

An Analysis of Dental Fricative Sound's Production (Case Study of 5th Semester Students of UIN Sjech M. Djamil Djambek Bukittinggi)

Ibrahim Hasan¹, Genta Sakti², Reflinda³, Syahrul⁴

^{1,2,3,4} UIN Sjech M. Djamil Djambek Bukittinggi, Indonesia

Email :

hasanibrahim928@gmail.com

ABSTRACT

This research was motivated by the problems of students of the English education study program at UIN Sjech M. Djamil Djambek Bukittinggi. Some students pronounce the dental fricative sound in various ways. First, some students pronounce the sound /θ/ correctly, however, there are also some students pronounce the sound /θ/ by replacing it with the sound /t/. Second, some students pronounce the sound /ð/ correctly, however, there are also some students pronounce the sound /ð/ by replacing it with the sound /d/. The researcher's question in this study was how students pronounce the dental fricatives sound at the initial, medial and final position of a word based on the PRAAT application. The purpose of this study was to analyze the way students pronounce the dental fricative sound at the initial, middle and final of a word based on the PRAAT application. This study uses a qualitative research method with seventh semester students as the research population. The research sample amounted to 13. Data was collected through audio recordings. Students are asked to pronounce 12 words that contain the sound of dental fricative sound. The sound is uploaded to the PRAAT software. The results showed that some of the students pronounce the dental fricative sound correctly, showed by a spectrogram display like a scribble pattern in the focus phoneme. others pronounce the dental fricative sound incorrectly, showed by an empty area on spectrogram in the focus phoneme. It showed that they replaced the phoneme with another phoneme such as /t/ or /d/. Researchers can conclude as follows. First, some students pronounce the dental fricative sound correctly. Second, most of the students pronounce the dental fricative sound incorrectly.

Keywords

Pronunciation, Dental Fricative Sound, PRAAT.

How to cite

<https://pusdikra-publishing.com/index.php/jesa>

INTRODUCTION

Pronunciation is important for english education study program because the competency of pronunciation is one of aspect that determines the level of someone's speaking ability. Students who have a correct and clear pronunciation will make a good communication with others. Therefore, for english education study program students, they must have an awareness to their pronunciation. In daily conversation, students who have good pronunciation will be easy to communicate with their friends or lecturer

because they produce and pronounce the word correctly. Therefore someone will understand with what they are talking about. A mistake that is made in pronouncing sounds may make misunderstanding in communication. Kriedlar as cited in Riam (2012) viewed that accurate and clear pronunciation is vital in language learning because, without it, students would be unable to understand and could misinterpreted by listener Different pronunciation makes different meaning even changing the meaning of the word. Because its importance, pronunciation must be paid attention in english language and teaching.

Pronunciation is a compulsory subject that must be taken by students of the English Department at UIN Sjech M. Djamil Djambek Bukittinggi in the first semester. In pronunciation practice class, students are given fundamental understanding in recognizing English sound symbols and pronunciation which cover both segmental features such as consonant, vowel and diphthong and also segmental feature such as stress, intonation and pitch both theoretical and practice as well. Therefore, the student should have practical skill in recognizing and pronouncing English sound.

One of the sounds that English department students need to master is dental fricative sounds. Dental fricative is a fricative consonant produced with the tip of the tongue against the teeth. Dental fricative sounds are produced with tongue tip is close to the upper front of teeth and it forms the narrowing between them so that the friction is made. Dental fricative sounds produces two sounds, namely voice and voiceless.

Even though to produced dental fricative sounds have different rule, student still not apply its in daily conversation. Some of them produce it correctly and others produce in incorrectly. In addition, Dedi Kurniawan (2003) mentioned most students produce dental fricative sound by replacing it to /t/ or /d/ sound. Therefore, students do not aware about how to produce dental fricative sound even they have learn about that material. Researcher found that students do not pay attention to dental fricative sound. They ignored phonological rule of these sound in different words and often replace it to closest sound in bahasa indonesia. The researcher used one of the tools to visualize sounds of language called PRAAT software to analyzed the sound. PRAAT software is computer program for analyzing, synthesizing, and manipulating speech. Based on spectrogram above it can be seen that there is an empty pattern in the middle of spectrogram which is /ð/ sound of the word "*method*". Meanwhile, the sound /ð/ is one of the fricative sounds, which has friction. In addition, Yavas claimed that when fricative sounds produced, a turbulent noise (friction) appears on spectrogram as scribble pattern. If in the

vertical red line on spectrogram, there's only an empty pattern, means the students changed sound /ð/ into another sound such as /d/ sound.

RESEARCH METHOD

In realizing this objective of the study, the researcher would apply qualitative designed research. Gay and peter (2016) stated that qualitative research is the collection, analysis and intepretition of comprehensive narrative and visual. The aims of using descriptive qualitative research is to analyze the students pronounce the dental fricative sounds. In this research, the researcher collected the data by using purposive sampling. By using this technique, the researcher focused on particular characteristics of a population that are of interest, which will best enable to answer the research question..

The researcher chose the seventh semester of English education department students of UIN Sjech M. Djamil Djambek Bukittinggi the academic year 2022/2023. The total population was about 120 students. The research instrument is a device which used to measure phenomena being observed. In qualitative research the researcher was an instrument who had to use all of his skill to collect the data and to record phenomena which found during the research process. Getting related data, this research used PRAAT software. PRAAT is an open-software tool for the analysis of speech in phonetics. It was designed and continues to be developed, by Paul Boersma and David Weenink of the University of Amsterdam. It is free and available for most platform. In this reseach , the analyzed and classified data is displayed on graphics and table form. The third step is to draw a conncclusion from all of the result.

RESULTAND DISCUSSION

Result

In this section, the researcher analyzed the sounds production of dental fricative sound obtained through recording and uploaded them to PRAAT software to answer the research question is how the dental fricative sounds at initial, medial and final position of the words are produced by the students based on spectrogram of PRAAT software. The informants are the seventh semester of english education department students of UIN Sjech M. Djamil Djambek Bukittinggi.

The data were gained from thirteen of the seventh semester of english education department students. The students were chosen since they already passed pronunciation subject in the previous semester. the data were collected by recording the students pronunciation, they were asked to pronounced 12 words contained dental fricative sound then the sounds converted into wav file

and upload them to PRAAT software. To determine whether or not students' production of voiceless interdental fricative on spectrogram is correct, the researcher also analyzes sounds produced by a native speaker and compared them to students' sound.

Discussion

Based on the findings of the research, the researcher explains the data which were gotten from recording sound that already analyzed by using Praat. This research sees that seventh semester of English education students of UIN Sjech M. Djamil Djambek Bukittinggi have difficulties producing voiced and voiceless interdental fricative sound. The specific result regarding voiceless interdental sounds are first most students substituted the sound /θ/ into /t/ at initial and medial position of the words second, the students eliminated the sound /θ/ at final position of words. However, for voiced interdental sounds most students substituted the sound /ð/ into /d/ at initial and medial position of the words. In addition, the students substituted the sound /ð/ into /d/ and /t/ at final position of words.

The research also revealed both correct spectrogram and incorrect spectrogram regarding Praat software. Sound production spectrograms based on the students do not show turbulent noise, indicating that they produce the dental fricative sound incorrectly. On the other hand, production showing the turbulent noise agrees with Yavas' ideas. He mentioned that the scribble pattern made by the production of fricative sounds appears on it. Means, if the students' spectrogram show a scribble pattern, indicating that they produced the dental fricative sound correctly.

CONCLUSION

Examining speech production acoustically will help us to consider whether a speaker pronounces words correctly or not. Boersema and Weenink have created Praat which is very useful software that can show us the visual representations of speech sounds so that they can be analyzed. After analyzing the students' sound production, this research leads to the conclusion that the productions of dental fricative sound of seventh semester of English education students are varied. Since the interdental sounds are not available in Indonesian pronunciation system, the mismatches occurred between Indonesian and English.

The findings show that the production of /θ/ sound, has not been appropriately applied. In the initial and medial position of voiced interdental fricative, most of the students used /t/ while producing the words *theory*, *thesis*, *healthy*, *method*. While, in final position, they eliminated /θ/ sound for the

word *Length* and substituted / θ / into /t/ in the word *death*. The inappropriate way ways of producing sound also occurred when the students uttered voiceless interdental fricative sounds. Sound /ð/ in the initial and medial position as in *those, than, feather and rhythm* were changed into /d/. In the final position, sound /ð/ as in *breathe and bathe* were changed into /t/. Moreover, the appropriate production of voiced and voiceless interdental fricatives sounds are shown by the scribble pattern they made, while the inappropriate ways did not.

REFERENCES

- Ahmad, Yousef Bani. "Teaching English Pronunciation of Suprasegmental Features on Students of English Education." *SHS Web of Conferences* 42 (2018): 00048.
- Almaqrn, Riam., and Abdulrahman Alshabeb. "EFL Learners' Attitudes towards the Proper Pronunciation of English and Podcasts as a Facilitator of Proper Pronunciation." *Arab World English Journal* 8, no. 1 (2017): 208–219. <https://osf.io/preprints/socarxiv/8x5th/download>.
- Carr, Philip. "English Phonetics and Phonology An Introduction." *Blackwell Publishing Ltd* 1 (2013): 382.
- Gay, L. R. *Educational Research : Competencies for Analysis Ans Aoplication*. 3rd ed. New York: Merril Publishing Company, 1987.
- Gerald Kelly. *How to Teach Pronunciation*. 1st ed. Longman, 2000.
- — —. *No Title*. Edited by Jeremy Harmer. Second. Longman, 2001.
- Gilakjani, Abbas Pourhossein, and Mohammad Reza Ahmadi. "A Study of Factors Affecting EFL Learners ' English Listening Comprehension and the Strategies for Improvement" 2, no. 5 (2011): 977–988.
- Huberman and J. saldana. *The Analysis of Qualitative Data*. 3 rd. USA: Sage Publications, 2014.
- Kenworthy, Joanne. "Teaching English Pronunciation," 1987.
- Mcmahon, April. *An Introduction to English Phonology-Edinburgh University Press* (2001) (1), 2002.
- Ramelan. *English Phonetics*. IKIP Semarang Press, 2003.
- — —. *English Phonetics*. UNNES Press, 2003.
- Roach, Peter. *English Phonetics and Phonology : A Practical Course*. 4th ed. Cambridge: Cambridge University Press, 2009.
- Skandera, Paul, and Peter Burleigh. *A Manual of English Phonetics and Phonology*. Augsburg: Narr Dr.Gunter, 2005.
- Sugiyono. *Metode Penelitian Kuantitatif Kualitatif Dan R&D*. Bandung: Alfabeta, 2008