the current study have provided evidence on the effectiveness of the aforementioned writing conditions - individual, pair, and group - as well as revealing learners' perceptions in terms of their preferences for writing in a foreign language.

5. Discussion

In this section, the results of this study are discussed in accordance with the research questions respectively. The first research question addressed whether there would be any significant difference among the participants' individual, pair, and group writing conditions regarding (1a) fluency, (1b) accuracy, (1c) complexity, (1d) length and (1e) overall score of the paragraphs. Regarding *fluency*, when the participants wrote in groups, they produced more fluent texts when compared to pair or individual writing. This finding contradicts earlier studies (Storch & Wigglesworth, 2007; Wigglesworth & Storch, 2009), where they stated that collaboration did not affect writing fluency. However, this finding can be explained with the benefits that the participants indicated such as thinking and brainstorming collaboratively, exchanging ideas, helping each other with the units of language such as grammar, vocabulary, et cetera. Due to these benefits, the participants might have written more fluently when they collaborated in groups. With respect to *accuracy*, we found that the rate of accuracy was the highest when participants wrote collaboratively in groups. Our results are also in line with their previous research (Fernández Dobao, 2012; Fernández Dobao & Blum, 2013; Storch, 1999, 2005; Wigglesworth & Storch, 2009) in which they similarly found that collaborative writing helped learners demonstrate better performance in terms of accuracy on the contrary to individual writing. Likewise, the qualitative data are in line with this finding since the majority of the participants uttered that they can control each other's writing, and they learn from each other. Therefore, it is potential that they benefited from each other and wrote more accurate paragraphs. On the other hand, regarding *complexity*, unlike the results of Fernández Dobao's (2012) study where she could not find any clear differences, the findings of our study demonstrated a statistically significant difference among individual, pair, and group writing conditions in terms of complexity. In her study, despite some improvements in accuracy and fluency, no difference was reported for syntactic complexity. However, our participants produced more complex paragraphs when they wrote collaboratively in groups. According to Storch (2005), better accuracy and complexity might be explained by the nature of collaboration since the participants had several chances to give and receive immediate feedback on language while working in groups. Moreover, it must be noted that "pooled knowledge acts as an enabler in collaborative writing activities, allowing learners to produce more accurate texts as a result of shared knowledge"

(Wigglesworth & Storch, 2012, p. 366). In terms of the *length* of the paragraphs, the participants similarly produced longer paragraphs when they wrote in groups. This finding contradicts the earlier findings (Fernández Dobao, 2012; Storch, 2005) who posited that the learners who wrote individually produced longer texts. However, as Storch (2005) put forward, "pairs produced shorter texts, but texts had greater grammatical accuracy and linguistic complexity, and were more succinct" (p. 168). Indeed, what we expect from L2 writers is not the quantity, but rather the quality of the texts. Therefore, considering that we expect more "succinct" (Storch, 2005, p. 168) texts from our students, long or short pieces of writing is not the focal concern of the activities employed for the present study. Regarding *overall score*, the participants similarly received highest overall scores on their paragraphs when they wrote in groups when compared to the scores they received in the pair and individual writing activities, showing an advantage for collaboration.

The second research question concerned the attitudes of the participants towards individual, pair, and group writing activities, and whether they had attitudinal changes before and after the treatment. It also aimed to reveal whether there would be any significant difference among the preferences of participants regarding individual, pair, and group writing at the end of the semester. The results illustrated that at the end of the semester, the majority of the participants were supportive of individual writing rather than pair or group writing, yet there is not a statistically significant difference in their preferences after the treatment. The results also demonstrated that collaborative writing helped participants generate and share different ideas, learn from each other, and provide feedback to each other. These results corroborate with the findings of earlier studies in the literature. For example, Storch (2005) also found that collaboration helped students to interact on different aspects of writing and to generate and discover ideas as well as to give and receive immediate feedback on language. Wigglesworth and Storch (2009) also demonstrate that collaborative writing encourages learners to generate ideas and exchange these ideas. According to Shehadeh (2011), collaborative writing helps learners "to generate ideas, pool ideas together, discuss and plan, generate their text collaboratively, provide each other with immediate feedback, and put their text in better shape" (p. 296). As also stated by Fernández Dobao and Blum (2013), collaborative writing helps learners share and exchange their ideas and knowledge which leads to "higher creativity and a more accurate use of the language" (p. 375). With respect to their attitudes toward collaborative writing, participants held positive views toward it, yet they valued pair writing rather than group writing due to the disadvantages enunciated by them. On the other hand, regarding individual- or solitary- writing, some participants found it advantageous in terms of time management, writing effectively, independently and faster, and for monitoring their self-improvement. However, as also demonstrated by the analysis of the paragraphs, individual writing is the least effective writing condition since when participants wrote collaboratively- either in groups or in pairs-, they outperformed the performance they individually demonstrated.

All in all, it should be noted that collaborative writing was a new experience for the participants; that is, all the participants were accustomed to individual writing. Moreover, they only produced one type of writing (i.e., descriptive) and these results might, to some extent, have been obtained because of this specific type of writing practiced by the participants. Therefore, the results of this study should carefully be interpreted and considered more suggestive than conclusive. Even though the participants stated the advantages and disadvantages of each writing condition, the results overall demonstrated that collaborative writing is a more effective means for L2 writing.

6. Conclusions and implications

Raising an important question, "Why write...together?" asked Ede and Lunsford (1990, p. ix) nearly three decades ago, and we believe we could answer their question to some extent. With this question in mind, this study basically aimed to compare the effectiveness of individual and collaborative writing in an L2 writing classroom at the tertiary level. The findings indicated that group writing was the most effective condition on all measures -fluency, accuracy, complexity, length, and overall score- which was then followed by the pair and individual writing conditions. Also, the participants overall held positive views toward collaborative writing, yet enunciated some of its disadvantages in the L2 writing classroom- which can be handled in classroom contexts. These so-called disadvantages or concerns can be eliminated through carefully structuring collaborative tasks, and this can be done by ensuring that the elements of group work are integrated into these tasks. Collaboration and cooperation should be promoted since ineffective group work might "...hinder student learning and create disharmony and dissatisfaction" (Johnson & Johnson, 1999, p. 68). Simply asking the students to work in group does not mean that they are going to do so; thus, the five basic elements of cooperation (Johnson & Johnson, 1999, pp. 70-71) should be included in collaborative tasks: 1. *positive interdependence*, 2. *individual accountability*, 3. *face-to-face promotive interaction*, 4. *social skills*, and 5. *group processing*. First of all, rather than negative interdependence where individual students work against each other and a competitive and individualistic environment is created, positive interdependence promotes a shared responsibility because each group member knows that they cannot succeed unless the other members do. Secondly, group members should be accountable both for their own achievement as well as the group's achievements. Teachers can evaluate the performance of each member, and give it back to the individual and to the group. By doing so, each member can see how much s/he contributes to the success of the group, and feels accountable. Thirdly, group members promote each other's success by "...helping, assisting, supporting, encouraging, and praising each other's efforts to achieve" (p. 71). Fourthly, group members should be taught and maintain the social skills they need while working in groups such as leadership, decision-making skills, et cetera. And lastly, group members should discuss their performance within their groups; i.e., how well or how bad they are doing, what they should do in order to achieve their

mutual goals, et cetera. By making sure these elements are integrated, the aforementioned disadvantages concerning the possibility of a clash of ideas, conflicts, and discrepancies among group members, and the unequal distribution of roles within the groups can be eliminated. And, when these disadvantages could be transformed into advantages by L2 writing teachers, the effectiveness of using collaborative writing activities in L2 writing classrooms would be maximized.

From these results which have also been discussed in depth above, it can be concluded that the social constructivist view of learning should have a bigger place in L2 writing classes. On the contrary to individual writing, collaborative writing increases meaningful communication, helps L2 writers engage in cognitive processes, contributes to learner collaboration, and creates a positive classroom atmosphere. Collaborative writing, thus, can be a powerful pedagogical tool. In fact, good things happen when L2 learners write collaboratively.

Based on these results, several pedagogical implications can be suggested as follow: *First of all*, teachers in L2 writing classrooms can take advantage of collaborative writing -especially group writing activities- in order to create a positive learning atmosphere in which students feel more relaxed and confident. *Secondly*, in order to improve the accuracy, fluency, complexity, length, or overall quality of the writing products, L2 writing teachers can also design and implement different collaborative activities. *Another implication* of this study might be that using collaborative writing activities could also improve learners' oral interaction and thus could be conducive to both positive feedback and modified input within a Vygotskian framework, which highlighted the role of social constructivism in the learning process. *Finally*, both teachers and students can design collaborative activities by selecting the topics or deciding on the outline together, thereby increasing the teacher-student interaction. All these activities could also develop learner autonomy, which might help them develop the ability to control their own learning process (Benson, 2011).

To sum up, it can be stated that on the contrary to the general assumption held by many people that writing is an "...intrinsically individual, antisocial" activity (Bruffee, 1983, p. 160, as cited in Hirvela, 1999, p. 8), writing "…does not need to be a solitary act" (Shehadeh, 2011, p. 297) because as one proverb suggests, *one hand washes the other and both wash the face*; that is, collaboration leads to accomplishment.

7. Limitations and further research

Given the nature of this study, the findings of this study should carefully be interpreted with its limitations. First of all, the study was a short-term study. Even though the participants practiced writing paragraphs individually, in pairs, and in groups for 11 weeks in a cyclical fashion until the data collection procedure for this study started, the comparison of the paragraphs was made out of three paragraphs- with one paragraph for each condition. Further studies which are long-term in their nature, therefore, might provide the results of longer-term effects. Moreover, delayed post-writing-tests can be administered to investigate whether the effectiveness of

these activities are retained or not. Thirdly, the number of participants employed in this study presents another limitation for this study. We, therefore, believe large-scale studies might be more explanatory if future researchers want to compare the effectiveness of individual, pair, and group writing. Another limitation concerns the proficiency level of the participants since only intermediate level learners participated in this study. While investigating the difference between collaborative and individual writing, future researchers should also take the proficiency level of the participants into consideration. We think that future research can be conducted with participants at different proficiency levels or mixed-ability (heterogeneous) students, and can compare the effectiveness of collaborative and individual writing across different proficiency levels (e.g., beginner or lower intermediate learners), if possible. Finally, employing only one type of writing (i.e., descriptive writing) presents another limitation for this study. Further research might, therefore, investigate the effects of individual and group writing in different types including expository, persuasive, and narrative writing. We think the results might vary according to the type of writing. Further research should also focus on the basic elements of cooperation in collaborative tasks. It is of great importance that all these five elements of cooperation (i.e., positive interdependence, individual accountability, face-to-face promotive interaction, social skills, and group processing) are included in further studies where collaborative tasks are used.

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Appendix A. Prompts for descriptive paragraphs

Writing condition	Paragraph writing prompt
Individual	Describe and explain a popular slang term.
Pair	Describe and explain the steps of a process (e.g., How to get a driving license? How to shop online?).
Group	Describe and explain a cultural tradition (e.g., Wedding traditions).

Appendix B. Semi-structured interview questions

1. In which writing condition do you feel more comfortable? Why?

2. In your opinion, what are the advantages and disadvantages of

a.   individual writing?

b.   pair writing?

c.   group writing?

3. According to you, which kind of writing is more effective in terms of the

a.   accuracy of a paragraph?

b.   fluency of a paragraph?

c.   length of a paragraph?

d.   complexity of a paragraph?

Appendix C. Customized analytic rubric for paragraph writing tasks

Category	Exemplary 5	Good 4	Satisfactory 3	Partially satisfactory 2	Needs improvement 1
Grammar	Always has exemplary and accurate grammar use, with almost no errors.	Often has good and accurate grammar use, only with a few errors which do not hinder the meaning.	Has satisfactory grammar use, with satisfactory grammatical knowledge, with some errors that might sometimes affect comprehension.	Has limited control over grammar, with considerable errors that make comprehension difficult.	Has very limited control over grammar, with numerous errors that interfere with meaning and legibility.
Vocabulary	Always has exemplary and accurate	Often has good and accurate vocabulary use,	Has satisfactory vocabulary knowledge, with	Has limited control over vocabulary use,	Has very limited control over vocabulary use,

	vocabulary use, with almost no errors	only with a few errors which do not hinder the meaning	satisfactory use, with some errors that might sometimes affect comprehension	with considerable errors that make comprehension difficult	with numerous errors that interfere with meaning and legibility
Organization	Has an exemplary paragraph organization with proper introduction, body, and conclusion	Has a good paragraph organization with proper introduction, body, and conclusion	Has satisfactory paragraph organization, but some elements of a well organized paragraph are missing	Has organization below the expectations and most of the elements of a well-organized paragraph are missing	Has very poor organization and little and/or no understanding of paragraph organization
Content	Rich in content; has a clear representation and well-developed discussion of concepts/ideas that have clear connections	Good content; has a clear representation and a good discussion of concepts/ideas most of the time, but there are certain points which can still be clarified and developed	Satisfactory content; has average representation and discussion of concepts/ideas that do not have clear connections, and some parts are unclear	Limited content; has somewhat unclear representation and partial discussion of concepts/ideas that are irrelevant some of the time	Superficial and/or minimal content; the representation and discussion of concepts/ideas is very poor/ambiguous, which interferes with meaning and legibility

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