



**WORD STRESS ERRORS OF GRADUATE STUDENTS  
IN THAILAND: A STUDY OF CEIC PROGRAM**

**BY**

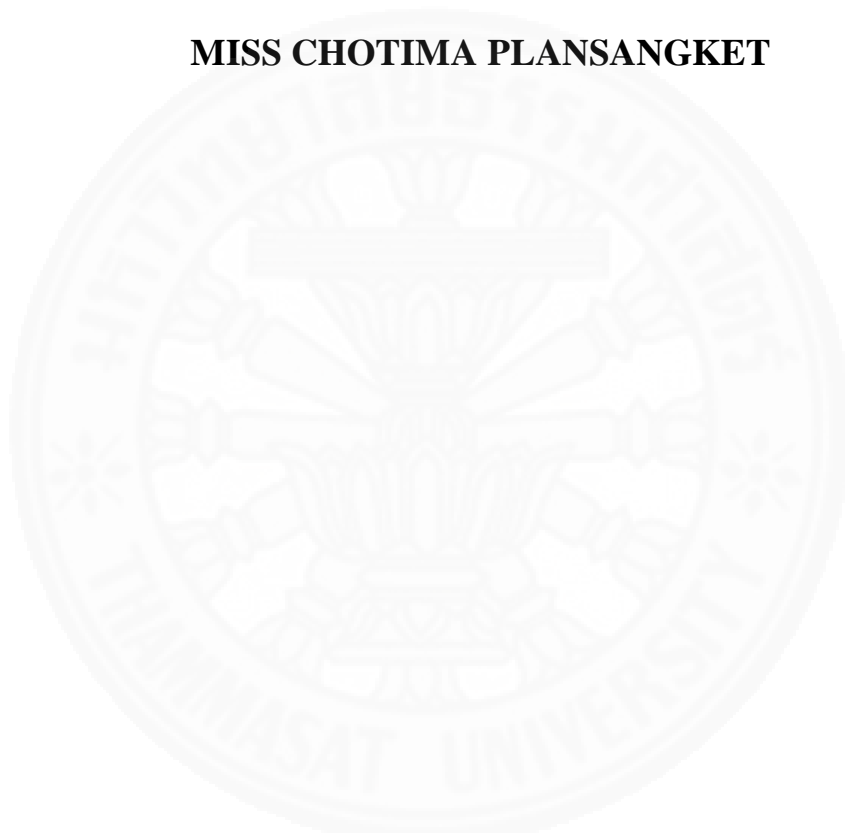
**MISS CHOTIMA PLANSANGKET**

**AN INDEPENDENT STUDY PAPER SUBMITTED IN PARTIAL  
FULFILLMENT OF  
THE REQUIREMENTS FOR THE DEGREE OF  
MASTER OF ARTS IN CAREER ENGLISH FOR  
INTERNATIONAL COMMUNICATION  
LANGUAGE INSTITUTE, THAMMASAT UNIVERSITY  
ACADEMIC YEAR 2016  
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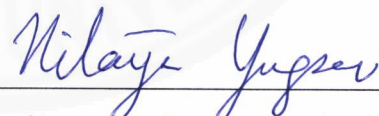
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was approved as partial fulfillment of the requirements for  
the degree of Master of Arts in Career English for International Communication

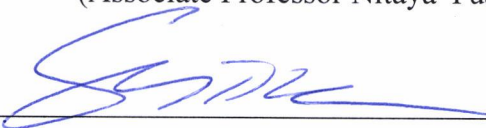
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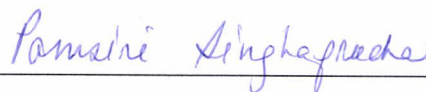
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Independent Study Paper Title	WORD STRESS ERRORS OF GRADUATE STUDENTS IN THAILAND: A STUDY OF CEIC PROGRAM
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## ABSTRACT

The purpose of this study is to explore to what extent graduate students in Thailand can correctly locate primary stress on English disyllabic pairs. The study also aims to investigate the potential factors affecting their stress placement errors. The participants in the study were 50 Thammasat University graduate students studying in Career English for International Communication program in the second semester of academic year 2016. The participants were asked to complete a stress assignment test consisting of 15 disyllabic pairs and a questionnaire regarding practice, attitude, motivation and prior pronunciation learning. The data obtained were analyzed using SPSS program to display descriptive statistics. The results found that graduate students in Thailand had limited competence in disyllabic pair stress placement. In addition, the lack of pronunciation knowledge, including word stress rules, was a significant factor affecting their word stress errors. The findings highlight the importance of pronunciation learning and are also useful for designing more appropriate teaching strategies.

**Keywords:** Pronunciation errors, Word stress, Disyllabic pairs

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Miss Chotima Plansangket

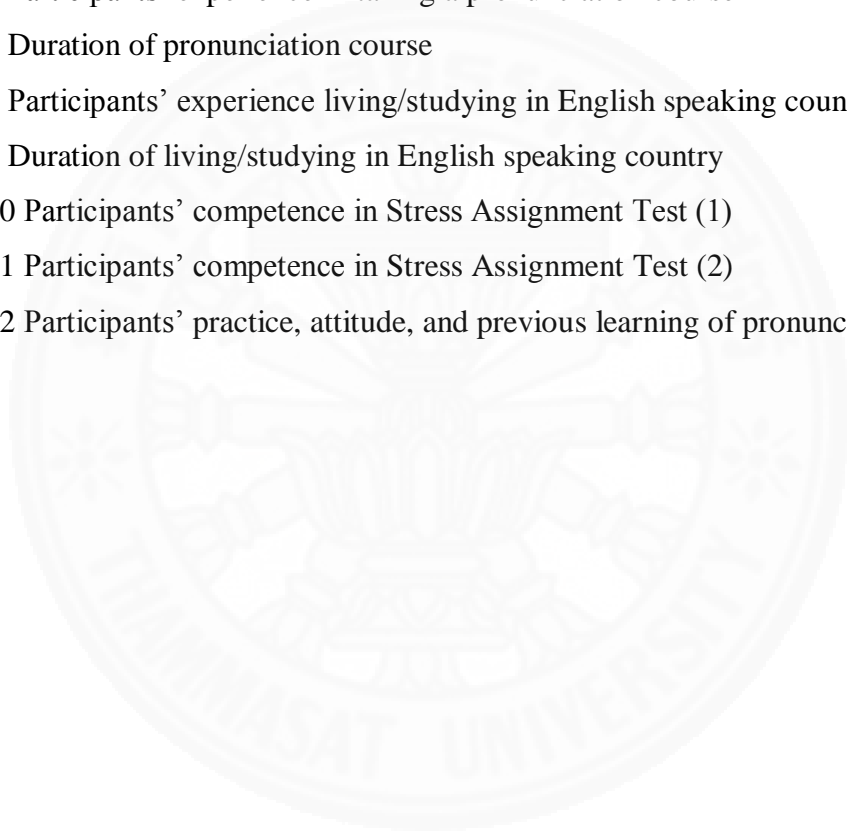
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# CHAPTER 1

## INTRODUCTION

### 1.1 Background of the study

Pronunciation is the most important skill of spoken English since it can convey meaning immediately (Gilakjani, 2011). To communicate effectively with native English speakers or speakers of other languages, even though perfect pronunciation is not required, it should be accurate enough to be always understood (Harmer, 1991). Pronunciation errors can lead to misunderstanding or increase difficulties to the person who is interpreting the message. It is considered one of the most frequent categories of errors that can occur in both segmental, which are consonants and vowel sounds, and suprasegmentals, including stress, pitch, rhythm, intonation, and duration.

The studies on suprasegmental have been gaining importance in recent years as it has a great impact on listener intelligibility. Word stress is one of prosodic features to which international researchers have paid attention and their studies found that misplaced word stress can slow listeners processing time and lessen the amount of recalled content (Field, 2005; Hahn, 2004). Jenkins (2009) also mentioned that stress placement is the element most causing difficulty to L2 learners and, it can be assumed, to Thai EFL learners. Over the past decades, there have been a number of studies focusing on Thai learners pronunciation abilities, and most of them indicated the limitations of Thai learners' competence in suprasegmental, in which word stress placement problems seemed to be significant (Khamkhien, 2010; Wei & Yalun, 2002; Winaitham & Suppasetsee, 2010).

English is a stressed-timed language and its stress pattern is fixed that every word has primary stress, but the primary stress is not tied with a particular sequence of syllables (Gimson & Cruttenden, 2001). To determine stress, there are at least 4 factors to take into consideration; grammatical class, morphological form, phonological structure, and the number of syllables (Roach, 2009). Certainly, the complexity of English stress pattern rules (tendencies), together with considerable

exceptions, will cause some difficulties to EFL learners, especially the learners whose L1 stress pattern are very different to English such as Thai learners.

It has been observed that even though this area appears to be highly problematic, the studies on competence and errors of word stress among Thai EFL learners are still limited. This study is aimed to investigate the competence of Thai learners to assign stress on disyllabic pairs where word classes (sometimes meanings) are distinguished by a shift of stress and they are group of words EFL learners should pay special attention to. Furthermore, the previous relevant studies mainly explored the errors of students studying in regular programs who tend have limited skill in English. This work deals with Thai graduate students studying in the international program of Career English for International Communication (CEIC) at Thammasat University who generally have higher exposure to English language and good pronunciations are more likely to affect their daily life, especially their careers.

## **1.2 Research questions**

**1.2.1** To what extent can CEIC students correctly assign stress to disyllabic noun-verb pairs?

**1.2.2** What are the factors affecting their word stress errors?

## **1.3 Research objectives**

The objectives of this research are:

**1.3.1** To explore to what extent CEIC students can assign stress to disyllabic noun-verb pairs.

**1.3.2** To investigate what factors affect their word stress errors.

## **1.4 Definition of terms**

**1.4.1 CEIC students** refer to students of Master of Career English for International Communication at Language Institute, Thammasat University in academic year 2016.

**1.4.2 Word stress** refers to an emphasis that is given to a certain syllable in a word. The ways in which all the syllables are stressed in the word vary from primary stress, secondary stress, and unstressed syllables.

**1.4.3 Word stress error** is an error that occurs when a speaker does not give stress to the correct syllable in the target word.

**1.4.4 Disyllabic pairs** typically disyllabic is a word with two syllables. This study focused on disyllabic pairs which refer to pairs of two syllables words that can function as both noun and verb, and their part of speech is distinguished by stress. Some sources mention disyllabic pairs as word-class pairs.

**1.4.5 Suprasegmental feature** refers to a phonological feature applied to larger than single segments such as length, intonation, stress, and tone. This study mainly focused on word stress.

## **1.5 Significance of the study**

Stress is one of most important suprasegmentals that plays a vital role in mutual intelligibility and Thai learners tend to have significant problem with this feature of pronunciation, particularly disyllabic noun-verb pairs that might cause confusion to speakers, and consequently affect the listener's comprehension. Recognizing errors relating to word stress placement and factors affecting errors would help students to be more aware of English production of word stress and also be useful in designing more appropriate teaching strategies.

## **1.6 Scope of the study**

This research was limited to exploring the competence (errors) in stress placement among first and second year students of Career English for international communication (CEIC) in academic year 2016. In addition, it is focused on the level of word stress of disyllabic pairs where stress varies in different parts of speech (verb, noun).

## **1.7 Organization of the study**

This research study is divided into five chapters as follows:

**1.7.1 Chapter one** presents the background of the study, research questions and objectives, definition of terms, significance of the study, scope of the study, and organization of this paper.

**1.7.2 Chapter two** focuses on the review of related theories including the definition of stress, stress pattern, and the factors affecting pronunciation competence, together with the relevant research studies.

**1.7.3 Chapter three** deals with the research methodology consisting of participants, materials, procedures, and data analysis.

**1.7.4 Chapter four** explains the results of this research study.

**1.7.5 Chapter five** provides a summary of the study, a summary of the findings, discussions, conclusions, and recommendations for further study.



## CHAPTER 2

### REVIEW OF LITERATURE

#### 2.1 Definition of stress

When mentioning pronunciation, two aspects, segmental and suprasegmental, are always included. Segmental involves individual sounds such as consonants and vowels while suprasegmental involves features of speech with more than one sound segment which are stress, pitch, rhythm, intonation, and duration. McNerney and Mendelsohn (1992) claimed that suprasegmentals are extremely important to convey the meaning in spoken language and are also able to convey the intended attitude.

*Stressed syllables* are defined as syllables within an utterance that are longer, louder, and higher in pitch (Celce-Murcia, Brinton, & Goodwin, 2012). They are also important at three different levels; word level – words with many syllables have one or more stressed syllables; sentence level – the most important words are more likely to be stressed; contrastive stress – the most important words have greater stress. To recognize the prominence of stressed syllables, four factors have to be taken into account; pitch change, loudness, quantity and quality of vowel sound (Gimsom & Cruttenden, 2001).

Dalton and Seidlhofer (1994) defined *word stress* as the characteristic pattern of two kinds of syllables that are stressed and unstressed syllables. They also claimed that incorrect word stress decreases intelligibility and may lead to misunderstandings. Phonological rules of stress pattern in some languages are simple while others are quite complex. For example, primary stress in Finnish always falls on the first syllable while some languages might need to know stem, prefix, or suffix to assign primary stress.

Avery and Ehrlich (1992) also suggested that L1 transfer often causes errors in word stress and incorrect stressing of polysyllabic words greatly affect comprehension. According to Swan & Smith (1998), Thai and English phonological systems are different which might cause difficulties in producing some features including stress. Thai learners tend to place primary stress on the final syllable of

polysyllabic English words. This might contribute to the fact that Thai is a tonal language with a fixed tone in each syllable. As a result, Thai learners might be unable to predict the stress pattern of English and then apply native language rules to their English pronunciation.

## 2.2 Primary stress of disyllabic words

Many scholars have tried to generate the stress pattern rules, which sometimes should be regarded as tendencies since these rules contains a large number of exceptions. Chomsky, Halle, and Keyser (as cited in Kreidler, 1987, p.102) formulated the stress rules that take into consideration in *syntactic information* involving word classes, *morphological composition* involving prefixes and suffixes, and *phonological factors* dealing with heavy and light syllables. They proposed that disyllabic nouns tend to have primary stress on the first syllable, which was confirmed by the study of Kelly & Bock (1988) revealing that 94% of nouns are stressed on the first syllable.

Roach (2009) mentioned the several pairs of disyllabic words with identical spelling, but their stress differs according to word class (verb, noun, and adjective). These pairs generally consist of prefix + stem and should be given the rule that primary stress is placed on the first syllable if it is noun (or adjective), and primary stress is placed on the second syllable if it functions as verb. Some common noun-verb disyllabic examples are; conduct, contract, contrast, desert, escort, export, import, insult, object, perfect, permit, present, produce, protest, rebel, record, and subject.

Even though the pattern rules of English are not regular, with a large number of exceptions to many rules, the learners of English should pay more attention to these tendencies, especially the role of affix on primary stress, the vowel reduction in unstressed syllables, and role of stress contrast in those words where word classes are distinguished by a shift of stress (Gimson & Cruttenden, 2001).

## 2.3 Factors affecting pronunciation competence

Celce-Murcia, Brinton, and Goodwin (2012) and Kenworthy (1987) identified some factors affecting learner pronunciation.

**2.3.1 Native language** Each language has some similarities and differences. If learners' native language is greatly different from English, the learners are more likely to experience difficulties in English pronunciation. According to Avery and Ehrlich (1992), the sound system of the native language influences English pronunciation problems in three ways which are: when learners encounter the sound that are different from their native sound system, when rules for combining sounds are different, and when stress and intonation patterns from L1 can be transferred to L2.

“*Interference*” or “*negative transfer*” which can be explained by contrastive analysis, originally proposed by Lado (1957), explains that interference with a second language will occur if the two language structures are different. He also claimed that “when learning a foreign language we tend to transfer our entire native language in the process”. This early view might be too strong as it has drawn some criticism among today researchers, however; most of them agree on the fact that negative transfer is a significant factor to account for foreign accents regarding the acquisition of distinctive segmental and suprasegmental features (Celce-Murcia, Brinton, & Goodwin, 2012).

**2.3.2 Exposure to the target language** several studies comparing the ability of pronunciation of learners with different levels of language exposure revealed the difficulty of the learners with limited exposure to English language (Sertikul, 2005). However, this factor is not as simple as people living in an English speaking country will master English pronunciation. Many people who live in a non-English speaking country, but use a lot of English in their daily life, can also have good pronunciation. Brown (1992) indicated that students could master good pronunciation if they devote time to it and have a strong intention to expose themselves to the target language. Kenworthy (1987) similarly supported that learners should respond to opportunities to listen and use English.

**2.3.3 Attitude and motivation** Attitude and motivation play important roles in improving pronunciation. People who have positive feelings toward target language are more likely to be successful in learning pronunciation (Brown, 1992). This positive attitude is relevant to *integrative motivation* that is the motivation to be included in the target language's society and *instrumental motivation* in which

learners learn target language to achieve something e.g. job promotion. Motivation also goes two ways. High motivation is a factor that promotes successful learning while success in learning may cause high motivation.

**2.3.4 Prior pronunciation instruction** also influences student pronunciation competence. Students with prior pronunciation lessons including phonetics and phonological knowledge tend to apply these rules to their English production. On the other hands, students who have not been instructed in this area or are taught by teachers whose pronunciation differs from standard pronunciation might not be aware of their errors, leading to intelligibility problems for the listeners.

**2.3.5 Age** There seems to be two contradicting claims about this factor. Some researchers, such as Scovel, supported Critical Period Hypothesis that learning a second language will be more difficult and the learner will be unable to achieve native-like fluency after puberty while other such as Hoefnagel-Hohle studied British learning Dutch in Holland and found that adult learners performed better for the first year of learning (as cited in Celce-Murcia, Brinton, & Goodwin, 2012, p.16). Kenworthy (1987) then concluded that there was still no simple and straightforward link between age and second language pronunciation competence.

Additionally, sociological or psychological factors also affect pronunciation competence such as anxiety when communicating with foreigners, worrying about grammatical mistakes (Winaitam & Suppasetsee, 2010), peer group pressure and not wanting to show language ability (Swan & Smith, 1998).

## **2.4 Relevant research studies**

Winaitam & Suppasetsee (2010) investigated English pronunciation errors of 30 first year Thai university students by using English pronunciation tests, a questionnaire and a semi-structured interview. They found that Thai undergraduate students pronounced words with very high errors in stress, with over 73.1% errors of pronouncing stress on unknown words, moderate errors in long vowels and diphthongs, and low errors in consonants. They also pointed out factors affecting Thai students' pronunciation errors. The major significant factors were worrying too much about English grammar, tenses, or vocabulary (90%), having anxiety when



communicating with foreigners (87%), minimal use of English in daily life (57%), and lack of basic pronunciation of English and phonetics (50%).

Attapol Khamkhien (2010) examined Thai learners' knowledge regarding word stress assignment and determined factors affecting their pronunciation. Ninety Thai EFL learners studying in the science field were selected to complete a questionnaire on their background information and a test of selected words from science textbooks to measure their word stress competence. The study found that Thai learners had difficulty with pronouncing five-syllable words the most, and two-syllable words the least. Among the 3 factors contributing to the participants' test scores, gender was the most significant factor as females performed slightly better while faculty and the number of year studying English were not significantly different.

Saijai Chuleethongrerk (2006) studied the competence of 68 Thai university students to place primary stress to first-syllable-stressed and second-syllable-stressed disyllabic words in context and context free environments. The students were asked to complete two tasks; pronouncing 10 selected words which appeared frequently in their textbook, and reading a reading passage which contained those words. The result showed that students assigned stress on second-syllable-stressed disyllabic words more correctly than first-syllable-stressed disyllabic words (100% and 76% in context free); (94% and 74% in context). This result also suggested that students assign stress more correctly in context free settings.

Wei Youfu and Zhou Yalun (2002) investigated some important pronunciation problems among Thai students. The study found Thai students had problems with consonants and vowels; words with final consonants which are always pronounced unaspirated and unvoiced; consonants clusters; words with /ei/ usually pronounced as /e/ ; words with /r/, /v/, /z/, /ʒ/ usually pronounced as /l/, /f/, /s/, /s/ ; and words with / θ/, / ð/ usually pronounced /s/ or /z/. Intonation and stress problems were also found. Thai students used the rising tone for Wh questions and used the same tone for Yes/No questions and statements. They also put the stress on the last syllable. Moreover, the researchers summarized some possible causes of Thai students' pronunciation problems as follows: pronouncing borrowed words in Thai

ways, Thai language influences on the pronunciation of English, teachers pronunciation in Thai style, and being shy to speak like native speakers.

Davis & Kelly (1997) conducted research to test the tendency for disyllabic nouns and disyllabic verbs to have first –syllable and second-syllable stress respectively. The participants were native speakers and learners of English from University of Pennsylvania who were tested in three experiments including the evaluation of lexical stress, sentence creation, and speed classification. The first experiment showed that non-native speakers were closely as accurate as native speakers in assigning the intended word stress pattern of disyllabic words, implying that they had essential concepts for learning the noun-verb stress difference. In the second experiment, both groups used disyllabic non-words as verbs in sentences more often when they had second-syllable stress. The third experiment found that non-native speakers classified words as nouns or verbs more quickly and accurately if they had a stress pattern in their grammatical class. Regarding native speakers, they represented the same pattern but not significantly. Moreover, there was no relationship between the effects of noun-verb stress difference and English experience.

## **CHAPTER 3**

### **RESEARCH METHODOLOGY**

#### **3.1 Participants**

The population of this study were first year and second year students of Career English for International Communication (CEIC) program studying at Thammasat University in academic year 2016. The participants were selected by convenience sampling technique. According to Dörnyei (2007), convenience sampling is the most common type in second language research and the criterion for selecting the sample are research conveniences e.g. easy accessibility or willingness to volunteer. In this study, the number of participants were 50 (n=50).

#### **3.2 Materials**

The data were collected using a pronunciation test and a questionnaire.

##### **3.2.1 Word stress assignment test**

A stress assignment test was administered to measure participants' level of errors in locating the primary stress of disyllabic pairs. The test consisted of 15 pairs of disyllabic words that can be both noun and verb and different stresses can identify its part of speech. Each disyllabic word was composed in a sentence arranged in a random order to prevent participants from predicting the stress placement pattern. The test items in sentences were obtained from pronunciation activities in 2 books; Pronunciation Practice Activities: A Resource Book for Pronunciation and Longman Pronunciation Dictionary: A Study Guide.

##### **3.2.2 Questionnaire**

A five point scaled questionnaire was used to find the potential factors causing stress placement errors. The questionnaire was divided into 2 parts.

**3.2.2.1 Personal information** dealt with age, gender, bachelor's degree field of study, years of studying English, English test score (TU-GET), prior pronunciation learning experience, and experience studying/living in an English speaking country.

**3.2.2.2 A survey questionnaire** aimed to explore English practice, attitude, motivation, and prior pronunciation learning to identify some potential factors affecting students' pronunciation. This questionnaire was adapted from an investigation of English pronunciation errors and factors affecting English pronunciation of Thai undergraduate students by Winaitham and Suppasetseree (2010). The questionnaire consisted of 15 questions; including items no. 1-5 intended to explore participants' pronunciation practice, items no. 6-10 related to participants' attitude and motivation, and items no.11-15 related to previous pronunciation learning. These 15 statements were measured on five level scales from strongly disagree (1) to strongly agree (5).

### **3.3 Procedures**

Some items in the questionnaire were developed based on the source and relevant theories. The test and questionnaire were piloted to five students to test its validity and reliability. The results from the pilot study revealed that some unclear questions needed to be adjusted. After revision, both instruments were distributed to 50 participants at Language Institute, Thammasat University during 1-30 April 2017. During the process of data collection, the participants were firstly asked to identify the primary stress on the stress assignment test of 30 items. Before beginning the test, the participants were allowed to read through all the sentences to make sure they understand all the meanings, and also informed that no forms of dictionaries were allowed during the test. After completing the test, the participants were asked to fill in the questionnaire consisting of 15 questions items.

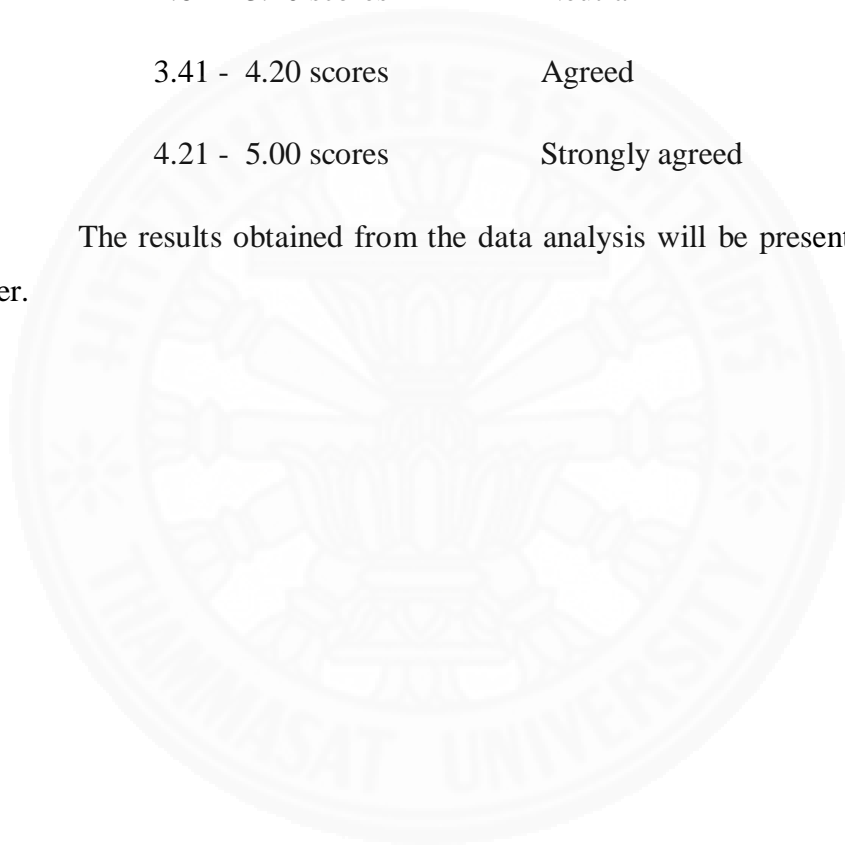
### **3.4 Data analysis**

The data from the test were first checked with answers keys provided in the resource books. 1 point was counted if the primary stress placement of each test item was correct and 0 if the placement was incorrect. In addition, this set of data was also calculated using Statistical Package for the Social Sciences (SPSS) program to find the percentage of accuracy on each test item. The data obtained from complete questionnaires were analyzed using descriptive statistics in SPSS to display frequency, percentage, mean, and standard deviation, then they were processed by the

criteria of 5 level intervals to interpret the mean score of each question in the following range:

<b>Mean</b>	<b>Level</b>
1.00 - 1.80 scores	Strongly disagreed
1.81 - 2.60 scores	Disagreed
2.61 - 3.40 scores	Neutral
3.41 - 4.20 scores	Agreed
4.21 - 5.00 scores	Strongly agreed

The results obtained from the data analysis will be presented in the next chapter.



## CHAPTER 4

### RESULTS

The previous chapter explained the methodology of the study. This chapter presents the results obtained from the stress assignment test and questionnaire. The data were coded and analyzed using the Statistical Package for Social Sciences (SPSS) to acquire descriptive statistics including frequency, percentage, mean, and standard deviation. The results in this chapter were divided into three parts as follows:

4.1 The personal information of the participants

4.2 The competence of the participants in assigning primary stress on disyllabic pairs.

4.3 The practice, attitude, and previous learning of English pronunciation

#### 4.1 Personal information of participants

The first part of the questionnaire explored the general information of the respondents which was presented in 7 categories; gender, age, bachelor's degree field of study, years of learning English, English test score (TU-GET), experience in taking pronunciation course, and experience in studying/living in English speaking country.

**Table 1. Gender of Participants**

Gender	Frequency (N)	Percentage (%)
Male	11	22.0
Female	39	78.0
Total	50	100.0

Table 1 shows that the large majority of the participants were female (N=39, 78%) while males were counted as 22% (N=11).

**Table 2. Age of Participants**

<b>Age</b>	<b>Frequency (N)</b>	<b>Percentage (%)</b>
21-30	30	60.0
31-40	17	34.0
40-50	1	2.0
Over 50	2	4.0
Total	50	100.0

As shown in table 2, the participants age of 21-30 years old were the majority of the group (60%), followed by participants of 31-40 years old (34%), and of over 50 years old (4%) while the mean age of the respondent was 30.8 years old.

**Table 3. Education Field of Participants**

<b>Education Field</b>	<b>Frequency (N)</b>	<b>Percentage (%)</b>
Arts/Humanity	32	64.0
Business/Economics	8	16.0
Education	4	8.0
Engineering	3	6.0
Other	3	6.0
Total	50	100.0

Table 3 represents the bachelor's degree field of study of participants. Most of them graduated in Arts/Humanity (64%). The participants who graduated in Business/Economics were four times less than the majority group (16%). There were

only 3 participants who graduated in Engineering, as few as participants who graduated in other fields (6%).

**Table 4. Years of Learning English of Participants**

<b>Years</b>	<b>Frequency (N)</b>	<b>Percentage (%)</b>
10-15	23	46.0
16-20	21	42.0
21-25	5	10.0
26-30	1	2.0
Total	50	100.0

Table 4 presents participant's duration of learning English. Almost half of the total participants have been learning English for 10-15 years (46%), followed by the participants with 16-20 years of learning (42%). The rest of respondents have been learning English for 21-25 years (10%) and 26-30 years (2%). The maximum duration of English learning was 27 years while the minimum was 10 years, and the mean was 16.4 years.

**Table 5. English Test (TU-GET) Scores of Participants**

<b>TU-GET Scores</b>	<b>Frequency (N)</b>	<b>Percentage (%)</b>
400-500	2	4.0
501-600	20	40.0
601-700	17	34.0
701-800	7	14.0
More than 800	1	2.0



Missing	3	6.0
Total	50	100.0

TU-GET is Thammasat University's standardized English test with the total scores of 1000. Every CEIC student needs 550 scores to pass the graduation requirement.

Table 5 displays the TU-GET test score of participants. The most frequent scores were in the range 501-600 which accounted for 40% of participants, followed by in the range of 601-700 scores acquired by 34% of participants. There was only one participant who achieved the highest range of over 800 scores and 6% accounted for missing answers. The average test score of these respondents was 625.

**Table 6. Participants' Experience in Taking Pronunciation Course**

<b>Experience of Pronunciation Course</b>	<b>Frequency (N)</b>	<b>Percentage (%)</b>
Yes	31	62.0
No	19	38.0
Total	50	100.0

As can be seen from Table 6, the majority of participants have taken a pronunciation course (62%) while 38% of them had no experience taking this course.

**Table 7. Duration of Pronunciation Course (Months)**

	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>S.D.</b>
Duration of Pronunciation Course	31	1	12	3.52	1.981

Table 7 summarizes the duration of the pronunciation course taken by 31 participants who had such experience. The average duration of the course was 3.5 months. The minimum duration was 1 month while the maximum duration was 12 months.

**Table 8. Participants' Experience in Living/Studying in English Speaking Country**

<b>Experience living/studying in English speaking country</b>	<b>Frequency (N)</b>	<b>Percentage (%)</b>
Yes	17	34.0
No	33	66.0
Total	30	100.0

As shown in Table 8, the majority of participants had no experience living or studying in an English speaking country (66%) while thirty-four percent of them had such an experience (34%).

**Table 9. Duration of Living/Studying in an English Speaking Country (Months)**

	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>S.D.</b>
Duration of living/study in English speaking country	17	1	36	6.18	8.925

Table 9 summarizes the duration of living/studying in English speaking country of 17 participants. The average duration of the time spent in those countries was about 6 months. The minimum duration was 1 month while the maximum duration was 36 months.

#### 4.2 The competence of the participants in assigning primary stress on disyllabic pairs.

The data in this part were obtained from the Stress Assignment Test of 15 pairs of disyllabic words whose stress differs in each part of speech (noun, verb). The results from the test were displayed in 2 aspects: The performance of participants by overall scores and the performance on each test item. The percentage, mean, and standard deviation were also calculated using SPSS program.

*Table 10. The participant's Competence in Stress Assignment Test (1)*

Stress Assignment Test Scores	Frequency (N)	Percentage (%)
1-10	4	8.0
11-20	23	46.0
21-30	23	46.0
Total	50	100.0

Participants who received scores between 21-30 accounted for 46%, the same amount as the group that received the scores between 11-20, and there were 4 respondents who achieved lower than 10 as shown in table 10. However, two out of four participants in this group could perform only 1 correct item. The average score was 19.6. The maximum score was 30 while the minimum was 1.

*Table 11. The Participants' Competence in the Stress Assignment Test (2)*

Test Items	Correct Stressed Syllable	Position of Syllable Stressed (%)		Overall Correct (%)
		First Syllable	Second Syllable	
1. They won the <b>contract</b> to build the new museum.	First	82.0	18.0	<b>82.0</b>

2. The time was a new world <b>record</b> .	First	66.0	32.0	<b>66.0</b>
3. It is my pleasure to <b>present</b> Dr Stevens.	Second	28.0	72.0	<b>72.0</b>
4. I've always wanted to <b>conduct</b> an orchestra.	Second	34.0	66.0	<b>66.0</b>
5. She gave me a watch as a <b>present</b> .	First	74.0	26.0	<b>74.0</b>
6. Thomas was the main <b>suspect</b> in the crime.	First	70.0	30.0	<b>70.0</b>
7. You need a <b>permit</b> to fish here.	First	66.0	34.0	<b>66.0</b>
8. As they cool, metals <b>contract</b> .	Second	56.0	44.0	<b>44.0</b>
9. What's that strange <b>object</b> on the top shelf?	First	82.0	18.0	<b>82.0</b>
10. The vegetable shop sold only local <b>produce</b> .	First	52.0	48.0	<b>52.0</b>
11. The rules don't <b>permit</b> mobile phones in the school.	Second	34.0	66.0	<b>66.0</b>
12. We can't <b>discount</b> the possibility that John has had an accident.	Second	40.0	60.0	<b>60.0</b>
13. The children's <b>conduct</b> during the concert was excellent.	First	56.0	44.0	<b>56.0</b>
14. I have to <b>produce</b> the report by the end of the week.	Second	14.0	86.0	<b>86.0</b>
15. When she asked for money I began to <b>suspect</b> her honesty.	Second	34.0	66.0	<b>66.0</b>
16. Would anyone <b>object</b> if we finish the meeting early?	Second	28.0	72.0	<b>72.0</b>

17. I asked if I could <b>record</b> her lecture.	Second	40.0	60.0	<b>60.0</b>
18. Will you give me a <b>discount</b> on the price if I buy three?	First	66.0	34.0	<b>66.0</b>
19. There has been a <b>decrease</b> in the birth rate.	First	46.0	54.0	<b>46.0</b>
20. His business interests <b>conflict</b> with his public duty.	Second	56.0	44.0	<b>44.0</b>
21. The <b>rebels</b> in the hills will never surrender.	First	74.0	26.0	<b>74.0</b>
22. The number of members is expected to <b>decrease</b> .	Second	28.0	72.0	<b>72.0</b>
23. The average <b>increase</b> in earnings last year was 6%.	First	44.0	56.0	<b>44.0</b>
24. The border dispute may lead to armed <b>conflict</b> between the two countries.	First	78.0	22.0	<b>78.0</b>
25. Taxes are not expected to <b>increase</b> .	Second	30.0	70.0	<b>70.0</b>
26. The President had an armed <b>escort</b> .	First	66.0	34.0	<b>66.0</b>
27. There will be a storm of <b>protest</b> .	First	66.0	34.0	<b>66.0</b>
28. Every child <b>rebels</b> against authority at some stage.	Second	34.0	66.0	<b>66.0</b>
29. I'm going to <b>protest</b> .	Second	34.0	66.0	<b>66.0</b>
30. The receptionist will <b>escort</b> visitors to the meeting room.	Second	36.0	64.0	<b>64.0</b>
<b>Total</b>		<b>50.47</b>	<b>49.47</b>	<b>65.4</b>

Table 11 presents the result gained from the stress assignment test of disyllabic pairs. It was found that the participants could averagely assign stress with 65.4% of correctness (34.6 % of errors). The item that participants could perform best was *Item 14. I have to **produce** the report by the end of the week* with over 86% correctness. On the other hand, there were four test items with a high percent of errors that the participants could perform less than 50% which were *Item 8 As they cool, metals **contract***. (56% of errors), *Item 19 There has been a **decrease** in the birth rate* (54% of errors), *Item 20 His business interests **conflict** with his public duty* which was supposed to stress on the second syllable, but most of the students placed stress on the first syllable (56% of errors), and *Item 23 The average **increase** in earnings last year was 6%* that was supposed to stress on the first syllable, but the majority of the students assigned stress on the second syllable (56% of errors).

#### 4.3 The practice, attitude, and previous learning of English pronunciation

The data in this part were obtained from the 15 item questionnaire with five –point scales relating to practice, attitude, and prior pronunciation learning. The data were analyzed using SPSS program to display frequency, mean, and standard deviation. The criteria for interpreting the mean score of each question were in the following range:

Mean	Level
1.00 - 1.80 scores	Strongly disagreed
1.81 - 2.60 scores	Disagreed
2.61 - 3.40 scores	Neutral
3.41 - 4.20 scores	Agreed
4.21 - 5.00 scores	Strongly agreed

**Table 12. Participants' Practice, Attitude, and Previous Learning of English Pronunciation**

Questionnaire Items	Level of Agreement					$\bar{x}$	S.D.	Results
	1	2	3	4	5			
1. I often use English in my daily life.	7	7	9	15	12	3.36	1.367	Neutral
2. I often use English in my career.	2	6	10	15	17	3.78	1.166	Agreed
3. I learn and practice pronunciation out of class with reading materials	2	10	18	16	4	3.20	0.990	Neutral
4. I learn and practice pronunciation out of class with songs, movies, and TV programs.	4	3	15	14	14	3.62	1.193	Agreed
5. I typically use a dictionary to correct my word stress.	5	11	12	10	12	3.26	1.322	Neutral
6. English is my favorite subject.	0	1	4	20	25	4.38	0.725	Strongly Agreed
7. I want to have good pronunciation to be judged favorably at work	2	0	7	17	24	4.22	0.975	Strongly Agreed
8. Learning pronunciation is hard.	2	7	17	12	12	3.50	1.129	Agreed
9. I avoid pronouncing English sounds correctly since people might think I try to show off.	20	17	11	2	0	1.90	0.886	Disagreed
10. Correct word stress is not important as long as I can communicate with foreigners.	16	16	9	6	3	2.28	1.213	Disagreed
11. I have anxiety when communicating in English.	7	15	15	7	6	2.80	1.212	Neutral
12. I am familiar with English phonetics/phonology	17	13	10	9	1	2.28	1.179	Disagreed
13. I am familiar with English stress rules.	12	15	13	10	7	2.42	1.071	Disagreed

14. Previous English teachers taught me about word stress.	4	6	14	19	7	3.38	1.123	Neutral
15. I learn the pronunciation by memorizing from English lecturers.	0	8	17	20	45	3.44	0.884	Agreed
<b>Total</b>						3.19	1.096	

It can be seen from Table 12 that most of the participants learned and practiced pronunciation with English songs, movies, and TV programs slightly more than with reading materials (mean scores 3.62, and 3.20 ). They also used English in their careers slightly more than in daily life (mean score 3.78, and 3.36). From question 6-10 relating to a participant's attitude, it was found that question 6 *English is my favorite subject* and question 7 *I want to have good pronunciation to be judged favorably at work* received the highest mean scores (4.38 and 4.22 respectively). However, they agreed on the statement that *learning pronunciation is hard*. Furthermore, most participants also disagreed with the statement 9. *I avoid pronouncing English sounds correctly since people might think I try to show off* (mean score 1.90), and statement 10. *Correct word stress is not important as long as I can communicate with foreigners* (mean score 2.28), implying that they were confident to pronounce English sounds accurately and saw the importance of correct word stress. In addition, a large majority of participants expressed that they were not familiar with English Phonetics/Phonology and English stress rules as shown in question 12 and question 13 with the disagree level (mean score 2.28 and 2.42 respectively).

The findings of the study will be summarized and discussed in the next chapter.



## **CHAPTER 5**

### **CONCLUSIONS, DISCUSSIONS AND RECOMMENDATIONS**

This chapter presents (1) a summary of the study, (2) a summary of the findings, (3) discussions of the results, (4) conclusion, and (5) recommendations for further study

#### **5.1 Summary of the study**

This section summarizes the objectives, participants, materials, and procedures of the study as follows:

##### **5.1.1 Objectives of the study**

This study aimed to explore to what extent graduate EFL learners in Thailand were capable of assigning the correct position of stress on disyllabic words in which stress varied with different parts of speech (verb, noun). In addition, the study was intended to investigate the potential factors affecting the learners' difficulties in word stress placement.

##### **5.1.2 Participants, Materials, and Procedures**

The participants of this study were 50 graduate students studying in the second semester of 2016 in the Career English for International communication (CEIC) program, Thammasat University. They were selected using convenient sampling technique.

The research instruments used in this study were a stress assignment test and a five point scales questionnaire. The stress assignment test consisted of 15 disyllabic pairs to measure the competence of the participants in locating primary stress. The questionnaire was divided into two parts. The first part was personal information of the respondents including gender, age, fields of study, TU-GET scores, pronunciation course experience, and living/studying experience in an English speaking country. The second part related to English pronunciation practice, attitude, and prior learning habits.

The test and questionnaire were distributed to 50 respondents by convenience at Language Institute, Thammasat University in April 2017. The

completed data from both instruments were computed and then analyzed using SPSS program to display frequency, percentage, mean, maximum, minimum, and standard deviation which were shown in the form of tables.

## 5.2 Summary of the findings

The results of this study can be summarized as follows:

### 5.2.1 Personal information of participants

The participants of this study consisted of 50 students in CEIC program. The findings revealed that the majority of the participants were female (78%). Most of these participants were between 21-30 years old (60%), followed by 31-40 years old (34%). Regarding the field of study, a majority graduated with a bachelor's degree in Arts/Humanity (64%), followed by Business/Economics (16%). The average years of learning English of participants was 16.4 years and most of them have learned English for 10-15 years (46%), slightly more than participants with 16-20 years of learning (42%). In terms of TU-GET scores, the most frequent range was 501-600 which was acquired by 40% of participants, followed by the range of 601-700 (34%). It was also found that the majority of participants (62%) had taken pronunciation classes with average duration of 3.5 months while over 66% of participants informed that they had no experience living/studying in an English speaking country.

### 5.2.2 The CEIC students' competence in assigning primary stress on disyllabic pairs.

Referring to the results of the stress assignment test, the average competence of participants in locating the primary stress of 15 disyllabic pairs was 65.4%. In other words, they could perform the test with 34.6 % of errors. There were none of the test items for which the participants could locate primary stress with 100% correctness. The test item that received the highest percent of correctness was "produce" which acted as a verb in *I have to **produce** the report by the end of the week* (86% of correctness), followed by "object" as a noun in *What's that strange **object** on the top shelf?*, and "contract" as a noun in *They won the **contract** to build the new museum* (82% of correctness). In contrast, there were 4 items that received

more than fifty percent of errors; “contract” (verb) in *As they cool, metals **contract*** (56% of errors), “conflict” (verb) in *His business interests **conflict** with his public duty* (56% of errors), “increase” (noun) in *The average **increase** in earnings last year was 6%* (56% of errors), and “decrease” (noun) in *There has been a **decrease** in the birth rate* (54% of errors). Considering the overall score of the participants, 46% scored between 11-20, which was equal to the group with 21-30 scores. It was also noticeable that the proportion of first syllable stressed and second syllable stressed were not significantly different (50.47% and 49.47% respectively).

### **5.2.3 CEIC students’ practice, attitude, and prior learning in English pronunciation.**

The findings in this part revealed that most CEIC students often use English in their career with the mean score of 3.78 (S.D. = 1.166) which is slightly more than the use of English in their daily life (Mean = 3.36, S.D. = 1.367). Most of them also agreed on the fact that they learned and practiced English pronunciation with English songs, movies, and TV programs (Mean = 3.62, S.D. = 1.193). Regarding the attitude, CEIC students had positive attitudes toward English and English pronunciation. Most participants highly agreed that English was their favorite subject with a mean score of 4.38 (S.D. = 0.725) and they wanted to have good pronunciation to be judged favorably at work (Mean = 4.22, S.D. = 0.975). In addition, most of the students also put importance on correct word stress in communication and had confidence in pronouncing English correctly. However, the participants still had some negative attitudes toward pronunciation in that they indicated learning English pronunciation is hard (Mean = 3.5, S.D. = 1.129). Turning to the aspect of prior pronunciation learning of the students, the results unfolded that most of them learn pronunciation by memorizing from English lecturers (Mean = 3.44, S.D. = 0.884). Still, most of the participants indicated that they were not familiar with English phonetics/phonology (Mean= 2.28, S.D. = 1.179) as well as not being familiar with English stress rules (Mean=2.42, S.D. = 1.071).

## **5.3 Discussions**

This section discusses several issues related to the theories and previous studies in the following research questions:

### **5.3.1 To what extent can CEIC students correctly assign stress to disyllabic noun-verb pairs?**

It could be concluded from the results of this study that CEIC students have somewhat limited capability in locating the primary stress of English disyllabic pairs. It could also be seen from the findings that none of 30 test items could be performed with 100% accuracy. Among these items, there were 4 disyllabic words which received more than fifty percent of errors. These findings were consistent with other studies that indicated the word stress placement was one of the major problematic skills for Thai EFL learners (Khamkhien, 2010; Wei & Yalun, 2002).

The findings also pointed out the various degrees of difficulties as over half of the students seemed to have considerable problems in stress placement while others seemed not to. The varying difficulties might be ascribed to factors including exposure to English language, attitude, and prior pronunciation instruction, which will be discussed in the next research question. Moreover, it was noticeable that some respondents had very high errors of more than 90% (the lowest test score=1), suggesting that some students could have been confused about stress pattern rule. Roach (2009) mentioned that stress rules are so complex and have so many exceptions that they might cause difficulties to learners; however, they were analyzed from what English speakers know and it would be useful to decide the stress placement.

Regarding the findings of words with high errors including contract (V), conflict (V), increase (N), decrease (N), it was possible that students were not familiar with these words in certain word-classes. Generally, students are more likely to deal with the words 'contract' and 'conflict' in noun class while using 'increase', and 'decrease' as verbs. As a result, they seemed to place stress similar to the words they were more familiar with. This finding supports the previous study of Winaitham & Suppasetserree (2010) indicating that Thai learners pronounced words with high errors in stress placement and stress errors on unknown word were highest among the top. The findings suggested CEIC students should be more aware of the influence of familiar stress patterns that possibly lead to pronunciation errors in producing unfamiliar words.

In term of percentage of first syllable and second syllable stressed, the findings contrasted with the previous work of Saijai Chuleethongrerk (2006) as the percent of correctness in first-syllable stress and second-syllable stress words were relatively similar (65.87% and 64.93% respectively). These findings, then similarly, did not support Swan & Smith (1998) & Wei & Yalun (2002) that Thai learners tend to place primary stress on the final syllable of English words.

### **5.3.2 What are factors affecting students' word stress errors?**

The competence of the students in word-class pairs stress placement with 65.4% of correctness (34.6% of errors) was slightly better than expected. However, the findings demonstrated the varied levels of difficulties among the students. Nearly half of the students performed with significant errors (33%-66% of errors) while 46% of them performed with small errors (less than 33% of errors). The results from the questionnaire indicated some potential factors that might contribute to the different degree of difficulties. Most of the students stated that they often use English in their career and they also learn and practice pronunciation out of class with songs, movies, and TV programs. These results have shown that students had quite high exposure to English language and it could be assumed that this exposure would enhance their ability on the test. This assumption is in accordance with Brown (1992) who suggested that students could master good pronunciation if they devote time to it and expose themselves to the target language. Similarly, a study by Winaitam & Suppasetserree (2010) confirmed that minimal use of English in daily life was one of the factors affecting Thai students' pronunciation errors. In term of field of study and years of learning English, as proposed by Khamkhien (2010), they were not significant factors affecting students' pronunciation competence. This study seemed to support his work since the results revealed some students with high errors had learned English for more than 15 years. However, the evidence was still not clear and needs to be proved by further statistical analysis.

Another factor affecting pronunciation competence was attitude and motivation. People who have positive feelings toward the target language are more likely to be successful in learning pronunciation (Brown, 1992) and high motivation, such as to achieve a job promotion, promotes pronunciation development (Celce-Murcia, Brinton, & Goodwin, 2012). From the findings, students highly agreed that

English was their favorite subject and they wanted to have good pronunciation to be judged favorably at work. Based on the literature, it could be assumed that the positive attitudes and motivation of CEIC students could encourage their competence in stress placement, especially for the group of students with less errors. In contrast, most of the students still thought that learning English pronunciation was hard and this negative attitude might contribute to the limited competence in stress placement. Moreover, the results revealed that students were confident in pronouncing English sounds correctly and had only a moderate level of anxiety when communicating, which is not in agreement with the study of Wei & Zhou (2002).

Regarding prior pronunciation learning, over 62% of students had experience taking a pronunciation course with an average duration of 3.5 months. In addition, they admitted that they have learned pronunciation by memorizing from English lecturers. It has been suggested that students' pronunciation learning experience would positively affect the ability in word stress placement as it was mentioned in Celce-Murcia, Brinton, & Goodwin (2012) that students with prior pronunciation lessons tends to apply some rules that benefit their English production. Nevertheless, most students still claimed that they were not familiar with stress rules and English phonetics/phonology. This may be related to the limited duration of pronunciation class or that the focus on stress rules might be neglected. The lack of pronunciation knowledge, and pronunciation class, are then potential factors affecting the errors in word stress placement, in particular to the group of student with high errors. The finding suggests students should pay attention to pronunciation learning including phonetics/phonology and stress rules which claim to encourage pronunciation ability, especially to the stress placement of disyllabic pairs as that knowledge of the rule primarily affected the competence.

In term of native language, many researchers have agreed on the fact that L1 transfer is a significant factor to account for foreign accents. However, this study could not provide the solid evidence to confirm the theory of native language, as well as age and gender factors.

## **5.4 Conclusions**

This study explored the competence in word stress placement of EFL graduate students in Thailand. The findings reveal that students have somewhat limited competence to accurately assign primary stress on disyllabic pairs. Moreover, the findings suggest that lack of pronunciation learning experience, including phonetics/phonology and stress rules knowledge, is the important factor affecting student difficulties on the task. It is recommended that students should pay more attention to pronunciation learning and be more aware of English stress pattern rules to communicate more effectively. Students should also put more effort into exposing themselves to English language as well as be aware of attitude that might affect pronunciation competence. Additionally, the findings are applicable to lecturers in designing more appropriate teaching strategies and establishing explicit pronunciation instructions including stress pattern of English word stress.

## **5.5 Recommendations for further research**

Based on the findings and conclusion of this research, these recommendations are made for further study as follows:

**5.5.1** This study was conducted with a limited number of 50 participants. A further study should increase the number of participants to enhance the degree of generalization, and also broaden the target sample to graduate students in other fields to observe similarities or differences of the research.

**5.5.2** Due to the time constraint, the participants were asked to complete the test by identifying the primary stress syllable instead of producing the words. Future research should investigate the real production of words as that seems to be more natural and more reliable.

**5.5.3** It is recommended that a future study should compare groups of students with different characteristics such as age, exposure to English, or phonetics ability to find statistical significance of factors affecting pronunciation.

**5.5.4** It would be interesting for a future study to explore the stress competence in other complex words with different stress tendencies such as words with affixes or compound words.

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**APPENDICES**



## APPENDIX A

### STRESS ASSIGNMENT TEST

Please underline the syllable that receives primary/main stress on each bold word in the following sentences. The participants are not allowed to look up any forms of dictionaries.

1. They won the **contract** to build the new museum.
2. The time was a new world **record**.
3. It is my pleasure to **present** Dr Stevens.
4. I've always wanted to **conduct** an orchestra.
5. She gave me a watch as a **present**.
6. Thomas was the main **suspect** in the crime.
7. You need a **permit** to fish here.
8. As they cool, metals **contract**.
9. What's that strange **object** on the top shelf?
10. The vegetable shop sold only local **produce**.
11. The rules don't **permit** mobile phones in the school.
12. We can't **discount** the possibility that John has had an accident.
13. The children's **conduct** during the concert was excellent.
14. I have to **produce** the report by the end of the week.
15. When she asked for money I began to **suspect** her honesty.
16. Would anyone **object** if we finish the meeting early?
17. I asked if I could **record** her lecture.
18. Will you give me a **discount** on the price if I buy three?
19. There has been a **decrease** in the birth rate.

20. His business interests **conflict** with his public duty.
21. The **rebels** in the hills will never surrender.
22. The number of members is expected to **decrease**.
23. The average **increase** in earnings last year was 6%.
24. The border dispute may lead to armed **conflict** between the two countries.
25. Taxes are not expected to **increase**.
26. The President had an armed **escort**.
27. There will be a storm of **protest**.
28. Every child **rebels** against authority at some stage.
29. I'm going to **protest**.
30. The receptionist will **escort** visitors to the meeting room.

## APPENDIX B

### QUESTIONNAIRE

This questionnaire aims to explore the factors affect pronunciation errors of CEIC students. It is divided into 2 parts; personal information, survey question regarding your English practice, attitude, and pronunciation learning. The information you provide will be only used for the research propose and will be kept confidentially.

#### **Part 1 Personal Information**

**Direction: Please fill in the form regarding your personal information**

1. Gender.....
2. Age.....
3. Received undergraduate degree in.....
4. Years of studying English.....
5. English Test Score TU-GET.....
6. Have you ever taken a pronunciation course?  Yes  No  
If yes, how long ? Year.....month.....
7. Have you ever studied or lived in English speaking country?  Yes  No  
If yes, how long? Year.....month.....

#### **Part 2 The Practice, Attitude, and Previous Learning of English Pronunciation**

**Direction: Please mark a cross (x) in the box that best represent your attitude or practice toward the following statements.**

**1= Strongly Disagree 2= Disagree 3= Neutral 4= Agree 5= Strongly Agree**

Practice, Attitude, and Previous Learning of English Pronunciation	Level				
	1	2	3	4	5
1. I often use English in my daily life.					
2. I often use English in my career.					
3. I learn and practice pronunciation out of class with reading materials (e.g. books, newspaper, novel).					

4. I learn and practice pronunciation out of class with English songs, movies, TV program.					
5. I typically use dictionary to correct my word stress.					
6. English is my favorite subject.					
7. I want to have good pronunciation to be judged favorably at work.					
8. Learning pronunciation is hard.					
9. I avoid pronouncing English sounds correctly since people might think I try to show off.					
10. Correct word stress is not important as long as I can communicate with foreigners.					
11. I have anxiety when communicating in English.					
12. I am familiar with English phonetics/ phonology.					
13. I am familiar with English stress rule.					
14. Previous English teachers taught me about word stress.					
15. I learn the pronunciation by memorizing from English lecturers.					