Effects of Written Corrective Feedback on the Use of the English Indefinite Article in EFL Learners' Writing

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The present study aimed at investigating the effects of the two types of teacher feedback—direct corrective feedback (DCF) and metalinguistic explanation (ME)—on the development of EFL learners' knowledge of the English indefinite article and on their use of it in writing. For this study, 58 college students classified into three groups (two experimental groups and one control group) took the error correction test and performed three writing tasks. The results of the study are 1) there was no group effect of the two types of feedback in the development of their explicit knowledge of the target feature in the test, whereas a time effect was found that their knowledge of the target feature developed significantly after the treatment; and 2) no group differences were found between the two types of feedback in the use of the target feature in the revised writing and among the three writings, though the DCF group outperformed the ME group in the accurate use of the target feature in writing. Theoretical and pedagogical relevance of the findings is addressed.

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1. INTRODUCTION

In recent times, when a variety of roles of a teacher have been called for in class, there is no doubt that teacher feedback is one of the major concerns in language teaching and learning. A teacher's role includes delivering knowledge to learners, assessing their output, giving feedback on their work, and even helping them properly use the knowledge. In L2 writing, in particular, providing learners with feedback on their written work is crucial for the development of their writing skills (Arndt, 1993; Richards, 2003; Yoon & Lee, 2018).

However, there are many conflicting claims among the researchers who have presented empirical evidence in order to confirm the effectiveness of teacher feedback. For example, Truscott (1999, 2007, 2010) asserts that corrective feedback (CF, hereafter) is ineffective and even harmful since it would not develop knowledge for communicative language use in writing and speaking. On the contrary, Ferris (1999, 2004, 2006) argues against his claims by commenting that CF can be a valuable pedagogic tool to help learners enhance accuracy in their writing, which, in turn, is indispensable for more effective communication in written language (Ferris, 1995; Frodesen & Holten, 2003; Muncie, 2002).

Despite continuing controversy of the effectiveness of CF, it is generally acknowledged that CF helps learners raise their awareness of knowledge, internalize explicit knowledge, and also more attend to writing accuracy. Furthermore, it was reported that a large number of students had positive perception of a teacher's error correction (Enginarlar, 1993; Ferris, 1999; Schulz, 2001), and they thought that the feedback was so important for the improvement of their writing accuracy since they wanted their errors to be corrected (Katayama, 2007; Oladejo, 1993; Schulz, 2001).

Now the issue related to teacher feedback mainly concerned is not whether CF is effective any more but what kind of CF needs to be offered to create more positive effects—written or oral, direct or indirect, focused or unfocused, and corrective or metalinguistic, to name a few. A large number of empirical studies on the types, techniques, or approaches to written CF have been conducted. Until now, however, the studies have reported very different results about the effect of different types of feedback. For example, several studies took an affirmative stance over the issue of the effectiveness of direct written feedback, asserting that direct CF is significantly effective in improving writing accuracy and facilitating L2 writing ability (Ellis, Sheen, Murakami, & Takashima, 2008; Farrokhi & Sattarpour, 2012; Ferris & Roberts, 2001). However, Bitchener and Knoch (2008) maintain that indirect feedback could be more effective; moreover, positive evidence on the effect of focused feedback was strongly refuted by Van Beuningen, De Jong, and Kuiken (2012), who argue that focused CF is nothing more than grammar exercises, leading learners to be conscious of target features.

Since the early 2000s, metalinguistic explanation (ME, hereafter) as one of the alternatives (Shintani & Ellis, 2013) has attracted many researchers' attention, resulting in many different findings. Some researchers argue that ME could be significantly beneficial to improve a knowledge base for language use (Fotos, 1994; Loewen & Erlam, 2006), while others insist that ME does not play a decisive role in increasing grammatical accuracy in writing tasks (Bitchener & Knoch, 2008; Ellis et al., 2008). In particular, based on the L2 learners' considerable difficulty in acquiring the indefinite article (Huebner, 1983; Young, 1996), Shintani and Ellis (2013) examined the efficacy of the two types of teacher feedback, direct CF and ME, using the indefinite article, and reported that ME positively affected the learners' accurate use of the target feature in ESL context. Although Kim (2019) also examined the accuracy development of the indefinite article, the study focused only on the comparison of focused written CF to unfocused written CF, which indicates that research on the indefinite article depending upon different types of teacher feedback, specifically on ME, is not still sufficient in EFL contexts.

As mentioned above, controversial results as well as continuing dispute on the effectiveness of different types of teacher feedback signify that further research needs to present more empirical evidence necessary for L2 learners' practical language use, especially in writing (Kim, 2015, 2019). Accordingly, the current study aims at investigating the effects of the two different ways of written error correction—direct corrective feedback (DCF) and metalinguistic explanation (ME)—on the development of EFL learners' knowledge of the English indefinite article and on their use of the indefinite article in writing. For the purposes of the present study, the following research questions were posed:

1. Are there any differences in their knowledge of the English indefinite article depending upon the two different types of feedback: direct corrective feedback (DCF) and metalinguistic explanation (ME)?
2. Are there any differences in their use of the English indefinite article in writing depending upon the two different types of feedback?

2. LITERATURE REVIEW

2.1. Importance of Feedback and Its Effectiveness in L2 Writing

While the role of teachers in a conventional classroom had focused primarily on delivering knowledge to learners, teachers in recent times have been required to play a new role as a facilitator and/or a coach in teaching. In other words, they need to take "how to

teach" into more account than "what to teach" in order to enhance learners' learning effect. In line with that, teacher feedback—whether its type is written or oral, direct or indirect, focused or unfocused, and corrective or metalinguistic—is a crucial component in the teaching/learning process as it could improve and consolidate learning.

In L2 writing, teacher feedback on L2 learners' written work is essential for the development of their writing skills (Arndt, 1993; Richards, 2003; Yoon & Lee, 2018), given that it has a good number of benefits. It helps learners raise their awareness of knowledge, internalize the explicit knowledge, and also attend more to language accuracy both during and after writing production. However, there is not enough evidence to support the consistent effectiveness of teacher feedback yet. Truscott (1999, 2007, 2010) argues that the corrective feedback does not play a positive role in developing the knowledge for language use in productive skills such as writing and speaking because of the lack of empirical and theoretical grounds for CF. On the other hand, he partially admitted that it could help develop learners' explicit knowledge (Krashen, 1982; Schwartz, 1993), resulting in better revised written products, but definitely denied its positive contribution to the "genuine knowledge of language" (Truscott, 1998, p. 120), which is called implicit knowledge. Additionally, Truscott and Hsu (2008) reported that DCF failed to improve grammatical accuracy in a new piece of writing (Sheen, 2007). It is also strongly argued that the gradual and complex process of acquiring the forms and structures of a second language should not be overlooked.

On the other hand, Ferris (1999, 2004, 2006) presents a different point of view over the effectiveness of CF that can be a good pedagogic tool for learners to achieve grammatical accuracy (Ellis et al., 2008; Farrokhi & Sattarpour, 2012; Ferris & Roberts, 2001; Van Beuningen et al., 2012), restating that accuracy is a vital component of successful language use (Ferris, 1995; Frodesen & Holten, 2003; Muncie, 2002). According to Sheen's (2007) study, which examined the role of CF in 91 adult intermediate ESL learners' acquisition using written CF, comparing treatment groups (direct correction only and direct metalinguistic correction) with a control group, both treatment groups performed much better than the control group on the immediate posttests, which indicated that direct written CF improved learners' linguistic accuracy.

To date, even though the role and effectiveness of written CF in the development of L2 proficiency has long been debated in the field of second language acquisition (Kim, 2015), it has been perceived by many researchers that providing learners with CF is essential for their L2 development. Emphasizing the importance of error correction, Ferris (1999) also pointed out that its effectiveness depended upon the quality of correction—in other words, it would be beneficial if clear and consistent correction was given. Moreover, Truscott (1999, 2007, 2010) commented that more careful account should be taken into about investigating different types of methods, techniques, or approaches to written CF in terms

of short-term or long-term language development and about whether L2 learners make better improvement in certain types of errors than others.

2.2. Written Corrective Feedback

A great deal of CF research on L2 writing has compared several types of written CF in order to investigate whether a certain type of CF has a more positive effect than others in developing learners' interlanguage (e.g., Fazio, 2001; Robb, Ross, & Shortreed, 1986). The comparison pairs of types of CF, which the researchers have had an interest in, include direct/indirect CF, focused/unfocused CF, or DCF/ME, to name a few. In other words, the issues have been associated with a matter of choice about whether teachers should provide learners with direct error correction or just indicate with no overt correction, whether correcting one or two focused grammatical features or all kinds of errors unfocused, and whether offering direct written CF or ME in an oral or written form. A growing body of empirical research on the types of methods, techniques, or approaches to written CF has been conducted, presenting many different findings, whose inconclusiveness, consequently, has led researchers to search for more empirical evidence.

Earlier, many studies comparing direct and indirect CF presented conflicting results (Bitchener & Knoch, 2008). For example, Ferris and Roberts (2001) reported that DCF had a positive effect of enabling learners to revise their errors, internalizing the correct form immediately, and, in turn, facilitating L2 learning. Furthermore, DCF was significantly effective in improving writing accuracy (Ellis et al., 2008; Farrokhi & Sattarpour, 2012). However, Bitchener and Knoch (2008) found from their meta-analysis of these two types of CF that there was no significant difference in their effectiveness. In two years, however, they changed their position that the two types were equally effective over the immediate production, but only DCF had a delayed effect (Bitchener & Knoch, 2010). Only one research reports that they failed to prove the effectiveness of DCF in improving L2 learners' accuracy in language use (Truscott & Hsu, 2008).

Another comparative study (Shintani & Ellis, 2013) has been conducted over focused CF, where only one of the errors is corrected and the rest ignored, and unfocused CF, where all (or most) errors are corrected, provoking extremely controversial debate among researchers. While a number of researchers showed that focused CF was more effective than unfocused CF (Bitchener & Knoch, 2008, 2010; Farrokhi & Sattapour, 2012), Van Beuningen et al. (2012) made a counterargument that focused CF was not only nothing more than grammar exercises but led learners to be conscious of the target feature only. In addition, they emphasized the "teacher's purpose" to provide authentic writing feedback, so called unfocused CF, so that it could "improve accuracy in general, not just the use of one grammatical feature" (p. 6).

2.3. Metalinguistic Explanation

Over the past decade, research into ME as an alternative feedback (Shintani & Ellis, 2013) also has been actively carried out by many researchers (Bitchener & Knoch, 2010; Bitchener, Young, & Caneron, 2005; Sheen, 2007; Shintani & Ellis, 2013). Metalinguistic feedback is defined as providing learners with ME in an oral or written form as to the nature of the error(s) that needs any correction, which is engaged in building learners' explicit knowledge by helping learners notice the nature of the error they made (Ellis et al., 2008). According to Ellis' (2013) classification of CF strategies, ME is under the explicit and out-prompting category that has properties of giving learners clear corrective force and pushing them to self-correct their own errors. In other words, giving explicit ME enhances a greater depth of processing on learners' part as they have to apply the ME to their errors, identify, and correct them for themselves in that explicit feedback facilitates acquisition better than implicit feedback (Loewen & Erlam, 2006). In addition, Jong's (2005) suggestion supports the theoretical argument that explicit explanation such as ME can be significantly beneficial to improve a knowledge base for productive language use (Fotos, 1994).

Sheen (2007) examined the effect of two types of written CF: DCF only and DCF with ME. She found that both experimental groups outperformed the control group on the immediate posttests, and the direct ME group performed much better than the DCF only group in the delayed posttests. It was concluded that written CF improved L2 learners' grammatical accuracy, especially when ME was provided together. Shintani and Ellis (2013) investigated the comparative effect of DCF and ME on 49 low-intermediate ESL students' explicit and implicit knowledge of the English indefinite article. It was found that DCF had no effect on accuracy of the grammatical feature, and it did not assist L2 learners' both implicit and explicit knowledge. ME, however, led them to gain more accuracy in the use of the target feature in a new writing test right after the treatment but not in a delayed test, suggesting that its effectiveness is just on L2 learners' explicit knowledge not on their implicit knowledge. They summed up their findings that ME may be more effective in developing learners' explicit knowledge, especially for those with low L2 proficiency (Mohamed, 2001), and neither DCF nor ME had any effect on L2 learners' implicit knowledge, requiring further research in different situations with different instruments and L2 learners' different proficiency levels.

Some research can be found with opposite results that ME did not play a decisive role in increasing grammatical accuracy in writing tasks. Bitchener and Knoch (2008) presented no significant differences on linguistic accuracy among three different written corrective feedback options—DCF + written and oral ME, DCF + written ME, and DCF only. This finding corroborates that metalinguistic understanding may be achieved as a result of direct

feedback without ME (Ellis et al., 2008). In addition, Kim (2009) investigated the effects of ME and self-correction integrated with indirect feedback on learners' ability to accurately write the target structures. She found that neither ME nor self-correction with indirect feedback alone had an effect on accuracy, but the combination of the two ways of providing feedback was statistically significant.

To sum up, consistent controversy on the aforementioned issues suggests that it is necessary to conduct further research to discover the effectiveness of DCF and ME in different grammatical features.

2.4. The Indefinite Article and Different Types of Teacher Feedback

In general, it is known that the grammatical feature of English articles is syntactically simple but semantically complex (Bitchener & Knoch, 2008, 2010). The semantically complex properties may cause cognitively demanding load when L2 learners acquire and use the articles (Yoon & Lee, 2020). Young (1996) also mentions that it is very challenging for L2 learners to master the articles since they have multifunctional features that include "sorting out many-to-many form-function mappings, learning the properties of nouns and how they change with context, and determining ways in which to mark specific/nonspecific reference and shared/unshared context" (p. 142). In addition, Yoon and Lee (2020) presented that the learners, who had participated in their study, showed a tendency to have more difficulties learning articles than other grammatical features, suggesting that they be provided with a great amount of exposure to illustrative examples coupled with appropriate pedagogical usage.

As a matter of fact, some researchers, motivated by the specific properties and usage of the articles, conducted several studies and reported that written CF achieved significant gains in accuracy in the use of English articles, resulting in the improvement of their learners' writing accuracy (Bitchener & Knoch, 2008; Ellis et al., 2008; Farrokhi & Sattarpour, 2012; Kim, 2019; Schenck, 2018; Sheen, 2007). Kim (2019) also examined the relative effects of direct focused and unfocused written CF on the accuracy development of the past hypothetical conditional and the indefinite article in an EFL context. As for the indefinite article, she reported that focused written CF had more significant effects on the improvement of the indefinite article than unfocused written CF. Particularly, the study conducted by Shintani and Ellis (2013), which investigated the effects of the two different feedback types—DCF and ME—on ESL learners' explicit and implicit knowledge of the indefinite article, found that ME positively affected the learners' accurate use of the target feature and encouraged them to develop their explicit knowledge but not implicit knowledge, while DCF had no effect on both knowledge.

The findings mentioned above are still inconclusive in terms of acquisition of the

indefinite article using different types of teacher feedback. Moreover, there has been such a little both attention and research on the indefinite article depending on the two types of feedback, especially in EFL settings (Kim, 2015, 2019) that it is undoubtedly considered that more studies need to be performed for more empirical evidence to convince the possibility of L2/EFL learners' acquiring the indefinite article through teacher feedback.

3. RESEARCH DESIGN

3.1. Participants

The total number of 58 college students participated in the present study, who enrolled in a *College English* course for freshmen in the fall semester, 2019, at a university located in the southern part of South Korea. At first, 61 participants were drawn from three intact classes—two natural science classes and one for liberal arts—which had 22, 22, and 17 attendees, respectively. All the freshmen are required to choose either liberal arts or natural science for their majors in the university. Three students, however, were excluded from the research since their sickness, dropouts, or private matters caused a leave or absence from the course. The final number of 58 students were included in the analyses of the study, consisting of 52 male students (89.7%) and 6 female students (10.3%) and their ages ranged from 19 to 22.

The three classes were arbitrarily designated into two experimental groups (DCF: $n = 20$, ME: $n = 17$) and one control group (n = 21) for the current study. The three groups were homogeneous in their explicit grammar knowledge according to the pre-test ($F = .050$, $p = .951$), implicit grammar knowledge according to the first writing task ($F = .352$, $p = .705$), and TOEIC scores ($F = .353$, $p = .704$). Plus, the average of their TOEIC scores was approximately 757, and their English proficiency level is considered to be intermediate-high.

3.2. Instruments

3.2.1. Error Correction Tests

Error Correction Tests (ECT, hereafter) were administered at the beginning of the course as a pre-test and at the end of the course as a post-test, which were aimed to assess the participants' explicit knowledge of the target feature, the indefinite article. The test was mainly based on Shintani and Ellis' ECT (2013) and slightly modified for the purpose of the present study. It consisted of 18 decontextualized sentences, each of which has a single error. Out of the items, eight included errors in the use of the indefinite article and the

others included other grammatical errors such as definite articles and pronouns. Each test was taken by all the participants for 20 minutes, and they were asked to identify an error in each sentence and then self-correct the error, writing out the sentence again on the blank provided.

3.2.2. Writing tasks

The picture composition writing task, a narrative writing task, was chosen to measure the participants' implicit knowledge of the target grammatical feature, the indefinite article, since it has been widely known that the validity of the narrative writing tasks has been substantiated to afford a measure of L2 writers' implicit knowledge (Shintani & Ellis, 2013). The two story-telling pictures were excerpted from Heaton's *Beginning Composition Through Pictures* (1975), which consisted of a series of six pictures that described a story. One was titled as "A surprise," and the other as "The table that got smaller" (See Appendix).

The participants completed three times of writing using the two series of pictures. For each writing task, a blank paper and one of the picture series were distributed. The picture series, "A surprise," was given for the first writing task and its revision task (the second writing task), and the other picture series, "The table that got smaller," was used as the third writing task to see the transferability of the knowledge probably obtained through the two times of writing. The tasks were carried out in a timed-test situation to raise their concentration on the composition. Thirty minutes was allocated for each writing task from generating ideas to write their drafts. Additionally, any reference materials were not allowed to use. The writing output and worksheets were collected by their instructor immediately after they completed writing.

3.3. Procedures

For the first week, the participants took the ECT for 20 minutes, which was designed as a pre-test to assess their explicit knowledge of the indefinite article, and then a survey was conducted to attain their background information, such as their age, TOEIC score, English grammar ability, and grammatical features that they think are difficult to learn. For the first writing task, the participants of the DCF group were given the picture series, titled "A surprise" for writing. Then they were guided to write a story using the given picture series for 30 minutes. After finishing the writing task, they submitted the picture and their writing. Two weeks later, distributed was the first draft with errors corrected by a native-speaking instructor, whose correction was focused only on the indefinite article. Then they were asked to look over the errors with the CF on them for five minutes. After submitting the

first draft, they started to rewrite the story. For the rewriting, they were given the same picture series. Thirty minutes were allocated for the rewriting task. Another two weeks later, a new piece of writing task (the third writing task) with a new picture series was completed under the same condition as the first one.

As to the ME group, the participants performed the first writing task in the same procedure as the DCF group. Two weeks later, they received ME of the use of the indefinite article. The metalinguistic feedback was provided orally along with a written material of grammatical rules of the feature for 5 minutes. After the explanation, they rewrote the story with the same picture series for 30 minutes. The third writing task was performed in the same procedure after two weeks as the DCF group did.

The participants of the control group conducted the first and the third writing tasks under the same procedure as the other two groups. However, for the second writing task, any kind of teacher feedback was not given for the rewriting task; they wrote the story again using the first picture series.

Finally, for the purpose of measuring the improvement of the participants' knowledge of the target feature after the treatment, the post-test was taken using the same test as the pre-test in order to clearly compare differences between the two test results. The whole procedure of the study is summarized in Table 1.

TABLE 1
Procedure of the Study

Week	DCF Group	ME Group	Control Group
1	Error correction test/survey	Error correction test/survey	Error correction test/survey
2	First writing task	First writing task	First writing task
4	Direct corrective feedback	Metalinguistic explanation	No feedback
	Rewrite	Rewrite	Rewrite
6	Third writing task	Third writing task	Third writing task
15	Error correction test	Error correction test	Error correction test

Note. DCF = direct corrective feedback; ME = metalinguistic explanation

3.4. Scoring and Data Analyses

The ECT was scored based on if the errors of the indefinite article were accurately corrected or not, and one point was given to the correct answer, with the total of 8 points. As for the accuracy of the use of the indefinite article in their narrative writing, obligatory occasion analysis was engaged (Shintani & Ellis, 2013). An obligatory occasion was defined as any noun phrase with [+specific referent/-hearer knowledge] in the pictures. The indefinite article can also be used in a singular noun with a referent that was [-specific referent/+hearer knowledge] or [-specific referent/-hearer knowledge]. Both correct use of the indefinite article in any obligatory occasion and the cases of overuse were tallied.

Pica's (1994) formula for accuracy of the target feature was used:

$$\frac{\text{Number of accurate use of the indefinite article}}{\text{Number of obligatory contexts} + \text{Number of overused forms}} \times 100$$

The two researchers scored each writing individually, and the inter-scorer reliability was calculated using Cronbach alpha. It was from .967 to .971, which showed a very high agreement rate between the two scorers.

The ECT results and the writing task scores were submitted to analyses using *t*-tests and a series of repeated-measures ANOVAs to answer the two research questions. The significance level was set at .05. Pairwise comparisons using Bonferroni adjustment were computed when necessary, and effect sizes for the effects of the statistical results were estimated using Cohen's *d*, with the values of small = 0.2, medium = 0.5, and large = 0. 8 (Cohen, 1988).

4. RESULTS AND DISCUSSION

4.1. Effects of Two Types of Feedback on Knowledge of the English Indefinite Article

A repeated-measures ANOVA was carried out to see whether there are any significant differences between the pre- and post-tests that measured the participants' explicit knowledge of the English indefinite article, depending upon the two different types of written CF as in Table 2. It showed that there was no significant group effect and time-group interaction effect. That is, the treatment using the two error correction types did not reveal any significant differences in the scores of the ECT (no group effect) (Shintani & Ellis, 2013). Pairwise between-group comparisons using the Bonferroni adjustment showed that there were no significant differences between the three groups both in the pre-test ($F = .050$, $p = .951$) and the post-test ($F = .626$, $p = .539$).

TABLE 2
ANOVA Results of the Pre- and Post-Test in the Two Types of Corrective Feedback

Source	*df*	*F*	*p*
Group	2	.416	.660
Time	1	8.211	.005
Group * Time	2	.182	.834

This outcome is contrary to previous studies that the DCF group achieved significantly higher scores in the error correction test, outperforming the control group (Bitchener & Knoch, 2010; Ellis et al., 2008). The likely explanation for these different results is, as Shintani and Ellis (2013) addressed, that the two studies treated indefinite and definite articles together, and that learner differences exist in terms of grammar learning context. In addition, the outcome of this study also differs from previous studies that the ME group outperformed the control group with significantly higher scores in the post-test (Shintani & Ellis, 2013). A possible reason is the participants' different L2 proficiency in the two studies. Considering ME is more effective for low-intermediate learners (Mohamed, 2001), the L2 proficiency level of the participants in the current study is deemed high-intermediate based on their TOEIC scores, with the average of 732.25 for the DCF group, 766.47 for the ME group, 769.05 for the control group, and 756.64 for the total.

On the other hand, the ANOVA revealed that there was a significant time effect as shown in Table 2. To check in which pairs the time effect took place, the pair-wise *t*-tests were conducted, which shows that all three groups significantly improved from the pre-test to the post-test as in Table 3 with the medium to high Cohen's *d* effect sizes. That is, their explicit knowledge of the indefinite article improved after the treatment in the two experimental groups and even in the control group. This might be interpreted as the effect of a certain amount of instruction no matter what types of instruction is included in the lesson. This finding corroborates some researchers' beliefs that teacher feedback on L2 learners' written work is essential for the development of their writing skills (Arndt, 1993; Richards, 2003; Yoon & Lee, 2018). Here, one thing is to be remembered that there must be practice effect as well, considering the significant improvement of the control group in the post-test result, which calls for more evidence through further investigation to draw a valid conclusion of the issue in question.

TABLE 3
Time Effect in the Pre- and Post-Test of the English Indefinite Article

Group	Test	M (SD)	t	p	Cohen's d
DCF	Pre	4.45 (1.986)	-3.621	.002	-0.90
	Post	5.90 (1.252)			
ME	Pre	4.29 (2.640)	-2.867	.011	-0.36
	Post	5.18 (2.455)			
Control	Pre	4.52 (2.136)	-2.386	.027	-0.51
	Post	5.57 (2.063)			

Note. DCF = direct corrective feedback; ME = metalinguistic explanation

4.2. Effects of Two Types of Feedback on the Use of the English Indefinite Article in Writing

Effects of Written Corrective Feedback on the Use of the English Indefinite Article in EFL Learners' Writing

We first examined the effects of DCF and ME on the learners' revised texts to investigate the development of implicit knowledge of the indefinite article in writing in EFL context. A repeated-measures ANOVA showed that there was a significant time effect (F = 4.689, p = .033), but the group effect (F = 1.533, p = .220) and the time-group interaction effect (F = 1.325, p = .270) failed to reach statistical significance as in Table 4. In particular, no group effect could probably be explained by the offset effect of the small amount of increase in the revised writing of the control group, regarding the significant differences between the two treatment groups and the control group in the *t*-test results in Table 5.

TABLE 4

ANOVA Results of the First and Revised Writing Tasks in the Two Types of Corrective Feedback

Source	*df*	*F*	*p*
Group	2	1.533	.220
Time	1	4.689	.033
Group * Time	2	1.325	.270

TABLE 5

Time Effect on the Use of the English Indefinite Article in the First and Revised Writing

Group	Test	*M* (*SD*)	*t*	*p*	Cohen's *d*
DCF	First	51.09 (26.681)	-3.657	.002	-0.89
	Revised	71.06 (18.857)			
ME	First	43.68 (27.233)	-2.399	.029	-0.44
	Revised	55.36 (27.236)			
Control	First	55.80 (25.485)	-.348	.732	-0.06
	Revised	57.39 (27.676)			

Note. DCF = direct corrective feedback; ME = metalinguistic explanation

Interestingly, however, the pair-wise *t*-tests revealed that both treatment groups significantly improved in the accuracy of the use of the indefinite article in the revised story as in Table 5 with the medium to large effect sizes (Bitchener & Knoch, 2010; Ellis et al., 2008 for the DCF group and Shintani & Ellis, 2013 for the ME group). In other words, these two types of written CF exerted a positive effect on immediate learning of the target grammar feature in writing, which verifies the efficacy of error correction in the development of the type of knowledge required to be involved in writing for communicative purposes (Bitchener & Ferris, 2011; Ellis, 2005). This suggests that the participants were successful in the development of their explicit knowledge of the indefinite article rule measured by the ECT, and this knowledge possibly enabled them to revise their stories correctly in terms of the use of the target grammatical feature.

The post hoc pair-wise between-group comparisons were carried out to see whether there

is any group differences in the two times of writing, and it failed to reach statistical significance in the 1st writing ($F = 1.021$, $p = .367$) and the revised one ($F = 2.289$, $p = .111$). The further statistical analysis was performed to check any group differences of the two treatment groups, excluding the control group, using the independent t-test between the DCF group and the ME group in order to ascertain comparative efficacy of the two different types of CF. As a result, the DCF group was found to significantly outperform the ME group in the accurate use of the indefinite article ($t = 2.064$, $p = .047$) with a large Cohen's d effect size of 0.70. That is, DCF was more effective than ME for the participants to internalize their explicit knowledge and to use it when revising.

This result is peculiar because a couple of comparison studies of the two types of teacher feedback with some extent of variation in providing the feedback reported comparative advantage of ME over DCF in the development of L2 learners' grammatical accuracy embodied in writing (Sheen, 2007; Shintani & Ellis, 2013). In particular, Shintani and Ellis (2013) reported that the ME group showed more increased accuracy than the DCF group in the revised text. Considering the similarities of the two studies in the research design that their study and ours examined the accurate use of the indefinite article and that both types of CF was provided on a single piece of writing, the possible explanation of the different outcome may come from different instruction settings, such as ESL and EFL, and learner differences, such as their ages and writing ability. Further studies are strongly required to clarify the comparative effects of both types of teacher feedback.

The groups' target-like use of the indefinite article in the three writings was also compared. A repeated measures ANOVA showed that no significant effects for time ($F = .605$, $p = .547$), group ($F = .844$, $p = .432$), and time-group interaction ($F = 1.715$, $p = .149$) were found as in Table 6. All groups failed to show any significant improvement in the use of the indefinite article over time, and also no group differences reached statistical significance. The two groups used their explicit knowledge successfully in the revision task, whereas they seem to fail to do so in the new piece of writing task (the 3rd writing task) probably because they must be busy constructing the new story, which hindered them to monitor the accurate use of the indefinite article (Shintani & Ellis, 2013).

TABLE 6
ANOVA Results of Three Writing Tasks in the Two Types of Corrective Feedback

Source	df	F	p
Group	2	.844	.432
Time	2	.605	.547
Group * Time	4	1.715	.149

It is for sure that the two groups revealed the improvement of their explicit knowledge in terms of the significant differences between the pre- and post-tests. Implicit knowledge, in

nature, once acquired withstands time and is easily recollected when necessary, so the potential effect of teacher feedback on the learners' genuine knowledge of language should be durable (Shintani & Ellis, 2013). It can be safely said, accordingly, that the two ways of error correction treatment was conducive to enhance the learners' explicit knowledge of the indefinite article in the short term with DCF being more effective than ME. In the long run, however, their explicit knowledge of the target grammar feature they had achieved through the two types of treatments might fail to develop into implicit knowledge.

5. CONCLUSION

In this study, the effects of the two different ways of written error correction—direct corrective feedback (DCF) and metalinguistic explanation (ME)—on the development of EFL learners' knowledge of the English indefinite article and on their use of the indefinite article in writing were examined. For this research purpose, 58 college students divided into three groups (DCT, ME, and control group) were asked to take the ECT as pre- and post-tests and to perform three writing tasks using two picture series, providing different types of teacher feedback for the two treatment groups and no treatment for the control group. The results from the study can be summarized as below.

First, the participants' explicit knowledge of the English indefinite article in the pre- and post-tests did not differ depending upon the two different types of written CF. This result is contrary to previous studies that the DCF group outperformed the control group (Bitchener & Knoch, 2010; Ellis et al., 2008) and that the ME group outperformed the control group (Shintani & Ellis, 2013). It can be interpreted that research design, learner differences, and learners' L2 proficiency needs to be taken into consideration in order to clearly understand the effects of different teacher feedback on the improvement of the English indefinite article. Nonetheless, a significant time effect was found that the participants' explicit knowledge of the English indefinite article developed significantly after the two types of treatment.

According to the results that the learners' explicit knowledge of the English indefinite article was improved over time, irrespective of the types of feedback they received, it can be safely suggested that a certain amount of teacher intervention using corrective feedback in L2/EFL writing class is beneficial for the acquisition of the target grammatical feature, regardless of the types of feedback (Arndt, 1993; Bitchener & Ferris, 2011; Richards, 2003; Yoon & Lee, 2018).

Second, the two types of feedback failed to show any group differences in the use of the English indefinite article in the revision and in the three writings, whereas the two treatment groups improved in the accuracy of the use of the indefinite article in the revised

story. The participants might transfer the explicit knowledge of the English indefinite article they showed in the results of the ECT to the revision task successfully. Moreover, the DCF group was found to outperform better than the ME group in the accurate use of the target feature, which suggests that DCF can be more effective than ME for L2 learners to internalize their explicit knowledge to use it in immediate production. Considering that a few comparison studies of the two types of feedback reported the advantage of ME over DCF in the development of L2 learners' grammatical accuracy for writing (Sheen, 2007; Shintani & Ellis, 2013), more research is strongly needed to clarify the conflicting results in terms of the comparative value of the two types of teacher feedback.

The results suggest that both DCF and ME exerted a notable influence on the participants' implicit knowledge of the English indefinite article in the revised story, though no between-group difference was found. Moreover, DCF was revealed more effective than the ME in the accurate use of the target grammar point, which suggests that helping learners recall the rule along with having them engaged in subsequent writing tasks will be conducive to their effective proceduralization of the target grammar feature.

In conclusion, the current study made an attempt to clarify the role of teacher feedback on the English indefinite article in L2 writing. As Grabe (2009) indicated that a single explorative study is not enough to prove the research issues in question under investigation, a variety of evidence is highly welcome through the research carried out including measurement tools of implicit and explicit knowledge of the indefinite article, different research methods such as in-depth survey and interview analysis, feedback related qualitative and quantitative variables, and learner variables such as learning experiences and L2 proficiency.

Applicable levels: Tertiary

REFERENCES

Arndt, V. (1993) Response to writing: Using feedback to inform the writing process. In M. N. Brock & L. Walters (Eds.), *Teaching composition around the Pacific Rim: Politics and pedagogy* (pp. 90-116). Clevedon, UK: Multilingual Matters.

Bitchener, J., & Ferris, D. (2011). *Written corrective feedback in second language acquisition and writing*. London: Routledge.

Bitchener, J., & Knoch, U. (2008). The value of written corrective feedback for migrant

and international students. *Language Teaching Research, 12*(3), 409-431.

Bitchener, J., & Knoch, U. (2010). The contribution of written corrective feedback to language development: A ten month investigation. *Applied Linguistics, 31*(2), 193-214.

Bitchener, J., Young, S., & Cameron, D. (2005). The effect of different types of corrective feedback on ESL student writing. *Journal of Second Language Writing, 14*(3), 191-205.

Cohen, A. D. (1988). *Statistical power analysis for the behavioral sciences*. New York: Academic Press.

Ellis, R. (2005). At the interface: Dynamic interactions of explicit and implicit language knowledge. *Studies in Second Language Acquisition, 27*(2), 305-352.

Ellis, R. (2013). Corrective feedback in teacher guides and SLA. *Iranian Journal of Language Teaching Research, 1*(3), 1-18.

Ellis, R., Sheen, Y., Murakami, M., & Takashima, H. (2008). The effects of focused and unfocused written corrective feedback in an English as a foreign language context. *System, 36*(3), 353-371.

Enginarlar, H. (1993). Student response to teacher feedback in EFL writing. *System, 21*(2), 193-204.

Farrokhi, F., & Sattarpour, S. (2012). The effects of direct written corrective feedback on improvement of grammatical accuracy of high-proficient L2 learners. *World Journal of Education, 2*(2), 49-57.

Fazio, L. L. (2001). The effect of corrections and commentaries on the journal writing accuracy of minority- and majority-language students. *Journal of Second Language Writing, 10*(4), 235-249.

Ferris, D. R. (1995). Student reactions to teacher response in multiple-draft composition classrooms. *TESOL Quarterly, 29*(1), 33-53.

Ferris, D. R. (1999). The case for grammar correction in L2 writing classes: A response to Truscott (1996). *Journal of Second Language Writing, 8*(1), 1-10.

Ferris, D. R. (2004). The "grammar correction" debate in L2 writing: Where are we, and where do we go from here? *Journal of Second Language Writing, 13*(1), 49-62.

Ferris, D. R. (2006). Does error feedback help student writers? New evidence on the short- and long-term effects of written error correction. In K. Hyland & F. Hyland (Eds.), *Feedback in second language writing: Contexts and issues* (pp. 81-104). Cambridge: Cambridge University Press.

Ferris, D. R., & Roberts, B. (2001). Error feedback in L2 writing classes: How explicit does it need to be? *Journal of Second Language Writing, 10*(3), 161-184.

Fotos, S. (1994). Integrating grammar instruction and communicative language use through grammar consciousness-raising tasks. *TESOL Quarterly, 28*(2), 323-351.

Frodesen, J., & Holten, C. (2003). Grammar and the ESL writing class. In B. Kroll (Ed.), *Exploring the dynamics of second language writing* (pp. 141-161). Cambridge: Cambridge University Press.

Grabe, W. (2009). Epilogues: Reflections on second language reading research and instruction. In Z.-H. Zhao & N. J. Anderson (Eds.), *Second language reading research and instruction: Crossing the boundaries* (pp. 192-205). Ann Arbor, MI: University of Michigan Press.

Heaton, J. (1975). *Beginning composition through pictures*. London: Longman.

Huebner, T. (1983). *A longitudinal analysis of acquisition of English*. Ann Arbor, MI: Korama Press.

Jong, N. D. (2005). Can second language grammar be learned through listening? *Studies in Second Language Acquisition, 27*(2), 205-234.

Katayama, A. (2007). Students' perceptions of oral error correction. *Japanese Language and Literature, 41*(1), 61-92.

Kim, B. J. (2009). The combined effects of metalinguistic explanation and self-correction on improving EFL writing accuracy. *English Language & Literature Teaching, 15*(3), 83-104.

Kim, J.-H. (2015). The effects of direct error correction and metalinguistic explanation on learners' explicit and implicit knowledge of the English article in EFL contexts. *English Language Teaching, 27*(4), 153-175.

Kim, J.-H. (2019). Relative effects of direct focused and unfocused WCF on the accuracy development of two language forms. *English Teaching, 74*(4), 29-50.

Krashen, S. D. (1982). *Principles and practice in second language acquisition*. New York: Pergamon Institute of English.

Loewen, S., & Erlam, R. (2006). Corrective feedback in the chatroom: An experimental study. *Computer Assisted Language Learning, 19*(1), 1-14.

Mohamed, N. (2001). *Teaching grammar through consciousness-raising tasks*. Unpublished MA thesis, University of Auckland, Auckland.

Muncie, J. (2002). Finding a place for grammar in EFL composition classes. *ELT Journal, 56*(2), 180-186.

Oladejo, J. A. (1993). Error correction in ESL: Learners' preference. *TESL Canada Journal, 10*(2), 71-89.

Pica, T. (1994). Research on negotiation: What does it reveal about second-language learning conditions, processes, and outcomes? *Language Learning, 44*(3), 493-527.

Richards, J. (2003). *Second language writing*. Cambridge: Cambridge University Press.

Robb, T., Ross, S., & Shortreed, I. (1986). Salience of feedback on error and its effect on EFL writing quality. *TESOL Quarterly, 20*(1), 83-93.

Schenck, A. (2018). An investigation of the relationship between grammar type and

efficacy of form-focused instruction. *The New Studies of English Language & Literature, 69*(Feb. 2018), 223-248.

Schulz, R. A. (2001). Cultural differences in students and teacher perceptions concerning the role of grammar instruction and corrective feedback: USA-Columbia. *The Modern Language Journal, 85*(2), 244-258.

Schwartz, B. (1993). On explicit and negative data effecting and affecting competence and linguistic behavior. *Studies in Second Language Acquisition, 15*(2), 147-163.

Sheen, Y. (2007). The effect of focused written corrective feedback and language aptitude on ESL learners' acquisition of articles. *TESOL Quarterly, 41*(2), 255-283.

Shintani, N., & Ellis, R. (2013). The comparative effect of direct written corrective feedback and metalinguistic explanation on learners' explicit and implicit knowledge of the English indefinite article. *Journal of Second Language Writing, 22*(3), 286-306.

Truscott, J. (1998). Noticing in second language acquisition: A critical review. *SLA Research, 14*(2), 103-135.

Truscott, J. (1999). The case for "The case against grammar correction in L2 writing classes": A response to Ferris. *Journal of Second Language Writing, 8*(2), 111-122.

Truscott, J. (2007). The effect of error correction on learners' ability to write accurately. *Journal of Second Language Writing, 16*(4), 255-272.

Truscott, J. (2010). Some thoughts on Anthony Bruton's critique of the correction debate. *System, 38*(2), 329-335.

Truscott, J., & Hsu, A. Y. (2008). Error correction, revision, and learning. *Journal of Second Language Writing, 17*(4), 292-305.

Van Beuningen, C., de Jong, N., & Kuiken, F. (2012). Evidence on the effectiveness of comprehensive error correction in second language writing. *Language Learning, 62*(1), 1-41.

Yoon, K.-O., & Lee, J.-W. (2018). Features and perception of EFL students' feedback on their peers' writing. *English Language & Literature Teaching, 24*(3), 69-87.

Yoon, K.-O., & Lee, J.-W. (2020). Effects of two different grammar instruction approaches depending upon EFL learners' grammar knowledge. *The Journal of Studies in Language, 35*(4), 583-598.

Young, R. (1996). Form-function relations in English interlanguage. In R. Bayley & D. R. Preston (Eds.), *Second language acquisition and linguistic variation* (pp. 135-175). Amsterdam: John Benjamins.

APPENDIX
Two Story-Telling Pictures