Phonological Variations and Problems in English Pronunciation among Thai EFL Learners: A Case Study of Undergraduate Students at Huachiew Chalermprakiet University

การศึกษาการแปรของระบบเสียงและปัญหาในการออกเสียงภาษาอังกฤษสำหรับนักศึกษาไทย ที่เรียนภาษาอังกฤษเป็นภาษาต่างประเทศ: กรณีศึกษาสำหรับนักศึกษาระดับปริญญาตรี มหาวิทยาลัยหัวเฉียวเฉลิมพระเกียรติ

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Abstract

This paper attempts to examine phonological variations and problem sounds in English pronunciation among Thai undergraduate students. The purposes of this study were to 1) find out the English problem sounds for Thai EFL learners, and 2) investigate significant factors causing the problems in the English pronunciation of those sounds. Quantitative and qualitative methods were employed in the research design of this study. The instruments for this study were questionnaires and semi-interview forms. The samples were 20 undergraduate English-Chinese major students who enrolled in EG2173 (English Phonetics and Phonology) at Huachiew Chalermprakiet University. The findings from the students' answers showed that 4 English consonant sounds, especially [θ], [ð], [tʃ], and [dʒ] and consonant clusters both at the initial and final positions were mentioned as serious problems of pronunciation at the segmental level whereas consonant linking sounds, and rising intonation patterns (2-3 level) such as in Yes-No questions were reported as serious problems at the supra-segmental level. Besides, phonetic learning background was reported as the factor that mostly caused problems in learning phonetics. The findings could be concluded that the differences of the sound systems between English and Thai and some factors including phonetic ability, native language, the background of learning English pronunciation, teaching methodology, and motivation caused the students' problems in English pronunciation as well.

Keywords: Phonological Variations, Segmental Phonemes, Supra-segmental Phonemes, Pronunciation Problems, Thai EFL Students

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บทคัดย่อ

      บทความวิจัยเรื่อง การศึกษาการแปรของระบบเสียงและปัญหาในการออกเสียงภาษาอังกฤษหรับนักศึกษา
ไทยที่เรียนภาษาอังกฤษเป็นภาษาต่างประเทศ มีวัตถุประสงค์เพื่อ 1) ศึกษาเสียงภาษาอังกฤษที่เป็นปัญหาสำหรับ
นักศึกษาไทยที่เรียนภาษาอังกฤษในฐานะภาษาต่างประเทศ 2) ศึกษาองค์ประกอบสำคัญที่ทำให้เกิดปัญหาการออก
เสียงภาษาอังกฤษ ด้วยวิธีการวิจัยแบบผสมผสานทั้งในเชิงคุณภาพและปริมาณ เครื่องมือที่ใช้ประกอบด้วย
แบบสอบถามและแบบสัมภาษณ์กึ่งโครงสร้าง กลุ่มเป้าหมายได้แก่นักศึกษาระดับปริญญาตรี สาขาวิชาเอก
ภาษาอังกฤษ-ภาษาจีน ที่ลงทะเบียนเรียนวิชา EG2173 (English Phonetics and Phonology) มหาวิทยาลัยหัว
เฉียวเฉลิมพระเกียรติ

      ผลการวิจัยพบว่า ในระดับ Segmental Phonemes เสียงพยัญชนะภาษาอังกฤษที่เป็นปัญหาในการออก
เสียงสำหรับกลุ่มเป้าหมายมากที่สุดได้แก่ [θ], [ð], [tʃ], และ [dʒ] รวมถึงการออกเสียงพยัญชนะควบกล้ำ
(Consonant Clusters) ทั้งในตำแหน่งต้นและท้ายคำ ส่วนการออกเสียงในระดับ Suprasegmental Phonemes
พบว่า การเชื่อมเสียง (Linking) และทำนองเสียง (Intonation) โดยเฉพาะทำนองเสียงขึ้น-ตก (2-3) เช่น ในประโยค
คำถาม Yes-No Questions เป็นปัญหาสำคัญที่สุดในการออกเสียงสำหรับกลุ่มเป้าหมาย ผลการศึกษายังพบว่า
พื้นฐานการออกเสียงเป็นปัญหาสำคัญที่ส่งผลกระทบต่อการออกเสียงภาษาอังกฤษมากที่สุด จากผลการศึกษาวิจัยจึง
สรุปได้ว่า ความแตกต่างระหว่างระบบเสียงภาษาไทย-อังกฤษและปัจจัยอื่น ๆ เช่น ศักยภาพทางภาษา อิทธิพลของ
ภาษาแม่ พื้นฐานด้านการออกเสียงของผู้เรียน วิธีการสอนและแรงจูงใจ ล้วนเป็นสาเหตุที่ส่งผลให้เกิดปัญหาการออก
เสียงภาษาอังกฤษของนักศึกษาไทย

คำสำคัญ: การแปรสัทศาสตร์, หน่วยเสียงประเภทอิสระ, หน่วยเสียงประเภทไม่อิสระ, ปัญหาการออกเสียง
          ภาษาอังกฤษ, นักศึกษาไทยที่เรียนภาษาอังกฤษเป็นภาษาต่างประเทศ

Introduction

      As global communication expands with less limitation, studying English becomes important
for all learners. English is probably one of the most important languages in the world today in
terms of international communication and lingua franca. It is truly clear that the English language is
playing a major role in the process of globalization. In all skills of English, many people think that
vocabulary and grammar skills are more important than pronunciation skill. As we know, there
are many things to study including vocabulary, grammar, reading, writing, and speaking. However,
as Ellis (1997) stated that a key to good speaking is good pronunciation, it can be inferred that
knowing grammar and vocabulary is important for students, but they need to pronounce those
structures or words correctly.

      English pronunciation is incredibly important to be understood and avoid misunderstanding
in communication. Thai students who study English as a foreign language are found too shy to
speak out since they are not confident with their pronunciation. They accept that their poor

pronunciation created incomprehensibility when they communicate with foreigners (Khamkhien, 2010). As for English-Chinese major students, their pronunciation of English is also a problem in learning English, especially for this major whose students have to study both English and Chinese. Studying two languages as their major can be mentioned as one of the barriers in their pronunciation.

Pronunciation teaching has its focus on the goal of achieving a near or native-like pronunciation. In other words, achieving good pronunciation should be the first goal of students. Gilakjani (2011) and Garrigues (1999), point out that if the speakers have unacceptable pronunciation, their utterances will not be comprehensible to listeners and as a result, they will not be successful in their communication. If speakers pronounce clearly and correctly, their audience should be able to easily understand what they are trying to express. On the other hand, misunderstandings, in many cases, may occur when words are inaccurately pronounced or stressed.

Regarding the English Department's curriculum of Huachiew Chalermprakiet University (HCU), there are compulsory courses in the subject area of Linguistics which are related to the above pronunciation domains, namely, EG 2723 (English Phonology) for the 2nd year English major students and EG 2173: English Phonetics and Phonology for 2nd year English-Chinese major students. Both segmental and supra-segmental phonemes have been taught to those students through the courses. The students need to use their speaking and pronunciation skills in related areas of their study such as English for Presentation, Cooperative Project Presentation, Listening-Speaking courses, etc. Students also need to increase the examination scores to get good grades in those subject areas. As English-Chinese major students (international program), they are highly expected to speak and pronounce English effectively in both segmental and suprasegmental phonemes.

After having taught English Phonetics and Phonology course for English-Chinese major students at Huachiew Chalermprakiet University for two semesters, the researcher has observed that English pronunciation problems affected their abilities to communicate in an authentic situation. Also, the problems of English pronunciation impacted students' performance in classroom activities, their tests, and grades. As a lecturer who teaches the English Phonetics course, the researcher would like to find out the causes and factors affecting the English pronunciation problems of students to find the suitable solution or materials for solving problems for future students.

There are many research papers and studies about the problems and factors affecting English pronunciation among Thai learners. Sahatsathatsana (2017) has studied the 'Pronunciation

Problems of Thai Students Learning English Phonetics: A Case Study at Kalasin University'. The findings could be concluded that the opinion of difference of sound system between English and Thai and some factors including phonetic ability, native language, prior English pronunciation learning, instruction, and motivation caused the students' problem in phonetics learning as well. Apichatabutra (2011) has mentioned that it is necessary to provide students with some background in articulatory phonetics. This will give them basic guidelines in articulation which will help them to better differentiate English problem sounds and thus enable them to improve their English pronunciation. Necessary basic concepts based on articulatory phonetics are as follows: (1) speech organs responsible for producing speech sounds; (2) criteria for producing accurate consonant sounds according to the places of articulation, manners of articulation and voicing; (3) criteria for producing accurate vowel sounds according to the position of the tongue and the lips; (4) the use of suprasegmental phonemes to accompany the consonant and vowel sounds in English; (5) sound assimilation of the English loan words used in Thai. Finally, learning motivation should be enhanced for the second language learners along with their theoretical knowledge of speech sounds.

Research Objectives

This study aims to

1) investigate the phonological variation and problems in English pronunciation among Thai EFL learners and

2) find out factors causing the problems in English pronunciation for Thai EFL learners.

Research Questions

1) What are the phonological variations and problem sounds in English pronunciation among Thai learners at Huachiew Chalermprakiet University ?

2) What are the factors causing the problems in English pronunciation among Thai EFL learners at Huachiew Chalermprakiet University?

Methodology

Research Design

Quantitative and qualitative methods were both employed in the research design of this study. The participants were 20 undergraduate students in English-Chinese major, taking the English Phonetics and Phonology course at Huachiew Chalermprakiet University. All of them were chosen as samples for this study depending on the conveniences and availabilities of the sampling

method for a quantitative study. Moreover, the teacher purposely selected nine from twenty students which are about 45% of the total participants. They consisted of three students with good English pronunciation, another three students with moderate English pronunciation, and the other three students with poor English pronunciation as the informants for the qualitative study. The selected participants for the qualitative study were based on the total scores after they had finished studying the English Phonetics and Phonology course with both spoken and written tests, according to the university's grading criteria.

The instruments used in this study consisted of a survey questionnaire, pronunciation identification task and a semi-structured individual interview. The questionnaire was adapted from Winitkul & Ulla (2007) and was employed for students' self-evaluation and self-awareness on their pronunciation proficiency and problems. It was also used to collect the quantitative data about the segmental and supra-segmental features, and factors causing students' pronunciation. The data obtained were analyzed through the criteria adapted from Suppasetseree (2005). The semi-structured individual interview was adapted from Hoque (2011) and was employed to collect the qualitative data in the same topics to compare and confirm the data obtained from the quantitative part. The results showed that semi-structured interviews were an efficient and effective method of collecting both qualitative and quantitative information for the students' pronunciation proficiency, the satisfaction of students, and their attitude toward learning this subject. The collected data by using these methods could significantly support insight on information, leading to more effective and valid data in this research.

Data Analysis

The data were collected after 20 of the 2nd year English-Chinese students finished studying the English Phonetics and Phonology course in the first semester of the academic year 2020. The questionnaire and pronunciation identification task were examined by statistical software to calculate the means and standard deviation. The coding techniques were used to analyze the qualitative data from the interview protocol, adapting the criteria evaluation for quantitative data of the questionnaire from Suppasetseree (2005) to calculate the data from a 5-point rating scale, to the arithmetic means and standard deviation.

Results

The data obtained from the survey questionnaire, pronunciation identification task, and a semi-structured individual interview were analyzed quantitatively and qualitatively and they are presented in the following sections:

TABLE 1: THE INTERPRETATION OF THE PERCENTAGES OF SURVEY ON SELF-EVALUATIONS AND IDENTIFICATION ON ENGLISH PROBLEMS AMONG THAI EFL LEARNERS AT HCU

		YES	NO	NOT SURE
1	I speak English with a clear voice and easy to hear.	33.64%	24.58%	41.78%
2	I pronounce English consonant sounds clearly.	22.67%	45.59%	31.74%
3	I pronounce English vowel sounds clearly.	49.29%	08.44%	42.27%
4	I appropriately produce word stress.	04.77%	28.79%	66.44%
5	I appropriately create intonation.	23.16%	24.09%	52.75%
6	I appropriately pronounce pausing and linking sounds.	19.81%	32.56%	47.63%
7	I appropriately address my messages at a qualified speed.	23.57%	18.15%	58.28%
8	I can make my audience understand my pronunciation.	25.61%	11.29%	63.10%
9	I am satisfied with my English pronunciation proficiencies.	22.87%	41.62%	35.51%
10	I need to improve my English pronunciation.	89.47	4.32	6.21

The findings presented in Table 1 showed that the Thai EFL learners cannot identify their problems clearly. The answers significantly indicated that they are 'not sure' about their pronunciation proficiencies. Overall, the answers indicated that most of the students were not satisfied with their English pronunciation and they highly needed to improve their English pronunciation.

TABLE 2: THE INTERPRETATION OF THE MEAN SCORE OF ENGLISH PROBLEM SOUNDS PRONOUNCED BY THAI EFL LEARNERS' MEAN SCORE INTERPRETATION

4.00 – 5.00	The English problem sounds referred as a very serious problem for students
3.00 – 3.99	The English problem sounds referred as a serious problem for students
2.00 – 2.99	The English problem sounds referred as a moderate problem for students
1.00 – 1.99	The English problem sounds referred as a small problem for students
0.00 – 0.99	The English problem sounds referred as a very small problem for students

For the qualitative data analysis, the results from the semi-structured interview were analyzed qualitatively by means of a coding technique developed by Creswell (2002) which includes open coding, axial coding, and selective coding for the description of the qualitative data as described in the results section below.

TABLE 3: THAI EFL LEARNERS' PROBLEMS IN PRONUNCIATION SEGMENTAL PHONEMES (CONSONANT AND VOWEL SOUNDS)

No.	Statements	$\bar{x}$	S.D.
1.	Consonant Pronunciation	2.7	1.308
2.	Consonant Cluster Pronunciation	2.95	1.203
3.	Monophthong Vowel Pronunciation	1.7	1.229
4.	Diphthong Vowel Pronunciation	1.8	1.327
5.	Final Sound with –ed ending Pronunciation	2.7	1.308
6.	Final Sound with -s ending Pronunciation	2.6	1.319
	Total	2.89	2.034

The results revealed that segmental phonemes of consonant articulation namely consonant clusters were the very cause serious pronunciation problems for the EFL students, whereas and final sound with –s and -ed were mentioned as serious problems.

TABLE 4: THAI EFL LEARNERS' PROBLEMS IN PRONUNCIATION SUPRA-SEGMENTAL PHONEMES (STRESS, INTONATION, PAUSING AND LINKING)

No.	Statements	$\bar{x}$	S.D.
1.	Word Stress	3.80	1.033
2.	Sentence Stress	3.80	1.135
3.	Intonation	4.00	.667
4.	Linking Sound	4.30	.949
	Total	**3.97**	**.940**

The three elements composing the supra-segmental features, including linking sounds and intonation were reported to cause very serious pronunciation problems while the other two: word stress and sentence stress were found to cause serious problems.

TABLE 5: THAI EFL LEARNERS' ANSWERS ON FACTORS CAUSING STUDENTS' ENGLISH PRONUNCIATION PROBLEMS

No.	Statements	$\bar{x}$	S.D.
1.	Phonetic Ability	4.30	.943
2.	Native Language	4.50	.919
3.	Experience in English Learning	4.20	.699
4.	Teaching Methodology	3.50	.699
5.	Motivation and attitude	3.70	.738
	Total	**4.06**	**.780**

The findings from Table 5 reflected that native language and phonetic ability were reflected as factors resulting in very serious pronunciation problems whereas motivation and attitude, English pronunciation learning experiences, and instruction were reported as serious pronunciation problems.

Qualitative Results

The data from students' answers were analyzed and proposed from the interview qualitatively by means of three steps of Creswell (2002)'s coding technique; that is, open coding, axial coding, and selective coding.

The findings showed two major pronunciational problems from the students' interviews: one is the differences in the sound system between Thai and English, the other is the factors occurring from those differences.

In the Speaking Test, many students pronounced some English sounds with high interferences of Thai native such as /z/, /r/, /v/, [θ], [ð], /tʃ/, /ʃ/, and [dʒ] . Thai students usually use the similar Thai sounds to substitute those English sounds such as the /z/ sound is substituted by /s/, the /v/ sound is substituted by /w/, and the [θ], [ð] sounds are substituted by /t/ respectively.

For the segmental level, Thai students encountered problems in pronouncing some English sounds. The problem sounds can be divided into three categories (Jotikasthira, 1999):

1) those that do not occur in Thai such as /v/, /z/, [θ], [ð], /r/, /v/, /tʃ/, /ʃ/, /,/dʒ/, and /ž/. as [θ], [ð], [dʒ], and /g/. Normally Thai students cannot pronounce these sounds because they do not exist in the Thai language.

2) those that are different from their Thai equivalents as to their distribution such as /l/, /f/, and /s/. Although those English sounds exit in Thai language, they are also considered problem sounds. This is because they do not occur at the final position in Thai and most Thai students fail to pronounce them when they appear finally in English words. The /l/ sound is substituted by /n/ as in the word 'football'. The unreleased /b/ is heard instead of /f/ as in 'golf' and 'safe'. The sound /s/ in 'gas' is usually replaced by the unreleased /d/.

3) those that are phonetically different from their Thai equivalents. The differences in both the places and manners of articulation of those sounds in the Thai language make it difficult for Thais to pronounce them the same way as the native speakers do. The English sounds /r/, for example, can be formed in various ways depending upon different speakers and dialects. This retroflex /r/ is made by moving the sides of the tongue against the back teeth. The front of the tongue is lowered but the tip is turned upward and withdrawn towards the back of the mouth, whereas the Thai /r/ sound is just a trilled /r/.

Students admitted that the differences between Thai-English sound systems caused problems for their pronunciation. Below are the excerpts of the students' interviews showing pronunciation problem:

"It is really difficult for me to pronounce some sounds that we do not have that consonant in Thai such as [θ], [ð], [ʤ] and so on." (S1)

"I cannot pronounce the word with consonant clusters, such as "Throw" contains [θ] and [r] in the initial position, and the word "Asked" consists of [s], [k], and [t] in the final position." (S2)

"Three consonant clusters at the initial position is the most difficult for me" (S3)

"The word "instincts" is the most difficult for me to produce because there are four consonant clusters at the final position. (S4)

Some students commented that some words having linking sounds confused them with the unclear sound heard, which made them hard to pronounce.

One of the pronunciation problems is voicing, as shown in S5 and S6:

"It is very hard for me to listen with understanding of what native speakers saying because they speak too fast to catch their words, and the sounds are not clear." (S5).

Students also differentiated their former and present teaching styles of pronunciation as the excerpt below:

"I have a headache of pronouncing method which is the standard." (S6)

"I often ignore voicing when I speak as Thai pronunciation has no voicing." (S7)

"I don't know how to automatically add voicing in my English." (S8)

"I have problems in voicing pronunciation because the influence of my mother tongue" (S9)

As earlier discussed, we found that many opinions on pronunciation problems are in segmental and supra-segmental levels in English Phonetics study. Consonant cluster articulation, consonant articulation, linking sounds, final sounds with -d and -ed, and also intonation are considered difficult. Motivation means the most to students at the first start of the course as they have difficulty in native familiarity with individual ability. In addition, instruction is recorded as one of the major problems as well.

Conclusion

The findings have shown that the Thai EFL learners at HCU had serious problems with English pronunciation both in segmental and supra-segmental phonemes. The qualitative data showed two main pronunciation problems reflected by the students, which were

1) the effects of differences between the sound systems of Thai and English and

2) the effects of Thai articulations on English pronunciation.

These are discussed as below:

Firstly, the findings from students' answers reflected that both segmental and supra-

segmental phonemes of English pronunciation affected the student's pronunciation problems. The differences in the sound systems and articulations of English and Thai highly affected their English pronunciation. As it was found there are many problems on English consonant sounds for Thai learners such as /z/, /r/, /v/, /tʃ/, /ʃ/, /ž/, and /dʒ/. Most Thai students are unable to produce some sounds such as interdental sounds [θ], [ð], and [dʒ] since they do not exist in the sound system of the Thai language. In this case, the teacher can explain to the students that those sounds do not exist in Thai, and they need to be careful when they pronounce the sounds mentioned. The differences in both places and manners of articulation of those sounds in the Thai language make it difficult for Thais to pronounce them the same way as the native speakers do. This may lead to communication failure in the end.

Secondly, consonant cluster and linking sound pronunciation were reported as the highest mean score of students' problems in English supra-segmental phonemes. Some consonant cluster sounds such as the [θr] sound in the initial position of the word 'three', [str-] sound in the word "strong", and [kst] sound in the final position of the word 'mixed' are more difficult to pronounce because they do not occur in Thai. The reason why consonant cluster articulation had the highest mean score of students' problems in pronunciation might be related to the difference between English consonant clusters and Thai consonant clusters due to the fact that many English cluster sounds do not exist in Thai. In Thai, certain consonants cannot occur as a consonant cluster. An example of the initial consonant cluster is in the word 'strong' consisting of three consonant sounds /s/, /t/, /r/. Since in Thai, up to only two sounds are found in the initial position, /s/,/t/. This might lead the students to encounter serious problems with their English pronunciation.

Pronunciation of s-ending and ed-ending sounds is one of the serious problems for Thai EFL learners. For example, the omission of consonant clusters as in 'mixed' is pronounced 'mik' instead of /mɪkst/. The omission of plurality is usually found such as 'dogs' is pronounced /dɔk/ instead of /dɔgz/. Moving 's' on singular verbs to the subject, for instance, *'He's talk too much'* instead of '*He talks too much'* is also obvious.

In contrast, the English vowel articulations were not mentioned as problem sounds for Thai EFL student's interviews This might be because the pronunciations of many Thai vowels are like those in English. So, the students could pronounce the appropriate sounds for some of the English vowels even though there were some problems in vowel articulations such as the positions of the tongue, the muscular tension, the position of the lips found during their pronunciation tests. This explains why problems in English vowel articulation were not reported in the interview.

Another serious problem of pronunciation learning in the English Phonetics course reported by the students was linking sounds. As mentioned earlier that linking is the way to join the last

sound of one word with the first sound of the next word. Although Thai EFL students are well-trained in individual English consonant and vowel sounds, when they speak English, their sounds are choppy or sometimes even not comprehensible. The findings showed that many Thai EFL leaners ignored linking sounds when they speak English. This is because students pronounce English with the interference of their mother tongue which has different linking sound systems from those of English.

Moreover, for the factors which negatively affect the students' pronunciation problems, the findings of the study have shown that there are three factors that cause students to experience very serious pronunciation problems, including their native language, phonetic proficiency, and background on English pronunciation learning, whereas the remaining two factors, including instruction and motivation, are the cause of serious problems. However, when calculating the results from the questionnaire, it was found that the factor of native language had the highest mean score. It corresponded with the study of Senel (2006) who mentioned that interference or negative transfer from the first language is likely to cause errors in aspiration, intonation, rhythm, and melody in the target language. Although students are well-trained in individual English consonant sounds, when they speak English, their sounds are choppy or sometimes even not comprehensible. This is because students pronounce English with the interference of their mother tongue, Thai, which is a tonal one-syllable word language.

Besides, the phonetic ability was reflected by the students that it was one of many factors that negatively affected their pronunciation problems. When students cannot hear a sound clearly, it is very difficult for them to repeat that sound correctly. This might be since native speakers or even some foreigners who speak English naturally made it difficult for the students to easily understand.

Lastly, backgrounds and previous experiences in learning English were reflected by the students as important factors negatively affecting their pronunciation. Students explained that their English learning at the primary and secondary schools was mostly focused on grammar. Pronunciation skill was not emphasized and sometimes was ignored by their teachers. These made students encounter difficulties in learning when they study at the university level on which pronunciation was significantly focused. From class observation, some students pronounced English words automatically and confidently with incorrect pronunciation. After that, they stopped and pronounced them again with the correct pronunciation which they learnt in the classroom. That is why students reflected that their English pronunciation was negatively affected by their previous experiences in studying pronunciation.

Discussion and Recommendation

The study has shown that Thai EFL learners at HCU faced problems in English pronunciation at both the segmental and supra-segmental levels. For the segmental level, the students encountered problems in pronouncing some sounds such as [θ], [ð], [ʤ], and so on, which were not existing in Thai. There are also many other problems in English consonant sounds for Thai learners such as /z/, /r/, /v/, /tʃ/, /ʃ/, and /ǯ/. The differences in both the places and manners of articulation of those sounds in the Thai language make it difficult for Thais to pronounce them the same way as the native speakers do. As Ellis (1997) stated that if words or sentences are not pronounced in those structures correctly, this may lead to communication failure in the end.

Moreover, the consonant cluster articulation in both initial and final positions could also be the problem for Thai EFL learners. When English allows as many as three consonant sounds in the initial position, Thai contains at most two sounds. An example of the initial consonant cluster is in the word 'strong' consisting of three consonant sounds /s/, /t/, /r/. Since in Thai, up to only two sounds are found in the initial position, /s/,/t/. In Thai, certain consonants cannot occur as a consonant cluster. For the problems at supra-segmental level, the students had the problems with linking sound and some final sounds, especially the final sounds with –d and –ed. The differences in the sound systems between the first language and the target language might negatively affect the students' English pronunciation.

Whereas the important factors which negatively affect their ability in pronouncing English sounds effectively are reflected in a wide range of problems from the most problematic to the least problematic, they include the difference of the mother language and target one, individual differences in ability, and past learning experiences. This is correlated to Avery and Ehrlich (1987) who believed that learners have difficulty speaking the target language if the target one is different from their native language.

There are some suggestions for further studies to promote pronunciation proficiencies of Thai EFL learners. Further studies should investigate and provide effective teaching methodology, activities, and teaching materials on teaching pronunciation courses to motivate and encourage Thai EFL learners to improve their pronunciation effectively and comprehensibly. Thai teachers usually teach English pronunciation utilizing and not teacher-made resources that specifically address these students' pronunciation problem in pronunciation. Although I am not opposed to using textbooks, the fact is that the current states of commercial phonetic materials used are highly unsatisfactory and insufficient for Thai EFL learners. The grammar-translation method is still maintained by most Thai teachers in English pronunciation class. All class activities are provided

and conducted by teachers who are classroom-centered. The isolated words or sentences are used as examples to display the way to pronounce English sounds in phonetic classes. The disadvantages of this are obvious. Isolated words or sentences do not provide good enough motivation to encourage students to fully understand the differences of each sound; the examples should be in the form of sentences.

Moreover, teachers teaching English Phonetics courses at all levels in Thai education institutions should prepare more intensive exercises, activities, and multimedia to solve students' problems of both the differences of sound systems between English and Thai and to deal with factors affecting English pronunciation learning. As suggested by Khamkhien (2010) and Kanoksilapatham (1992), to improve and increase teacher skills in using multimedia and other related resources can enhance students' pronunciation competence. Finally, English curriculum designs should increase more focusing on Listening-Speaking courses than the previous ones. English Pronunciation skills in both segmental and supra-segmental phonemes should receive more focus from teachers at primary and secondary schools.

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