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The Effects of Immediate and Delayed Corrective Feedback on the Acquisition of English Subject-Verb Agreement by EFL Learners

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Abstract

The timing of corrective feedback (CF) provision has been a controversial issue in SLA research. Despite widespread research, there is still disagreement on whether the erroneous structures should be addressed immediately or at a delayed time after task completion. This study investigates the comparative effects of immediate and delayed feedback on developing subject-verb (s-v) agreement by Iranian EFL learners. To this end, 28 university students were divided into immediate (n=14) and delayed (n=14) CF groups after the administration of the Oxford Placement Test. The study involved a pre-test, three treatment sessions and a post-test. The two feedback groups received treatments followed by either immediate feedback provided after task completion or delayed feedback delivered after 3 days of task completion. The tests and treatments contained various activities including multiple-choice, cloze, fill-in-the-blanks and picture description task. The results of the analysis of test scores on the pre- and post-tests were indicative of the outperformance of the immediate CF group, implying that the immediate feedback may be more beneficial for developing s-v agreement accuracy than delayed feedback. The findings of this investigation can bear efficient implications for language teachers and researchers.

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Introduction

Corrective Feedback (CF) is normally provided by teachers when language learners face grammatical errors during task completion. Considering the timing of CF, two approaches are adopted by language teachers, which are referred to as immediate and delayed CF. In the former approach, CF can be provided immediately after an error is committed and during task performance in the classroom. In the latter one, the errors are addressed with a time interval and CF can be provided at a delayed time after the tasks are completed. Language learners can become aware of real-time corrective intents when immediate CF on their grammatical errors is provided so that they may consider them when doing their tasks in the classroom. However, they often ask teachers to provide them with CF at a time interval during their task performance, which can be more effective when their learning process is not interrupted (Edge, 1989; Bartram & Walt, 1991). CF can be useful for L2 learners as indicated by the literature on Second Language Acquisition (SLA) (Spada & Russell, 2006; Saito & Sato, Lyster, 2013).

The ideal time for providing feedback in an educational context has been highlighted by some studies (Li, 2017; Yilmaz & Arroyo, 2018; Li, 2020; Kim, Ellis &, Li, 2020). There are two approaches for dealing with timing in CF. The first approach involves sequentially manipulating its context before and after performing the tasks, referred to as online and offline (post-task) feedbacks (Li, 2020). The second approach entails operationally manipulating its schedule, i.e., providing immediate and delayed feedback at an early stage after instructions are explicitly provided to the learners and they are involved in some practical activities (Li et al., 2020). Since feedback context and schedule are conflated according to the related literature, distinctions between both types of feedbacks are made by labeling them as immediate and delayed feedbacks.

A few SLA studies have compared the impacts of timing on feedback. Nevertheless, there are very limited studies examining its different effects on developing grammar by EFL learners. Actually, some innovations have been made to the insufficient traditional methods of education all over the world. Instructional activities must be innovated and renovated. Particularly, students are not so well enabled to use grammatical rules and comprehend them via traditional methods of teaching grammar (Li & Fu, 2020; Fuli, 2020), which mostly leads to such problems as learners' deficiencies in properly learning grammar and satisfying their needs due to providing them with ineffective strategies. Furthermore, they cannot differentially use grammatical rules in the spoken and written language because the curricula of English language institutes are not suitable for teaching grammar (Li, Ellis & Zhu, 2016).

In case of making grammar errors in communicative practices and activities, CF can be provided immediately during the task or postponed after task completion. Nevertheless, professional teacher-training materials encourage educators to provide CF after communicative practice to inhibit the interruption of the tasks (Edge, 1989; Harmer, 2001).

Subject-verb agreement is a fundamental grammatical rule in English, governing the relationship between the subject and the verb in a clause or a sentence. According to this rule, the grammatical categories of person and number of verbs in English must agree with those of

the subject. English does not use grammatical gender like Spanish and Arabic and requires matching a verb with its subject in terms of number and person. Despite its importance, subject-verb agreement is a problematic area for many English language learners, especially for non-native speakers. (Hoshino, et al., 2010). This difficulty arises from several factors, including irregular verb form, nouns that can be either singular or plural, and complex sentence structures. Errors in subject-verb agreement can affect the clarity and accuracy of written and spoken output, potentially hindering effective communication in English. Therefore, it is crucial to address the challenges of subject-verb agreement in English language education to help learners achieve proficiency and avoid common errors.

In order to find out an innovative method to eradicate the grammatical problems of EFL learners the current inquiry seeks to compare the effect of the immediate and delayed CF on the development of subject-verb agreement by Iranian EFL learners by proposing the following questions:

1. Does the provision of feedback have any significant impact on learning the target linguistic feature (i.e., subject-verb agreement)?
2. Is there any significant difference between the immediate and delayed CF groups in the development of subject-verb agreement?

Literature Review

1. Theoretical framework

The present research employed the interaction hypothesis posed by Long (1996) as its main theoretical framework for using CF. Based on this theory, L2 learning is provided by a conversational interaction through comprehensible linguistic inputs. It is empowered by conversational interaction, during which CF occurs and beneficial cognitive processes like noticing may be followed when learners' attention is attracted towards the formal aspects of language (Schmidt, 2001). Moreover, further theoretical support for using CF can be provided by the perspective of Focus on Form (F on F) which is grounded in the mentioned hypothesis. This ensures that learners' attention will be drawn towards the formal elements of language via instruction when the need for an intervention is perceived (Long, 1991; Robinson & Long, 1998). During an exchange of interaction, an initial role is also assigned for CF by the output hypothesis (Swain, 1985 and 1995). Based on this hypothesis, learners can be helped to enhance their metalinguistic awareness by noticing linguistic forms and testing hypotheses when they are asked to rework their Non-Target-Like (NTL) attempts. Advocating the mentioned perspective, Doughty (2001) claims that CF can benefit learners, especially when their incorrect utterances, which preserve their intended meanings, are reformulated by comparing their intentions and outputs, along with feedbacks, in their working memories. According to Doughty (2001), a most effective mental comparison can be made as long as 40 seconds for providing a cognitive opportunity (p. 226). Indeed, Doughty (2001) maintains that:

> *If the verbatim format of recent speech remains activated in memory and available for use in subsequent utterance formulation, this can be taken to be an important cognitive underpinning for facilitating the opportunity to make cognitive comparisons. Concerning the timing of the information to be*

> *compared, the most efficient means to promote cognitive comparison would seem to be the provision of immediately contingent recasts. (p. 253; emphasis added)*

According to the interaction hypothesis, for acquisition to occur, comprehensible feedback is essential but is not sufficient (Long, 1996). Long believed that modifications should be provided in the form of verbal interactions through negotiation of form or negotiation of meaning. In Long's view, when the learners are provided with an opportunity to interact, they probably pay further attention to the feedback they receive. In the same vein, Doughty (2001) notes that the Cognitive Comparison Theory (CCT) supports the immediate CF, indicating that learners should compare their output to the provided and reconstructed feedback. He hypothesizesa "cognitive window of opportunity", in which a limited framework of working memory is required for comparing cognitive aspects with the results when the structures of the target language are employed (Doughty, 2001, 257). This opportunity is specified to be less than 60 seconds after an error occurs (Nakata & Quinn, 2017). An argument is raised for the mentioned hypothesis, particularly postulating the effectiveness of an immediate feedback in the form of recast (reformulation).

Dekeyser (2007) introduced Skill Acquisition Theory (SAT) to support the immediate CF. SAT explains that CF with the ability to provoke prompt-formed output enables learners to acquire grammatical structures and rules implicitly by offering the chance to proceduralize the grammatical structures they already possessed explicitly. To make the cognitive procedure work properly, there must be a similarity between prompts and erroneous output.

Despite the numerous arguments that claim immediate CF is superior to delayed CF, the vast majority of theoretical perspectives in cognitive psychology support (DeKeyser, 2007) the idea that both types of feedback, immediate and delayed, have the potential to have an effect. To this end, Transfer Appropriate Processing, Distributed Practice Effect, and Reconsolidation Theory are among the most often mentioned ones. It has been hypothesized by the authors of the paper "Distributed Processing Effect" (Cepada et al., 2006) that when learning opportunities are spaced out over a longer period, an individual can retain more information than when the learning opportunities are condensed together. Consequently, the efficiency of delayed feedback may be linked to the time gap that it naturally permits between the incidence of an error and CF provision.

2. Empirical Studies on the Comparison of Immediate and Delayed CF

Several studies have been conducted to compare the timing of feedback (references). Two studies have revealed that immediate feedback is approximately more helpful for completing almost simple tasks, whereas somewhat delayed feedback was more beneficial for completing relatively tough tasks (Clariana et al., 2000; Kulhavy& Anderson, 1972). Shute (2008), for instance, concluded that receiving immediate feedback was typically more beneficial than receiving it at a later time. On the other hand, with regard to varied learning contexts, she believed in more effectiveness of delayed feedback for facilitating learning transfer. In another research, the impacts of immediate and delayed corrections explicitly generated by a computer on subjunctive errors following the error and after the exercise and 24 hours, respectively, during the process of instruction activities were investigated by Henshaw (2011), who found

similar effects of the immediate and delayed CFs. Since all his groups received instructions on the target structure before the tasks of treatment, he observed significant improvement in his control group over time as well.

Li et al. (2016) studied corrective recasts on errors of past passive voice made by teenage learners of English as a foreign language either immediately or after the end of two dictogloss tasks consecutively performed. The learners' implicit and explicit amounts of knowledge were respectively measured by designing an Elicited Imitation Test (EIT) and untimed Grammaticality Judgment Test (GJT), both of which consisted of regular and irregular verbs in addition to new verbs and those confronted in the treatment. Timing was only influenced by the explicit knowledge represented via the scores of GJT, while regular verbs were mostly affected.

Moreover, Sauro, S. (2021) studied how well video-based computer-mediated communication helped Spanish learners of English as a foreign language acquire the -ing/-ed participial adjectives. While performing the activity, the immediate-feedback group received clear corrective feedback; the delayed-feedback group, however, received the feedback 24 hours later via an edited video footage of the interaction. The result implies that immediate feedback circumstances may be more beneficial for boosting L2 learners' accuracy than delayed feedback since it consistently displays a bigger effect size.

In another study the implications of explicit metalinguistic corrective feedback on the proper use of the English regular past tense form were studied by Salajegheh et al. in 2022. The primary goal of the study was to determine whether providing metalinguistic feedback immediately after a writing assignment was finished, as opposed to delaying it for two days and providing it during the following class period, would have a distinct effect on the accuracy of the structure. The instant metalinguistic feedback did better than the other groups on the postponed test. In order to provide the immediate feedback necessary for the acquisition of language traits, Long (2015, as referenced in Salajegheh et al., 2022) suggests the following benefits: Since the learner's meaning or language performance is on the line, it (a) is contextualized and motivating, and b) is contingent and fits the learner's internal syllabus, (c) contrasts the incorrect and correct forms so the learner can see the difference right away, (d) reduces the learner's processing load and fosters the opportunities for an effective focus on form, and (e) "capitalizes on a symbiotic relationship between explicit and implicit learning, instruction, and knowledge" (p. 317).

Immediate feedback was also supported by the research conducted by Qi et al. (2020),who investigated improvement of Chinese university students of English language by providing immediate and delayed CF. They used three (low level, moderate level, and high level) with three different interventions (immediate feedback, delayed feedback, and no feedback). Furthermore, it was said that delayed feedback was delivered within an hour of the test's completion, but immediate feedback was characterized as feedback given immediately after the test. The pre-test and post-test results were suggestive of outperformance of the group of students provided with immediate compared to delayed feedback or those receiving no feedbacks.

Several studies performed by Fu and Li (2020), Fu, Li, and Fuli (2020), and Fuli (2020) focused on the subject of English past tense morphemes learned by young EFL learners. Their findings demonstrated that the target linguistic forms were better facilitated by immediate compared to delayed CF. Concerning feedback timing as an independent variable in their studies, they referred to DeKeyser (2007) supporting the theory and asserting that too much delay in CF may result in error fossilization (p. 4) though not providing any further details on the ideal time of feedback delay.

A more pertinent reason for immediate feedback's advantage in some research is that pupils occasionally might not completely comprehend feedback after a wait unless they are compelled to as in laboratory studies. The contrast between applied and laboratory research may be explained by this assumption. Laboratory experiments often have more control over how feedback is processed after a delay. For instance, in Butler et al.'s (2007) study, which is in favor of delayed feedback, learners were compelled to look at delayed feedback for each answer for a defined period. The effects of feedback type and time on how much is learned from multiple-choice tests were researched by Butler et al. (2007) who found that delayed feedback enhancesthe final performance of the test. They examined the hypothesis of whether the positive and negative impacts of giving feedback on a multiple-choice test for correctly and incorrectly answered questions are ameliorated and diminished or eliminated, respectively, as measured on a test in the following week. Their data indicated that providing students with feedback following tests is a practical strategy to address any potential negative impacts of multiple-choice exams. Feedback increases the benefits of taking a test and assists students in fixing their mistakes, hence minimizing the spread of false information.

According to their findings, feedback does not have to be offered right away because delaying its delivery may actually help students learn the target linguistic form. Although the learners were given true responses not immediately after they answered each item, but in a short time after taking the test, many instructors did not consider it as delayed feedback. With regard to the literature in this field, it is needed to do further research to establish whether delayed feedback would be ineffective or not.

Methodology

1. Design

The current investigation involved a pre- and post-test design together with a pedagogical treatment based on a quasi-experimental design. The two CF groups were assessed before and after the treatment to test whether the treatments had the potential to cause change. The main variable of the study is corrective feedback timing, which is studied under two conditions of immediate and delayed. In the former condition, CF is provided to the participants' non-targetlike structures of s-v agreement immediately following completion of the task-based activities in the classroom. In the latter one, CF is given on the non-targetlike structures with a 3-day interval at a delayed time after the tasks are completed.

2. Participants

Twenty-eight undergraduate Iranian learners of English (9 males and 19 females) participated in this research. Based on convenience sampling, they were chosen from the

students attending the state university of Mazandaran, located in the north of Iran. From among a larger group of students (n=60), those whose ages ranged from 19 to 29 and obtained a score of 17-26 on the Oxford Placement Test (OPT) were divided into the two groups of pre-intermediate learners to receive immediate and delayed CFs. They spoke Persian as their first language but had already had 7 years and 2 semesters of learning English at high schools and university, respectively. None of the participants had the experience of living in a foreign country. Considering ethical issues, they participated voluntarily in the study and had the right to leave it at any time.

3. Instruments

a. Oxford Placement Test (OPT). To ensure the participants' homogeneity in the two groups, they were administered an Oxford Placement Test (OPT), which consisted of 60 multiple-choice questions. Then, 40 students were excluded based on its outliers. Finally, 28 main participants were chosen and randomly divided into two groups of immediate and delayed CF groups.

b. Pre-test and post-test. The students were administered a pre-test to screen their initial levels of knowledge on subject-verb agreement one week before the treatments (Session 1). The pre-test contained four sections including a total number of 40 questions; section one consisted of a grammaticality judgment test with 10 items and section two consisted of a cloze test requesting the participants to write the correct verb form given in brackets. Section three also consisted of a multiple-choice test with 10 items and the last section consisted of picture description task with two pictures for which the participants were asked to write 10 sentences for each one.

One week after the fourth session, the participants were administered the post-test to find out the possible improvement following the treatment sessions with either immediate or delayed CF. The items and the tests were the same as those included in the pretest. The post-test was administered with a one-month interval from the pretest to ensure that the participants would not remember the items from the pretest.

c. Tasks for treatment sessions. The task-based activities included multiple-choice test items, error identification, and writing composition. The participants replied to the items by clicking on the selected choice. There were 15 items to be answered in 15 minutes. Thus, each participant received randomized items for every practice. The following table presents two sample items from the multiple-choice task; the second item is provided with corrective feedback on the error.

1.	There…….. several reasons why you should reconsider your decision. ◯ are ◯ is
2.	Not only the student but also their instructor……..…..been called to the principal's office. ● have ◯ has Sorry, your response is incorrect. Please select 'The explanation please!' The explanation please! With paired conjunctions such as either…..or and not only……but also, the subject closer to the verb (in this case, the singular 'instructor') determines whether the verb will be singular or plural. Thus the response is has.

Three practice sessions were administered during class hours by focusing on subject-verb agreement exercises on the University of Mazandaran virtual platform (umz.iranlms.org). The exercises and items were adopted from the *Guide to Grammar and Writing* website. Below is the description of the two mentioned websites.

a. *Umz.iranlms.org* platform**:** The flexibility in providing the CF whenever required by the programmer/researcher, as well as participants' familiarity with the mentioned website, was the main reason to select it as a CF providing medium.
b. *The guide to grammar and writing.org*: Materials at different levels for word, sentence, paragraph, essay and research paper sections were provided by the mentioned website.

4. Data Collection Procedure

All participants received the treatment for six sessions. In the first session, the participants were divided into two experimental groups; immediate CF versus delayed CF group. Also, the participants received explanations on how to correctly respond to the items. Then, in the second session, the participants answered 40 questions in the umz.iranlms.org as the pre-test phase. On the following week in the third session, the participants were asked to do the subject-verb agreement tasks on the university online platform (webinar). The practices were links to questions and the participants answered them by clicking the correct choice. The links of practices were shared with immediate feedback group members only. Since the practices were scored immediately after answering and explanations were provided for each question, the links to answers were shared with immediate CF group members. Moreover, the links were not shared with the delayed group to prevent them from getting answers immediately. The immediate feedback group used their smart phones or laptops to answer the questions and took screenshots of their answers. On the other hand, questions were shared with the delayed group on the *WhatsApp* chat group in PDF format. The delayed group wrote their answers either on their *WhatsApp* page or on answer sheets.

Regarding trust issues and accountability of data, it was emphasized that the results of the research are very important and learners should not talk to each other in any way while they are taking the tests. Moreover, online research conditions are similar to online exam conditions. It should also be mentioned that this study was a classroom-based empirical study and considering the context, it was impossible to participate separately as inalanguage laboratory setting. To increase accountability, the learners were asked to turn on the webcam and share their phone screens. The students were also told that taking the test has no score, whether positive or negative and is for research purposes only.

5. Data Analysis

This study employed a quantitative approach. The participants' test papers (pre and post-test) were collected in order to conduct a quantitative analysis of the data. The scores were compared after using SPSS software to analyze statistical data.

3. Results

In the current investigation, the learners' general levels of proficiency in English language were examined by using an OPT before they were divided into groups. Following that, the finally

selected 28 participants were randomly divided into two experimental groups based on their results as displayed in Table 1.

Table 1. *Descriptive statistics of the OPT test*

Groups	N	Mean	Std. Deviation	Std. Error Mean
Immediate	14	20.64	2.89	.774
Delayed	14	21.85	1.61	.430

As depicted in the above table, they have close mean scores in the immediate and delayed groups with M values of 20.64 and 21.85 and SD values of 2.89 and 1.61, respectively. Homogeneity of the two groups was further ensured by using an independent samples *t*-test, the results of which are shown in Table 2.

Table 2. *Independent Samples t-test on OPT*

	t	df	Sig. (2-tailed)
Equal variances assumed	-1.370	26	.182
Equal variances not assumed	-1.370	20.328	.186

As can be observed in this table, the groups of immediate and delayed CFs are not significantly different (p=0.182, p>0.05), indicating their similarities in proficiency levels. The misleading impact of extreme values on the results was prevented by identifying and removing the test outliers before performing the statistical analysis.

RQ_1. Does the timing of feedback have any significant impact on the students' improvement in learning subject-verb agreement?

The mean scores of the immediate CF group in the two tests were assessed by doing a descriptive statistical analysis as depicted in Table 3.

Table 3. Descriptive Statistics of the immediate feedback group

	N	Minimum	Maximum	Mean	Std. Deviation
Pretest	14	17.50	65.00	35.53	15.99
Posttest	14	22.50	82.50	51.78	23.76

As shown in the above table, the pre-test and post-test represent the mean values of 35.53 and 51.78, respectively. It is clear from the scores that the students made significant gains in the post-test. To test the significance of these differences, a paired samples *t*-test was conducted on the scores of the participants, the summary of which is presented in Table 4.

Table 4. *Paired Samples t-test on the mean scores of the immediate group*

	t	df	sig (2-tailed)
Pair 1 pretest-posttest	-3.283	13	.006

After analyzing the results, the immediate CF participants' scores in the pre-test and post-test were found to be significantly different (df=13; p=0.006), indicating that they had significantly improved by receiving immediate CF during the treatment sessions (p<.05).

The magnitude of difference in the mean scores was determined by analyzing the effect size based on Cohen's d value, which was initially calculated with regard to the mean difference according to Sullivan and Feinn (2012), besides using the p-value to measure its significance

since solely relying on the results of Null-Hypothesis Significance Testing (NHST) (p-value) mainly relevant to the sample size was found to be limited. The 3 categories of small (d=0.2), medium (d=0.5), and large (d≥0.8) effect sizes have been specified by Cohen (1988), according to whom the small, medium, and large effects of 0.2, 0.5, and0.8 are specified. The small effect is noticeably smaller than the medium though not trivial. It is visible to a careful observer with naked eyes. Also, the large effect is located above the medium with the same distance as that of the small value below it. Accordingly, a high effect size value (d=0.62) was obtained for the first dataset related to the first question (M=35.53 and SD=15.99). Table 5 presents the descriptive statistics relevant to the group of delayed feedback.

Table 5. *Descriptive statistics of the delayed feedback group*

	N	Minimum	Maximum	Mean	Std. Deviation
Pretest	14	17.50	70.00	33.92	14.36
Posttest	14	15.00	67.50	35.17	14.85

The above table compares the pre-test and post-test mean scores with the values of 33.92 and 35.1, respectively. On average, the improvement was not very high; however, to test the significance of the differences, another paired samples *t*-test was conducted. The result of this test indicated no significant improvement ((*p*=0.58). A summary of this analysis is presented in Table 6.

Table 6. *Paired Samples t-test on the mean scores of the delayed CF group*

	t	df	Sig (2-tailed)
Pair 1 pretest-posttest	-.559	13	.586

The mean score and standard deviation of 33.92 and14.36 were calculated for the effect size, respectively. Thus, a low effect size of 0.08was shown with regard to Cohen's value. The findings pertaining to the first research question will be interpreted in the section on discussion.

RQ2. Is there any significant difference in the development of subject-verb agreement between the immediate and delayed CF groups?

An analysis based on independent samples t-test was done to answer the second question. Table 7 statistically describes the performance of the two groups in the pre- and post-test sessions.

Table 7. *Descriptive statistics of the two groups*

Groups	N	Mean	Std. Deviation	Std. Error Mean
Pretest Immediate	14	35.53	15.99	4.27
Pretest Delayed	14	33.92	14.368	3.84
Posttest Immediate	14	51.78	23.76	6.35
Posttest Delayed	14	35.17	14.85	3.96

The above table compares the pre-test and post-test mean scores of 35.53 and 33.92for both groups of immediate and delayed CFs, respectively. As can be observed, the post-test mean score of the group of immediate CFS (M=51.78) is higher than that of the group of delayed CFS (M=35.17), indicating better performance of the former group with regard to the pre-test and post-test interval. That is, on average, results revealed the mean score was increased among participants in the immediate CF group. To confirm this finding, two independent samples t-

tests were conducted on their pre-and posttests. A summary of the results is presented in Table 4.8.

Table 8. *Independent samples t-test comparing the two groups*

	t	df	Sig (2-tailed)
Pretest Equal variances assumed	.280	26	.782
Posttest Equal variances assumed	2.217	26	.036

Table 8 shows that the pre-test has a higher significance level compared to the set p-value level ($p<0.05$), demonstrating that the two groups are not significantly different in the pre-test. Nevertheless, there is a statistically significant difference in their post-test based on its lower p-value (0.36) compared to the significance level ($p<0.05$). Based on Cohen's value of 0.83 for effect size, a high effect size (M=35.53)associated with a standard deviation of 15.99 was obtained.

Finally, to assess the reliability of tests, as Kline (2005) recommended, Cronbach's Alpha was measured. According to this test, including test items in the statistical calculation showed the minimum alpha as.764. The Cronbach's Alpha reliability of tests is shown in Table 9.

Table 9. *Reliability statistics*

Cronbach's Alpha	No of items
.764	2

Figure1 presents the mean scores of the pre- and post-test in the immediate and delayed groups.

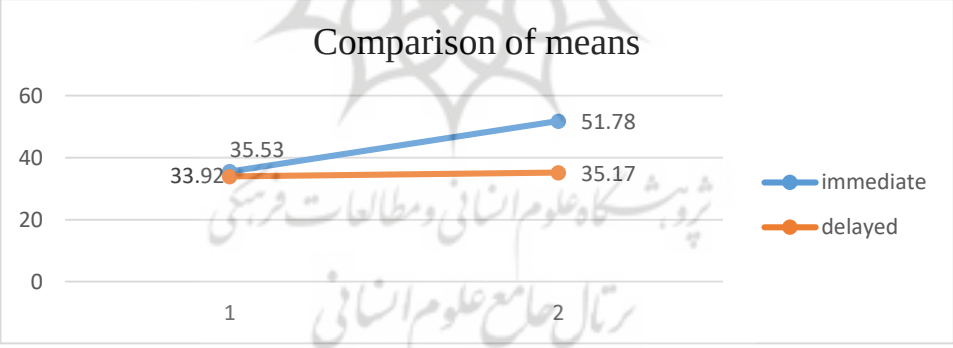

Fig 1. *Comparison of means of the immediate and delayed groups*

A comparison of the collected mean scores of both tests for the two studied groups is also depicted in the above figure. As displayed in the figure, the scores of both groups were almost similar on the pretest (IG= 35.53, DG=33.92), however, the immediate group changed and grew steadily and went up (IG=51.78), while the delayed group did not make significant improvement over the time (from pretest to 1-month posttest), which is indicated by the straight line in Figure 4.1 (DG=35.17).

4. Discussion

In this research, it was examined whether corrective feedbacks could possibly improve the studied students' learning of subject-verb agreement, while it was more specifically tried to

find any significant differences between the immediate and delayed CF groups based on the mentioned issue. According to the results, a higher score was gained by the group of immediate feedback compared to that of delayed feedback. Therefore, the results were indicative of the higher effect of immediate compared to delay CF on the students' development of applying the rule of subject-verb agreement, especially after receiving delayed feedback on the 1-monthpost-test.

Three justifications could be proposed for greater efficacy of immediate CF in this research. First, CF seemed to be most effective before proceduralizing errors via communicative practice. In the condition of immediate feedback, the learners' errors were corrected as soon as they occurred based on the learners' interlanguage knowledge, thus reinforcing and proceduralizing the rectified system in their later tasks. This is congruent with the Skill Acquisition Theory, based on which linguistic or declarative knowledge is integrated into actual linguistic performance (proceduralization) like when a grammar rule is orally produced. (DeKeyser, 2007). This is in line with Li and Fu (2022) study, claiming that feedback should be given at the start of the instructional cycle and immediately after learners are exposed to a linguistic feature for the first time. They claim that mistakes should be fixed before they are proceduralized in the L2 system.

Second, it might be useful to apply CF when the learners could easily receive some instruction on the linguistic target regardless of its nature. The effects of any brief instruction on grammar might be reinforced, especially when CF was immediately provided after the instruction. In this case, the learners could compare their own active knowledge with that received through immediate feedback like when they learned regular and irregular forms of past tense. The research conducted by Ha et al., (2021) is also in line with this finding. They reported that most of the students thought that getting immediate/rapid feedback was beneficial since it may let them realize their mistakes right away. However, they did not value delayed feedback very much because they might have forgotten what they said or what mistakes they made. Third, immediate feedback followed by practice activities might provide the learners with its differential effects (Li et al., 2016).

These findings were consistent with those of some studies reporting more effectiveness of CF after providing explicit information compared to merely giving explicit instruction or providing CF. For example, Li et al. (2016) reported the most efficiency of within-task feedback after providing their learners with explicit instruction among the different configurations of instruction focusing on forms like pre-task instruction and within-and post-task feedbacks.

The framework of the present research was most similar to the one developed by Henshaw (2011). Yet, some of the findings were contradictory. For example, Henshaw's study discovered that there was no significant difference between immediate CF given based on an item-by-item analysis and delayed CF after the tests. Unlike Henshaw's (2011) study, in which instruction was given in the form of feedback after the practices had been completed, in the current study, instruction was given in the form of feedback immediately following the completion of the treatments. This discrepancy may have arisen because the design of the previous studies such as Henshaw (2011), included both feedback and instructions. Indeed, Goo and Mackey (2013) stated that the impacts of teaching may help to attenuate the consequences of feedback. Hence,

teaching effectiveness in Henshaw's study might have been the result of lacking a significant difference between his item-by-item and end-of-test CFs since all his participants were provided with the same instruction.

According to Li et al's (2016) research, another possible reason is the varied processing demands that are needed by the two different feedback circumstances. They claimed that the contextual nature of the feedback was the key factor in distinguishing the two. Learners participated in a condition called "instant feedback," in which they were given feedback on the questions and answers they had just provided in the practices. That is to say, learners were given the chance to make use of and interact with the feedback that they had just obtained, as an example by asking the question. In the delayed situation, on the other hand, the explanations were given four days later and out of context. The participants in this setting were required to take part in passive activities. The difference in effectiveness between the contextualized condition and the control condition may be better understood with the aid of Skill Acquisition Theory. According to DeKeyser (1998), language students need to make use of their prior knowledge as a "crutch" to help their efforts to utilize language in activities such as communication and production. In the current study, in line with Li (2016), this did not appear to assist the proceduralization of subject-verb agreement. Proceduralization represents a process, in which learners practice and restore their declarative knowledge through an automatic and faster procedure, which is less prone to errors (Fitts, 1964; Anderson, 1982; Dreyfus, 1986; Kim, Ritter, &Koubek 2013). However, it did help to integrate the declarative representation in the target language grammar structure more deeply in the participants' memories.

The results of the current research provided greater support to those SLA theories supporting the utilization of immediate corrective feedback. On the other hand, these ideas were developed to explain how students gain procedural competence to employ the acquired language elements in various communicative-based settings (i.e., implicit knowledge). The present study did not focus on uncovering people's implicit knowledge. Therefore, an explanation of why the instant feedback was more helpful for the formation of clear norms of subject-verb agreement is what is required at this point.

Itshould be noted that the results of the present research were contrary to those of other studies on immediate and delayed CFs. For instance, the impact of feedback timing on learning was found by Quinn (2014) to be insignificant, no matter when it was received. The different findings obtained from his study and this research could be due to the varied approaches taken as follows: (1) A classroom setting was used to conduct this study, while a laboratory environment was applied in Quinn's research; (2) Unlike the present research, Quinn offered pre-treatment guidance on the target structure; (3) the students in Quinn's study already had significant prior exposure to the forms and structure in the TL, whereas, in this research, it was low; and (4) Quinn did not provide all feedback in the form of delayed CF since feedback was also supplied within various activities.

The research conducted by Arroyo and Yilmaz (2018) also highlighted the benefits of providing students with fast feedback. They showed more usefulness of receiving immediate compared to delayed CF in the examinations on oral production. This finding was in line with

those of the studies on oral feedback conducted earlier by Li et al. (2016) and Shintani& Aubrey (2016). However, it is important to mention that the methodology of the studies, which indicated contradictory findings, is different from that of the current study considering the communication format, the nature of the treatment activities, and the kind of feedback. Because of these discrepancies, it is difficult to determine which factors, if any, may be responsible for the contradictory findings regarding the impact of feedback timing. Nonetheless, with this limitation in mind, it is of the utmost importance to incorporate certain design elements that were prevalent across the research that demonstrated the value of providing feedback in a timely manner. Especially, it is essential to highlight the several design aspects that were common to the research that demonstrated the value of immediate feedback (Arroyo, D. C., & Yilmaz, Y., 2018).

Yet, considering the empirical relevance of delayed CF for practitioners in circumstances where immediate response is not practicable owing to limited human resources, future studies should examine the elements that improve delayed feedback. For instance, learners may benefit from production possibilities following feedback, which was not examined in the current research.

Conclusion

The present research was indicative of superior effect of using immediate CF over delayed CF. Many SLA scholars contend that teachers are generally reluctant to provide immediate feedback, despite the fact that it is effective for both accuracy and fluency work (Ha et al., 2021). As a result, the study's findings can serve as a useful point of reflection for L2 instructors and teacher educators. Furthermore, this result is in favor of the developers of Computer Assisted Language Learning (CALL) applications, including Open English, Tell Me More, Pimsleur, Rosetta Stone, and Duolingo, all of which provide empirical activities with immediate (item-by-item) CF. Thus, this study lends support to the previous studies the researchers like Nagata and Swisher (1995), Nagata (1999), Heift (2010), and Amaral and Meurers (2011) arguing that immediate CF is preferred to delayed CF. According to Segaran and Hashim (2022), in order to improve ESL learners' grammatical acquisition, a variety of online quiz tools were relatively successful. Thus, it is hoped that this research will provide fresh knowledge and act as a guide for educators who wish to design entertaining activities for teaching grammar to language learners. Nonetheless, the results of this study should be interpreted with caution and further research is needed to extend the findings. Firstly, the method may not be completely reliable as a control group could not be employed in this research. Hence, the obtained results could not definitely ensure superiority of feedback over no-feedback condition. As for the testing instruments, we predominantly employed multiple-choice tests and sentence-writing skills and more extended writing samples (e.g. essay) were not collected. Future research may consider these methodological issues and may ensure the validity of findings by administration of a delayed post-test. Secondly, immediate and delayed CF effects are recommended to be studied considering other language skills such as speaking, as well as prolonged listening and reading comprehension. Finally, further research is required to ascertain if the current findings also hold for learner production that is less tightly regulated and circumstances where information cannot be easily accessed by the learner (Lavolette,

2015). Consequently, comparing immediate and delayed CF across other linguistic features and language components (e.g. vocabulary and pronunciation) is required to expand the results and findings in this area.

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