Pronunciation of the English Voiceless Postalveolar Affricate /tʃ/ in Yemeni EFL Learners’ Production

Njah Ahmed Khamis Bin Hadjah  
School Of Languages, Civilisation and Philosophy  
Universiti Utara Malaysia  
e-mail: n.a.b.92999@gmail.com

Rohaiza Jupri (Corresponding author)  
School Of Languages, Civilisation and Philosophy  
Universiti Utara Malaysia  
e-mail: rohaiza@uum.edu.my

Abstract: Achieving a near-native speaker’s pronunciation is so essential for EFL learners. However, many factors contribute to the challenges faced by EFL learners, mainly due to the difference in the sound system of English Language and that of their first language. For this reason, Arab learners of English Language may mispronounce some English sounds. This paper analyzed one of the few problematic sounds to the Arab Yemeni EFL learners - the pronunciation of the English voiceless postalveolar affricate /tʃ/. The study which has a quantitative case study design uses four Yemeni EFL postgraduate students as its participants. The participants’ pronunciations of /tʃ/ sound in the initial, middle and final word-positions were analyzed using Praat phonetic software. The findings of the study showed that Yemeni EFL learners have difficulties in producing the /tʃ/ sound, especially in the initial and final positions, and deaffrication of /tʃ/ occurred in the pronunciation of the four participants. The current study is expected to be of value, particularly for EFL learners, teachers, as well as material writers.

Keywords: Pronunciation, Voiceless Postalveolar, Affricate, Deaffrication
1. Introduction

One of the important facts about the enquiry of a language is that it is a communicative process with an aide of exchanging information between individuals via a common system of symbols, signs, or behaviors (Na’ama, 2011). Learning a new foreign or second language such as English, involves learning a variety of skills, for example vocabulary, grammar, pragmatics, etc. In order to communicate effectively and successfully, EFL learners need to become proficient in the use of the phonological, morphological, syntactic and semantic elements of the language being taught (Hebert, 2002). One of the most crucial elements for learning a new language is pronunciation. This is because of the fact that regardless of having a good command of English language vocabulary and grammar, speakers of English Language will be unintelligible when their pronunciation of English sounds is poor.

2. Literature Review

Nowadays, when we discuss the objectives of teaching pronunciation, researchers mostly “revolve around the concepts of intelligibility and comprehensibility” (Atli and Bergil, 2012). Intelligibility is regarded as the extent to which the interlocutors can understand each other; comprehensibility is an assessment of how difficult or easy a person’s pronunciation is to be understood and accentedness is considered as an assessment of how much individual’s speech phonologically is dissimilar to the variety of local (Derwing (2010). Abercrombie (1991) as cited in Varasarin (2007) stated that to be an intelligible speaker means to understand and to be understood. Grice (1975) argued that all communication between individuals is done in an intentional way and that understanding is an issue of interpreting what is intentionally meant as opposed to decoding the referential meaning of what is uttered. However, if the pronunciation is grossly inaccurate, then meanings will be distorted or buried Varasarin (2007). Thus, pronunciation is considered as the most essential element in oral skills learning of an L2 (MacDonald, 2002).

Thompson and Gaddes (2005) further confirmed that “while adult students may never be able to pass as native-speakers, improving pronunciation can improve learners’ confidence and motivation” (p. 2). Likewise, Fraser (2000a) cited in Gilakjani (2011) emphasized that to be able to speak English involves other essential “sub-skills of which pronunciation is by far the most important” (p. 2). Fraser further highlighted that examples of the other sub-skills of speaking English Language are vocabulary, grammar in addition to pragmatics. Pronunciation is considered as the most important sub-skills for mastering English Language because “with good pronunciation, a speaker is intelligible despite other errors; with poor pronunciation, understanding a speaker will be very difficult, despite accuracy in other areas” Fraser (2000a) as cited in (Gilakjani, 2011, 2). However, despite the importance of pronunciation, many teachers have neglected teaching it in the field of EFL teaching. Like the other skills in the English language, such as grammar, writing, reading etc., pronunciation is fundamental for EFL/ESL learners to improve communicative efficiency and competency as Ahmad and Nazim (2013) confirmed.
A great number of L2 learners consider the main obstacle that they face when they speak the L2 is pronunciation which they regard as the main cause of their difficulties in communication using that language Al-Saidat (2010) and Gilakjani (2011). This is in line with Fraser (2000) who assured that the major difficulty that several learners of L2 have is in pronunciation mostly even after having many years of instructions of English Language. As for Arabic learners of English Language, Rababah (2003) as cited in Al-Shaebi (2017) emphasized that a great number of Arab learners (from various Arab countries like Yemen, Sudan, Egypt, Saudi Arabia and Jordan) have some problems when they speak English, and more specifically with respect to pronunciation errors. He found that the subjects of his study encountered greater difficulty of articulation especially if a syllable includes more consonants. Furthermore, Baloch (2013) declared that L1 interference evolves in any area of the target language, such as accent and grammar and pronunciation. Accordingly, it is difficult for Arab EFL learners to produce certain sounds of English Language, especially those which are not found in their mother tongue language.

Some researchers highlighted the causes of such difficulties that Arab face when they produce English sounds. According to Na’ama (2011), obviously, Arabic and English differ in their linguistic system. Both of them have their own distinct language components, phonology, morphology, syntax, and semantics. Consequently, the phonological system of English Language, specifically segmental features, is different from that of Arabic. For this reason, when Arabic learners of English speak English, the phonology system of Arabic Language plays a crucial role in producing phonology of English Language, more specifically concerning the language transfer (Al-Shaebi, 2017). In addition to that, ElMahdi and Khan (2015) emphasized a general fact that the consonant sounds of English and Arabic differ in number, in place and manner of articulation. Ashour (2017) stated that English alphabets are just 26 letters that usually make about 44 sounds (24 consonants and 20 vowels: 6 short vowels, 6 long vowels and 8 diphthongs) whereas Arabic contains 28 (Chouchane, 2016). Like in many other Arabic dialects, “the Najdi Arabic consonant inventory lacks six consonant sounds that the English language consonant inventory has, which are /p/, /v/, /ʃ/, /ʒ/, /ɹ/, and /ŋ/” (Al-Feneekh,1983; Al-Sweel, 1981) cited in (Alqarni, 2013, 3).

Several studies have contributed to identifying certain areas of obstacles which hamper communication through mispronouncing English phones and sounds by individuals such as Kang (2013), Tuan (2011), and ElMahdi and Khan (2015). However, only very view studies have been conducted on the accuracy of pronouncing the problematic sounds produced by Arab EFL learners using Praat software such as the study by Ali (2013). In the current body of literature, there are many studies that have already proven the difficulty in pronouncing the English affricate /tʃ/, as well as some other English sounds that are absent in Arabic Language for Arabic learners of English Language such as the studies by Alqarni (2013), ElMahdi and Khan (2015), Al Yaqoobi, Ali and Sulan (2016), Jabali and Abuzaid (2017), and Ababneh (2018). They found that the /tʃ/ is sometimes pronounced as /ʃ/ by Arab learners of English Language. According to Alqarni, the /tʃ/ sound was more problematic for learners in
the final word-position. However, Al Yaqoobi, Ali and Sulan found that the /tʃ/ sound was more difficult for learners to pronounce when it was in the medial word-position. There has been a minimal focus that has been given so far to the research on the pronunciation problems of the Arabic EFL learners and the awareness of the problems and difficulties that learners face can potentially provide a base for planning, designing and producing materials in future (Ahmad and Nazim, 2013) as it can assist teachers to rectify mispronunciations of their students and their own, too. Thus, this study is an attempt at investigating the pronunciation of the English voiceless postalveolar affricate /tʃ/ in Yemeni EFL learners’ production using Praat. It is hoped that the outcomes of this study can benefit EFL learners in general and Yemeni EFL learners in particular.

2.1 The Markedness Differential Hypothesis (MDH)

This theory is related to this study because it is “one of the phonological acquisition theories that make a connection between native language transfer and language universals” (Rungruang, 2017, p. 217). This theory makes the prediction that if language A has marked structure at a particular point and language B has at this point unmarked or less marked structure, then speakers of A should more quickly acquire the unmarked structure in B than speakers of B should acquire the marked structure in A. To put it simply, marked structures are difficult to learn, particularly if those in target language (TL) are more marked than those in native language (NL). In other words, features of a target language (English Language in this study) which are not similar to those of a learner’s L1 (Arabic Language in this study) but more common in most of the world’s languages are considered to be easier for the learner to acquire. Applying this hypothesis can really help us describe the phonological differences between Arabic and English Languages and how such differences may affect the pronunciation of EFL learners. The hypothesis suggests that learners will find it difficult to acquire the English voiceless 32 postalveolar affricate /tʃ/ because it is regarded as more marked sound than /ʃ/- except for very few Arabic dialects which include a quite similar sound to the English affricate /tʃ/. Ashour (2017) affirmed that it is important to mention that there are other Arabic consonants that vary in their pronunciation among Arabs according to their dialect. For instance, Salim and Al-Badawi (2017) highlighted that the sound /tʃ/ is frequently found in colloquial Arabic but not in Standard Arabic. Similarly, Andrzej and Rouag (1993) and Hattami (2010) assured that some Arabic dialects, such as the Iraqi dialect, include the /tʃ/ sound and this have helped Iraqi learners pronounce words with such sound appropriately.

2.2. The Language Transfer Theory (LTT)

According to the language transfer theory, it is assumed that the learner’s first language (L1) will positively or negatively affect his learning a foreign language in second language acquisition (SLA). Gass and Selinker (1994) as cited in Alqarni (2013, p.10) assured that similarities between L1 of the learner and the target language “would result in fewer difficulties in the acquisition process, and vice-versa”. The Language Transfer Theory (LTT) is essential to this study because it is important to the process of L2 learning. This theory proposes that EFL learners may not produce
the voiceless postalveolar affricate /tʃ/ of English Language because of the interference (i.e. negative transfer) from their L1. L1 interference would be shown if the learners produced the /ʃ/ sound instead of producing /tʃ/ because the English /ʃ/ sound has a quite similar sound in the Standard Arabic ⟨ش⟩.

2.3. Contrastive Analysis Hypothesis (CAH)

Jasmine (2010) affirmed that Contrastive Analysis Hypothesis (CAH) was used to explain and predict learners’ errors by contrasting the difference between two languages. According to the hypothesis, elements in L2 that share similarity to the native language of the learners will be easier. In contrast, those contain different elements will pose greater difficulty to the learners. As proposed by Fries and Lado (1957), prediction of difficulties in learning L2 could be made by comparing the two languages. For instance, there is no equivalent sound in Standard Arabic Language to the English /tʃ/. Therefore, it is predicted that Yemeni EFL learners may face difficulties when producing it. They may reduce or simplify the /tʃ/ sound and pronounce it as /ʃ/ in order to make it more similar to their L1 sound, which is the sound of ⟨ش⟩.

3. Methodology

The design of the study was a quantitative case study design and the research questions were:

1. How do Yemeni EFL learners pronounce the English /tʃ/ sound?
2. To what extent does the environment (sound position in the word: initial, medial or final) in which the English /tʃ/ sound occurs affect the accuracy of their pronunciation?
3. What are the main types of substitutions of the English /tʃ/ sound?

The sample were four Yemeni EFL postgraduate students (2 males and 2 females) who had similar level of English Language proficiency based on their university placement test results and all of them had not had any type of exposure to a native English environment prior to the study. In order to investigate how the Yemeni EFL learners pronounce the English voiceless postalveolar affricate /tʃ/ the participants had to read a list of eighteen words consisting the target sound of the study –/tʃ/ in different positions (initial, medial and final) three times. A total of 216 word sounds that involved the frequencies of the pronunciation of the /tʃ/ sound by the participants (i.e. whether they pronounced it correctly or not) were later analysed using Praat software. The production of errors that the participants of this study pronounced in the investigated sound was considered as the dependent variable in this study. The independent variable of this study was the target sound positions in the word, with the three levels: initial, middle, as well as final. The spectrogram of the English voiceless postalveolar affricate /tʃ/ as analysed by Praat will be focused on. The /tʃ/ sound was identified by a closure for the stop part followed by a sharp release for the fricative aperiodic noise part as shown in Figures 1 and 2.
4. Results and Discussion
The results of the study are through frequency analysis of the most common errors in all three positions of the two sounds. They will be later discussed based on the research questions for each participant.
Figure 3 shows that Subject A-m had some problems in pronouncing the /tʃ/ sound. He had some difficulties in pronouncing this sound especially in the initial and final positions. In the initial and final positions, he pronounced the /tʃ/ sound fifteen times correctly (83%) while he substituted it with /ʃ/ sound in both positions three times (17%). In the medial position, he pronounced the /tʃ/ sound correctly in all the words that he read (100%).

Figure 4. Pronunciation of /tʃ/ sound by B – m

Figure 4 illustrates that subject B -m had some problems in pronouncing the /tʃ/ sound particularly in the medial and final positions. In the medial and final positions, he pronounced the /tʃ/ sound fifteen times correctly with a percentage of 83% but at times, substituted it with /ʃ/ sound in both positions three times (17%). In the initial position, he pronounced the /tʃ/ sound seventeen times correctly with a percentage of 94% and substituted it with /ʃ/ sound only once (6%).

Figure 5. Pronunciation of /tʃ/ sound by C-f
As shown in Figure 5, subject C-f also faced some difficulty in pronouncing the /tʃ/ sound in all the three positions and more specifically in the initial position. In the initial position, the subject pronounced the /tʃ/ sound correctly only twice (11%). On the other hand, she substituted it with /ʃ/ sound sixteen times (89%). In the medial position, she pronounced correctly the /tʃ/ sound fifteen times (83%) but she substituted it with /ʃ/ sound three times (17%). In the final position, she pronounced the /tʃ/ sound correctly for only fourteen times (78%), and substituted it with /ʃ/ sound four times (22%).

Figure 6 shows that the /tʃ/ sound is quite difficult to pronounce for subject D-f, especially in the initial and final positions. In the initial and final positions, the subject pronounced the /tʃ/ sound correctly for fifteen times (83%) but substituted it with /ʃ/ sound in both positions three times (17%). In the medial position, she pronounced the /tʃ/ sound correctly sixteen times (89%) and substituted it with /ʃ/ sound only twice (11%).

4.1 Pronunciation difficulty in the English voiceless postalveolar affricate /tʃ/

Research Question 1 aimed to find out how Yemeni EFL learners pronounce the English voiceless postalveolar affricate /tʃ/. In other words, this question aimed to find out if the English voiceless postalveolar affricate /tʃ/ was problematic to pronounce for Yemeni EFL learners. The findings provided evidence that the /tʃ/ sound did cause some difficulty to the participants of this study and thus to Yemeni EFL learners of English.

In general, the results of this study were to some extent, in line with the hypotheses employed in the study which are: the Markedness Differential Hypothesis (MDH), The Language Transfer Theory and Contrastive Analysis Hypothesis (CAH) as they are related to acquiring L2 phonology (Alotaibi, 2018). First, as cited in Rungruang
In this study, the subjects mispronounced the /tʃ/ sound in some words and substituted it with /ʃ/. Some researchers stated that the /tʃ/ sound is one of the problematic sounds to Arabic speakers of English Language. For instance, Watson (2002) cited in Elmahdi and Khan (2015) assured that some consonants such as /p/-/b/, /f/-/v/, /tʃ/-/dʒ/, etc., seem to be problematic for Arab learners of English. This is because of the absence of these oppositions in Arabic. Avery and Ehrlich (1992) also cited in Elmahdi and Khan (2015) listed some of the difficult English consonants for Arabic speakers of English Language such as /θ/, /ð/, /tʃ/, /ŋ/, /dʒ/, /r/. Another hypothesis used in this study was the Contrastive Analysis Hypothesis (CAH). Jasmine (2010) stated that this hypothesis claimed that prediction of difficulties in learning L2 could be made by comparing the two languages. For example, there is no equivalent sound in Arabic Language to the English /tʃ/ sound. Therefore, it is predicted that Yemeni EFL learners may face difficulties when producing it. They may reduce or simplify it (deaffrication) and pronounce it as /ʃ/ in order to make it more similar to its equivalent sound in their L1 which is (ش) and this was what the researcher found in this study. Deaffrication of /tʃ/ occurred in the pronunciation of all participants who pronounced it as /ʃ/ in some words. A general explanation of the subjects’ poor performance of the /tʃ/ sound in some words that they read could be L1 transfer. Wang (2009) emphasized that the transfer will function positively when there are similarities between the native language and target language, but will transfer negatively when otherwise. Therefore, since Arabic lacks the exact sounds of English, even with those sounds shared between the two languages, they are somehow different in place and manner of articulation, and have different phonetic realizations.

4.2 The effect of sound environment (initial, middle and final position of /tʃ/ in words) on pronunciation accuracy

For Research Question 2 on the extent of the environment (sound position in the word: initial, middle or final) in which /tʃ/ occurs influences the accuracy of their pronunciation, the results of this study showed that the /tʃ/ sound was difficult for Yemeni learners, especially when it occurred in the initial and final positions.

In this study, the total number of words that were read by each participant was eighteen. There were four participants who read the eighteen words three times. Thus, the total number of words pronounced by all participants was 216. Hence, each position included 72 tokens. The total number of the correct pronunciation of /tʃ/ in
the initial position was only 49 with a percentage of 68% and substitution occurred 23 times (32%). For the medial position, the total number of the correct pronunciation of /tʃ/ was 64 with a percentage of 89%, and substitution occurred only 8 times (11%), whereas for the final position of /tʃ/, the total number of the correct pronunciation was 59 with a percentage of 82%, and 13 times of substitution (18%) as shown in Figure 6.

![Figure 6. Frequencies and percentages of the total number of correct pronunciations and substitutions of /tʃ/ by ALL participants.](image)

Hence, it can be deducted that the pronunciation of /tʃ/ was more difficult in the word-initial position for the subjects of this study, followed by the word-final position and the least mispronunciation of /tʃ/ occurred in the medial-word position.

Concerning the effect of the environment (sound position in the word) on the accuracy of EFL learners’ pronunciation, Tantthis (2013) also concurred that the Thai students also encountered problems in the initial and final consonant positions that include the /tʃ/ sound. Furthermore, for Arabic learners of English Language, Alqarni (2013) found that the pronunciation of /tʃ/ sound was more difficult in word-final position than word-initial. However, Al Yaqoobi, Ali and Sulan (2016) found that learners mispronounced the /tʃ/ sound more when it was in the medial position.

### 4.3 Main types of mispronunciations (substitutions)

This will address the third research question on the main types of substitutions of the English /tʃ/ sound for the Yemeni subjects. For most of them, the type of substitution of the voiceless postalveolar affricate /tʃ/ was only deaffrication. The /tʃ/ sound was simplified and thus it was pronounced as /ʃ/. This will be summarized as follows:
Pronunciation of the English Voiceless Postalveolar Affricate

a) Subject A-m

i. In the initial position, deaffrication took place three times. Subject A-m pronounced chief [ʧiːf] as *[ʃiːf] three times and this could be because the word has been borrowed from English Language to some Arabic dialects and hence, Arabic speakers of English in some countries such as in some areas of Yemen, have been using this word with /ʃ/ sound. This could be because of the absence of /tʃ/ and the presence of /ʃ/ in Arabic language.

ii. In the medial position, deaffrication did not occur at all.

iii. In the final position, deaffrication took place three times in the word ‘lunch’.

b) Subject B-m

The results showed that /tʃ/ was pronounced as /ʃ/ “deaffrication” by the subject in the following cases:

1. In the initial position, deaffrication took place only once in the word chief [ʧiːf]. Subject B-m pronounced it as *[ʃiːf] and this could be because of the same reason as stated earlier.

2. In the medial position, deaffrication took place three times in the word ‘blencher’ [ˈblɛnʧə]. Subject B-m did not pronounce the /tʃ/ sound correctly. Instead, he pronounced it as /ʃ/, and therefore he pronounced the word ‘blencher’ [ˈblɛnʧə] as *[ˈblɛnʃə].

3. In the final position, deaffrication of the /tʃ/ sound took place three times: twice in the word ‘such’ and once in the word ‘lunch’. Subject B-m pronounced ‘such’ [sʌʧ] as *[sʌʃ] (twice) and ‘lunch’ [lʌnʧ] as *[lʌnʃ] (only once).

c) Subject C-f

1. In the initial position, deaffrication took place sixteen times. Subject C-f pronounced ‘cheap’ [ʧiːp] as *[ʃiːp] (three times); ‘cheat’ [ʧiːt] as *[ʃiːt] (three times); ‘cheese’ [ʧiːz] as *[ʃiːz] (three times); ‘cheek’ [ʧiːk] as *[ʃiːk] (three times); ‘cheep’ [ʧiːp] as *[ʃiːp] (three times) and ‘chief’ [ʧiːf] as *[ʃiːf] (only once) and this could be because Subject C-f has been affected so much by her L1 which was Arabic Language that does not include the /tʃ/ sound.

2. In the medial position, deaffrication took place three times in the word ‘texture’ [ˈtekʃə]. She pronounced it as *[ˈtekʃə].

3. In the final position, deaffrication of the /tʃ/ sound took place four times: three times in the word ‘such’ and once in the word ‘lunch’. She pronounced ‘such’ [sʌʧ] as *[sʌʃ] and ‘lunch’ [lʌnʧ] as *[lʌnʃ].

d) Subject D-f

1. In the initial position, deaffrication occurred three times. Subject D-f pronounced ‘cheap’ [ʧiːp] as *[ʃiːp] (only once); ‘cheat’ [ʧiːt] as *[ʃiːt] (only once) and ‘cheek’ [ʧiːk] as *[ʃiːk] (only once).
2. In the medial position, deaffrication took place twice in the word ‘lecture’ ['lɛkʃə]. She pronounced it as *[lɛkʃə].

3. In the final position, deaffrication of the /tʃ/ sound took place three times in the word ‘lunch’. Subject D-f pronounced ‘lunch’ [lʌnʧ] as *[lʌnʃ].

Therefore, the main type of the /tʃ/ mispronunciations found in this study was deaffrication. The participants pronounced /ʃ/ instead of pronouncing /tʃ/ in some words that they read. This finding supported “The Language Transfer Theory” which assumes that if the learner’s L1 and the L2 are similar, the L1 will actively aid the L2 in learning. However, in the case of differences between L1 and L2, L1 functions negatively. The theory suggests that Yemeni EFL learners of English may not produce the English voiceless postalveolar affricate /tʃ/ because of the interference (negative transfer) from their L1. The First Language interference was clearly shown because learners produced the Arabic voiceless postalveolar fricative /ʃ/ instead of producing the English voiceless postalveolar affricate /tʃ/. This was found in this study in some words. Such substitution of the English postalveolar affricate /tʃ/ that the researcher found in this study was also found in previous studies such as in the study by Jabali & Abuzaid (2017). These two researchers conducted a study on “Pronunciation Errors Committed by Palestinian Students at An-Najah National University” and one of their findings was that the /tʃ/ sound was sometimes realized as /ʃ/ sound.

In the current study, the /tʃ/ sound has been considered as one of the problematic sounds when it occurred in all the three positions as this result has been proven by some previous researchers. First, according to Amer (2001), /ʃ/ and /tʃ/ cause more problems as they are often confused especially in initial position. He added that /ʃ/ is wrongly used for /tʃ/. For example (cheap) and (sheep) are pronounced */ʃip/ instead of /ʃip/ for the first and /ʃɪp/ for the second. Second, Alqarni (2013) found that pronunciation of /tʃ/ was more difficult in word-final position than word-initial. Third, one of the findings of the study by Al Yaqoobi, Ali and Sulan (2016) was that the learners mispronounced the /ʃ/ sound more when it was in the middle position.

In other words, the participants were able to pronounce the English /tʃ/ sound slightly correct and this could be because that they had already been exposed to this sound many times during their previous learning of English Language because at the time of the study, all the participants were postgraduate students. Likewise, in the study by Luviya (2016, the researcher discussed some of the mispronunciation of English consonants by Javanese students in English Literature of Sanata Dharma University. One of the outcomes of this study as stated by Luviya was that palatal voiceless fricative /ʃ/ and palatal voiceless affricate /tʃ/ are not difficult enough to be articulated by the respondents as shown by the accuracy score above 60%.

5. Conclusion

Yemeni EFL learners have difficulties in producing the English voiceless postalveolar affricate /tʃ/. As the results of the study have shown, the four subjects of this study mispronounced the /tʃ/ sound several times in the words that they read, and the environment greatly affected the accuracy of the participants’ pronunciation of the /tʃ/ sound because the four participants had different pronunciations of the /tʃ/ sound when
it occurred in the initial, middle and final word-positions. In general, the subjects had more problems in pronouncing the /tʃ/ sound when it occurred in the initial and final word-positions. And finally, deaffrication of the /tʃ/ sound occurred for all participants for some of the words. Further research in investigating the /tʃ/ sound is recommended by using more subjects. This study had a quantitative research design and for future research, mixed method is recommended by interviewing the participants of the study or EFL teachers who have enough experience in teaching English as a second/foreign language so that they can be interviewed by the researcher to support and provide richer data to strengthen the findings of the study.

*** This research received no specific grant from any funding agency in the public, commercial, or not-for profit sectors.

References


Pronunciation of the English Voiceless Postalveolar Affricate


