The Effect of Unfocused Written Corrective Feedback on Syntactic and Lexical Complexity of L2 Writing

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Abstract

Written corrective feedback (henceforth CF) has been an issue of substantial controversies and debates. Although the focus of current CF studies has primarily been on grounding the value of focused CF, evidence on the benefits of unfocused CF is still limited. Moreover, it is essential to explore whether and how correction impacts the complexity of students’ writings to diminish the prospect that CF accuracy improvement is actually caused by evading more complex language use. The current study examined the effectiveness of unfocused written CF on the syntactic and lexical complexity of students’ writing. The participants were 30 homogeneous advanced learners from an English Institute located in Yazd; they were divided into experimental and control groups. Both groups were asked to write 10 compositions during the course but only the experimental group received unfocused CF for each essay. A computerized text analysis (Analyzer) was used to measure the linguistic properties of the written compositions. Syntactic complexity (ratio of subordination and average sentence length of the written texts) and lexical complexity (lexical diversity and lexical density) were calculated by the program. Using Multivariate analysis revealed a significant gain for both syntactic and lexical complexity in the experimental group. The paper concluded with theoretical and pedagogical implications of unfocused written CF for future research and classroom use.

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Keywords: Unfocused; Written corrective feedback; Syntactic complexity; Lexical complexity; Writing

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1. Introduction

For a decade or so, the effect of written corrective feedback (CF) on accuracy of learner’s writings has caused considerable amount of controversy among theorists and SLA researchers alike (Van Beuningen, 2010). It seems that this debate will not subdue soon. Furthermore, written CF literature is replete with studies regarding the effect of feedback on improving written accuracy and counter studies and responses in order to nullify the nature of those studies. On the one side, Truscott fiercely underestimated the benefits of providing feedback on the grounds that not only is it theoretically wrong and harmful but also practically impossible and the time is worth spending on more fruitful issues (e.g. Truscott, 1996; 1999; 2004; 2007; 2009; 2010). Truscott (1996, 1999), reflecting the views of teachers who adhere to process theories of writing, advanced the strong claim that correcting learners’ errors in a written composition may enable them to eliminate the errors in a subsequent draft but has no effect on grammatical accuracy in a new piece of writing (i.e. it does not result in acquisition). In one study, Sheppard (1992) analyzed the effects of two types of CF (indirect error coding CF vs. holistic comments in the margins) on the development of L2 students’ accurate use of verb tense, punctuation, and subordination. His students wrote seven essays which then were analyzed for accuracy with regard to the targeted linguistic features. He reported that the group that received holistic comments outperformed the group that received CF and further noted that the CF group regressed over time by avoiding the use of the complex structures as a result of the CF. This led him to conclude that grammar error correction had a negative effect. Actually, this study has investigated the effect of unfocused CF on the written accuracy of ESL learners in that the correction in their studies targeted a range of errors. Critics of written CF make their case based on the traditional unfocused approach to correcting students’ written work. However, where grammatical accuracy is concerned, the utility of written CF might eventually lie in the intensity and focus of the correction teachers provide to L2 writers.

However, those on the other campus vigorously defend the case for grammar correction and provide research evidence to support their claims (e.g. Chandler, 2003, 2004, 2009; Bitchener, 2008; Bruton, 2009, 2010; Ferris, 1999; 2004; 2010). The effect of focused CF which just focuses on one specific grammatical problem was thoroughly researched in the past decade (e.g. Bitchener & Knoch, 2009; Bitchener & Knoch, 2010a; Bitchener & Knoch, 2010b; Sheen, 2007). These researchers focused on specific problematic features (e.g. errors in the use of past tense), totally neglecting other errors committed by the learners. Most of these studies are laboratory and tightly controlled and almost all of them found positive effects with durable gains after a period of time for focused CF. Bitchener, Young, & Cameron (2005), for example, investigated the extent to which different types of CF (direct CF with and without oral conferencing) influence the accuracy in new pieces of writing. Bitchener et al. limited the provision of written CF to only errors involving past tense, definite article (‘the’), and prepositions. They found that both types of direct CF had a significant impact on accuracy in new pieces of writing but that this was only evident for the definite article and past tense. The same type of feedback did not have a significant positive effect on accurate use of prepositions. The authors explained their findings by referring to Ferris’s (2002) argument that if a grammatical feature is clearly rule-based (e.g., definite article and past-tense), it is more treatable than when a feature is item-based (as with many prepositions). Consequently, the authors suggested that direct CF might be effective in treating some but not all errors, and that teachers should be selective with regard to the errors they address in students’ writing. It should be noted that unlike the focused approach, the unfocused approach constitutes a relatively unsystematic way of correcting errors. Given that corrective feedback in the classroom is often provided in an ad-hoc way (i.e., sporadically and often inconsistently on a range of grammatical features) there is an obvious need to investigate unfocused CF.

Research on the effect of unfocused CF and on the relative effectiveness of focused and unfocused CF is still scarce. Only few studies investigated its potential usefulness in improving learners’ accuracy (Ellis et al., 2008, Sheen, Wright, and Moldawa, 2009; VanBeuningen, de Jong, & Kuiken, 2012). There is an obvious need to investigate what effects the two types of CF have on a broader range of grammatical structures. For example, Ellis et al. (2008) study compared the effects of focused and unfocused CF on the accurate use of English definite and indefinite articles and reported that both types of feedback were equally effective in improving accuracy. The findings of these studies, although they had some methodological, measurement problems and limitations, highlight the usefulness of unfocused feedback and provide encouraging reasons to investigate the effect of unfocused CF on learners writing because of its authentic methodology, teachers’ preferences and generalizability of the findings as
noted by several researchers such as Hartshorn et al. (2010) and Xu (2009).

However, few studies, have sought to take complexity into account when measuring the effects of feedback on writing. To the best of the researchers’ knowledge, only Ruegg (2010) has considered a tradeoff between complexity and accuracy in her study. The problem with plethora of studies which have investigated written CF is that they assessed the change in the number of errors over time. If feedback does reduce the number of errors significantly over time, it is questionable that along with this increased accuracy goes equal complexity (Ruegg, 2010). As the literature review shows, almost all the studies investigated the effect of providing feedback on learners accuracy development and totally neglected its impacts on the complexity of students’ writing and therefore the acquired accuracy that was reported in these studies may be brought about by avoidance of more complex language use as postulated by Truscott (1996) as a case against correction or, on the other hand, the lack of improvement in accuracy may possibly indicate that, while unfocused feedback may not lead to increased accuracy, it may result in interlanguage development.

It should be emphasized that Second Language Acquisition (SLA) researchers are concerned with whether corrective feedback has any effect on learners’ interlanguage development (Ellis, 2012). It is clear from the literature that language development is not a simple process and there may be a U-shaped course of development where learners are initially able to use the correct forms, only to backslide later, before finally using them according to the target language rules. Thus, rather than hoping for increased accuracy alone, it should be hoped that the types of errors learners are making should change as they acquire new language structures and go on to make errors on more complicated ones. In fact, as Hyland and Hyland (2006) stated; unfortunately, feedback studies ignored how language acquisition occurs, although the influence of feedback on the learner’s long-term writing development fits closely with SLA research. Moreover, as he stated “attempting to establish a direct relationship between corrective feedback and successful acquisition of a form is, therefore, over-simplistic and highly problematic” (ibid, p. 85).

In the light of current discussion provided about the importance of attention to complexity of interlanguage development of L2 learners and lack of studies about the effect of feedback on syntactic and lexical complexity, this study aims to answer the following two research questions:

1. Does unfocused written corrective feedback affect syntactic complexity of L2 writing?
2. Does unfocused written corrective feedback affect lexical complexity of L2 writing?

2. Methodology

2.1 Participants

The participants were 30 advanced students enrolled in conversational classes in an English institute in Yazd. The study used a quasi-experimental design involving intact classes serving experimental (15) and control group (15). All of the participants passed pervious upper intermediate conversational levels or enrolled by quick Oxford placement test. The students were both male and female (8 males and 22 females) and aged between 16-23. They participated in these classes to improve their communicative competence ability, as it is very difficult to do it in their formal classes in schools and universities. The teacher was one of the researchers. She was an experienced non-native speaking teacher of English as a foreign language and a Ph.D. candidate of TEFL at Yazd University. She was the class’s regular teacher; the course lasted for 3 month, 3 sessions in a week.

2.2 Data Collection

Both groups had Summit 1 (Saslow & Ascher, 2006) for their conversational classes. Summit is a two level high-intermediate advanced course communicative series for adults and young adults that can follow any intermediate course book. Both groups received exactly the same instruction except for writing assignments at the end of each lesson; students in the experimental group received unfocused written corrective feedback for 10 compositions and those in control group received no written corrective feedback on grammatical features, but, to satisfy moral obligations, they were given feedback on the quality and organization of their content. The level of
syntactic and lexical complexity was calculated for the first composition to ensure the sameness of the participants’ syntactic and lexical complexity of their writing in both groups in the beginning of the course. The analysis showed the homogeneity of first compositions in control and experimental group based on complexity indexes. The first and last compositions of the learners (which had the same topic) were analyzed for scrutinizing the effect of unfocused CF during this period.

2.3 Data Analysis

There are different ways to address syntactic and lexical complexity of writing in different studies. Syntactic complexity is marked in second language writing in terms of how varied and sophisticated the construction elements or linguistic structures are (Ortega 2003), and lexical richness is marked in L2 use in terms of the sophistication and array of learners’ productive vocabulary (Wolfe-Quintero, Inagaki, & Kim, 1998). For evaluating the syntactic and lexical complexity of the students’ writing, L2 Syntactic Complexity Analyzer and Lexical Complexity Analyzer designed by Lu (2010; 2012) were used.

The analyzer is intended to automate syntactic and lexical complexity analysis of written English language samples produced by advanced learners of English. In this study, we calculated the length of production at mean length of sentence (MLS), and a dependent clause ratio (dependent clauses per clause, or DC/C) for assessing syntactic complexity. For assessing lexical complexity features, lexical density (LD) and lexical variation (LV) were measured by the software. After extracting the features form the analyzer, they were put in SPSS. Because there were two dependent variables in each set of scores, multivariate analysis of variance (MANOVA) was run.

3. Results

3.1 The first question

The descriptive statistics for MLS and DC/C including means and standard deviations are presented in Table 1.

Table 1. Descriptive statistics for MLS and DC/C

<table>
<thead>
<tr>
<th>Group</th>
<th>Compositions</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>First composition</td>
<td>15.56</td>
<td>2.78</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Final composition</td>
<td>17.37</td>
<td>1.79</td>
<td>15</td>
</tr>
<tr>
<td>Experimental</td>
<td>First composition</td>
<td>15.46</td>
<td>3.33</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Final composition</td>
<td>20.43</td>
<td>2.01</td>
<td>15</td>
</tr>
</tbody>
</table>

An inspection of the mean scores indicated that experimental group that received unfocused written CF gained more in MLA and DC/C measures than control group. Research question 1 asked whether unfocused written corrective feedback affects syntactic complexity of L2 writing. This question was answered by running two-way MANOVA after checking for preliminary assumptions. The result is presented in the following Tables:
Table 2. Multivariate tests for MLS and DC/C

<table>
<thead>
<tr>
<th>Effect</th>
<th>Value</th>
<th>F</th>
<th>df</th>
<th>Error df</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>Wilks’ Lambda</td>
<td>.863</td>
<td>4.379*</td>
<td>2.000</td>
<td>55.000</td>
<td>.017</td>
</tr>
<tr>
<td>Time</td>
<td>Wilks’ Lambda</td>
<td>.517</td>
<td>25.719*</td>
<td>2.000</td>
<td>55.000</td>
<td>.000</td>
</tr>
</tbody>
</table>

Table 3. Tests of Between-Subjects Effects for MLS and DC/C

<table>
<thead>
<tr>
<th>Source</th>
<th>Dependent Variable</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>Mean Length of Sentence</td>
<td>32.989</td>
<td>1</td>
<td>32.989</td>
<td>5.066</td>
<td>.028</td>
<td>.083</td>
</tr>
<tr>
<td></td>
<td>Dependent clauses per clause</td>
<td>.043</td>
<td>1</td>
<td>.043</td>
<td>5.138</td>
<td>.027</td>
<td>.084</td>
</tr>
<tr>
<td>Time</td>
<td>Mean Length of Sentence</td>
<td>172.468</td>
<td>1</td>
<td>172.468</td>
<td>26.487</td>
<td>.000</td>
<td>.321</td>
</tr>
<tr>
<td></td>
<td>Dependent clauses per clause</td>
<td>.281</td>
<td>1</td>
<td>.281</td>
<td>33.382</td>
<td>.000</td>
<td>.373</td>
</tr>
</tbody>
</table>

As the results show, there was a statistically significant difference between experimental and control groups on the combined dependent variables, $F(2, 55) = 4.37, p = .017; \text{Wilks' Lambda} = .86; \text{partial eta squared} = .13$. Overall, there were both significant group differences and time differences.

3.2. The second question

The following Table presents the means and standard deviations for the control and experimental group regarding lexical complexity features (LD and LV).

Table 4. Descriptive Statistics for LD and LV

<table>
<thead>
<tr>
<th>Group</th>
<th>Compositions</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lexical density</td>
<td>Control</td>
<td>First composition</td>
<td>.4787</td>
<td>.03270</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Final composition</td>
<td>.5327</td>
<td>.05535</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>First composition</td>
<td>.4820</td>
<td>.02833</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Final composition</td>
<td>.5947</td>
<td>.06323</td>
</tr>
<tr>
<td>Lexical variation</td>
<td>Control</td>
<td>First composition</td>
<td>.6047</td>
<td>.06728</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Final composition</td>
<td>.6580</td>
<td>.09314</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>First composition</td>
<td>.6080</td>
<td>.06689</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Final composition</td>
<td>.7420</td>
<td>.08793</td>
</tr>
</tbody>
</table>
The second research question was regarding the fact that whether receiving unfocused written corrective feedback affects lexical complexity of L2 writing. The results indicate that it did. There were statistically significant differences between the control and experimental groups. The result of two-way MANOVA is presented in Tables 5 and 6:

Table 5. Multivariate Tests for LD and LV

<table>
<thead>
<tr>
<th>Effect</th>
<th>Value</th>
<th>F</th>
<th>Hypothesis df</th>
<th>Error df</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>Wilks' Lambda</td>
<td>.846</td>
<td>5.015a</td>
<td>2.000</td>
<td>55.000</td>
<td>.010</td>
</tr>
<tr>
<td>Time</td>
<td>Wilks' Lambda</td>
<td>.485</td>
<td>29.200a</td>
<td>2.000</td>
<td>55.000</td>
<td>.000</td>
</tr>
</tbody>
</table>

Table 6. Tests of Between-Subjects Effects for LD and LV

<table>
<thead>
<tr>
<th>Source</th>
<th>Dependent Variable</th>
<th>Type III Sum of Squares</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>Lexical density</td>
<td>.016</td>
<td>.016</td>
<td>7.166</td>
<td>.010</td>
<td>.113</td>
</tr>
<tr>
<td></td>
<td>Lexical variation</td>
<td>.029</td>
<td>.029</td>
<td>4.503</td>
<td>.038</td>
<td>.074</td>
</tr>
<tr>
<td>Time</td>
<td>Lexical density</td>
<td>.104</td>
<td>.104</td>
<td>46.637</td>
<td>.000</td>
<td>.454</td>
</tr>
<tr>
<td></td>
<td>Lexical variation</td>
<td>.132</td>
<td>.132</td>
<td>20.719</td>
<td>.000</td>
<td>.270</td>
</tr>
</tbody>
</table>

MANOVA revealed that there was an effect for experimental group, $F(2, 55) = 5.01, p = .010$; Wilks’ Lambda = .84, partial eta squared = .15. Moreover, the results indicated that both groups improved after writing 10 new compositions but only the experimental group outperformed in improving the syntactic and lexical complexity of their writings after 3 month.

3. Conclusion and Pedagogical Implications

As postulated by Ortega (2009, p140) many questions were left to future research regarding “how and why L2 learners develop (or not) sufficiently detailed and idiomatic representations across various fundamental areas of grammar”. Therefore, what roles various kinds of situations and types of teachings can play in supporting or weakening success along the way call for more research (ibid). Furthermore, as astutely mentioned by Bichner (2012) and Manchon (2012) a statistically significant increase in accuracy on one or a few occasions cannot provide adequate evidence that acquisition has occurred. So, other criteria such as fluency and complexity and a distinction between ‘feedback for accuracy’ and ‘feedback for acquisition’ should be developed. Thus, expecting error-free compositions are out of question and seem to be unreasonable goal.

Hopefully, the result of this study also indicated that unfocused written CF not only would stop learners from trying more complex features in their new pieces of writing but also may lead to acquisition and improving complexity in their interlanguage. Therefore, rather than looking for accuracy and lessening the number of errors, we should be looking for a change in the type of errors being made (Ruegg, 2010). That being the case, instead of correcting specific errors, unfocused feedback can help students receive valuable feedback on their new inaccuracies and consequently provides a chance to eradicate errors form their future new pieces of writing.

References


