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Investigating the Impact of Unfocused Direct and indirect Written Corrective Feedback on Writing Accuracy of Iranian EFL Learners

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Abstract

Despite extensive studies concerning written error correction, it is imperative that more research be conducted to demonstrate the effectiveness of error correction on improving L2 writing. Driven by this gap, this study aimed to examine whether unfocused direct and indirect types of written corrective feedback had any impact on the writing accuracy of the Iranian English language learners' new compositions. Through the random matching technique, ninety Iranian English language learners from seven foreign language centers in southwestern Iran were split into two groups for treatment and one group for control. As part of the evaluation, a writing test was utilized to determine whether the learners had improved their writing accuracy due to the treatment. The results showed that the participants in both treatment groups improved their writing accuracy, though the learning gains from both treatment were not significantly different. This study concludes with some implications for teachers regarding their use of appropriate types of written error correction.

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1. Introduction

Written corrective feedback (WCF) is still assumed to be a distinct, ordered, and selective way of managing and assisting learners to understand and provide corrections for their written errors (Manchón & Cerezo, 2018). Providing error corrections on learners' writing compositions is considered an essential instructional practice for educators, who are hopeful that WCF will assist their learners to develop their writing accuracy and skills (Lee, 2019; Zheng & Yu, 2018). Although the different aspects of WCF are not totally utilized by instructors (Kang & Han; 2015), students are demanding feedback from their instructors as a way to develop different aspects of their writing skills (Ferris, 2004). Furthermore, researchers have shown that WCF has the potential to improve the accuracy of learners' revised texts (e.g., Bitchener, 2008; Ferris, 1999), as learners are believed to gain more linguistic knowledge through written error correction (DeKeyser, 2007).

However, L2 writing practitioners and instructors are still unsure of the relative impact of written grammatical feedback to improve the accuracy of writing composition (Hyland & Hyland, 2006). This view is still advocated by some recent studies, with Gad, Li, Kliewer, Langberg, Jiang, and Bruck (2016) and Crosthwaite (2017) arguing that written feedback studies to date have not persuasively shown that WCF assists L2 writers to develop their writing accuracy. In addition, it has also been suggested that the provision of WCF is detrimental as it can distract much time and energy from the other more dynamic L2 writing aspects. From the learners' viewpoints, WCF is not always understood by learners and they may not be able to recall the meaning of the written feedback when revising their writing compositions (Chandler, 2003; Lee, 2014).

In turn, there have also been disagreements in the literature concerning the impact of error correction on L2 composition (Liu & Brown, 2015; Truscott, & Hsu, 2008) and contradictory results regarding various issues of WCF including the focus of feedback and strategy (Bitchener, Young, & Cameron, 2005). However, as asserted by Bitchener (2008), disagreements on the findings of the relative impact of error feedback on L2 composition are likely because of the flaws in the design of those studies. Bitchener (2008) enumerated the lack of a control group and also not comparing the corrected texts with a new piece of writing as such flaws.

Trying to offer more conclusive responses to the ambiguities on the effectiveness of error correction in composition, recent studies have attempted to take into account the research design flaws that have seemingly been neglected in former investigations. Such studies (e.g., Diab, 2015; Ruegg, 2015; Shintani, Ellis, & Suzuki, 2014) used a control group and necessitated a new composition task for the post-test. Their results show that the experimental subjects getting instructor error correction performed better than the control subjects. Nevertheless, they (e.g., Diab, 2015; Ruegg, 2015) used only a direct kind of written feedback rather than both kinds of direct and indirect error feedback as treatment. As argued by Bitchener (2012), researchers who support the indirect kind of WCF claim that this strategy is the most beneficial since it can assist students to take part in problem-solving activities. Therefore, it can activate the kind of cognitive processes which are more likely to lead to the consolidation of the partially learned linguistic knowledge. On the other hand, Bitchener (2012) also points

out that researchers who advocate a direct kind of WCF claim that this strategy can be more useful to students as it is regarded to decrease any misunderstanding they may encounter if those students are incapable to comprehend the respective linguistic items, and it can also offer them the relevant information to figure out more complex linguistic written errors. Given that written feedback can be delivered in a direct or an indirect form and that these types can have differential effects on the students' composition accuracy, this study endeavored to explore the comparative effectiveness of the two kinds of indirect unfocused WCF and direct unfocused WCF among Iranian English as a Foreign Language (EFL) learners.

In effect, the research conducted in different contexts, particularly EFL contexts which are thought to be under-represented, can be regarded as a contribution to the field (Lee, 2014). Since error correction is a field of study that is believed to have an impact on all L2 writing instructors and their language learners, it is necessary that the respective literature be enlarged through empirical studies which are performed across various linguistic contexts (Hyland & Hyland, 2006).

A drawback with research on WCF, according to Bitchener and Ferris (2012), is that many studies have been conducted by focusing on one type of error; namely, focused error correction (e.g., Sheen, 2010) rather than focusing on several types of errors at the same time (i.e., unfocused corrective feedback). Focused, unlike unfocused, corrective feedback is restricted and its results also reveal a partial facet of L2 writing ability. Therefore, the impact of the different aspects of unfocused WCF is an encouraging area of L2 writing research. This research is a contribution to the type of studies exploring the relative impact that unfocused direct and indirect WCFs can have on the improvements of grammatical writing accuracy among Iranian EFL learners. Contrary to many empirical studies on WCF which explored article errors (e.g., Sheen, 2010), the present study looked at 17 grammatical structures which are believed to be productively problematic for L2 English learners (Ellis, 2006). This, in turn, was intended to contribute to the expansion of the area of WCF research. Moreover, the present study attempted to account for the ecological validity by delivering written error feedback on several linguistic grammatical errors and exploring whether these two types of WCF can affect the participants' writing accuracy in students' novel compositions at different times. The two following questions stand out to explore the research aims:

1. Do the two types of unfocused direct and indirect WCFs have any significant effect on the learners' writing accuracy?

2. Which of the two types of WCF leads to greater L2 writing accuracy?

2. Methodology

2.1. Participants

An announcement was sent to seven foreign language schools in Behbahan, southwestern Iran, inviting the EFL learners aging 19-27 who had studied five to seven semesters of English language based on the standards of *American English File* textbooks to voluntarily participate in a free non-mandatory writing course. In order to homogenize the students, the Michigan test of ECPE (Examination for the Certificate of Proficiency in English) was given to them (Corrigan, Dobson, Kellman, Spaan & Tyma, 2010). Based on their performance on the

proficiency test, 90 volunteers who scored between -1 and 0 standard deviations were identified as those needing special treatment.

The random matching technique was used to assign the participants to a control group and two treatment ones, with the size of 30 students in every group, to receive the intended treatment in 12 sessions. The first kind of treatment which was providing the unfocused kind of direct WCF (UDWCF) was given to the writing tasks of the first group of treatment, while the second kind of treatment that was supplying the unfocused kind of indirect WCF (UIWCF), was performed on the writing tasks of the second group of treatment. In turn, the control group participants were not given any written error correction concerning the 17 types of grammatical structures under investigation on their written texts, though they received some wide-ranging types of error written corrections regarding the whole text.

2.2. Instrumentation

The Michigan test of Examination for the Certificate of Proficiency in English

The Michigan test of Examination for the Certificate of Proficiency in English (ECPE) (Corrigan et al., 2010) was used to determine the homogeneity of participants for the current study. Each of the test items, which included several questions on the reading, listening, cloze, grammar, and vocabulary, scored 1 point. As a result of the practicality issues and research priorities, it was decided to remove the listening section which had 50 items. In order to ensure the reliability of the test for the context of the present study, 30 EFL learners who were from the same statistical pool but not from the main participants of the study took part in the pilot testing of this 120-item test battery. The reliability coefficient was shown to be 0.84. Once the proficiency test was conducted in the main phase of the study, those learners whose scores fell between -1 and 0 SDs on the ECPE were selected as the main participants of the study who were randomly assigned into three groups. In effect, the proficiency test scores indicated that they needed more assistance with different language features, including grammar since this was the focus of the study.

Writing Test (WT)

To check the accuracy development of the learners throughout the research, a writing test (WT) was used for assessing the learners' writing accuracy according to the 17 types of grammatical items under investigation in the different testing performances. Accordingly, learners were required to describe in 100-150 words some real-life topics such as a memorable trip they took during the summer. Regarding measuring the learners' wring accuracy, the percentage of error-free words in the WT served as a measure of writing accuracy. In other words, errors were counted in comparison with the total number of words. In the opinion of Polio (1997), it is possible to provide a more accurate view of the number of errors by showing the percent of words that are without any errors than other methods such as determining the number of errors per t-unit with no distinction between single and multiple errors.

2.3. Procedure

One of the authors of this study conducted the treatment and feedback procedure for the groups during 12 sessions. The participants in each respective group were required to compose 12 descriptive writing tasks in about 100-150 words in each of the 12 sessions, based upon some suggested real-life titles. While focusing on the 17 grammatical items under investigation, the

instructor determined the errors in the learners' compositions in the first treatment group and provided corrections for the errors through UDWCF. For instance, the erroneous sentence "He like to put the portrait in the living room" was corrected as "He *likes* to put the portrait in the living room" in which the third person –s was added to the verb. Afterwards, learners were given back the compositions with corrective feedback on the relevant errors and asked to reflect on them. As for the second treatment group, the instructor identified the errors in the learners' compositions through UIWCF, but the correct forms were not provided to them. For instance, the erroneous sentence "If I knew her address, I can write her" received feedback as "If I knew her address, I can write her" in which the error was just underlined. Similarly, all compositions in the second treatment group were then returned to learners for reflection on the provided corrective feedback. In contrast, for the control group, no specific WCF was given to the learners regarding the grammatical accuracy of their writing tasks during the 12 sessions. Nevertheless, for ethical considerations, such general error corrections as 'Your composition is interesting', 'Revise grammar', 'Check spelling', 'Check tense and vocabulary', 'Improve punctuation', and 'Go ahead with the good work' were provided for the control group.

2.3.1 Test administration

A WT was employed by the researchers to measure the writing accuracy of the learners with respect to the intended structures. In effect, the WT was intended to assess wring accuracy of the learners on the basis of the 17 features and structures during all testing periods of the pre-, post-, and delayed post-tests. The pre-test was administered three days prior to the first treatment session, while the post-test session was run one day after the last teaching session. As for the delayed post-test, it was administered two weeks after the post-test to ensure whether the learning gains had endured.

2.3.2 Target structures

A review of the relevant literature allowed the researchers to determine the common writing mistakes made by Iranian language learners, which were identified by writing instructors. Then, 20 Iranian English teachers who had previously worked at these selected language institutes were asked to rank the errors and see if they were relevant in the EFL classes so that we could assess whether they were also applicable to our target participants. Thirty of the cases recognized in previous researches were often cited by the Iranian English teachers as the most important problems spotted in the writing performances of the Iranian EFL learners. Among these items, seventeen of these grammatical structures (i.e., verb complements, regular past tense, question tags, yes/no questions, modal verbs, unreal conditionals, since and for, indefinite articles, ergative verbs, possessive –s, plural –s, third person –s, relative clauses, embedded questions, dative alternation, comparatives, and adverb placement) were chosen on the grounds that they were already reported by Ellis (2006) as the most universal grammatical errors made by English learners.

2.4 Data analysis

Regarding the WT, descriptive statistics were compiled for participants in each group during the pre-, post-, and delayed post-test periods. The test of Kolmogorov–Smirnov was used to make sure the scores had a normal distribution. Then, MANCOVA was run to examine changes in the adjusted means (i.e., adjusted for the covariate, which is equivalent to removing the pre-

test effects) for answering the first research question. MANCOVA has indeed an additional benefit over one-way ANOVA, as it allows the researchers to control a third variable (also referred to as a confounding variable), which may affect the results. To address the second research question, the researchers employed the one-way ANOVA in order to investigate the possible differences among the mean scores of the WT in the two treatment groups and the control group, as well.

3. Results

In this section, the findings of the current study, which investigated how unfocused direct and indirect WCF affect Iranian EFL learners' writing accuracy, are shown.

3.1. The ECPE Descriptive Statistics

To homogenize the learners in the study, the researchers administered the ECPE test to 380 learners. Participants included those whose ECPE test scores were between 1 SD lower than the average score of all other language learners. The descriptive statistics of the participants in the ECPE are shown in Table 1.

Table 1. *ECPE descriptive statistics for 380 participants*

Test	Number	Mean	SD	Minimum	Maximum
ECPE	380	60.80	10.20	27.00	98.00

To assign the participants to the three groups, the researchers determined the cut-off points for the ECPE scores. For the data to be generalizable, each class was designed to have 30 members. Thus, 90 students who scored between 50.60 and 60.80 on the ECPE test were divided into two treatment groups and one control group using the random matching technique. The descriptive statistics of the ECPE test for the 90 learners chosen to participate in the current study are presented in Table 2.

Table 2. *ECPE descriptive statistics for the groups*

Test	Group	Number	Mean	SD	Minimum	Maximum
ECPE	UDWCF	30	54.60	3.30	51.00	59.00
	UIWCF	30	53.10	2.80	51.00	57.00
	Control	30	53.80	2.90	51.00	58.00

3.2 Descriptive statistics of WT

In order to properly assess the relevant grammatical points, the participants were given a WT for each of the pre-test, post-test, and delayed post-test exam sessions. Table 3 shows the details of the descriptive statistics related to this test for both treatment groups and the control group for each of the test sessions. As can be seen from the results of Table 3, the scores of learners in both treatment groups were significantly greater than the scores of the participants in the control group. In turn, as the results of the first treatment group (M= 88.43, SD= 5.52) reveal, the first treatment group did better than the second treatment group, and also the control group. Meanwhile, the participants of the second treatment group (M= 88.03, SD= 5.13) showed greater improvement as compared to the control group participants.

Table 3. *Descriptive statistics of WT*

Pre-T				Post-T		Delayed Post-T	
Group	Number	Mean	SD	Mean	SD	Mean	SD
UDWCF	30	48.17	3.2	88.43	5.52	87.33	4.37
UIWCF	30	48.03	4.1	88.03	5.13	86.63	5.01
CONTROL	30	47.97	3.3	58.70	3.50	54.30	4.10

The one-way ANOVA was used to determine whether the mean differences among the two treatment groups as well as the control group were significant. Table 4 presents the details of the one-way ANOVA results for the three groups of participants.

Table 4. *One-way ANOVA results for three groups*

Between-Groups Effects Tests					
WT	Type III Sum of Squares	Df	Mean Square	F	P-Value
	131.2	2	131.2	5.2	.55

The results of Table 4 show that there are no noticeable differences among the mean scores of all three groups of learners in the pre-test on the WT.

3.3 The analysis of the data for normality

The Kolmogorov–Smirnov statistic was applied to ensure that the data were normally distributed. A non-significant test index indicates that the distribution of the variables is normal, as shown in Table 5.

Table 5. *Normality test descriptive statistics*

Tests	Z test	P-value
WT	.930	0.35

As represented in Table 5, in the z test, there is no statistical significance for the variable under study, indicating that it is normally distributed.

3.4. The results of the first research question

The first research question was intended to investigate the impact of two types of WCF on the Iranian EFL learners' writing accuracy. Table 6 shows the details of MANCOVA on the post-test scores.

Table 6. *MANCOVA data for each group*

Test	**Value**	**F**	**Hypothesis df**	**Error df**		**Sig.**
Pillai's Trace	0.998	15.737	10.000	158.000	0.0001	
Wilks' Lambda	0.009	1.142	10.000	156.000	0.0001	
Hotelling's Trace	108.526	835.651	10.000	154.000	0.0001	
Roy's Largest Root	108.519	1.715	5.000	79.000	0.0001	

As shown in Table 6, according to the results of Pillai's Trace, Wilks' Lambda, Hoteling's Trace, and Roy's Largest Root (F= 15.737, P< 0.0001), the data indicated that there was a noticeable difference in the dependent variable. Accordingly, a one-way ANCOVA was administered on the variable under study to find the differences. Table 7 shows the results below.

Table 7. *Analyses of the dependent variable using one-way ANCOVA*

Between-Groups Tests Effects							
Source	Test	Type III Sum of Squares	Df	Mean Square	F	P-Value	Partial Eta Squared
Groups	WT	32105.957	2	16052.978	117.33	0.0001	0.966
	WT Delayed	31500.1	2	15900.89	115.80	0.0001	0.86

According to Table 7, there is an obvious difference between the performance of the two treatment groups and the control group in terms of WT in the post-test and delayed post-test (F=117.33, P< 0.0001; F=118.80, P< 0.0001). Table 8 below illustrates the results of the adjusted means for all three groups of participants.

Table 8. *Means adjusted for the WT*

						95% Confidence Interval	
Test	**Groups**	**Means of Delayed Post-T**	**SD of Delayed Post-T**	**Post-test Means**	**Std. Error**	**Lower Bound**	**Upper Bound**
WT	**Control**	54.00	4.00	58.20	0.67	54.45	59.15
	UDWCF	87.00	4.70	88.36	0.67	87.01	89.71
	UIWCF	85.00	3.80	88.03	0.67	86.68	89.37

The WT covariate is assessed at the value of 46.0.

According to Table 8, considering the adjusted means of these tests, the performance of both treatment groups was significantly better than that of the control group. Thus, as these adjusted mean scores indicate, both UDWCF and UIWCF treatments increased the writing accuracy of the participants.

3.5 The results of the second research question

The second research question sought any significant differences between the mean scores of both treatment groups and the control group according to the WT scores. Table 9 presents the one-way ANOVA results.

Table 9. *Mean scores one-way ANOVA results of the groups*

Between-Subjects Groups Tests					
Test: WT					
Source	**Type III Sum of Squares**	**Df**	**Mean Square**	**F**	**P-Value**
Corrected Model	56.62	3.00	18.87	0.69	0.558
Intercept	921026.40	1.00	921026.40	3.383	0.000
GA1	56.62	3.00	18.87	0.69	0.558
Error	3157.96	116.0	27.22		
Total	924241.00	120.0			
Corrected Total	3214.59	119.0			

Table 9 shows the mean scores of both treatment groups ($p < 0.05$) in both post-test and delayed post-test sessions were not significantly different according to the WT scores. Then, to specify which group performed better on the WT, multiple comparisons were made using Tukey's test. Table 10 below summarizes the results.

Table 10. *Tukey's multiple comparisons in WT for writing accuracy between the groups*

Multiple Comparisons							
Tukey HSD							
						95% Confidence Interval	
Dependent Variable	(I) g	(J) g	Mean Difference (I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
Control	**Control**	**UDWCF**	-7.20000*	.95336	.000	-9.5638	-4.8362
		UIWCF	-5.00000*	.95336	.000	-7.3638	-2.6362
	UDWCF	**Control**	7.20000*	.95336	.000	4.8362	9.5638
		UIWCF	2.20000	.95336	.072	-.1638	4.5638
	UIWCF	**Control**	5.00000*	.95336	.000	2.6362	7.3638
		UDWCF	-2.20000	.95336	.072	-4.5638	.1638

*. At a 0.05 level, there is a significant difference in the mean scores.

In Table 10, the mean score for the participants of the control group was significantly different from the mean score of the participants of the first treatment group ($p<0.05$, M D = 7.2). Compared to the mean score of the participants in the second treatment group, the mean score of the participants in the control group was still significantly lower ($p<0.05$, M D = 5.0).

On the other hand, the results of Table 10 reveal that the mean scores of both treatment groups were not significantly different from each other ($p<0.05$, M D = 2.2).

4. Discussion

The present study followed two main questions. The purpose of the first question was to investigate the effect of two specific types of written feedback on Iranian EFL learners' writing accuracy according to 17 grammatical points. The second question sought to examine the possible differences among the three groups of the study in terms of learning gains. To that end, a non-compulsory writing module was conducted with 90 Iranian EFL learners. The results of the inferential analysis on the collected data from the participants' writing performance showed that both types of WCF employed in this study improved the participants' writing accuracy. The results also showed that there was no obvious difference between the two specific types of WCF in terms of their impact on the participants' writing accuracy, although the first type of written feedback (i.e., UDWCF) led to more writing accuracy.

Suggesting that written error correction is effective for student learning, regardless of the kind of the correction strategies, this study provides evidence in response to Truscott (1999) who began the debate over the comparative efficiency of WCF. According to Bruton (2009), some of the contradictory results of previous studies are attributable to such factors as not including any control group for comparative purposes, and also relying on the results of the revised compositions instead of using a new text. Therefore, the participants of the two treatment groups in the current study were provided with two types of WCF, and the control group participants did not receive any written feedback on their grammatical errors.

The results of this study are not in line with those of Truscott and Hsu (2008), indicating no significant relationship between the use of WCF and the writing accuracy of the learners. The results of this study can be considered as practical evidence advocating that written error correction is beneficial in decreasing the learners' grammatical errors. In effect, the findings demonstrated that learners who received WCF improved effectively in recognizing various written errors and incorporating the new grammar rules that they learned from the feedback in their writing. It is thus suggested that learners be provided with effective WCF so as to raise their writing accuracy by decreasing grammatical errors they make in novel compositions.

The results of this study also showed that due to long-term gains, the performance of learners in both treatment groups was better than that of the learners in the control group over time. The argument for the saliency of written error correction in learning L2 knowledge is related to Schmidt's theory of noticing (Schmidt, 2001) suggesting that students must first notice the L2 input before it can be further processed for learning. Consequently, it can be reasoned that the more the saliency and noticeability of the written error correction are increased, the more it will be effective. According to the findings of this study, providing L2 writers with written error correction, no matter what form of written feedback is used, could lead to long-term improvements in learners' writing accuracy, at least with respect to these 17 grammatical points. This finding is consistent with the results of some previous research on WCF (e.g., Bitchener, 2008, 2012).

However, the results of this study contradict those of some former studies that examined the different aspects of WCF in various contexts. For example, contrary to the results of Ellis

(2009) indicating no effect of the direct type of written feedback on the durable improvement of learners' writing accuracy, the findings of the present study indicate otherwise. According to our findings, direct WCF improves writing accuracy among the Iranian EFL learners. Contrary to Polio, Fleck, and Leder (1998) who suggested that students do not benefit from written error correction, this study claims the effectiveness of WCF strategies on the grammatical accuracy of the Iranian EFL learners. This study revealed that both kinds of WCF significantly contributed to writing accuracy when compared with no error feedback.

According to the results of the second research question, neither of these two specific types of written feedback used in this study produced better results, and both of them almost equally improved the writing accuracy of the learners. However, a closer look at the results revealed that the direct type of written feedback led to the better performance of the learners. In line with Chandler's (2003) argument, by giving learners direct written feedback, instructors may be able to raise learners' grammatical awareness and help them produce new pieces of writing with fewer mistakes. As a result, it is believed that students will be able to replicate their positive performance due to the learning gains acquired through direct WCF. On the other hand, indirect error correction contributes to the development of writing accuracy by cognitively engaging learners to focus on the clues provided by instructors, and by engaging learners in problem-solving activities that are situated in linguistic features, which in turn may result in long-term learning benefits (Bitchener, 2012).

A number of previous studies that have examined the comparison between direct and indirect types of written error feedback have not reached certain conclusions in this regard (e.g., Chandler, 2003; Junqueira & Payant, 2015). However, the study by Bitchener and Knoch (2010) showed that direct types of written error feedback were more effective when they were measured over a period of time in delayed post-tests. This result is somewhat in agreement with those of this study in the sense that the performance of the students receiving a direct type of written feedback was slightly better in all testing sessions. In turn, the indirect WCF recipients were able to keep some of the gains they had achieved in their post-test writings. However, compared with the performance of the first treatment group, the performance of the second treatment group was not significantly different.

Moreover, the current study differs from Ferris's (2006) study indicating that the indirect type of error correction has a greater impact on students' writing accuracy. Ferris believed that indirect written error feedback is likely to benefit students in the long run because it facilitates deeper internal processing, which contributes to the long-term retention among students. In addition, our findings contradict the results of Jamalinesari, Rahimi, Gowharyb, and Azizifar (2015) which revealed that learners receiving indirect WCF developed their writing accuracy in terms of eight types of grammatical structures than those receiving the direct kind of WCF on the same grammatical structures. However, the results of the present study showed that both direct and indirect types of written feedback almost equally improved the learners' writing accuracy.

5. Conclusion

This study showed that both direct and indirect types of WCF had a positive effect on the writing accuracy of Iranian EFL learners. In response to the skepticism expressed by Truscott

(1999) about the value of WCF, the results of this study can be considered as evidence to prove that WCF can help enhance the writing accuracy of Iranian EFL learners. Pedagogically, the findings of this study can be useful for designing instructional interventions, more particularly for writing instruction. However, a larger number of grammatical points and structures needs to be considered on the use of WCF in larger classes. This can be regarded simultaneously as a challenge and an opportunity for teachers to provide WCF on the writing compositions of EFL learners. In effect, the variations observed in the individual learner response to WCF indicates that written error correction might be beneficial for one learner but not for another. It is thus recommended that future research be done on probable differences between learners' assumptions and beliefs concerning the WCF and its efficacy in writing classes. More research can also add a qualitative description to our findings using various tools such as questionnaires and interviews with learners and teachers so that they can have a better understanding of the WCF and its practice in writing instruction.

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