

The Effect of Type of Corrective Feedback (Direct vs. Indirect) on Iranian Pre-Intermediate EFL Learners' Writing

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Abstract

This study investigated the effect of gender and type of written corrective feedback (WCF) on Iranian pre-intermediate EFL learners' writing. Four intact classes were assigned to experimental and two intact classes to control groups. The learners were homogenized using a pre-test which was followed by sixteen sessions lasting one hour and forty five minutes. After receiving instruction on how to write a standard short essay, while the participants in the experimental group one (n = 36) received Direct Corrective Feedback and the participants in the experimental group two (n = 33) received Indirect Corrective Feedback, the learners in the control group (n = 38) received no feedback on their writing except for an overall grade. The statistical analysis tools of *t*-test and two-way ANOVA on the post-test and a final exam, were used to check whether there were any significant differences in the participants' writing ability. Statistically significant differences were found between control and experimental groups on the dependent variable of writing ability. The students who received direct WCF performed significantly better than those who received indirect WCF and those in control groups, gender had also a significant impact on the learners' writing ability with females performing better than males.

Key words: Direct corrective feedback; Indirect corrective feedback; Form-focused feedback; Iranian EFL learners

Introduction

Writing is an inseparable part of any language learning process. Writing ability is the art of producing thought and ideas, the mastery of which is associated with many problems for learners. Providing effective feedback to help learners in their writing development can be a daunting and confusing task for teachers (Adam, 2003). Written production and feedback are therefore of special importance in any language acquisition process.

Kepner (1991, p. 308) defines feedback as “any procedure used to inform a learner whether an instructional response is right or wrong”. Keh (2003, p. 17) considers feedback as “any input from reader to writer that provides information for revision”. In general, feedback is used to express an opinion or a reaction to another person's performance (Mackey, Gass & McDonough, 2000). The feedback used at school is mostly defined in similar ways; it is a strategy, according to Askew (2000), where the teacher is imparting directly a judgment of a learner's strategies, skills, or attainment, and giving information about the judgment. *Written corrective feedback*

(WCF) is a pedagogy that is often used when helping learners improve their written accuracy (Ferris, 2003). Brannon (2006, p. 84) states that WCF is the most widely used form of feedback that students receive on their written work and “it can be a powerful tool for helping students to move forward in their learning”.

Second language (L2) writing scholars regard feedback as a crucial factor for “encouraging and consolidating learning” (Hyland & Hyland, 2006, p. 92). Some scholars in writing (for instance, Leki, 1991) believe that giving feedback is one of the important methods in assisting student writers to improve their writing. There exist different types of WCF and, Ellis (2009) presents a comprehensive typology of WCF types, among which are the following: Direct Corrective Feedback (DCF) and Indirect Corrective Feedback (ICF). According to Lyster and Ranta (1997), in the former, the teachers supply the correct form and clearly indicate that what the students say is incorrect. Bitchener (2005) believes that the latter, or implicit feedback, refers to the situation when teachers point out an error without correct form provision. Other types of WCF based on Ellis (ibid) are Metalinguistic corrective feedback, where the teacher provides some kind of metalinguistic clue as to the nature of the error; Electronic feedback which enables teachers to hyperlink an error to a corpus that contains samples of correct usage; and Reformulation, where a native speaker reworks on the students’ whole job to represent a language that is as native-like as possible, though preserving the same content as that of the original text.

Humans can consciously change a behavior if they “become aware that a particular behavior produced an undesirable consequence” (Rubin & Campbell, 1997, p. 53), if they receive some kind of feedback. In educational settings and as far as writing as a skill is concerned, different researchers (e.g., Sommers, 1982) argue that feedback is a crucial aspect in the writing process and that it plays a central role in learning this skill. A valuable feature of feedback is that it serves as a good indication of how English as a Second Language (ESL) students are progressing in learning the written language and, therefore, assists the teachers in diagnosing and assessing their students’ problematic areas (Hedge, 1988). In the absence of feedback, students can become discouraged, and lose sense of how they are doing and which aspects of their writing they should pay more attention to (ibid). Asiri (1996) believes that depriving feedback from the students would inspire them to think that their meaning has been communicated successfully and that there is no need to modify their writing (Sommers, 1982).

Research studies on grammar feedback had begun with Truscott’s (1996) paper titled “The Case Against Grammar Correction in L2 Writing Classes”, in which he reviews first language (L1) and L2 studies that has been carried out on grammar correction. He reports that almost all L2 writing teachers agree that giving students some grammar feedback is a necessity and that teachers do not even question its efficiency and usefulness, however, he claims that they are wrong in their ideas and beliefs. Truscott (1996) claims that in the studies he reviewed, the ineffectiveness of grammar correction was obvious. He might have ignored some other variables that could have possibly affected the results of the studies he reviewed, factors such as the length of the studies, the types of instructions and assessments, and the variables regarding the learners, since in each study, applying grammar feedback on students’ papers did not improve students’ writing. So, he recommends that, generally speaking, grammar correction should not be employed in writing courses. As far as L1 studies (e.g., Brannon, 1981) revealed that “students who did not receive correction had a more positive attitude towards writing than those who did”, Truscott (1996, p. 94) believes that “grammar correction has significant harmful effects”. He mentions that Semke (1984) has also found that students who are not corrected, write more

comprehensively than their peers who do receive correction. Truscott further comments that in Kepner's (1991) and Sheppard's (1992) studies, the authors found that the complexity of students' writings diminishes as a result of grammar correction. Finally, Truscott argues that grammatical feedback should be abandoned, although students would prefer and rely on correction (e.g., Leki, 1991), it does not necessarily mean that the teachers should seek to provide students with it.

It is claimed that "no single form of grammar correction can work for all of the students or texts" (Ferris, 2003, p. 154). In her study, Ferris (2003) reports an analysis of university ESL students' diagnostic essays including both treatable and untreatable errors. She defines treatable errors as mistakes in subject-verb agreement, missing articles, etc. that are compensated for by explicit teaching and untreatable errors as errors for which there is no generally stated set of rules for students to consult with in order to remedy them, they include lexical and grammatical errors, such as, missing and unnecessary words and word order problems. Ferris (ibid) further suggests that ESL writing teachers should be thoughtful of providing students with the right type of feedback. She advocates presenting grammar feedback, because not only students expect it, but also proficiency examinations consider this type of error as one aspect of the entire piece of writing. She also states that professors regard ESL writing errors bothersome, and advice that they should be completely ignored hoping that they would disappear or that attitudes change is unrealistic. Ferris mainly believes that students must be taught to be able to edit their own writing, an aim which will never be achieved unless students receive feedback.

Ashwell (2000) states that teachers believe in correcting the grammar of student writers' work which will help them improve the accuracy of subsequent writing. Research evidence on error correction in L2 writing classes shows that students who receive error feedback from teachers improve in accuracy over time (Ferris & Roberts, 2001). Research has also shown that students are fond of error feedback because they think that it helps them increase their L2 writing skill (e.g., Chandler, 2003).

A two-part study was conducted by Chandler (2003) who investigated the effect of error correction on enhancing students' writing accuracy and also the effects of various kinds of feedback in this regard. Teacher feedback was provided in both parts of the study. There were two ESL classes of 15 and 16 music majors located in an American conservatory that were taught by the same teacher who was at the same time the researcher, the study lasted for a 10-week semester. The students in every class had to complete five assignments about their own life. Although the control group received no feedback on their writing until after data collection was completed, the experimental group received indirect feedback, i.e., the grammatical or lexical errors were underlined, and the students were required to make revisions before they go on to the next draft. The results revealed that the experimental group increased significantly in accuracy than did the control group. However, both groups had a significant increase in fluency over the semester.

While there have been studies comparing these and other error correction strategies from different parts of the world, to the researchers' knowledge no studies have been reported for the Iranian pre-intermediate EFL context in the sense of considering a proper control group and gender as a moderate variable. Thus, this study aimed at exploring the possible effects of gender on the process of implementing different types of WCF; and to this end, the following research questions were put forward:

1. *Does direct/indirect corrective feedback have any significant impact on Iranian pre-intermediate EFL learners' writing? And if so;*

Is there any significant difference between the two in terms of their effects?

And

2. *Does learners' gender play any important role regarding the effect of direct and indirect corrective feedback on writing?*

Method

Design

The present research employed a quasi-experimental pretest-posttest control group design. Random selection of the learners was impossible, so six intact classes were selected from among the existing pre-intermediate classes and were randomly assigned to the four experimental and two control groups. One control group and two experimental groups were female, and the remaining groups were male.

Participants

The participants included 107 EFL learners, within the age range of 16 to 25, with pre-intermediate language proficiency attending Jahade Daneshgahi Language Institute (JDLI) in Urmia, Iran. The distribution of groups is presented in Table 1:

Table 1: Distribution of Groups

<i>Instruments</i>	Intervention		Gender			
			Male	N	Female	N
In order to learners' inform them purpose and	Direct	Corrective Feedback	Group 1	19	Group 2	17
	Indirect	Corrective Feedback	Group 3	19	Group 4	14
	Control		Group 5	19	Group 6	19

and procedure obtain the consent and about the content of the

study, they were given the consent forms adapted from Caposy and Heider (2003). Being familiarized with types of Corrective Feedback and the process of the study, the students were allocated ten minutes to read and complete the consent forms. All of the students accepted that they were willing to participate in the study.

Key English Test (KET), the first level Cambridge English for Speakers of Other Languages (ESOL) exam intended to measure the ability to cope with everyday written and spoken communications at a basic and elementary level, was administered to pre-test writing ability of the learners and to check their homogeneity. The pre-test included two writing topics which required the learners to write a short essay of at least 60 words for each. The learners' writings were graded based on the frequency of grammatical errors. The reliability estimates for KET calculated using Cronbach's Alpha amounted to 0.95. The fact that KET is an internationally recognized standard proficiency test guarantees its validity, while the validity of the writing tasks used for this research was found to be satisfactory when experienced teachers at JDLI were consulted on the appropriacy of the writing topics employed in this study.

Then the six intact classes were randomly divided into the four experimental and the two control groups. All of the groups received the same amount of instruction and the same amount of time was spent teaching writing in each class. Core component of the treatment included having the students to write a 40-minute short essay (about one or two paragraphs) each session; the topics were selected mainly from the course book (*Top Notch* by Joan Saslow & Allen Ascher, 2006).

The procedure and aims were introduced by one of the researchers, who was the teacher. In direct feedback experimental groups, the teacher underlined the students' grammatical errors and provided the correct forms which were reported back to the students the next session. The indirect feedback experimental groups received ICF; i.e., the errors were underlined but the correct forms were not provided for the learners. Also, learners were supposed to provide the correct forms themselves. They were asked to correct their writing and hand them in along with the original ones in the following session. The writings of the experimental groups were graded based on the frequency of occurrences of grammatical errors. There were not any particular grammatical points of focus; all of the ungrammatical points were treated by the researchers. The control groups did not receive any feedback on the grammatical features, nor were they invited to execute any revisions, but, to satisfy ethical requirements, they were given feedback on the overall quality of their essays such as 'Good' or 'This is really persuasive' or 'Pay more attention to the ideas'. The treatment lasted for 16 sessions (2 sessions per week) and the participants were given 16 topics to write about during the treatment.

After eight-weeks of treatment, to investigate the amount of gain in the participants' writing ability, a Final Exam including a Writing Test was used in addition to KET. The test was prepared by the examiners' committee in the JDLI based on the materials covered in each level of learning. The writing test included a topic which asked the learners to write within a guided framework. Learners have to put at least 60 words in their writing paper. From among the 321 writing papers, 84 of them were selected randomly and checked by another EFL teacher at the institute to ensure the reliability of scores. The Spearman correlation coefficient indicated a high correlation or consistency for error counting among the two raters, with correlation coefficients (r) of 0.86 in pre-test, 0.90 in post-test and 0.86 in the final exam writing test, all significant at $p < .05$.

Data analysis

The present study used the type of corrective feedback as the independent variable with two levels of direct and indirect; it treated learners' gender and writing ability as the moderate and dependent variables, respectively. *T*-tests and Two-Way Analyses of Variance (Two-Way ANOVA) were utilized for analyzing the results using SPSS software.

Results

In order to investigate the differences between the treatment and the control groups and also to find out whether male and female EFL learners performed differently in the pretest stage, a two-way ANOVA was used. The descriptive statistics showing mean scores and standard deviations of all groups during the pre-test are presented in table 2 below.

Table 2 *Descriptive statistics of all groups during the pre-test:*

gender	type	Mean	Std. Deviation	N
male	direct feedback	43.57	6.149	19
	no feedback	46.21	7.764	19
	indirect feedback	46.05	9.766	19
	Total	45.28	7.979	57
female	direct feedback	51.00	9.552	17
	no feedback	48.89	11.575	19
	indirect feedback	51.57	5.445	14
	Total	50.36	9.395	50

Total	direct feedback	47.08	8.676	36
	no feedback	47.55	9.816	38
	indirect feedback	48.39	8.565	33
	Total	47.65	8.995	107

The results of descriptive statistics showed that in the control group, male participants had a slightly better writing performance compared with that of experimental groups. And, female participants who received indirect feedback performed better than the other experimental and the control groups' participants. The results of two-way ANOVA are reported below (table 3).

Table 3 ANOVA results for the differences among groups in the pretest

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	838.251 ^a	5	167.650	2.188	.061	.098
Intercept	242227.906	1	242227.906	3.1613	.000	.969
Gender	716.334	1	716.334	9.348	.003	.085
Type	44.475	2	22.238	.290	.749	.006
gender * type	105.133	2	52.567	.686	.506	.013
Error	7739.955	101	76.633			
Total	251567.000	107				
Corrected Total	8578.206	106				

a. R Squared = .098 (Adjusted R Squared = .053)

There was a statistically significant main effect for gender $F(1, 101) = 9.34, p = .003$; however, according to Cohen (1988), the effect size was small (partial eta squared = .08). Post-hoc comparisons using the Tukey HSD test indicated that there were no initial differences among all the six groups (table 4).

Table 4 Tukey test results for the differences among feedback types

I) type	(J) type	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
direct feedback	no feedback	-.4693	2.0360 2	.971	-5.3125	4.3739
	indirect feedback	-1.3106	2.1097 2	.809	-6.3291	3.7079
no feedback	direct feedback	.4693	2.0360 2	.971	-4.3739	5.3125
	indirect feedback	-.8413	2.0830 0	.914	-5.7963	4.1136
indirect feedback	direct feedback	1.3106	2.1097 2	.809	-3.7079	6.3291
	no feedback	.8413	2.0830 0	.914	-4.1136	5.7963

Based on observed means.
The error term is Mean Square (Error) = 76.633

To see the impact of DCF on learners' writing performances, an independent samples *t*-test was run. Table 5 shows the results of descriptive statistics.

Table 5 Descriptive statistics for the direct experimental and control groups

Type	N	Mean	Std. Deviation	Std. Error Mean
direct feedback	36	76.08	9.932	1.65538
no feedback	38	64.86	9.040	1.46664

As table 6 below shows, there were significant differences in scores for direct feedback ($M = 76.08$, $SD = 9.93$) and no feedback ($M = 64.86$, $SD = 9.04$), $t(72) = 5.08$, $p = 0.00$ conditions, in favor of direct feedback.

Table 6 Independent samples *t*-test results for the direct experimental and control groups

		Levene's Test for Equality of Variances		<i>t</i> -test for Equality of Means						
		F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error	95% Confidence Interval of the Difference	
								Lower		Upper
irect	Equal variances assumed	.378	.541	5.08	72	.000	11.21491	2.20595	6.81742	15.61240
	Equal variances not assumed			5.07	70	.000	11.21491	2.21163	6.80445	15.62537

Another *t*-test was used to compare the performances of ICF and control groups. Table 7 presents the data derived from this test.

Table 7 Descriptive statistics for the indirect experimental and control groups

Type	N	Mean	Std. Deviation	Std. Error Mean
no feedback	38	64.86	9.040	1.46664
indirect feedback	33	67.87	13.869	2.41435

As is evident in table 8, there were no significant differences in scores for no feedback ($M = 64.86$, $SD = 9.04$) and indirect feedback ($M = 67.87$, $SD = 13.86$); $t(53.65) = -1.06$, $p = 0.29$ conditions.

Table 8 Independent samples *t*-test results for the indirect experimental and control groups

		Levene's Test for Equality of Variances		<i>t</i> -test for Equality of Means					
		Sig.	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
								Lower	Upper
Equal variances assumed	7.375	.008	69	.277	-3.01037	2.74457	-8.48563	2.46489	
Equal variances not assumed			53.655	.291	-3.01037	2.82491	-8.67480	2.65407	

The results of two-way ANOVA for the differences in the types of corrective feedback among male and female learners' writings in the post-test are presented in table 9 and 10; the descriptive statistics showing mean scores and standard deviations of all groups during the post-test are reported in former table.

Table 9 Descriptive statistics of all groups during the post-test

Type	gender	Mean	Std. Deviation	N
direct feedback	male	74.84	11.086	19
	female	77.47	8.581	17
	Total	76.08	9.932	36
no feedback	male	62.05	6.736	19

	female	67.68	10.290	19
	Total	64.86	9.040	38
indirect feedback	male	61.36	13.396	19
	female	76.71	8.887	14
	Total	67.87	13.869	33
Total	male	66.08	12.282	57
	female	73.54	10.268	50
	Total	69.57	11.933	107

The descriptive statistics simply showed that the means of DCF group were better than the ones in indirect and control groups. So, it can be said that DCF seemed more effective than ICF. A surface look at table 9 indicated that female participants had a higher mean compared to that of males. The mean differences between male and female participants are especially greater in the indirect feedback type group. Also, it is clear that there are mean differences between all types of corrective feedback. However, to locate the precise points of differences, a two-way ANOVA was used to check the difference in performances of the groups in the post-test, the results of which are presented in the table below (10).

Table 10 ANOVA results for the differences in the types of corrective feedback among male and female learners' writings

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	4723.132 ^a	5	944.626	9.199	.000	.313
Intercept	517964.438	1	517964.438	5.0443	.000	.980
Type	2390.267	2	1195.134	11.639	.000	.187
Gender	1635.197	1	1635.197	15.925	.000	.136
type * gender	742.162	2	371.081	3.614	.030	.067
Error	10371.092	101	102.684			
Total	532974.000	107				
Corrected Total	15094.224	106				

a. R Squared = .313 (Adjusted R Squared = .279)

As it can be inferred from the table above, there was a statistically significant main effect for the feedback type $F(2, 101) = 11.63, p = .00$. This means that DCF group performed generally better than indirect and no feedback control groups. There was also a significant difference between male and female learners' performance $F(1, 101) = 15.92, p = .00$, which implies that the overall performance of females was better than that of males. There was also significant interaction effect (type * gender: sig. = .03). This shows gender did act as a moderator variable in affecting the relationship between corrective feedback type and writing.

In order to see the exact places of differences, the Tukey HSD test was used (table 11) for further data analysis to determine which groups in the sample differed from others statistically significantly. It indicated that the mean score for the direct feedback type ($M = 76.08, SD = 9.93$) was significantly different from the indirect type ($M = 67.87, SD = 13.86$). There was also a statistically significant difference between the direct feedback type ($M = 76.08, SD = 9.93$) and no feedback type ($M = 64.86, SD = 9.04$).

Table 11 *Tukey test results for the differences among feedback types*

	(I) type	(J) type	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Tukey HSD	direct feedback	no feedback	11.2149*	2.35681	.0000	5.6086	16.8212
		indirect feedback	8.2045*	2.44213	.0031	2.3953	14.0138
	no feedback	direct feedback	-11.2149*	2.35681	.0000	-16.8212	-5.6086
		indirect feedback	-3.0104	2.41119	.4277	-8.7460	2.7253
	indirect feedback	direct feedback	-8.2045*	2.44213	.0031	-14.0138	-2.3953
		no feedback	3.0104	2.41119	.4277	-2.7253	8.7460

Based on observed means.

The error term is Mean Square (Error) = 102.684.

*. The mean difference is significant at the .05 level.

In sum, it can be concluded that the difference in the performance of the experimental and control groups is attributable to the effect of written corrective feedback (with direct corrective feedback having an effect and indirect corrective feedback with no effect) and gender (in favor of females).

Discussion and conclusion

This study investigated the effect of type of corrective feedback on writing ability of pre-intermediate EFL learners as well as the role of learners' gender in moderating the link between feedback types and writing performance. The findings showed a significant difference between the direct experimental group and the control group in favor of the experimental group and that there were no differences between the indirect experimental and control groups. The results also showed that the learners who received DCF performed significantly better than those in the indirect and no corrective feedback groups. As regards the gender, it was revealed that learners' gender had a significant impact on learners' writing ability in which females outperformed males. On the whole, it was observed that the learners' writing ability was affected by DCF and gender.

The results of this study are in line with Bitchener's (2008) findings who found that DCF by the teacher seemed to be the best corrective feedback method. She also stated that DCF by the teacher was the most preferable method among the students. According to Bitchener, the reason for the failure of other methods was that self-correction might delay internalizing the correct form, which could also be considered as one of the reasons for ineffectiveness of the ICF group in comparison with the DCF group. The findings also support Sheen's (2007) suggestion that corrective feedback became more useful when it consisted of giving the correct form and explanation. Making our findings more robust, in another experimental study on error correction and writing accuracy, Chandler (2003) had also found students in the experimental group that received feedback, significantly outperformed those in the control group. Furthermore, Hedge (1988) claims that when feedback is not presented to students, they may be discouraged, and lose sense of how they are doing and which aspects of their writing they should pay more attention to.

However, our findings do not seem to support Ferris (2004), who claimed that ICF led learners to be reflective and analytical because they took more responsibility. That is why, she suggested, teachers should use ICF instead of DCF. However, she warned that teachers could provide DCF under some circumstances. On the other hand, this study found that the type of feedback provided did have a significant effect on accuracy. Based on this finding, we could easily jump to the conclusion that Truscott (1996) was not right with other findings when he claimed that the provision of corrective feedback on L2 writing is ineffective.

Lee (2004) proposed that types of corrective feedback which lead to self-correction should be preferred for learners at higher proficiencies and DCF should be used in less proficient groups. The reason for the indirect group's failure compared to direct group might take its source from the proficiency level of the learners in this study accordingly.

Furthermore, the findings of Rob, Ross, and Shortreed's (1986) longitudinal study comparing direct and ICF were not compatible with the findings obtained in the current study. No significant difference was found between direct and indirect group at the end of their study and they suggested that teachers should prefer ICF since it was less time consuming.

The results obtained in this study can provide illuminating guidelines for EFL language teachers and learners, educational settings including language institutes, schools and universities. A call for continued feedback is stressed throughout the literature on feedback (Kim & Mathes, 2001). Some limitations in the implementation of the present study are: The most important limitation which can be associated with this study is its generalizability; that the results may not be generalizable to other situations, since due to the institutional criteria, random sampling of the participants was impossible; Secondly, it has been suggested that various personality factors may differentially affect the success of grammar feedback (Sheen, 2007), an aspect not considered in this research. A few recommendations for future researchers to ponder on would be: To examine the accuracy of students' writing after implementing many cycles of peer feedback rather than direct or indirect feedback by the teacher; to include participants with different proficiency levels in order to examine the possible differential effects of WCF on performance of EFL learners; and to focus on studies in a longer term, using a more longitudinal and process-oriented framework.

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