The Interplay between Corrective Feedback, Motivation and EFL Achievement in Middle and High School Education

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ABSTRACT

Introduction. Despite the fact that error correction has significant and long-term effects on facilitating language learning and development, there has not been any research that investigates its influence on learners' motivation within the classroom context of Bosnia and Herzegovina.

Purpose. This research aims to examine the impact of written and oral corrective feedback on students' motivation and achievement within this EFL context.

Method. For this quantitative study, the questionnaire has been used to collect the data from 160 middle and high school students in central Bosnia and Herzegovina.

Results. The findings indicated that the respondents generally like to be corrected and they are moderately to highly motivated to speak and write in English as a foreign language. Furthermore, learners with positive attitudes towards the received feedback feel significantly more motivated to keep learning than those with negative attitudes.

Conclusion. The study is expected to provide teachers with suggestions on how to transform their classrooms into an environment conducive to the development of higher levels of writing and speaking motivation and how to provide corrective feedback that will positively influence students' EFL achievement.

KEYWORDS

corrective feedback, motivation, students' achievement, attitudes

INTRODUCTION

Learning motivation is learners' desire or willingness to put time and effort into initiating or sustaining the process of language learning (Ortega, 2009) and can eventually determine their success or failure in learning a foreign language. Thus, motivated individuals will learn a foreign language at a faster pace and to a larger degree than individuals lacking motivation (Gass & Selinker, 2001, p. 349). As such, motivation has attracted a keen interest of researchers (e.g. Deci & Ryan, 1991; Dörnyei, 2000; Gardner & MacIntyre, 1993), who have tried to develop a suitable model explaining the role of motivation in the process of second language learning. One of these models is the Self-Determination Theory which takes human interaction with the social environment as a way of satisfying the needs of autonomy, competence and relatedness as its starting point (Lagaut, 2017). Thus, if learners perform an activity with an internal drive for knowledge, pleasure and feeling of satisfaction, they are considered to be intrinsically motivated. Conversely, if the reason for doing the task is controlled from the outside world by the means of rewards and punishments, that is referred to as extrinsic motivation.

However, as indicated by previous researchers, the construct of motivation is a dynamic variable (Dervić & Bećirović, 2019; Dörnyei, 2005; Mašić et al., 2020), and is influenced by other individual and environmental factors, one of which is corrective feedback (CF) (Vásquez & Harvey, 2010) or a teacher's response

to learners' incorrect utterances of some sort. Since CF occurs in a response to learners' errors, it is believed to be beneficial to students because it gives them negative evidence and helps them to see the difference between the target language they have acquired and the target-like L2 (Second Language) form (Long, 1996). Russell and Spada (2006) maintained that CF in L2 classroom instruction is an apt tool for improving language production despite the existing differences in teachers' instruction modes. Still, in spite of such positive perceptions of CF as a practice prompting successful L2 acquisition (e.g., Doughty & Long, 2003; Doughty & Williams, 1998; Gass, 2003; Long, 1996; Schachter, 1991), it is very frequently observed as a needless practice with little impact on L2 learning (e.g., Flynn, 1996). Nevertheless, in teaching schemes, feedback plays an essential role in maintaining the teacher-student or peer-student interaction (Polz & Bećirović, 2022; Hyland & Hyland, 2006) and also in enhancing students' autonomous learning (Hyland, 2003) and its efficacy relies on the nature of linguistic features, teaching practices, and learners' individual characteristics, motivation in particular (Schachter, 1991).

CF has also been frequently pointed out as a factor which can negatively influence motivation (DeKeyser, 1993; Jean & Simard, 2011), but also as a process appreciated by language learners and observed as a factor strengthening motivation (Jean & Simard, 2011; Lee, 2013; Yoshida, 2008). In the majority of recent studies feedback is seen as beneficial (Evans et al., 2010; Ferris, 2006; Kang & Han, 2015; Nassaji, 2016). However, there is still some controversy about what form of correction is more influential (Al-Rubai'ey & Nassaji, 2013; Bitchener, 2008; Chen et al., 2016; Nassaji, 2015), which has proved to be at least partially dependent on learners' individual differences (Zamel, 1985), and their interest in the learning process (Papi et al., 2019).

Hence, teachers should have a deep insight into theoretical as well as practical guidelines related to this issue (Schulz, 2001), and they are expected to take learners' beliefs into account as well (Jean & Simard, 2011; Yaman & Bećirović, 2016), since the difference between their and their students' beliefs could have detrimental effects on motivation (Kalaja & Barcelos, 2003). Therefore, to foster learners' motivation and ensure linguistic accuracy, teachers need to be familiar with their students' perceptions of the best way of correcting mistakes. In order to be extrinsically motivated, students need encouragement and support which can be provided by teachers through feedback as a reward. However, if learners are aware of their own learning progress, it can lead to greater intrinsic motivation and students' engagement in learning. Thus, as found by previous researchers (e.g., Choi, 2013; Gardner, 2011), the use of CF might decrease the risk of lowering students' motivation.

The studies determining how and to what extent CF and motivation interact with each other to affect language learning outcomes in a foreign language learning context seem to be relatively scant. Moreover, it has also been pointed out that such studies have mainly focused on adults and that there is a need for research revealing the impact of CF on younger learners (Jean & Simard, 2011). Therefore, the current study aims to investigate the relationship between CF and motivation taking into account their interactive effect on middle and high school students' English language performance. Moreover, it aims to help teachers, students, and future researchers understand whether the way of providing feedback in middle and high school motivates students and to what degree. It also reveals students' attitudes towards the received feedback as well as to its frequency, and the impact of error correction on students' achievement. Such a comprehensive approach can further our understanding of why CF is so important and can open new ways of research on how to make feedback more effective in order to motivate students.

LITERATURE REVIEW

Corrective Feedback

Although research into the role of CF and its impact on L2 acquisition is steadily progressing, there is no single study that covers all aspects of understanding its controversial function. In general, CF has been found beneficial to SLA (Second Language Acquisition) but in order to gain a better understanding of its controversial role as well as to identify research orientations for L2 scholars, it is important to present a comprehensive overview of its effectiveness.

The usefulness of both written and oral correction for learners' L2 improvement has been frequently confirmed (Ellis, 2009; Li & Vuono, 2019) and negative evidence has emerged as a necessary factor for language learning advancement (Gooch et al., 2016; Li, 2010; Lyster & Saito, 2010; Lyster et al., 2013; Nassaji, 2016, 2017; Yang & Lyster, 2010). Several recent meta-analyses (e.g., Kang & Han, 2015; Karim & Nassaji, 2019; Lyster & Saito, 2010; Plonsky & Brown, 2015; Russell & Spada, 2006) have also shown that CF significantly impacts L2 learners' performance, with long-lasting effects (Russel & Spada, 2006). Correction frequently appears in numerous classroom events (Brown, 2016; Wang & Li, 2020) and it has been particularly effective in constituting students' achievement (Bitchener et al., 2005; Choi, 2013; Li & Vuono, 2019; Sheen, 2007). Patra et al. (2022) showed that immediate feedback positively affects learners' academic performance, since it triggers positive attitudes towards continuous learning and learners get more involved in learning.

Some researchers find oral correction feedback unneeded and useless. According to Krashen (1982), error treatment is maleficent to the whole learning process, as it makes learners avoid complex tasks, and "even under the best

of conditions, with the most learning-oriented students, teacher corrections will not produce results that will live up to the expectations of many instructors" (Krashen, 1982, p. 119). Truscott (1999) believes that correction provided during spoken activities should be avoided as it does not enhance learners' willingness to speak accurately and mentions some of its disadvantages, such as the difficulty of giving clear explanation for an error and the uncertainty as to whether feedback will help learners in acquiring the target language. Lyster et al. (1999) disagree with Truscott's findings, claiming that effectiveness of oral CF is certain and correction is necessary in some cases. Through correction, students engage in their L2 "communicatively-authentic discourse" (Lyster et al., 2013), which in return improves their accuracy, fluency as well as automaticity (Saito, 2021, p. 408). Both students and teachers in Ha et al. (2021) study conducted in the Vietnamese EFL context felt very positive about explicit feedback types, namely explicit correction and metalinguistic feedback, but they differed in their beliefs on feedback timing. While the students favor immediate feedback, the teachers worry about their emotional state and are concerned that feedback may disrupt the flow of their speech (Ha et al., 2021).

In addition to studies investigating spoken error correction, there have been a few studies investigating whether CF of written errors can help students to improve their writing accuracy. In some earlier studies, corrective feedback of written errors did not prove particularly useful as the students who received correction and those who did not differed insignificantly in writing accuracy (e.g. Robb et al., 1986; Sheppard, 1992). In some more recent studies, feedback has proved to be beneficial to students' writing accuracy (Bitchener, 2017; Bitchener & Storch, 2016; Bruton, 2010; Chandler, 2009; Chen & Nassaji, 2018; Ferris 2006; Kang & Han, 2015; Karim & Nassaji, 2019), though the degree to which it can improve L2 writing is still debatable (Karim & Nassaji, 2019). Karim and Nassaji (2019) also emphasized that students need to provide output with the correct form on their own as such practices could be more useful for their interlanguage development. Several studies have investigated the implementation of written corrective feedback (WCF) over a longer time period (i.e., weeks or months) and have come to different conclusions. Some studies provide support for WCF (see. Ashwell, 2000; Ferris & Roberts, 2001), while some others fail to see any advantages on the side of the group that received WCF (Polio et al., 1998). This might be assigned to the non-existence of a control group in some previous studies (Bitchener, 2008; Storch, 2010; as cited in Karim & Nassaji, 2019) or to the measurement of the usefulness of correction only in terms of the production of revised utterances (e.g., Ferris, 2010). More recent studies have investigated the effect of correction not only on revised but also on new pieces of writing (Hartshorn et al., 2010; Karim & Nassaji, 2018; Lopez et al., 2018) and their findings varied depending upon the ways of providing feedback. Xu's (2021) findings showed

that Chinese learners were generally well-disposed towards WCF in an online environment in this case, but what they particularly liked is the clarity of teachers' feedback and its potential for being analyzed further or as marked in their responses 'indefinitely' (Xu, 2021, p. 568).

When grading students' written compositions, teachers are obliged to provide correction but are also advised to provide feedback "an objective that may operate at cross-purposes with the evaluative goal" (Hedgcock & Lefkowitz, 1996, p. 288). Teachers sometimes tend to be impacted by the belief that the more errors they correct the more responsible teachers they are (Lee, 2013, p. 113), which is potentially dangerous and can impact the learning process (Hyland & Hyland, 2006). It is generally suggested that not all errors should be corrected but correction should be directed towards a few errors so that learners pay more attention to the feedback thus provided (Ellis *et al*., 2008).

Corrective Feedback and Motivation

Although it has been confirmed that both feedback and motivation are important for language learning, empirically very little is known about their interplay in SLA (Ellis, 2010). More specifically, some recent studies conducted by the leading CF investigators (Lyster et al., 2013; Nassaji, 2016) do not pay so much attention to the impact of motivation on the usefulness of correction (Bitchener, 2017) and neither do L2 motivation investigators focus so much on this relation (see Dörnyei & Ushioda, 2011).

However, numerous experimental and non-experimental research studies have found CF and motivation to be positively correlated (e.g., DeKeyser 1993; Guilloteaux & Dörnyei, 2008). Dörnyei and Csizer (1998) interviewed 200 Hungarian language teachers asking them to rank a selection of 51 teaching strategies considered as motivational factors and the results showed that one of the strategies ranked high was teacher feedback which is seen as an influential factor in students' motivation and as a stimulator of learners' motivation and self-confidence. Hence, consistent feedback is considered to be essential in facilitating L2 motivation since it carries a clear message about the teacher's priorities and is reflected in the student motivation (Dörnyei, 1994, p. 278). A similar study conducted by Guilloteaux & Dörnyei (2008) among EFL students in South Korea also indicated that CF in the form of prompts and students' motivation for language learning are strongly and positively correlated.

The correlation between CF and motivation was also found in a quasi-experimental study carried out by DeKeyser (1993), which examined the influence of feedback on L2 grammar and oral performance. In this study, the participants were learners of French who went through a ten-month treatment in Belgium, with one group obtaining constant correction and the other group not obtaining any. DeKeyser (1993) found that students with lower motivation achieved better results

on oral fluency tests as well as accuracy tests after constantly receiving correction, which suggests that correction might directly affect motivation and eventually have positive outcomes for the learning process. Thus, DeKeyser's original hypothesis stating that students with low motivation would take CF as criticism and that it would not be beneficial for them as much as for students with high motivation was refuted since the results confirmed that correction had an impact on students' L2 motivation regardless of its initial level. Likewise, Hamidun et al. (2012) examined if teacher's feedback can foster students' motivation. As it was initially found through classroom observation that students were not motivated or had little motivation to engage in language activities, explicit correction was used, and the results indicated that direct feedback increased the level of motivation, with participants responding well to this type of error correction. Al-Darei & Ahmed (2022) also researched the effect of feedback but also of feedback type on students' motivation and achievement in the e-learning environment. Their findings also indicated an increase in motivation and achievement after the implementation of feedback, particularly interpretative feedback.

The Present Study

The present study aims to explore whether written and oral corrective feedback lead to an increase in students' motivation for learning English as a foreign language and better EFL achievement in the middle- and high-school milieu of Bosnia and Herzegovina. Based on the theoretical and empirical findings presented above, the research will respond to the following research questions:

(1) Does oral CF significantly correlate with motivation for EFL speaking in the classroom?

(2) Does written CF significantly correlate with motivation for EFL writing in the classroom?

(3) Does gender significantly influence motivation for EFL speaking and writing when the English study duration is controlled?

(4) Does oral and written CF in English as a foreign language significantly predict the students' EFL achievement?

METHOD

Participants

The research sample consisted of 160 middle and high school students. Different grade levels were included with randomly selected participants, and a stratified sampling method was employed. Two classes (the first and the third grade) from high school and five classes (from the fifth to the ninth grade) from middle school, both located in central Bosnia, participated in this research. The sample consisted of 90 female participants (56.3%) and 70 male participants (43.8%) aged between 10 to 17 (M = 13.83, SD = 1.998). Table 1 gives an accurate description of the representative selection.

Table 1

Descriptive Analysis of the Research Sample

		N	%
School	Middle school	118	73.8
	High school	42	26.3
Gender	Female participants	90	56.3
	Male participants	70	43.8
	Fifth	16	10.0
	Sixth	16	10.0
	Seventh	29	18.1
Grade levels	Eighth	27	16.9
	Ninth	30	18.8
	First	21	13.1
	Third	21	13.1
Total		***160***	***100.0***

Instruments and Procedures

After the schools' administration as well as the participants themselves granted the approval, the data collection tools were prepared, administrated and adjusted accordingly to the middle and high school by the researchers themselves. The participants were informed that the data obtained from these surveys will be anonymous, confidential and voluntary and were provided with an appropriate clarification on how to fill in a Likert-type scale.

The questionnaire comprised three core parts. The first part collected statistical data about the participants' individual characteristics, such as gender, age, GPA in English, grade level and the duration of English language learning process. The second part consisted of the motivation scale to speak and write in English as a foreign language designed and authorized by Ryan & Connell (1989). The aim of this survey was to gain more in-depth information about how participants are motivated to speak and write in English as well as its correlation with other variables such as gender, achievement and the duration of learning English. The instrument comprised 33 items for speaking and 33 items for writing motivation, separated into three

crucial categories, namely intrinsic, extrinsic motivation and amotivation, which are further divided into seven subscales (amotivation e.g. Doing these activities is not interesting for me; external regulation e.g. Because I know I will get in trouble if I do not; introjected regulation e.g. Because it is absolutely necessary to do these activities if one wants to be successful in language learning; identified regulation e.g. Because it is a good way to gain lots of skills that could be useful to me in other areas of language learning and my life; intrinsic motivation for knowledge e.g. Because I experience a great pleasure while discovering new techniques of expression of ideas and feelings through these activities; intrinsic motivation for accomplishment e.g. Because I think carrying out hard tasks in these activities will improve my performance; and intrinsic motivation for stimulation e.g. Because it makes me happy). The Relative Autonomy Index (RAI) was used to measure both self-determined motivation for speaking and writing by using the original RAI formula: *RAI = (2 * intrinsic + identified) - (2 * external + introjected)* (Ünlü, 2016, 2019). The instrument showed the overall consistency reliability, motivation to write, in total (introjected regulation, identified regulation, intrinsic motivation for knowledge, intrinsic motivation for accomplishment and intrinsic motivation for stimulation dimension) α = .81 as well as motivation to speak, in total α = .79. Also, the compounded writing intrinsic motivation α = .75 and speaking intrinsic motivation α = .72 were consistent.

The third and the last part of the survey was the Corrective Feedback Scale, adopted from Calderón (2013). It employed a five-point Likert scale, ranging from strongly disagree to strongly agree and it contained 15 statements related to written feedback and 15 statements related to spoken feedback, divided into the following four categories: a type of feedback (e.g. I like it when my teacher explicitly tells me I made a mistake and gives me the right version of it), the frequency of given feedback (e.g. Teachers should correct students every time they make a mistake when speaking/ writing English), positive attitude towards CF (e.g. Error correction is good for language learning) and negative attitude towards CF (e.g. I usually feel embarrassed when my teacher corrects me in front of the whole class). Each of the mentioned constructs of the survey has three to four questions addressing distinct focus (Calderón, 2013). This part of the survey was used to investigate the students' perception of CF and its association with learners' motivation to speak and write in English as a FL, as well as their EFL achievement.

To fill in the items provided in the questionnaire, the participants were kindly asked to read all the statements carefully and without exception and to choose the preferred number (1-5) which demonstrates their beliefs about the given items. To complete the survey, the participants needed approximately 25 minutes.

Data Analysis

The Statistical Package for Social Science (SPSS) version 23.0 was computed for examining the data, and four different statistical procedures were applied. Before testing the hypothesis, the normality test was performed (Byrne, 2010; Chua, 2013; Hair et al., 2010). To determine the extent of the students' motivation to speak and write in English as well as their attitude towards CF in the English language classroom, means and standard deviation were calculated. Then, the Person correlation coefficients were calculated to explore the relationship between the constructs of CF and motivation. One-way MANCOVA was performed in order to determine the impact of gender on writing and speaking motivation with the impact of English study duration being controlled. Finally, standard multiple regression was employed to examine students' motivation and the impact of corrective feedback on students' English language achievement.

RESULTS

Initial Analyses

The initial analysis measured the mean values and standard deviation on all subscales of motivation, i.e. amotivation, external regulation, introjected regulation, identified regulation, intrinsic motivation for knowledge, intrinsic motivation for accomplishment, and intrinsic motivation for stimulation. It also measured the mean values and standard deviation of all variables of corrective feedback, i.e. frequency of given feedback, positive attitude towards corrective feedback, and negative attitudes towards corrective feedback (Table 2).

In terms of speaking motivation subscales, the analysis revealed that students experienced identified regulation as the highest level of motivation with a rather high mean value, followed by intrinsic motivation for accomplishment, introjected regulation, intrinsic motivation for knowledge, external regulation and intrinsic motivation for experiencing stimulation. Rather expectedly, the lowest mean was measured for amotivation. With regards to corrective feedback, the findings related to three categories of the CF scales revealed that participants generally like to be corrected frequently and they were quite positive about it, with positive attitudes being rather high and negative attitudes moderate. Skewness and kurtosis values showed that all the variables are normally distributed since the range of normality of skewness and kurtosis is from -2 to +2 (Garson, 2012; Hair et al., 2010).

Moreover, the mean values and standard deviation of all of subscales of motivation for writing and written corrective feedback were also measured and the data are presented in Table 3.

Table 2

Descriptive Analysis of Motivation Subscales and Categories of CF Scale for Speaking

Measure	M	SD	Skewness	Kurtosis
Amotivation	2.58	.79	-.052	-.458
External regulation	3.34	.63	-.150	.343
Introjected regulation	3.67	.66	-1.001	2.045
Identified regulation	3.76	.64	-.545	1.011
Intrinsic motivation for knowledge	3.65	.86	-.400	-.492
Intrinsic motivation for accomplishment	3.72	.77	-.926	1.604
Intrinsic motivation for stimulation	3.30	.89	-.156	-.514
Frequency of given CF	3.15	.78	-.145	.167
Positive attitude towards CF	3.78	.64	-.333	.499
Negative attitude towards CF	2.93	.88	-.228	-.219

Table 3

Descriptive Analysis of Motivation Subscales and Categories of CF Scale for Writing

Measure	M	SD	Skewness	Kurtosis
Amotivation	2.60	.81	-.159	-.603
External regulation	3.19	.63	-.122	.185
Introjected regulation	3.55	.68	-.653	1.103
Identified regulation	3.74	.67	-.679	1.233
Intrinsic motivation for knowledge	3.65	.82	-.400	-.395
Intrinsic motivation for accomplishment	3.70	.81	-.924	.911
Intrinsic motivation for stimulation	3.40	.85	-.036	-.964
Frequency of given CF	3.27	.75	-.377	.829
Positive attitude towards CF	3.70	.67	-.310	-.429
Negative attitude towards CF	2.83	.92	.173	-.289

The findings related to motivation for writing indicated that the participants scored the highest mean on identified regulation, followed by intrinsic motivation for accomplishment, intrinsic motivation for knowledge, introjected regulation, intrinsic motivation for stimulation, and external regulation. The participants again obtained the lowest mean on amotivation. Considering the frequency of receiving feedback, the current study students generally like to be corrected when they make an error in their writing. Overall, they appear to have positive attitude towards error correction and when they are corrected in writing, they feel that they learn more. As for their negative attitude towards correction, the mean value was not rather high. The skewness and kurtosis values again show that all the variables are normally distributed (Hair et al., 2010).

The Relationship between Oral CF and EFL Motivation to Speak

The analysis further measured the relationship between the subscales of oral corrective feedback and motivation for speaking English as a foreign language (Table 4). The interrelationship analyses revealed that the frequency of CF (r = -.16 p = .048) as well as negative attitude (r = -.33 p = .000) towards correction are negatively and significantly correlated with EFL motivation for speaking, while positive attitudes towards CF and motivation for speaking are positively and significantly correlated (r = .19, p =.017). Therefore, those students who have rather negative attitudes towards correction and who are corrected more frequently seem to be less motivated for speaking English, while those students who have positive attitudes towards

CF are more motivated to speak in a foreign language. The correlation between negative attitudes towards CF and positive attitudes towards CF is negative and statistically significant (r = -.20, p = .01). In addition, it is found that positive attitudes towards CF (r = .00, p > .05) and negative attitudes towards CF (r = .15, p > .05) are positively but insignificantly related to the frequency of CF.

The Relationship between Written CF and EFL Motivation to Write

The relationship between the subscales of oral corrective feedback and motivation for writing was also measured (Table 4). The correlation analyses show that writing motivation is positively and significantly correlated only with positive attitudes towards error correction (r = .21 p = .008). It is negatively but statistically insignificantly correlated with the frequency of given feedback (r = -.12, p > .05) and negatively and statistically significantly correlated with negative attitudes towards feedback (r = -.22, p = .004). This indicates that the students who have higher negative attitudes towards CF are less motivated to write. The results also revealed a negative and insignificant correlation between positive attitudes towards CF and its frequency (r = -.11, p > .05), as well as negative and statistically significant correlation between positive and negative attitudes towards corrective feedback (r = -.23, p = .004). The correlation between the frequency of given feedback and negative attitudes towards error correction was positive and statistically significant (r = .17, p = .030).

The Relationship between Gender and EFL Motivation to Speak and Write

A Multivariate analysis of covariance (MANCOVA) was performed to examine the effect of gender on EFL motivation to speak and write (RAI variables), while the impact of the duration of studying English was controlled. The MANCOVA results revealed insignificant differences between female and male participants on the combined depended variable [Wilks' Λ = .996, F (2, 156) = .324, p = .724, multivariate $\eta 2$ = .004]. The results were also insignificant on the covariate duration of studying English [Wilks' Λ = .948, F (2, 156) = 2.435, p = .091 >.001, multivariate $\eta 2$ = .030]. Likewise, differences based on gender were insignificant on speaking

motivation F (1, 909) = .286, p = .593, $\eta 2$ = .002, as well as on writing motivation F (1, 005) = .002, p = .966, $\eta 2$ = .000. The differences were also insignificant on the controlling variable for speaking motivation F (7, 619) = 2.400, p = .123, $\eta 2$ = .015 as well as for writing motivation F (4, 895) = .000, p = .997, $\eta 2$ = .000.

Corrective Feedback as a Language Achievement Predictor

With the intention of determining the accuracy of the frequency of CF, positive attitudes towards CF, and negative attitudes towards CF in speaking and writing in forecasting the learners' accomplishment visible in terms of the English average grade, the standard multiple regression was conducted. The regression analysis showed that error correction scale insignificantly predicted attainment in mastering English as a foreign language R^2 = .056, R^2 adj. = .019 F (6,153) = 1.768, p = .173. The regression coefficient displayed in Table 5 also demonstrates that higher levels of positive attitudes towards speaking and writing are associated with higher levels of students' EFL achievement despite its insignificance. Likewise, the frequency of CF and negative attitudes towards CF in terms of both speaking and writing do not significantly predict the students' EFL performance but are negatively related to the student's achievement, as seen in Table 5.

DISCUSSION

Descriptive Data

The current paper aimed to explore Bosnian EFL learners' speaking and writing motivation and their stance towards oral and written CF received during English classes. The results showed that these learners in general like to be corrected since the majority of them have positive attitudes towards given feedback, which implies that they are convinced that CF accelerates their learning. Such findings are closely aligned with those reported by Schulz (1996), who found that 90% of the participants hold rather positive attitudes towards correction and grammar teaching, as well as those presented by Hyland (1998) and Ferris and Roberts (2001), who claimed that students expect to be corrected

Table 4

Correlations for Speaking/Writing

	N	1	2	3	4
1. Speaking motivation (RAI)	160	1/1			
2. Frequency of given CF	160	-.16*/-.12	1/1		
3. Positive attitudes toward CF	160	.19*/.21**	.00/-.11	1/1	
4. Negative attitudes toward CF	160	-.33**/-.22**	.15/.17*	-.20*/-.23**	1/1

Table 5

Multiple Regression CF Speaking and Writing

	B	B	T	P	Bivariate r	Partial r
Frequency CF speaking	-.095	-.068	-.428	.669	-.116	-.035
Frequency CF writing	-.023	-.015	-.098	.922	-.109	-.008
Positive attitudes speaking	.082	.048	.350	.727	.092	.028
Positive attitudes writing	.012	.007	.052	.958	.101	.004
Negative attitudes speaking	-.159	-.128	-.647	.518	-.214	-.052
Negative attitudes writing	-.080	-.067	-.339	.735	-.211	-.027

and they perceive CF as beneficial while learning the target language.

The current study participants' answers linked to the frequency of given feedback were quite diverse. Overall, it was shown that the participants like to be frequently corrected because error correction helps them to learn more by transforming a wrong utterance they have produced. These results are in accordance with those reported in the study conducted by Kim and Mathes (2001), who argued that continued feedback is needed when compared to limited feedback, especially if an error occurs more frequently. What is rather interesting is that the participants' negative attitudes towards both oral and written error correction were measured as moderately low, which also corroborates some previous findings suggesting that error correction has a remarkable role in the process of teaching and learning a second or foreign language (see Ellis, 2009; Hattie & Timperley, 2007; Li & Vuono, 2019; Ramsden, 1992).

In terms of motivation to speak and write in a foreign language, the results revealed that it is somehow high though the participants of the present study seem to be more motivated to speak in English, which might be attributed to the fact that writing is frequently cited as the most challenging proficiency target (Laličić & Dubravac, 2021) as well as to the fact that the majority of language learners wish to develop their speaking skills at a rather fast rate, since "someone's fluency in speaking measures his/her proficiency in that language" (Martin, 2011, p. 237). These findings are consistent with previous research on motivation in the same context. For instance, Bećirović and Brdarević-Čeljo (2018) and Ahmetović et al. (2020) also indicated that Bosnian students are highly motivated to learn the English language. This can be ascribed to the fact that Bosnia and Herzegovina is a country where the English language is widespread (Brdarević-Čeljo & Dubravac, 2022; Brdarević-Čeljo et al., 2018; Brdarević-Čeljo et al., 2021) and presents an effective means of establishing good communication as well as close cooperation (Brdarević-Čeljo & Asotić, 2017; Bećirović, 2023; Dubravac & Latić, 2019; Dubravac & Skopljak, 2020, Ribo & Dubravac, 2021). Being influenced by the media

as well as by economic and technological advancements, these Bosnian students feel more motivated to put more effort into learning English as a foreign language (Brdarević et al., 2021; Delić et al., 2018; Dubravac, Brdarević-Čeljo & Bećirović, 2018; Dubravac, Brdarević-Čeljo & Begagić, 2018; Kovačević et al., 2018).

The Relationship between Oral CF and EFL Motivation to Speak

The first research question sought to identify whether oral CF significantly correlates with motivation for speaking in English. The current study correlation results indicated that positive attitudes towards error correction are significantly correlated with motivation, which means that more positive attitudes towards receiving feedback help develop the participants' proficiency and those who complete the task successfully are expected to continue working hard to improve in the areas where they are less skillful and will be motivated to increase their effort. These results are in line with those in some other studies which also showed a positive and significant correlation between CF and motivation (e.g., DeKeyser, 1993; Guilloteaux & Dörnyei, 2008). On the other hand, negative attitudes towards correction correlated negatively and significantly with motivation, which shows that the current study participants who are not well motivated will adopt negative stances towards their tutors' correction and the other way round. The frequency of given feedback also significantly correlated with motivation, but the correlation coefficient was negative. Even though it is generally believed that correction enhances language proficiency, still, teachers should be aware of the fact that frequent error correction in spoken activities disturbs the flow of speech and is the cause of learners' demoralization while performing classroom activities (Lasagabaster & Sierra, 2005).

The Relationship between Written CF and EFL Motivation to Write

To respond to the second research question, the correlation between motivation for writing in English and

three subcategories of written corrective feedback, i.e. frequency of CF, negative and positive attitude towards error corrections, was investigated. In particular, positive attitude towards written CF significantly correlates with the participants' motivation to write, indicating that the current study participants who are well disposed towards written CF have stronger motivation to write. On the contrary, two other subcategories of CF correlated negatively with motivation to write, namely frequency towards given CF non-significantly, and negative attitudes towards CF significantly, which shows that the current study participants who are not well disposed towards CF do not feel motivated particularly if they are corrected frequently. These results are aligned with some other studies (e.g., Bitchener, 2017; Bitchener & Storch, 2016; Ferris, 2003; Leki, 1991), which showed that learners consider feedback valuable and if they do not receive feedback they want, they may lose motivation (Ferris, 2003). Additionally, learners who enjoy learning English, despite having negative attitudes towards correction and constantly being corrected, may find learning challenging and thus become more motivated. Bearing in mind that writing is a difficult (Graham & Harris, 2013; Ogrić-Kevrić & Dubravac, 2017) and an unattractive task (Boscolo & Gelati, 2013; Hamzić & Bećirović, 2021) involving multiple steps, teachers should nurture and support students by giving meaningful feedback on the areas that need improvement. Hence, the feedback provided by teachers may raise learners' motivation. Though the frequency of given feedback is positively correlated with learners' motivation, constant and extensive correction and taking notice of every mistake the learner makes is needless (Graham et al., 2011). Overall, as one of the major factors influencing students' motivation, feedback needs to be an essential part in acquiring writing skills (Schunk et al., 2014), but teachers should be cautious while employing it as in some research studies no advantages of WFC were observed (e.g. Polio et al., 1998).

The Relationship between Gender and EFL Motivation to Speak and Write

The third question researched the impact of gender on the participants' motivation for speaking and writing in English when the duration of studying English is controlled. Overall, the current findings did not find that gender had a significant impact on the participants' writing and speaking motivation as suggested by previous research (Bećirović et al., 2022; Dörnyei & Csizer, 2005; Harthy, 2017; Xiong, 2010). Still, the current findings are in accordance with the findings of some other studies (Akram & Ghani, 2013), in which no gender-based differences were measured in terms of motivation. Despite the non-existent gender differences in the current study, the male participants had an insignificantly higher level of speaking motivation, while the female participants were more motivated in terms of writing.

Corrective Feedback as Language Achievement Predictor

The fourth research question asked whether oral and written CF in English significantly predict the participants' language achievement. In the current study, neither oral nor written CF significantly predicted the participants' EFL achievement. Taking into consideration different components of oral as well as written corrective feedback (frequency of given feedback, as well as negative and positive attitude towards error correction), the current study showed that positive attitude is insignificantly and positively associated with the learners' attainment, which indicates that the current study participants who are well disposed towards error correction might be more successful in learning the target language since they believe that CF facilitates their progress in developing greater EFL proficiency. This finding is in accordance with the past research discoveries which demonstrated correction effectiveness in improving students' achievement (Bitchener et al., 2005; Choi, 2013; Hyland, 1998; Lee, 2004; Sheen, 2007). The frequency of given feedback and negative attitude towards error correction are insignificantly but negatively related to the participants' attainment, which suggests that these participants find continuous correction very annoying, distracting and ineffective and some of them would even stop participating in the classroom activities to avoid being frequently corrected. Thus, too much feedback can hinder students' achievement as they might feel controlled, which results in putting less effort into learning activities. Therefore, as it was confirmed previously by the great majority of studies, correction should take place in EFL classrooms, since it improves students' accuracy (see Kepner, 1991; Sheppard, 1992), but teachers should be cautious as to how frequently they employ it especially during speaking activities. To sum up, it seems that learners with positive attitude towards CF will benefit more from correction and will, thus, succeed in increasing their language proficiency than those with negative attitudes as correction can impact the scope of their engagement in learning activities (Sheen, 2007).

CONCLUSION

Error making is an unavoidable aspect of language learning, which should not be hindered by error correction. In general, students tend to believe that they should receive correction when they make a mistake, and that teachers are tasked with the responsibility of providing learners with correct information. Even though implementing error correction properly can be challenging, it is crucial that teachers are knowledgeable of learners' attitudes towards given feedback so that they can use correction effectively while addressing students' errors and not decrease their motivation.

Therefore, the aim of the current study was to investigate students' motivation to speak and write in English and its correlation with their attitude towards error correction and frequency of given feedback based on their gender, achievement, and duration of EFL learning. On the one hand, learners in Bosnia have different attitudes towards provided feedback and its frequency, so the students with positive attitudes towards CF and frequency of given feedback feel more motivated to continue improving in the target language in comparison with the students who are not so well disposed towards the received feedback. Generally, the participants of the current study react positively to error feedback, which means that they take it seriously, pay attention to it and appreciate it highly. Thus, they appear to believe in the benefits of CF, and they agree that error correction is necessary to help them see the difference between a wrong utterance and the right version of it. Furthermore, the results suggest that those students who are more negatively oriented towards CF might feel more embarrassed, which could eventually diminish their self-confidence and hinder their language learning achievement.

Led by these research results, teachers can apply different strategies of error correction with the aim of motivating learners in an attempt to obtain significant results in acquiring English as a foreign language. For instance, while doing oral activities, teachers can provide feedback in various ways: teachers may record learners while speaking and at the end of the activity, they might firstly ask students whether they are aware of their own errors or write both the correct and incorrect versions (the one that students have used) on the board and ask students to choose the right one. When doing this, teachers should not point to the person who made the mistake in order to avoid increasing students' sense of insecurity. To achieve this, teachers should concentrate on those mistakes made by more than one person. If teachers want to focus on individual students' mistakes, they can write individual notes to students about the mistakes they have made, with explanations or suggestions as to where to find more information about those mistakes. On the other hand, giving feedback on the written language production will depend on the characteristics of a writing task. For example, in workbook exercises, teachers can mark the responses as either correct or incorrect, while in more creative or communicative writing, such as reports, essays, stories, and so on, teachers need to approach the task with caution demonstrating their curiosity in the content of the learners' assignment rather than focusing on grammar. This could be done by responding to students' work in a form of written feedback emphasizing strong and weak sides of the composition rather than just assessing the work by a numerical grade. Although all of these methods are time-consuming, they are very useful and more beneficial than the other methods used in error correction. Additionally, in writing activities teachers can use codes or symbols and put them in the body of writing. This makes correction more helpful and less threatening than responding comments, and they are very useful while referring to issues such as spelling, verb tenses, word order, etc. However, students' interest in improving their language skills plays an important part in the process of learning as it can lead to a positive attitude towards teachers' correction and towards learning English in general. Taking this into account, teachers should find appropriate measures to arouse students' curiosity and develop their interest in EFL learning.

Limitations

The present study has some limitations. Firstly, only students and not teachers were included in the research, although teachers' attitudes towards error correction play a significant role in error correction and in L2 motivation. Consequently, as the present study did not include teachers as participants, the obtained results might not be fully representative of the reality in this foreign language context especially in terms of teachers' beliefs. Additionally, as the study did not include any classroom observation, learners' views about error correction as well as the frequency of given feedback might have been purely subjective and the results could not have been confirmed through a more objective measurement method. Thus, longitudinal observation as well as a mixed method design (both quantitative and qualitative) might lead to more concrete results about the relationship between EFL motivation and CF.

DECLARATION OF COMPETITING INTEREST

None declared.

AUTHORS' CONTRIBUTION

Emnijeta Ahmetovic: Conceptualization; Funding acquisition; Investigation; Methodology; Project administration; Resources; Supervision; Validation; Writing-review and editing.

Senad Bećirović: Conceptualization; Data curation; Formal analysis; Investigation; Methodology; Resources; Software; Supervision; Validation.

Vildana Dubravac: Conceptualization; Data curation; Investigation; Methodology; Project administration; Supervision; Validation; Visualization; Writing-original draft.

Amna Brdarević Čeljo: Conceptualization; Data curation; Investigation; Methodology; Project administration; Supervision; Validation; Writing-original draft; Writing-review and editing.

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