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Various Corrective Feedback Types in Collaborative vs. Individual Writing Conditions

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Abstract

One of the important issues in EFL instruction is the idea of eliminating students' linguistic errors through providing corrective feedback (CF). Accordingly, this study investigated the effect of various CF types (i.e., comprehensive, selective, and no feedback) on advanced EFL learners' writing in different writing conditions (i.e., individual & collaborative). 132 EFL advanced learners aged from 14-20 were considered as the main participants. Learners were divided into 6 groups (i.e., three individual and three collaborative writing conditions). Furthermore, each writing condition included three groups with selective, comprehensive, and no correction orientations. Data collection tools and procedures encompassed an institutionalized Placement Test, pre-test, and post-test. The treatment that lasted for nine sessions was followed by a post-test. Data were submitted to a series of ANOVA tests with follow up pair-wise comparisons and independent-samples t-tests. Findings indicated that: (1) CF, especially selective one, was more effective in enhancing learners' writing accuracy, and (2) members of the collaborative writing groups outperformed those in the individual ones in terms of their writing accuracy development. The theoretical and practical implications are discussed in relation to enhancing writing accuracy of the learners.

Keywords: corrective feedback, collaborative writing, selective feedback, comprehensive feedback, EFL learners

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1. Introduction

In learning something new, there is always the possibility of making mistakes. In the history of language acquisition and learning, learners have encountered a lot of difficulties in the learning process. One of the most important difficulties is omitting students' linguistic errors. When errors occur in the second language acquisition, teachers encounter another problem called error correction which always confuses teachers since they do not know whether this error should be corrected or not, and if so, when is the best time and what is the best way to correct it. Whether and how CF can help students to become good writers have been of great interest for researchers (Chandler, 2003; Ferris, 2010).

Since good writing entails the acquisition of various linguistic abilities, including grammatical accuracy, lexicon, syntax, and planning strategies like organization, style and rhetoric, writing instruction is especially important in English as a Foreign Language (EFL) classes (Aydin & Yildiz, 2014). The ability to write effectively is becoming more significant in today's communication and academic settings, and, therefore, improving the writing ability of the learners is assuming an important part in L2 language education (Ghoorchaei, Tavakoli, & Ansari, 2010).

As regards effective writing pedagogy, one type of feedback that EFL writing teachers provide is CF which is defined as "any indication to the learner that his or her use of the target language is incorrect" (Lightbown & Spada, 2006, p. 197). Although the effectiveness of CF is under question (Truscott, 1996; Truscott & Hsu, 2008), many L2 writing teachers believe that CF is effective in improving their learners' L2 writing accuracy (Brown, 2007; Ellis et al., 2008; Hyland & Hyland, 2006; Sheen, 2007) and there is a need for its use (Van Beuningen, 2010; Van Beuningen, De Jong, & Kuiken, 2012). Thus, written CF is an important part of second language writing because it provides teacher-student interaction in L2 writing class (Ferris, Pezone, Tade, & Tinti, 1997).

Indeed, inspired basically by the Sociocultural Theory (SCT) of language learning, the current view of language learning and teaching emphasizes the use of collaborative work (i.e., pair and group) in the language classroom (Batstone, 2010; Lantolf, 2000; Shehadeh & Coombe, 2010). Collaborative Writing (CW) is believed to enhance language in general and writing in particular in L2 learning (Storch, 2005; Villamil & de Guerrero, 1998). According to Vygotsky (1978), social interaction between partners mediates the learning process and socially rich conditions should be provided for learners for better cognitive development. As Lantof (2000) states, the talk generated during the co-construction and revision of a piece of writing helps researchers to access the learners' cognitive processes and investigate the effect of that talk on language learning as reflected in the students' writing. SCT emphasizes the importance of interaction with peers. In other words, according to Vygotsky's (1978) Zone of Proximal Development (ZPD), through mediation and interaction among learners in the writing class, writing skill can develop.

1.1 Statement of the Problem

The literature on written CF is teeming with contradictions with some studies emphasizing the positive effects of written CF on learners' intake and with some other studies rejecting its usefulness. The current status quo of English writing skill at an adequate level indicates a great deficiency of the learners in their writing proficiency. The main difficulties which make learners poor writers in the classrooms can include problems originating from the learning environment, the teacher, content knowledge, affective factors, materials and contextual factors (Koosha & Yakhabi, 2013).

In addition, most of the teachers do not know how to encourage learners to write and get them to work collaboratively which can be enjoyable and motivating. Moreover, they are short of knowledge on which errors to correct, how to correct (i.e., which methods to use), and when to provide CF on the errors. Regarding CW, the number of the studies investigating the advantages of CW is rare, especially in the Iranian context. Storch (2005) states that "although pair and group work are commonly used in language classrooms, very few studies have investigated the nature of such collaboration when students produce a jointly written text" (p. 153).

In sum, both teachers and students feel the need for the use of CF in EFL learners' writing (Van Beuningen, 2010; Van Beuningen, De Jong, & Kuiken, 2012). Therefore, there is a dire need for further research to shed more light on this fledgling concept of differential effect of various types of written CF. Accordingly, this study was an attempt to assess student uptake of corrections received through various forms of intervention, that is, direct comprehensive feedback, direct selective feedback, and no feedback on texts written in different conditions, that is, individually and collaboratively. Thus, the following research hypotheses and questions were formulated.

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1.2 Research Questions

The researchers formulated the following research questions:

1. Is there a significant difference among patterns of CF (direct selective, direct comprehensive, and no correction) in terms of their effect on writing accuracy of EFL learners in individual writing conditions?
2. Is there a significant difference among patterns of CF (direct selective, direct comprehensive, and no correction) in terms of their effect on writing accuracy of EFL learners in collaborative writing conditions?
3. Is there a difference between collaborative and individual writings at the post-test?

1.3 Research Hypotheses

The research hypotheses are as follows:

1. There is no significant difference among patterns of CF (direct selective, direct comprehensive, and no correction) in terms of their effect on writing accuracy of EFL learners in individual writing conditions.
2. There is no significant difference among patterns of CF (direct selective, direct comprehensive, and no correction) in terms of their effect on writing accuracy of EFL learners in collaborative writing conditions.
3. There is no difference between collaborative and individual writings at the post-test.

2. Literature Review

According to Godwin-Jones (2018), nowadays emphasis in studies on L2 writing is one the stages of a writing project viewed as a process not a product. Students improve their writings through teacher and peer feedback. Thus, writing is seen as an interactive process involving a negotiation with readers (Zheng & Warschauer, 2017). Thus, linguistic accuracy, clarity of presentation, and organization of ideas are all important factors in enhancing the efficacy of the communicative act, since they supply the clue for interpretation (Araghi & Sahebkheir, 2014; Ashoori Tootkaboni & Khatib, 2014; Salimi & Ahmadpour, 2015). Accordingly, while the global perspective of content and organization need to be focused on and given appropriate attention, it is also most important to present a product which does not suffer from illegible handwriting, numerous spelling errors, faulty punctuation, or inaccurate structure, any of which may render the message unintelligible (Celce-Murcia, 2001).

According to Kahyalar and Yılmaz (2016), CF in second language acquisition is used to refer to "responses to the errors in learners' second language productions, and giving effective CF is a central concern for teachers of writing" (p. 148). Providing feedback as an important part of EFL writing instruction is of great significance for both teachers and students. Feedback is perhaps the most widely used method for reacting to student writing. Teachers view it as spending a lot of time on learners' writing; however, for students, error correction is the most important part that will lead to their success as writers (Ashoori Tootkaboni & Khatib, 2014; Ferris, 2003; Ghandi & Maghsoudi, 2014; Kahyalar & Yılmaz, 2016). However, the usefulness of error correction and its contribution to the development and improvement of writing accuracy continues to be under question (Ferris, 1999; Chandler, 2003; Truscott, 1996; Truscott & Hsu; 2008).

A number of studies have claimed that CF has significant effects on EFL students' writing (Ahmadi Shirazi & Shekarabi, 2014; Bitchener, 2008; Karimi, 2014; Maleki & Eslami, 2013; Zarei & Rahnama, 2013). In spite the fact that the effectiveness of oral CF is well-established (Li, 2010; Lyster & Saito, 2010; Mackey & Goo, 2007), and also a number of theoretical Second Language Acquisition (SLA) insights predict that written CF can enhance L2 development, the usefulness and efficacy of written error correction is a topic of considerable debate (Ferris, 1999, 2004; Truscott, 1996; 1999, 2007; Truscott & Hsu, 2008). Regarding the efficacy of CF in EFL writing classes, there are two general approaches toward written error correction (i.e., *comprehensive vs. selective*) in the literature (Ellis, 2009; Van Beuningen, 2010). The comprehensive/unfocused approach involves the teachers correcting all errors in a learner's text without considering the error category. On the other hand, the selective/focused approach focuses on specific linguistic features only, leaving all other errors outside of the focus domain uncorrected.

There are some research studies regarding the effectiveness of either approach. Through comprehensive CF, the students' attention is drawn toward errors in writing, and also to new features of the target language, therefore, promoting more effective language learning (Corpuz, 2011). Some researchers have found evidence that correction of all errors can reduce the number of errors (Lalande, 1982) and enhance the accuracy of the texts (Van Beuningen, De

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Jong, & Kuiken, 2008, 2012); others, on the other hand, have called for selective/focused correction of specific error types (Ferris, 2006, Van Beuningen, 2010).

Collaborative learning (CL), on the other hand, involves two or more people interacting with each other to enhance learning (Dillenbourg, 1999). Recent years have witnessed a significant growth of research on CW in L2 classroom (Li & Zhu, 2017; Mozaffari, 2017; Wu, 2015; Zhang, 2018). CW is supported by cognitive and sociocultural theories of L2 learning. In other words, Long's (1996) interaction hypothesis, according to cognitive view, suggests that negotiation for meaning and form can increase and facilitate L2 learning. From Vygotsky's (1978) sociocultural perspective, language learning is a socially mediated process through which learners construct knowledge (Du, 2018). Constructivism, in the same vein, emphasizes the student-centered learning (Cheek, 1992; Yager, 1991). As noted in Hansen and Liu (2005), and substantiated by others (Storch, 2005; Swain & Lapkin, 1998), peer editing leads to more meaningful revision, as these revisions are superior in vocabulary, organization, and content. Studies by Gousseva-Goodwin (2000) and Storch (2005) further found that advanced English as a Second Language (ESL) learners' collaborative essay grades were higher than those done independently and tended to have greater grammatical accuracy.

Researchers have reported numerous benefits of the use of collaboration in wiring such as observing how other learners think and modeling their peers' thinking strategies and writing styles (Dale, 1994). In addition, collaboration enhances the sense of camaraderie and confidence (Fung, 2011). However, one should keep in mind that learners sometimes get reluctant to engage in co-authoring (McDonough, 2004); therefore, care should be taken by the teachers in guiding L2 learners to participate appropriately in collaborative works. Peer feedback may provide more social or affective support than teacher feedback; learners may find it less threatening (Lee, 2015). Peer feedback can "enhance a sense of audience and text ownership" (Lee, 2015, p. 2), leading students to take their role seriously, creating the potential for reflection and discussion on language issues.

In spite of recommendations for the use of CW (Lee, 2015; Tocalli-Beller, 2003), it is not clear for writing instructors what actually takes place during collaboration. The primary interviews with some of the teachers by the researcher herself revealed that few teachers conduct CW in their classes due to the shortage of time. Most of the teachers stated that it is time-consuming and creates a disorderly situation in the classroom. Moreover, learners do not know how to write collaboratively since it is not applied in the classes at all. Some writing instructors also claim that it is not logical to ask learners to work collaboratively because not everyone is able to work with others who have different opinions, thus, conflict may occur (Stewart, 1988).

However, the studies by Storch (2005) and Storch and Wigglesworth (2007) that investigated CW in L2 found significant differences in favor of CW for grammatical accuracy. Indeed, inspired basically by the SCT model of language learning, the current view of language learning and teaching emphasizes instruction where collaborative work is at the center of the language classroom (Batstone, 2010; Lantolf, 2000; Shehadeh & Coombe, 2010). Therefore, more research into what happens in both pair and group writing situations is needed to determine its effectiveness on the accuracy of the texts produced and the types of feedback learners may get from each other.

3. Methodology

3.1 Design of the Study

The researchers adhered to an intact group design bringing the research to light as a quasi-experimental type of enquiry. In the current investigation, 6 advanced classes were randomly selected and assigned into two groups, namely, collaborative and individual writing groups (each one including three classes). Each group received various feedback types (i.e., direct comprehensive feedback, direct selective feedback, and no feedback), and was given the same pre- and post-test. Pre-test was administered in order to make sure that the groups were homogeneous in terms of language ability (i.e., writing accuracy) before the treatment; and post-test was used to measure the extent to which treatment was effective.

3.2 Participants

A total of 132 advanced female EFL learners formed the main participants. They all ranged in age from 14-20 and were learning EFL in an English Language Institute. By means of an institutionalized placement test, 6 advanced classes including 22 participants in each class were selected and the classes were assigned into two main groups writing either collaboratively or individually. Moreover, each main writing condition (i.e., collaborative and

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individual) was divided into three groups receiving comprehensive CF, selective CF and no feedback at all, that is, following Truscott's (1996) view, no correction of grammar errors. The participants had 3-year experience of learning English at secondary school and institute(s).

3.3 Instruments

In the current study, the following instruments were employed in data collection process:

1) English Language Institute Placement Test
2) Pre-tests
3) Post-test

3.3.1 English Language Institute Placement Test

It is a highly valid and reliable proficiency test institutionalized by Iran Language Institute and used at the beginning of each term as the placement test. It includes items on grammar (60) and vocabulary (60) followed by an interview. It served the purpose of homogenizing the participants in terms of language proficiency at the outset of the study.

3.3.2 Pre-tests

Having established homogeneity among the groups in terms of their language proficiency, the researchers selected a topic covered in the students' books, namely, Advanced Student's Book for which the learners were required to write a composition. Learners were asked to write a composition within a word limit of at least 250 in 45 minutes. To ensure the accuracy and consistency of the correction method utilized for correcting the papers, the researchers calculated the inter-rater reliability for the students' written productions at pre-test through coding 25% of the written data regarding writing accuracy (i.e., grammar) with the help of a research assistant. A high inter-rater reliability was established (r = 0.78).

3.3.3 Post-test

Finally, the researchers administered the post-test to find out whether CF was effective or not. The test comprised the topic used in the pre-test phase. Also, the inter-rater reliability was calculated for immediate post-test through double rating 25% of the written data by another research assistant. The inter-rater reliability was high (r = 0.78).

3.4 Procedure

During the study, 6 advanced classes were selected and the participants were assigned into three groups, namely, direct comprehensive (unfocused) CF, direct selective (focused) CF, and no correction. Then, all three groups were randomly divided into two classes writing collaboratively and individually. Prior to any treatment, the researchers made statistically sure that the participants were not significantly different from each other at the outset of the study. To this end, participants wrote the first composition on a topic selected by the researchers which was considered as both the test of writing homogeneity and pre-test. All 6 groups wrote one composition during 9 sessions on general topics covered in their students' books. They were asked to write compositions within a word limit of at least 250 for Advanced level in 45 minutes. First of all, the researchers focused targeted grammatical structures and the topics (e.g., *What does your mother say about her childhood*? *What would she have done if she had come back?)*. During writing time, the teacher monitored and observed the learners and provided hints whenever needed.

Learners doing their first composition that served the purpose of pre- and post-test were not allowed to have access to any resources and assistance. Participants' writings were reacted by the teacher following three methods. The teacher underlined all the grammar errors in the written performance of the first group, that is, comprehensive CF. As for the second group, the researchers focused on targeted structures; namely, Reported Speech and Conditional Type (III) (i.e., selective CF). However, the third group did not receive any correction from the teacher and were just commented on the content through such terms as great, good, ok, etc.

When the researchers gave back the papers to the learners, learners in the first group (i.e., comprehensive feedback) were given 25 minutes to individually check and reckon the errors corrected directly and underlined by teacher and those in the paired groups did this in pairs as well. And those in the second group (i.e., selective feedback) were given 15 minutes to check the errors corrected by the teacher in both groups (i.e., collaborative and individual). Due to the lack of correction, learners in the third group were required to only take a look at the comments (e.g., good, ok,

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acceptable, etc.) provided by the teacher. This procedure was followed for 9 sessions and at the tenth session, the post-test was conducted for all learners.

3.5 Data Analysis

A series of one-way ANOVA statistics were conducted at the pretest to establish homogeneity across the participants and in the post-test to figure out the possible effects of various treatment patterns. Moreover, Post hoc comparison by means of the Tukey HSD test was conducted in post-test stage to find out where exactly the difference/s among the pairs existed. Furthermore, a set of independent samples t-test was run to explore the difference between the collaborative and individual writings in the post-test.

4. Results

4.1 Differences among CF Types in Pre-test

A one-way analysis of variance was used to explain the homogeneity of the participants at pre-test after the assumptions for parametric tests were met and no violations were detected. The outcome is illustrated in Table 1.

Table 1. Descriptive statistics of the three CF treatment groups in pre-test

Type	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Selective	22	80.87	5.0497	1.07662	78.6397	83.117	70.00	89.00
Comprehensive	22	81.72	5.7228	1.22012	79.1872	84.261	68.00	89.33
No-Correction	22	82.10	6.9907	1.49043	79.0087	85.207	69.00	97.00
Total	66	81.57	5.9056	.72693	80.1187	83.022	68.00	97.00

According to the mean scores, there was no outstanding difference among the three groups at pre-test and a one-way analysis of variance (ANOVA) was employed to confirm it (Table 2).

Table 2. ANOVA results: Homogeneity measures in pre-test

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	17.413	2	8.707	.244	.78
Within Groups	2249.570	63	35.707		
Total	2266.983	65			

The results of ANOVA revealed that there were no significant differences ($F = .24$, $p = .78>.05$) among the advanced EFL learners who were assigned into three CF treatment groups (i.e., selective, comprehensive, and no correction) at the pre-test stage.

4.2 Differences among CF Types in Post-test

Table 3 shows descriptive statistics for differences between the types of written CF in terms of their effect on EFL learners' accuracy development.

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Table 3. Descriptive statistics for the differences among CF types in post-test

Type	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean Lower Bound	Upper Bound	Minimum	Maximum
Selective	22	55.67	6.9291	1.47730	52.6028	58.747	45.00	67.00
Comprehensive	22	68.74	6.0938	1.29922	66.0463	71.450	57.00	84.20
No-Correction	22	82.78	6.0369	1.28707	80.1129	85.466	65.00	92.00
Total	66	69.07	12.7966	1.57516	65.9251	72.216	45.00	92.00

As the mean scores indicate, there was a difference among three groups in the post-test that was signified through a one-way analysis of variance (Table 4).

Table 4. ANOVA results for the differences among CF types in post-test

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	8090.621	2	4045.311	99.808	.00
Within Groups	2553.445	63	40.531		
Total	10644.067	65			

The results of ANOVA indicated that there was a statistically significant difference ($F = 99.80$, $p = 0.00<0.05$) among three groups at post-test. The group receiving selective feedback outperformed the two other groups. In addition, in order to show the exact points of variations among the groups, a Tukey *post-hoc* test was run (Table 5).

Table 5. Multiple comparisons for the differences among CF types in post-test

(I) Type	(J) Type	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	Upper Bound
Selective	Comprehensive	-13.07318*	1.91954	.000	-17.6807	-8.4657
	No-Correction	-27.11455*	1.91954	.000	-31.7221	-22.5070
Comprehensive	Selective	13.07318*	1.91954	.000	8.4657	17.6807
	No-Correction	-14.04136*	1.91954	.000	-18.6489	-9.4338
No-Correction	Selective	27.11455*	1.91954	.000	22.5070	31.7221
	Comprehensive	14.04136*	1.91954	.000	9.4338	18.6489

*. The mean difference is significant at the 0.05 level.

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Multiple comparisons test indicated that there was a difference among groups in post-test. The results of Tukey test indicated that there was a decrease in learners' errors from pre-test to post-test in selective and comprehensive groups compared to no correction group; however, the selective type was the most influential. Figure 1 indicates the distribution of the means.

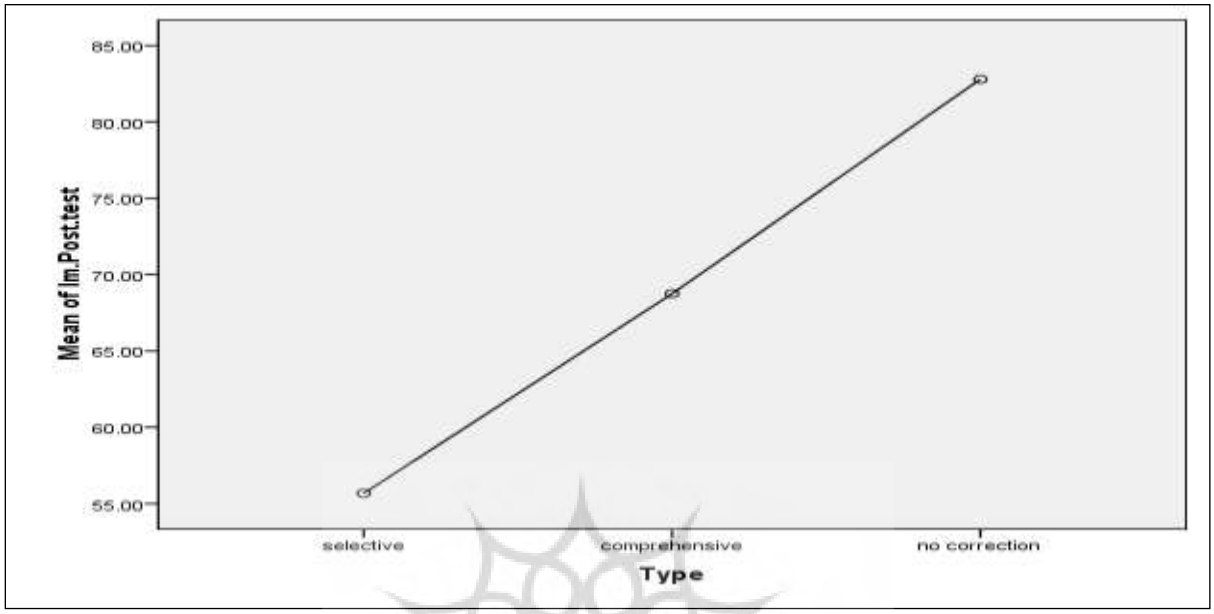

Figure 1. Means plot for the differences among CF types in post-test

The mean plot indicated that there was a decrease in the number of the errors of the learners' receiving selective feedback.

4.3 Differences among CF Types in Collaborative Writing in Pre-test

The influence of CF types was also scrutinized as far as writing accuracy of learners, this time writing in pairs, was concerned. Table 6 shows descriptive statistics related to outcomes of the three groups (selective, comprehensive, and no correction) at pre-test. The main reason was to establish homogeneity among learners .

Table 6. Descriptive statistics for the differences among CF types in pre-test

Type	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Selective	22	78.265	4.04952	.86336	76.4700	80.0609	71.64	87.00
Comprehensive	22	81.129	4.50486	.96044	79.1322	83.1269	74.28	89.33
No-Correction	22	79.546	5.26029	1.12150	77.2141	81.8786	70.00	89.56
Total	66	79.647	4.71037	.57981	78.4892	80.8051	70.00	89.56

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According to the mean scores, there was no outstanding difference among three groups at pre-test and a one-way analysis of variance (ANOVA) was employed to confirm it (Table 7).

Table 7. ANOVA results for the differences among CF types in pre-test

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	90.568	2	45.284	2.111	.130
Within Groups	1351.622	63	21.454		
Total	1442.191	65			

The results of ANOVA revealed that statistically there was no significant difference (F = 2.11, p = .13>.05) among the EFL learners assigned to three written CF (selective, comprehensive, and no correction) treatments groups at pre-test.

4.4 Differences among CF Types in Collaborative Writing in Post-test

Table 8 shows descriptive statistics for differences between the types of written CF in terms of their effect on EFL learners' accuracy development.

Table 8. Descriptive statistics for the differences among CF types in post-test

					95% Confidence Interval for Mean			
	N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximum
Selective	22	36.43	3.8694	.82498	34.7180	38.1493	30.00	42.00
Comprehensive	22	37.49	4.4170	.94173	35.5334	39.4502	30.00	45.28
No Correction	22	83.65	6.6687	1.4217	80.6951	86.6086	64.28	94.00
Total	66	52.52	22.7500	2.8003	46.9331	58.1184	30.00	94.00

As the mean scores indicate, there was a slight difference among the three groups at post-test. A one-way analysis of variance (ANOVA) was employed to check whether these differences were significant (Table 9).

Table 9. ANOVA results for the differences among CF types in post-test

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	31983.762	2	15991.881	607.627	.000
Within Groups	1658.070	63	26.319		
Total	33641.832	65			

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The results of ANOVA indicated that there was a statistically significant difference (F = 607.62, p = .00<.05) among three groups at post-test. The group receiving selective feedback outperformed two other groups. Moreover, comprehensive group outperformed no correction group. A Tukey *post-hoc* test was run in order to show the exact points of variations among the groups (Table 10).

Table 10. Multiple comparisons for the differences among CF types in post-test

(I) Type	(J) Type	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Selective	Comprehensive	-1.05818	1.54680	.774	-4.7710	2.6546
	No Correction	-47.21818*	1.54680	.000	-50.9310	-43.5054
Comprehensive	Selective	1.05818	1.54680	.774	-2.6546	4.7710
	No Correction	-46.16000*	1.54680	.000	-49.8728	-42.4472
No Correction	Selective	47.21818*	1.54680	.000	43.5054	50.9310
	Comprehensive	46.16000*	1.54680	.000	42.4472	49.8728

Multiple comparisons using the Tukey HSD test indicated that there was a difference among groups at post-test. The Tukey test showed that there was a decrease in learners' errors from pre-test to post-test in selective and comprehensive groups more than no correction one. Figure 2 indicates the distribution of the means.

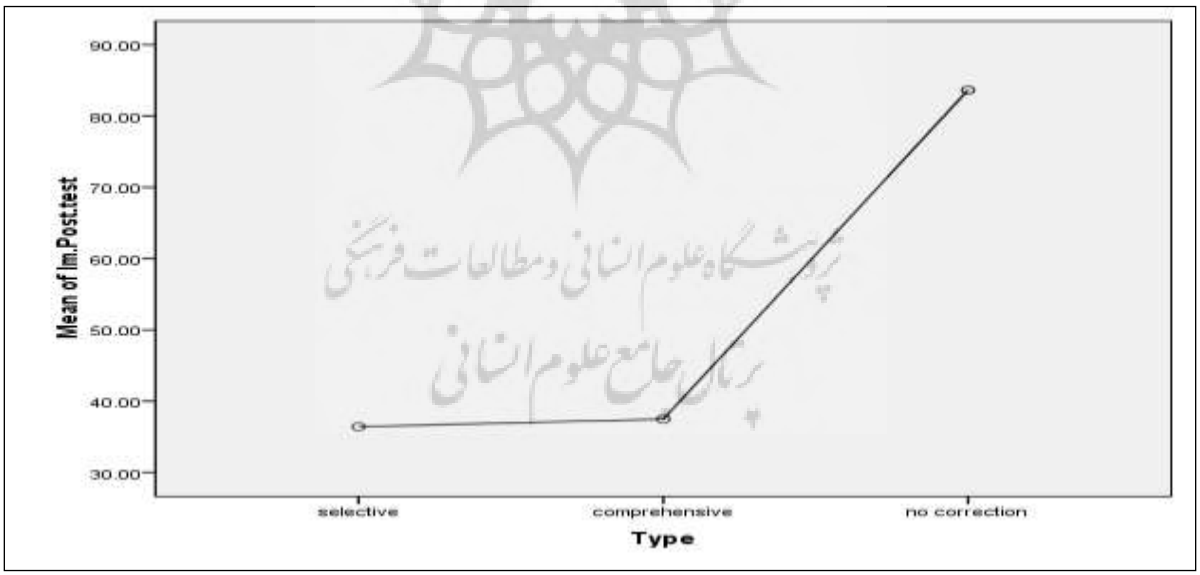

Figure 2. Means plot for the differences among CF types in post-test

The mean plot indicated that there was a decrease in the number of the errors of the learners' receiving selective feedback and comprehensive one; however, the decrease in selective feedback groups was more than those in the comprehensive one.

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4.5 Difference between Collaborative and Individual Writing Conditions in Post-test

Table 11 shows descriptive statistics for differences between collaborative and individual writings at the post-test.

Table 11. Descriptive statistics for the difference between collaborative and individual writing conditions in the post-test

Levels	Time	N	Mean	Std. Deviation	Std. Error Mean
Advanced	Individual	66	69.07	12.79667	1.57516
	Collaborative	66	52.52	22.75009	2.80034

According to the mean scores, there was a difference between collaborative and individual writing conditions.

Table 12. Independent-samples T-test for the difference between collaborative and individual writing conditions in the post-test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Advanced	Equal variances assumed	52.3	.00	5.15	130	.00	16.545	3.212	10.188	22.90
	Equal variances not assumed			5.15	102.3	.00	16.545	3.212	10.172	22.91

According to the independent-samples *t*-test output, there was a significant difference in scores for CW (M=52.52, SD=22.75) and individual writing [M=69.07, SD=12.79; t (130) =5.15, p=.00 < .05] of the learners. In other words, there was an increase in the writing accuracy of the learners writing collaboratively compared to individual ones.

5. Discussion

The present study aimed at exploring the effect of various feedback types, that is, direct comprehensive feedback, direct selective feedback, and no feedback on the accuracy of the texts written by EFL learners. In addition, their effect was scrutinized in different writing conditions, that is, individually and collaboratively in order to find ways in helping students to increase their writing accuracy. The results proved the superiority of providing feedback types (i.e., selective and comprehensive). Moreover, in both individual and collaborative writing conditions, selective correction was more effective in decreasing the number of the errors in the post-test. In addition, CW groups outperformed their peers in the individual groups in terms of writing accuracy development in the post-test.

The results of the present study indicated that CF was very influential in enhancing learners' writing accuracy. A number of studies are in line with this study (Ahmadi Shirazi & Shekarabi, 2014; Karimi, 2014; Maleki & Eslami,

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2013; Sarkhosh, Farahani, & Soleimani, 2012; Zarei & Rahnama, 2013). Although teachers view it as spending a lot of time on learners' writing, for students, error correction is the most important part that will lead to their success as writers (Ashoori Tootkaboni & Khatib, 2014; Ferris, 2003; Ghandi & Maghsoudi, 2014). Moreover, other researchers (Bitchener & Knoch, 2008; Chandler, 2003; Sheen, 2007) claim that CF promotes grammatical accuracy.

The existing theories can account for the findings. From a Noticing Hypothesis perspective, since CF draws learners' attention to their areas of difficulty and releases their minds to process language content, it can be advantageous. However, contrary to what Truscott (1996) advocates, the results of this study proved that error correction is beneficial in writing classes. In other words, teacher's CF is, indeed, effective in helping students reduce their grammatical errors in the post-test.

Regarding the efficacy of selective type of the feedback in this study, the findings are in line with Bitchener and Knoch (2010a) and Pashazadeh and Marefat (2010) who showed that students who had received selective CF continued to outperform students whose errors had not been corrected. Moreover, Sheen et al. (2009) reported that selective CF is more beneficial than comprehensive feedback. It may be that learners had a good understanding of the rules for their usage and only needed the CF to raise their consciousness (Bitchener, 2008; Bitchener & Knoch, 2008). Regarding theoretical predictions on the use of selective feedback, Pienemann (1989) argues that learners will only be able to acquire linguistic structures for which they show developmental readiness. In other words, CF should be aligned to the learner's current level of L2 development or, as SCT explains, be within their ZPD.

With respect to the effect of CW on the quality of students' writing accuracy, results of the statistical analysis showed that CW had an overall significant effect on improving students' writing accuracy. Previous research studies also found that learners' writing in pairs produced linguistically more accurate texts than those writing alone (Du, 2018; Storch, 2005, 2011, 2013; Storch & Wigglesworth, 2007; Wigglesworth & Storch, 2009). According to Vygotky's (1978) SCT, learning is a social activity.

Involving the learners in collaborative activities can increase the interaction among learners in the writing class. The collaborative dialogue in the writing process mediates language learning. Supporting the results of this study, Fahim and Haghani (2012) state that learners' personal effort will not result in the mastery of the language without help from other people. Therefore, giving and receiving feedback from peers not only promotes the level of the learners' writing but it also offers them opportunities to communicate with each other, share ideas and give useful comments and suggestions.

6. Conclusion

The results of the study justified the positive effect of two CF types, that is, selective and comprehensive especially selective type on the learners' accuracy improvement. Moreover, learners' writing accuracy in CW groups enhanced more than the ones in the individual groups in the post-test. The findings of the present study can be of great benefit to English language teachers in providing learners with feedback types based on the learners' interlanguage development as well as writing conditions. Moreover, EFL instructors are recommended not to rid themselves of the burden of using various CF types in the classes because each type is an important avenue for students to improve their writing accuracy.

From a pedagogical perspective, CW can be used as a pedagogical tool to encourage student collaboration and create a positive social atmosphere in the classroom. Thus, writing teachers can provide opportunities for students to work collaboratively since more capable students can guide and help the weaker ones. In other words, collaboration encourages students to develop their independence and responsibility to construct knowledge on their own. As any human production, this study has some limitations. A serious limitation of this study was the gender of the participants who were limited to female learners. In addition, the results of this study may be unique to this particular population. In order to gain more reliable information, other studies should be carried out with more participants in different contexts. Moreover, this study focused on the effect of direct CF on the learners' writing accuracy. Moreover, a longitudinal study is required to ensure the efficacy of CF types on the accuracy of the targeted structures in this study as well as other structures.

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