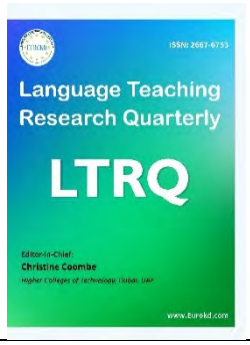

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The Comparative Effect of Recasts and Prompts on EFL Learners' Vowel and Consonant Accuracy

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Abstract

This study examined the comparative effect of recasts and prompts on EFL learners' pronunciation accuracy of consonants and vowels. Eighty-nine elementary EFL learners were selected among 117 through their performance on a piloted sample KET and were randomly assigned into two experimental groups (recast, prompt), and a control group. A piloted researcher-made pronunciation pre-treatment test was administered to the three groups to measure their pronunciation accuracy before the treatment. The three groups underwent the same amount of teaching time and received the same material. The participants in the recast group received recast and those in the prompt group received prompt. However, the participants in the control group received no specific type of corrective feedback. At the end of the treatment, the participants took a pronunciation post-test parallel with the pre-treatment test. An Analysis of Covariance (ANCOVA) was run. The results indicated that both recast and prompt had a significantly positive effect on EFL learners' pronunciation accuracy of consonants and vowels. Moreover, the results showed that there was no significant difference between the effect of recast and prompt on EFL learners' pronunciation accuracy of consonants and vowels.

Keywords: *Corrective Feedback, Pronunciation, Accuracy*

Introduction

In the area of language learning pedagogy, innumerable researchers have sought novel methods to meet the numerous needs learners have in language learning owing to their lack of proficiency in communicative competence more specifically, pronunciation. Pronunciation teaching and learning is regarded as a complex task since it needs knowledge of appropriate sounds in particular contexts

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as well as the use of vocal organs to articulate those sounds, which requires extensive practice and feedback (McCrocklin, 2016). Myriad researches have paid the path towards finding effective ways of teaching pronunciation in the classroom, as good phonological development is of great importance to many L2 learners (Derwing et al., 2004). As Burgess and Spencer (2000) stated, in second language pedagogy, one of the most important fields of study is communication and the role of pronunciation in L2 pedagogy. However, pronunciation mostly has been ignored in second language classrooms and has been expressed as a frightening issue by teachers.

Feedback is one of the necessary components of processing instruction (Granena & Yilmaz, 2018) and without any kinds of feedback, learners would have not realized if they were processing incorrectly. According to Ding (2010), teachers utilize corrective feedback (CF) to reformulate learners' errors or mistakes. Recast and prompt, which are of utmost significance among diverse types of CF are more often used by teachers. Using recast, the teacher reformulates all or part of a learner's error without its central meaning being changed (Long et al., 1998) while in prompt; teachers encourage learners to correct their errors themselves (Lyster, 2002). Prompts consist of four moves based on Lyster and Mori (2006) including elicitation, metalinguistic clue, clarification request, and repetition. Via these moves, teachers offer students an opportunity to self-correct.

Iranian EFL learners have errors in pronouncing a number of consonants and vowels such as: /θ/, /ð/, /l/, /s/, /ɹ/, /w/, /I/, /ʌ/, /ʊ/, /ɔ/, /ə/ and also there are some pairs of sounds, i.e., (/v/ vs /w/), (/ɑ/ vs /ʌ/), (/I/ vs /i/), (/U/ vs /U:/), (/θ/ vs /ð/), (/ə/ vs /e/), (/ɒ/ vs /ɔ:/). These sounds are confusing to them while being pronounced (Hunter & Kebede, 2012; Mojsin, 2016; Nosratinia & Zaker, 2014; Yavas, 2020). Regarding the impact of CF on pronunciation, few studies have had worthwhile findings with regard to pronunciation accuracy especially at vowel and consonant levels. To fill the research gap, in this study the researchers utilized recasts and prompts on learners' errors regarding their accuracy in production of consonant and vowel sounds of /θ/, /ð/, /l/, /s (s, z)/, /ɹ/, /I/, /ʌ/, /w /, /ə/; which are taken into account as the most intricate sounds for Iranian learners and some of them are totally absent in Persian.

Literature Review

Pronunciation is one of the crucial sub-skills of language teaching, and teachers should teach pronunciation from the start with other skills (Brown, 2021). EFL and ESL Language learners have tried to improve their pronunciation through several activities which can be classified under two categories: segmental and supra-segmental features. Vowels and consonants were the main focus in the activities for segmental features. It is commonly believed that teaching pronunciation is something more than sounds or emphasizing fluency. The first step, in this regard, should be mastering supra-segmental features which fall under a top-down approach by listening and communicating with native English speakers. In addition, it is essential for learners to have a portfolio for their errors and difficulty they face in pronunciation. Each sound that learners have problem pronouncing is related to vowel and consonant accuracy and is one of the segmental pronunciation features which fall under the bottom-up approach.

During the second language acquisition, most of the pronunciation errors come from L1 while there are some challenging sounds in L2 to be pronounced (Nosratinia & Zaker, 2014). As

Seferoğlu (2005) stated, almost all language curricula lack a secure place for teaching pronunciation which has been regarded as a personal interest to teachers and learners whose preference plays a crucial role in including pronunciation in their syllabi. One way to improve learners' pronunciation is through technological applications which are designed and developed in cooperation of teachers and programmers aiming at improving pronunciation.

According to Purcell and Suter (1980), for non-native speakers, the most crucial factor in pronunciation accuracy is to have the ability to imitate or produce foreign sounds. They demonstrated that four most meaningful predictions of successful pronunciation accuracy were first language, aptitude for oral mimicry, residency, and strength of concern for pronunciation accuracy.

Ellis (2009) asserted that CF in second language learning has the most essential role to play in behaviorist and cognitive theories of L2 learning. Feedback is a gift to learners who would like to learn a language. In current approaches such as task-based instruction, the concept of feedback is extended to any response that is intended and/or recognized as being corrective (Li, 2021). In both structural and communicative approaches of language teaching, feedback holds the most crucial role to increase learners' motivation and linguistic accuracy. How to treat learner errors has been an important issue in L2 learning and teaching and there has been considerable controversy about the role and importance of CF in SLA (Nassaji & Kartchava, 2017). Accordingly, Fu and Li (2020) investigated the effects of immediate and delayed corrective feedback on the acquisition of the English past tense in EFL context. The study demonstrated that immediate CF was more facilitative of L2 development than delayed CF. The results suggest the importance of addressing linguistic errors before they are proceduralized in the interlanguage.

As reported by Nassaji and Kartchava (2017, pp. 1-35), "the most vital factors in oral feedback are divided into three sections: oral CF, computer-mediated CF, and written CF". A study done by Nguyen and Hung Luu (2021) indicated that CF positively impacted learners' pronunciation achievement. Teachers as a source of CF and learners as receivers of CF both "shared similarities in the value of students' responsibility in error correction and segmental features as a choice of corrected errors and teachers as a source of CF" (p.266). Lyster and Saito (2010) represent the definition of prompt as a technique used in language teaching to correct learners' errors in such a way that it pushes students to self-repair without providing correct forms. Using prompts, the teachers do not reformulate but encourage learners to correct their errors themselves.

Lyster (2004) also weighed in prompting against recast on the grounds that they were often ambiguous (i.e., learners had difficulty in determining when they were corrective and when they were not) and maintained that output-prompting strategies were preferable because they enabled learners to increase control over linguistic forms that they had partially acquired. Recent studies on oral CF have shown that output-prompting strategies are more effective than recasts (an input-prompting strategy) (Lyster, 2004). According to (Ellis, 2009, p. 1), using recasts "the corrector incorporates the content words of the immediately preceding incorrect utterance and changes and corrects the utterance in some way (e.g., phonological, syntactic, morphological or lexical)". Moreover, Watanabe (2010) argued that recast is a form of implicit negative feedback where the learner's attention is drawn to mismatches between the input and the output. Recast enables

teachers to provide feedback without hindering L2 learners' communicative intent. In consonance with Goo (2012), recast is one of the most important kinds of strategies, which is preferred to be used among other strategies of CF.

Error correction is essential to the history of EFL learning. Yavuz (2014) investigated the attitude of students towards error correction and their preference. This research proved that EFL learners very often tend to be corrected by their teachers or peers. The result of this study, accordingly, revealed that learners' had tendency to receive CF from their teachers because they find it safer and more relaxing. Considering learners' preferences for receiving oral corrective feedback on lexical and grammatical errors in relation to their personality traits, Nateghian and Mohammadnia (2022) showed that more extroverted learners prefer explicit and immediate feedback while more introverted ones prefer implicit and non-immediate feedback. Moreover, to explore possible effects of socio-cultural differences on teachers' beliefs about oral corrective feedback (OCF), Mahalingappa and Polat (2021) asked how do in-service teachers in China (EFL) and the U.S (ESL) perceive the need for OCF in second language learning and teaching. The results revealed that although both groups approved the need for OCF and considered prompts more effective than other types, they differed in their reported use of different types, partially moderated by socio-cultural factors, dominant educational philosophies, and background factors.

Gooch et al. (2016) demonstrated the results of recast and prompt on Korean English learners' pronunciation skill in producing /ɹ/. As pre/post-tests reveal, recasts were especially helpful in the improvement of controlled production of /ɹ/, whereas prompts were facilitative of not only controlled but also spontaneous production of /ɹ/. More relatively, Karami and Heidari Darani (2018) carried a study on effectiveness of prompts as CF on teaching /θ/ and /ð/ sounds to Iranian EFL learners. The results indicated that EFL learners did not significantly outperform in the post-test, so they concluded that prompts might not be an effective type of CF in teaching pronunciation. Meilani et al. (2022) demonstrated that CF had an essential role in enhancing learners' abilities and needs in foreign language acquisition. CF enhances learners' knowledge, confidence, motivation, and language awareness in oral production and pronunciation accuracy.

The Study

In order to fulfill the purpose of the present study, the following research questions were raised:

RQ_1: Do recasts have any significant effect on EFL learners' vowel and consonant pronunciation accuracy?

RQ_2: Do prompts have any significant effect on EFL learners' vowel and consonant pronunciation accuracy?

RQ_3: Is there any significant difference between the effect of recasts and prompts on the EFL learners' vowel and consonant pronunciation accuracy?

Method

Participants

In order to select the participants, first, some announcements were made to different language schools, which advertised ten-session free English pronunciation teaching classes. One hundred

and seventeen Iranian EFL learners, whose first language was Persian, registered in the program and were regarded as the initial participants of the study. Their age ranged from 14 to 40 (M_{age} = 22.3). They took a piloted Key English Test (KET), and based on the obtained results, 89 homogenous participants whose score fell within the range of one standard deviation above and below the mean, were selected to take part in the main phase of the study. The selected homogeneous participants (N=89) were divided into two experimental groups (i.e., recast, N=29, and prompt N=30) and a control group (N=30).

Instruments

Key English Test (KET)

A sample of KET adopted from KET Practice Test by Capel and Ireland (2010), was employed for the purpose of choosing participants at elementary level and ensuring their homogeneity. KET consists 68 of the four parts of reading and writing (paper 1), listening (paper 2), and speaking (paper 3). Reading and Writing Section consists of 56 items. For the assessment of the writing section, the researchers used the KET general mark scheme, which is used as a rubric for a summative score. The listening section consists of 25 items in 5 tasks. Speaking Section has two main parts. In first part, candidates interact with an examiner. In part two, they interact with another candidate.

Pre-Treatment Test

The pre-treatment test was in fact a teacher-made pronunciation test which was carefully designed based on the study of Saito and Lyster (2011). The items of the pre-treatment test were meticulously designed by the researchers referring to different pronunciation books written by Baker (2006), Baker and Goldstein (2007) and Mojsin (2016), to measure the pronunciation accuracy of the participants. The pretreatment test consisted of 59 items in three different tasks (i.e., word reading task, sentence-reading task and picture description task). It is worth mentioning that the pre-treatment test was expert viewed by three experts in the field of language teaching for validity purposes. The estimated reliability for the modified test was 0.903. The pre-treatment test was categorized in three tasks and the items aimed to measure participants' accuracy of 9 different sounds, namely five consonants (/θ/, /ð/, /l/, /s (s, z)/, /ɹ/) and four vowels (/I/, /ʌ/, /w/, /ə/). Target words in the pre-treatment test had the following features:

1) Target sound with initial position in word
2) Target sound in the middle position of the word
3) Target sound at the end of the word except /ɹ/ and /w/. (/ɹ/ in consonant cluster).

All words in pre-treatment test consisted of 2 to 10 letters. The researchers avoided to use target sound near the linking word in sentence reading task. However, participants were asked to read target words in sentences of the reading task without connected speech pronunciation. The researchers collected target words from one to three syllabuses, and tried to choose the same syllable for both tests (pre-treatment test and post-test). The pre-treatment test aimed to cover the target sounds in different distinctive tasks:

Word Reading Task. Word reading task consisted of 28 words.

Sentence Reading Task. Sentence reading task consisted of 26 words.

Picture Description Task (5 Pictures)

The list of words in the pre-treatment test are provided in Table 1.

Table 1

Items in the Pre-Treatment Test

Sound	Items
/θ/	thumb, anything, ~~earth,~~ author, thought, nothing, ~~south,~~ theater, ~~thunder~~
/ð/	smooth, their, ~~weather~~, therefore, ~~Smith,~~ this, mother, father, clothes
/s/(/s/,/z/)	spoken, stress, desire, these, stop, screaming, ~~What's, upsetting,~~ school
/l/ (dark, light)	like, help, less, ~~real,~~ loved, laundry, call, old, ~~ball~~
/ɹ/	read, ~~rate,~~ broom, brick, ~~Roman,~~ ~~improve,~~ pronounce, correctly, rice
/I/	ship, India, ~~gift,~~ ~~internet,~~ Mrs., Kim, into, sit, kiss
/ʌ/	under, ~~but,~~ lunch, thunder, ~~uncle,~~ bug, cup, rug, ~~bus~~
/w/	web, anywhere, would, want, ~~twenty,~~ one, words, ~~language, wheel~~
/ə/	above, ~~China,~~ photograph, Victoria, the, Peter, eleven, ~~o'clock,~~ pizza

Note. Words with strikethrough formatting were omitted after piloted the test.

Posttest

The post-test consisted of 59 items in three different tasks (i.e., word reading tasks, sentence reading task and picture description). The post-test was carefully designed by the researchers to measure participants' pronunciation accuracy in vowels and consonants /θ/, /ð/, /l/, /s (s, z)/, /ɹ/, /I/, /ʌ/, /w/, /ə/ after receiving treatment. Target words in post-test had one to three syllables and the researchers tried to choose the same syllable for both tests (pre-treatment test and post-test). The list items in this test is provided in Table 2.

It is worth mentioning that both the pre-treatment test and the parallel post-test shared commonalities in designing task items and task numbers while the items were different. For example, the word "thumb" in the pre-treatment test evaluates /θ/ accuracy and the researchers used the same position of this sound in the post-test (i.e., word "thanks").

Table 2

Items in the Post-test

Sound	Items
/θ/	thanks, something, method, twelfth, Thursday, birthday
/ð/	they, brother, that, with, feathers, other, bathe
/s/	stolen, spend, music, ours, schedule, skin, score
/l/	long, milk, low, looked, calendar, listen, told
/ɹ/	right, program, groom, Friday, bride, river
/I/	king, Italy, this, in, pill, skin, tip
/ʌ/	up, tunnel, London, nothing, honey, love
/w/	Were, likewise, forward, warm, waiting, where
/ə/	about, listen, camera, Saturday, quarter, today, cinema

Praat Software

The two concerns of the study were consonant accuracy and vowel accuracy. Consonant accuracy is defined as "the place and the manner of articulation when a consonant is articulated" (Richards & Schmidt, 2010, p. 121), while vowel accuracy is defined as "the position of the tongue, lips, lower jaw and shape of the mouth and pharynx when a vowel is articulated" (Richards & Schmidt, 2010, p. 633). To measure these two variables, the researchers used acoustic analysis software (Praat). In this research, the researchers measured transition-duration in millisecond (ms) and the formants values in hertz (Hz) from the beginning (found approximately by listening) to the middle of the target sounds and then the researchers chose the best frequency to find out participants' score. The amount base of F1, F2, and F3 of vowels and F3 and F4 (in case they were in Table 3) of consonants for measuring participants' accuracy were Table 3.

Table 3

Formants (Hz) and Transition-duration (ms) for Vowel and Consonant

	/l/		/s/	/z/	/ɹ/	/θ/	/ð/	/ə/	/ʍ/	/I/		/ʌ/	
	Clear /l/	Dark /l/											
Dur	0.078-0.112	0.073-0.086	165	179	.078-0.11	0.53	0.29	≈0.121	≈0.13	M W C	192 237 248	M W C	188 226 234
F1	367-388	399-453			300-350			≈520	≈450.24	M W C	427 483 511	M W C	623 753 749
F2	790-920	692-870			1000-1200			≈1492	≈1121.68	M W C	2034 2365 2552	M W C	1200 1426 1546
F3	2700-3200	2200-2700	2689	2934	2230	≈2500	≈2500	≈2570	≈2543.33	M W C	2684 3053 3403	M W C	2550 2933 3145
F4			3500 - 6000	≈4000 -6000		≈3000 - ≈6000	≈4870 - ≈6000			M W C	3618 4334 4575	M W C	3557 4092 4320

M=Man, W=Woman, C=Children (Sounds by Boersma & Weenink (2020); Hillenbrand et al. (1994), Recasens & Espinosa, (2006); /w/ and Schwa sounds by the researchers)

Figures 1, 2, 3, and 4 were used to measure the effect of vowel and consonant adjacency.

Figure 1

The Effects of Initial Consonant Environment for Men by Hillenbrand et. al (2001)

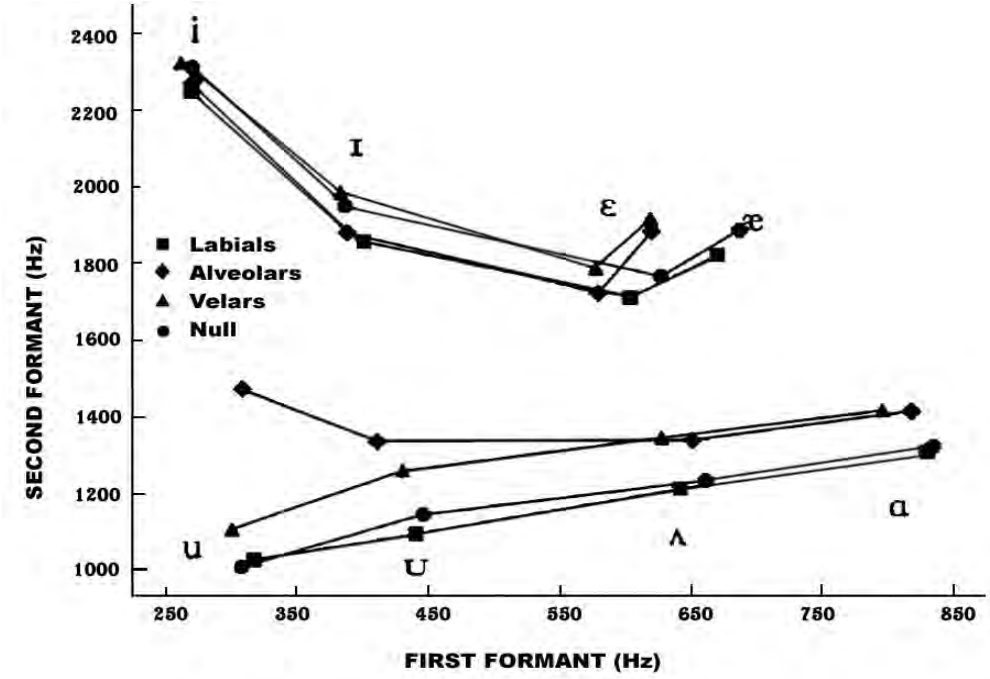

Figure 2

The Effects of Initial Consonant Environment for Women by Hillenbrand et.al (2001)

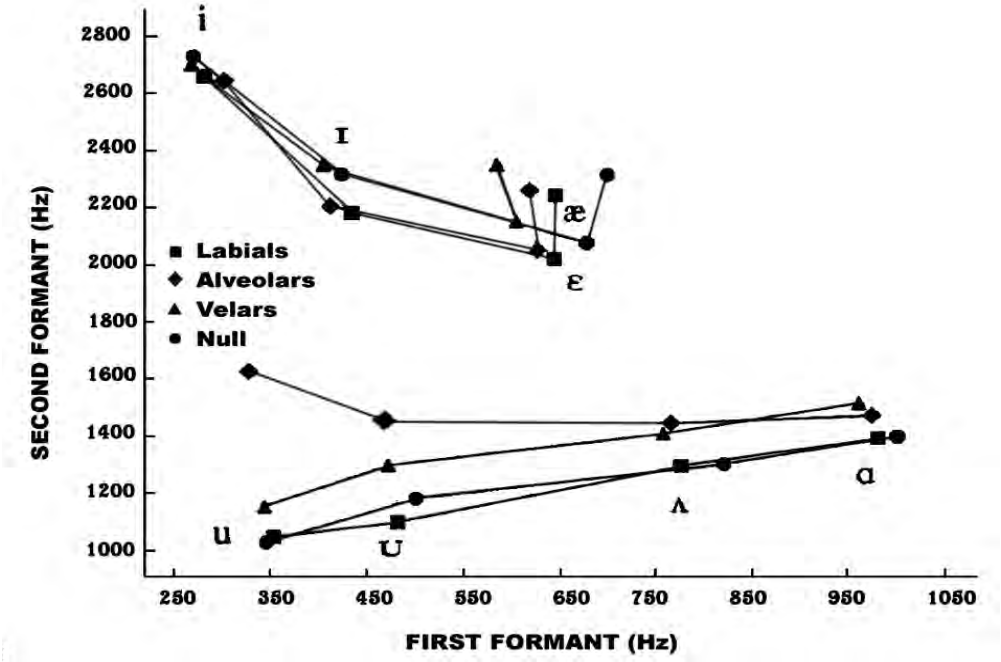

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Figure 3

The Effect of Initial Voiced and Unvoiced Consonant Environment for Men by Hillenbrand et.al (2001)

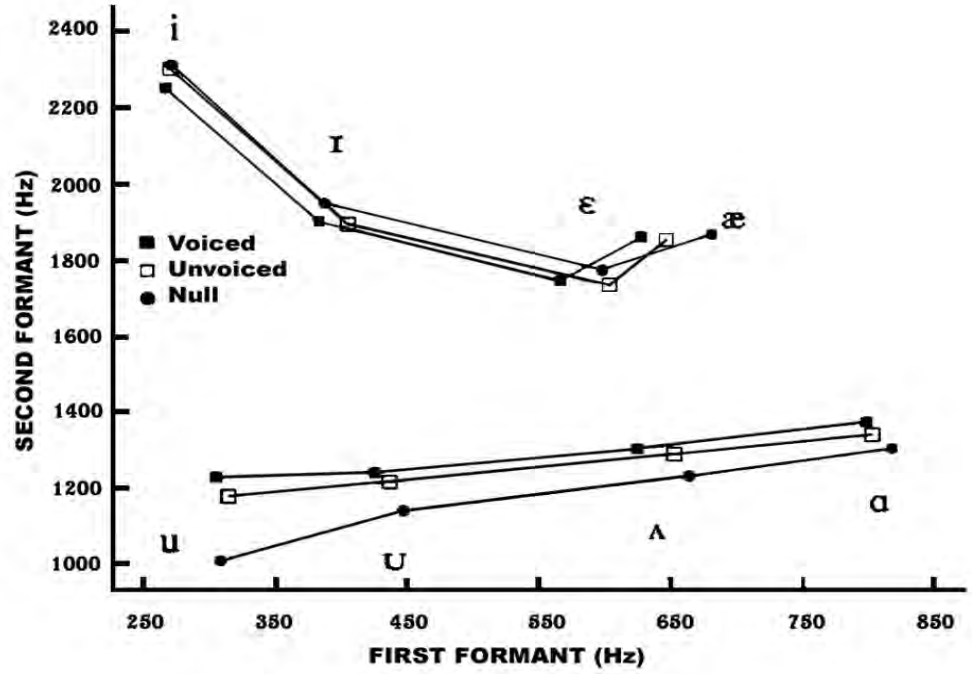


Figure 4

The Effect of Initial Voiced and Unvoiced Consonant Environment for Women by Hillenbrand et. al (2001)

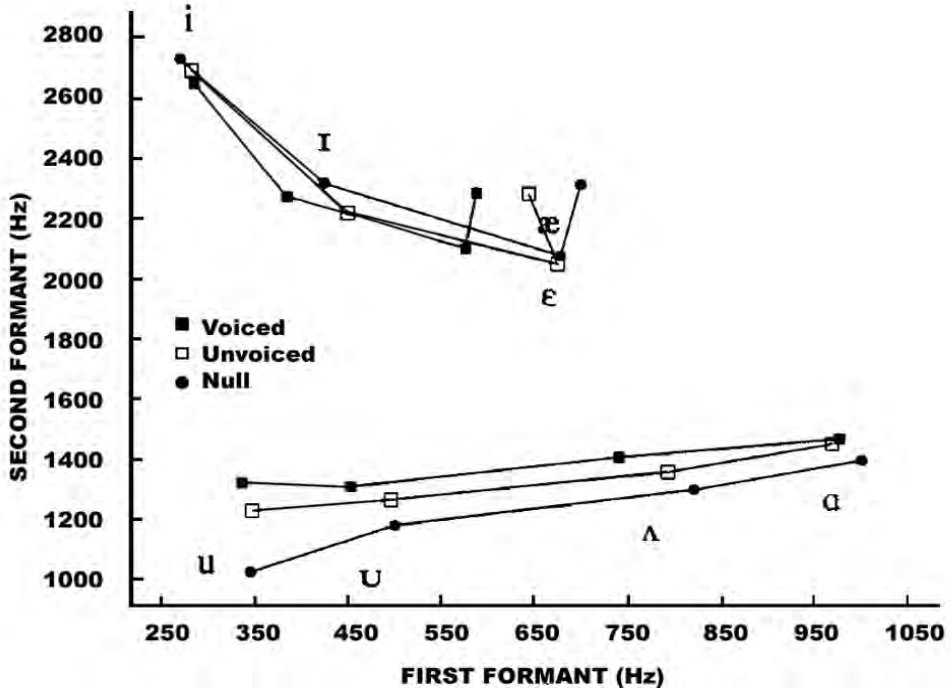


Table 4 was used to measure vowels' duration in millisecond (ms) with the effect of consonant adjacency.

Table 4

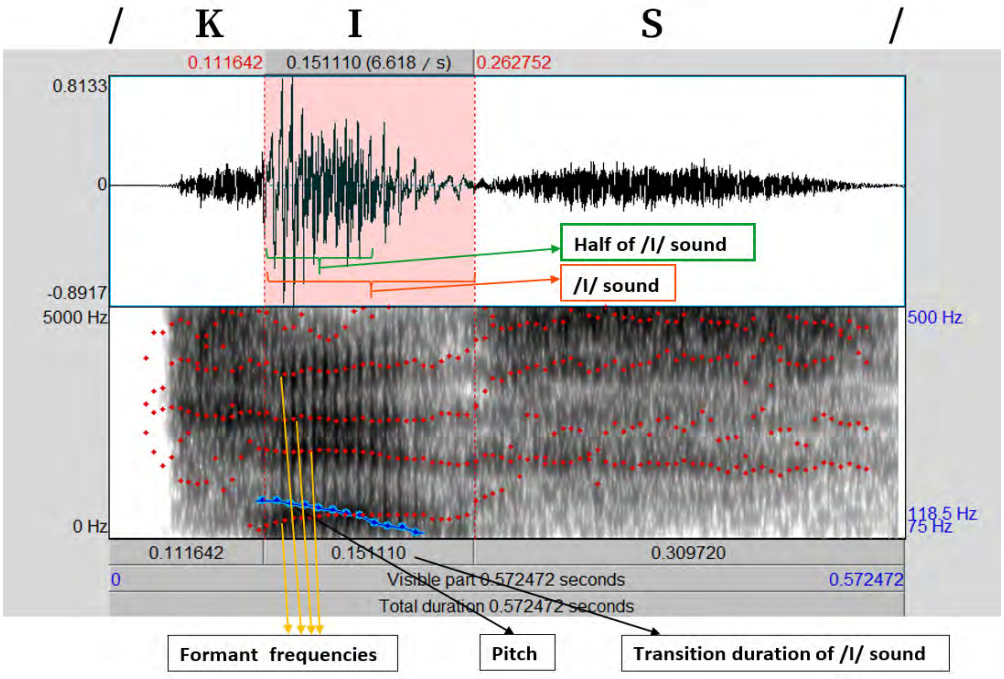
Vowel Transition-Duration in ms by Hillenbrand et al. (2001)

Vowel	voiced initial consonant, voiced final consonant	unvoiced initial consonant, voiced final consonant	voiced initial consonant, unvoiced final consonant	unvoiced initial consonant, unvoiced final consonant	All consonant environments
/I/	190	174	137	116	153(41.7)
/ʌ/	215	178	146	118	162(49.2)

In this study, the researchers at first, listened to the speech of all participants and decided whether the results of participants' productions were close to the target sound or too far away from it. If the participants' sounds were too far away from target sound, the researchers considered poor score (=9), and if participants' sounds were close to the target sounds then the researchers measured participants' vowels & consonants accuracy by Praat software; in this case participants' scores were between (1 to 8). Figure 5 shows the spectrum of the sound /I/ in the word "kiss" which was articulated by a learner.

Figure 5

The Spectrum of the Sound /I/ in the Word "kiss"



Based on each sound, which had its own F1, F2, F3, and F4 and transition-duration, the researchers rated participants' accuracy in vowels or consonants from 1 to 8. Table 5 shows the goodness of consonants' sounds rating on an 8-point scale used in this study.

Table 5

Consonants' Border Area

Very good	=	**Y or up till Y±133 Hz**	⇨	**1≤Z≤3**
Hybrid	=	from Y±133 up till Y±417 Hz	⇨	4≤Z≤6
Poor	=	Y±418 or more	⇨	7≤Z≤8

Y= Appropriate frequency, Z= Score

In this research, the researchers measured participants' accuracy in F1 and F2 and F3 of vowel sounds and the transition-duration, then the mean of formants and duration was considered as the final score of the participants. Table 6 and 7 shows the vowels' border area for F1, F2, and F3 rating on an 8-point scale used in this study.

Table 6

Vowels' Border Area for F1

Very good	=	**Y or up to Y±100 Hz**	⇨	**1≤Z≤3**
Hybrid	=	from Y±101 until Y±200 Hz	⇨	4≤Z≤6
Poor	=	Y±201 or more	⇨	7≤Z≤8

Y= Appropriate frequency, Z= Score

Table 7

Vowels' Border Area for F2 and F3

Very good	=	**Y or up till Y±130Hz**	⇨	**3≤Z≤1**
Hybrid	=	from Y±131 until Y±260 Hz	⇨	6≤Z≤4
Poor	=	Y±261 or more	⇨	8≤Z≤7

Y= Appropriate frequency, Z= Score

The duration of /I/ and /ʌ/ was fundamental base to measure participants' accuracy in two vowel sounds. Therefore, based on Table 4 the researchers first checked the participants' transition-duration in millisecond. If participants' duration of /I/ was close or more than /i/ (255ms) and for /ʌ/ was close or more than /ɑ/ (328ms), the researchers scored 9 for their accuracy.

Procedure

At first, to ensure the applicability and compatibility of the aforementioned instruments in this study, a sample of KET was piloted with 30 EFL learners who had the same characteristics of the main sample of the study. Next, the researchers piloted the pre-treatment test with 30

nonparticipant students. The test includes 81 items that were categorized in three tasks in order to measure participants' accuracy in pronunciation of different sounds (i.e., /θ/, /ð/, /l/, /s (s, z)/, /ɹ/, /I/, /ʌ/, /w/, /ə/). After item analysis, from 81 items, the best-case scenario was to omit 22 items based on the results obtained from each subsection. 59 items were left in the final version of the test in three different tasks:

1) Word reading task (28 words)
2) Sentence reading task (26 words)
3) Picture description task (5 words)

Each subsection had either 6 or 7 questions (items). The estimated reliability for the modified test was 0.903.

Afterwards, the piloted sample of KET was administered to 117 EFL learners, and based on the results of KET, 89 participants whose scores were one standard deviation above and below the mean were selected as the main participants in this study. Next, the selected participants (N=89) were divided into two experimental groups (i.e., recast (N=29) and prompt (N=30)) and a control group (N=30). Before having any treatment, the piloted pre-treatment test of the study was administered to the participants of the three groups to identify the pronunciation accuracy level of the participants. There were three instructional treatments for participants. Recast group received recast CF, prompt group received prompt CF and a traditional instruction (teacher-centered instruction) with no feedback was used for the control group. In recast group the participants received recast CF to produce meaningful outputs with adequate accuracy in the pronunciation of vowels and consonants. An example for the recast CF in the treatment is as follows.

Student1: I saw a /ʃɪp/ in the island.
Student2: She saw a /ʃiːp/.
Teacher: /ʃɪp/
Student2: She saw a /ʃɪp/ in the island. (Saito, 2013).

In prompt group whenever learners produced a word without having enough accuracy in pronunciation of vowels and consonants, the researchers prompted participants by applying some clarification requests (e.g., "I don't understand") or (e.g., "Excuse me?"). Another example representing the CF in the prompt group is as follows.

Student1: I saw a /ʃɪp/ in the island.
Student2: She saw a /ʃiːp/ in the island.
Teacher: Excuse me?
Students2: She saw a /ʃɪp/ in the island. (Saito, 2013).

Each group went through 10 sessions of instruction and each session took about 60 minutes. It is worth noting that the participants participated in online classes, and all classes were held online by adobe connect software. Each session, the following instructions took placed as treatments. The researchers started to warm up about five minutes by using words which were related to the target sound by a short story. Next About 10 minutes the researchers described how to produce target sounds (each session one sound). After that about 10 minutes, the learners were supposed to read around 50 words that had the target sound with various positions (initial, middle, final).

The learners in the two experimental groups received CF from the researchers based on their groups (recast and prompt) and no CF for control group. In the next stage about 10 minutes movies were played on the screen that were related to the way how the learners could pronounce the sounds. All the movies were produced by native English teachers. At the end, in about 25 minutes, learners exercised different tasks collected from different pronunciation books written by Baker (2006), Baker and Goldstein (2007) and Mojsin (2016). In each part of the classroom activities, the learners in the groups received CF based on their groups (recast CF for the recast group, prompt CF for the prompt group and a traditional instruction with no feedback for the control group).

After 10 sessions of classroom activities and treatments, the post-test with 59 items in three different tasks were administered to the participants of the three groups. For the post-test, the participants' speech was recorded by their phone or the researchers recorded their speech by speech analysis software (Praat). The Participants' vowels and consonants accuracy were measured by the researchers during listening to the participants' speeches which were recorded.

Results

Initially, in order to make sure that the three groups were homogenous both in terms of language proficiency and speaking ability (as it is closely related to the dependent variable of the study, i.e. pronunciation), a two-way Analysis of Variance (ANOVA) was run on the three groups' both total KET scores and the speaking score of the KET. Table 8 shows the descriptive statistics of the three groups' scores with those regards.

Table 8

Descriptive Statistics of Scores Obtained from KET and its Speaking Section by the Three Groups

	Test	N	Min.	Max.	Mean	SD	Skewness Ratio
Recast	KET	29	21.00	32.00	27.0172	3.44208	-.461
	Speaking	29	9.50	15.00	12.1724	1.55997	-.288
Prompt	KET	30	22.00	33.50	27.3333	3.60156	.307
	Speaking	30	10.00	15.50	12.7667	1.66471	-.194
Control	KET	30	21.00	34.00	26.8167	4.00750	.951
	Speaking	30	10.00	15.50	12.3333	1.98413	.703

As is evident from Table 8 above, the skewness ratios of all six sets of data fell within the acceptable range of ±1.96. Moreover, checking the Levene's test of equality of error variances, the results showed that variances among the six subgroups were not significantly different (KET: $F_{(2, 86)} = .433$, $p = 0.650$; Speaking: $F_{(2, 86)} = 1.956$, $p = .148 > 0.05$). Accordingly, running a two-way ANOVA was legitimized. Table 9 below shows the results of the tests of between-subjects effects.

Table 9

Two-Way ANOVA: Tests of Between-Subjects Effect

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	KET	4.069[a]	2	2.035	.149	.862
	Speaking	5.604[b]	2	2.802	.917	.403
Intercept	KET	65132.561	1	65132.561	4772.634	.000
	Speaking	13734.461	1	13734.461	4496.737	.000
Group	KET	4.069	2	2.035	.149	.862
	Speaking	5.604	2	2.802	.917	.403
Error	KET	1173.650	86	13.647		
	Speaking	262.671	86	3.054		
Total	KET	66329.000	89			
	Speaking	14012.500	89			
Corrected Total	KET	1177.719	88			
	Speaking	268.275	88			

a. R Squared = .003 (Adjusted R Squared = -.020); b. R Squared = .021 (Adjusted R Squared = -.002)

As Table 9 indicates, the significance values for both KET ($F_{(2,86)}$ =0.149, p=0.862>0.05) and its speaking section ($F_{(2,86)}$ =0.917, p=0.403> 0.05) were non-significant. Accordingly, the researchers were rested assured that the three groups bore no significant differences in terms of language proficiency at the outset. After making sure of the initial homogeneity of the participants, the main study started with administration of the pronunciation test to the three groups. This was followed by the treatments in the experimental groups and traditional instruction in the control group. At the end of the treatment, a parallel form of the pronunciation test administered before the treatment was administered to the three groups, as well. The descriptive statistics of the scores obtained from the two administrations are presented in Table 10.

Table 10

Descriptive Statistics of Scores Obtained from Pre-Treatment and Posttest Administration by the Three Groups

	Test	N	Min.	Max.	Mean	SD	Skewness Ratio
Recast	Pre-Treatment	29	254.00	400.00	348.2759	37.72825	-1.742
	Posttest	29	119.00	224.00	184.0345	26.81748	-1.643
Prompt	Pre-Treatment	30	270.00	408.00	361.2333	33.09931	-1.703
	Posttest	30	103.00	245.00	173.9000	33.48530	-.124
Control	Pre-Treatment	30	299.00	407.00	365.4333	22.84382	-1.653
	Posttest	30	179.00	302.00	236.2000	28.07551	.756

As it is evident from Table 10, the inspection of skewness ratio values for all distributions of scores showed that none of the distributions were non-normal as the skewness ratios fell within

the legitimate range of ±1.96. To check if the differences are statistically significant, an Analysis of Covariance (ANCOVA) was run. Before running the test, the assumption of ANCOVA were checked. As reported above, the assumption of normality was in place. The other required three assumptions were linearity of the relationship, homogeneity of regression slopes, and equality of variances. For linearity, a scatterplot of scores of the covariate (pre-treatment scores) and dependent variable (posttest scores) were created, the inspection of which showed no indication of a curvilinear relationship. For homogeneity of regression slopes, an interaction general linear model was created. The results showed no significant interaction between treatment and pre-treatment test scores ($F_{(1, 56)}$ =1.239; p=.280>.05). Finally, the equality of variances was checked through Levene's test of equality, the result (F (2, 86) =.957, p=338>.05) of which indicated no significant difference in the variance of the posttest scores of the three groups. Having all the assumptions in place, the ANCOVA was run (Table 11).

Table 11

ANCOVA: Tests of Between-Subjects Effect

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	70155.117[a]	3	23385.039	27.527	.000	.493
Intercept	11014.142	1	11014.142	12.965	.001	.132
Pretest	3301.223	1	3301.223	3.886	.052	.044
Group	62163.361	2	31081.680	36.586	.000	.463
Error	72211.243	85	849.544			
Total	3638654.000	89				
Corrected Total	142366.360	88				

a. R Squared =.493 (Adjusted R Squared =.475)

As reported in Table 11, after adjusting the posttest scores for the possible effects of the pretest, there was a significant difference among the three groups on the posttest scores ($F_{(2,85)}$=36.586, *p*=.000, partial eta squared=.463 representing a large effect size). Finally, Table 12 presents the results of Scheffe post hoc test to locate the differences. The results in Table 12, below, shows that the difference between the recast and control groups' pronunciation scores was significant (MD= -48.819, SE=7.78, p=.000<.05) after the treatment. Therefore, it can be concluded that *recast does have any significant effect on vowel and consonant pronunciation accuracy*. Moreover, the difference between the prompt and control groups' pronunciation scores was significant (MD=-61.48, SE=7.54, p=.000 <.05) after the treatment. Therefore, *prompt does have any significant effect on vowel and consonant pronunciation accuracy*. Finally, the difference between the recast and prompt groups' pronunciation scores was not significant (MD=12.662, SE=7.7, p=.104>.05) after the treatment. Therefore, it can be concluded that *there is no significant difference between the effect of recast and prompt on the EFL learners' accuracy in vowel and consonant pronunciation*.

Table 12

ANCOVA: Scheffe Post Hoc Test

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval for Difference	
					Lower Bound	Upper Bound
Recast	Prompt	12.662	7.698	.104	-2.643	27.967
	Control	-48.819*	7.778	.000	-64.283	-33.354
Prompt	Recast	-12.662	7.698	.104	-27.967	2.643
	Control	-61.481*	7.537	.000	-76.467	-46.495
Control	Recast	48.819*	7.778	.000	33.354	64.283
	Prompt	61.481*	7.537	.000	46.495	76.467

Based on estimated marginal means (The mean difference is significant at the .05 level)*

Discussion

The first aim of conducting this study was to investigate the effect of recasts on EFL learners' vowel and consonant pronunciation accuracy. The results of ANCOVA revealed that recasts had a significant and positive effect on EFL learners' pronunciation accuracy of consonants and vowels. The findings are in line with those of different studies (e.g., Fatemi & Harati, 2014; Gooch et al., 2016; Khojastehnejad & Zareipur, 2017; Lee & Lyster, 2015; Lyster, 2004; Sato & Lyster, 2012), who found that recast were effective in improving different language skills and components. However, the findings are not in agreement with those of Ellis (2007) who reported that recast had no significant effect on the production accuracy of language learners. Likewise, the results are not also in line with those of Lyster and Ranta (2007), who found that recast had no effect in simplifying the uptake of second language forms. One possible justification for the findings might be the fact that recasts draw the language learners' attention to second language forms and allow them be conscious of the mismatches between their interlanguage and second language forms in the input that they will reconstruct their interlanguage toward the learning of target language forms (Doughty, 2001). The other significant reason why recast basically serves as a suitable move to improve pronunciation accuracy of consonants and vowels is that recasts can make second language sounds noticeable and salient to EFL learners and consequently, inspire the formation and improvement of a novel phonetic category in their common phonological space (Saito, 2011).

The second drive of conducting this study was to examine the effect of prompts on EFL learners' pronunciation accuracy of consonants and vowels. The results of ANCOVA showed that prompts had a significant positive effect on EFL learners' pronunciation accuracy of consonants and vowels. The findings are in line with those of Lyster (2004), who reported the effectiveness of prompts in improving both oral and written production of language learners in general. The findings in this regard are also in proportion to those of several studies (e.g., Ammar, 2003; Lee & Lyster, 2015; Lyster, 2004; Lyster & Mori, 2006; Sato & Lyster, 2012; Yang & Lyster, 2010), who reported a positive effect of prompts on different aspects of language learning in general and pronunciation accuracy of both consonants and vowels in particular.

The most essential underlying reason for the effectiveness of prompts is the theory of skill-acquisition (Anderson, 2005). As rightly Dekeyser (2001) asserted, repeated practice plays a

central role in altering the declarative knowledge into procedural knowledge, consequently prompts are "effective both for developing accurate knowledge by restructuring their already existing knowledge and for enhancing the practice effect by pushing" the language learners to self–repair their inaccurate pronunciations and utterances (Sato & Lyster, 2012, p. 594). The findings can also be supported by argument that prompts via meta-linguistic cues allow EFL learners to perceive the difference between their consonants and vowels erroneous formulation and accurate formulation for self-correction in comparable cases (Benhima & Slaoui, 2020).

The third driving force behind conducting this study was to inspect the difference between the effects of recasts and prompts on EFL learners' accuracy level of vowel and consonant pronunciation. The results of ANCOVA showed that there was no significant difference between the effect of recasts and prompts on EFL learners' vowel and consonant pronunciation accuracy. In other words, the results provide practical support for the estimation that both recasts and prompts were found beneficial in the same way on EFL learners' vowel and consonant pronunciation accuracy.

The findings of this study are in agreement with those of Lyster (2004), who found that there existed no significant difference between the effect of recasts and prompts in the oral production of language learners. Similarly, the findings of the present study also confirm the results of the study conducted by Sato and Lyster (2012) who concluded that there was no significant difference between the effects of recast and prompt in the accuracy of language development of learners. However, the findings are not in line with those of Yang and Lyster (2010). The most essential underlying reason for the equal effectiveness of recasts and prompts might be the fact that recasts happening in proper settings can simplify the encoding of novel declarative knowledge, while prompts serve to help language learners in the transition of declarative knowledge to procedural one (Leeman, 2003). In other words, providing prompts can basically improve control over those linguistic forms which have already been internalized. The provision of both recasts and prompts by teachers can basically pave the way for "comparison of the erroneous utterance (via recast), or with an opportunity to test another hypothesis (via prompts)" (Sato & Lyster, 2012, p. 595) throughout communication. That is, building on monitoring perceptual theory and the theory of skill-acquisition (Anderson, 2005), the provision of CF can simplify language learners' monitoring once they cannot identify or correct their own errors.

Conclusion

Based on the findings of the first two research questions, both recast and prompt were found to have a significant and positive effect on EFL learners' pronunciation accuracy of consonants and vowels. Consequently, EFL teachers can benefit from the findings as they can take advantage of both types of error correction strategies (i.e., recast and prompt) in their classroom to develop EFL learners' pronunciation accuracy of consonants and vowels.

Moreover, based on the findings of the third research question, EFL teachers are recommended to use both recast and prompt "in accordance with their students' language abilities and content knowledge… without abandoning one at the expense of the other" (Lyster, 2002, p. 251). In addition, EFL teachers are also suggested to intentionally supply different tasks and activities

wherein both recast and prompt are provided so that EFL learners will be able to accurately pronounce newly offered vocabulary items in general and the pronunciation accuracy of different vowel and consonant sounds in particular. According to Han (2002), one important issue is language teachers' awareness of learning process, which is regarded as a significant and determining aspect for CF. Consequently; EFL teachers are fortified to get familiar with various error correction strategies that might have an influence on their quality of teaching.

As for EFL learners, the results might suggest that being familiar with and applying different types of CF in general and recasts and prompts in particular would help them improve their level of pronunciation accuracy of vowels and consonants. The results might also recommend that EFL learners should become more conscious and more alert on the type of feedback they receive and judge, based on their own cognitive and personality features, which type of CF (i.e., recast or prompt) is more attuned with their needs. The findings might have significant implications for syllabus designers and material developers since they can draw on the results of the present study to form curricula, generate syllabi, develop materials, and accordingly conduct pronunciation courses. Some suggestions for further research can also be provided. In this study only two types of CF, namely, recast and prompt, were applied. Further research can be conducted applying other types of CF such as metalinguistic feedback. While this study focused on pronunciation accuracy of vowels and consonants of EFL learners, other studies within the same design and caliber could seek other features of pronunciation such as stress and intonation.

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