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ANALYSIS OF INDONESIAN EFL LEARNERS' PERFORMANCE IN PRONOUNCING ENGLISH CONSONANT CLUSTER

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Abstract

Pronunciation is essential in oral communication in order to convey messages effectively. Nevertheless, pronunciation can be challenging to master for EFL learners. One of the reason is because the different phonetic system between the native language and English as the target language. Particularly for Indonesian EFL learners, some research found that one of the difficulties that the learners encountered in learning English pronunciation is learners are unfamiliar with some sounds in English, since it does not exist in Bahasa Indonesia. Among them are consonant cluster, consonant cluster is scarcely found in Bahasa Indonesia. For example the word 'thirst' consist of three consonants, while Indonesian EFL learners are unfamiliar with this form. This study aims to analyze the performance of EFL learners in pronouncing English consonant cluster. The study only analyze the production of 5 English consonant cluster, they are $[\theta]$, $[\int]$, [gh], [ld], and [st]. The subject of this study is 5 students in vocational high school. The students was given a text that they have to read and record. Then the researcher analyze the students' pronunciation of the consonant clusters. The research show that there are some errors that the students made while pronouncing the consonant clusters.

Keywords: Pronunciation; Consonant Cluster; Error

INTRODUCTION

Pronunciation is one of the abilities that an English learner must have to be able to convey a message in spoken English effectively. Gilakjani (2012) stated that one of the key requirements for language proficiency is to secure understandable pronunciation for the language learners. Particularly for EFL students who are non-native speakers, learning English pronunciation is absolutely needed. Without adequate pronunciation skills, the learner's ability to communicate is severely limited (Pardede, 2010) added to this, Gilakjani (2011) stated that terrible pronunciation leads to occasional misunderstanding. The need for EFL learners to have intelligible pronunciation is an integral part to the English language mastery, since the goal of English learning is to make the learners can communicate in English. Therefore it is important for the English learners to pay more attention towards their pronunciation ability. However, many EFL learners consider pronunciation difficult to master. Gilakjani, (2011) stated that many learners of English language have major difficulties with English pronunciation even after years of learning the language. In the context of Indonesian EFL learners, Pallawa & Alam (2013) explained that one of the problems in teaching English sounds to Indonesian students is the constant interference of the native language systems of the students to the target language. In line with this, from the research that conducted by Sholeh & Muhaji (2015) to college students in Malang, Indonesia which study about the difficulties that college students face in learning pronunciation, one of the difficulties that the students have is because the different phonetic system between their native language, Bahasa Indonesia and the target language,



English. For example, the letter 'I' in Bahasa Indonesia is pronounced /i/ while in English it is pronounced /ai/ and etc. Moreover there are some sounds that exist in English but don't exist in Bahasa Indonesia. These differences have caused confusion among Indonesian EFL learners. Moreover, with the lack of emphasis on intelligible pronunciation given to EFL learners in the classroom, has caused a more complicated issue regarding the students' pronunciation ability. In line with the research that was done by Gilakjani & Sabouri (2016) stated that English pronunciation has a great impact on learners' successful communication but it is still ignored by a lot of teachers who pay more attention to teaching grammar and lexis. Consonant cluster is one of the differences between Bahasa Indonesia and English language system. Consonant cluster is rarely found in Bahasa Indonesia while it is very common in English. There are few consonant clusters that exist in Bahasa Indonesia such as /fl/ (inflasi) and /tr/ (transportasi). In line with this, Yuliati (2014) stated that "the words "track" is not problematic at all for Indonesian speakers of English." Bahasa Indonesia has simpler form of consonant cluster compared to English (Razieb, et.al, 2021). While English has more complex form of consonant cluster, for example CC (trap) and CCC (straight). The position of English consonant cluster in a word also can be at the initial (breath, cloth), medial (daughter, soldier), or final (ghost, shield). This difference become the challenge for Indonesian EFL learners to have intelligible pronunciation. Tambunsaribu & Simatupang (2021) explain that "The main reason why most of the students encountered difficulties in pronouncing the double-consonant-letter because it is seldom found consonant clusters in Indonesian language." While on the other hand, consonant cluster is very important in producing an intelligible pronunciation of words. Yuliati (2014) explained that "Errors in consonant clusters are considered to be phonological errors which may cause their speech becomes less intelligible." Based on Dyson & Paden (1983) as cited in Chang (2014) categorized two kinds of consonant cluster errors, they are epenthesis and coalescence. Epenthesis means adding a vowel between cluster elements, usually the schwa sound while coalescence means "when the yielded pronunciation contains a new consonant composed of features from the original consonants" (Dyson & Paden, 1983 as cited in Chang, 2014). Furthermore, Grunwell (1987) as cited in Chang (2014) added two classification of consonant cluster errors, they are cluster reduction and cluster simplification. Cluster simplification is when the production of the cluster elements is not produced in the correct manner. While Cluster reduction is the "deletion of one or more consonants from a target cluster, so that only a single consonant occurs at syllable margins." Related to errors in consonant cluster made by Indonesian EFL learners, Matthew (2005) as cited in Yuliati (2014) categorized the errors into two types, they are developmental and transfer errors. Developmental errors is errors that occurred related to the process of first language acquisition such as "final consonants deletion, final consonant cluster devoicing, [voiced consonants b, g, are replaced by p, k], over-generalisation (substituting one target language voice into another one), and approximation." Transfer error is "the transfer of linguistic items such as word order, along with some vocabulary and sounds with ones that are phonetically close to their mother tongue sounds." There are many research that focus on analyzing errors in English pronunciation by Indonesian EFL learners, such as Tiono & Yostanto (2008) their qualitative research focus on analyzing kinds of phonological errors of sounds that do not exist in Bahasa Indonesia [v], $[\theta]$, $[\delta]$, [3], [d3], and [t]. Chaira (2015) conducted a research on interference of first language in pronouncing segmental sounds. Zaky (2019) focus on analyzing segmental error which involves freshmen college students as the participants. Saadah & Ardi (2020) analyze the pronunciation error of English diphthong made by college students. Furthermore, there are research that focus on analyzing errors in English consonant cluster pronunciation, such as the research that done by Chang (2004) that analyze the performance of Chinese EFL learners in producing English consonant cluster. Yuliati (2014) study the simplification of final consonant cluster by Indonesian EFL learners and the intelligibility in the international context.



Razieb, et.al, (2021) study the common errors made by advanced English education students in producing final consonant cluster. This study aims to analyze the performance of EFL learners in pronouncing English consonant cluster [st], [gh], [ld], [θ], and [f].

METHOD

The subjects that involved in this research are 5 first grade students of vocational high school in Kabupaten Bandung. The researcher take the data by asking the students to record themselves while read aloud the text that consist of consonant cluster being examined. Then the researcher analyzed the error in pronouncing consonant cluster of the students' by listening to the recording. After that, the researcher calculate the data using simple statistical calculation based on Frijuniarsi (2018). Finally the researcher describe and classified the error into the kinds of pronunciation error based on Matthew (2005) as cited in Yuliati (2014), Dyson & Paden (1983); Grunwell (1987) as cited in Chang (2014).

RESULTS AND DISCUSSION

Results

The table below describe the error analysis of students' read aloud activity adapted from Frijuniarsi (2018).

Table 1. Error Analysis of Students Consonant Cluster Production

No.	Words	Transcrip-	As rec	orded	Numbers	Perce-	Description
		tion			and	ntage	
					percen-	of	
					tage of	total	
					students	error	
					produc-		
					ing errors		
1.	Three	θri:	(a) Tri		4 (80%)	4,8 %	Substitution of $/\theta$ / to $/t$ /
			(b) Cri		1 (20%)	1,2 %	Substitution of θ to ϵ
2.	Something	sam. θ ıŋ	(a) sam.t	ıŋ	4 (80%)	4,8 %	Substitution of $/\theta$ / to $/t$ /
3.	Theory	іл.еі	(a) teori		3 (60%)	3,6 %	Substitution of $/\theta$ / to $/t$ /
			(b) theor	į	2 (40%)	2,4 %	
4.	Third	b : $\epsilon\theta$	(a) trid		1 (20%)	1,2 %	Substitution of θ to /t/
			(b) thir		1 (20%)	1,2 %	
			(c) t3:d		1 (20%)	1,2 %	Substitution of θ to /t/
			(d) third		1 (20%)	1,2 %	
5.	Things	θιη	(a) ting		1 (20%)	1,2 %	Substitution of /θ/ to /t/
	C	v	(b) tings		2 (40%)	2,4 %	Substitution of θ to /t/
			(c) tins		1 (20%)	1,2 %	Substitution of θ to /t/
6.	Might	mait	(a) maig		2 (40%)	2,4 %	Voicing the voiceless
	<u> </u>		(b) main		1 (20%)	1,2 %	Substitution of /t/ to /n/
			(c) maig		1 (20%)	1,2 %	Deleting /t/ in the final
7.	Insight	ın.sait	(a) insaig	gh	2 (40%)	2,4 %	Voicing the voiceless
	Č		(b) instin	•	1 (20%)	1,2 %	Č
			(c) insaig	_	2 (40%)	2,4 %	Voicing the voiceless
8.	Highly	haɪ.li	(a) haige		1 (20%)	1,2 %	Insertion of schwa
	<i>.</i>		(b) haigh		4 (80%)	4,8 %	Voicing the voiceless
9.	Thought	θο:t	(a) thoug		1 (20%)	1,2 %	Voicing the voiceless



TOT	AL			55	83	100	
			(b)	setori	2 (40%)	2,4 %	consonant cluster Insertion of schwa
22.	Story	sto:.ri	(a)	stori	-		No error in initial
			(d)	_	_		
			(c)		-		
			` '	streithen	-		consonant cluster
21.	Strengthen	Streηθ	(a)	strengden	- (=0/0/		No error in initial
			(d)	setuden	1 (20%)	1,2 %	consonant cluster Insertion of schwa
			(c)	student	-		No error in initial
			(0)	syuuəlli	-		No error in initial consonant cluster
		-		stju:.dənt			consonant cluster No error in initial
20.	Student	stju:.dənt	(a)	staden	-		No error in initial
			(b)	star	-		No error in initial consonant cluster
19.	Start	sta:t	(a)	ster	-		consonant cluster
10	Start	sta:t	(c)		1 (20%)	1,2 %	Voicing the voiceless /l/ No error in initial
			, ,	wold	3 (60%)	3,6 %	Voicing the voiceless /l/
18.	Would	wod	(a)		1 (20%)	1,2 %	Substitution of /d/ to /t/
			(b)		1 (20%)	1,2 %	
17.	Couldn't	kʊd.ənt	(a)	kold	4 (80%)	4,8 %	Voicing the voiceless
			(b)	word	2 (40%)	2,4 %	
16.	World	wз:ld	(a)	werd	1 (20%)	1,2 %	Deleting /l/ sound
		3	(b)		4 (80%)	4,8 %	Voicing the voiceless
15.	Should	ſʊd	(a)	sul	1 (20%)	1,2 %	Deleting /d/ in the final
14.	Share	∫eər	(a)	ser	4 (80%)	4,8 %	Substitution of /ʃ/ to /s/
13.	Show	∫əʊ	(a)	sow	4 (80%)	4,8 %	Substitution of /ʃ/ to /s/
			(b)	sold	4 (80%)	4,8 %	Substitution of /ʃ/ to /s/
12.	Should	ſʊd	(a)	sul	1 (20%)	1,2 %	Substitution of /ʃ/ to /s/
			(d)	-	1 (20%)	1,2 %	
				raigt	1 (20%)	1,2 %	voicing the voiceless
11.	Right	rait	(a)	raig raigh	1 (20%) 1 (20%)	1,2 %	Voicing the voiceless
11.	Diaht	mort.		neigbornhaud	1 (20%)	1,2 %	
10.	Neighborhood	neī.bə.hud	(a)		4 (80%)	4,8 %	Voicing the voiceless
				trog	1 (20%)	1,2 %	
				tougs	1 (20%)	1,2 %	
				traugh	1 (20%)	1,2 %	

The fourth coloumn present the error that the students made focusing on the 5 examined sounds. The fifth coloumn present the number of students who mispronounced the words and the percentage. A simple calculation adapted from Frijuniarsi (2018) was done to analyze the data:

N = Number of students producing error

P = Population

For example for the word "three", there are 4 students who mispronounced it:

$$4 \times 100 = 80\%$$



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So, there are four students or 80% students who mispronounce the word "three" / θ tri//tri/ by substituting / θ / to /t/. While the sixth coloumn present the percentage of total error. In total, there are 83 errors in pronouncing 22 words made by 5 students. The calculation is as follow:

For example, the word "story" was mispronounced by 2 students:

$$\frac{2}{83}$$
 x 100 = 2,4 %

So, there are 2,4 % from 83 errors made by the students in pronouncing the [st] by inserting the vowel schwa between the consonant cluster.

Discussion

Substitution of the Sound

Based on the table above, we can see that most of the students subtituted the sound into another sound that they are familiar with. For example, in the $/\theta/$ sound we can see that 4 out of 1 (80%) students mispronounced the sound $/\theta/$ by substituting $/\theta/$ into /t/. Zaky (2019) found the same result, the problem is that the manner of articulation of this sounds change from dental to alveolar. The mispronounciation can lead into the change of meaning, for example in the word "Three" $/\theta$ ri/ was pronounced /tri/ which the correct pronunciation of the word "Tree" (Zaky, 2019). This error can be categorized as cluster simplification because the students produced it in a wrong way. Yuliati (2014) explained that simplification occur when the speaker is devoicing and omitting some features. The factor that can cause this error is because this sound doesn't exist in Bahasa Indonesia, so the students need to reconceptualize this sound. The students tend to pronounced it into the sound /t/ that are exist in Bahasa Indonesia. Furthermore, the same case happened to another sound that don't exist in Bahasa Indonesia, that is the /f/ sound. For example in the word "Should", all of the students substituted the sound /f/ into /s/. However in the other two words "Show" and "Share" there was one students who pronounced it correctly.

Insertion of Vowel Between the Consonant Cluster

From the analysis, we can see that there are some errors that happened because the students add a vowel between the consonant cluster. This can be found in the /st/ and /gh/ consonant cluster. For example in the word "Story" /stori/ there are 2 (40%) of the students who added the vowel schwa and pronounced it /setori/. In the word "Highly" there are 1 student who added the vowel schwa and pronounced it /haigel/. However, there were only a few students who produced this error, most of the students pronounced it correctly. Added to this, Yuliati (2015); Chang (2004) also found that the vowel that usually added is the schwa sound. This kind of error can be categorized as epenthesis.

Deletion of the Consonant Cluster Element

Another error that the students made in pronouncing english consonant cluster was deletion of the consonant cluster element. This error happened in the final consonant cluster [ld]. In the word "should" / fod/ there are one student who mispronounced it to /sul/. The students delete the /d/ sound. Yuliati (2014) also found that students tend to delete some later consonant. This error also can be found in the word "World" / w3:ld / there are three students who pronounced it as /werd/ and /word/, they delete the /l/ sound. This deletion of /l/ sound or liquid was also found in Chinese EFL learners (Chang, 2004). One students also delete the sound /t/ in the final position of the word "Might" /matt/ was pronounced /maig/. This error can be categorized as



cluster reduction. The different between Bahasa Indonesia and English made the students difficult in pronouncing final consonant cluster since it is not common in Bahasa Indonesia.

Voicing the voiceless

According to Palupi (2021) "L2 learners of English often interpreted English pronunciation based on the orthography." This caused the student pronounce the words the way it written. This kind of errors can be found in the /gh/ sound. For example in the word "Might" /maɪt/ the /gh/ sound should be voiceless, but most of the students (60%) pronounced it as /maigt/ or /maig/. The same case happened to the words "Right" (80%) of the students pronounced the /g/ sound, "Highly" (100%) of the students pronounced the /g/ and other words that already presented in the table. This error can happened because the different language system between Bahasa Indonesia and English, also lack of understanding of the target language. The students are unfamiliar with this form of cluster sound so they are confused in pronouncing this consonant cluster.

The Initial Consonant Cluster [st]

From the result we can see that the students rarely mispronounced the words that start with the consonant cluster [st]. Overall, there are only 3,6% of errors occurred in total. In line with this, Matthew (2005) as cited in Yuliati (2014) "finds no significant errors committed with the consonant cluster in the initial position." This could happened because there are a lot of words that originally in English that been used in Bahasa Indonesia so, the students are more familiar with this type of consonant cluster.

CONCLUSION

Consonant cluster is very common in english and it can impact to students' intelligibility. This research found that the students still encountered difficulties in pronouncing consonant cluster $[\theta]$, [f], [gh], [ld], and [st]. The errors that found in this research is the substitution of sounds, insertion of vowel, and deletion of the consonant cluster element. Considering the importance of intelligibility in pronunciation, the english teacher in should focus on how to practice it in the english classroom.

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