



รายงานวิจัยฉบับสมบูรณ์

An Investigation of Morphological Awareness and  
Vocabulary Knowledge of Thai EFL University Students

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สังกัด

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วันลงทะเบียน... 0 6 ส.ค. 2564

เลขทะเบียน... 1034751

เลขเรียกหนังสือ... 3

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2019

สนับสนุนโดย

งบประมาณรายได้มหาวิทยาลัยนเรศวร

ปีงบประมาณ 2560

## **Executive Summary**

### **Title**

An Investigation of Morphological Awareness and Vocabulary Knowledge of Thai EFL University Students

### **Author**

Sarunya Tarat

### **Rationale of the study**

Vocabulary knowledge is essential to develop learner's literacy skill; learners need to have sufficient knowledge and use their prior knowledge to identify words in reading and to take ideas and organize them in writing because reading and writing skills are the processes of constructing word meaning. Additionally, vocabulary knowledge links to morphological awareness because it leads to vocabulary acquisition. Significantly, morphological awareness is increasingly important as a strong predictor of vocabulary knowledge. It can be referred that learners who possess morphological awareness, they can extract and understand words even those words are unfamiliar to them.

According to Thailand education system, English is one of subjects in basic education core curriculum B.E. 2551 (A.D. 2008). Thus, students are required to study English as a foreign language from preschool until university level. Those students have to acquire English language skills: listening, speaking, reading, and writing. However, it is obvious that Thais are struggling in using and communicating in English because they have not reached appropriate levels of English proficiency for international communication needs.

## **Objectives of the study**

1. To elicit the relationship of morphological awareness and English vocabulary knowledge of Thai EFL learners
2. To clarify whether gender relates to morphological awareness

## **Research Methodology**

The researcher used the quantitative method to collect data. In this case, the researcher followed a methodology suggested by Creswell (2003) in which data was collected and explained the probable relationship between independent and dependent variables. In this case, the independent variable was gender; meanwhile, the dependent variables were morphological awareness and vocabulary knowledge. Then, the researcher tested the relationship of morphological awareness and vocabulary knowledge.

The participants of this study were Thai EFL university freshmen in lower northern region of Thailand who are taking bachelor's degree majoring in English. Systemic sampling was used to choose 100 university freshmen from four universities in the region. The morpheme identification test was applied as research instrument to collect quantitative data. The test was adapted from Nelson-Denney Reading Test which is a reading survey test for high school students, college students, and adults that measures vocabulary development, comprehension, and reading rate. Additionally, the list of vocabularies in the morpheme identification test was derived from Cambridge Vocabulary for IELTS by Cullen (2008).

The participants were given the test which contained 50 complex words. The test was divided into 2 parts: self-checking and morpheme breakdown. To do the test, the participants were asked to check the 50 words whether they knew them or not. They had to check by using a tick if they knew the words (✓). If not, using a cross (x) was for unknown words. After self-checking, the participants were also requested to complete the test by identifying

the words in the previous part and breaking them into morphological units within an hour. The scores were given if the participants could correctly break a word into morpheme

## **Results**

Based on the results of the present study, it could be discussed that morphological awareness can be linked to the acquisition of vocabulary and vocabulary knowledge. In other words, the awareness of word structure or morphological awareness is the predicator of acquiring and gaining new words of learners. In addition, the researcher investigated whether there was any difference between male and female in perceiving morphological awareness which could be linked to vocabulary knowledge. The results showed that there was not any significant difference between male and female participants

## **Conclusions or the impact of the results**

The conclusion of the study is that Thai EFL university students had a sufficient level of morphological awareness which enabled them to have vocabulary knowledge of English. In other words, the majority of participants could separate words into morphemes correctly even though they have not seen those words. In this study, gender is the factor investigated whether it affected the ability of acquiring morphological awareness and vocabulary knowledge of English.

According to the results of the present study, it was found that there was no significant difference of morphological awareness and vocabulary knowledge of English between male and female students. This can be implied that male and female students have the equal level of acquiring morphological awareness and gaining vocabularies. Therefore, it can be concluded that there is a relationship between morphological awareness and

vocabulary knowledge in which this awareness assists learners to understand how they can break words into morphemes correctly even if it is a new or an unknown word for them



ชื่อเรื่อง การสำรวจความตระหนักรู้ในหน่วยคำและความรู้ทางคำศัพท์ของนักศึกษาไทย  
ระดับอุดมศึกษาที่เรียนภาษาอังกฤษเป็นภาษาต่างประเทศ

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บทคัดย่อ

งานวิจัยนี้มีวัตถุประสงค์เพื่อศึกษาความสัมพันธ์ระหว่างความตระหนักรู้ในหน่วยคำและความรู้ทางคำศัพท์ภาษาอังกฤษของนักศึกษาไทยระดับอุดมศึกษาที่เรียนภาษาอังกฤษเป็นภาษาต่างประเทศ และเพื่อศึกษาว่าเพศมีผลต่อความตระหนักรู้ในหน่วยคำและความรู้ทางคำศัพท์ภาษาอังกฤษหรือไม่ กลุ่มตัวอย่างเป็นนิสิตและนักศึกษาชั้นปีที่ 1 สาขาวิชาภาษาอังกฤษ ที่กำลังศึกษาอยู่ในมหาวิทยาลัยในเขตภาคเหนือตอนล่างจำนวน 100 คน เครื่องมือที่ใช้ในการวิจัยคือแบบทดสอบความสามารถในการแยกหน่วยคำในภาษาอังกฤษจำนวน 50 คำ ผลการวิจัยพบว่าความตระหนักรู้ในหน่วยคำมีผลต่อความสามารถในการแยกหน่วยคำและความรู้ทางคำศัพท์ของผู้เรียนภาษาอังกฤษ กล่าวคือผู้เรียนสามารถแยกคำศัพท์ออกเป็นหน่วยคำได้อย่างถูกต้อง ถึงแม้ว่าผู้เรียนจะไม่เคยเห็นหรือไม่รู้ความหมายของคำศัพท์เหล่านั้นมาก่อน อย่างไรก็ตาม ผู้วิจัยพบว่านักศึกษาเพศชายและเพศหญิงมีความตระหนักรู้ในหน่วยคำและความรู้ทางคำศัพท์ภาษาอังกฤษในระดับที่ไม่แตกต่างกัน ดังนั้นเพศจึงไม่มีผลต่อความตระหนักรู้ในหน่วยคำและความรู้ทางคำศัพท์ภาษาอังกฤษ

**Title** An Investigation of Morphological Awareness and Vocabulary Knowledge of Thai EFL University Students

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**Keywords** morphological awareness, vocabulary knowledge, EFL learners, university students

#### ABSTRACT

This study focuses on the relationship between morphological awareness and vocabulary knowledge of English among Thai EFL university students. All participants are taking English language as their major field in the universities situated at the lower northern region of Thailand. The morphological awareness identification test was employed to identify the linkage between morphological awareness and vocabulary gain Thai EFL learners. The test was divided into 2 parts: self-checking and morpheme identification. Fifty English vocabularies in intermediate and upper-intermediate level were used in the test in which the participants were requested to check whether they have seen the vocabularies in the test and also asked to break those vocabularies into morphemic units. The results showed that the participants possessed an adequate level of morphological awareness to break words into morphemes correctly even though they were unknown words of the participants. Additionally, the findings also revealed that there is no significant difference between male and female in acquiring morphological awareness of English and gaining English vocabularies

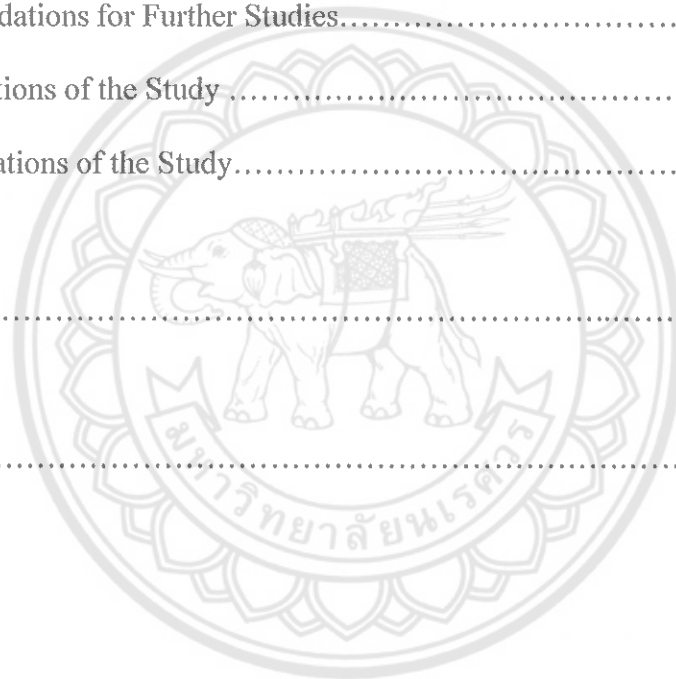
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# CHAPTER I

## INTRODUCTION

### Background of the Study

According to learning in the 21<sup>st</sup> century, there are three abilities that students need to acquire and improve themselves to succeed in the digital age: leaning skills, literacy skills, and life skills (Thoughtful Learning, 2016). As literacy skill is one type of the skills that students need to acquire, they have to be able to read and write fluently in order to successfully apply, analyze, and evaluate texts in different forms (National Council of Teachers of English [NCTE], 2013). In order to build and strengthen reading and writing skills, vocabulary knowledge is essential to do so. That is, students need to have sufficient knowledge and use their prior knowledge to identify words in reading and to take ideas and organize them in writing because reading and writing skills are the processes of constructing word meaning (Tompkins, 2013).

However, vocabulary knowledge links to morphological awareness since this awareness leads to vocabulary acquisition. Morphological awareness is the ability to reflect on and manipulate morphological units in word structure (Carlisle, 1995) in which morpheme is the smallest unit of meaning that construct words (Junior & Mota, 2015). As Zhang's study (2014), learners can acquire new and unknown words if they have two morphemic abilities: (a) identifying and decoding words into morpheme units and (b) understanding functional characterization of each morpheme. Similarly, McBride-Chang et al. (as cited in Chen et al., 2012) found that morphological awareness is increasingly important as a strong predictor of vocabulary knowledge. Therefore, if learners possess morphological awareness, they can extract and understand words even those words are unfamiliar to them.

Nagy and Anderson (1984) stated that children may learn 3,000 unknown words per year when they read texts. In the same way, Bloom (2002) reported that children between the ages of 12 months and 18 years acquire 10 words a day if they hear lots of new vocabularies used in their environment. Moreover, Wolter and Pike (2014) also found that the awareness of morphological structure is significantly important to literacy and vocabulary developmental levels of performance. That is, morphological awareness also has an impact learner's vocabulary skills; learners can acquire more complex words faster and successfully when they understand the structure of words or they possess morphological awareness.

Not only is morphological awareness important to first language acquisition but also second language. Osborne and Mulling (2001) found the negative effect of lacking morphological awareness towards English vocabulary acquisition of Spanish-speaking ESL learners in which those students have limited knowledge of English inflectional and derivational morphology. Furthermore, Choi (2015) studied about the role of L1 (Korean) and L2 (English) derivational morphological awareness in L2 (English) reading through the mediation of L2 (English) vocabulary knowledge and found that L2 (English) derivational morphological awareness directly affects to L2 (English) reading comprehension. It can be said even though learner possesses morphological awareness in the first language; learner also needs to possess L2 morphological awareness in order to acquire words and use them in reading or writing.

In Thailand, English is one of subjects in basic education core curriculum B.E. 2551 (A.D. 2008) (Ministry of Education [MOE], 2008). It refers that learner have to learn English as a foreign language from preschool until university level. As mentioned earlier, morphological awareness is important for vocabulary knowledge and this knowledge also links to being literate; it is better to take a long, hard look at morphological awareness so that

learners can understand and acquire new words to use them to learn reading and writing successfully.

### **Statement of the Problem**

There are several studies focusing morphological awareness and vocabulary knowledge (Lam et al., 2011; Mokhtari, Neel, Matatall, & Richards, 2016; Apple & Thomas-Tate, 2009; Zhang, 2014; Zhang, Koda, & Sun, 2104; Kieffer & Lesaux, 2012). Some of them talk about morphological awareness in the context of native speakers of English. Meanwhile, some of them investigate morphological awareness of ESL/EFL learners.

However, research on morphological awareness and vocabulary knowledge in the context of Thai learners is limited. Therefore, the researcher would like to investigate morphological awareness Thai EFL learners and find out the relationship between morphological awareness and English vocabulary knowledge of Thai EFL learners. Also, the researcher would figure out whether gender is as a factor of possessing morphological awareness.

### **Purpose of the Study**

This study aimed (a) to elicit the relationship of morphological awareness and English vocabulary knowledge of Thai EFL learners (b) to clarify whether gender relates to morphological awareness.

### **Research Questions**

This study proposed to answer the following research questions:

1. Does morphological awareness relate to vocabulary knowledge of Thai EFL university students?
2. Is there any difference of morphological awareness of male and female students?

### **Scope of the Study**

This study focused on the relationship of morphological awareness and vocabulary knowledge of Thai EFL learners. The researcher emphasized how morphological awareness links to vocabulary knowledge. Also, this study examines gender differences in possessing morphological awareness.

### **Significance of the Study**

The findings obtained from this study clarified a connection of morphological awareness and vocabulary knowledge. Moreover, this study provided information related to gender and morphological awareness. This information was useful for teachers or education planners to make some changes in their current teaching or curriculum. Likewise, it would encourage them to find more interesting methods for their future planning of teaching. Also, the same information was useful for researchers who are interested in the area of morphological awareness and literacy skills since those skills are required for learning in the 21<sup>st</sup> century.

## Definition of Terms

*Morphological Awareness* refers to the ability to reflect on and manipulate morphological units in word structure (Carlisle, 1995)

*EFL* refers to English as a Foreign Language in which English is not an official language and it is only as a compulsory subject in school. Also, learners have limited opportunity to use English in daily life.

*University level* refers to the level following the completion of a school providing a secondary education.



## CHAPTER II

### REVIEW LITERATURE

This chapter reviews the related literature for the better understanding of the present study. There three main sections in this chapter. The first emphasizes on the definition of morphological awareness. The second concentrates on morphological awareness and vocabulary knowledge. Finally, the last section relates to studies about morphological awareness and vocabulary knowledge in ESL/EFL contexts.

#### What is Morphological Awareness?

Morphological awareness has been defined by many researchers. Carlisle (1995) defined morphological awareness as the ability to think about and identify word structure. Similarly, morphological awareness also refers to learner's ability to analyze the smallest unit (morpheme) of word structure (Berninger, Abbott, Nagy, & Carlisle, 2010). McCutchen and Stull (2104) mentioned that morphological awareness is a metalinguistic insight that word can be isolated into small meaningful units. Additionally, Zhang Koga, and Sun (2014) added that this awareness is a multidimensional competence that leads to different aspects and level of insights. It means that morphological awareness is the ability to identify, analyze, and break words into morphological units or morphemes. However, it depends on individual performance to develop one's self to have more complex level of the awareness.

A word consists of meaningful units in which each unit called as morpheme (Finegan, 2008). Morphemes can be free or bound. Free morpheme is a morpheme that can stand alone as a word: father, mouse, happy etc. Meanwhile, bound morpheme is a morpheme that cannot stand alone (Rispen, McBride-Chang, & Reitsme, 2008; Finegan, 2008; Verhoeven &

Perfetti, 2003). There are two types of bound morphemes: derivational and inflectional morphemes. Derivational morphemes change the part of speech of words (Finegan, 2008). For example, the verb “work” can be changed into the noun “worker” by adding the suffix “er”. On the other hand, inflectional morphemes create variant form of word to conform to different roles in a sentence such as tense, number, and degree (Finegan, 2008). For instance, the sentence “I walk” is present tense and the sentence “I walked” is past tense; -ed (inflectional morphemes) is added to change the tense for this sentence.

### **Morphological Awareness and Vocabulary Knowledge**

Vocabulary knowledge is a critical component to learn language (Hayashi & Murphy, 2011). Several studies have been documented that there is a linkage between morphological awareness and vocabulary knowledge. McBride-Chang, Wagner, Muse, Chow, and Shu (2005) did research on the role of morphological awareness in children’s vocabulary acquisition in English and found that morphological structure awareness and morpheme identification together predicted an additional unique 10% of variance in vocabulary knowledge, for a total of 58% of the variance explained; that is, both morphological structure awareness and morpheme identification tests were uniquely associated with vocabulary knowledge.

In addition, Wolter and Pike (2015) also confirmed that there is a relationship between morphological awareness and vocabulary knowledge. The participants in their study asked to define 16 derived morphologically complex words and the result of the test revealed that those participants could reflect on known morphological units and many of them successfully inferred the meaning of unknown words. Similar, McCutchen and Stull (2015) insisted that morphological awareness assists word production for students in their study.



### **Morphological Awareness and Vocabulary Knowledge in EFL Contexts**

As morphological awareness is an important factor for vocabulary knowledge. There are many researchers who studied morphological awareness and vocabulary knowledge of learners of English as a second of foreign language (ESL/EFL) (Nurhemida, 2007; Lam, Chen, Geva, Luo, & Li, 2012; Hayashi & Murphy, 2011). Nurhemida (2007) studied the relationship between morphological awareness and English vocabulary knowledge of Indonesian senior high school students and found that there was a significant relationship between the students' performance in the vocabulary level test and the morphological awareness tasks. Additionally, Lam, Chen, Geva, Luo, and Li (2012) researched on roles of L1 and L2 derivational morphological awareness in L2 reading through the mediation of L2 vocabulary knowledge of Korean EFL students. The results revealed that L2 vocabulary knowledge had a significant relationship with L2 derivational morphological awareness and reading comprehension. According to Hayashi and Murphy's study on morphological awareness in Japanese learners of English (2011), it showed that L2 vocabulary knowledge can be explained by higher degrees of metalinguistic awareness that includes explicit knowledge of morphological segments.

## **CHAPTER III**

### **METHODOLOGY**

This chapter covers the research method employed in this study. The methodology section comprises five parts: (a) research design, (b) participants, (c) research instruments, (d) data collection procedures, and (e) data analysis.

#### **Research design**

In this study, the researcher selected the qualitative method in order to elicit the relationship of the relationship of morphological awareness and English vocabulary knowledge of Thai EFL learners and to clarify gender differences in possessing morphological awareness.

#### **Participants**

The participants of this study were a hundred of Thai EFL university students in lower northern of Thailand. Those participants are freshmen who are studying in Bachelor of Art (English).

#### **Research Instruments**

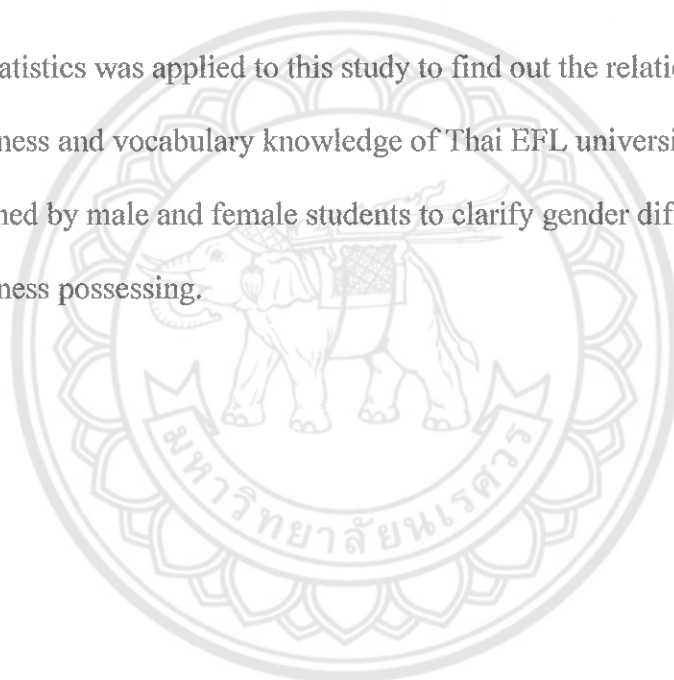
In this study, morphological awareness test (morpheme identification test) was applied as research instrument to collect data. The test was adapted from Nelson-Denney Reading Test. Vocabularies in the morphological awareness test were derived from Cambridge Vocabulary for IELTS (2008) by Pauline Cullen.

### **Procedure**

First, the participants were given a test with a list of 50 complex words. The participants were asked to check the words that they know. After checking the words, the participants were requested to complete the second part of the test within an hour by identifying words in the same list and breaking them into morphological units. Breaking words into morphological units was the process of double-checking vocabulary knowledge to make sure that the participants understood word structure exactly not guessing.

### **Data Analysis**

Descriptive statistics was applied to this study to find out the relationship of morphological awareness and vocabulary knowledge of Thai EFL university students and to examine scores obtained by male and female students to clarify gender differences in morphological awareness possessing.



## CHAPTER IV

### FINDINGS

This chapter presents the analysis of quantitative data gained for the morpheme identification test. Additionally, the relationship between morphological awareness and vocabulary knowledge also presents in this chapter.

#### The Quantitative Data Gained from the Morpheme Identification Test

In this study, the researcher investigated the relationship between morphological awareness and vocabulary knowledge of Thai EFL university students in the lower northern region of Thailand. Additionally, the present study elicited information on gender and morphological awareness. The results gained from 100 participants were analyzed as follows:

Table 1

The number of participants (n=100)



Gender	Total (%)
Male	24 (24.0%)
Female	76 (76.0%)

According to Table 1, the number of participants joined in this study was totally 100: 24 males (24.0%) and 76 females (76.0%).

Table 2

## The Vocabulary Knowledge Checklist (n=100)

Vocabulary	Percentage (%)
inadvisable	66
abolitionist	9
increased	100
constructive	75
overindulgent	11
irresponsible	89
extended	86
involvement	97
demolition	31
biodiversity	57
deforestation	61
unaffected	91
unavoidably	86
insurmountable	5
extremely	98
punishment	93

Vocabulary	Percentage (%)
imagination	89
unemployment	95
endangered	86
gravitational	35
interrelated	42
immaturity	63
prevents	85
distraction	63
educated	96
explorers	89
weightlessness	97
stimulator	77
horizontal	73
invented	88
implications	77
challenges	100
compounded	90
multiculturalism	63

Vocabulary	Percentage (%)
skeptical	25
difficulty	98
inadequate	49
transformation	98
catastrophic	19
marginal	21
disagreeable	87
unnecessary	92
unprecedented	22
fertilizers	52
omnipresent	15
unparalleled	59
staggering	22
eventually	89
declining	74
advertisement	94

The results in Table 2 were from the English vocabulary checklist. The use of checklist was to identify the relationship of morphological awareness and vocabulary knowledge. By doing so, the participants were asked to check 50 English vocabularies whether they have seen or known those words or not.

The results showed that “*increased*” and “*challenges*” were the words that all participants have seen (100%). On the other hand, *insurmountable* was the word which they knew the least among the words in the list (5%).

Table 3

Percentage of Morphological Awareness Categorized By Vocabularies (n=100)

Vocabulary	Percentage (%)
inadvisable	73
abolitionist	24
increased	45
constructive	51
overindulgent	37
irresponsible	81
extended	44
involvement	37
demolition	31
biodiversity	9



Vocabulary	Percentage (%)
deforestation	64
unaffected	87
unavoidably	51
insurmountable	18
extremely	87
punishment	95
imagination	50
unemployment	92
endangered	86
gravitational	41
interrelated	68
immaturity	82
prevents	45
distraction	60
educated	91
explorers	75
weightlessness	92
stimulator	8

Vocabulary	Percentage (%)
horizontal	93
invented	32
implications	27
challenges	97
compounded	25
multiculturalism	61
skeptical	22
difficulty	93
inadequate	77
transformation	73
catastrophic	42
marginal	80
disagreeable	89
unnecessary	61
unprecedented	9
fertilizers	30
omnipresent	73
unparalleled	9

Vocabulary	Percentage (%)
staggering	49
eventually	63
declining	33
advertisement	9

As shown in Table 3, it was found that the majority of the participants could break the word “*challenges*” correctly (97%). However, “*biodiversity, unprecedented, unparalleled, advertisement*” were the words which the participants could not cut them into morphemes. The overall percentage of grammatical correctness was 9%.

Table 4

Average Score, Mean, and Standard Deviation (SD) (n=100)

Item	Score
Lowest Score	7.0
Highest Score	41.0
Average Score and Standard Deviation (SD)	28.42±6.45

Table 4 revealed the highest and lowest scores from the test. The highest average score was 41 meanwhile the lowest was 7. The overall scores gained from the test was 18.42 with SD 6.45.

Table 5

The Overall Scores Categorized by Score Range (n=100)

Range	Percentage
0-10	1
11-20	10
21-30	55
31-40	33
41-50	1

According to Table 5, it was found that 55% of the participants was in the score range of 21 to 30; meanwhile, 33% of them had a score with a range between 31 and 40. The 10% of the participants had scores from 11 to 20 and 1% was at 0-11 points and 41-50 points, respectively.

Table 6

The Scores of Vocabulary Knowledge and Morphological Awareness

Score	N	X	SD	t	Sig
Vocabulary Knowledge	100	33.69	7.57		
Morphological Awareness	100	28.50	6.53	7.773*	0.000

\* p&lt;0.05

The findings in Table 6 showed that the mean score of vocabulary knowledge was 33.69 with SD 7.57. Additionally, it was also found that the participants had score of morphological awareness with the mean score 28.50 and SD 6.53. Therefore, there is a significance difference at  $p < 0.05$

Table 7

The Relationship between Vocabulary Knowledge and Morphological Awareness

Score Item	N	$\bar{x}$	SD	Pearson Correlation	Sig
Vocabulary Knowledge	100	33.69	7.57	0.560*	0.000
Morphological Awareness	100	28.50	6.53		

\*  $p < 0.01$

As seen in Table 7, gains in vocabulary were apparently associated with morphological awareness which referred that there was the positive and linear relationship between vocabulary knowledge and morphological awareness. That is, the mean score of vocabulary knowledge and morphological awareness was 33.69 with SD 7.57 and 28.50 with SD 6.53 respectively. The reliability of the relationship of morphological awareness and vocabulary knowledge was at  $p < 0.01$  (99 %)

Table 8

## The Morphological Awareness Scores of Male and Female Participants

Gender	N	$\bar{x}$	SD	t	Sig
Male	24	30.58	4.50	1.910*	0.059
Female	76	27.74	6.84		

In addition, the researcher investigated whether there was any difference between male and female in perceiving morphological awareness which could be linked to vocabulary knowledge. The results showed that there was not any significant difference between male and female participants as illustrated in Table V. The scores obtained from the participants (24 male and 76 female) revealed that the mean score of male was 30.58 points with SD 4.50; meanwhile, the mean score of female was 27.74 with SD 6.84. Therefore, it could be implied that the morphological awareness of male and female was not significantly different.



### Summary

Thai EFL university students had a sufficient level of morphological awareness which enabled them to have vocabulary knowledge of English. In other words, the majority of participants could separate words into morphemes correctly even though they have not seen those words. In this study, gender is the factor investigated whether it affected the ability of acquiring morphological awareness and vocabulary knowledge of English. According to the results of the present study, it was found that there was no significant difference of morphological awareness and vocabulary knowledge of English between male and female students. This can be implied that male and female students have the equal level of acquiring morphological awareness and gaining vocabularies. Therefore, it can be concluded that there is a relationship between morphological awareness and vocabulary knowledge in which this

awareness assists learners to understand how they can break words into morphemes correctly even if it is a new or an unknown word for them



## CHAPTER V

### CONCLUSION AND DISCUSSION

In this chapter, the results of this study are discussed in relation to the research questions. Following the discussion, recommendations for further studies, the limitations of the study, and the implications of the study are also presented.

#### Conclusion

Based on the results of the present study, it could be discussed that morphological awareness can be linked to the acquisition of vocabulary and vocabulary knowledge. In other words, the awareness of word structure or morphological awareness is the predicator of acquiring and gaining new words of learners. The results were consistent with McBride-Chang, Wagner, Muse, Chow, and Shu's research (2005), morphological awareness can apparently predict the ability of perceiving vocabulary and having vocabulary knowledge. It was similar to the study of Zhang and Koda (2013) which mentioned that this awareness enables learners to understand and acquire new words to use them to learn reading and writing successfully. Moreover, the results of the present study was also related to Wolter and Pike's study (2015) in which the participants in their study could reflect on known morphological units and many of them successfully inferred the meaning of unknown words. Therefore, it could be concluded that there is a relationship between morphological awareness and vocabulary knowledge.

Due to the present study conducted in the EFL context, the results were also consistent with several studies investigated the relationship between morphological awareness of English and vocabulary knowledge of EFL learners. For example, Nurhemida (2007) studied the relationship between morphological awareness and English vocabulary



knowledge of Indonesian senior high school students and found that there was a significant relationship between the students' performance in the vocabulary level test and the morphological awareness tasks. Additionally, Lam, Chen, Geva, Luo, and Li (2012) researched on roles of L1 and L2 derivational morphological awareness in L2 reading through the mediation of L2 vocabulary knowledge of Korean EFL students. The results revealed that L2 vocabulary knowledge had a significant relationship with L2 derivational morphological awareness and reading comprehension. According to Hayashi and Murphy's study (2011) on morphological awareness in Japanese learners of English, it showed that L2 vocabulary knowledge can be explained by higher degrees of metalinguistic awareness that includes explicit knowledge of morphological segments. The results of the present study also revealed that there was the positive relationship between morphological awareness and vocabulary knowledge. In other words, the participants could segment known and unknown words into small units correctly. It was because the morphological awareness enables them to understand each unit of word.

The conclusion of the study is that Thai EFL university students had a sufficient level of morphological awareness which enabled them to have vocabulary knowledge of English. In other words, the majority of participants could separate words into morphemes correctly even though they have not seen those words. In this study, gender is the factor investigated whether it affected the ability of acquiring morphological awareness and vocabulary knowledge of English. According to the results of the present study, it was found that there was no significant difference of morphological awareness and vocabulary knowledge of English between male and female students. This can be implied that male and female students have the equal level of acquiring morphological awareness and gaining vocabularies. Therefore, it can be concluded that there is a relationship between morphological awareness



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and vocabulary knowledge in which this awareness assists learners to understand how they can break words into morphemes correctly even if it is a new or an unknown word for them.

## Discussion

### Research Question 1

*Does morphological awareness relate to vocabulary knowledge of Thai EFL university students?*

According to the results of this study, it was found that morphological awareness is related to vocabulary knowledge. In other words, students who possess morphological awareness can identify and break words into morphemes even though they have never seen those words before. The results of the current study was consistent with the previous studies. As McBride-Chang, Wagner, Muse, Chow, and Shu (2005) did research on the role of morphological awareness in children's vocabulary acquisition in English, they found that morphological structure awareness and morpheme identification together predicted an additional unique 10% of variance in vocabulary knowledge, for a total of 58% of the variance explained; that is, both morphological structure awareness and morpheme identification tests were uniquely associated with vocabulary knowledge.

In addition, Wolter and Pike (2015) also confirmed that there is a relationship between morphological awareness and vocabulary knowledge. The participants in their study asked to define 16 derived morphologically complex words and the result of the test revealed that those participants could reflect on known morphological units and many of them successfully inferred the meaning of unknown words. Similarly, McCutchen and Stull (2015) insisted that morphological awareness assists word production for students in their study.

## Research Question 2

*Is there any difference of morphological awareness of male and female students?*

The results of the present study showed that there is no significant difference of morphological awareness between male and female students. It is because language skills depends on individual abilities development. The results were similar to these studies which investigated the relationship of morphological awareness and vocabulary skills among both of male and female ESL/EFL students. It was obvious that there is a link between the morphological awareness and vocabulary skills. However, gender is not related to morphological awareness and vocabulary knowledge.

According to Nurhemida (2007), The study revealed the relationship between morphological awareness and English vocabulary knowledge of Indonesian senior high school students. It was found that there was a significant relationship between the students' performance in the vocabulary level test and the morphological awareness tasks. In addition, Lam, Chen, Geva, Luo, and Li (2012) researched on roles of L1 and L2 derivational morphological awareness in L2 reading through the mediation of L2 vocabulary knowledge of Korean EFL students. The results revealed that L2 vocabulary knowledge had a significant relationship with L2 derivational morphological awareness and reading comprehension. According to Hayashi and Murphy's study on morphological awareness in Japanese learners of English (2011), it showed that L2 vocabulary knowledge can be explained by higher degrees of metalinguistic awareness that includes explicit knowledge of morphological segments.

### **Recommendations for Further Studies**

This study was a first attempt to investigate the relationship between morphological awareness and vocabulary knowledge of Thai EFL university students. The study also led to three suggestions. First, future studies should look in greater depth into morphological awareness and language skills. Second, investigations should explore whether EFL students in lower grades possess an adequate level of morphological awareness since this awareness is the predicator of being literate. Finally, more research should explore methods or techniques which could.

### **The Limitations of the Study**

This study was limited to Thai EFL university students in lower northern of Thailand. Those participants are freshmen who are studying in Bachelor of Art (English) which was a very particular group of students. The findings might not be representative of students in other grade levels and fields of study. Therefore, it might not be representative or generalizable to other groups of students in different contexts.

### **The Implications of the Study**

As mentioned, vocabulary knowledge is essential to develop learner's literacy skill; learners need to have sufficient knowledge and use their prior knowledge to identify words in reading and to take ideas and organize them in writing because reading and writing skills are the processes of constructing word meaning (Tomkins, 2013)

Therefore, people working on teaching English and learning development should concern more about language formation for student's language skills. For example, the directors of schools should support policies which lead teaching and learning process to enhance students' ability in acquiring morphological awareness to have vocabulary

knowledge. Moreover, academic institutions should organize seminars or workshops to train English teachers to understand the significance of morphological awareness which leads to vocabulary skills. Therefore, morphological awareness is essential to vocabulary development of learners.





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**Appendix A**

**Morpheme Identification Test**

**Morphological Awareness Test (Morpheme Identification)****Demographic information**

Age: \_\_\_ 18 \_\_\_ 19 \_\_\_ 20 \_\_\_ 21 \_\_\_ 22 \_\_\_ other: \_\_\_\_\_

Gender: \_\_\_ Female \_\_\_ Male

University: \_\_\_\_\_



**Part 1:** Look at each word in the list below. Check ✓ if you know the word. Check ✗ if you do not know the word.

- |                         |                           |
|-------------------------|---------------------------|
| 1. _____inadvisable     | 26. _____explorers        |
| 2. _____abolitionist    | 27. _____weightlessness   |
| 3. _____increased       | 28. _____stimulator       |
| 4. _____constructive    | 29. _____horizontal       |
| 5. _____overindulgent   | 30. _____invented         |
| 6. _____irresponsible   | 31. _____implications     |
| 7. _____extended        | 32. _____challenges       |
| 8. _____involvement     | 33. _____compounded       |
| 9. _____demolition      | 34. _____multiculturalism |
| 10. _____biodiversity   | 35. _____skeptical        |
| 11. _____deforestation  | 36. _____difficulty       |
| 12. _____unaffected     | 37. _____inadequate       |
| 13. _____unavoidably    | 38. _____transformation   |
| 14. _____insurmountable | 39. _____catastrophic     |
| 15. _____extremely      | 40. _____marginal         |
| 16. _____punishment     | 41. _____disagreeable     |
| 17. _____imagination    | 42. _____unnecessary      |
| 18. _____unemployment   | 43. _____unprecedented    |
| 19. _____endangered     | 44. _____fertilizers      |
| 20. _____gravitational  | 45. _____omnipresent      |
| 21. _____interrelated   | 46. _____unparalleled     |
| 22. _____immaturity     | 47. _____staggering       |

23. \_\_\_\_\_ prevents

48. \_\_\_\_\_ eventually

24. \_\_\_\_\_ distraction

49. \_\_\_\_\_ declining

25. \_\_\_\_\_ educated

50. \_\_\_\_\_ advertisement

**Part 2:** Break down each word into meaningful units**Ex.** actress → act + ress

1. inadvisable → \_\_\_\_\_

2. abolitionist → \_\_\_\_\_

3. increased → \_\_\_\_\_

4. constructive → \_\_\_\_\_

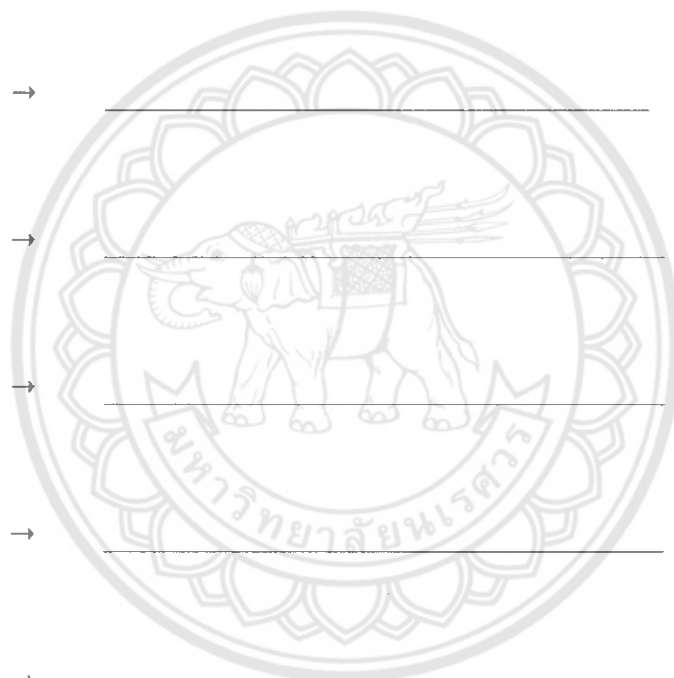
5. overindulgent → \_\_\_\_\_

6. irresponsible → \_\_\_\_\_

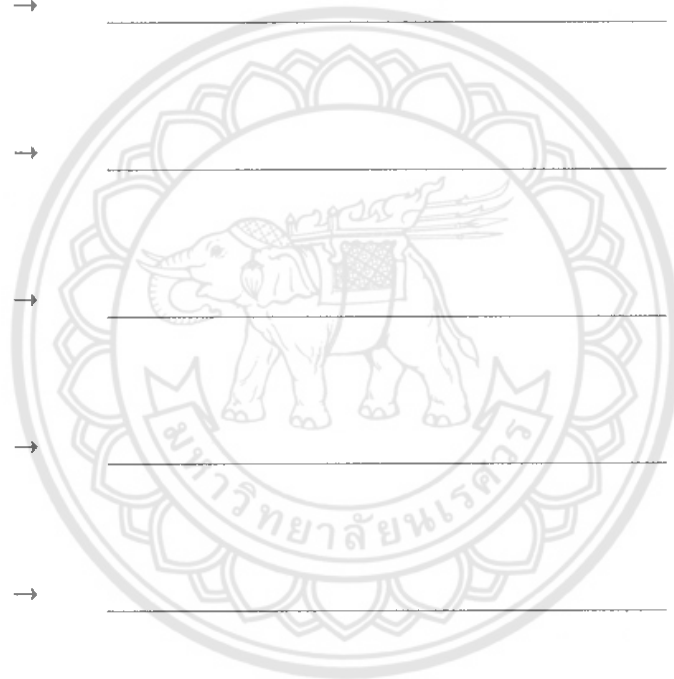
7. extended → \_\_\_\_\_

8. involvement → \_\_\_\_\_

9. demolition → \_\_\_\_\_



10. biodiversity → \_\_\_\_\_
11. deforestation → \_\_\_\_\_
12. unaffected → \_\_\_\_\_
13. unavoidably → \_\_\_\_\_
14. insurmountable → \_\_\_\_\_
15. extremely → \_\_\_\_\_
16. punishment → \_\_\_\_\_
17. imagination → \_\_\_\_\_
18. unemployment → \_\_\_\_\_
19. endangered → \_\_\_\_\_
20. gravitational → \_\_\_\_\_
21. interrelated → \_\_\_\_\_



22. immaturity → \_\_\_\_\_

23. prevents → \_\_\_\_\_

24. distraction → \_\_\_\_\_

25. educated → \_\_\_\_\_

26. explorers → \_\_\_\_\_

27. weightlessness → \_\_\_\_\_

28. stimulator → \_\_\_\_\_

29. horizontal → \_\_\_\_\_

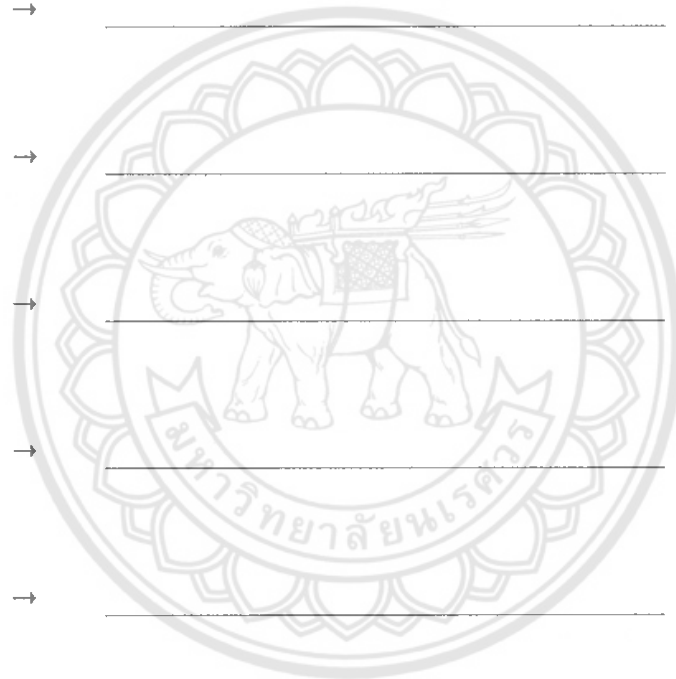
30. invented → \_\_\_\_\_

31. implications → \_\_\_\_\_

32. challenges → \_\_\_\_\_

33. compounded → \_\_\_\_\_

34. multiculturalism → \_\_\_\_\_





35. skeptical → \_\_\_\_\_

36. difficulty → \_\_\_\_\_

37. inadequate → \_\_\_\_\_

38. transformation → \_\_\_\_\_

39. catastrophic → \_\_\_\_\_

40. marginal → \_\_\_\_\_

41. disagreeable → \_\_\_\_\_

42. unnecessary → \_\_\_\_\_

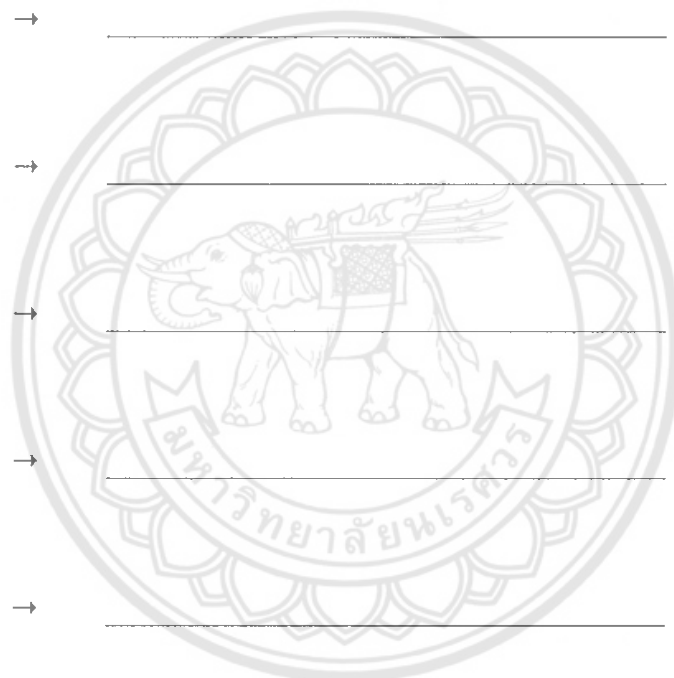
43. unprecedented → \_\_\_\_\_

44. fertilizers → \_\_\_\_\_

45. omnipresent → \_\_\_\_\_

46. unparalleled → \_\_\_\_\_

47. staggering → \_\_\_\_\_



48. eventually → \_\_\_\_\_

49. declining → \_\_\_\_\_

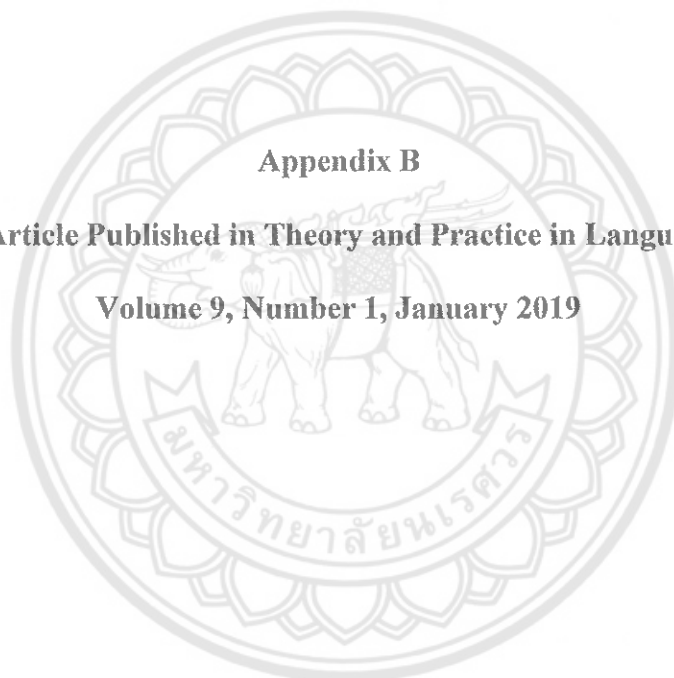
50. advertisement → \_\_\_\_\_



**Appendix B**

**Research Article Published in Theory and Practice in Language Studies**

**Volume 9, Number 1, January 2019**



# The Relationship between Morphological Awareness and Vocabulary Knowledge of Thai EFL Students

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**Abstract**—This study focuses on the relationship between morphological awareness and vocabulary knowledge of English among Thai EFL university students. All participants are taking English language as their major field in the universities situated at the lower northern region of Thailand. The morphological awareness identification test was employed to identify the linkage between morphological awareness and vocabulary gain Thai EFL learners. The test was divided into 2 parts: self-checking and morpheme identification. Fifty English vocabularies in intermediate and upper-intermediate level were used in the test in which the participants were requested to check whether they have seen the vocabularies in the test and also asked to break those vocabularies into morphemic units. The results showed that the participants possessed an adequate level of morphological awareness to break words into morphemes correctly even though they were unknown words of the participants. Additionally, the findings also revealed that there is no significant difference between male and female in acquiring morphological awareness of English and gaining English vocabularies.

**Index Terms**—morphological awareness, vocabulary knowledge, EFL learners, university students

## I. INTRODUCTION

As learning in the 21st century, learners are required to acquire leaning skills, literacy skills, and life skills and improve those skills to be in the digital age successfully (Thoughtful Learning, 2017). Literacy skill is the skill that learners need to have so that they are able to read and write fluently to apply, analyze, and evaluate texts in different forms (National Council of Teacher of English, 2013). Therefore, building and strengthening vocabulary knowledge is important for literacy skill development.

As mentioned, vocabulary knowledge is essential to develop learner's literacy skill; learners need to have sufficient knowledge and use their prior knowledge to identify words in reading and to take ideas and organize them in writing because reading and writing skills are the processes of constructing word meaning (Tomkins, 2013). Vocabulary knowledge links to morphological awareness because it leads to vocabulary acquisition. Calisle (2003) defined morphological awareness is the ability to reflect on and manipulate morphological units in word structure. Additionally, Freitas Junior, Mota, Deacon (2018) also mentioned that morpheme is the smallest unit of meaning that construct words. Then, if learners acquire and understand that a word consists of morphemes; they will be able to identify words even though they have not seen those words. As McBride-Chang, Tong, and Wong's study (2009), morphological awareness is increasingly important as a strong predictor of vocabulary knowledge. It can be referred that learners who possess morphological awareness, they can extract and understand words even those words are unfamiliar to them.

Nagy and Anderson (1984) reported that children may learn 3,000 unknown words per year when they read texts. Moreover, children between the age of 12 months and 18 years can acquire 10 words per day if they hear new vocabularies used in their environment (Bloom, 2002). It is, therefore, the awareness of morphological structure which is significant to literacy and vocabulary developmental levels of performance (Wolter & Pike, 2015). Thus, morphological awareness also has an impact on learner's vocabulary knowledge; learners can acquire more complex words faster and successfully when they understand the structure of words or they possess morphological awareness.

Morphological awareness is also related to language acquisition in which it leads to literacy skills as well as vocabulary knowledge. According to Osborne and Mulling's research (2001), there is the negative effect of lacking morphological awareness towards English vocabulary acquisition of Spanish-speaking ESL learners. The researchers found that in those students have limited knowledge of English inflectional and derivational morphology. Furthermore, Choi (2015) studied about the role of L1 (Korean) and L2 (English) derivational morphological awareness in L2 (English) reading through the mediation of L2 (English) vocabulary knowledge and found that L2 (English) derivational morphological awareness directly affects to L2 (English) reading comprehension in which ESL are struggling to learn to read new words. It is because if inflectional and derivational morphology processing is problematic, it affects the process of L2 vocabulary acquisition. Furthermore, Masrai (2016) found that there are some significant relationships between knowledge of regular inflection and derivation and L2 vocabulary knowledge of Arabic EFL learners in which native Arabic EFL learners have difficulty extracting the irregular base words.

According to Thailand education system, English is one of subjects in basic education core curriculum B.E. 2551 (A.D. 2008) (Ministry of Education, 2009). Thus, students are required to study English as a foreign language from preschool until university level. Those students have to acquire English language skills: listening, speaking, reading, and writing. However, the EF English Proficiency Index from 2011-2017 reported that Thailand has been ranked at a low level of English proficiency among countries in Asia. In 2017, Thailand was ranked 15 from 20 countries in Asia. Furthermore, several research revealed that Thais are struggling in using and communicating in English because they have not reached appropriate levels of English proficiency for international communication needs (Chauchaisit & Prapphal, 2009; Jarupan, 2013; Verhoeven & Perfetti, 2003; Wiryachitra, 2001).

In order to have good or excellent proficiency in English language skills, vocabulary knowledge is a major role in the formation of complete spoken and written texts (Nation, 2001). As mentioned earlier, morphological awareness is important for vocabulary knowledge in which this awareness links to being literate (Zhang & Koda, 2013); therefore, it is better to take a long, hard look at morphological awareness so that learners can understand and acquire new words to use them to learn reading and writing successfully.

To clarify the relationship of morphological awareness and English vocabulary knowledge of EFL learners and to explore whether gender relates to morphological awareness, the present study addresses two questions: (1) Does morphological awareness relate to vocabulary knowledge of Thai EFL university students? and (2) Is there any difference of morphological awareness between male and female EFL students?

## II. LITERATURE REVIEW

### A. Morphological Awareness

Morphological awareness has been variously defined. For example, Carlisle (2003) mentioned that morphological awareness is the ability to think about and identify word structure. Similarly, morphological awareness also refers to learner's ability to analyze the smallest unit (morpheme) of word structure (Berninger, Abbott, Nagy, & Carlisle, 2010). McCutchen and Stull (2015) explained that morphological awareness is a metalinguistic insight that word can be isolated into small meaningful units. Additionally, Koda, Sun, and Zhang (2014) added that this awareness is a multidimensional competence that leads to different aspects and level of insights. It means that morphological awareness is the ability to identify, analyze, and break words into morphological units or morphemes. However, it depends on individual performance to develop one's self to have more complex level of the awareness.

Since morphological awareness is the ability to identify and break words into the smallest units which carry meanings, therefore, it can be said that meaningful units are formed in the process of word formation in which each unit is called as morpheme (Finegan, 2008). Morphemes can be divided into two types: free and bound. Free morpheme is a morpheme that can stand alone as a word: father, mouse, happy etc. On the other hand, bound morpheme is a morpheme that cannot stand alone which can be referred to affixes (Rispen, McBride-Chang, & Reitsma, 2008; Finegan, 2008; Verhoeven & Perfetti, 2003). Bound morphemes are used for word formation process: derivation and inflection. As the derivation process, the morpheme called as derivational morpheme is added to a root word to change the part of speech of the word (Finegan, 2008). For example, the word "work", which acts as the verb, can be changed into the noun "worker" by adding the derivational morpheme "er" meaning someone or something that performs the actions. Meanwhile, the morpheme added to a root word in word formation process is referred to the inflectional morpheme which creates variant form of word to conform to different roles in a sentence such as tense, number, and degree (Finegan, 2008). For instance, the sentence "I walk" is present tense. The inflectional morpheme "-ed" is added to the verb "walk" (present tense) as "walked" (past tense) to change the sentence from present tense to past tense.

### B. Morphological Awareness and Vocabulary Knowledge

Vocabulary knowledge is a critical component to learn language (Hayashi & Murphy, 2011). Several studies have been documented that there is a linkage between morphological awareness and vocabulary knowledge. McBride-Chang, Wagner, Muse, Chow, and Shu (2005) did research on the role of morphological awareness in children's vocabulary acquisition in English and found that morphological structure awareness and morpheme identification together predicted an additional unique 10% of variance in vocabulary knowledge, for a total of 58% of the variance explained; that is, both morphological structure awareness and morpheme identification tests were uniquely associated with vocabulary knowledge.

In addition, Wolter and Pike (2015) also confirmed that there is a relationship between morphological awareness and vocabulary knowledge. The participants in their study asked to define 16 derived morphologically complex words and the result of the test revealed that those participants could reflect on known morphological units and many of them successfully inferred the meaning of unknown words. Similarly, McCutchen and Stull (2015) insisted that morphological awareness assists word production for students in their study. In other words, when learners are aware of word structure; they can acquire new and unknown words and also know how to make words and segment words into morphemes

### C. Morphological Awareness and Vocabulary Knowledge in EFL Contexts

As morphological awareness is an important factor for vocabulary knowledge. There are many researchers who studied morphological awareness and vocabulary knowledge of learners of English as a second or foreign language (ESL/EFL) (Nurhemida, 2007; Lam, Chen, Geva, Luo, Li, 2012; Hayashi & Murphy, 2011). Nurhemida (2007) studied the relationship between morphological awareness and English vocabulary knowledge of Indonesian senior high school students and found that there was a significant relationship between the students' performance in the vocabulary level test and the morphological awareness tasks. Additionally, Lam, Chen, Geva, Luo, and Li (2012) researched on roles of L1 and L2 derivational morphological awareness in L2 reading through the mediation of L2 vocabulary knowledge of Korean EFL students. The results revealed that L2 vocabulary knowledge had a significant relationship with L2 derivational morphological awareness and reading comprehension. According to Hayashi and Murphy's study on morphological awareness in Japanese learners of English, it showed that L2 vocabulary knowledge can be explained by higher degrees of metalinguistic awareness that includes explicit knowledge of morphological segments (Hayashi & Murphy, 2011).

### III. METHODS

#### A. Participants

The participants of this study were Thai EFL university freshmen in lower northern region of Thailand who are taking bachelor's degree majoring in English. Systemic sampling was used to choose 100 university freshmen from four universities in the region.

#### B. Design

The researcher used the quantitative method to collect data. In this case, the researcher followed a methodology suggested by Creswell (2003) in which data was collected and explained the probable relationship between independent and dependent variables. In this case, the independent variable was gender; meanwhile, the dependent variables were morphological awareness and vocabulary knowledge. Then, the researcher tested the relationship of morphological awareness and vocabulary knowledge.

#### C. Instrument

The morpheme identification test was applied as research instrument to collect quantitative data. The test was adapted from Nelson-Denney Reading Test which is a reading survey test for high school students, college students, and adults that measures vocabulary development, comprehension, and reading rate. Additionally, the list of vocabularies in the morpheme identification test was derived from Cambridge Vocabulary for IELTS by Cullen (2008).

#### D. Procedure

The participants were given the test which contained 50 complex words. The test was divided into 2 parts: self-checking and morpheme breakdown. To do the test, the participants were asked to check the 50 words whether they knew them or not. They had to check by using a tick if they knew the words (✓). If not, using a cross (x) was for unknown words. After self-checking, the participants were also requested to complete the test by identifying the words in the previous part and breaking them into morphological units within an hour. The scores were given if the participants could correctly break a word into morpheme.

#### E. Data Source and Analysis

The quantitative data analysis was conducted with data obtained from the morpheme identification test. Descriptive statistic was employed to summarize the scores from the test. In addition, Pearson Correlation Coefficient was also used to find out the relationship between morphological awareness and vocabulary knowledge of Thai EFL university freshmen.

### IV. RESULTS AND DISCUSSION

In this study, the researcher investigated the relationship between morphological awareness and vocabulary knowledge of Thai EFL university students in the lower northern region of Thailand. Additionally, the present study elicited information on gender and morphological awareness. The results gained from 100 participants were analyzed as follows:

TABLE I.  
THE NUMBERS AND PERCENTAGE OF PARTICIPANTS (N=100)

Gender	Total (%)
Male	24 (24.0%)
Female	76 (76.0%)

According to Table I, it revealed the numbers and percentage of participants joined in this study in which there were 24 male students (24.0%) and 76 female students (76.0%).

TABLE II.  
OVERALL SCORE, MEAN SCORE, AND STANDARD DERIVATION (N=100)

	Score (50)
Lowest	7.0
Highest	41.0
Mean score (Mean $\pm$ Standard Deviation SD)	28.42 $\pm$ 6.45

Furthermore, Table II showed the mean score of the test which was 28.42 out of 50 points with the standard derivation (SD) 6.45. As shown in Table II, it was also found that the highest score was 41 points and the lowest score was 7 points.

To clarify more about the scores gained from the test, it can be separated into ranges as shown in Table III

TABLE III.  
THE RANGE OF SCORES FROM THE TEST (N=100)

Range	Number (Percentage %)
0-10	1 (1.0)
11-20	10 (10.0)
21-30	55 (55.0)
31-40	33 (33.0)
41-50	1 (1.0%)

According to Table III, it was found that 55% of the participants was in the score range of 21 to 30; meanwhile, 33% of them had a score with a range between 31 and 40. The 10% of the participants had scores from 11 to 20 and 1% was at 0-11 points and 41-50 points, respectively.

As seen in Table IV, gains in vocabulary were apparently associated with morphological awareness which referred that there was the positive and linear relationship between vocabulary knowledge and morphological awareness. That is,

TABLE IV.  
THE RELATIONSHIP BETWEEN MORPHOLOGICAL AWARENESS AND VOCABULARY KNOWLEDGE

Score Item	N	$\bar{x}$	SD	Pearson Correlation	Sig
Vocabulary Knowledge	100	33.69	7.57	0.560*	0.000
Morphological Awareness	100	28.50	6.53		

\*  $p < 0.01$

the mean score of vocabulary knowledge and morphological awareness was 33.69 with SD 7.57 and 28.50 with SD 6.53 respectively. The reliability of the relationship of morphological awareness and vocabulary knowledge was at  $p < 0.01$  (99 %).

In addition, the researcher investigated whether there was any difference between male and female in perceiving morphological awareness which could be linked to vocabulary knowledge. The results showed that there was not any significant difference between male and female participants as illustrated in Table V. The scores obtained from the participants (24 male and 76 female) revealed that the mean score of male was 30.58 points with SD 4.50; meanwhile,

TABLE V.  
THE MORPHOLOGICAL AWARENESS SCORES OF MALE AND FEMALE PARTICIPANTS

Gender	N	$\bar{x}$	SD	t	Sig
Male	24	30.58	4.50	1.910*	0.059
Female	76	27.74	6.84		

\*  $p < 0.05$

the mean score of female was 27.74 with SD 6.84. Therefore, it could be implied that the morphological awareness of male and female was not significantly different.

Based on the results of the present study, it could be discussed that morphological awareness can be linked to the acquisition of vocabulary and vocabulary knowledge. In other words, the awareness of word structure or morphological awareness is the predicator of acquiring and gaining new words of learners. The results were consistent with McBride-Chang, Wagner, Muse, Chow, and Shu's research (2005), morphological awareness can apparently predict the ability of perceiving vocabulary and having vocabulary knowledge. It was similar to the study of Zhang and Koda (2013) which mentioned that this awareness enables learners to understand and acquire new words to use them to learn reading and writing successfully. Moreover, the results of the present study was also related to Wolter and Pike's study (2015) in which the participants in their study could reflect on known morphological units and many of them successfully inferred the meaning of unknown words. Therefore, it could be concluded that there is a relationship between morphological awareness and vocabulary knowledge.

Due to the present study conducted in the EFL context, the results were also consistent with several studies investigated the relationship between morphological awareness of English and vocabulary knowledge of EFL learners. For example, Nurhemida (2007) studied the relationship between morphological awareness and English vocabulary knowledge of Indonesian senior high school students and found that there was a significant relationship between the students' performance in the vocabulary level test and the morphological awareness tasks. Additionally, Lam, Chen, Geva, Luo, and Li (2012) researched on roles of L1 and L2 derivational morphological awareness in L2 reading through the mediation of L2 vocabulary knowledge of Korean EFL students. The results revealed that L2 vocabulary knowledge had a significant relationship with L2 derivational morphological awareness and reading comprehension. According to Hayashi and Murphy's study (2011) on morphological awareness in Japanese learners of English, it showed that L2 vocabulary knowledge can be explained by higher degrees of metalinguistic awareness that includes explicit knowledge of morphological segments. The results of the present study also revealed that there was the positive relationship between morphological awareness and vocabulary knowledge. In other words, the participants could segment known and unknown words into small units correctly. It was because the morphological awareness enables them to understand each unit of word.

#### V. CONCLUSION AND RECOMMENDATIONS

The conclusion of the study is that Thai EFL university students had a sufficient level of morphological awareness which enabled them to have vocabulary knowledge of English. In other words, the majority of participants could separate words into morphemes correctly even though they have not seen those words. In this study, gender is the factor investigated whether it affected the ability of acquiring morphological awareness and vocabulary knowledge of English. According to the results of the present study, it was found that there was no significant difference of morphological awareness and vocabulary knowledge of English between male and female students. This can be implied that male and female students have the equal level of acquiring morphological awareness and gaining vocabularies. Therefore, it can be concluded that there is a relationship between morphological awareness and vocabulary knowledge in which this awareness assists learners to understand how they can break words into morphemes correctly even if it is a new or an unknown word for them.

The study also led to three suggestions. First, future studies should look in greater depth into morphological awareness and language skills. Second, investigations should explore whether EFL students in lower grades possess an adequate level of morphological awareness since this awareness is the predictor of being literate. Finally, more research should explore methods or techniques which could.

#### ACKNOWLEDGMENTS

The authors wish to thank all participants who joined this study without whose co-operation; it could not have been carried out. In addition, this work was supported in part by a grant from Naresuan University.

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