Efficacy of Written Corrective Feedback in the Short and Long Term

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Abstract

The purpose of this study was twofold: 1) to examine the general efficacy of different types of Written Corrective Feedback (WCF) on the errors of the target structure (past simple tense) in the short and long term and 2) to compare the possible difference in the effect that different WCF types might have on improving the target structure in the short and long term. One hundred and five EFL (English as Foreign Language) Iranian learners participated in this quasi-experimental study. They were divided into four experimental groups (20 in each) that received different WCF, that is, metalinguistic, direct, indirect, reformulation and a control group (n=25) that did not receive any feedback. The effects of the WCF types were measured using a Picture Description Test and an Error Correction Test as a pre-test, an immediate post-test, and a delayed post-test. It was found that all experimental groups performed better than the control group in the short term, but the metalinguistic and indirect WCF did not lose their effect in the long term. The findings from the delayed post-test confirmed the superiority of the metalinguistic and indirect WCF over the reformulation and direct WCF in the long term.

1.   Introduction

There are many arguments suggesting how best to go about the teaching of writing effectively (Ellis, 2006). Giving feedback is one of the most appropriate ways of instruction in foreign language and second language writing. The underlying assumption for giving corrective feedback is that it will help learners to notice their errors and, subsequently, to produce the correct forms (Storch, 2010). Schmidt's Noticing Hypothesis claims that learners should notice the gap between their language productions and the correct forms in the target language in order to learn the target language. Schmidt (1990) believed that corrective feedback facilitates learners' noticing the difference between their incorrect utterance and the target form, leading to L2 development. Corrective feedback is also a pedagogical technique teachers use to draw attention to students' erroneous utterances, which may result in learners' modified output (Suzuki, 2005). According to Long (1996), corrective feedback is connected to further ESL (English as Second Language) improvement, in that it can offer students opportunities to perceive the differences between output and input by means of a negotiation of meaning.

Ultimately, the aim of corrective feedback is language learning. It is provided on the assumption that it will lead not only to improved accuracy in the short term (on immediate revisions) but to L2 acquisition in the long term. That is, it is assumed that feedback will ultimately lead learners to greater mastery and control over the use of partially acquired linguistic knowledge (Bitchener, 2009). However, for scholars of second language writing, how to most effectively respond to student writing remains a matter of great interest (McMartin-Miller, 2014) and for writing teachers, it is a critical issue which is usually laden with disappointment and lack of determination. Teachers are confused about what they should look for in the writing, how they can give clear and specific feedback to motivate and encourage the learners, how they can make sure that the learners

receive the feedback and learn from that, and finally how they can manage the energy and time to give feedback. In spite of these self-doubts, only a few of them would state that they should not respond to learner's writing. There is a need to investigate the impact, processes, and aims of the Written Corrective Feedback (WCF) in order to understand this issue and help the instructors (Ferris, 2014).

2. Literature Review

The effects of various feedback types on the success of foreign or second language learning have been researched by many scholars in recent years. The central questions of these studies revolve around what kinds of feedback should be given to learners for effective learning. Moreover, both second language acquisition researchers and language educators have paid careful attention to corrective feedback (CF), but they have frequently disagreed about whether to correct errors, what errors to correct, how to correct them, and when to correct them (for example, Hendrickson, 1978 and Hyland & Hyland, 2006). So, the research in support of WCF is far from conclusive (Ellis et al., 2008; Ferris, 2003; Guenette, 2007; Hyland & Hyland, 2006; Storch, 2010).

In general, the demand for research on the value of WCF can be drawn back to the discussion between Truscott and Ferris. Prior to 1996 (when Truscott claimed that WCF is not useful), the assumption that WCF is helpful in improving the accuracy of the learners' writing was not challenged. In fact, as Truscott (1996; 1999) and Ferris (1999) expressed, research evidence was limited in terms of the studies that had tried to address the question of the efficacy of WCF. Ferris (1999) believed that Truscott's claims were premature because the body of evidence he presented was too limited and because there were too many methodological flaws in the design and analysis of the published studies. She also explained that short-term investigations involving text revision reveal improvement in accuracy as a result of WCF and that students believed it helped them improve their writing.

Therefore, to date, research on WCF has shown some interesting findings, but the contradiction of the results makes it clear that more research

needs to be done. Answering the call for more research on the effect of corrective feedback, Bitchener et al. (2005) compared the effect of three types of feedback (direct written feedback plus teacher-student conference, direct written feedback alone, and no feedback) on how well the students corrected the errors pertaining to the use of three grammatical categories, i.e., prepositions, the past simple tense, and the definite article. They used 53 learners who were divided into three groups. The first group included 19 students, who received direct written feedback along with a five-minute conference with the researcher after completing each new composition. The second group included 17 students, who only received direct written feedback. The third group included 17 students, who were only given feedback on the quality of their content and organisation, rather than feedback on the linguistic accuracy of their writing. After a twelve week period, learners were asked to produce a novel piece of writing. Three kinds of errors were analysed including the definite article, prepositions, and the simple past tense. These error types were chosen for analysis based on the fact that they represented the three most frequent error types in the initial composition. The results showed no difference between the three feedback groups when the overall students' errors were considered. However, with respect to the students' errors in any one of the grammatical categories, the study found significant differences among the groups: the feedback groups made more improvement in their writing than the no-feedback group. This study, however, only testifies to the joint effect of written and oral CF on learners' writing.

Moreover, Van Beuningen et al. (2008) cautiously suggested that direct CF might be more beneficial than indirect correction. There was no significant difference between the direct and indirect CF treatment at a p-value of 0.06, but when each treatment was compared to the two control (no CF) conditions, only the learners receiving direct CF significantly outperformed pupils in the control groups when writing a new text.

Sachs and Polio (2007) reported an interesting study that compared reformulation with direct error correction. They examined the effectiveness of written error correction versus reformulations of FL (foreign language) learners'

writing as two means of improving learners' grammatical accuracy on a three-stage composition-comparison-revision task. Fifteen adults participated in a repeated-measures study with three experimental conditions: error correction, reformulation, and reformulation with think-aloud. All participants had to write a 30-min picture description. The participants in the first experimental condition had to look at written error corrections of the story for 15 minutes on the next day. After that, they revised a clean copy of the original story without access to the corrections. The participants in the second experimental condition had to compare the story to a reformulated version for 15 minutes, and then revise a clean copy of the original story without access to the reformulation. The participants in the third experimental condition had to compare the story to a reformulated version while thinking aloud. After that, they had to revise a clean copy of the original story without access to the reformulation. In their study, the students were shown their reformulated/corrected stories and asked to study them for 20 minutes and take notes if they wanted. Then, one day later, they were given a clean sheet of paper and asked to revise their stories but without access to either the reformulated/corrected texts or the notes they had taken. Both the groups that received reformulation and corrections outperformed the control group. However, the corrections group produced more accurate revisions than the reformulation group. As Sachs and Polio (2007) pointed out, reformulation is a technique that is not restricted to assisting students with their surface level linguistic errors; it is also designed to draw attention to higher order stylistic and organisational errors. Thus, their study should not be used to dismiss the use of reformulation as a technique for teaching written composition. Nevertheless, it would seem from this study that it does not constitute the most effective way of assisting students to eliminate linguistic errors when they revise.

In general, the controversy concerning WCF centres on a number of issues, such as: the efficacy of different types of WCF, degree of explicitness of WCF, explicit and implicit knowledge, focus of WCF, and the selection of error to be corrected.

The research on WCF has uncovered some interesting findings, but since some of the findings are inconsistent, it is clear that more research needs to be

done. Furthermore, a large majority of published feedback research has been conducted in L1 and ESL college contexts (e.g., Fazio, 2001; Chandler, 2003 among others). So, empirical research carried out in other contexts, especially under-represented contexts such as elementary and EFL contexts will be a welcome addition to the field (Lee, 2014). As feedback is an area of work that affects all writing teachers and their students, it is important that the literature be augmented by research studies conducted in different parts of the world. This study is an attempt to fill the gap in the literature on WCF. The theoretical framework of this study is "Skill Acquisition Theory", based on which it is believed that explicit knowledge can help to develop the implicit. WCF is also believed to further assist this process (Ellis, 2010). The purpose of this study is two-fold: 1) to examine the general efficacy of different types of WCF on the errors of the target structure (past simple tense) in the short and long term, 2) to compare the possible difference in the effect that different WCF types might have on improving the target structure in the short and long term.

The following research questions are going to be answered in this study:

1) What effect does focused metalinguistic WCF have on learners' accuracy of past simple tense?

2) What effect does focused direct WCF have on learners' accuracy of past simple tense?

3) What effect does focused indirect WCF have on learners' accuracy of past simple tense?

4) What effect does reformulation WCF have on learners' accuracy of past simple tense?

5) Is there any difference in the effect that different WCF types have on learners' accuracy of past simple tense?

It is worth mentioning that due to insufficient justification in the literature, it was not possible to develop the hypotheses for the research questions mentioned above.

3.   Methods

3.1.   Participants

The present study was conducted in the English Language Department of Payam-e-Noor University in Ardabil (Iran) during the spring semester of 2014. One hundred and five intermediate level learners (46 male, 59 female) ranging in age from 20 to 32 (average age: 23) (Table 3.1) participated in the study. Their first language was Azeri Turkish and second language was Persian, so the sample was homogeneous with regard to the language spoken. They were undergraduate students pursuing a Bachelor's degree in translation studies.

Subsequently, they were randomly divided into five groups i.e. 20 in each experimental group and 25 for the control group. The control group did not receive any feedback while the four experimental groups received different kinds of feedback on the target structure, the past simple tense. This structure was problematic for them based on the pre-test. One of the experimental groups received metalinguistic feedback (explicit comments regarding the nature of the errors they have made). The second group received direct feedback (they received the correct form of the error they had made under the erroneous structure). The third experimental group received indirect feedback (which only specifies that in some way an error has been made by underlining the erroneous structure). The last group received the reformulation of their writing which was handed to them in a separate sheet of paper. Those students, who did not take all the writing tasks were eliminated from the data analysis. But those who took all the tasks received two extra marks on their final exam and an honorarium for participating in the study.

3.2. Target Structure

One of the issues that Truscott expressed against providing WCF was the readiness of learners (Piennemann, 1998) to acquire a specific structure, because the acquisition of some forms has been proven to follow a natural order (Clahsen

et al., 1983). However, it is possible that the teacher provides WCF on one or two targeted forms that have been proven to be repeatedly problematic for the learners and they agree that it should be targeted for an agreed period of time (Bitchener & Knoch, 2009).

Based on the findings from the pre-test and the Picture Description Test, the past simple tense form was deemed to be difficult for learners and corresponded with at least two of the criteria suggested by Harley (1993) that were actively used in the writing of the learners and were the most problematic structure for the learners. We also elected to investigate focused CF, where only one type of error is corrected and the rest ignored, rather than unfocused CF, where all (or most) errors are corrected. This decision was motivated by recent studies (e.g., Bitchener & Knoch, 2008) which have shown that focused CF is effective and by Farrokhi and Sattapour's (2012) study, which showed that it was more effective than unfocused CF.

3.3. Procedure

This study had a quasi-experimental design (a pre-test, immediate post-test, and delayed post-test design). The design of the study was similar to Shintani and Ellis' (2013) study that compared the influence of direct WCF and metalinguistic explanation on explicit and implicit knowledge of the learners. The reason for following their study was because it was the only study that had specifically addressed the effects of WCF on explicit and implicit knowledge based on Skill Acquisition Theory.

In Shintani and Ellis' study, they had three groups that participated in three sessions. In the first session, they completed a background questionnaire, the Error Correction Test (as pre-test) and the first writing task (picture description). In the second session (time 2) the groups received their respective feedback and were asked to revise and then do the second writing task. At time 3, the third session, they completed their third writing task, following the exit questionnaire and the same Error Correction Test as at time 1 (this time as post-test).

This study, on the other hand, made minor adaptations of Shintani and Ellis' study. Although similar tests were used in this study, the target structure, number of treatment sessions and WCF types were different. This study also was designed to take 11 weeks. In the first week, a background questionnaire and the first pre-test were administered to find out the problematic target structure. This was followed closely by the second pre-test (in the 2nd week) that was an Error Correction Test and the first writing assignment (Picture Description Test). Then, the teacher collected the learners' written stories and the researcher provided the considered feedback (for the experimental groups). After that, the teacher handed the comments back to the learners in the next session, that is, week 3. Upon receiving the papers, the learners had time to examine the feedback and were asked to revise their writing. Then after a short break of 10 minutes in the same session, they were asked to write the next story. The story was different from the first task. Then, in weeks 4, 5, and 6 the same pattern was followed. In week 7, an immediate post-test (the same pre-test) was given to measure the effects of the treatment in the short term. Finally, for the possible effects of the treatment over time, a delayed post-test (the same pre-test) was given in the 11th week.

3.4. Data Analysis Procedure

The scores of the Picture Description Test were calculated with regard to the percentages of forms correctly supplied in "obligatory occasions". To derive the accuracy percentages for all the participating individuals in the current study (e.g., [5/10]*100 = 50), Pica's (1994) "target-like use analysis" formula was adopted, i.e.

$$\frac{(n) \text{ number of correct suppliance in contexts}}{(x) \text{ total number of obligatory contexts}} \times 100 = \%percentage\ of\ accuracy$$

In the Error Correction Test, however, one point was awarded for successful correction of the targeted form in each sentence. In line with the literature available on this type of test (e.g., Ellis et al., 2008), the distractor items which

did not contain any errors were excluded from consideration in scoring the correction test.

4. Results

Table 1 illustrates the descriptive statistics for the total scores of the subjects. The total scores (the combination of the scores of two tests) were analysed by repeated-measure ANOVA (Table 2).

Table 1: Descriptive Statistics for the Total Scores

Group	Pre-test		Immediate post-test		Delayed post-test	
	M	SD	M	SD	M	SD
Metalinguistic	65.84	16.22	89.15	14.39	81.44	14.02
Direct	67.86	17.28	88.75	11.96	73.73	13.04
Indirect	63.37	16.95	90.01	9.90	72.59	12.15
Reformulation	72.29	18.37	82.86	18.03	73.12	14.89
Control	61.65	10.51	65.86	9.78	64.62	11.02

Considering the total scores in Table 2, the effect of time was statistically significant (*p = 0.00).* So, post-hoc analysis was computed for each group using Bonferroni adjustment that is reported in this section.

Table 2: Repeated-measure ANOVA Result for the Total Scores

Effect		Value	F	Error df	Sig.
Time	Wilks' Lambda	0.483	53.008	99.000	0.000*

Table 3: The Effect of Time in Metalinguistic Group's Total Scores

(I) Factor1	(J) Factor1	Mean Difference (I-J)	Std. Error	Sig
Time 1	Time 2	-23.312	3.916	0.000
Time 1	Time 3	-15.594	3.387	0.000
Time 2	Time 3	7.718	3.009	0.035

Table 3 shows that the metalinguistic WCF could affect the learners' performance positively in both the short and long term because, there was a positive significant difference between the pre-test and immediate post-test (*p = 0.00*) as well as the pre-test and delayed post-test (*p = 0.00*). However, the learners' total score in this metalinguistic group dropped significantly from the immediate post-test to delayed post-test (*p = 0.03*).

Table 4: The Effect of Time in Direct Group's Total Score

(I) Factor1	(J) Factor1	Mean Difference (I-J)	Std. Error	Sig
Time 1	Time 2	-20.884	3.916	0.000
Time 1	Time 3	-5.865	3.387	0.259
Time 2	Time 3	15.02	3.009	0.035

The result of the post-hoc for total scores of the direct group (Table 4) revealed that the learners' performance in this group was positively affected by the direct WCF in terms of the accuracy on using past simple tense in the short term, since there was a positive significant difference between the pre-test and immediate post-test (*p = 0.00*). However, there was no significant difference between the pre-test and delayed post-test *(p = 0.25).* So, it can be said that the direct WCF was not effective in the long term.

Table 5: The Effect of Time in Indirect Group's Total Scores

(I) Factor1	(J) Factor1	Mean Difference (I-J)	Std. Error	Sig
Time 1	Time 2	-26.641	3.916	0.000
Time 1	Time 3	-9.221	3.387	0.023
Time 2	Time 3	17.42	3.009	0.000

As far as the effect of the indirect WCF on the general performance of the learners is concerned, Table 5 depicts that this group's performance was similar to the metalinguistic group. The learners' score in this group increased significantly from the pre-test to immediate post-test ($p = 0.00$) and also from the pre-test to delayed post-test ($p = 0.02$), though their total score decreased significantly from the immediate post-test to delayed post-test ($p = 0.00$). Therefore, the indirect WCF was effective in improving the learners' performance in both the short and long term.

Table 6: The Effect of Time in Reformulation Group's Total Scores

(I) Factor1	(J) Factor1	Mean Difference (I-J)	Std. Error	Sig
Time 1	Time 2	-10.576	3.916	0.024
Time 1	Time 3	-0.835	3.387	1.000
Time 2	Time 3	9.741	3.009	0.005

The last experimental group showed a significant gain in the short term only ($p = 0.02$). Although the learners' scores in this group inclined from the pre-test to immediate post-test significantly ($p = 0.02$), it declined significantly from the immediate post-test to delayed post-test ($p = 0.00$). Moreover, there was no statistically significant difference between the pre-test and delayed post-test ($p = 1.00$). It is interesting to note that this group's performance was similar to the direct group (Table 6).

Table 7: The Effect of Time in Control Group's Total Scores

(I) Factor1	(J) Factor1	Mean Difference (I-J)	Std. Error	Sig
Time 1	Time 2	-4.212	3.502	0.696
Time 1	Time 3	-2.972	3.029	0.987
Time 2	Time 3	1.240	2.692	1.000

Finally, the post-hoc analysis of the total scores in control group didn't show any significant difference in both the short and long term. (Table 7).

5.   Discussion

Considering the results of the test as a total score, it was found that all experimental groups performed better than the control group in the short term, but the metalinguistic and indirect WCF did not lose their effect in the long term. The findings from the delayed post-test confirmed the superiority of the metalinguistic and indirect WCF over reformulation and direct WCF in the long term. Metalinguistic and indirect WCF had durable positive effects on the subject's performance in both of the tests.

Based on these results, the outcome of the study contributes to the ongoing debate on WCF in favour of advocates of WCF on learners' performance. In highlighting the positive effect of WCF, it can be strongly suggested that EFL teachers should supply learners with WCF. These results corroborate some recent studies (e.g., Sheen, 2007; Bitchener, 2008; Bitchener & Knoch, 2008) that examined the effect of WCF over a period. The enduring effect on accuracy is clear evidence of the potential for focused WCF to help learners acquire a feature of a foreign language that is a pleasing result for researchers and teachers. For example, Sheen (2007) answered her research question with the view that WCF helps L2 learners' written accuracy. Similarly, Chandler (2003) advocated providing WCF for EFL and ESL learners. Agreeing with these scholars, Ferris (1999) and Ferris and Roberts (2001) were also advocates of correcting learners'

errors. They claimed that corrective feedback should be inserted into the learning context as learners considered correction as indispensable elements of the learning situation and expected to be corrected. In other words, the learners believed in corrections and felt secure when corrected.

This study also found that the accuracy of the participants (in using past simple tense) in some cases varied significantly across the different times of the tests. In other words, there was no linear and upward pattern of improvement from one test to another. This was not surprising as earlier research has shown that learners, in the process of learning linguistic forms, may perform them with accuracy on one occasion but fail to do so on another similar occasion (Ellis, 1994; Lightbown & Spada, 1999; Pienemann, 1998). These variations could also have been the result of other variables such as the nature of the tasks, the scheduling of the tasks, and individual performance factors that can cause the non-consistent learning curve. For example, the personal circumstances and daily experiences of individual learners can often have an effect on their motivation and attention span. It might also be due to the fact that they have been at the unstable stage of learning a feature that has not been implicit and internalised yet. Every effort was made to write task rubrics that would provide participants with opportunities to use the targeted linguistic feature. Inevitably, minor differences in subject focus may have made the use of some forms obligatory and others optional, thereby enabling learners to avoid using a targeted feature they were not confident in using correctly. It is also possible that the timing of a task may influence the quality of performance, but it is unlikely that this was a factor in this study because the time of day and the days of the week during which the tasks were performed did not differ.

Therefore, despite Truscott's (1996, 1999, and 2004) claims that WCF should be abolished because it is ineffective, the current study and all previous studies above confirmed the necessity and effectiveness of WCF and showed that it is facilitative of improved written accuracy and is worth the time and effort.

Moreover, following Shintani and Ellis (2013), two instruments (Error Correction Test and Picture Description Test) were used in this study. The Error

Correction Test was chosen as a measure of learners' explicit knowledge. The Picture Description Test that was used to measure the implicit knowledge consisted of picture compositions. Considering the effect of the different WCF types on explicit knowledge, the findings of the study revealed that both the metalinguistic and direct groups were effective in improving the explicit knowledge of past simple tense in both the short and long term. Conversely, while the indirect WCF could improve the learners' explicit knowledge in the short term, the reformulation had no effect on their explicit knowledge of the past simple tense in both the short and long term.

Turning to the implicit knowledge, the metalinguistic and indirect WCF proved to be effective in the long term. However, the reformulation and direct WCF could not affect the implicit knowledge of the learners in terms of the accuracy of past simple tense form, though they were both effective in the short term. To prove the improvement of the implicit knowledge, the effect of the WCF must be durable, that is, it should be maintained when tested in the long term. In general, it is suggested that WCF had effects on both explicit and implicit knowledge of the past simple tense.

Shintani and Ellis (2013) also compared the effect of direct WCF with the provision of metalinguistic explanation on accuracy of use of the target feature (the English indefinite article) in terms of explicit and implicit knowledge. They found that the direct WCF had no effect on accurate use of the target feature suggesting that it benefited neither implicit nor explicit knowledge. But, in this study it could improve the explicit knowledge of the past simple tense in the short and long term. However, similar to the findings of this study, they reported that the metalinguistic explanation helped to develop learners' L2 explicit knowledge in both the short and long term. In this study too the metalinguistic WCF was effective in developing the implicit knowledge. However, based on the findings of Shintani and Ellis (2013), the effect of metalinguistic explanation was not durable and thus probably had no effect on their implicit knowledge. They suggested that if the goal of WCF is to develop learners' explicit knowledge, the

metalinguistic approach may be a more effective means of achieving this than direct WCF.

However, there are a number of differences between this study and their study. The metalinguistic WCF they investigated took the form of a handout providing an explanation of the target structure (articles), which was given to all the students when they had finished writing. Thus, no correction of individual learners' writing took place. In this study, it was provided by numbering errors and then providing a brief metalinguistic explanation of each type of error (following Bitchener & Knoch, 2010). The target structures considered were also different (indefinite article in their study and past simple tense in this study). Furthermore, in their study, two feedback types were considered but in this study four types of WCF with different degrees of explicitness were examined.

Nevertheless, the findings of this study proposes that if the goal of WCF is to develop learners' explicit knowledge of the past simple tense, the metalinguistic and direct WCF may be a more effective means of achieving this than the indirect and reformulation WCF. Furthermore, if it aims to improve the implicit knowledge of the past simple tense, the metalinguistic and indirect WCF might be more effectual.

6.   Conclusion and Pedagogical Implications

The purpose of the study, that is, the general efficacy of WCF is of pedagogical importance. Teachers need to know if providing learners with WCF, which is a time-consuming task, would help them improve their writing.

Based on the findings of the study, teachers should feel confident about providing WCF on their students' linguistic errors. This is provided that the WCF is based, to the best of their knowledge, on their students' 'readiness', that is, focus on the most problematic structure first. Teachers should also be patient with the results of WCF since some grammar items like past tense might require an extended period of time for WCF to reveal any effect on implicit knowledge. It is not realistic to assume that every student would act and reflect upon each WCF

annotation. We cannot expect that a target form will be acquired soon after it has been highlighted through WCF.

7. Limitations of the Current Study and Suggestions for Future Research

Despite all of the insights that this study provided into the nature of error correction among foreign language students, it had some shortcomings. This study focused on one problematic structure which was determined by analysing the learners' first draft as the pre-test. Further research is now required to determine the extent to which WCF is effective in helping learners acquire other forms/structures that they use incorrectly. It is especially important that it be tested with more complex features to determine whether or not its optimal effect is with single rule-based function such as the one examined in this study. The use of the past simple tense is determined by sets of rules; as Ferris (1999) suggests, they are readily ''treatable''. Further research can also be done to investigate the untreatable errors. More research is also needed to see if there is an advantage for different types, amount, frequency and delivery of metalinguistic explanation over a range of testing occasions. Further research is also needed to determine whether or not written metalinguistic explanation is more beneficial than oral metalinguistic explanation and whether or not metalinguistic explanation has an advantage over other types of WCF when other linguistic error categories are investigated.

It should also be acknowledged that the participants in the study (Azeri students in Iran where English is most often studied as a foreign language in formal instructional settings and the focus is usually form- and structure-based as opposed to competency-based) have had some earlier instruction in the use of the targeted functions, but that their mastery or acquisition was still being established. Thus, further research is needed to determine the extent to which corrective feedback helps learners develop accuracy in the use of completely new linguistic forms and structures.

Moreover, while performance on the delayed post-test reveals the

learners' level of retention, it does not mean that accuracy in this test was necessarily only the result of the treatment provided. In any longitudinal study, it is not possible to control for the effect of intervening variables such as additional instruction that may have been received outside of class time or additional self-study engaged in by highly motivated students. Methodologically, further research could investigate whether or not students receive such input by means of a self-report questionnaire or interview.

The population focus of the study was EFL Iranian learners at an intermediate level of proficiency. Future research could also be aimed at including students from other L1 and ethnic backgrounds (international and migrant) and other proficiency levels of English. Future researchers should also consider employing incentives to invite more learners to participate in the study. The variation in individual student response to error correction should be investigated. Error feedback might work with one student but not with another. This variation is attributed to individual differences between students and thus could have important pedagogical implications, especially in that students might have different expectations from their teachers. Though they appreciate their teachers' feedback, they also expect the teacher to understand their needs based on their proficiency levels.

There is also a need to investigate whether there is a connection between students' level of English and their capacity to benefit from feedback. Though this study provides a provisional answer, there is a need for research that uses two experimental groups; one of lower and the other of higher proficiency students. Both groups should be given similar feedback treatment and then the results could be analysed to detect any difference between and within groups.

This study also measured accuracy retention over a one month period, but further research would do well to extend this scope to include several additional post-tests over a longer period of time so that the ultimate value of WCF for acquisition can be determined. The effects of cognitive and emotional experiences in that period could be stated as one of the limitations of the current study.

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