Difficulty Level of English Fricative Sounds for High School Students

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Abstract

Not all English fricative sounds are applied to Bahasa Indonesia. So, it is sometimes difficult for Indonesians to pronounce English words. Indonesian, especially those who learn English as foreign language, commonly failed to have proper pronunciation due to lack of pronunciation knowledge. Finding out the problems of students in English fricatives pronunciation would be one of the solving problems. Therefore, this study aim to investigate the difficulty level (which is the most difficult and the least difficult) of English fricative sounds faced by high school students, where the learners of English are commonly from high school students. The study would descriptively explain the order of fricative sounds difficulties by describing its percentage. There were fifty students acted as samples for this study who were selected randomly. The samples were taken from junior high school students number 1 Talang Kelapa. Testing instrument was used for this study. The students were tested to pronounce the English words which had fricatives on them. The words were formed in isolation and sentence. This study used recording technique in order to collect the data. It was found that the most difficult English fricative sound was /ž/ and the least difficult English fricative sound was /v/.

Keywords: *English Fricative Sounds, Difficulty Level, Testing Instrument, and Recording Technique.*

1. Introduction

1.1. Background

Four skills of language are the essential keys for all language speakers. They need to have these knowledge and competencies when communicating to somebody else. Those skills are the ability of understanding the spoken language (listening), the ability of using the language orally (speaking), the ability of understanding the main and supporting ideas of the written language (reading), and the ability of expressing oneself in written language (writing). They support one another in producing and receiving the language. In other words, one cannot have good oral communication when they just can speak without having good competency on listening to their addressee and/or reader can get the exact ideas if the writer cannot write well.

Regarding Indonesian Government Regulation No. 19 Year 2005 and No. 32 Year 2013 about English as one of foreign languages in Indonesia which must be taught and/or integrated in classroom activities and used as tested subject for *Ujian Nasional*

(students' final exam), it shows the importance of English mastery for Indonesians. Therefore, Indonesians need to focus on four skills of English language. This is to prepare Indonesian for global competition as ASEAN Economic Community in 2015. So, Indonesians can compete others in having good quality of lives. As we know that Indonesian have good human and natural resources to compete other countries but sometimes failed to show it due to language incompetency.

All four skills are of course essential to be mastered by every language learner. However, this study will only focus on speaking skill, specifically pronunciation ability, since this skill is mostly used skill for daily need. Robinett cited in Sukmarini (2000, P. 5) stated that "One of the most important aspects of learning a second language is the effort to master the sound system, to pronounce the language". In addition, Wahba (1998, P. 30) believed that "Pronunciation teaching not only makes students aware of different sounds and sound features (and what they mean), but can also improve their speaking immeasurably".

In speaking, the students should be able to pronounce the sounds that could be discriminated by others. However, pronouncing the English Sounds for Indonesians is not always easy. These problems are due to some reasons. Firstly, there some sounds of English that do not exist in Bahasa Indonesia, such as [ð] in "that". Secondly, some examples of sounds are represented by unfamiliar symbols to Indonesian students (Sulaiman, 2004, P. 3) such as [Ɵ] in "nothing", [ǰ] in "judge", and [j] in "you". Thirdly, most of the English words are not pronounced as they are spelled. The last is every language has various and different sounds.

Unfortunately, this situation does not make teacher aware of pronunciation teaching in classroom. Teachers tend to deal with their students passive English knowledge such as writing, grammar, and reading. Students are rarely exposed to active skills such as speaking, pronunciation, stress, and listening. English pronunciation had rather been neglected. In addition, it is commonly known that Indonesian are good at listening to foreigner but then they are afraid to speak to them. According to Moedjito and Harumi (2008, P. 71) found that Indonesian learners tend to make a considerable number of mistakes in pronunciation when they try to speak in English, they commonly make mistakes in some vowels and consonants such as /d/, /t/, /v/, /p/, /f/, /s/, /z/, /ʃ/, /I/, /i:/, /u/, etc. In addition, Simanjuntak (2000, P. 18) stated that out of 24 sounds pronounced with errors include /t, f, v, Ɵ, z, ð/. Asnita (1999, P. 33) also stated that / ð, Ɵ, ž, ǰ, č, j/ are consonants which are difficult to pronounce and recognize.

There are many errors made in pronouncing them. For example, the sound [Ɵ] is pronounced [t] or [s] such as "thing" is pronounced [tiŋ] and [siŋ] and the sound [ð] is pronounced [d] such as "that" is pronounced [dæt]. In addition, [ž] and [š] sounds are also pronounced incorrectly by the students. For example, [ž] is pronounced [s] such as "measure" is pronounced ['mesə(r)] instead of ['mežə(r)] and [š] is pronounced [s] such as "she" is pronounced [si:].

It is obviously seen that pronunciation is not an easy task to do, moreover, it deals with foreign language pronunciation. Form the above explanation, most of difficulties happen to fricative consonant sounds. Therefore, it encourages the writer to investigate what is most and least difficult fricative sounds for high school students, as it is stated in the following title "Difficulty Level of English Fricative Sounds for High School Students".

1.2. Problems of Study

The problems of this study were formulated as this follows:

a. What is the most difficult fricative sounds of English for high school students?
b. What is the least difficult fricative sounds of English for high school students?
c. How is the order of difficulty of fricative sounds of English for high school students?

1.3. Objectives of Study

The objectives of this study were to find out as this follows:

a. the most difficult fricative sounds of English for high school students;
b. the least difficult fricative sounds of English for high school students;
c. the order of difficulty of fricative sounds of English for high school students.

1.4. Literature Review

1.4.1. Pronunciation

In the study of language, i.e., linguistics, phonology is discussed comprehensively. Phonology, as it is defined by Hornby, 1998, p. 253, is the sound pattern of language. In phonology, language learners discuss phonemes, phones, and allophones where phoneme is a constrastive phonological segment whose phonetic realizations are predictable by rule (e.g., /p/ as in *pit* and /b/ as in *bit*), phone is a phonetic realization of a phoneme, and allophone is a predictable phonetic realization of a phoneme (e.g., [p] and [p^h] are allophones of the phoneme /p/ in English. There are some rules of phonology.

a. Assimilation Rules
b. Feature Changing Rules
c. Dissimilation Rules
d. Feature Addition Rules
e. Segment Deletion and Addition Rules
f. Movement Rules

The way on how the written words are spoken to be understood and the key for someone in target language communication are the success point for language learners. Pronunciation is a way in which a language is spoken (Hornby, 1995, P. 331). Pronunciation may include: (1) vowels and consonants, (2) stress, (3) length or rhythm, and (4) intonation (Abdullah, 2004, p. 10). It can be interpreted in at least three different ways. The first is as a description (or prescription) of the sound system of a given language. The second is a description of the relation between the oral and written forms of a language. And the third is as a set of prescriptive rules for the manner in which any given graphic representation is to be rendered in speech, and or the manner in which any oral form is to be rendered in writing. However, this study only focused on consonant sounds.

Vowel sounds and consonant sounds do not necessarily correspond to the vowels and consonants we are familiar with in alphabet. Vowel sounds are all voiced for example /i:/, /e/, /i/, and /ə/. Consonant sounds may be voiced or voiceless, for example, /b/, /d/, /g/, /v/, and /z/.

1.4.2. English Consonants

Consonant is defined as the one which is produced when the mouth passage is obstructed. Meanwhile consonantal sounds are produced with some restriction or closure in the vocal tract as the air from the lungs is pushed through the glottis out of the mouth. Different consonantal sounds result when we change the shape of the oral cavity by moving the lips and tongue, the articulators, and the change the place of articulation in the oral cavity.

Consonants can be classified into sets or classes on the basis of two phonetic criteria or features:

a. The point or place of articulation

Consonants can be separated into several classification based on its point or place of articulation (Fromkin and Rodman, 1998, P. 223). The classification can be seen as follows:

1. Bilabials
   This sounds are produced when bringing both lips together. Sounds which are indicated as bilabials are [p], [b], [m];
2. Labiodentals
   This sounds are produced when we articulate by touching the bottom lip to upper teeth. Sounds which are indicated as labiodentals are [f], [v];
3. Interdentals
   This sounds are produced when we insert the tip of the tongue between the upper and lower teeth. Sounds which are indicated as interdentals are [Ɵ], [ð];
4. Alveolars
   This sounds are produced when we raise the front part of the tongue to the alveolar ridge. Sounds which are indicated as alveolars are [t], [d], [n], [s], [z], [i], [r];
5. Palatals
   This sounds are produced by raising the front part of tongue to a point on the hard palate just behind the alveolar ridge. Sounds which are indicated as palatals are [š], [ž], [č], [ǰ];
6. Velars
   This sounds are produced by raising the back of our tongue to the soft palate or velum. Sounds which are indicated as velars are [k], [g], [ŋ];
7. Uvulars
   This sounds are produced by raising the back of the tongue to the uvula. Sounds which are indicated as uvulars are [R], [q], [G];
8. Alveolars
   These sounds are produced when the glottis is open, no other modification of the air stream mechanisms occurs in the mouth. Sounds which are indicated as glottal is [h].

b. Manner of articulation

Based on its manner of articulation, consonants are categorized into eight categories as these follows:

1. Voiced and voiceless sounds
   According to Fromkin and Rodman (1998, P. 225), voiceless sounds are the sounds where the vocal cords are apart when the air stream is pushed from the lungs. [p],

[t], [k], and [s] are the examples of consonants voiceless sounds. As in sip [sip], seat [sit], and seek [si:k]. Voiced sounds happens when the vocal cord are together, the air stream forces its way through and causes them to vibrate. The example of this sound is [b], [d], [g], and [z], as in "daze" [dez]. These two sounds can be differed by feeling the vibrations. If we put a finger in each ear and say the voiced "z-z-z-z-z-z-z", we can feel the vibrations of the vocal cords. If we say the voiceless "s-s-s-s-s-s-s", we will not feel the vibrations. To conclude, English certain consonants are voiced (vibration of vocal bands) while other are voiceless (no vibration of vocal band).

2. Aspirated and unaspirated sounds
   We have an extra puff of air out for aspirated sounds. In contrast, we do not have an extra puff of air out for unaspirated sounds. In written, these sounds are symbolized [p^h] and the unaspirated sounds [$p^=$]
3. Nasal sounds
   This sound is produced when the velum is lowered, air escapes through the nose as well as the mouth.
4. Stops
   It is the air stream may be completely stopped after entering the oral cavity.
5. Fricatives
   In the production of some continuants while the air stream is not completely stopped. It is obstructed from flowing freely.
6. Affricates
   It is produced by a stop closure followed immediately by a slow release of the closure characteristic of fricatives.
7. Liquids
   It is produced when there is some obstruction of the air stream in the mouth, but not enough to cause any real friction.
8. Glides
   We produced it by having little or no obstruction of the air stream in the mouth.

All of them can be distributed into Table 1. Minimal Set of Phonetic Symbols for American English Consonants.

1.5. Methodology

There were fifty respondents who acted as samples in this study. They were taken randomly. This data collection was done at Junior High School Number 1 Talang Kelapa. Testing technique was used to collect the data. The writer built English fricative sound test to know the students' pronunciation difficulties in pronouncing the words. As it is described by Hornby (1995, P. 1233), test is a short examination of knowledge or ability, consisting of questions that must be answered or activities that must be carried out.

The pronunciation test was divided into two parts of testing point, they were words in isolation and sentences. There were forty items for fricatives in sentence test and another forty for words in isolation. In conclusion, there were one hundred items for this pronunciation test with eight fricative sounds tested, so, ten items for each sound. Words in isolation means the words stand by itself, there will be word stress but the

writer did not focus on the stress errors instead of fricatives pronunciation. However, this study also did not give attention to sentence stress when checking fricatives in sentences. The data was taken by asking the students to pronounce the test and it was recorded. In other words, the writer used recording technique to obtain the data.

After getting the data, the writer analyzed the data by doing some steps. They were (1) making the correction table which include the students' order and items, (2) coding the answer of the students' answer in questionnaire 1 for correct answer and 0 for incorrect answer by listening to the recording at least five times, (3) having descriptive analysis of correct and incorrect answers, (4) analyzing its error frequency of each fricative sounds, and (5) interpreting the data obtained.

Table 1. Minimal Set of Phonetic Symbols for American English Consonants

	Bilabial	Labiodental	Interdental	Alveolar	Palatal	Velar	Glottal
Stop							
Voiceless	p			t		k	
Voiced	b			d		g	
Nasal	m			n		ŋ	
Fricatives							
Voiceless		f	Ɵ	s	š		h[1]
Voiced		v	ð	z	ž		
Affricate							
Voiceless					č		
Voiced					ǰ		
Glide							
Voiceless	M				j	M	h[1]
Voiced	W[2]					W[2]	
Liquid				l r			

(taken from An Introduction to Language by Fromkin and Rodman, 1998: 233)

1. [h] is sometimes classified as a fricative because of hissing sound produced by air or noise at the glottis. It is also sometimes classified with the glides because in many languages it combines with other sound as the way that the glides do.
2. [w] is classified as both bilabial because it is produced with both lips rounded and as a velar because the back of the tongue is raised toward the velum.

2. Discussion

2.1. Findings

From the test given, it was gotten that fricative voiceless sound /f/ was indicated by 65,4% students could pronounce it properly, and 34,6 % students pronounced it improperly. Fricative voiceless sound /Ɵ/ was indicated by 64% students pronounced it properly, and 36% students pronounced it improperly. Fricative voiceless sound /s/ was indicated by 65,2% students pronounced it properly, and 34,8% students pronounced it improperly. Fricatives voiceless sound /š/ was indicated by 62,8% students pronounced it properly, and 37,2% students pronounced it improperly.

Meanwhile, fricative voiced sound /v/ was indicated by 66,6% students pronounced it properly, and 33,4% students pronounced it improperly. Fricative voiced

sound /ð/ was indicated by 62,4% students pronounced it properly and 37,6% students pronounced it improperly. Fricative voiced sound /z/ was indicated by 62,4% students pronounced it properly, and 37,6% students pronounced it improperly. Fricative voiced sound /ž/ was indicated by 56,2% students pronounced it properly, and 43,8% students pronounced it improperly. The distribution of the findings could be seen in Table 2. Fricative Sounds Distribution of the Pronunciation Test.

To answer the problems of study, the table above was used. The most difficult fricative sound was /ž/ which was 43,8% students failed to pronounce the words in isolation or sentence properly. In contrast, the least difficult fricative sound was /v/ which was shown by only 33,4% students failed to pronounce it properly. However, the other fricative sounds were classified into moderate level of difficulties.

Table 2. Fricative Sounds Distribution of the Pronunciation Test

Fricative Voiceless	Proper Pronunciation	Improper Pronunciation
f	65,4%	34,6%
Ɵ	64%	36%
s	65,2%	34,8%
š	62,8%	37,2%
Fricative Voiced	Proper Pronunciation	Improper Pronunciation
v	66,6%	33,4%
ð	62,4%	37,6%
z	62,4%	37,6%
ž	56,2%	43,8%

. The difficulties order of fricatives could be shown in Table 3. The Order of Fricatives Difficulties, as shown below.

Table 3. The Order of Fricatives Difficulties

Difficulties Order No.	Fricatives	%
1	ž	43,8%
2	z	37,6%
3	ð	37,6%
4	š	37,2%
5	Ɵ	36%
6	s	34,8%
7	f	34,6%
8	v	33,4%

This could be implied that fricatives were categorized as sounds which were difficult for high school students since none of fricative sounds resulted 0% in their difficulties level. There were about more than 18 to 20 students failed to pronounce the fricative sounds properly. Specifically, there were about 21 students failed for /ž/ sound, 19 students failed for /z/ and /ð/ sounds, 18 students failed for /š/ and /Ɵ/ sounds, 17 students failed for /s/, /f/, and /v/ sounds.

However, it was pleased to see that there were more students able to pronounce the English fricative sounds well. In general, there were over 60% students able to pronounce it well or about 30 students out of 50 students. But, it did not mean that teacher could neglect pronunciation teaching since there were still some students failed to pronounce the English fricative sounds.

2.2. Interpretation

Most of the students experienced difficulties in English pronunciation especially fricative sounds. The most difficult sound was /ž/ and then /z/ in the second part, /š/ and /s/ for the next level. It was understandable due to the words in Bahasa Indonesia influenced the competence. We do not have difficulty in recognizing how word is pronounced since its pronunciation is represented by its spelling. For example, when we have ***s**aya, **Z**oya,* and ***sy**arat,* they are pronounced as it is shown. ***S**aya* is pronounced /saya/, ***z**oya* is pronounced /zoya/, and ***sy**arat* is pronounced /šyarat/.

In contrast, English does not apply the same rules as Bahasa Indonesia. When we see the word with 's', it does not mean it is pronounced with /s/ sound. For instance, the word 'vi**s**ion', '**s**ee', and 'a**s'**. The three words were represented by letter 's' but they had different ways to pronounce. 'vision' is pronounced /'vižn/, 'see' is pronounced /**s**i:/, 'as' is pronounced /æ**z**/. This random rule might hamper the students' ability in pronouncing the English words.

In addition, the sound /ž/ becomes the most difficult sound of all fricatives due to it is not applied to Bahasa Indonesia. /z/ is the sound which is mostly applied in Bahasa Indonesia. This /ž/ sound is rarely found in Bahasa Indonesia. The writer even never found this sound in Bahasa Indonesia. However, this sound is popularly used in English such as the word genre, vision, and television.

Meanwhile, the fricative sound of /ð/ and /Ɵ/ were in the third and fifth place. This is understandable that these two sounds were much more easier to predict than the /s/, /z/, /š/, and/or /ž/ since these sounds are mostly applied to the letter 'th'. Then, the students would only predict which sound is applied /ð/ or /Ɵ/.

The least difficult sounds were /f/ and /v/. Even this was classified into the least ones but these sounds were still difficult for students. This finding showed the reason of some mistakes made by Indonesian when they say names of people 'Sifa' and 'Siva'. Most Indonesian pronounced those two words in the same pronunciation /si**f**a/ instead of /si**f**a/ and /si**v**a/.

3. Conclusion and Suggestion

3.1. Conclusion

From the findings and interpretation, it can be concluded that:

a. The most difficult English fricative sound was /ž/ with 43,8% out of fifty students as sample. It is about 21 students felt /ž/ sound was difficult to pronounce the sound whether it is word in isolation and/or in sentence.
b. The least difficult English fricative sound was /v/ with 33,4% out of fifty students as sample. It is about 17 students felt /v/ sound was difficult to pronounce the sound whether it is word in isolation and/or in sentence.
c. The difficulty level of English fricative sounds was as this order; the first was /ž/ (43,8% about 21 students out of 50 students), the second was /z/ (37,6% about 19

students out of 50 students), the third was /ð/ (37,6% 19 students out of 50 students), the fourth was /š/ (37,2% about 18 students out of 50 students), the fifth was /Ɵ/ (36% about 18 students out of 50 students), the sixth was /s/ (34,8% about 17 students out of 50 students), the seventh was /f/ (34,6% about 17 students out of 50 students) and the eighth was /v/ (33,4% about 17 students out of 50 students).

d. Different rules in pronouncing words in Bahasa Indonesia and English contributed to the students' ability in English pronunciation. It is commonly known that English cannot be pronounced as it is spelled meanwhile Bahasa Indonesia is commonly pronounced as it is spelled.
e. Some English Fricative sounds which do not exist in Bahasa Indonesia would also contribute to students' difficulties in English pronunciation. For example, /ž/ is not applied in Bahasa Indonesia, then it is in the first level of difficulty for the students in this study.

3.2. Suggestion

The suggestions would be addressed to teachers, researchers, and students. For teachers (not only junior high school teachers but also all English teachers) need to give more focus on the students' difficulties on certain sounds of English. Based on this study, /ž/ must be taught and trained more by teachers to their students. Teachers also need to do study on their students' problem so that they can solve the real problems faced by students. Teachers also need to have more attention to pronunciation teaching and stop neglecting it since pronunciation is the essential part in speaking.

For researchers, it is encouraged that language researchers would do more investigation on students' difficulties in learning foreign language, for all aspects of language skills. Researchers need to find the problem solving after finding the problems of learning a language.

For students, it is suggested for students to predict their own difficulties during the learning process. They need to see their disadvantages from all language aspects, so that they can find their own problem solving. The students are also suggested to keep practicing and focusing on their problems of pronunciation so they can improve the ability well. In addition, dealing with this study finding, students must have more focus on practicing /ž/ sound.

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