# The Effect of Written Corrective Feedback on EFL Students' Writing Accuracy

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**Abstract**

The present study explores the effect of providing different types of written corrective feedback (WCF) on 79 Iranian EFL learners' writings over time through a pre-test, immediate post-test and delayed post-test. In this way, the study first aims to investigate the extent to which different types of WCF result in improved accuracy in writing over a period of two months, and then maintains to see if there is a differential effect on accuracy when the students are required to revise their writings based on the feedback provided to them over this period. However, to narrow down the scope of the study, considering the level of the learners, and the type and complexity level of the expected writing tasks, it was decided to use the three linguistic errors (capitalization errors, the correct use of definite and indefinite articles, and simple present tense verb) which occurred mostly frequently during the participants' first writing tasks as the target linguistic structures of the work. After analyzing the collected data, it was found that providing WCF indeed contributes to the accuracy of the students' writings because the results indicated each type of feedback employed in the treatment groups could clearly bring about writing improvement at varying degrees. In particular, the findings suggested that direct feedback might bring about greater effects on students' writing accuracy, whereas different types of feedback are more likely to produce rather long term improvement and/or learning over time.

**Keywords:** written corrective feedback, writing accuracy, revision, type of feedback

## 1. Introduction

Correcting students' language errors is thought to be a central part of every teacher's job, a professional duty that many language teachers excel in and that most language students expect. However, if we take a look at the available body of research for advice, the evidence is seemingly contradictory at best and discouraging at worst: For every study that shows positive effects for error correction, there is another study that reports no effects or even negative effects (Ferris, 1999).

Truscott (1996) commenced this debate by publishing "The case against grammar correction in L2 writing classes", claiming that grammar correction has no place in writing courses and should be abandoned (p. 328). To justify his claim, he argued that error correction, as it is typically practiced, overlooks SLA insights about the gradual and complex process of acquiring the forms and structures of a second language. He also outlined a range of practical problems related to the ability and willingness of teachers to give and learners to receive correction. In addition, he suggested that error correction is harmful since it diverts time and energy away from the more productive aspects of a writing program. Truscott's firmly-held position received immediate attention and led to heated discussions at conferences and several published journal responses, amongst which was Ferris's (1999) "The case for grammar correction in L2 writing classes: A response to Truscott (1996)".

In her response, Ferris (1999) argued that Truscott's claims were premature and overly strong (p.1). Contrary to Truscott, she believed that there is mounting research evidence that effective error correction-that which is selective, prioritized, and clear-can and does help at least some student writers (p.4). In addition, Ferris criticized him for jumping into conclusion based on limited, dated, incomplete, and inconclusive evidence, arguing for eliminating a pedagogical practice that is not only highly valued by students, but on which many thoughtful teachers spend a great

deal of time and mental energy because they feel that helping students to improve the accuracy of their writing is vitally important (p. 9).

What both Ferris (1999) and Truscott (1999) recommended was that teachers, practitioners, and researchers should look seriously and more in-depth at the case against grammar correction and for it. In his response to Ferris, Truscott (1999) acknowledges Ferris's claim that there are many interesting questions remain open in the field, but suggests that the logic and purpose of any research should be to search for those especial, hypothetical circumstances under which correction might not be a bad idea.

However, after about a decade, Hyland and Hyland's (2006) review of feedback on L2 students' writing revealed that there are still no clear answers to the questions researchers have addressed in this regard. As they have observed 'it may be that what is effective feedback for one student in one setting is less so in another' (p. 88). Therefore, what a great deal of research efforts since 1996 have shown as well as the possible implications for practice still remain in dispute.

*1.1 A Classification of Written Corrective Feedback*

One of the most practical classifications of written corrective feedback (WCF) for teachers is the one proposed by Ellis (2008). By inspecting both teacher handbooks, like Ur (1996) and published empirical studies (Chandler, 2003; Ferris, 2006; Robb, Ross, & Shortreed, 1986), Ellis presents a typology of the different types of WCF available to teachers and researchers. His typology distinguishes two sets of options relating to (1) strategies for providing feedback, and (2) the students' response to the feedback. Different types of WCF provided by teachers for correcting linguistic errors in students' written work are summarized and presented in Table 1. According to Ellis, major types of WCF are direct, indirect, metalinguistic, focused/unfocused, electronic, and reformulation, the descriptions of which are presented in the Table 1. Since the focus of this study is mainly on direct and indirect types of feedback, we briefly elaborate on these two.

Table 1. Types of teacher written corrective feedback

| Type of CF | Description | Studies |
|---|---|---|
| **A** Strategies for providing CF | | |
| **1** Direct CF | The teacher provides the student with the correct form. | e.g. Lalande (1982) and Robb *et al.* (1986). |
| **2** Indirect CF | The teacher indicates that an error exists but does not provide the correction. | |
|   **a** Indicating + locating the error | This takes the form of underlining and use of cursors to show omissions in the student's text. | Various studies have employed indirect correction of this kind (e.g. Ferris and Roberts 2001; Chandler 2003). |
|   **b** Indication only | This takes the form of an indication in the margin that an error or errors have taken place in a line of text. | Fewer studies have employed this method (e.g. Robb *et al.* 1986). |
| **3** Metalinguistic CF | The teacher provides some kind of metalinguistic clue as to the nature of the error. | |
|   **a** Use of error code | Teacher writes codes in the margin (e.g. ww = wrong word; art = article). | Various studies have examined the effects of using error codes (e.g. Lalande 1982; Ferris and Roberts 2001; Chandler 2003). |
|   **b** Brief grammatical descriptions | Teacher numbers errors in text and writes a grammatical description for each numbered error at the bottom of the text. | Sheen (2007) compared the effects of direct CF and direct CF + metalinguistic CF. |
| **4** The focus of the feedback | This concerns whether the teacher attempts to correct all (or most) of the students' errors or selects one or two specific types of errors to correct. This distinction can be applied to each of the above options. Unfocused CF is extensive. Focused CF is intensive. | Most studies have investigated unfocused CF (e.g. Chandler 2003; Ferris 2006). Sheen (2007), drawing on traditions in SLA studies of CF, investigated focused CF. |
|   **a** Unfocused CF  **b** Focused CF | | |
| **5** Electronic feedback | The teacher indicates an error and provides a hyperlink to a concordance file that provides examples of correct usage. | Milton (2006). |
| **6** Reformulation | This consists of a native speaker's reworking of the students' entire text to make the language seem as native-like as possible while keeping the content of the original intact. | Sachs and Polio (2007) compared the effects of direct correction and reformulation on students' revisions of their text. |

Adapted from "A typology of written corrective feedback types" by Ellis (2008)

*1.2 Studies on Direct vs. Indirect Feedback*

A distinction has been made in the written corrective feedback literature between direct feedback—that is, explicit corrections provided by the teacher or another reader—and indirect feedback—that is, an error called to the student's attention but left for the student to correct (Ferris, 2010). Both types can be further divided into subcategories that can

be positioned on a more explicit-less explicit feedback continuum (Heift, 2010). For example, indirect feedback can be coded (marking an error with a metalinguistic code such as WO for 'word order') or uncoded (underlining or circling errors). In another classification, Bitchener and Knoch (2009) suggest that indirect CF may be provided in one of four ways: underlining or circling an error; recording in the margin the number of errors in a given line; or using a code to show where an error has occurred and what type of error it is.

Direct CF has the advantage that it provides learners with explicit guidance about how to correct their errors. This is clearly desirable if learners do not know what the correct form is (i.e. are not capable of correcting the errors themselves). Ferris and Roberts (2001) suggest direct CF is probably better than indirect CF with student writers of low levels of proficiency. In line with Ferris and Roberts' argument, Ellis (2008) claims that indirect feedback where the exact location of errors is not shown might be more effective than indirect feedback where the location of the errors is shown, as students would have to engage in deeper processing.

The bulk of the studies that have investigated the general effectiveness of these strategies and approaches have tended to be grouped according to those that have compared direct and indirect types of WCF, different types of indirect feedback, and different types of direct feedback. Some of these studies found more beneficial effects for indirect WCF options (Lalande, 1982), others for direct options (Chandler, 2003), and still others found no difference between the two (Robb et al., 1986). Obviously, firm conclusions cannot be made from these conflicting results.

Recent SLA studies on WCF, however, have argued for the superiority of direct feedback, at least for a few targeted features (Bitchener, 2008; Bitchener & Knoch, 2009; Ellis et al., 2008; Sheen, 2007), whereas L2 writing researchers have argued for the importance of indirect feedback as a means to engage student writers in guided problem-solving and to encourage them to take more responsibility for their own progress (Ferris, 2002, 2003, 2006).

As well as comparing direct and indirect approaches, several other studies (Ferris et al., 2000; Ferris & Roberts, 2001; Robb et al., 1986) have investigated the relative effectiveness of different types of indirect feedback (coded and uncoded), but none has found any difference between the two options. An exception is Ferris's (2006) study in which she found positive long-term effects for indirect feedback given in response to 'treatable' error categories. The ESL learners in Ferris's study gradually and systematically decreased the number of errors that they were able to correct on their own (e.g., in verb morphology) following indirect prompts (metalinguistic error codes) provided by the instructor. In contrast, no long-term improvement was found in 'untreatable' error categories (e.g., errors made when a student attempts to use a structure not yet learned), for which instructors provided direct corrections (supplying correct forms).

*1.3 Studies on Revision*

Generally speaking, an essential feature of corrective feedback is how the student responds to the corrections provided by the teacher. The student's response frequently takes the form of revision of the initial draft of the written work—an important stage in process writing (as opposed to product writing). From the perspective of L2 writing researchers, the development of effective strategies and writing processes that can impact students' subsequent writing is the primary goal of writing instruction. Therefore, revision studies are not only interesting but also provide important evidence that helps teachers refine their practice in accordance with the findings of such studies that investigate the effectiveness of WCF for student writers. Much of the research that has investigated WCF has centered on whether students are able to make use of the feedback they receive when they revise. Revision is usually viewed as part of WCF, i.e., students may or may not be given the opportunity to revise their writing following one of the other types of feedback. It then becomes possible to investigate whether providing the opportunity to revise assists learning or not (Chandler, 2003).

One example is the study by Ferris et al. (2000) in which the effects of different treatment conditions on both text revisions and new pieces of writing were investigated. Discussing the findings of the study, Ferris (2002) reported that direct error correction led to more correct revisions (88%) than indirect error feedback (77%). Over the course of the semester, however, it was noted that students who received indirect feedback reduced their error frequency ratios substantially more than those who received direct feedback.

Chandler (2003) compared indirect CF plus the opportunity to revise with indirect CF where there was no opportunity to revise. Chandler reported that accuracy was improved from the first to the fifth piece of writing significantly more

in the group that was required to correct their errors than in the group that just received indication of their errors. Also, this increase in accuracy was not accompanied by any decrease in fluency. Chandler noted that 'what seems to be a crucial factor is having the students do something with the error correction besides simply receiving it' (p. 293).

Ellis (2008) claims that the question of whether to require students to simply attend to the corrections or to revise based on them raises an interesting theoretical issue. He puts this question out that whether it is the additional 'input' that the corrections afford or the 'output' that occurs when students revise that is important for learning. Guenette (2007) argued that students 'have to notice the feedback and be given ample opportunities to apply the corrections' (p. 52). But students may succeed in noticing corrections even if they are not required to revise their writing. Here, Ellis states that again there is lack of literature and no research that has addressed this issue.

Based on these previously discussed studies and the contradiction in the findings, and following recent trends and suggestions for further research (Ellis, 2008; Ferris, 2010), the purpose of this study is firstly to add to the growing body of research investigating the extent to which different types of WCF result in improved accuracy in writing, and secondly to investigate if there is a differential effect on accuracy when students are required to revise their writings based on the feedback provided to them or not. Two research questions were therefore framed to investigate these purposes:

1. Does the accuracy in the use of simple present tense verbs, definite and indefinite articles, and capitalization improve over a 2-month period as a result of direct and indirect WCF?

2. Does accuracy in the use of these grammatical features vary according to the students' revision of their written work in response to the teacher's WCF?

## 2. Methodology

### 2.1 Design

The objective of the present experimental study is to compare the effectiveness of two types of corrective feedback over time: direct (explicit) error correction in the form of metalinguistic information, and indirect (implicit) error correction. The subjects of the study were randomly assigned to one of the four groups: group 1 received direct corrective feedback (errors were corrected by the teacher); group 2 received indirect CF (teacher indicated and located the errors and learners were required to revise their papers); group 3 received indirect CF (teacher indicated and located the errors and students were just given back the text: no revision required); group 4 was the control group and thus received no feedback. The students in experimental groups received the treatment for the first two weeks of the course.

### 2.2 Participants

In the present study, seventy nine students participated from two *General English* classes in a higher education Institute in Iran. The students were identified as low-intermediate by the course instructor teaching both classes. The mean age of all participants was 21 years old. Only about 10% of the learners indicated that they had been formally engaged in studying English for 1 year to 3 years in private English schools. Around 90% of participants indicated that their familiarity with English was restricted to junior-high and high school classes. In addition, in order to verify whether all participants were the same, a pre-test was administered which indicated no significant differences between the four group.

### 2.3 Procedure

To examine the efficacy of WCF over time in this paper, the relative effectiveness of two different types of feedback was assessed over a 2-month period by means of a pre-test–post-test design; a pre-test at the beginning of the 2-month period and post-tests after 2 weeks (an immediate posttest), and 2 months (a delayed posttest). The teaching approach adopted by the course instructor and the course book placed emphasis on developing reading skills in English. In addition, at the end of each book chapter, there were some complementary activities providing students opportunities to enhance their vocabulary and writing skills. Learners received two sessions of English language instruction a week. They were randomly assigned to one of the three treatment groups (group 1 = 20 students, group 2 = 20 students, group 3 = 20 students) or to the control group (group 4 = 19 students). To compare the means of the writing tests for the treatment groups and the control group, Analysis of Variance (ANOVA) was employed to evaluate the obtained data.

As for the target linguistic structures employed in the study, the researchers decided to narrow down the scope of the study design and thus took into account the level of the learners and the type and complexity level of the expected writing tasks. To do so, the three linguistic errors which had occurred mostly frequently during the participants' first writing task were only focused on as the target linguistic structures of the work including capitalization errors, the correct use of definite and indefinite articles, and simple present tense verbs. In fact, the decision to limit the focus of the feedback was based on the positive findings of SLA studies where intensive corrective feedback has successfully targeted a single linguistic category (Bitchener & Knoch, 2009; Ellis et al., 2006; Muranoi, 2000) or focused on few (Bitchener et al., 2005).

## 3. Results and Analysis

To find the answers to the research questions, the data were collected and analyzed quantitatively using SPSS. First, normal distribution of the data was checked using skewness and kurtosis statistics for the four groups. To have normal distribution, skewness and kurtosis values should be between -2 and +2. As Table 2 indicates, all the skewness and kurtosis values are between -2 and +2 for all groups. Therefore, we are sure that the data enjoy normal distribution.

Table 2. Descriptive statistics of pre-test

| Group | | N | Minimum | Maximum | Skewness | | Kurtosis | |
|---|---|---|---|---|---|---|---|---|
| | | Statistic | Statistic | Statistic | Statistic | Std. Error | Statistic | Std. Error |
| Direct CF | pre.test | 19 | 10.00 | 19.50 | .856 | .524 | .599 | 1.014 |
| | immediate.p.t | 19 | 9.00 | 20.00 | .363 | .524 | -.655 | 1.014 |
| | delayed.p.t | 19 | 9.50 | 20.00 | .523 | .524 | -.484 | 1.014 |
| | Valid N (listwise) | 19 | | | | | | |
| Indirect CF Revision | pre.test | 20 | 9.00 | 18.50 | -.227 | .512 | -.777 | .992 |
| | immediate.p.t | 20 | 8.50 | 20.00 | -.349 | .512 | -.541 | .992 |
| | delayed.p.t | 20 | 9.50 | 20.00 | -.337 | .512 | -.586 | .992 |
| | Valid N (listwise) | 20 | | | | | | |
| Indirect CF No Revision | pre.test | 19 | 10.00 | 20.00 | .305 | .524 | .033 | 1.014 |
| | immediate.p.t | 19 | 9.00 | 20.00 | -.015 | .524 | -.184 | 1.014 |
| | delayed.p.t | 19 | 10.00 | 20.00 | .282 | .524 | .063 | 1.014 |
| | Valid N (listwise) | 19 | | | | | | |
| Control Group | pre.test | 21 | 10.00 | 16.50 | .485 | .501 | -.747 | .972 |
| | immediate.p.t | 21 | 8.00 | 17.00 | -.120 | .501 | -.341 | .972 |
| | delayed.p.t | 21 | 8.50 | 16.50 | -.153 | .501 | .215 | .972 |
| | Valid N (listwise) | 21 | | | | | | |

Then, one-way Analysis of Variance (ANOVA) was performed on the pre-test to check that whether the four groups are at the same level. Descriptive statistics for the four groups can be seen in Table 3 and graphically in Figure 1.

Table 3. One-way Analysis of Variance (ANOVA) of the pre-test

| | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | | Minimum | Maximum |
|---|---|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound | | |
| Direct CF | 19 | 13.1579 | 2.65650 | .60944 | 11.8775 | 14.4383 | 10.00 | 19.50 |
| Indirect CF Revision | 20 | 14.1000 | 2.65370 | .59338 | 12.8580 | 15.3420 | 9.00 | 18.50 |
| Indirect CF No Revision | 19 | 13.8421 | 2.67734 | .61422 | 12.5517 | 15.1325 | 10.00 | 20.00 |
| Control Group | 21 | 12.7143 | 2.02837 | .44263 | 11.7910 | 13.6376 | 10.00 | 16.50 |
| Total | 79 | 13.4430 | 2.52296 | .28385 | 12.8779 | 14.0081 | 9.00 | 20.00 |
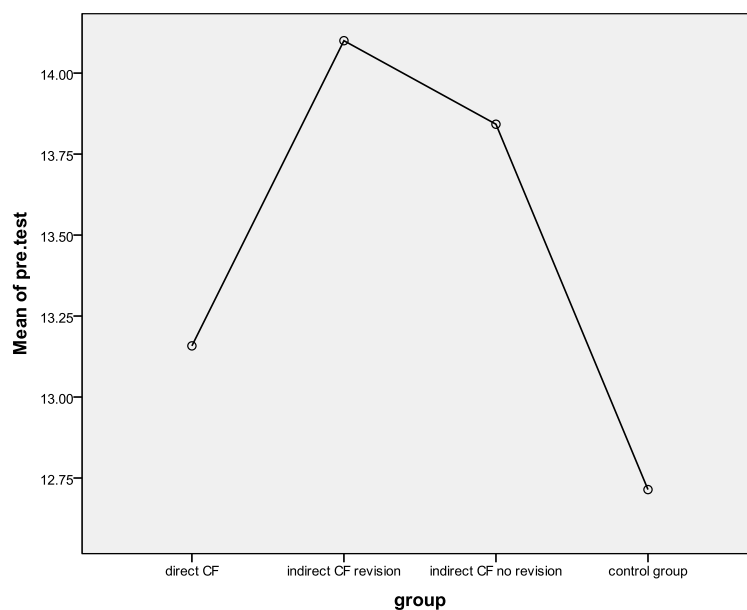


Figure 1. One-way Analysis of Variance (ANOVA) of the pre-test

As Table 3 and Figure 1 illustrate, mean of the writing task for direct CF was 13.15, for direct CF with revision 14.10, for direct CF with no revision 13.84, and for the control group 12.71. To see whether these differences are statistically significant, ANOVA table was checked.

Table 4. ANOVA of the pre-test

|  | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Between Groups | 24.355 | 3 | 8.118 | 1.290 | .284 |
| Within Groups | 472.138 | 75 | 6.295 |  |  |
| Total | 496.494 | 78 |  |  |  |

As ANOVA table indicates, there is no statistically significant difference among the four groups on the pre-test [F= 1.29, p>.05]. Therefore, we can now proceed with the analysis and be sure that in case of any differences among the groups, it is due to treatment.

Following this, the differences among the four groups in immediate post-test were examined. Descriptive statistics can be seen in Table 5 and graphically in Figure 2.

Table 5. Descriptive statistics of post-test

|  | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | | Minimum | Maximum |
|---|---|---|---|---|---|---|---|---|
|  |  |  |  |  | Lower Bound | Upper Bound |  |  |
| Direct CF | 19 | 13.6316 | 3.12180 | .71619 | 12.1269 | 15.1362 | 9.00 | 20.00 |
| Indirect CF Revision | 20 | 14.9500 | 3.15770 | .70608 | 13.4722 | 16.4278 | 8.50 | 20.00 |
| Indirect CF No Revision | 19 | 14.0789 | 2.83462 | .65031 | 12.7127 | 15.4452 | 9.00 | 20.00 |
| Control Group | 21 | 12.7143 | 2.28895 | .49949 | 11.6724 | 13.7562 | 8.00 | 17.00 |
| Total | 79 | 13.8291 | 2.92523 | .32911 | 13.1739 | 14.4843 | 8.00 | 20.00 |
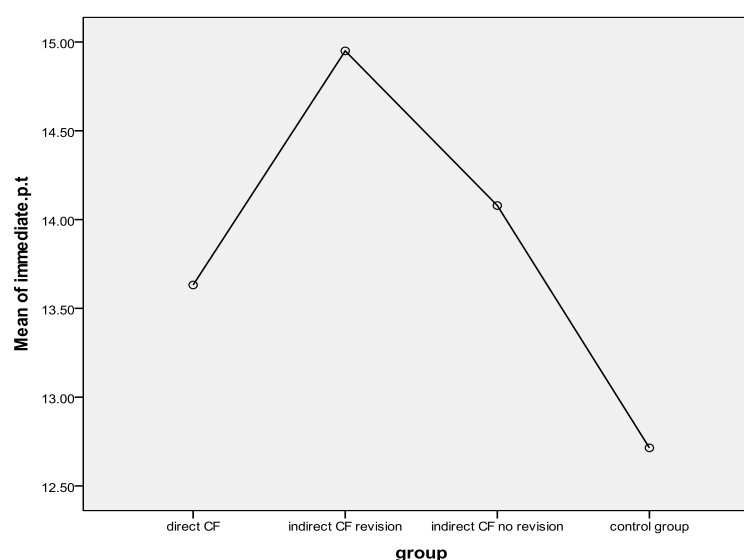


Figure 2. One-way Analysis of Variance (ANOVA) of the post-test

As Table 5 and Figure 2 show, mean of the writing task for direct CF was 13.63, for direct CF with revision 14.95, for direct CF with no revision 14.07, and for the control group 12.71. To see whether these differences are statistically significant, ANOVA table was checked.

Table 6. ANOVA of the post-test

|  | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Between Groups | 53.155 | 3 | 17.718 | 2.163 | .099 |
| Within Groups | 614.288 | 75 | 8.191 |  |  |
| Total | 667.443 | 78 |  |  |  |

As Table 6 shows, there is no statistically significant difference among the four groups in the immediate post-test [F= 2.16, p>.05]. Finally, the difference among the four groups with regard to delayed post-test was examined. Descriptive statistics can be seen in Table 7 and graphically in Figure3.

Table 7. Descriptive statistics of the delayed post-test

|  |  |  |  |  | 95% Confidence Interval for Mean | | | |
|---|---|---|---|---|---|---|---|---|
|  | N | Mean | Std. Deviation | Std. Error | Lower Bound | Upper Bound | Minimum | Maximum |
| Direct CF | 19 | 13.6316 | 2.92424 | .67087 | 12.2221 | 15.0410 | 9.50 | 20.00 |
| Indirect CF Revision | 20 | 15.1750 | 2.88497 | .64510 | 13.8248 | 16.5252 | 9.50 | 20.00 |
| Indirect CF No Revision | 19 | 14.1842 | 2.63107 | .60361 | 12.9161 | 15.4523 | 10.00 | 20.00 |
| Control Group | 21 | 12.8571 | 1.95027 | .42558 | 11.9694 | 13.7449 | 8.50 | 16.50 |
| Total | 79 | 13.9494 | 2.70516 | .30435 | 13.3434 | 14.5553 | 8.50 | 20.00 |
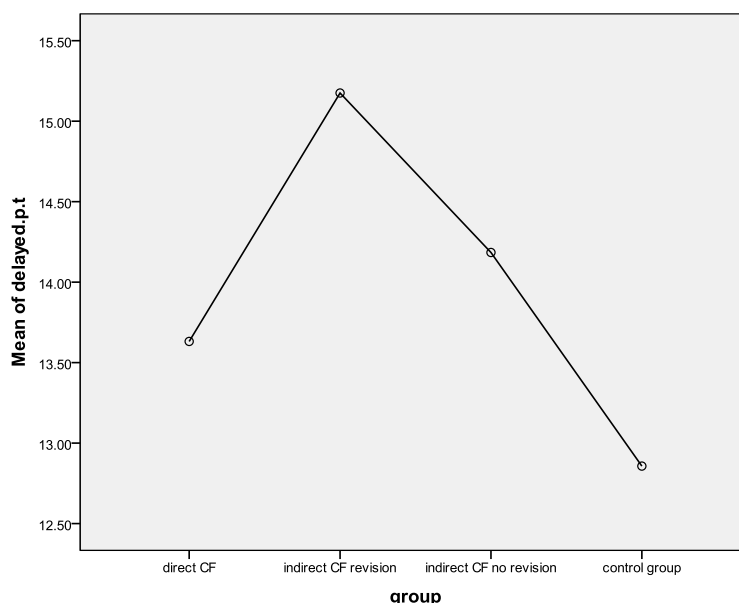
Figure 3. One-way Analysis of Variance (ANOVA) of the delayed post-test

As Table 7 and Figure 3 shows, mean of the writing task for direct CF was 13.63, for direct CF with revision 15.17, for direct CF with no revision 14.18, and for the control group 12.85. To see whether these differences are statistically significant, ANOVA table was checked.

Table 8. ANOVA of the delayed post-test

|  | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Between Groups | 58.062 | 3 | 19.354 | 2.831 | .044 |
| Within Groups | 512.735 | 75 | 6.836 |  |  |
| Total | 570.797 | 78 |  |  |  |

As Table 8 shows, there is a statistically significant difference among the four groups in delayed post-test [F= 2.83, p<.05]. To find the exact location of difference, post-hoc analysis with Tukey was run. Results can be seen in Table 8.

Table 9. Multiple comparison

| (I) group | (J) group | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound |
| Direct CF | indirect CF revision | -1.54342 | .83764 | .262 | -3.7444 | .6575 |
| | indirect CF no revision | -.55263 | .84831 | .915 | -2.7816 | 1.6764 |
| | control group | .77444 | .82786 | .786 | -1.4008 | 2.9497 |
| Indirect CF Revision | direct CF | 1.54342 | .83764 | .262 | -.6575 | 3.7444 |
| | indirect CF no revision | .99079 | .83764 | .640 | -1.2102 | 3.1918 |
| | control group | 2.31786* | .81693 | .029 | .1713 | 4.4644 |
| Indirect CF No Revision | direct CF | .55263 | .84831 | .915 | -1.6764 | 2.7816 |
| | indirect CF revision | -.99079 | .83764 | .640 | -3.1918 | 1.2102 |
| | control group | 1.32707 | .82786 | .383 | -.8482 | 3.5023 |
| Control Group | direct CF | -.77444 | .82786 | .786 | -2.9497 | 1.4008 |
| | indirect CF revision | -2.31786* | .81693 | .029 | -4.4644 | -.1713 |
| | indirect CF no revision | -1.32707 | .82786 | .383 | -3.5023 | .8482 |

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

As Table 9 indicates, there is only one significant difference among the four groups. There is a statistically significant difference between control group and indirect CF with revision group in the delayed post-test [mean difference= 2.31, p<.05].

## 4. Discussion

As it was stated earlier, the present study was to investigate the impact of written corrective feedback on writing accuracy of the Iranian EFL learners. The relative effectiveness and usefulness of two different types of feedback was assessed over a 2-month period by means of a pre-test–post-test design. After the collection and analysis of data, it was indicated that providing written corrective feedback has a positive effect on the accuracy of the students' writings. Moreover, the findings revealed that the utilization of each type of feedback in the treatment groups could result in improving the writing at different levels. Consistent with this study, Bitchener (2008) revealed that the accuracy of students who received written corrective feedback in the immediate post-test outperformed those in the control group and that this level of performance was retained 2 months later and he claimed that written corrective feedback should be emphasized more in teaching and learning process. In addition, Bitchener, Young, and Cameron (2005) emphasized the positive effect of written corrective feedback on writing accuracy of the learners. On the other hand, Bitchener and Knoch (2009) claimed that error correction has no significant effect on the learners' writing accuracy and can be used for low level students. Furthermore, the results of the present study suggested that direct feedback brings about greater impacts on students' writing accuracy, whereas various kinds of feedback are more likely to produce long-term learning improvement over time.

## 5. Conclusion

The present experimental study set out to investigate the impact of providing different types of WCF (direct and indirect WCF) on 79 Iranian EFL learners' writings over time through a pre-test, immediate post-test, and delayed post-test. The grammatical structures included in the study were related to capitalization, the correct use of definite and indefinite articles, and simple present tense verb. Overall, the findings indicated that providing WCF indeed

contribute to the accuracy of the students' writings because the results indicated that each type of feedback in the treatment groups could bring about writing improvement, but with varying degrees.

In fact, as shown above, it is clear that the mean of the indirect CF with revision is higher than that of the control group; therefore, it can be concluded that seemingly those students who receive corrective feedback and have to revise their papers show better performance in delayed post-test. In this sense, as a pedagogical implication, it is suggested that while Iranian language teachers try to offer WCF (more indirect CF) to the students as much as possible, they should also not expect too much from their students because any learning caused by WCF is by no means quick and obviously takes some time according to the obtained findings.

However, like all other studies, the current study is not without any limitations. One of the limitations is that the small sample size may restrict the generalization of findings of the study. On the other hand, there is also need for some future studies to look into the differential effect of the types of WCF over longer time spans (e.g. a semester or a year) and/or over different linguistic structures with other proficiency levels.

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