# INVESTIGATING THE ENGLISH PRONUNCIATION DEVIATION AMONG THAI STUDENTS

**Natlada Makamthong; Vega Hesmatantya**
University of Muhammadiyah Surabaya, Indonesia
*natlada41km@gmail.com*; *vegahesmatantya@um-surabaya.ac.id*

**Abstract**: When Thai students spoke English, they frequently deviated from the English consonant sounds. This aspect significantly influences the level of misunderstanding in English communication. This study aims to look at the variables that cause Thai students to deviate from English consonant sounds and the many phonological issues that cause Thai students to deviate from English sounds. The research approach employed in this study was descriptive qualitative. The participants in this study were twelve Thai students drawn purposefully from regions around Thailand such as Bangkok, Pathumthani, Nonthaburi, Samutprakarn, Songkhla, Pattani, and Narathiwat provinces who studied at Universitas Muhammadiyah Surabaya. The data were obtained from the participants' recording of minimal pairs of consonants and examined using PRAAT, a phonetics-focused computer program for speech analysis which was used to record and transcribe the participants' conversations. This study demonstrates that respondents' deviation of English sounds differs significantly. Their phonological difficulty was aided by many circumstances, resulting in variations in English consonant sounds.

*Keywords:* English Pronunciation, English Consonant Sounds, Deviation, Thai Students, Thai Consonant Phonemes

## INTRODUCTION

We currently live in a world of global communication in which English is the dominant language and is spoken by many people worldwide. People from many nations communicate and exchange ideas using the same language, English. Many countries, including Thailand, Indonesia, and Laos, have adopted English as a foreign language. Furthermore, it is crucial in various globalized domains such as politics, education, business, and others. Because everyone conveys information to one another through sound, it is critical to have proper pronunciation when communicating.

Acquiring an adequate vocabulary is as crucial as learning correct pronunciation when communicating. Apart from that, Harmer (2007) claimed that being aware of pronunciation issues will assist everyone in terms of their output and their knowledge of spoken English. As Harmer pointed out, knowing how to pronounce things helps you grasp what they say in English. The ability to pronounce words correctly is widely acknowledged as one of the main problems for many language learners. Even university students who have studied English for a long time still struggle with pronunciation. Most Thai students in higher education still have pronunciation problem in communication (Chavangklang, 2013). In the standardized examinations, EFL students frequently have to take as part of induction screening or course assessment processes, pronunciation is frequently evaluated in isolation since it is crucial to efficient communication (Fraser, 2000 in Moxon, 2021). As English plays as a foreign language in Thailand, the pronunciation problems may occur due to several factors. English is a challenging language to exercise orally since most Thai learners don't have many opportunity to speak in it on a regular basis. Having the chance to practice speaking both within and outside of the classroom is crucial for gaining L2 fluency. The majority of Thai people do not regularly expose English-language media (Tantiwich & Sinwongsuwat kornsakt, 2021).

Nowadays, many Thai students study in Indonesia, and they use English as a language to interact with one another. Even though both countries are in South East Asia, there is some misinterpretation or misunderstanding between them due to many Thai students pronouncing English consonants similarly to Thai consonants. According to (Wold, 2006), Beginner foreign language learners encounter difficulties acquiring a second language since it differs from their native tongue. Since then, English pronunciation has become the most challenging component for Thai students. In addition, Sahatsathatsana (2017) added that when Thai students pronounce English words, they encounter difficulties with certain sounds such as [θ], [ð], [ʤ], and other sounds that are not present in Thai language systems. Furthermore, according to (Chakma, 2014) Thai learners pronounce /k/, /t/, and /ch/ instead of /g/, /t/, and /sh/ since the Thai language lacks voiced velar stops and fricatives. Because it is difficult to pronounce proper sounds, Thai learners usually employ consonants that are closest in pronunciation in the Thai language, such as /k/, /t/, and /s/.

English pronunciation is the method of producing sounds. Pronunciation refers to the process of producing the sound of speech. Kristina & Rarasteja (2006) explained pronunciation as the performance or process of pronouncing words. Furthermore, the word can be spoken by individuals or groups because it depends on various factors, such as the areas in which they grew up or currently live; itall affects their speech or voice disorder. Crystal (1991) stated that pronunciation can be studied from two points of view: phonetic and phonology. Also, the main features of pronunciation are segmental features (including phonemes) and supra-segmental features (including stress, intonation, and connected speech).

The term phonetics is a branch of linguistics that studies the human sounds of speech. Kelly (2001) stated that phonetics is widespread in the studied language field, and it can be studied independently. As it is about the sound of human speech thus, it is connected to the speech organs, which it produces sounds that move the sound waves and are then received by the ears and transmitted to the brain.

Phonology is the study of the system in language, and it is generally concerned with how the sounds are interpreted and systematized. Kelly (2001) mentioned that phonology manages with the sound system and pattern that exist within the particular languages. The phonology of English is considered at two features: the vowels and consonants of the language. (McMahon, 2002) claimed that the phonology is the field which organization of sounds and the language- specific selection to signal meanings.

Thai people have their alphabets, orthographic, and pronunciation, then lead this study becomes unique since their English pronunciation is affected by how they pronounce Thai letters. For Thai people, English pronunciation is considered to be difficult because of the different sounds system in English and theThai language. Also, some Thai students pronounce some English consonants with the sounds of Thai consonants in communication. Consequently, it is challenging to grasp the English that they speak.

Referring to the situation above, through this study, the researchers attempt to involve twelve Thai students as participants in this study which were drawn purposefully from a variety of regions around Thailand such as Bangkok, Pathumthani, Nonthaburi, Samutprakarn, Songkhla, Pattani, and Narathiwat provinces who studied at University of Muhammadiyah Surabaya. The researchers examine how the English pronunciation deviation occur among Thai students and the kind of English pronunciation deviation when they pronounce the English words.

**METHOD**
Descriptive qualitative is used as the research design to analyze the data. The rationale of doing

this is that the researchers attempt to describe Thai students' Deviation in English pronunciation, and it is used to answer in the form of explanation and description towards the transcript of the data. The qualitative method demonstrated a different methodology for intellectual investigation than quantitative research. Even though the process is related, the qualitative method relies on transcript and appearance data. In addition, the analysis has unique steps and draws on various designs (Creswell, 2012). In addition, Bogdan et al., (1975) defined the "qualitative method" as a kind of research that produced descriptive data, including theoretical review, people's common perspectives, and uniquely human behavior.

The participants in this research were twelve Thai students who studied in the English Education Department at the Universitas Muhammadiyah Surabaya. They are enrolled in the second, fourth, and sixth semesters in the academic year 2019. The participants in this research were purposed sample whom all come from different areas of Thailand, consisting of four males and eight females from different family backgrounds; they are from Bangkok, Pathumthani, Nonthaburi Samutprakarn, Songkhla, Pattani, and Narathiwat provinces. Next, the data were the respondents' sounds when pronouncing the minimal pairs. Since the research was done during the Covid-19 pandemic, the instruments were sent through WhatsApp and email platforms. The respondents recorded their voices and sent them back to the researcher. Meanwhile, The instruments of this research used the demographic question and minimal pair consonants test. The demographic question is used to select the participants and it found out the participants' backgrounds and sought out who could be the respondents in this research.

The researcher collected the data from the demographic question and the minimal pair consonants test. These techniques gave explicit information directly to participants. This research data was collected by the steps as follows (1) giving demographic questions to all the participants to complete it. The researcher then checked it for completion; thus, the respondents were purposing selected from all participants, (2) The record participants' voices pronouncing through the minimal pair consonants test.

**FINDINGS AND DISCUSSION**

In this study, the researcher looked at how Thai students mispronounced words. Minimal pair consonants were used to extract data from the participant's speech recording. The research finding is the phonetics transcription from participant's voice recordings of twelve Thai students in the English department at Universitas Muhammadiyah Surabaya. This research aims to examine and characterize the pronunciation deviations of Thai students in English and what kind of pronunciation deviations they have. Kelly (2001) shared ideas on type manners of articulation of English consonants (consonants plosives, consonants affricatives, consonants fricative, consonant nasals, and consonants approximants), which were employed to address the following aims.

**The Types of Deviation in English pronunciation.**

This finding revealed two types of articulation deviations: affricate and fricative. The result is below.

**Table 1: The types of Deviation in English pronunciation**

| No | Sound | Symbol | Percentage of respondent pronunciation |
|---|---|---|---|
| 1 | Voiced dental fricative | /ð/ | 91.66% |
| 2 | Voiceless dental fricative | /θ/ | 75% |
| 3 | Voiced post-alveolar affricate | /dʒ/ | 58.33% |

Table 1 displays the overall data obtained from students who differed in the sorts of sounds they made in various places and articulation styles. The students have a fricative deviation, and it is because voiced dental fricative had the highest proportion of/ð/, contributing to 91.66 % of respondents' voiced dental fricative pronunciation. They were, however, comforted by the voiceless dental fricative /θ/, which reports for 75% of the total respondent's pronunciation. Finally, they remark on the voiced post-alveolar affricate /dʒ/, which is articulated by 58.33 %.

**The Deviation of Voiced Dental Fricative**

The following is the result, which shows the deviation of participants produced in voiced dental affricate of the manner of articulation. The result has shown in the table below.

**The Pronunciation of /ð/**

The English consonant sound /ð/ is the consonant sound that does not exist in the Thai phonetic system, and it is categorized as voiced dental in place of articulation and as a consonant phoneme, which belongs to the fricative in the manner of articulation. This particular sound is produced by placing the tip of the tongue between the upper and lower lip, and the air is released gradually through a narrow opening in the mouth, causing friction. The following table shows two deviations that occurred in the pronunciation of the voiced dental fricative sound /ð/.

**Table 2: The Deviation of /ð/**

| Position | Words | Standard Phonetic Transcription | Actual pronunciation | | Deviation |
|---|---|---|---|---|---|
| | | | **Respondents** | **Pronunciation** | |
| Initial | Though | /ðoʊ/ | 1 | /toʊ/ | /ð/ → /t/ |
| | | | 6 | / doʊ/ | /ð/ → /d/ |
| | This | /ðɪs/ | 4 | /dɪs/ | /ð/ → /d/ |
| | Then | /ðen/ | 3 | /den/ | /ð/ → /d/ |
| Medial | Lather | /ˈlæð.ɚ/ | 3 | /ˈlæt.ɚ/ | /ð/ → /t/ |
| | | | 5 | /ˈlæd.ɚ/ | /ð/ → /d/ |
| | Mother | /ˈmʌð.ɚ/ | 1 | /ˈmʌd.ɚ/ | /ð/ → /d/ |

| | | | 3 | /ˈmʌt.ɚ/ | /ð/ → /t/ |
|---|---|---|---|---|---|
| Final | Writhe | /raɪð/ | 1 | /raɪd/ | /ð/ → /d/ |
| | | | 8 | /raɪt/ | /ð/ → /t/ |
| | Teethe | /tiːð/ | 5 | /tiːt/ | /ð/ → /t/ |
| | | | 1 | /tiːd/ | /ð/ → /d/ |
| | Bathe | /beɪð/ | 5 | /beɪt/ | /ð/ → /t/ |
| | Scythe | /saɪð/ | 6 | /saɪt/ | /ð/ → / t/ |

Table 2 illustrates the total deviation of the participants' sound /ð/ produced. Nine respondents have deviation in the word of 'writhe' /raɪð/, eight respondents of word'lather' /ˈlæð.ɚ/, seven respondents have deviation in the word 'though' /ðoʊ/ and word 'this' /ðɪs/, six respondents from the word 'teethe' /tiːð/ and word 'scythe' /saɪð/, five respondents fromtheword 'bathe' /beɪð/, four respondents of the word 'mother' /ˈmʌð.ɚ/ and 3 respondents from the word 'then' /ðen/.

This deviation occurred when the participants replaced the sound /ð/ to another sound which participants performed substitution such as /t/ and /d/ /as follow;

The pronunciation of /ð/is pronounced as /t/. This deviation happened because sound /ð/ was substituted by /t/. The place of articulation, which /ð/ should be dental sound, but the participants constructed them into alveolar sound. Then, they produceda stop rather than a fricative sound in terms of the manner of articulation. In the initial position of a word, /ð/ was replaced with /t/ such as in the word though pronounced as / toʊ/, and in the medial position, the word lather pronounced as /ˈlæt.ɚ/ andin the final position word writhe pronounced as /raɪt/, bathe pronounced as /beɪt/ and scythe pronounced as /saɪt/.

The pronunciation of /ð/is pronounced as /d/. This occurred when the sound /ð/ was replaced with /d/, a voiced alveolar stop. The participants produced both sounds in the same way. The way to produce the sound /ð/ is the tip of the tongue is put behind the upper front teeth. However, in this case, the participant put the front part ofthe tongue on their alveolar ridge. In terms of articulation, /ð/ should be produced by pushing a nearly obstructed airflow through the tight hole and making a hissing noise.

Nonetheless, the participants completely stopped the airstream and then released it abruptly, resulting in a very different mannerof articulation, that is, stop. The substitution of /ð/ with /d/ occurred in a word's initial, medial, and final position. In an initial position, the word though pronounced as / doʊ/, pronounced as /dɪs/, and then pronounced as /den/. In the medial position, for example, the word lather is pronounced as /ˈlæd.ɚ/, and in a final position, such as writhe pronounced as /raɪd/, and the word teethe is pronounced as /tiːd/.

**The Deviation of Voiceless Dental Fricative**

The following is the study's result, which shows the deviation of participants produced in voiceless dental affricate of the manner of articulation. The result has shown in the table below.

**The Pronunciation of /θ/**

The English sound /θ/ is categorized as dental in place of articulation and as a consonant

phoneme, which belongs to fricative in the manner of articulation. This sound is made by placing the tongue's tip between the upper and lower teeth,and the air is unconfined gradually over and done with a narrow opening in the mouth,crossing friction without any vibration. The participants' pronunciation of /θ/is shown in the table below.

**Table 3 : The Deviation of /θ/**

| Position | Words | Standard Phonetic Transcription | Actual pronunciation | | Deviation |
|---|---|---|---|---|---|
| | | | **Respondents** | **pronunciation** | |
| Initial | Think | /θɪŋk/ | 3 | /tɪŋk/ | /θ/ → /t/ |
| | Thirst | /θɝːst/ | 9 | /tɝːst/ | /θ/ → /t/ |
| | Thought | /θɑːt/ | 3 | /tɑːt/ | /θ/ → /t/ |
| | Thigh | /θaɪ/ | 5 | /taɪ/ | /θ/ → /t/ |
| | Thor | /θɔːr/ | 1 | /dɔːr/ | /θ/ → /d/ |
| | | | 2 | /tɔːr/ | /θ/ → /t/ |
| Medial | Author | /ˈɑː.θɚ/ | 3 | /ˈɑː.tɚ/ | /θ/ → /t/ |
| Final | Mouth | /maʊθ/ | 1 | /maʊn/ | /θ/ → /Ø/ |
| | | | 7 | /maʊt/ | /θ/ → /t/ |
| | Oath | /oʊθ/ | 1 | /oʊf/ | /θ/ → /f/ |
| | | | 6 | /oʊt/ | /θ/ → /t/ |
| | Faith | /feɪθ/ | 1 | /feɪk/ | /θ/ → /k/ |
| | | | 1 | /feɪʃ/ | /θ/ → /ʃ/ |
| | | | 7 | /feɪt/ | /θ/ → /t/ |
| | Ruth | /ˈruːθ/ | 1 | /ˈruːz/ | /θ/ → /z/ |
| | | | 1 | /ˈruːd/ | /θ/ → /d/ |
| | | | 2 | /ˈruːf/ | /θ/ → /f/ |
| | | | 2 | /ˈruːʃ/ | /θ/ → /ʃ/ |
| | | | 3 | /ˈruːt/ | /θ/ → /t/ |

Table 3 demonstrates the total deviation of the sound /θ/ which produced from the participant; the result shows that there are nine respondents from word 'faith' /feɪθ/ , word

'ruth' /ˈruːθ/ and word 'thirst' /θɝːst/, eight respondents from word 'mouth' /maʊθ/, seven respondents from word 'oath' /oʊθ/, 5 respondents form the word 'thigh' /θaɪ/, three respondents from the word 'thought' /θɑːt/, 'think' /θɪŋk/, word 'thor' /θɔːr/, and word 'author' /ˈɑːθɚ/.

This deviation occurred when the participants replaced sound /θ/ to another sound; there are three kinds of which participants performed substitution such as /t/, /d/ and /Ø/ as follow;

The pronunciation of /θ/ is pronounced as /t/. This sound was deviated to /t/ at the word's first, medial, and final rank. These two sounds are similar because both of them are voiceless sounds. The participant changed the site of vocalization of /θ/ from dental to alveolar and the way of voicing from fricative to plosive. They stopped the airstream quickly, then released it shortly and produced stop instead of fricative. The deviation in the initial position of a word sound /θ/ was replaced with /t/ before a vowel such as word think pronounced as /tɪŋk/; thirst was pronounced as /tɝːst/ and thigh pronounced as /taɪ/. And in the final position, for example, word mouth is pronounced as /maʊt/, oath is pronounced as /oʊt/, and faith is pronounced as /feɪt/.

The pronunciation of /θ/ is pronounced as /d/. The participant changed the locate of vocalization of /θ/ from dental to alveolar and the technique of voicing from fricative to plosive in which they stopped the airstream for a short time and released it suddenly and produced stop instead of fricative. This deviation appeared in the initial and final position of the word for example of word thor is pronounced as /dɔːr/, and in the final word is ruth pronounced s /ˈruːd/.

The pronunciation of /θ/ is pronounced as /Ø/. This deviation is the sound /θ/ was the elision of this sound. This happened when the participant completely deleted this voiceless dental fricative sound in their articulation. The elision of /θ/ only happened in the final position as in the word mount that, pronounced as /maʊn/.

**The Deviation of voiced post-alveolar affricate**

The following is the result of the study, which shows the deviation of participants produced in voiced post-alveolar affricate of the manner of articulation. The result has shown in the table below.

**The Pronunciation of /dʒ/**

The first English sound analyzed in this research was /dʒ/. The consonant phoneme /dʒ/ is categorized as post-alveolar in place of articulation and as a consonant phoneme that belongs to affricate in the manner of articulation. Table 4 shows three deviations that occurred in the pronunciation of the voiced post-alveolar affricate sound /dʒ/.

**Table 4 : The Deviation of /dʒ/**

| Position | Words | Standard Phonetic Transcription | Actual pronunciation | | Deviation |
|---|---|---|---|---|---|
| | | | **Respondents** | **pronunciation** | |
| Medial | Pledger | /ˈpledʒə/ | 3 | /ˈpledgə/ | /dʒ/ → /g/ |
| | | | 1 | /ˈpledjə/ | /dʒ/ → /j/ |
| | | | 1 | /ˈpled tʃ ə/ | /dʒ/ → / tʃ/ |

|  | Ledger | /ˈledʒ.ɚ/ | 2 | /ˈledg.ɚ/ | /dʒ/ → /g/ |
|---|---|---|---|---|---|
|  |  |  | 2 | /ˈledj.ɚ/ | /dʒ/ → /j/ |
| Final | Badge | /bædʒ/ | 3 | /bæd/ | /dʒ/ → /d/ |
|  |  |  | 3 | /bætʃ/ | /dʒ/ → /tʃ/ |
|  | Ridge | /rɪdʒ/ | 1 | /rɪt/ | /dʒ/ → /t/ |
|  |  |  | 2 | /rɪd/ | /dʒ/ → /d/ |
|  |  |  | 4 | /rɪtʃ/ | /dʒ/ → /tʃ/ |

Table 4 shows the total deviation of sound /dʒ/ in each words which produced form participants; for example word 'ridge' /rɪdʒ/ (7 respondents), word 'badge' /bædʒ/ (6 respondents), word 'pledger' /ˈpledʒə/ (5 respondents), word 'ladger' /ˈledʒ.ɚ/ (4 respondents).

This deviation occurred when the participants replaced this sound with another sound; there are six kinds of which participants performed substitution such as /g/, /j/, /t/, /d/ and /tʃ/ as follows;

The pronunciation of /dʒ/ is pronounced as /g/. In this case, the sound/dʒ/ was substituted with /g/. These two sounds have different places and manner of articulation but have the same state of vocal cords because bothsounds are voiced. In producing the sound of /dʒ/, the tip of the tongue has to be raised in the hard palate. Meanwhile, velar is produced when the back of the tongue is positioned against the velum. In terms of the manner of articulation, to produce affricate sound, the airstream is stopped briefly, and then the articulators are released slightly to generate friction, while the stop is made if the current of air is completely stopped in the oral cavity shortly and then released abruptly. The substitution of /dʒ/ with /g/ occurred in all of the positions of the word. However, the result showsthat it happened when the sound /dʒ/ is in the medial and final location of some word, for example of, the word pledger pronounced as /ˈpledgə/, ledger pronounced as /ˈledg.ɚ/.

The pronunciation of /dʒ/ is pronounced as /j/. Those two sounds are voiced sounds, and it means that they are produced with the pulsation of the vocal cords. Then, /dʒ/ and /ĵ/is produced in the tip of the tongue is raised up to the hard palate, which indicates that those two sounds are categorized as palatals. Nonetheless, those two sounds are differentiated by noticing their manners of articulation. The finding of this study showed that the occurrence of this substitution of /dʒ/ with /ĵ/ appeared in the final position for case in point the word pledger pronounced as /ˈpledjə/ and ledgerpronounced in place of /ˈledj.ɚ/.

The pronunciation of /dʒ/ is pronounced as /t/ and /d/. With the substitution of /dʒ/ with /t/ and /d/, both sounds' place and manner of articulation are different. The vocalization of /dʒ/ is palatal and produced when the speaker raises the tip of the tongue to the hard palate, while /t/ and /d/ is alveolar, which is produced by placing the blade of the tongue on the alveolar point. In terms of the manner of articulation, /dʒ/ is an affricate sound, and /d/ is produced by briefly stopping the airstream and therefore known as a stop. The substitution of /dʒ/ with /t/ occurred at the final site of a word for case in point of word ridge pronounced by/rɪt/. The substitution of /dʒ/ with /d/ occurred in the final position of a word, for example, of word badge, which is pronounced as /bæd/ and ridge, which is pronounced as /rɪd/.

The pronunciation of /dʒ/ is pronounced as /tʃ/. This deviation in the pronunciation of /dʒ/ was substituted with /tʃ/. This deviation shows that the students replaced the voiced palate alveolar affricate sound with voiceless alveolar affricate. The substitution of /dʒ/ with /tʃ/ occurred only at the last position of a word for case inpoint of the word badge pronounced as /bætʃ/ and ridge pronounced in place of /rɪtʃ /.

The findings of this study are supported by Sahatsathatsana (2017) who revealed that some sounds were not presented in Thai language systems, and Thai students found problems of particular sounds such as [θ], [ð], [dʒ] when they were pronouncing English words.


**CONCLUSION**

Based on the findings of the research represented by twelve Thai students, there are many kinds of deviation produced by the Thai students in English consonants pronounced. As the presented in the previous section; the findings show that the participants performed deviation in two types of places and techniques of vocalization, and it consisted of three consonants phoneme which is voiced post-alveolar affricate sound /dʒ/, voiceless dental fricative sound /θ/ and voiced dental fricative sound /ð/. This research found 15 deviations in pronouncing English consonants performed by twelve participants presented below;

The results show the deviation in English consonant sound /dʒ/ has 6 kinds which participants performed substitution such as /g/, /j/, /t/, /d/, /ʃ/ and /tʃ/. For a case, the consonants phoneme /dʒ/ in word ridge /rɪdʒ/, most of them were pronounced as /rɪtʃ/and /rɪd/. In addition, the deviation of pronunciation in English consonants of Thai, students have three consonants from two  different places and manner of articulation, such as consonant sounds of /dʒ/, /θ/ and /ð/.

This study implies that it is challenging to get used to pronouncing English words properly. The occurrence of English pronunciation deviation is strongly influenced by the native language and the pronunciation of Thai national alphabet. This could be minimized by reinforcing pronunciation class. Drilling and practice activities must be performed often. In order to improve their training in pronouncing English words without being influenced by how they are spoken in Thai, Thai students should be exposed to English more frequently and engage in listening exercises. For future research, it is recommended by conducting classroom action research to examine deeper on the problem regarding pronunciation deviation among Thai students and propose ways and strategies to help them in practicing English pronunciation accurately.

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