

The Effect of Two Types of Corrective Feedback on the Writing Accuracy of Egyptian EFL Learners

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Abstract:

According to the Sociocultural Theory of mind, corrective feedback (CF), as a sort of social negotiations, is considered a critical mutual transaction between the teacher and the learner in EFL classroom settings. This study investigated the role of negotiated corrective feedback (NCF) and non-negotiated feedback (NNCF) in developing the writing accuracy of Egyptian EFL learners in both revising of their texts and producing new ones. 24 homogenous EFL learners participated in a 6-week instruction of a paragraph writing course and wrote 6 texts in class, which they revised later. Pre-,

post-, and delayed tests were administered to assess their writing improvement. The learners' revised drafts and their performance on the three tests were analyzed using *t*-tests and ANOVA. Results showed that negotiated feedback was more effective than non-negotiated feedback in developing the learners' writing accuracy whether on the short term (learners' revised drafts) or on the long term (production of new texts). Learners, on the other hand, preferred being *scaffolded* with negotiated corrective feedback by the teacher as it allowed them to faster detect and correct their own linguistic errors when revising

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their marked written texts.

Keywords:

Written corrective feedback, negotiated feedback, non-negotiated feedback, grammatical accuracy, Sociocultural Theory, EFL learners.

المخلص،

بحثت هذه الدراسة في تأثير نوعين من التغذية الراجعة على الدقة اللغوية للأداء الكتابي عند دارسي الإنجليزية كلغة أجنبية من المصريين من منظور ثقافي اجتماعي. تم اختبار أربع وعشرين دارساً مقيداً ببرنامج لتنمية المهارات الكتابية بمركز اللغات والترجمة بجامعة القاهرة، وتوزيعهم عشوائياً إلى مجموعتين. خلال ستة أسابيع تم إمداد الدارسين بالمجموعة الأولى بتغذية راجعة تواصلية Negotiated Corrective Feedback من قبل الباحث خلال عقد لقاءات معهم لمناقشة أخطائهم في النصوص الكتابية. على النحو الآخر تم إمداد دارسي المجموعة الثانية بتغذية راجعة تقليدية بتحديد موقع الخطأ ونوعه

فقط دون أي تفسير أو مناقشة من قبل الباحث Non-negotiated Corrective Feedback.

تم قياس مدى تقدم مستوى الدقة اللغوية للأداء الكتابي عند الدارسين عن طريق ثلاثة اختبارات لكتابة النصوص، بالإضافة إلى مراجعة الدارس لنصه المكتوب مسبقاً بعد إمداده بالتغذية الراجعة المناسبة. أثبتت الدراسة أن المجموعة التي تم إمدادها بتغذية راجعة تواصلية كانت أفضل من حيث مراجعتها وإنتاجها للنصوص المكتوبة من حيث الدقة اللغوية، و كان الفرق ذا دلالة إحصائية.

كما أظهرت الدراسة تفضيل الدارسين الواضح للتغذية الراجعة التواصلية من حيث تنمية مهاراتهم في تحديد أخطائهم الكتابية، وتصحيحها بشكل أسرع عن إمدادهم بتغذية راجعة تقليدية عن طريق تحديد موقع الخطأ ونوعه فقط.

الكلمات الدالة،

اللغة الإنجليزية كلغة أجنبية – التغذية الراجعة – الأداء الكتابي

—نظريّة الثقافة الاجتماعيّة.

1.Introduction

More than two decades ago, Tuscott (1996, 1999) introduced the "correction-free approach" and since then written corrective feedback (WCF) has been under debate by L2 and FL researchers in the field of language acquisition. Known as 'grammar correction' or 'written error correction', Ferris (199, 2004) and Hyland and Hyland (2006) asserted the importance of WCF in ESL/EFL writing courses around the world. A growing body of research, since then, started to prevail to the extent that in the Journal of Second Language Writing, the articles of WCF are among the most cited ones (Ferris, Liu, Sinha, and Senna, 2013).

The aim of FL writing classes is to improve the overall

quality and accuracy of the learners' FL writing ability. Such a linguistic accuracy, specially in academic settings, demands providing FL learners with a specific type of CF to help them 'notice' and 'focus' on their errors (Bitchener, 2012). On the other hand, FL teachers have to devote ample time and energy to provide suitable WCF in their L2 writing classes (Ferris, Brown, Liu, and Stine, 2011; Ferris, Liu, and Rabie, 2011; Lee, 2008, 2009).

Nassaji (2011), on the other hand, maintains that during L2 writing classes a good amount of pedagogical intervention should be directed towards the learners' L2 writing errors. The method the teacher expresses his CF in "affects the learners' reactions to it, and may have a significant impact on their writing ability improvement" (Panahi, Birjandi, and Azabdaftari,

2013, p.3).

Research on WCF, however, resulted in diverse and conflicting outcomes. Therefore, with the aim of contributing to the field of research on the EFL writing improvement ability, this study investigated two types of CF (negotiated vs non-negotiated) on the writing accuracy of Egyptian EFL learners.

2. Literature Review

The following sections introduce a review of the research on CF, followed by the theoretical framework of the present study.

2.1 Corrective Feedback (CF)

Previous research on the impact of CF on treating L2 writing errors in the field of second language acquisition resulted in a number of debates. Tuscott (1996) questioned whether ESL benefit from WCF on

the bases that acquiring linguistic knowledge in L2 is a long and complex process, and such a process is overlooked by error correction (Bitchener, Young & Cameron, 2005). He also argued that teachers should make use of every minute in classroom for a 'more constructive' practice than just "giving feedback on grammatical errors", and that "grammar correction has no place in writing courses and should be abandoned" (p. 328). On the other hand, Tuscott's view has been rejected by a number of researchers stating that it was based on inadequate research findings (Chandler, 2003, 2004; Ferris, 1999, 2004; Ferris & Helt, 2000), and that on the contrary, growing research results supported the effects of CF in the context of SLA (Bitchener & Knock, 2010; Chandler, 2003; Fathman &

Whalley, 1990, Ferris, 2006; Ferris & Roberts, 2001; Sheen, 2010).

Researchers supporting the use of CF in L2 and FL classrooms advocated that in writing courses learners usually receive inadequate positive feedback that does not direct them towards the correct forms of language input and, consequently, does not help them realize the difference and mismatch between their previously existing L1 knowledge and the new L2 knowledge that they need to learn (Ritherford, 1987; White, 1989, 1991). Such a type of inappropriate feedback leads FL learners even to "narrow the range of possible hypotheses that can account for the data" (Carroll & Swain, 1983, p. 358).

Hyland (2003), moreover, asserted that teachers are required to provide CF to learners because it

provides a certain type of reaction to learners' efforts, help them to improve their writing skill, justify the evaluation and grades learners get and therefore motivate them for better results in the future (Ferris, 1995; Ferris & Roberts, 2001). Ferris et al. (2013) supported the use of CF stressing its facilitative role in FL learning and pointing out that "the question around written CF is not if, but how best to provide it" (p. 308).

Direct versus indirect feedback is one type of CF that is discussed in a number of researches. Ferris (2003) and Bitchener et al. (2008) defined the direct feedback as being explicit in which the correct form is provided by the teacher near or above the error. This CF can be applied through different forms such as crossing out or inserting a morpheme, a phrase or a word, provision of the correct

structure, and meta-linguistic explanation whether orally or in written form. Indirect CF, on the other hand, can have the form of underlining or circling a linguistic error, indicating the number of errors in the margin, and using a coding system to show the type or place of the error (Bitchener, 2008; Ferris & Roberts, 2001). Therefore, the learner is left to diagnose and correct the error in this implicit kind of CF. Furthermore, the indirect CF is divided into two types: coded feedback versus uncoded feedback. In a coded CF the exact location and type of linguistic errors are shown. The teacher might use PP for example to indicate an error of preposition use. In an uncoded CF, the teacher only underlines or circles the error without further indications. Research on indirect versus direct CF showed different results. Ferris

& Helt (2000), Lalande (1982) and Lee (1997) stressed the importance of indirect CF, others supported the significant effect of direct CF (Bitchener, 2008; Bitchener & Knoch, 2009; Chandler, 2003), and a third group stated that neither indirect CF (coded versus uncoded) nor direct CF has any superior significance on the other (Ferris et al., 2008; Robb et al., 1986; Semke, 1984). The indirect CF, however, is favored more by some researchers because it engages the learner in solving the linguistic error, and which eventually leads to fostering acquisition and long-term retention (James, 1998; Lalande, 1982).

Focused CF versus unfocused CF is another distinction made by researchers in the field of CF. Focused CF is a type of feedback that focuses on only a few error

categories. Schwartz (1993) and Truscott (1999) stressed the importance that error categories should be kept to minimum when providing CF because learners do not acquire linguistic knowledge and error categories in a single way. Studies adopting this approach supported the focus on "one or only a few categories at a time" (Bitchener, 2008; p.108). Two error categories were used by Bitchener (2008), Nassaji (2011), and Sheen (2007), while three error categories were regarded as the maximum number to focus on (Bitchener et al., 2005). Unfocused CF, on the other hand, focuses on various error categories. Such an approach is mostly used when the learners' language proficiency level is not advanced and they are eager to know all their linguistic errors, not just one or two types. In this study, the unfocused CF was used

so as to help the learners not just consider one or two error categories and neglect others (Xu, 2009). If limited error categories were chosen in this study, this would invalidate the findings because the participants might become aware of the focus of research (Bitchener, 2009). Furthermore, learners in normal classroom settings do not submit their writing texts expecting that they would be marked focusing on an error type or two. They usually look forward to having all possible errors they have made to be highlighted so that they try avoid them in their coming writing tasks, and eventually master more linguistic features of the FL.

In order to assess the role of CF on learners' writing ability, research should examine both short-term and long-term effects of CF. Ferris and Roberts (2001) mentioned that

the short-term effect of CF is measured by making learners revise the same text that they have produced, while the long-term effect is measured examining the new texts learners write. That is why an effective feedback is achieved in terms of language learning when it is "noticed, processed, and acted upon" (Bitchener, 2012; p. 857). Engaging learners to revise their written texts is considered critical in improving their L2 writing accuracy. That is because learners have to "do something with error correction besides simply receiving it" (Chandler, 2003; p. 293). On the other hand, some researchers regarded the process of revision of the learners' texts by themselves as inadequate and insufficient because the effects of CF are not demonstrated in the new texts learners produce later (Sheen,

2007; Truscott, 2007). In their studies, Bitchener et al. (2005) and Nassaji (2011) emphasized the need to investigate the long-term effects of CF in the new texts learners produce. In a longitudinal study, Van Beuningen, De Jong, & Kuiken (2012) stressed the significance of the written CF on the improvement of the writing accuracy of learners in both revision of their produced texts and their new texts later. Significant results were also found about the positive effect of written CF on writing of new texts (Bitchener, 2008, 2009; Bitchener & Knoch, 2008; Sheen, 2007; Sheen, Wright & Moldawa, 2009). However, other studies found no significant effects of written CF on new texts production (Fazio, 2001; Polio et al. 1998; Semke, 1984; Sheppard, 1992).

In a real writing classroom, providing learners with CF is considered an ethical issue by many researchers. Ferris (2004, 2006) pointed out that CF helps students to notice their linguistic errors and depriving them from such a process is not accepted. Moreover, learners always expected to receive feedback on their errors (Ferris & Roberts, 2001), and overlooking this dissatisfies and even demotivates learners. Providing 'summary end notes on the errors' is not enough and does not compensate for the lack of CF because learners need to avoid such errors in their writing later (Ferris, 2006).

2.2 Theoretical Framework: Negotiation and Guided Learning

Most of the previous research on CF on written errors focused on providing the learners a

unidirectional feedback where there was no teacher-student interaction or negotiation. Teachers used to provide the CF and learners just received it (Nassaji, 2011). In such non-reciprocal feedback, the learners' needs and attitudes towards the treatment of their linguistic errors by their teachers was not taken into account. A more possible effective CF might be that which is provided through interaction and negotiation between the teacher and learners. Negotiation is considered as a technique to reach a solution for a communicative problem which arise in interaction. This can take two forms: meaning negotiation or form negotiation. Meaning negotiation is achieved through facilitating communication. This is done through making input more comprehensible. In form negotiation, the aim is to produce

more grammatically correct utterance (van den Branden, 1997). Although the significant effect of negotiation in CF has been studied by some researchers (Lyster, 1998, 2002; Nassaji, 2007; Ohta, 2000; van den Branden, 1997), they have focused on oral errors. To the researcher's knowledge, there is a gap in literature about the impact of negotiated CF on the writing errors of EFL learners.

Based on the Sociocultural Theory of Learning, L2 learning is a process that can be attributed to learner's participation in social activities where L2 is used. Feedback in L2 learning has been studied by researchers from a sociocultural perspective (Aljaafreh & Lantolf, 1994; Nassaji, 2011; Nassaji & Swain, 2000). In a formal classroom setting where L2 is learnt, the teachers and learners

negotiate the meaning and socially develop the structure and function of the L2. It is this teacher-learner mutual interaction that helps learners to develop their language skills. Corrective feedback is considered, accordingly, to focus on negotiation within this sociocultural framework. Within this framework, the traditional view of the teacher as the provider of CF and the learner as the receiver has changed into a social interactionist view in which feedback depends on joint participation and negotiation between the learner and teacher.

Aljaafreh & Lantolf (1994) highlighted the social and dialogic nature of feedback from a sociocultural perspective. Bitchener (2009) asserted the importance of sociocultural focus in the design of researches in order

to assess the performance improvement of subjects. In such a framework, feedback is effective as long as meaningful negotiation is established between the teacher and the learner, and it is this positive interaction that enables the teacher to discover what Vygotsky (1978) referred to as the learner's Zone of Proximal Development (ZPD). ZPD is "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance, or in collaboration with more capable peers" (Vygotsky, 1978, p.86). The teacher should be alert to this ZPD and accordingly provide the suitable feedback (Nassaji & Cumming, 2000; Nassaji & Swain, 2000).

Within this sociocultural

framework lies the notion of scaffolding or the guided support. Donato (1994) defines it as "a situation where a knowledgeable participant can create supportive conditions in which the novice can participate, and extend his or her current skills and knowledge to higher levels of competence" (p. 40). So, the effects of feedback, in such a scaffolded interaction, are dependant on how it is negotiated between the teacher and the learner. Aljaafreh and Lantolf (1994) in their study examined the role of negotiation in correcting L2 written errors. They showed that negotiated feedback was effective in facilitating new forms of learning. It is noteworthy that the "regulatory scale" they used in their study to provide feedback in oral negotiations between three English learners and a teacher, is used in this study as well.

Nassaji and Swain (2000) compared the effect of negotiated help versus random help on the learning of English articles by two Korean learners of English. They described negotiated help as the CF provided within the learners' ZPD. The results showed that negotiated help was more effective in improving the learners' accuracy in producing English articles.

Nassaji (2011) further distinguished between negotiated CF and non-negotiated CF. In negotiated CF, the teacher "encourages and pushes the learners to discover and correct their errors" using regulatory scale. In Non-negotiated CF, however, the teacher only "provides a correction of the error with no negotiation and interaction with the student" (p. 323-3). He examined the effect of oral negotiation on L2

written errors using three types of CF: negotiated CF, CF with limited negotiation, and non-negotiated CF. The results showed that non-negotiated CF was the least effective in improving the L2 written errors. It is noteworthy that Nassaji concluded that not all feedback with negotiation has similar effects on all linguistic errors. In his study, negotiated CF was more effective in reducing learners' article errors than preposition errors.

Ferris et al. (2013) called for more research on CF because "there is an obvious and startling gap in recent research on CF and the individual learner characteristics as they receive, process, and apply written CF" (p. 308). Moreover, there is a gap in literature on the effect of negotiated CF on the written performance of

FL learners. Thus, the present study seeks to answer the following research questions:

What is the effect of negotiated versus non-negotiated corrective feedback on the short-term writing accuracy improvement of Egyptian EFL learners?

What is the effect of negotiated versus non-negotiated corrective feedback on the long-term writing accuracy improvement of Egyptian EFL learners?

3. Method

3.1 Subjects

The subjects in this study were the Egyptian learners of English enrolled in EFL courses at the Computer & Language Unit at the Faculty of Physical Therapy, Cairo University. 24 learners, in two intact classes at the intermediate level, participated in all treatment and testing sessions. To further

homogenize their English Language proficiency level, the subjects were asked to sit for the paper-based TOEFL. The results confirmed that they were at intermediate level.

The subjects ranged in age from 18 years to 25. Of the total number of subjects, 6 (25%) were males and 18 (75%) were females.

The subjects were randomly divided into 2 groups: negotiated corrective feedback (NCF) and non-negotiated corrective feedback (NNCF). Each group consisted of 12 learners. The writing course the subjects were enrolled in was entitled English Writing Course I. The aim of the course was to introduce the basics of paragraph writing and familiarize the learners with the different types of writing discourse (narrative, expository, process, descriptive, argumentative, ...).

3.2 Design

The blended design used in this study was recommended by Ferris (2010). During 6 weeks, the subjects wrote a pretest first, during the pedagogical intervention they wrote different texts, received CF from the teacher, revised the same texts (repeated for 6 times), wrote a posttest, and finally they wrote a delayed-posttest with one month interval. A one month interval was considered enough by the researcher to control intervening variables more as the learners were attending other language proficiency courses. The same interval was also used by Van Beuningen et al. (2012) in their study.

3.3 Linguistic Errors Coding

This study adopts an unfocused error correction approach (see Section 2.1) to motivate learners

know more about their various linguistic errors and therefore aiming to reduce them in their writing later. 14 error categories, adapted from Ferris et al. (2012), were coded to be used and addressed in the feedback phase of this study. The sheet of error types with their description and an example for each was delivered to the subjects (Appendix A).

3.4 Procedures

All subjects were asked to sit for the paper-based TOEFL on the first day of treatment to determine their language proficiency level. The test was taken from Longman Complete Course for the TOEFL Test by Phillips (2001). A complete test with its 4 sections - Listening Comprehension, Structure and Written Expression, Reading Comprehension and Test of Written English (TWE) - was

administered to all learners. The TWE served as the pretest in this study and based on it learners were placed in the same level of writing ability. The learners' scores in the TOEFL showed that all of them were at an intermediate language proficiency level and their performance in the TWE as the pretest showed they were homogeneous. Next, the learners were assigned randomly into 2 groups: negotiated corrective feedback (NCF) and non-negotiated corrective feedback (NNCF). The researcher, during the intervention, used the same kind of instruction, activities and writing topics for the 2 groups.

During the 6-week classroom treatment, the learners were introduced to the basics of paragraph writing and were trained in 6 different writing discourse types: narrative, descriptive,

reasoning, process, compare and contrast, and classification. The textbook used was *Developing Composition Skills* by Ruetten (2012). After teaching one of the genres in each session, the teacher asked the learners to write a paragraph in that genre in 30 minutes. After collecting their produced texts, the teacher marked the texts and gave two types of CF (NNCF vs. NCF) pertaining to the learners in each group. In the NNCF group, the learners received their marked texts in which the teacher circled or underlined the linguistic grammatical errors and indirectly coded them without discussing them with the learners. In the NCF group, however, the teacher had face-to-face oral discussions with the learners to locate and negotiate their linguistic errors. Subjects in both groups were asked to rewrite their

paragraphs using the feedback they had received from the teacher. This revision examined the short-term effect of the feedback type learners received. On the last day of the treatment, an immediate writing posttest was administered to measure the long-term effect of the different types of CF the subjects received through producing new paragraphs. The same genre of writing was selected by the teacher for the pretest and posttest. This is done to provide a valid measurement of learners' progress (Bitchener, 2008). Therefore, the expository genre of analyzing reasons was used by the teacher asking learners to write a paragraph on "Why did you.....?" In the pretest, the question was "Why did you choose to study English at the Language & Computer Unit of the Faculty of Physical Therapy, Cairo University?" and in the posttest

learners produced texts answering the question "Why did you enrol in a basic course of writing in English?" After a month, the researcher administered the delayed posttest to the same learners of both groups. The genre of analyzing process was also used asking the learners to produce texts answering the question "Why did you choose to enrol in an intermediate course of writing in English?"

3.5 Corrective Feedback Types

The two types of CF used in this study are discussed in this section.

3.5.1 Non-negotiated Coded Written Corrective Feedback

After reading the subjects' texts from the NNCF group, the teacher underlined or circled the linguistic grammatical errors found in their paragraphs and wrote a code above each error (Appendix C). These

error codes were previously given to the subjects to help them identify their errors. Then, the texts were returned to the learners for revision (short-term effect of CF).

3.5.2 Negotiated Written Corrective Feedback

After marking the texts written by the NCF group, the teacher held face-to-face oral discussions with the learners to negotiate their linguistic grammatical errors. The negotiation was guided via the regulatory scale proposed by Aljaafreh and Lantolf (1994) (Appendix E). The scale includes 12 episodes of negotiation ranging from the most indirect implicit feedback (self-regulation) and attuned gradually to the learners' needs to the most direct explicit help (other-regulation). This means that the learner has first to identify and correct the errors, then jointly

share them with the teacher and finally the responsibility is assigned to the teacher. A sample of NCF provided by the teacher is provided in Appendix D.

3.6 Data Analyses

To make the rating process easier, the researcher collected the paragraphs written by the learners and word-processed them using Microsoft Office Word 2007. To confirm the reliability of error identification and correction analysis, two other TEFL teachers with a 7-year experience assisted the researcher in rating the texts. The inter-rater analysis was carried out in three phases:

The researcher identified and coded the linguistic grammatical errors in the learners' texts. Checking the inter-rater reliability showed an initial agreement of 93% in error identification and

91% in error coding. The respective 7% and 9% of agreement were solved via further collaborative analysis.

The learners' revisions were marked and edited by the raters. The raters used correct or incorrect/no change adopted from Ferris and Roberts (2001). The inter-rater reliability reached a 98% agreement on the texts they analyzed and the remaining 2% was collaboratively solved.

The researcher identified and coded the errors in the pretest, posttest and the delayed posttest. The raters reached 92% and 94% rates of agreement in error identification and error coding respectively. They collaboratively solved the remaining 8% and 6% to establish the inter-rater reliability.

4. Results

The aim of this study was

to investigate the effect of two types of corrective feedback on the writing accuracy of Egyptian EFL learners when revising their own marked texts and producing new ones. To answer the research questions, descriptive statistics (means and standard deviations), t-tests (to compare the differences across treatment groups), and ANOVA (to assess differences across treatment groups and the 3 assessment phases) were used.

The first research question posed in the study investigated the difference in effect of NCF and NNCF on short-term writing accuracy improvement of Egyptian EFL learners. To answer this question, the percentage of error uptakes were calculated for subjects' revision of each of the 6 texts they produced in class. Chandler's (2003) formula was

adopted and adapted to calculate the value of uptake. Instead of measuring the error rate as a ratio

of the total number of errors to total number of words, the researcher measured it as the ratio of total number of corrections to the total number of errors. The mean percentage of uptake was computed. Table 1 shows the descriptive statistics and Figure 2

represents the error uptake in the groups across the six revisions.

Table 1

Percentage of Error Uptake and Paired-Sample T-tests for Revision

	Session 1 Narrative		Session 2 Descriptive		Session 3 Reason		Session 4 Process		Session 5 Compare & Contrast		Session 6 Classification	
Group	%	P	%	P	%	P	%	P	%	P	%	P
NCF	88.57	.00*	90.41	.00*	85.76	.00*	93.42	.00*	91.00	.00*	96.36	.00*
NNCF	77.84	.00*	64.22	.00*	78.28	.015*	76.66	.00*	82.47	.013*	79.27	.00*

%; mean percentage of uptake = number of corrections/number of errors x 100

p: paired-samples t-tests (time 1: error correction; time 2: error revision)

*p<.05

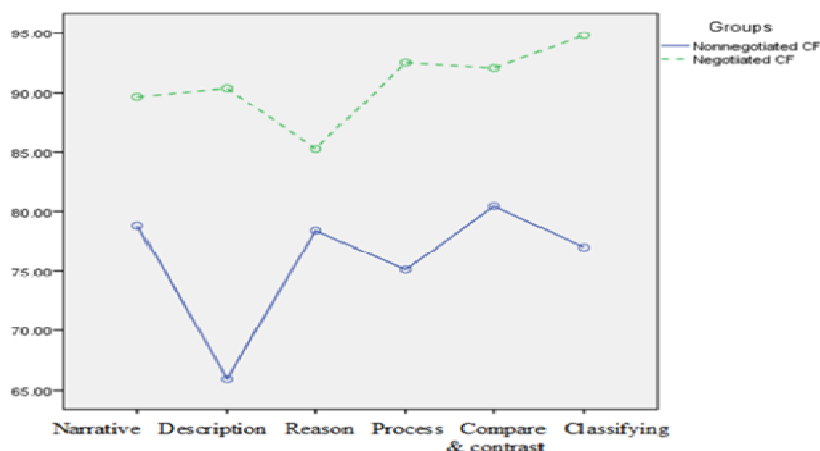


Fig. 1: Error Uptake in the Groups across Six Revisions

Table 1 shows that the NCF learners had their lowest rate of uptake in session 3: Reason ($M=85.76$) and their highest rate in session 6: Classification ($M=96.36$).

However, the NNCF learners had their lowest rate in session

2: Description ($M=64.22$) and their highest rate in session

5: Compare and Contrast ($M=82.47$).

In order to investigate whether the uptake that occurred in each text and for each group was significant or not, a series of paired-samples t-tests were utilized (within-group analysis). Table 1 shows that the results are significant for all the 6 texts across all the teaching sessions. This indicates that the uptake occurred significantly as a result of both NNCF and NCF. Moreover, an independent-sample t-test was

conducted using the overall mean percentage of uptake in all the sessions of each group (between-group analysis) to compare the overall effect of uptake and its significance. The descriptive statistics and results are shown in Table 2.

Table 2

Independent-Sample T-Test for Uptake

	<i>Groups</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>df</i>	<i>t</i>	<i>Sig. (2-tailed)</i>
Uptake	NCF	15	90.77	3.94	38	-24.735	.00
	NNCF	15	66.80	1.79			

Table 2 shows that there is a significant difference between the rate of uptake in NNCF (M=66.80, SD=1.79) and the rate of uptake in NCF (M=90.77, SD=3.94). This indicates that the NCF subjects corrected their linguistic errors significantly better than those in the NNCF.

The second research question in this study aimed to investigate the

long-term effects of NCF versus NNCF on the writing accuracy improvement of Egyptian EFL learners. The researcher adopted once again Chandler's (2003) formula and adapted it to suit this study. Instead of using the total number of words and the total number of errors to calculate error rate, the researcher subtracted the total number of errors from the total number of words to calculate

the number of accurate forms. In order to have a valid comparison of error rates across samples with different length, Riazantseva (2012) argued that the word count must be normed on the basis of approximate length. In this study, the average length of the learners' writing texts was equal to 100, and

the measure of accuracy over 100 words was calculated (Chandler, 2003). The accuracy mean for the pre-, post-, and delayed posttests is shown in Table 3. Figure 2 represents the accuracy mean for the NNCF and NCF groups over the three periods of testing.

Group	N	Pretest		Posttest		Delayed Posttest	
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
NCF	15	81.20	1.74	95.06	1.10	96.74	.73
NNCF	15	81.60	1.83	87.26	1.55	91.02	1.14

Table 3

Descriptive Statistics for Accuracy Mean by Group and Testing Periods

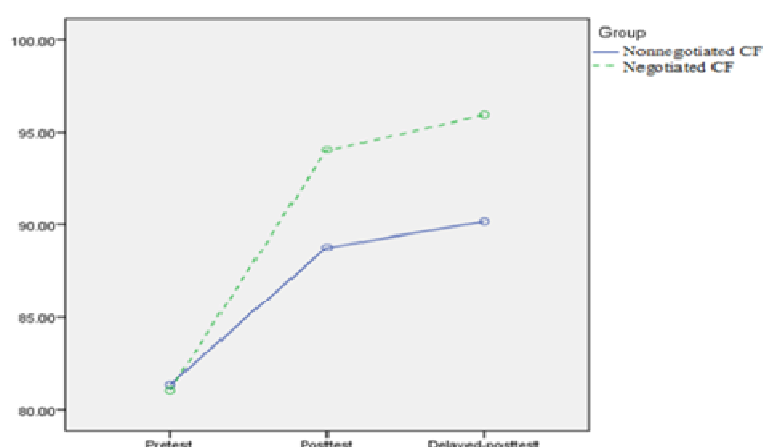


Fig. 2: Accuracy Mean for the NNC and NCF Groups over Three Testing Periods

Table 3 shows that both NCF group ($M=81.20$, $SD=1.74$) and

NNCF group ($M=81.60$, $SD=1.83$) $SD=1.14$).

had nearly an equal level of accuracy level at the time of pretest. However, at the time of posttest the accuracy mean for both NCF group ($M=95.06$, $SD=1.10$) and NNCF group ($M=87.26$, $SD=1.55$) increased. The same increase is evident at the time of delayed posttest as well for both NCF group ($M=96.74$, $SD=0.73$) and NNCF ($M=91.02$,

Table 4

Mixed Between-Within ANOVA Results

	Source	df	F	p
Between Subjects	CF Type	1	116.78	.000
Within Subjects	Time	2	935.08	.000
	Time x CF Type	2	56.96	.000

Table 4 shows that there is a significant interaction between the 2 CF types and the 3 testing periods, Wilk's $\Lambda=0.23$, $F(2,37)=56.96$, $p=.000$. Moreover, time had a main effect, Wilk's

Finally, ANOVA was employed to compare the groups' accuracy means. The dependent variables in the study were the accuracy scores and the three testing periods, while the independent variables were the two CF types under investigation. Table 4 shows the results of mixed between-within ANOVA results.

$\Lambda=0.02$, $F(2,37)=935.08$, $p=.000$, and both NNCF and NCF groups showed an increase in their accuracy means across the three testing periods. The results also show that the 2 types of CF had

different significant effects on the writing accuracy of learners over time $F=116.78$, $p=.000$.

5. Discussion

Investigating the effect of two types of corrective feedback on the writing accuracy improvement of Egyptian EFL learners, this study showed that negotiated corrective feedback is more effective in improving the writing accuracy of EFL learners than the non-negotiated corrective feedback. Through a pedagogical intervention over a period of six weeks, the participants' writing accuracy improvement was not only manifested in their writing performance in the posttest but also retained in the delayed posttest after a month interval.

Concerning short-term effects of the NNCF and NCF, the results of the study supported the

positive relationship between feedback and revision. Subjects in both groups successfully revised a large number of their linguistic errors during the revision phase of their produced texts. The findings of this study echoed the results found by Chandler (2003) who stressed the importance of the revision phase in CF research, to the extent that no revision meant no feedback for her. Ferris (2010) proposed that in the revision phase, learners find the appropriate time to "think about and process the corrections and attempt repairs and modifications" (p. 194).

In line with Bitchener et al. (2005), this study showed that although the overall accuracy of the learners' writings across the three tests (pre-, post-, and delayed post-) and the 6 genres of writing

increased, the improvement was not a linear and an upward one. One reason for this might be that the learner's initial ability in using a linguistic form correctly regresses later before it is eventually used according to the norms of the target language (Ellis, 1994; Lightbown & Spada, 1999; Pienemann, 1989). Bitchener et al. (2005, p. 191) point out that "L2 learners, in the process of acquiring new linguistic forms, may perform them with accuracy on one occasion but fail to do so on other similar occasions". Therefore, after highlighting a form through feedback, it is not a must that it is immediately or permanently acquired (Hyland & Hyland, 2006). According to the Sociocultural Theory of Mind, a learner might perform differently on the same task in different

occasions "as a result of complex interaction of individual, situational, and task factors" (Bitchener et al. 2005, p. 202). Based on this, the writing accuracy variation in this study can be attributed to the difference in the nature of the different writing genres (tasks) and individual performance factor.

The measurement of the short-term (revision of previously-written texts) and long-term (producing new writing texts via the posttest and delayed posttest) effects of the two types of corrective feedback is another contribution of the findings of the study. Truscott (1996, 1999, 2004) and Ferris (1999, 2004) stated that a valid assessment of written corrective feedback entails the testing of writing accuracy of new texts.

The findings of this study, moreover, are in line with studies advocating the use of negotiation in delivering CF that eventually leads to the development of the writing abilities of learners and the production of texts with a better writing quality (Aljaafreh & Lantolf, 1994; Williams, 2002). It is through this teacher-learner dialogue that learners have enough time to discuss their linguistic errors and receive guided help within their ZPD. Nassaji & Swain (2000) used the term "scaffolding" to refer to the support learners need in negotiating the meaning and socially developing the structure and function of L2. In the present study, negotiating the CF learners received by their teacher/researcher helped them to move along their ZPD so that

eventually they could identify and correct their own linguistic errors with fewer levels of help in subsequent texts. This is clear how student A, in this study, performed better in producing her second text after receiving NCF on her errors in her first text. The scaffolded help the teacher provided in the regulatory scale took the form of dialogic interactions to help student A detect and correct her subject-verb agreement error in Text 1.

Text 1:

Teacher (T): Could you please read this sentence? (Level 2)

Student (S): "The Language Center are near the Metro."

T: Do you think there is something wrong with this sentence?
(Level 3)

S: No! Correct! No problem!

T: There is something wrong with the verb. (Level 6)

S: Center were near the Metro.

T: No. (Level 4)

There is a subject-verb disagreement. The verb does not suit the
subject. (Level 7)

S: But we say the shops are near our houses.

T: Correct! But are you writing about many centers or only one?
(Level 9)

S: So you mean centers are near the Metro.

T: You mention one center so the sentence must read "The Language
Center is near the Metro." (Level 10)

Verbs should agree with their subjects in number. If you use a
singular subject, you should use a singular verb. (Level 11)

In Text 1, the student was unable to detect her linguistic error despite receiving four levels of scaffolded help (Levels 2, 3, 6 and 4). Even if the teacher helped her in identifying the error (Level 7), the learner was still unable to correct it and there was the need for more three levels of scaffolded help (Levels 9, 10 and 11).

When producing Text 2, improvement has been noticed in the student's ability in identifying Text 2:

Teacher (T): Read this sentence please. "Students joins the writing course because it is useful in composing paragraphs and articles." (Level 2)

Student (S): Do you like this sentence? Good English?

T: Yes it is great. But is there something wrong with it?
(Level 3)

S: (reading carefully...) Oh yes! "Students join...not joins".
Students is a plural subject. Sorry !

T: Excellent!

This quick detection of the subject-verb disagreement error by

and correcting her linguistic errors. The teacher had to provide her fewer levels of scaffolded help (2 vs. 8) in the regulatory scale during receiving NCF. This proves that NCF helps learners to identify and correct errors faster in their writing texts on the long run. Text 2 is presented with the levels of scaffolded help during the NCF:

student A and consequently correcting it proves that NCF is effective in incorporating feedback faster and with a better quality. The teacher, through negotiation, constructed with the learner a ZPD in which "feedback as regulation becomes relevant and is used by learners to modify their interlanguage system" (Aljaafreh & Lantolf, 1994, p.480).

From a sociocultural perspective, the use of NCF in writing development should be tailored according to the needs and preferences of the learners because "what is effective feedback for one student is less so for another" (Hyland & Hyland, 2006). The teacher-learner interaction might provide an endless resource of linguistic knowledge to the learner while negotiating CF, and subsequently develop all language skills of learners (Lee, 2004;

Wigglesworth & Storch, 2012).

Bitchener (2012) focused on the individual differences in research on CF from a sociocultural point of view. Learners' acceptance of CF might be influenced by their activities, goals and attitudes. Therefore, not all learners benefit from CF and all approaches teachers adopt might prove useless (Guenette, 2007). The success and rate of information processing is affected by the "learners' individual factors related to context, performance, and motivations" (Storch & Wigglesworth, 2010). This is because *Activity Theory* distinguishes between the task given to learners to perform and the activity they engage in while performing the task. As a result, it can be proposed that the scaffolded help in the NCF group might have positively contributed

to an increase in the learners' positive attitudes toward the feedback they received through negotiation and which eventually fostered its long-term effect.

An atmosphere of trust between teachers and learners should be constructed by the joint problem-solving and scaffolded help provided by the teacher. Some learners might fear of being corrected and therefore they lose interest in the feedback teachers provide. However, through negotiation and step-by-step guidance the teacher would help learners overcome their uncomfortable feelings of being corrected.

Written indirect feedback is regarded by researchers as not effective as negotiated feedback (Aljaafreh & Lantolf, 1994; Williams, 2002). This is because

indirect feedback may confuse learners in understanding or memorizing error codes for instance. Although in the present study subjects were given a list of error codes, it is more likely that they ignored consulting it for the codes subjects in the NNCF received on their linguistic errors, or simply they confused one code for another. Ferris and Roberts (2001) explained that with low language proficiency learners, this can be a serious phenomenon. It might be that learners in the NNCF group had no access to the teacher/researcher, both in correction and revision, to clarify the vague points for them in coding the errors. Those in the NCF group, on the other hand, had the teacher/researcher with them while receiving feedback, and could ask for explanations.

Finally, since NCF group learners performed better than NNCF group learners in the posttest and delayed posttest vis-à-vis their writing accuracy, then NCF is proved to be a successful type of feedback in making EFL learners detect and correct their own linguistic errors in the texts they produce. This is because due to Hyland and Hyland (2006), "the ultimate aim of any form of feedback should be to move students to a more independent role where they can critically evaluate their own writing and intervene to change their own process and products where necessary" (p. 92).

6. Conclusion and Implications

With the aim of enriching the field of Second Language Acquisition generally and improving the writing accuracy of

L2 learners specifically, this study investigated the difference in the short- and long-term effect of negotiated and non-negotiated corrective feedback on the accuracy improvement of Egyptian EFL learners' writings. The findings of the study showed that NCF had a more significant effect on both revisions and production of new texts. The study rejects what Guenette (2007, p. 51) refers to as "CP recipe", and the idea that there is an appropriate and effective approach that can be adopted to treat all kinds of errors. On the other hand, this study adds to the growing body of research that demonstrates that factors related to the language proficiency level of learners, the type of error, the classroom context, genre and type of writing discourse may contribute to the success or failure of the corrective feedback

provided by the teacher.

The findings of this study have several implications in L2/FL writing classrooms. Teachers might incorporate NCF in their writing courses to help their learners improve their short-term and long-term writing accuracy. They might employ a mixture of approaches instead of only focusing on the revision or production of new texts, as used in this study.

Future research may compare the effect of oral NCF with written NNCF on the writing accuracy improvement. It may also compare the effect of NCF and NNCF on learners with different language proficiency levels and in different contexts. Other genres and types of writing discourse, argumentative essays for instance, may be investigated to measure

the effect of CF on them.

The time-on-task amount in this study is a factor of concern that is shared by other studies (Nassaji, 2011; Nassaji & Swain, 2000). The NNCF in the present study is static in terms of time-on-task: all learners received feedback in an equal duration of time. The NCF, on the other hand, is dynamic in term of time-on-task: all NCF group learners had their feedback in a non-finite duration of time. The duration, amount and nature of negotiation between the learners and the teacher were not fixed. In future research, this variable of equal time-on-task should be taken into consideration although Nassaji and Swain (2000) consider this open timing as a factor contributing to the positive effect of NCF.

Finally, FL teachers should

have thorough knowledge of the forms and structures of the L2 (Panahi et al. 2013). They should also be familiar with the concepts of scaffolding (Van Lier, 1996) and work with regulatory scale flexibly, if they like to employ NCF. They should be trained on how to provide detailed and immediate types of CF that are tailored vis-à-vis the needs and attitudes of their learners. Their negotiation with learners should focus only on linguistic issues excluding other personal bias or negative attitudes in order to provide CF generously.

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* * * *

Appendices

Appendix A

Error codes used in marking learners' texts

Error Type Code	Description
VT	Verb tense
WF	Word form
ART	Article is missing, unnecessary, or incorrect
AGR	Subject and verb do not agree
PP	Preposition is missing, unnecessary, or incorrect
WO	Word order is incorrect
PUN	Punctuation is missing, unnecessary, or incorrect
SP	Spelling error
FRAG	Sentence fragment (incomplete sentence)
CAP	Capitalization
VV	Verb voice is incorrect (active/passive)
PL	Noun plural marker is missing, unnecessary, or incorrect
WW	Wrong word choice
PRO	Pronoun is incorrect

Adopted from Ferris et al. (2012)

Appendix B

Data collection procedures

Time	Data Collected
First day of treatment	Pretest
Week 1	Narrative paragraph
Week 2	Descriptive paragraph
Week 3	Reason paragraph
Week 4	Process paragraph
Week 5	Compare & Contrast paragraph
Week 6	Classification paragraph
Last day of treatment	Posttest
One month after last day	Delayed Posttest

*Appendix C**Sample of NNCF on learners'**texts*

Last week ^{PUN} my sister was returning ^{PP} back home when she ^{VT} meet her friend, ^{PUN}
^{CAP} they decided to eat in KFC in ^{PP} maadi. My sister ^{CAP} order ^{VT} dinner ^{CAP} box and her friend
^{VTART} eat ^{VT} sandwich. They ^{are} not feel well after the dinner and went to the doctor of ^{PP}
 treatment.

*Appendix D**Sample of NCF on learners'**texts*

During my stay at ^{ART} United States of America I ^{PUN} visited many wonderful
 places. I went to see the Statue of Liberty, the Twin Towers that ^{VV} destroyed and
^{SP} the Universal studios at Hollywood. Travelling abroad is very ^{SP} usefull. You can
^{CAP} learn ^{PRO} there culture and ^{PRO} there language ^{WV} because you can speak with them ^{WF} fluent.
^{SP} The culture of the people ^{SO}

Appendix E

Regulatory scale of the Tutor's Intervention in ZPD

- | |
|---|
| <ol style="list-style-type: none">0. Tutor asks the learner to read, find the error and correct them independently, prior to tutorial.1. Construction of a 'collaborative frame' prompted by the tutor as a potential dialogic partner.2. Prompted or focused reading of the sentence that contains the error by the learner or the tutor.3. Tutor indicates that something may be wrong in a segment (e.g. sentence, clause, line): 'Is there anything wrong in this sentence?'4. Tutor rejects unsuccessful attempts at recognizing the error.5. Tutor narrows down the location of the error (e.g. tutor repeats or points to the specific segment which contains the error).6. Tutor indicates the nature of the error, but tries not to identify the error (e.g. 'There is something wrong with the tense making here').7. Tutor identifies the error ('You can't use an auxiliary here').8. Tutor rejects learner's unsuccessful attempts at correcting the error.9. Tutor provides clues to help the learner arrive at the correct form (e.g. 'It is not really past but something that is still going on').10. Tutor provides the correct form.11. Tutor provides some explanations for use of the correct form.12. Tutor provides examples of the correct pattern when other forms of help fail to produce an appropriate responsive action. |
|---|

Adopted from Aljaafreh & Lantolf (1994)