

THE IMPACT OF CORRECTIVE FEEDBACK ON IRANIAN EFL LEARNERS' WRITING COMPLEXITY, ACCURACY, AND FLUENCY

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ABSTRACT

Background/Purpose: Recently, corrective feedback (CF) has gained considerable importance in language teaching research. Up until now, there has been less attention to the use of CF in an Iranian context. This current study aims at investigating the impact of corrective feedback on Iranian intermediate EFL learners' Complexity (C), Accuracy (A), and Fluency (F) in their writing production.

Methodology: After administering an Oxford Quick Placement Test (OQPT), the researcher selected 30 Iranian intermediate learners at a private English language institute in Isfahan, Iran and divided them into two groups of 15 randomly. An Oxford placement test was run to make sure that the two groups were homogenous. A series of writing tasks were developed to examine the participants' performance in writing. The experimental group attended the class in which CF was performed where they received feedback from the teachers and also their partners in the class (by crossing out and explaining) during the writing tasks on how to use the correct forms of the words and tenses. The control group attended the class in which CF was performed briefly. At the end of the study, all subjects participated in paragraph writing. To compare the group means for the study, a test analysis was performed. The difference between the experimental and the control group was considered to be important.

Findings: The results of Independent and samples t tests revealed that the participants in the experimental group outperformed the ones in the control group in writing production. The results clearly indicated that the participants who received CF did better than those who did not. Therefore, the findings generally revealed that CF had a significant effect on Iranian intermediate EFL learners' writing complexity, accuracy, and fluency.

Contributions: This study has multiple benefits for language learners and teachers. Utilizing CF in writing classes can be a practical way to improve students' proficiency and writing skill. In addition, this study draws attention to the Complexity, Accuracy, and Fluency (CAF) of written production.

Keywords: Corrective feedback, complexity, accuracy, fluency, Iranian Intermediate EFL learners.

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1.0 INTRODUCTION

There is a controversy over the efficacy of corrective feedback (CF) on intermediate second/foreign language learners (Hamouda, 2011). Nevertheless, a growing number of EFL/ESL studies show that CF has a noteworthy role in improving intermediate language learners' use of the target language (Philp, Oliver, & Mackey, 2008). On the one hand, some surveys into the most adequate ways to provide EFL learners with written CF have often been highly all-embracing in the range of error categories examined. On the other hand, oral CF studies have brought about clear, positive results from studies that have intended particular error categories.

Rezaei, Izadpanah, and Shahnava (2017) who investigated the various sorts of CF provided to French immersion students by their teachers, undertook one of the earlier descriptive studies. They revealed that while a great deal of teacher feedback went unnoticed, some kinds of CF (e.g., repetition with emphasis) guided to immediate remodeling on the part of the learners than others (e.g., repetition without emphasis). There are some positive findings reported in three recent written CF studies that were conducted over two months (Li & He, 2017; Lyster, Saito, & Sato, 2016; Rezaei et al., 2017). In those studies, the effectiveness of direct CF with written meta-linguistic explanation (example of its use) and also oral meta-linguistic explanation (i.e., discussion and clarification, direct CF just with written meta-linguistic explanation, direct CF and no-CF) was approved. The result of the studies showed that those who received direct CF performed better than those who did not receive CF (Namaziandost, Sawalmeh, & Izadpanah Soltanabadi, 2020).

Some investigators and language practitioners consider that the constructs of L2 performance and L2 proficiency are multi-componential, and the essential dimensions can be effectively and comprehensively captured by the CAF (Ellis, 2014; Azizi, Behjat, & Sorahi,

2014). As such CAF has been figured as major research variables in applied linguistic research. CAF has been manipulated both as performance for the oral and written assessment of language learners and that of indicators of learners' proficiency underlying their performance. It is believed that CF can affect intermediate language learners' written proficiency. By correcting their errors learners will become enthusiastic to notice the errors which they make and they improve their writing by using correct terms and grammatical points in their writings (Mirshekaran, Namaziandost, & Nazari, 2018; Ellis, 2014).

According to Salimi (2015), CF in writing is very important; however, CF is less favored by many ESL teachers because it takes a long time to correct papers and much time is spent on writing (Lee, 2011). Teachers appear less likely to apply extended commentary on ESL students' writing. ESL teachers' feedback tends to ignore the errors committed by students. Even though writing is one of the complex and significant skills and also time-consuming to correct, teachers have problems in classrooms giving CF on students' writings in detail. Having error correction on learners' writings can have a positive effect on their writing output. Whereas some researchers have come up with the point that all forms of error correction of L2 learners' writings are not only ineffective but harmful and should be abandoned (Golpour, Ahour, & Ahangari, 2020; Pakbaz, 2020; Sobhani & Tayebipour, 2018; Truscott, 2008).

As a part of classroom activities, intermediate EFL learners in Iran have writing assignments in their English course and the assignments are corrected by teachers subjectively. According to several observations which have been done in different classes in some institutes in Isfahan, it was revealed that the majority of the classroom written exercises in the class focus on accuracy but little attention is given to other dimensions of proficiency, namely complexity, and fluency. Despite the bulk of research on the impact of CF on learners' written production, little has been done on intermediate learners. It is also supposed that applying CF in language classrooms makes learners learn better and they become aware of their errors. In response to the problems mentioned above, i.e., the ignorance of complexity and fluency in intermediate language learners' writing in language classrooms, this study scrutinized the impact of CF on intermediate language learners' fluency, accuracy, and fluency in their writing.

The current study is planned to evaluate the impact of CF on Iranian intermediate language learners' written proficiency. It also aims to examine the role CF plays in the fluency, complexity, and accuracy of Iranian intermediate EFL learners.

1.1 Significance of The Study

The present study aimed to examine the impact of CF on Iranian intermediate EFL learners' writing CAF. CF has various ways to be performed in classrooms but occasionally it is done by brief correcting. The corrective feedback which was used in the study is to correct the learners' writing in the class by getting help from other partners, crossing out the errors and writing the correct forms and the teacher put comments on them. It may have many advantages over using oral correction on the writing. The present study contributed to a better understanding of CF which has been applied in classes for years. It is truly believed that CF creates a motivating environment for the learners and enhances their independent writing skills in terms of quality and quantity (Butler & Zeng, 2014). As mentioned above, this study was done among Iranian intermediate learners and it represented that CF is not only useful but also it enhances motivation to have a better writing. Another point is to make teaching writing more convenient and practical and teachers should also feel comfortable about using CF on learners' errors. The researcher believes that learners' motivation is more likely to be gained if teachers negotiate with learners about which features they focus on and how frequently the feedback should be given.

2.0 REVIEW OF THE LITERATURE

2.1 CF in Second Language Writing

The debate on whether CF has any effect on the advancement of learner's grammar returns back to the mid- 90s with the publication of the well-known work called 'The case against grammar correction in L2 writing classes' by Truscott (1996). In his study, the writer decreased the significance of CF in learner's written homework because of its efficiency and unfavorable effects. Such strong case versus grammar correction originated from (1) research showing the inefficiency of correction, (2) the origin of both the correction process and language learning, (3) its detrimental result on learners' learning process, and (4) debate against it. By referring to great works of the time done on WCF, Truscott (2008) introduced explanations based on research for expressing that feedback on grammar had shown ineffective. Furthermore, the writer also focused on the necessities that must be accomplished in order for grammar correction to have any effect on learners. For example, the teacher observing the occurring of the mistake, comprehending the mistake and even being able to propose a solution are among some of these necessities.

There is some disagreement and also controversy among researchers and SLA theorists on the nature and existence of `error`, and classroom instruction (i.e., students can be helped to

develop their written accuracy when they are supported by teacher feedback and also grammar instruction). A case study was done by Sermsook, Liamnimitr, and Pochakorn (2016) in which they analyzed the feedback given by one teacher to three students- a high performer, an intermediate performer, and a low performer- in three distinct settings (three teachers and nine students (writers) in total). While they did not explicitly examine the accuracy of teacher error correction, they noted that the different teachers only dealt with approximately half of the issues and the rest were avoided and overlooked. In another research, García Mayo and AlcónSoler (2013) investigated the progress of three ESL college students over a semester. They examined a variety of students' texts and they concluded that teacher correction has a positive effect on students' progress in accuracy over time.

Truscott (2008) claimed that teacher feedback does not necessarily enhance students' proficiency. The students are forced to resort to teacher feedback due to a discrepancy between teachers' and students' perception of error feedback strategy. Moreover, Lyster et al. (2016) suggested that providing feedback on writing activities help writers produce texts with less errors. Therefore, the success of writing process depends on the feedback given to the students' written text. Moreover, Truscott (2008) cited many studies to reveal that the error correction of grammar is not a good idea. He claimed that grammar correction decreases the students' motivation to learn. The basis for his assertion arose from a growing number of studies that have been unsuccessful in providing meaningful evidence that error correction improves the accuracy of students' writing (Guillén, 2012; Mackey, 2012; Hashemifardnia, Namaziandost, & Sepehri, 2018).

In another study, Montgomery and Baker (2007) considered teachers in an intensive ESL program in the United States. They found that the form-focused feedback which was given by the teachers was totally effective. Lee (2011) also studied secondary English teachers in Hong Kong. He found out the "mismatches" between teacher beliefs from one hand and practices about CF from the other hand which some instructors attributed to external pressures (from government school administrators, parents, or students themselves). Through the studies which have been conducted about feedback in L2 writing, the "teacher variable" is usually either ignored or removed altogether from the research design. In the studies which considered teachers' oral feedback, it is often assumed that teacher correction is accurate, comprehensive, and consistent. If more than one teacher is involved, it is assumed that the teachers are all giving feedback in the same ways and with the same degrees of quality.

Moreover, Ansarian and Chehr Azad (2015) examined whether the kind of feedback given by learners affected students' writing accuracy. They examined 53 migrant learners, who

were placed into one of three groups, which met for 20, 10, or 4 hours per week respectively. The researchers noted that despite the various amounts of total class times, all three groups spent four hours on writing and grammar. The first group that included 19 students received direct written feedback along with a five-minute dialogue 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 organization, 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 analyzed 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 researchers noted that there were considerable inconsistencies in accuracy levels among the four pieces of writing used for the study. Though no significant effect was observed when the three error types combined, the researchers reported that the combined effect of the written feedback and the dialogue was significant for the definite article and the simple past tense. These findings suggested that certain kinds of error correction in particular context may be useful.

In summary, considering the limited available evidence, when students received teacher feedback on their writing and were required to revise it, they indeed considered the teachers' feedback precisely and tried to apply it. In some interviews about feedback and revision cycles, the learners reported that they would not address corrections if a) they did not have enough time to go over them carefully; b) they did not understand the error codes, terms, or symbols used to describe the errors; c) they did not know how to correct the problem even when it was called to their attention.

2.2 Complexity, Accuracy, and Fluency (CAF)

CF is described as providing negative evidence or positive evidence upon erroneous utterances, which encourages learners' repair involving accuracy and precision, and not merely comprehensibility (Nasri & Namaziandost, 2019).

Complexity refers to the size, elaborateness, richness, and diversity of the L2 performance. Complexity has thus been commonly characterized as the extent to which the language produced in performing a task is elaborate and varied (Ellis, 2014). In some other studies, complexity is defined as the capacity to use more advanced language, with the possibility that such language may not be controlled so effectively.

The term accuracy is perhaps the simplest and most internally coherent construct, referring to the degree of conformity to certain norms. Accuracy is a measure for the target-like and error free use of language. Similarly, Ellis (2014) defined accuracy simply as “error-free” speech. Ellis (2014) also stated that accuracy is the ability to avoid errors in performance, possibly reflecting higher levels of control in the language and/or a conservative orientation.

Fluency can be defined as the capacity to produce speech at a normal rate without interruption or as the production of language in real-time without undue pausing or hesitation. Fluency is a multidimensional construct, in which sub-dimensions can be recognized such as breakdown fluency, repair fluency, speed fluency. According to Ellis (2014), fluency is the ability to process the L2 with “native-like rapidity” or “the extent to which the language produced in performing a task manifests pausing, hesitation, or reformulation”.

2.3 CAF in Second Language Acquisition

Researchers and language practitioners believe that the construction of L2 performance and L2 proficiency are multi-componential and L2 dimensions can be apprehended by the notions of CAF comprehensively (Ellis, 2014; Azizi et al., 2014; Abedi, Namaziandost, & Akbari, 2019). CAF has been known as a major variable in applied linguistic research. It has been used as something which is used for the oral and written assessment of the language learners’ proficiency and performance. Moreover, to measure progress in language learning, CAF has also been used. The literature review suggests that the origins of this concept lie in studies on L2 pedagogy. In this regard, Montgomery and Baker (2007) distinguished between fluency-oriented activities, which bring up spontaneous oral L2 production, and accuracy-oriented activities, which focus on linguistic form and the controlled production of grammatically correct linguistic structures in the L2. Complexity as the third component of the CAF was added in the 1990s following Skehan (1998) who proposed an L2 model which includes CAF.

More importantly, there was a debate among different SLA researchers to know how much L1 can be effective in the L2 process. Dulay and Burt (2013) claimed that L1 had little influence in L2 acquisition that caused important controversy. The accuracy of English morpheme produced by Spanish and Chinese speakers was considered by Dulay and Burt. Different percent of errors that were unambiguously attributable to L1 interference were decreased to 3 percent in Dulay and Burt’s study. Later, Dulay and Burt concluded that there is a possibility that the L1 would not have the same effect among learners at different levels of proficiency.

Following the aforementioned debates, the construct of a T-unit or minimal terminal unit was developed by Larsen-Freeman and Strom (1977), as an independent clause accompanied by a dependent clause. Choosing T-units rather than sentence length was better because children writing in their native language was better as they were familiar with L1 and could write long sentences discriminatively using coordination. Larsen-Freeman and Strom (1977) concluded that the average length of error-free T-units was an acceptable measure to distinguish the students' developmental levels. Later, similar findings for T-unit analysis Japanese spoken language as a second language were also reported by Larsen-Freeman and Strom.

2.4 CAF In Second Language Writing

Several definitions have been proposed for CAF constructs, however, such definitions have not provided the terrain in applied linguistics with a thorough overview of what may shape the constructs (Neisi, Nasri, Akbari, & Namaziandost, 2019). Complexity, the first construct, is defined, according to Lennon (1990), as using a large number of structures and vocabulary. Complexity indicates the field of expanding or restructured second language knowledge. Truscott (2008) calls complexity as the most complicated construct of the three because it includes at least eight aspects of communication and language (lexical, interactional, propositional, and several types of grammatical complexity. Complexity is discussed in the current study in view of two dimensions, namely, syntactic and lexical complexity. For syntactic complexity, Dulay and Burt (2013) defined it as “the range of forms that surface in language production and the degree of sophistication of such forms” (p. 33), while, Azizi et al. (2014) defined lexical complexity as “means that a wide variety of basic and sophisticated words are available and can be accessed quickly, whereas a lack of complexity means that only a narrow range of basic words are available or can be accessed” (p. 19).

The second construct, accuracy, is defined by Skehan (1998) as “how well the target language is produced in relation to its rules” (p. 23). Briefly, accuracy is defined by Foster and Skehan (1998) as the freedom of the written task from error. Azizi et al. (2014) defined writing accuracy as being free from errors while using the language in written communication. Analyzing writing accuracy is based on counting the number of errors in a written text (Azizi et al., 2014). Although it is not easy for EFL students to reach writing accuracy, they should do their best to improve it to make their writing as readable as possible (Montgomery & Baker, 2007). Therefore, many EFL teachers try hard to help their students produce accurate writings (Montgomery & Baker, 2007). The last construct, fluency, is defined by Ellis (2014), as “the

ability to produce texts in large chunks or spans and is optimally measured through using the length of writers' translating episodes or production units" (p. 89). Nevertheless, the above mentioned three constructs and their sub-constructs have been discussed in view of the writing measures employed in the methodology in the current study. Discussing the nature of the relationship among the measure of CAF, it is noted that one of the criticisms of CAF research in second language acquisition (SLA) has been the separate treatment of the three constructs. Larsen-Freeman and Strom (1977) argues that research should consider CAF in harmony, stating that "if we examine the dimensions one by one, we miss the fact that the way that they interact changes with time as well" (p. 39). To elaborate, it is noted by the researchers that all the constructs of CAF should be treated as one entity. Ellis (2014) states that fluency is a strong predictor of writing level; while grammatical accuracy, as considered through error types, decreases as scores increases, and complexity has a significant but relatively smaller impact than other CAF features.

In Sheppard's (2010) study, the percentage of correct pronunciation was the only measurement in which there was a significant difference between the group who received CF than those who did not. Some other studies considered the effects of different types of teacher feedback on the students' writing errors. Lalande's (2011) experimental group of U.S students who were learning German as a second language improved in grammatical accuracy on sequent writing after using an error code to rewrite, whereas the control group, which received direct correction from the teacher, actually made more errors on the essay at the end of the semester. Although the difference between the groups was not statistically significant, in Frantzen's (2010) study of intermediate Spanish students, both the grammar-supplementation group receiving direct correction and the non-grammar group whose errors were marked but not corrected improved in all-inclusive grammar usage on the post essay. Both groups did not show significant improvement in written fluency over the semester. In another study that dealt with the effects of various kinds of teacher feedback on the accuracy of both revision and subsequent writing, Salimi (2015) claims that when students' writings are corrected by teachers directly, it leads to more correct revisions than indirect feedback; however, by comparing the students over the semester, students who received elementary indirect feedback reduced their error frequency ratios than the students who received direct feedback. Although there is growing evidence for the relationship between written CF and accuracy improvement over time, the studies have so far been limited to test its effectiveness with certain linguistic error domains and categories. Today, the role of written CF in helping learners achieve specific linguistic forms and structures did not receive enough attention as it deserves.

Lastly, in a study by Zohrabi, Farrokhi, and Chehr Azad (2017), the effects of different CF conditions on Iranian EFL learners' spoken general accuracy and breakdown fluency was investigated. They found that the different CF conditions had insignificant effects on the number of error free Analysis of Speech (AS)-units, as an index of the spoken general accuracy.

Reviewing the literature so far, the impact of CF on writing did not receive enough attention it deserves. Moreover, limited studies in Iranian context have been done in this regard. Thus, this study was conducted to investigate the impact of corrective feedback on Iranian EFL learners' writing complexity, accuracy, and fluency. To fulfill this objective, the following research questions were considered to be answered in this study.

1. Does CF impact Iranian intermediate EFL learners' written production?
2. Does CF impact Iranian intermediate EFL learners' complexity in written production?
3. Does CF impact Iranian intermediate EFL learners' accuracy in written production?
4. Does CF impact Iranian intermediate EFL learners' fluency in written production?

Based on the above-mentioned research questions, the following null hypotheses were formulated.

1. CF does not impact Iranian intermediate EFL learners' written production.
2. CF does not impact Iranian intermediate EFL learners' complexity in written production.
3. CF does not impact Iranian intermediate EFL learners' accuracy in written production.
4. CF does not impact Iranian intermediate EFL learners' fluency in written production.

3.0 METHODOLOGY

3.1 Participants

To carry out this research, the Oxford Quick Placement Test (OQPT) was given to 60 Iranian EFL learners and 30 of them were selected for the target population of the study. The participants were selected from the E-land private English language institute in Isfahan, Iran, and their level of general English proficiency was intermediate. Their age range was between 16 and 19 years old. All the participants were females since the researcher had access only to females. Indeed, the participants were selected based on non-random sampling method. The selected participants were randomly divided into two equal groups; one experimental group and one control group.

3.2 Instruments

To perform the experiment and collect the desired data, the following types of materials were employed.

3.2.1 The Oxford Placement Test

The first instrument which was used in the present study to homogenize the participants' level of proficiency was OQPT. This instrument was used to collect information on the learners' proficiency. The OQPT consisted of two parts: Part one (1-40) deals with simple grammar and vocabulary items. Part two (41-60) concerns with a bit more difficult multiple-choice items and cloze test. The students' scores are ranked from high to low and homogenizing the participants is based on the OQPT categorizing chart including 0-10 scores for beginners, 11-17 for breakthrough, 18-29 for elementary, 30-47 for intermediate and 48-60 for advanced level. The participants whose scores were between 30 and 47 participated in the study as intermediate group.

3.2.2 The Textbook

The textbook which is supposed to be used in the course was *Family and Friends*, Intermediate level, by Thompson (2010). The book included 14 units. The book includes a focus on real speaking and writing output, clear vocabulary and grammar syllabus recycles and recombining language. Five units of the book were taught in the study period. Additionally, during the course, intermediate learners were trained how to use correct tense of the words (accuracy), correct use of grammatical points in their writings (fluency), and how to use complex sentences (complexity) which were significant in the study.

3.2.3 Pretest and Posttest

The second instrument which was used in this study was a writing pre-test. Before the treatment, the researcher asked the participants to write a narrative composition about 200 words on a topic given by the researcher. The purpose of the writing pretest was to determine whether or not the participants were homogeneous in their writing ability. The validity of the pre-test was confirmed by two English experts and its reliability was calculated through using inter-rater reliability by means of Pearson correlation analysis ($r=0.86$).

At the end of the treatment, the researcher selected a topic based on their textbook as the posttest for both groups and they were supposed to write a composition including at least 200 words like the pretest. The purpose of the post-test was to compare the performance of the

experimental groups after the treatment. It should be noted that the validity of the post-test was confirmed by two English experts and its reliability was calculated through using inter-rater reliability by means of Pearson correlation analysis ($r=0.98$).

3.3 Data Collection Procedure

The first OQPT was administered in order to manifest the participants' homogeneity in terms of English language proficiency. Thirty participants out of 60 were chosen for the target population of the present study. The participants were then randomly assigned to two equal groups of experimental and control. After choosing the participants a pretest was conducted. In pretest, the participants were required to write a paragraph based on their first writing assignment in their course book (i.e., *Family and Friends 4*). After the pretest, the treatment was carried out. During the treatment, first the instructions were explained to the students in the experimental group. Then, the participants in the experimental group received feedback from their teachers and also their partners in the class (by crossing out and explaining) during the writing tasks on how to use the correct forms of the words and tenses. Next as a part of the treatment, they were provided with the samples of reading passages in the book as a model about using the practical words in their writing (collocations, grammatical points, and etc.) explicitly. So, in the treatment, the participant had to write some writing texts according to the titles of the units included in the books. The participants in the control group did not receive corrective feedback.

3.4 Data Analysis

After collecting data related to the performances of control and experimental group, the researcher analyzed the data using SPSS (Statistical Package for Social Science, 25) software. Then, independent and paired samples t-tests were conducted to compare the means of the experimental group with control group in pre-test and post-test to get the final results.

3.5 Measure Criteria

Based on Wigglesworth and Storch (2009), the following quantitative measurements can be used to analyze the writing performance of the participants; that is, fluency was measured by the average number of words in each text, the average number of T-units in each text, or the average number of clauses per text. Complexity was also determined by the proportion of the clauses to T-units or the percentage of dependent clauses of total clauses, also, accuracy was measured by the percentage of error-free T-units or the percentage of error-free clauses

4.0 RESULTS

4.1 Results of the Pretest of Complexity (C), Accuracy (A), and Fluency (F)

To examine the impact of CF, i.e., the independent variable, on Iranian intermediate EFL learners' Complexity (C), Accuracy (A), and Fluency (F) in writing, i.e., the dependent variables, the participants of the study had to write several writings during the course. The first writing of the participants was considered to be the pretest. The following tables present the descriptive statistics and the results of the independent samples t-test related to the writing CAF of the participants in the pretest.

Table 1 presents descriptive statistics related to the CAF of participants' writing in the pretest.

Table 1: Descriptive Statistics for CAF (Pretest)

	Group	N	Mean	Std. Deviation	Std. Error Mean
Pre. C	Experimental	15	.42	.23	.06
	Control	15	.29	.17	.04
Pre. A	Experimental	15	.54	.10	.03
	Control	15	.57	.13	.03
P.re F	Experimental	15	7.32	1.63	.42
	Control	15	7.07	.91	.23

Note: Complexity (C), Accalacy (A), Fluency (F); Pre (Pretest); Post (Posttest)

Although the means indicate that there was no significant difference between the experimental and control groups, to make sure that the difference was not statistically significant, an independent samples t-test was conducted. Table 2 presents the results.

Table 2: Independent Samples T-test for CAF (Pretest)

			Levene's Test for Equality of Variances		t-test for Equality of Means						
			F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper	
PreC	Equal variances assumed		4.05	.05	1.77	28.00	.09	.13	.07	-.02	.28
	Equal variances not assumed				1.77	25.45	.09	.13	.07	-.02	.28
PreA	Equal variances assumed		.24	.63	-.73	28	.47	-.03	.04	-.12	.06
	Equal variances not assumed				-.73	26.50	.47	-.03	.04	-.12	.06
PreF	Equal variances assumed		3.12	.09	.53	28	.60	.25	.48	-.73	1.24
	Equal variances not assumed				.53	21.93	.60	.25	.48	-.74	1.25

As Table 2 indicates, there is no significant difference between the control group and experimental group in terms of the CAF pretest since all the sig. values are higher than 0.05.

4.2 Results of the Posttest of Complexity (C), Accuracy (A), and Fluency (F)

At the end of the study a posttest was conducted to examine the impact of CF on writing CAF. The following tables show the information about each group in terms of number, mean, standard deviation, and standard error of measurement in CAF posttest.

Table 3 presents descriptive statistics for the CAF of the participants' writing in the posttest.

Table 3: Descriptive Statistics for CAF (Posttest)

	Group	N	Mean	Std. Deviation	Std. Error Mean
Post C	Experimental	15	.46	.19	.05
	Control	15	.20	.07	.02
Post A	Experimental	15	.78	.11	.03
	Control	15	.37	.12	.03
Post F	Experimental	15	10.00	1.77	.46
	Control	15	5.54	1.27	.33

The descriptive statistics of the participants' performance on posttest of CAF indicate that there was a significant difference between the mean of the experimental group and that of the control group, however, to make sure that the difference was statistically significant, an independent samples t-test was conducted. Table 4 indicates the results.

Table 4: Independent Samples T-test for Complexity (Posttest)

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
PostC	Equal variances assumed	7.08	.01	4.92	28	.000	.26	.05	.15	.37
	Equal variances not assumed			4.92	17.83	.000	.26	.05	.15	.37
PostA	Equal variances assumed	.31	.58	10.20	28	.000	.42	.04	.33	.50
	Equal variances not assumed			10.20	27.61	.000	.42	.04	.33	.50
PostF	Equal variances assumed	2.74	.11	7.94	28	.000	4.46	.56	3.31	5.61
	Equal variances not assumed			7.94	25.38	.000	4.46	.56	3.30	5.62

As shown in Table 4, there was a highly significant difference, $t_{(28)} = 4.92$, $P < .05$, between the performance of the participants in the control group ($M = .20$, $SD = .07$) and that of the experimental group ($M = .46$, $SD = .19$) in terms of the complexity of their sentences. The results help to answer the second research question (*Does CF affect Iranian Intermediate EFL learners' complexity in written production?*). Therefore, the answer to this question is positive which means that CF helped learners to produce more complex sentences among Iranian intermediate EFL learners.

Moreover, there was a highly statistically significant difference, $t_{(28)} = 10.20$, $P < .05$ between the control group ($M = .37$, $SD = .12$) and the experimental group ($M = .78$, $SD = .11$) in terms of writing accuracy. The results provide the answer to the third question (*Does CF affect*

Iranian Intermediate EFL learners' accuracy in written production?). The results show that CF, positively and significantly affected participants' production of more accurate sentences.

Lastly, as indicated in Table 4, there was a statistically significant difference, $t_{(28)} = 7.94, P < 0.05$ between the performance of the control group ($M = 5.54, SD = 1.27$) and that of the experimental group ($M = 10.00, SD = 1.27$) in terms of the writing fluency. As can be seen from the results, participants of experimental group outperformed the control group in their writing fluency, so this helps answer the fourth question (*Does CF affect Iranian Intermediate EFL learners' fluency in written production?*).

4.3 Paired Samples T-Tests

The results tabulated in the previous sections clearly show that presenting CF to the students' writing did make a difference in their performance in the posttest. As can be seen, the participants of the experimental group outperformed control group. This helped the researcher answers the first research question (*Does CF affect Iranian Intermediate EFL language learners' writing?*). In fact, as the results of the experiment indicated CF did significantly affect Iranian intermediate EFL language learners' written production.

However, to have a better picture of the results and participants' performances, a paired samples t-test was run. Table 5 presents the results of paired samples t-test for the CAF of the participants' writing in the experimental group.

Table 5: Paired Samples T-test For CAF of Experimental Group (Pretest Versus Posttest

		Mean	Std. Deviation	Std. Error Mean	t	df	Sig. (2-tailed)
Pair 1	EG. Pre. C EG. Post. C	-.03	.29	.07	-.46	14	.030
Pair 1	EG. Pre. A EG. Post. A	-.25	.17	.04	-5.75	14	.000
Pair 1	EG. Pre. F EG. Post. F	-2.68	2.87	.74	-3.61	14	.003

Note: EG (Experimental group)

The results in Table 5 show that there was a significant increase in learners' CAF in writing production from the pretest to the posttest, since the Sig. value is less than 0.05.

In summary, as the results of the posttest show, the experimental group significantly performed better than the control group in all three dimensions of writing skill (i.e., CAF).

5.0 DISCUSSION

This study sought to examine the effect of CF on Iranian intermediate EFL language learners' writing production and writing CAF. The first hypothesis stated that CF does not have any effect on learners' written production. The obtained results showed that CF had significant effects on intermediate language learners' written production. In this regard, the study lends support to previous studies that have found positive effects of CF on L2 learners' writing production (Bitchener & Knoch, 2008; Philp et al., 2008; Sheen, 2007).

The second hypothesis stated that CF does not have significant effects on Iranian intermediate EFL learners' complexity of their written production. The results showed that there was a highly significant difference between the performances of the learners' complexity in the experimental group compared with those of the control group. As Ferris and Roberts (2011) compared direct (teacher provides the correct linguistic form for the students) and indirect (underlining, coding, and leave the error to the students to correct) feedback between two groups; they found that participants who received indirect feedback did slightly better in revising their grammatical errors (complexity) than the ones who only received underlining as the feedback. It can be concluded that CF has a positive effect on learners' writing complexity. The results of the study are in line with Salimi (2015) who showed that CF can be an effective way to improve complexity in written production. Salimi conducted that CAF was an essential dimension and effective in learners' writing production.

The third research question aimed to check whether CF affects the accuracy of Iranian intermediate EFL learners' written production. The results indicated that CF was highly effective in writing accuracy. Bitchener and Knoch's (2008) study is in the same line with the present study. They compared three types of direct feedback (combination of direct feedback, written and oral explanation; direct feedback and written explanation, and direct feedback only). Their results showed the accuracy of the participants who received feedback in the immediate post-test outperformed those in the control group who received no feedback in the use of (a) and (the).

The fourth research question was whether CF affects Iranian intermediate EFL learners' fluency in their written production. The results indicated that this type of CF can be influential in learners' written production. Among studies that have come to the same conclusion is Lizotte (2001) who reported that the achievement of Hispanic bilingual and ESL students of a low

intermediate English proficiency increased after students were informed about errors using a code. What he did was to indicate only the location of errors for students' self-correction. The errors in the students' writing significantly reduced over a term and at the same time they made significant gains in fluency (number of words written in a specified amount of time). It was concluded that CF could provide many benefits ascribed to CAF in written production.

The results of the present study reveal that the treatment did make a highly significant increase in accuracy more than complexity and fluency and the participants in the experimental group outperformed the control group, which is consistent with Bitchener and Knoch (2008) and Sheen (2007) who conducted studies over two months and obtained the same results. In those studies, the provision of CF, whether in the written or oral form, was effective. Those who received direct CF outperformed those who did not.

To sum up, CF was achieved as an effective way to improve writing ability. This finding is in agreement with DeKeyser (2014) in which the effect of CF alone was examined. He actually investigated the students' improvement in grammar. In DeKeyser's (2014) study, the posttest results showed the improvement of learners' grammar proficiency. Similarly, Zhang (2017) observed six ESL writers on a full-time 14-week English program at the university in China. The obtained results showed that the "focus on the form" feedback which was used by most of the students in their immediate revisions to their drafts was highly valued. Within the same line, Almasi and Nemat Tabrizi (2016) showed that the teachers' feedback on students' grammatical and lexical errors resulted in a significant improvement in their writing (accuracy and fluency) over a term. The use of CF cannot guarantee writing ability; thus, there should be a teacher who is aware of the methods of teaching writing and using the CF in useful ways.

6.0 CONCLUSION AND IMPLICATIONS OF THE STUDY

The purpose of the research was to investigate the impact of CF on Iranian intermediate EFL learners' written production. In addition, this study aimed to check the role of CF practically on Iranian intermediate EFL learners' writing CAF. In other words, the study tried to perform CF on learners' CAF in writing to see which dimension was more significantly affected by CF. The results showed that there were no statistically significant differences between the control group (pretest and posttest) in their writing performance. However, the results of this study indicated that there was an improvement over time in writing performance for the experimental group. It is interesting to highlight this fact that using treatment in experimental group, provision of CF, showed positive effects from the pretest to the posttest and they had higher mean score in writing proficiency than the control group. The results imply that the application

of CF, such as direct correction, crossing out the errors and writing the correct terms, getting help from the other learners in the class, the interaction of the learners and teachers must be taken into account. The findings also indicated that the use of CF may lead to better and more fruitful results in accuracy compared to complexity and fluency of the participants' writing proficiency.

In sum, CF provides a great opportunity to write accurate, fluent, and also complex sentences; it requires each learner to contribute and seek contribution from partners whose writing is corrected by the teacher, performing CF tasks in class improves learners' writing.

The use of CF can have very practical implications for language learners. The results of the study showed that employing CF in their writing classes can be a practical way to improve their students' proficiency. Similarly, EFL learners can also use CF to have better writing. It is believed that the results of this study can contribute to better-written production in terms of CAF. It can enhance the quality of writing tasks.

Another important implication of the study is the efficacy of CF for intermediate learners. It might be argued that intermediate language learners are not able to interpret CF from their teachers or peers. Nevertheless, the results of the study showed that providing intermediate language learners with CF can be an efficient way. Although it might be difficult to conclude that the same results will be obtained in oral production, the results clearly showed that it can have a positive impact on written production. This must be done with plenty of care and considerations. It is essential for teachers to consider CF as a part of teacher training courses so that they must be familiarized with the most practical ways to provide CF, especially when their learners are intermediate.

7.0 LIMITATIONS OF THE STUDY

Like any other studies in the field of second language teaching, this study was not without limitations. The experiment that was done in the study was a little different from a natural L2 writing study. The sentence correction was done sentence by sentence in the class which was followed by explanations and getting help from other learners in the class, which made the treatment quite time-consuming. One of the most important limitations of the study was the number of sessions. The researcher wished to present strategies and practiced them during more than eight sessions. In addition to the number of sessions, the researcher wished to have more participants for each group. Furthermore, it was at times very frustrating for the students and the researcher had to include some fun activities to keep the participants amused, which in some situations slowed the process of data collection.

8.0 SUGGESTION FOR FURTHER RESEARCH

The study can be followed with plenty of other studies to confirm and strengthen the results and investigate the findings from a different perspective. One of the areas of the study that can be encouraged is the inclusion of gender as another variable. Researchers are invited to examine the efficacy of strategy training and gender on writing scores. As well as the effects of strategy training on writing, the effects can be studied on other skills, such as reading and speaking. Researchers are encouraged to continue this line of research on the impact of CF on intermediate EFL learners' speaking and listening comprehension. This is practically interesting because no studies have been conducted to investigate teaching intermediate language learners; therefore, examining the effects of strategy training on other skills among intermediate language learners can be a promising area of research.

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