The Effect of the Corrective Feedback on Iranian EFL Learners' Speaking Accuracy and Breakdown Fluency[1]

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Abstract

The purpose of the current study was to explore the effects of different corrective feedback (CF) conditions on Iranian EFL learners' spoken general accuracy and breakdown fluency and their relationships. Consequently, four pre-intermediate intact classes were randomly selected as the control, delayed explicit metalinguistic CF, extensive recast, and intensive recast groups; these groups participated in spoken reproduction tasks for six sessions and their errors were treated differently. Then, the data was transcribed, coded for accuracy and fluency, and analyzed. The results indicated that the different CF conditions had insignificant effects on the number of error free Analysis of Speech (AS)-units, as an index of the spoken general accuracy. Considering the fluency, although different

CF conditions had insignificant effects on the number of pauses the participants produced, it had a significant effect on the whole number of pauses; there was a significant correlation between participants' pauses and the whole number of pauses, with a medium effect size. The correlations between the general accuracy and breakdown fluency of all groups were negative and insignificant. In addition, different CF conditions had insignificant effects on the relationship between the accuracy and fluency. These findings suggest that there is no trade-off between spoken general accuracy and breakdown fluency. In addition, different CF conditions have insignificant effects on the EFL learners' spoken general accuracy, breakdown fluency, and their relationships.

Keywords: spoken general accuracy, spoken breakdown fluency, focus on form, corrective feedback (CF), trade-off hypothesis.

1. Introduction

One of the shortcomings of the meaning focused instruction, which helped the learners become fluent, was its insufficiency to ensure comparable levels of accuracy and, consequently, this led to the introduction of the focus on form (Long, 1991), a subordinate category of form focused instruction. Accordingly, "one of the methodological macro-options for focus on from is corrective feedback options" (Ellis, 2008, p. 869). CF, as an effective way to promote noticing, is considered conducive to L2 learning and grammar development (Ammar & Spada, 2006; Ellis, Loewen, & Erlam, 2006; Li, 2010; Lyster, 2004; & Sheen, 2007). It can also develop learners' specific spoken accuracy (Chehr Azad, Farrokhi, & Zohrabi, 2017a). However, the production isn't a one-dimensional concept which is restricted to accuracy. Indeed, L2 proficiency is a multi-componential construct consisting of three principal dimensions of complexity, accuracy, and fluency (Ellis & Barkhuizen, 2005; Skehan, 1996, 1998; & Skehan & Foster, 2001). Consequently, the development of one of these aspects might be at the expense of the others. For example, the accuracy development might be at the expense of fluency development because of the learners' attentional limitations. There have been several studies (e.g., Ansarin & Chehr Azad, 2015; Farrokhi & Chehr Azad, 2012; Hoseini Fatemi & Harati, 2014; Maftoon & Kolahi, 2009; & Salimi, 2015) investigating the effects of the different CF conditions on the EFL learners' spoken accuracy. There have also been a limited number of studies (e.g., Chehr Azad, Farrokhi, & Zohrabi, 2017a; Rahimi & Vahid Dastjerdi, 2012; Sato & Lyster, 2012; & Seyed Motahari & Ghasemi Nik Manesh, 2014) examining the effects of the CF on complexity, fluency, and accuracy. However, no studies, to the researchers' knowledge, have studied the effects of the CF on EFL learners' general accuracy and breakdown fluency and the trade-off between them. Therefore, the current research has been an attempt to accomplish these.

2. Review of the Related Literature

2.1. Focus on form and corrective feedback (CF)

According to Doughty and Williams (1998), the current interest in focus on form is inspired by the findings of immersion and naturalistic acquisition studies (Harley & Swain, 1984) that suggest when classroom second language learning is entirely experiential and meaning focused, some linguistic features do not develop to target like level. Consequently, it seems as if a certain amount of explicit focus on language form may be necessary.

Indeed, according to Long (1991, pp. 45-46), "focus on form overtly draws students' attention to linguistic elements as they arise incidentally in lessons whose overriding focus is on meaning or communication". Doughty (2001, p. 211) also noted "the factor that distinguishes focus on form from other pedagogical approaches is the requirement that focus on form involves learners briefly and simultaneously attending to form, meaning, and use during one cognitive event".

According to Ellis (2008, p. 869), "one of the methodological macro-options for focus on from is CF". Different researchers have defined it in fairly different ways. For example, it is defined by Sheen (2007, p. 301) as "a teacher's reactive move that invites a learner to attend to the grammatical accuracy of the utterance which is produced by the learner".

Ellis, Loewen, and Erlam, (2006, p. 340) defined it:
Corrective feedback takes the form of responses to learner utterances that contain an error. These responses can consist of (a) an indication that an error has been committed, (b) provision of the correct target language form, and (c) metalinguistic information about the nature of the error, or any combination of these.

Proponents of noticing hypothesis (Ellis, 1991; Gass & Varonis, 1994; Sato & Lyster, 2012; & Schmidt, 1990, 2001) have considered CF as a means of drawing learners' attention to form and as a stimulus for noticing. In addition, it gives them an opportunity to make a cognitive comparison between their interlanguage and the given input (Ellis, 1994). It can also help them engage in focused input analysis (Ellis, 2005). However, according to Sato and Lyster (2012, p. 593), "this line of thought is specifically applicable to input-providing CF such as recasts, but less to output-prompting types of CF that do not provide targetlike models with which learners can compare their erroneous utterance".

CF can be categorized into different types. One CF type which is relevant to the current study and which appeals to researchers, due to theoretical and practical reasons (Ellis, 2008), is recast. Lyster and Ranta (1997, p. 46) defined it as "the teacher's reformulation of all or part of a student's utterance, minus the error". Regarding their importance, Van Patten (1990) argued that L2 learners cannot simultaneously attend to and process both form and meaning, but they can consciously focus on form if the input is easily comprehended. In addition, Doughty and Varela (1998, p. 114) claimed that they are "potentially

effective, since the aim is to add attention to form in a primarily communicative task rather than to depart from an already communicative goal in order to discuss a linguistic feature". Recasts can be categorized into intensive, focused, and extensive, unfocused types (Ellis, 2001; Loewen, 2011). According to Ellis (2001), intensive recasts occur when the single target structure is selected in advance, and learners are likely to receive feedback multiple times on it. In other words, "when intensive recasts are provided, errors related to the target structure are the only ones addressed" (Kamiya, 2015, p. 60). In contrast, extensive recasts occur when feedback is not limited to a single target structure and learners receive feedback on many structures that occur incidentally during the instruction. It should also be mentioned that when intensive recasts are provided, the number of recasts focused on a single target structure is likely to be higher than when extensive recasts are provided and they can be considered as an explicit feedback (Kamiya, 2015). On the other hand, extensive recasts are directed at different structures, and they can be considered as an implicit feedback. Different studies, based on the comparison of the extensive and the intensive recasts, have produced mixed results. In some of these studies, there were no significant differences between these two types of recasts. For example, Ellis, Sheen, Murakami, and Takashima (2008) compared the effects of intensive and extensive recasts and showed that there was no statistically significant difference between their effects on the development of English articles. A meta-analysis conducted by Russell and Spada (2006) also showed that there was no difference between intensive and extensive CF. Other studies, in contrast, have supported the superiority of intensive recasts. For instance, Sheen, Wright, and Moldawa's (2009) study showed the superiority of intensive recasts over extensive recasts. Nicholas, Lightbown, and Spada (2001), reviewing previous studies, also discovered that intensive recasts were more effective than extensive recasts. Furthermore, in their meta-analysis, Mackey and Goo (2007) showed that intensive recasts were more effective than extensive ones.

Another CF type which is relevant to the current study is called explicit CF. According to Ellis (2008, p.227), explicit correction is "an utterance that provides the learner with the correct form while at the same time indicating an error was committed". The following example is taken from Ellis (2009a, p. 9).

L: On May.

T: Not On May. In May. We say "It will start in May".

The other CF type, relevant to the current study, is metalinguistic CF. According to Ellis (2008, p. 227), it refers to "an utterance that provides comments, information, or request related to the well-formedness of the learner's utterance".

L: I go to Paris last year.

T: Went. You should use simple past tense.

2.2. Aspects of spoken production and trade-off hypothesis

According to SLA researchers (Ellis & Barkhuizen, 2005; Skehan, 1996, 1998; & Skehan & Foster, 2001) L2 proficiency and L2 performance are multi-componential constructs consisting of three principal dimensions of complexity, accuracy, and fluency (CAF).

One aspect of the spoken production, which is relevant to the current study, is accuracy. It is a simple concept to be identified because almost all researchers agree on its main goal. For example, Ellis (2003, p. 339) referred to accuracy as "the extent to which the language produced in performing a task conforms to the target language norms".

Another aspect of the spoken production, which is relevant to the current study, is the spoken fluency. According to Lennon (2000, p. 26), fluency is "the rapid, smooth, accurate, lucid, and efficient translation of thought or communicative intention into language under the temporal constraints of on-line processing". Similarly, Skehan (1996) defined it as the learners' capacity to mobilize their interlanguage systems to communicate meanings in real time.

Skehan (1998) came up with his trade-off hypothesis, also known as the limited attentional capacity model, stating that CAF are interdependent such that increased performance in one area may occur at the expense of performance in the other areas. Indeed, this hypothesis predicted that "committing attention to one area, other things being equal, might cause lower performance in others" (Skehan, 1998, p. 112). In particular, it is proposed that there might be a tension between form, complexity and accuracy, on the one hand, and fluency, on the other hand. This tension and prioritization might have some consequences. For example, consistent prioritization of fluency might lead to over-lexicalized performance, and performance in which fossilized language may be difficult to change. Consistent prioritization of accuracy, in contrast, might lead to lack of fluency. Therefore, the nature of the trade-offs and balancing these aspects of performance should be thoroughly considered.

Considering the nature of the trade-off, different studies, particularly planning studies, have advanced different and, at times, conflicting proposals. For example, Foster and Skehan (1996) have argued that the trade-off is between accuracy and complexity. Skehan and Foster (1997) also reported a trade-off between accuracy and complexity in a study focusing on the effect of planning during three oral tasks. Finally, Skehan (2009) suggested that accuracy and complexity rarely go together.

Other studies, on the other hand, have suggested that the trade-off is between meaning, fluency, and form, either complexity or accuracy. For example, some studies (Ahmadian & Tavakoli, 2010; Wendel, 1997; & Yuan & Ellis, 2003) have proposed that the trade-off involves fluency and accuracy. Brumfit (1984), focusing on the fluency-form distinction, also claimed that spontaneous and free-flowing language is the goal of fluency-oriented tasks and a focus on form and control is the goal of accuracy-oriented tasks. Skehan (1998, p. 269) also stated that "adult learners vary in learning style by learning through exemplars

and emphasizing fluency or by learning through analysis and emphasizing complexity or accuracy".

3. The study

There were two broad purposes for the current study. The first one was to examine the different effects of different corrective feedback (CF) types, as a focus on form, on Iranian EFL learners' general accuracy, operationalized as error free AS-units, and breakdown fluency, operationalized as pauses. The second one was to examine the presence or absence of a trade-off between general accuracy and breakdown fluency and how it would be influenced by different CF types. To attain these, the following research questions were formulated.

RQ1: Are there any significant differences among different CF types' effects on Iranian EFL learners' spoken general accuracy and error free AS-units?

RQ2: Are there any significant differences among different CF types' effects on Iranian EFL learners' breakdown fluency and pauses?

RQ3: Is there a trade-off between Iranian EFL learners' spoken CAF and how it would be affected by different CF types?

3.1. Method

3.1.1. Design of the study

The current study was a quasi-experimental research. The independent variable of the study was focus on form, operationalized as corrective feedback (CF), with four levels of no CF, intensive (focused) recast, extensive (unfocused) recast, and delayed explicit metalinguistic feedback. Its dependent variables were spoken general accuracy, operationalized as error free AS-units, and breakdown fluency, operationalized as pauses. Four pre-intermediate intact classes were randomly selected and assigned into the control, delayed explicit, extensive recast, and intensive recast groups. The participating groups are shown in Table 1.

Table 1.
Participating Groups and their Specific Characteristics

Groups	Names	Type of CF	Focus of CF	Time of CF
Control	Control	No CF	No CF	No CF
Experimental 1	Delayed Explicit	Explicit Metalinguistic	Simple past tense errors	Delayed
Experimental 2	Extensive Recast	Recast	All grammatical errors	Immediate
Experimental 3	Intensive Recast	Recast	Simple past tense errors	Immediate

3.1.2. Participants

Four pre-intermediate intact classes with 76 male learners, who were bilingual speakers of Azeri and Persian, from a private English language learning school in Tabriz, Iran, were randomly selected. The course they were taking was based on task-based language teaching. They had no or little opportunity for informal interaction in English outside the classroom. They were between the ages of 15 and 23. Their weekly attendance at school was 3 one and half an hour sessions. They were considered a fairly homogenous pre-intermediate group of learners, based on their learning history and English proficiency. However, to verify their initial homogeneity, a Key English Test (KET) was used and the test results were analyzed via a one-way ANOVA, with the alpha set at .05, and it was revealed that they were initially homogenous ($F_{3,60}$ = .28, p =.87).

3.1.3. Target structure

The structure which was chosen as the target was the simple past tense because of the following reasons. The first reason was that although Iranian EFL learners have knowledge of this structure, as a result of their exposure to this structure in their textbooks, they have difficulty using it accurately in their production. Indeed, according to Ellis et al. (2006), it is the structure which is introduced early in textbooks and pre-intermediate level learners are likely to be familiar with. However, gaining full control of it might be difficult, even for intermediate or advanced level learners. Consequently, the purpose was to examine the effect of the CF on a structure they have partial knowledge about. The other reason was to test the hypothesis that drawing learners' attention to one aspect of their production, in this study general accuracy, would be at the expense of the other aspect, in this study breakdown fluency.

3.1.4. Procedure

The randomly selected intact classes were randomly assigned to the control, delayed explicit metalinguistic, extensive recast (unfocused), and intensive recast (focused) groups of the study. Two days later, KET (Key English Test) was administered to verify their initial homogeneity. One week later, the first written fill-in-the-blank test, the written pretest, was given to all groups to ensure their initial homogeneity, considering their knowledge of the simple past tense, and its result revealed that they were homogenous ($F_{3,60}$ = .28, p =.88).

The study was carried out during six sessions. The first part of each of these sessions was for the institute term program. The other part, which was audio recorded for subsequent analyses, was devoted to the main process of the current study. Each of these began by assigning a story from *Steps to Understanding* (Hill, 1988) to all groups. Indeed, while between group stories were the same, within group stories were different due to the prevention of the practice effect. In other words, in each of these sessions, participants within each group were to read a different story, summarize it, and retell it to the class. To ensure

that all participants had sufficient time to complete the task, all participants were given 5 min and asked to read and summarize it. When they completed the task of summarizing their individualized stories, they were asked to orally reproduce and retell it to the whole class. During the oral reproductions of the stories, which were audio recorded for the later analysis, all groups experienced different processes. Indeed, they were different with respect to the presence or absence of the CF, its focus, its type, and its timing. That is, the control group and the experimental groups were different based on the presence or absence of the CF. That is, while the experimental group participants received CF on their errors, the control group participants received no CF on their errors.

In addition to the differences between the experimental groups and the control group which were based on the presence or absence of CF, all experimental groups were also different based on the focus and types of the CF and the time it was provided. In the intensive (focused) recast group, the CF was immediately and intensively provided on the participants' simple past tense errors during their spoken reproductions. In other words, as soon as they made simple past tense errors on their spoken reproductions of their stories, they were provided with CF of the recast type. In the extensive (unfocused) recast group, unlike the focused recast group, the recast was extensively provided on all errors of their oral reproductions of the stories. In the delayed explicit metalinguistic corrective feedback group, unlike the extensive and intensive recast groups, there was no immediate reaction to the participants' errors and the type of the CF was explicit and metalinguistic. That is, during their story reproductions, the simple past tense errors were not immediately corrected and the CF was provided at the end of their story reproductions. In other words, the researchers did not immediately react to their errors and made notes of their simple past tense errors during their story reproductions. At the end of each participant's spoken reproduction, the researchers presented the simple past tense errors on the board, corrected explicitly, and provided some metalinguistic explanations for all participants of the group. This process of story summarizing, its oral reproduction, and error treatment lasted for six sequential sessions. Then, the recorded oral data of all participants during six instructional sessions were transcribed and coded by the researchers focusing on spoken general accuracy and breakdown fluency by using the following measurements.

Following previous studies (Lambert & Engler, 2007; Sadeghi Beniss, & Edalati Bazzaz, 2014; & Vercellotti 2012), the general accuracy measurement was based on the calculation of the proportion of error-free AS-units. That is, the number of error-free AS-units each participant produced in each of the oral reproduction tasks and sessions of the study was divided by the total number of AS-units the participant produced to arrive at the accuracy scores.

There were two approaches to measure fluency. The basic approach which was taken to measure spoken fluency, based on previous studies (Foster & Skehan, 1996; Sadeghi Beniss & Edalati Bazzaz, 2014; & Skehan & Foster, 1997), was based on the number of pauses each participant produced in each of

the spoken reproduction tasks and sessions of the study. The other approach, which was innovatively used in this study, was based on the whole number of pauses. That is, in addition to the participants' pauses, the researchers' pauses to provide CF were also considered. After the measurement of fluency and accuracy, the researchers recoded and recalculated different CAF indices in a different order. The intra-rater reliability using Cohen's Kappa was .85. Another researcher, one of the researchers' colleagues, independently coded 15% of the data. The inter-rater reliability using Cohen's Kappa was .80.

3.1.5. Data analysis

First, the assumptions of ANOVA and ANCOVA were tested. Next, the descriptive statistics and a one-way ANOVA were used to analyze the participants' general spoken accuracy and error free AS-units during six sessions. Then, two steps were taken to analyze the spoken breakdown fluency. The first one was based on the analysis of the effect of CF on the number of times the participants paused. To this end, the descriptive statistics and a one-way ANCOVA analysis, using the participants' grades in session one as a covariate, were used to analyze the breakdown fluency, pauses. The other one, innovatively analyzed in the current study, was based on the effect of the CF on all pauses in the spoken production. To analyze it, the descriptive statistics, a one-way ANOVA, and LSD were used. Then, a 2 × 2 correlation matrix was created with Pearson correlation coefficient to study the relationship between participants' pauses and all pauses. Another 2 × 2 correlation matrix was created with Pearson correlation coefficient to study the relationship between general accuracy, i.e. error free AS-units, and breakdown fluency, i.e. pauses. Finally, to study the effect of different CF types on the relationships between general accuracy and breakdown fluency, eight 2 × 2 correlation matrices were created with Pearson correlation coefficient using each of the participating groups' scores in both sessions one and six.

4. Results

Before presenting the results of the data analysis, it is needed to mention that since the comparisons were based on sessions one and six, only the results of these sessions are presented.

4.1. The Results of the tests of the assumptions of ANOVA and ANCOVA

The results of the test of the homogeneity of the variances of accuracy, error free AS-units, are depicted in Table 2.

Table 2.
Test of Homogeneity of the Variances of Accuracy (Error free AS-units) in Sessions 1 and 6

Sessions	Levene Statistic	df1	df2	Sig.
1	.387	3	60	.762
6	.717	3	57	.570

In both sessions 1 and 6, the $p > 0.05$. Consequently, the variances of accuracy were homogenous and one of the assumptions of the parametric tests was met.

In addition, the results of the test of the homogeneity of the variances of fluency, pauses, are depicted in Table 3.

Table 3.
Test of Homogeneity of the Variances of Fluency (Pauses) in Sessions 1 and 6

Sessions	Levene Statistic	df1	df2	Sig.
1	1.048	3	60	.378
6	1.286	3	57	.288

In both sessions 1 and 6, the $p > 0.05$. Thus, the variances of fluency were homogenous and this assumption of the parametric tests for fluency was also met.

In addition, the results of the tests of the normality of the distribution, another assumption of parametric tests, of accuracy, error free AS-units, are depicted in Table 4.

Table 4.
Normality Tests of Accuracy (Error Free AS-Units) in Sessions 1 and 6

Sessions	Skewness		Kurtosis		Shapiro-Wilk		
	Statistic	Std. Error	Statistic	Std. Error	Statistic	df	Sig.
1	.243	.299	-.175	.590	.973	64	.174
6	.022	.306	-.386	.604	.989	61	.862

Since in both sessions 1 and 6, the $p > 0.05$, the distribution was normal.

In addition, the results of the tests of the normality of the distribution of fluency, pauses, are depicted in Table 5.

Table 5.
Normality Tests of Fluency (Pauses) in Sessions 1 and 6

Sessions	Skewness		Kurtosis		Shapiro-Wilk		
	Statistic	Std. Error	Statistic	Std. Error	Statistic	df	Sig.
1	.257	.299	-.359	.590	.964	64	.060
6	.280	.306	-.598	.604	.974	61	.164

Since in both sessions 1 and 6, the $p > 0.05$, the distribution of fluency was also normal.

In addition, the results of one of the assumptions of ANCOVA are presented in Table 6.

Table 6.
Tests of Between-Subjects Effects, Pauses of Session 6

Source	Type II Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	43.759	7	6.251	.423	.884
Intercept	615.46	1	615.457	41.651	.000
Groups * pauses of session 1	38.82	3	12.940	.876	.459
Groups	29.84	3	9.946	.673	.572
Pauses of session 1	3.73	1	3.722	.252	.618
Error	827.48	56	14.776		
Total	3667	64			
Corrected Total	871.24	63			

As it is demonstrated, the *p*-value of the interaction of the pauses of the session 1 and groups was more than 0.05. Consequently, the slopes of the groups on the covariate were parallel, there was homogeneity of the regression, and consequently, one of the basic assumptions of ANCOVA test was met.

4.2. Accuracy

The results of the descriptive statistics of all groups' general spoken accuracy, error free AS-units, in sessions one and six are given in Table 7.

Table 7.
Descriptive Statistics of Groups' General Spoken Accuracy in Sessions 1 and 6

Sessions	N	Mean	SD	95% CI Lower Bound	Upper Bound
Session 1 Control	16	57.57	19.84	47	68.14
Delayed Explicit	17	50.71	17.17	41.88	59.54
Extensive Recast	16	50.69	22.52	38.69	62.69
Intensive Recast	15	48.20	16.21	39.23	57.18
Session 6 Control	18	49.06	25.53	36.37	61.75
Delayed Explicit	18	59.94	18.34	50.83	69.07
Extensive Recast	11	54.36	19.69	41.14	67.60
Intensive Recast	14	47.64	11.82	40.83	54.47

As it is shown, the extensive recast and the delayed explicit groups' general accuracy measurements of session six were bigger than those of session one. In contrast, the control and the intensive recast groups' general accuracy measurements were smaller than those of session one. In addition, the delayed explicit group had the highest general accuracy in session six. These differences are demonstrated in Figure 1.
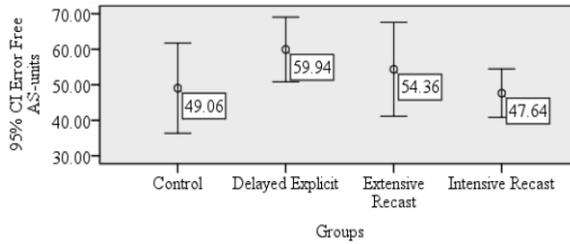
Figure 1.
Comparison of all groups' spoken general accuracy in session 6.

The results of the one-way ANOVA used to analyze the participants' general spoken accuracy, error free AS-units, in sessions one and six are displayed in Table 8.

Table 8.
One-way ANOVA of General Spoken Accuracy

		Sum of Squares	df	Mean Square	F	Sig.
Session1	Between Groups	2104.07	3	255.27	.700	.56
	Within Groups	22992.43	60	364.93		
	Total	25096.49	63			
Session6	Between Groups	1201.89	3	523.26	1.33	.28
	Within Groups	18521.79	57	394.39		
	Total	19723.68	60			

As it is illustrated, there were insignificant differences among all groups in sessions one and six ($p > 0.05$). In other words, although there were differences among the participating groups' spoken general accuracy, the differences were not strong enough to reach a statistical significance.

4.3. Fluency

The descriptive statistics of all groups' breakdown fluency scores, pauses, in sessions one and six is given in Table 9.

Table 9.
Descriptive Statistics of Groups' Spoken Breakdown Fluency in Sessions 1 and 6

Sessions		N	Mean	SD	95% Confidence Interval	
					Lower Bound	Upper Bound
Session 1	Control	16	6.9	3.98	4.82	9.06
	Delayed Explicit	17	8.4	3.93	6.34	10.37
	Extensive Recast	16	4.6	2.69	3.14	6
	Intensive Recast	15	7.4	3.51	5.47	9.34
Session 6	Control	18	6.5	3.44	4.80	8.21
	Delayed Explicit	18	6.67	4.59	4.39	8.95
	Extensive Recast	11	5.82	3.46	3.50	8.15
	Intensive Recast	14	7.15	3.72	4.99	9.29

As it is illustrated, in all groups, except the extensive recast group, the breakdown fluency of the spoken production in session six was smaller than

that of session one. In other words, the spoken productions of these groups in session six were more fluent than that of session one. In addition, the intensive recast group had the highest breakdown fluency in session six and it was the least fluent group. These differences are depicted in Figure 2.
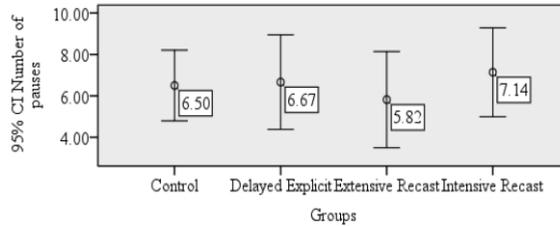

Figure 2.
Comparison of all groups' spoken breakdown fluency, pauses, in session 6.

The results of the one-way ANOVA used to analyze the spoken breakdown fluency, based on the number of pauses the participants produced, revealed that there were significant differences among groups in session one ($F_{3, 60}$ = 3.33, p = .026), but there were insignificant differences among all groups' production of the number of pauses in session six ($F_{3, 57}$ = .245, p = .87).

Having realized that there were significant differences among groups in session one, it was needed to factor out the effects of the participants' grades in session one to find out the effects of the CF on the spoken breakdown fluency in session six. To this end, the participants' grades in session one, based on the number of pauses they had, were used as a covariate in a one-way ANCOVA analysis. The result of this analysis revealed insignificant differences among groups in session six after the grades of session one were factored out ($F_{3, 59}$ = .095, p = .97).

The descriptive statistics of the participating groups' whole number of pauses during sessions one and six is given in Table 10.

Table 10.
Descriptive Statistics of Groups' Whole Number of Pauses in Sessions 1 and 6

Sessions		N	Mean	SD	95% Confidence Interval	
					Lower Bound	Upper Bound
Session 1	Control	16	6.93	3.98	4.82	9.06
	Delayed Explicit	17	9.48	4.91	6.90	11.99
	Extensive Recast	16	11.25	4.84	8.67	13.84
	Intensive Recast	15	12.87	5.91	9.60	16.14
Session 6	Control	18	6.94	3.44	4.80	8.21
	Delayed Explicit	18	7.11	4.71	4.78	9.45
	Extensive Recast	11	12.45	4.95	9.14	15.78
	Intensive Recast	14	12.71	5.17	7.99	10.64

As it is illustrated, the extensive recast groups' whole number of pauses, unlike the other groups, in session six were more than that of session one. In other

words, the spoken production of this group in session six was less fluent than that of session one. In addition, the intensive recast group had the highest number of pauses in session six and it was the least fluent group. These differences are demonstrated in Figure 3.
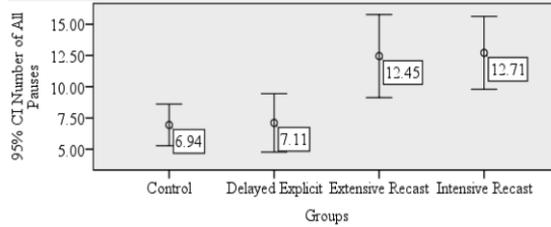

Figure 3.
Comparison of all groups' whole number of pauses in session 6.

The results of the one-way ANOVA, used to analyze the whole number of pauses the participants produced, revealed that there were significant differences among groups in session one ($F_{3, 60}$ = 4.15, p = 0.10). Consequently, it was needed to factor out the effects of the participants' grades in session one to find out the effects of the CF on the spoken breakdown fluency in session six. To this end, the participating groups' whole number of pauses were used as a covariate in a one-way ANCOVA analysis. The result of this analysis revealed significant differences among groups in session six after the grades of session one were factored out ($F_{3, 57}$ = 7.6, p = .000, partial η^2 = .005).

The results of the post-hoc test, LSD, which was used to compare the participating groups' whole number of pauses in session six are presented in Table 11.

Table 11.
LSD Test Results of Session 6

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	Upper Bound
Control	Delayed Explicit	-.17	1.50	.911	-3.16	2.83
Extensive Recast	Control	5.52	1.72	.002*	2.08	8.95

Table 11 (continued)

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	Upper Bound
Extensive Recast	Delayed Explicit	5.35	1.72	.003*	1.92	8.78
Intensive Recast	Control	5.77	1.60	.001*	2.58	8.97
Intensive Recast	Delayed Explicit	5.61	1.60	.001*	2.41	8.80
Extensive Recast	Intensive Recast	.27	1.81	.886	-3.36	3.88

Notes. * The mean difference is significant at the 0.05 level.

As it is demonstrated, both the extensive recast and the intensive recast groups were significantly different from both the control and delayed explicit groups ($p < 0.05$). Considering the descriptive statistics of these groups – the control group ($\bar{X}$ = 6.50, SD = 3.44, n = 18), the delayed explicit group ($\bar{X}$ = 7.12, SD = 4.71, n = 18), the extensive recast group ($\bar{X}$ = 12.46, SD = 4.95, n = 11), and the intensive recast group ($\bar{X}$ = 9.32, SD = 5.17, n = 14), it was discovered that both the extensive recast and the intensive recast groups significantly outperformed the other two groups and they were less fluent because of higher whole number of pauses. It is essential to mention that in other post hoc tests, including LSD, Tukey, Gabriel, and Bonferroni, which were used in the current study both intensive and extensive recasts groups were significantly different from both control and delayed explicit groups and there were no differences between the results of these tests.

Finally, the results of the 2 × 2 correlation matrix to study the relationship between participants' pauses and whole number of pauses revealed a significant correlation between them (r = .76, p = .000) with a medium effect size (R^2 = .58). Consequently, the participants' pauses, commonly used as an index of fluency, was chosen as the index representing the breakdown fluency for further analyses.

4.4. The results of the correlational analyses of all groups' general accuracy and breakdown fluency in sessions 1 and 6

The results of the Pearson correlation of the general accuracy, i.e. error free AS-units, and breakdown fluency, i.e. pauses, of all groups in sessions one and six are presented in Table 12.

Table 12.
Correlations of Fluency and Accuracy in Different Groups in Sessions 1 and 6

Groups		Error free AS-units and breakdown fluency in session 1	Error free AS-units and breakdown fluency in session 6
Control	Pearson Correlation	-.35	-.08
	Sig	.197	.764
	N	16	18
Delayed Explicit	Pearson Correlation	-.25	-.24
	Sig	.347	.360
	N	17	18
Extensive Recast	Pearson Correlation	-.09	-.22
	Sig	.744	.324
	N	16	11
Intensive Recast	Pearson Correlation	-.41	-.07
	Sig	.135	.827
	N	15	14

As it is demonstrated, all correlations in all groups were negative and insignificant. That is, an increase in one of these was insignificantly at the expense of a decrease in the other.

4.5. The results of the test of the trade-off hypothesis

The results of the correlations between general accuracy, error free AS-units, and breakdown fluency, pauses, are presented in Table 13.

Table 13.
Correlations of the Accuracy and Fluency Indices

	Error free AS-units	Pauses
Error free AS-units	1	- .09
N	403	403
95% CI		
Lower	1	- .19
Upper	1	.08
Pauses	- .09	1
N	403	403
95% CI		
Lower	- .19	1
Upper	.08	1

As it was demonstrated, the Pearson's *r* correlation between general accuracy, error free AS-units, breakdown fluency, pauses, was negative, small, and insignificant.

5. Discussion

There were two broad purposes for the current study. The first one was to investigate the effects of the presence or absence, the type, the focus, and the timing of the CF on EFL learners' spoken general accuracy and breakdown fluency. The other one was to study the presence or absence of the trade-off between the spoken accuracy and fluency and how it would be affected by different CF conditions. Considering the first purpose, two research questions were put forward.

The first research question was based on the effects of the presence or absence, type, focus, and timing of the CF on EFL learners' spoken general accuracy. The results of the descriptive statistics revealed that all groups were different and the extensive recast and the delayed explicit groups' general accuracy measurements of session six were bigger than those of session one. In contrast, the control and the intensive recast groups' general accuracy measurements were smaller than those of session one. In addition, the delayed explicit group had the highest general accuracy in session six. However, these differences were not strong enough to reach a statistical significance. In other words, there were no significant differences among groups with respect to their production of the error free AS-units.

The logical explanation for these results can be related to both the purpose of this research question and the nature of the accuracy measurement. On the one hand, the focus was on the simple past tense and, consequently, two of the

participating groups called intensive recast and the delayed explicit recast groups, targeted it. On the other hand, the accuracy measurement was a general accuracy measurement and the only group which extensively covered all errors was the extensive recast group. Considering these two facts, the only group which had the possibility of developing the general accuracy was the extensive recast group. However, it could not develop the general accuracy and it had even a lower mean than the delayed explicit CF group. It can be explained with respect to the hypothesis that "discourse mode is likely to affect the particular linguistic forms a learner uses in performing a task" (Ellis, 2003, p. 92). Consequently, a story-retelling task will lead more naturally to the use of the past tense. This frequent use of past tense might have some consequences. The most important consequence, relevant to the current study, might be the frequency of the simple past tense errors. That is, due to the highest frequency of the simple past tense in the story-retelling tasks, they might potentially be the most frequent errors. Indeed, even in the extensive recast group which was based on covering all errors, most of the errors might have been the simple past tense errors. As a result, in the extensive recast group which was formed on the basis of correcting all errors, the errors might have mostly been the past tense errors and this type of CF had insignificant effects on the spoken general accuracy. The results are in line with Kim and Mathes' (2001) study which revealed insignificant differences in the scores of the explicit and implicit groups. These results provide support for previous CF studies (e.g., Chehr Azad, Farrokhi, & Zohrabi, 2017a; Doughty & Varela, 1998) which revealed that CF is beneficial to L2 learning when it specifically targets and measures particular forms. They are also in line with Rahimpour, Salimi, and Farrokhi's (2012) study, investigating the effects of intensive and extensive focus on form strategies on female pre-intermediate EFL learners' oral accuracy, which revealed no differences between the performances of two groups in terms of the accuracy in oral narrative task. The results are, particularly, in line with Chehr Azad, Farrokhi, and Zohrabi's (2017b) study in which there were insignificant differences among different CF conditions on the number of error free clauses, as another index of spoken general accuracy.

The second research question was based on the effects of the different CF conditions on the spoken breakdown fluency of the Iranian EFL learners. There were two aspects for this question.

The primary aspect was based on the number of pauses. Considering this aspect, the results of the descriptive statistics revealed that in all groups, except the extensive recast group, the spoken production in session six was more fluent than that of session one. In addition, the intensive recast group had the highest breakdown fluency in session six and consequently, it was the least fluent group. Considering the results of the inferential statistics, it was discovered that although the breakdown fluency of all groups were different, the differences were not big enough to reach a statistical significant. In other words, the presence, absence, or type of CF had no significant effect on the number of pauses they produced and the breakdown fluency of their spoken production. Despite the absence of the significant differences, the groups having higher flu-

ency in session six than in session one can be explained with respect to the nature of the task repetition, defined as "the repetition of the same or slightly altered task, whether the whole tasks, or parts of a task" (Bygate & Samuda, 2005, p. 43). According to some researchers (Bygate, 2001; Ellis, 2003), task repetition can increase learners' fluency and complexity. These results are in line with Sato and Lyster's (2012) study which demonstrated that the presence or absence of the CF had no significant effect on the development of the learners' spoken fluency. They are also in line with Seyed Motahai and Ghasemi Nik Manesh' (2014) study which revealed that the type of the CF had no influence on impulsive and reflective EFL learners' spoken fluency. The results are also in line with Chehr Azad, Farrokhi, and Zohrabi's (2017b) study in which there were insignificant differences among different CF conditions on the pruned speech rate, as another index of spoken temporal fluency. These results are in contrast with Rahimi and Vahid Dastjerdi's (2012) study which discovered that the CF type had a significant effect on the intermediate EFL learners' oral fluency and that the delayed CF was significantly more effective than the immediate CF for the development of their oral fluency.

Considering the other aspect of spoken fluency, innovatively used in this study, the results of the descriptive statistics indicated that in the extensive recast group, unlike the other groups, the whole number of pauses, in session six were more than that of session one. In other words, the spoken production of this group in session six was less fluent than that of session one. In addition, the intensive recast group had the highest number of pauses in session six and it was the least fluent group. The results of the inferential statistics, one-way ANCOVA and LSD, revealed that both the extensive recast and the intensive recast groups significantly outperformed the other two groups and, consequently, they were the least fluent groups, because of higher whole number of pauses. One of the logical explanations for these results can be based on the nature of the CF provision. That is, the provision of the CF, particularly of the immediate type, is inherently related to pausing and interrupting the flow of production. Consequently, the more the immediate CF type, the more the whole number of pauses, and the least fluent the production.

The other purpose of the study was to examine the presence or absence of the trade-off bewteen the spoken accuracy and fluency and how it would be affected by different CF conditions. Considering the nature of the trade-off, the results of the correlational analyses, based on all groups' spoken production in all sessions of the study, revealed a negative and insignificant correlation between general accuracy, error free AS-units, and breakdown fluency, pauses. The results are in contrast with Chehr Azad, Farrokhi, and Zohrabi's (2017b) study in which there were positive and significant correlation between general accuracy and fluency. It should be mentioned that that study was different from the current study. That is, in that study, the general accuracy and fluency measures were respectively based on the measurements of the number of error free clauses and temporal fluency, pruned speech rates. In the current study, in contrast, the general accuracy and fluency measures were respectively based

on the measurements of the number of error free AS-units and breakdown fluency, number of pauses.

These results are against the trade-off hypothesis that "committing attention to one area, other things being equal, might cause lower performance in others" (Skehan, 1998, p. 112). It is also in contrast with Skehan's (1998) suggestions that there might be a tension between form, complexity and accuracy, on the one hand, and fluency on the other. The results are inconsistent with the previous studies (Ahmadian & Tavakoli, 2010; Michel, Kuiken, & Vedder, 2007; Wendel, 1997; & Yuan & Ellis, 2003) which revealed a trade-off between accuracy and fluency.

With respect to the effects of different CF conditions on the trade-off between AF, the results of the correlational analyses revealed that different CF conditions had no significant effects on the relationships between general accuracy and breakdown fluency. This finding, different CF conditions having no effect on the relationship be between accuracy and fluency, is consistent with previously conducted studies (Chehr Azad et al., 2017a, 2017b) which revealed insignificant effects of the CF conditions on the relationships between the spoken accuracy and fluency.

6. Conclusion

Based on the findings, it can be concluded that different CF conditions have no significant effects on the EFL pre-intermediate level learners' spoken general accuracy in the story-retelling tasks. In addition, different CF conditions have insignificant effects on the EFL pre-intermediate learners' breakdown fluency. However, repeated performance of story retelling tasks, irrespective of the presence or absence of CF, might have some insignificant, but positive influences on the EFL learners' spoken breakdown fluency. The provision of the CF, particularly of the immediate type, and irrespective of its focus, might significantly and inherently lower the fluency of the production. Considering the relationships between spoken accuracy and fluency, it should be suggested that different accuracy measurements, error free clauses or error free AS-units, and fluency measurements, breakdown or temporal fluency, can have a significant effect on the significance and the direction of their relationships. In addition, CF has no significant effect on their relationships.

The current study suffered from several limitations. One of them was related to its length. That is, it was very short and lasted six sessions. Another limitation was related to the target of the study which was the simple past tense. Another limitation was related to the nature of the CF types which were input providing. Yet another limitation was related to the use of only one task, story-retelling task. The other limitation was related to the proficiency level of the participants. Consequently, further research, focusing on long treatments, other grammatical structures, output prompting CF types, different tasks, and different proficiency level participants, needs to be done to address these limitations.

With respect to the pedagogical implications, it can be suggested that the provision of different CF types, whether intensive or extensive, has no significant effects on the EFL pre-intermediate learners' spoken general accuracy and breakdown fluency. In addition, repeated performance of story-retelling task is likely to develop the EFL pre-intermediate learners' spoken breakdown fluency. There is no trade-off between spoken general accuracy and breakdown fluency.

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