



The Impact of Gender and Explicit Written Feedback on Learners' Grammar Performance

Jafar Izadpanah¹, Firooz Sadighi^{1*}, Leila Akbarpour¹

¹Department of English Language, Shiraz Branch, Islamic Azad University, Shiraz, Iran.

Email: jafarezadpanah@gmail.com

Email: firoozsadighi@yahoo.com

Email: akbarpourleila@gmail.com

*Corresponding Author's Email: firoozsadighi@yahoo.com

Received: 01-05-2023, Accepted: 19-07-2023

ABSTRACT

This study aimed at investigating the effect of explicit written feedback under metalinguistic feedback (WMF) on EFL learners' grammar performance with involving gender factor. To this end, the performance of the male and female learners as a result of written metalinguistic feedback (explanation) was studied. Sixty homogeneous Iranian EFL male and female high school students were randomly assigned to male and female experimental groups. Afterward, a grammar test was administered to see the effect of the written metalinguistic corrective feedback. This study adopted a pretest-posttest quasi experimental design. The statistical techniques employed to measure such effects were a series of independent paired samples t-tests to analyze the data. The results indicated a significant effect of WMF on the reduction of grammatical errors. Meanwhile, there were no differences between genders in the learners' performance as a result of written metalinguistic feedback. As for the pedagogical implications, written metalinguistic feedback is suggested as a profitable type of corrective feedback to improve and enhance error correction practices within Iranian EFL context.

KEYWORDS: Gender; Learners' Grammar Performance; Written Metalinguistic Feedback

INTRODUCTION

Written Corrective Feedback (henceforth WCF) is a very important aspect in L2 writing class. It can reduce linguistic errors and make the composition more accurate especially in organization and content. The effectiveness of WCF in L2 writing has been investigated for years. However, it has been a controversial issue in L2 teaching during many years. For example, a few researchers (Truscott & Hsu, 2008) disagreed that feedback gave facilitative effect to L2 learners. Truscott (1996) argued that CF was dangerous and gave a bad impact on L2 learners' writing. Truscott (1996, 2004), then, recommended that CF was useless (Van Beuningen et al., 2012). Then, many researchers measured the effectiveness of CF and gave strong evidence about the usefulness of CF. For example; Ferris (1999) responded to Truscott's argument and gave empirical data to support the use of feedback in L2 writing. Since then, some researchers conducted some studies on the influence of CF in L2 writing. For example, (Hyland &



Hyland, 2006; Sheen & Ellis, 2011) agreed that feedback gave facilitative effect to L2 learners. Guenette (2007) found that CF was useful for L2 learners. CF was useful for increasing grammatical accuracy (Chandler, 2003; Sheen, 2007). Then, it was argued that feedback could increase learners' accuracy in writing (Ashwell, 2000; Ferris & Roberts, 2001). Studies about the influence of written metalinguistic feedback have been conducted by Chandler (2003). He found that this feedback gave positive effect to L2 learners. Written metalinguistic feedback is a feedback given to the learners using the correct form done by the language instructors (Ferris, 2003). It includes the giving of cross out to the incorrect words, phrases, or morphemes, the giving of insertion of missing words, phrases, or morphemes, or providing correct forms directly (Ellis, 2008; Ferris, 2006). In explicit written CF, the language instructors gave the correct forms of the learners' errors. Explicit written CF was more useful to learners since it provided learners' errors and revises them directly (Elashri, 2013). This type is more suitable for low learners who cannot correct their errors by themselves (Ferris & Hedgcock, 2013). On the contrary, written metalinguistic CF (explanations) is a feedback indicating that there was a linguistic error; however, the teacher did not provide the correct form directly (Ferris, 2003). In this type, language instructors only show the errors but they do not give learners the correct form (Lee, 2013). For instance, language instructors give signs on the errors by using lines, circles, codes, or explanations to show the errors (O'Sullivan & Chambers, 2006), or by giving a cross (Talatifard, 2016). Moser and Jasmine (2010) found that learners who were given written metalinguistic CF achieved better than those treated using other types of feedback. Moreover, the effectiveness of written corrective feedback (WCF) in the improvement of language learners' grammatical accuracy has been investigated in an EFL context. The results of this study indicated an improvement caused by WCF during the treatment process (Khanlarzadeh & Nemat, 2016).

In the Iranian EFL context, the use of CF in the instruction of foreign languages has not been applied efficiently (Zhang & Rahimi, 2014). While different forms of CF can contribute to language learning, the impact of written CF on grammar performance of Iranian EFL high school students considering gender has been under-researched. Therefore, the present study sought to investigate the effect of written metalinguistic feedback with involving gender as potential factors on grammar performance. Here, the learners' gender was taken into account for better understanding of the effectiveness of written metalinguistic feedback in reducing the grammatical errors.

RESEARCH QUESTIONS

This study was guided by the following research questions:

RQ1. Does the teacher's written metalinguistic feedback lead to the reduction of grammatical errors?

RQ2. Are there any significant differences on the learners' grammar performance caused by gender factor as well as MWF?

METHODOLOGY DESIGN

This study adopted a pretest-posttest quasi experimental design. A pretest was followed immediately by a post-test after the treatment to determine the effect of MWF on the reduction of grammatical errors considering the learners' gender.

PARTICIPANTS

The participants of the current study consisted of 60 Iranian EFL high school students (male and female). Oxford Quick Placement Test (OQPT) was used to determine the students' proficiency levels. They ranged in age from 17 to 18. They were selected based on a non-random convenience sampling method.



INSTRUMENTS

The instruments used for this study included: Oxford Quick Placement Test (OQPT), and a grammar test as a pretest, and a posttest. A pilot study with 30 pre-intermediate EFL learners was conducted to calculate the reliability of the grammar test. The reliability of this grammar test was estimated through KR-21 during the pilot study ($r=0.73$). The content validity of this test also was confirmed by two Ph.D. holders who were experts in language testing and design. Likewise, some writing tasks on the assigned topics that were interesting to the learners, suitable for pre-intermediate level students, and related to the topics of the students' textbook taught in the class.

DATA COLLECTION PROCEDURE

This study included an experimental design (a pretest and an immediate posttest), which took about nine weeks (18 sessions of the first semester). After getting the participants' consent at the outset of the study, the first aim of the researchers was to select a homogenous group of participants. For this purpose, before the experiment, the proficiency test was administered to 92 participants. After getting the participants' scores and analyzing the test's results, 60 students who scored one standard deviation below and above the mean were classified as pre-intermediate students for the present study. Participants were randomly assigned to two experimental groups, i.e., male and female, and each of the two groups included 30 participants.

After establishing the homogeneity of the learners in terms of general knowledge of English through the proficiency test in the pretesting phase, another test (grammar test) as a pretest consisting of 40 items was administered to two experimental groups in which students were required to answer the items in 40 minutes. The pretest results were used for comparing them with those of the post-test to see if the learners' progress in reducing and correcting grammatical errors is due to the treatment they went through and for determining the learners' grammatical levels. Learners' pretests were corrected and scored (on a scale ranging from zero to 20), and they were not given back to the participants. The treatment process in this study was done as follows: In the first session of the treatment, the experimental groups were introduced to further written metalinguistic corrective feedback (explanations). Metalinguistic feedback provided L2 learners with some forms of explicit comment about the nature of the errors they have made (Ellis, 2009).

Accordingly, during the treatment process, experimental groups received explicit written CF in the form of metalinguistic CF separately. Every session, as part of their homework, they were supposed to do a piece of writing with a common topic and submitted it to the teacher at the next session. The researchers did not only score the writings as the final product. Instead, they provided explicit written CF under metalinguistic CF (explanations) on students' grammatical structures (target structures: relative pronouns, passive voice, verb tense, and articles identified as the most problematic errors in L2 writing (Martinez, 2006) were the main criteria for choosing these target structures) and returned the corrected writings to the students in the following session. In the explanation C.F. approach, the teacher numbered errors in text and wrote a grammatical description for each numbered error at the



bottom of the text. The students were required to study the comments and applied them in their subsequent writings (Ellis, 2009). The students were advised to review their corrected assignments of the previous week and write their new writings. This process continued for eight consecutive sessions (two sessions every week). One week after the last treatment session, a post-test was administered to the participants to determine the treatment effects as well as gender effect. The learners' post-test was also corrected and scored on a scale ranging from zero to 20. Inferential statistics were used to analyze quantitative data. Two paired-samples t-tests and two independent t-tests were used to estimate the effect of learners' gender on their grammar performances as a result of written metalinguistic feedback.

RESULTS

The results are delineated in more detail on research questions posed earlier. Before that, the normality of the distributions was checked to run inferential statistics using the Kolmogorov-Smirnov test of normality, whose result indicated that the data were normally distributed. Moreover, the magnitude of the differences between the means, i.e., the effect size, was calculated for each t-test using the eta-squared formula for independent and paired-samples t-tests (Pallant, 2013). By comparing the mean scores of the groups in the pretest, the grammatical homogeneity of participants was examined. Table 1 and Table 2 show the comparison between the pretest of both male and female experimental groups on the grammatical test.

Table 1
Sample Means and Standard Deviations for the Grammar Test of Male and Female Groups on the Pretest

	N	Mean	Std. Deviation
Male Group	30	12.99	0.86
Female Group	30	13.02	1.06

Table 2
Independent Samples T-Test for the Pretests of Male and Female Groups

	Levene's Test for Equality of Variances		t-test for Equality of Means		
	F	Sig	t	df	Sig. (2-tailed)
Pretests	0.995	0.323	1.53	58	0.131

As Table 1 shows, the mean scores of the groups were 12.99 and 13.02. Table 2 indicates that the p-value equals .131, which is more than 0.05. It can be claimed that there was not any significant difference between the two groups' mean scores on the grammar test. Thus, they were homogenous in terms of their grammatical knowledge before the administration of the treatments.

RESEARCH QUESTION 1

A paired-samples t-test was conducted to answer the first research question. The researchers compared the means scores of the participants on the pre-test and post-test of the male experimental group to investigate the effect of written metalinguistic feedback on the correction of grammatical structures. Table 3 and Table 4 show the results of the comparison between the pretest and posttest of the male group.



Table 3

Pretest-Posttest Comparative Data for Male Group

	N	Mean	Std. Deviation
Pretest	30	12.99	0.158
Posttest	30	15.82	1.11

Table 4

Paired Samples T-Test for Explicit Male Group

	Paired Differences				
	Mean	Std. Deviation	t	df	Sig. (2-tailed)
Pretest-posttest	3.39	1.35	8.64	29	0.000

In Table 3, it is shown that the mean scores for the pretest and posttest of the male group were 12.99 and 15.82, respectively. As shown in Table 4, the probability of t (8.64) has a $p < .001$, which is lower than the significance level of .05. Also, the effect size between the pretest and posttest of the explicit oral group was calculated to be .72, which is considered appropriate (Pallant, 2013). Thus, it can be concluded that the mean scores of the pretest and posttest were significantly different. In other words, written explicit corrective feedback in metalinguistic feedback had a significant effect on students' correction of grammatical structures.

The second paired samples t-test was also conducted to compare the means scores of the participants on the pretest and posttest of the female experimental group to examine the effect of metalinguistic feedback on the correction of grammatical structures. Tables 5 and 6 show the results of the comparison between the pretest and posttest in female group.

Table 5

Pretest-Posttest Comparative Data for Female Group

	N	Mean	Std. Deviation
Pretest	30	13.02	1.06
Posttest	30	16.01	1.12

Table 6

Paired Samples T-Test for Female Group

	Paired Differences				
	Mean	Std. Deviation	t	Df	Sig. (2-tailed)
Pretest-posttest	2.99	1.65	4.85	29	0.000



Table 5 illustrates that the mean scores for the pretest and posttest of female group were 13.02 and 16.01, respectively. Based on Table 6, the probability of $t(4.85)$ had the $P < .001$, which is lower than the significance level of .05. The effect size between the pretest and posttest of the explicit written group was calculated to be .44, which is considered appropriate (Pallant, 2013). Hence, it can be concluded that the mean scores of the pretest and posttest were significantly different. On the other hand, written explicit corrective feedback under metalinguistic feedback had a significant effect on students' correction of grammatical structures.

RESEARCH QUESTION 2

To answer the second research question first, an independent samples t-test was run to answer the second research question. The participants' mean scores on the post-tests of the both male and female experimental groups were compared to compare the difference of both experimental groups' performance and also the effect of learners' gender on the correction of grammatical structures. It is shown in Table 7 that the mean scores for the posttest of male and female groups were 15.82 and 16.01, respectively. Therefore, the experimental male and female groups performed equally well on the correction of grammatical structures. Table 8 shows the results of the independent t-test of the posttests for male and female groups.

Table 7

The Comparative Data of Posttests in Male and Female Groups

	N	Mean	Std. Deviation
posttest	30	15.82	1.11
posttest	30	16.01	1.12

Table 8

Independent Samples T-Test for Male and Female Groups

	Levene's Test for		t-test for Equality of Means		
	Equality of Variances				
	F	Sig	t	df	Sig. (2-tailed)
Posttest-posttest	0.059	0.809	3.63	58	0.133

As shown in Table 8, the p-value equals .133, which is more than 0.05, and the effect size between the posttest of male and female groups was calculated to be .18, which is considered as appropriate (Pallant, 2013). It is concluded that there was no a statistically significant difference between the mean scores of posttests for the two groups, and the male group equally performed the written feedback group in terms of the overall performance of the correction of grammatical structures after the treatment.



DISCUSSION

Two paired-samples t-tests and two independent t-tests were applied to measure the influence of gender and the type of feedback on the learners' grammar performance. Here, the respondents were assigned to divide into two groups: male and female. The output confirmed that there was a significant difference for the type of WMF on the learners' grammar performance. The gender factor did not give facilitative effect among the mean groups in learners' grammar performance. The interaction effect of gender and type of feedback did not have effects on the learners' grammar performance.

Based on the output, it could be concluded that the type of MCF have facilitative significant effect on the learners' grammar performance. However, there was no significant difference for the gender factor in the learners' grammar performance. The results of Karim's (2013) study suggested that MCF could significantly increase the writing accuracy. This study was also in line with Sheen (2007) indicating that MCF was useful for L2 learners. The finding was also consistent with findings of related studies. For example, one study found that MCF was an effective method for L2 learners (Elashri, 2013; Ko, 2010). Dealing with MCF feedback, the results were also supported by some researchers. For example, (Ferris, 2003) found that MCF was useful to learners. Researches showed that MCF was better than direct CF (Chandler, 2003; Sheen et. al., 2009). Many experts agreed that explicit written CF has the most potential way in developing grammar accuracy (Ferris, 2003). Moreover, the results of the present study are in line with Bitchner and Knoch (2008), who found that explicit feedback under metalinguistic feedback did help learners clarify the points for themselves by making the presented learning input salient, thereby assisting them to remove any possible doubts or misunderstandings of the input. Likewise, they said that explicit written feedback did help learners to notice issues containing grammar, assisting them with their hypothesis making and testing. Similarly, the result of the study partly echoes the studies of Lyster et al. (2013), who found out that explicit written C.F in the form of metalinguistic feedback is significantly more fruitful than no C.F. and also reveals a tendency for learners receiving prompts or explicit written correction to depict more gains on some measures than students receiving recasts.

In terms of gender, the results of the study were not in accordance with Sadeghi, Khonbi and Gheitranzadeh (2013). They investigated the effect of gender and type of WCF on Iranian pre -intermediate EFL learners' writing. Sadeghi et al. found that learners who treated using direct WCF performed significantly better than those who treated using indirect WCF and those in control groups and gender had significant effect on the learners' writing ability with females performing better than males. However, this finding was totally in contrast with Truscott's (Truscott, 2004, 2007, 2009). Therefore, the finding of the study refuted Truscott's arguments (in 2004, 2007, and 2009). By a short glance, it was noted that different types of WCF had important role in increasing the language development of learners' writing performance. In addition, corrective feedback was important for both the teachers and learners in L2 writing class.



CONCLUSIONS and IMPLICATIONS

According to the study results, explicit written C.F. as classified “metalinguistic feedback” is helpful in raising the learners’ awareness to reduce grammatical errors and write correctly in their subsequent writing. There was a significant difference between the mean scores of pre-test and post-test. Thus, explicit written feedback under metalinguistic feedback could be significant in the reduction of grammatical errors. Meanwhile, there were no differences between genders in the learners’ grammar performance. Taken together, the findings of this study can motivate teachers to use a wider variety of error correction techniques, move from implicit toward explicit feedback types, in the form of MWF, to make their teaching more useful. However, it is plausible that some limitations could have influenced the results obtained. The present study was limited to four grammatical targets, including relative pronouns, passive voice, verb tense, articles, and just explicit feedback. Thus, future research can take into consideration the impact of CF on the correction of more grammatical structures and investigate the effect of implicit CF. Moreover, the existence of a control group can be considered for future studies.

REFERENCES

- Ashwell, T. (2000). Patterns of teacher response to student writing in a multiple draft composition classroom: Is content feedback followed by form feedback the best method? *Journal of Second Language Writing*, 9(3), 227-257.
- Bitchener, J, Knoch, U. (2008). The value of written corrective feedback for migrant and international students. *Language Teaching Research*, 12 (3), 409-431.
- Chandler, J. (2003). The efficacy of various kinds of error feedback for improvement in the accuracy and fluency of L2 student writing. *Journal of Second Language Writing*, 12(3), 267-296.
- Elashri, I. (2013). The Impact of the Direct Teacher Feedback Strategy on the EFL Secondary Stage Students' Writing Performance. *Online Submission*.
- Ellis, R. (2008). A typology of written corrective feedback types. *ELT Journal*, 28(2), 97-107.
- Ellis, R. (2009). Corrective feedback and teacher development. *L2 Journal*, 1(1), 3-18.
- 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), 1-11.
- Ferris, D. R. (2006). Does error feedback help student writers? New evidence on the short-and long-term effects of written error correction. *Feedback in second language writing: contexts and issues*, 81-104.
- Ferris, D. (2011). *Treatment of error in second language student writing*. University of Michigan 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.
- Ferris, D. R., & Hedgcock, J. (2013). *Teaching L2 composition: Purpose, process, and practice*. Routledge.
- Guenette, D. (2007). Is feedback pedagogically correct? Research design issues in studies of feedback on writing. *Journal of Second Language Writing*, 16(1), 40-53.
- Hyland, K. & Hyland, F. (2006). *Feedback in second language writing: contexts and issues*. Cambridge University Press.
- Karim, K. M. R. (2013). *The effects of direct and indirect written corrective feedback (CF) on English-as-a-second-language (ESL) students' revision accuracy and writing skills* (Doctoral dissertation).
- Ko, K. (2010). *Perceptions of KFL/ESL teachers in North America regarding feedback on college student writing* (Doctoral dissertation, The Ohio State University).
- Lee, E. J. (2013). Corrective feedback preferences and learner repair among advanced ESL students. *System*, 41(2), 217-230.
- Lyster, R., Saito, K., & Sato, M. (2013). Oral feedback in the second language classroom: A meta-analysis. *Language Teaching*, 46(1), 1-40.
- Moser, M. (2010). *Using peer feedback with high school students to improve the use of analogies and symbolism within creative writing* (Doctoral dissertation, Caldwell College).
- O'Sullivan, I., & Chambers, A. (2006). Learners' writing skills in French Corpus consultation and learner evaluation. *Journal of Second Language Writing*, 15(1), 49-68.
- Pallant, J. (2013). *SPSS survival manual: A step by step guide to data analysis using IBM SPSS*. Routledge.



- Sadeghi, K., Abolfazli Khonbi, Z., & Gheytranzadeh, F. (2013). The effect of type of corrective feedback (direct vs. indirect) on Iranian pre-intermediate EFL learners' writing. *Journal of Applied Linguistics and Applied Literature: Dynamics and Advances*, 1(2), 71-86.
- 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.
- Sheen, Y., & Ellis, R. (2011). Corrective feedback in language teaching. In *Handbook of research in second language teaching and learning* (pp. 593-610). Routledge.
- Talatifard, S. (2016). The Effect of reactive focused corrective feedback on Iranian EFL learners' writing performance. *Journal of Advances in English Language Teaching*, 4(3), 40-48
- Truscott, J. (1996). The case against grammar correction in L2 writing classes. *Language Learning*, 46(2), 327-369.
- Truscott, J. (2004). Evidence and conjecture on the effects of correction: A response to Chandler. *Journal of Second Language Writing*, 13(4), 337-343.
- 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. (2009). Arguments and appearances: A response to Chandler. *Journal of Second Language Writing*, 1(18), 59-60.
- Truscott, J., & Hsu, A. Y. (2008). Error correction, revision, and learning. *Journal of Second Language Writing*, 17(4), 292-305.
- Van Beuningen, C. G., De Jong, N. H., & Kuiken, F. (2012). Evidence on the effectiveness of comprehensive error correction in second language writing. *Language Learning*, 62(1), 1-41.
- Zhang, L. J., & Rahimi, M. (2014). EFL learners' anxiety level and their beliefs about corrective feedback in oral communication classes. *System*, 42, 429-439.