

A Study of the Perception of English Regular Plural Sounds

by Thai College EFL Students

การศึกษาการรับรู้เสียงรูปแบบพหูพจน์ปกติภาษาอังกฤษโดยนิสิตชาวไทย
ที่เรียนภาษาอังกฤษในฐานะเป็นภาษาต่างประเทศKathamas Seethes¹, Jidapha Rungrapsung²,Piyawan Kaewthim³, and Monrat Thuamphuthong⁴ศษามาศ สีเทศ⁵ จิดาภา รุ่งราบสูง⁶ปิยวรรณ แก้วทิม⁷ และมนรัตน์ ท่วมภูทอง⁸

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Abstract

The differences between native language and target language can make EFL learners perceive English regular plural sounds difficult. Cross-Linguistic Influence is the common problem that can happen to anyone learning a second language (Harshim, 1999). Therefore, the present study examined which English regular plural sounds had the greatest and least difficulty regarding the perceptions of English majors and non-English majors, and this study also investigated the differences in perceptions of the English regular plural sounds of both groups. The sample consisted of 31 fourth-year English majors and 31 fourth-year non-English majors at Naresuan University. Data was collected using a test. The study found that English majors had the greatest difficulty perceiving the English regular plural sound [s] due to most of them are not aware the phonological rules of English plurals. However, non-English majors had the greatest difficulty perceiving both [s] and [z] since most of them struggled with distinguishing between the voiceless and voiced sounds, as well as the absence of [z] in the Thai sound system. English majors and non-English majors had the least difficulty perceiving the English regular plural sound [Iz] due to the addition of a syllable. The perception of English regular plural sounds that had the least problems in both groups supported Markedness theory in term of voice clarity is easy to perceive the sound. The score of English major students was significantly higher than that of non-English major students at the alpha level of 0.05 for the [z] and [Iz] sounds; ($t = -.95$; $p < 0.05$) and ($t = -2.86$; $p < 0.05$).

Keyword: perception, English regular plural forms, English majors, non-English majors

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บทคัดย่อ

ความแตกต่างระหว่างภาษาแม่และภาษาปลายทางสามารถทำให้ผู้เรียนที่เรียนภาษาอังกฤษในฐานะเป็นภาษาต่างประเทศมีความยากลำบากในการรับรู้เสียงรูปแบบพหูพจน์ปกติภาษาอังกฤษและอิทธิพลของการเรียนภาษาอื่นที่ไม่ใช่ภาษาแม่ นับว่าเป็นปัญหาทั่วไปที่สามารถเกิดขึ้นได้กับทุกคนที่เรียนภาษาที่สอง (Harshim, 1999) ดังนั้นการศึกษาค้นคว้าโดยหาความแตกต่างด้านการรับรู้เสียงรูปแบบพหูพจน์ปกติภาษาอังกฤษของนิสิตทั้งสองกลุ่ม กลุ่มตัวอย่างประกอบด้วยนิสิตปีสี่เอกภาษาอังกฤษ 31 คน และนิสิตปีสี่ที่ไม่ใช่เอกภาษาอังกฤษ 31 คน จากมหาวิทยาลัยนครสวรรค์ โดยการเลือกแบบเฉพาะเจาะจง เก็บข้อมูลโดยใช้แบบทดสอบ จากการศึกษาพบว่านิสิตเอกภาษาอังกฤษมีปัญหาในการรับรู้เสียงรูปแบบพหูพจน์ปกติภาษาอังกฤษ [s] มากที่สุด เนื่องจากส่วนใหญ่ไม่ได้ตระหนักในเรื่องกฎการออกเสียงพหูพจน์ภาษาอังกฤษ อย่างไรก็ตามนิสิตที่ไม่ใช่เอกภาษาอังกฤษมีปัญหาในการรับรู้ทั้งเสียง [s] และ [z] มากที่สุด เนื่องจากส่วนใหญ่มีปัญหาในการแยกเสียง voiceless และ voiced ตลอดจน เสียง [z] ไม่มีอยู่ในระบบเสียงภาษาไทย นิสิตเอกภาษาอังกฤษและนิสิตที่ไม่ใช่เอกภาษาอังกฤษมีปัญหาในการรับรู้รูปแบบพหูพจน์ปกติภาษาอังกฤษ [Iz] น้อยที่สุด เนื่องจากมีการเพิ่มพยางค์เข้ามา สำหรับรูปแบบพหูพจน์ปกติภาษาอังกฤษที่มีปัญหาในการรับรู้เสียงน้อยที่สุดโดยทั้งสองกลุ่มนั้นสนับสนุนทฤษฎี Markedness ในเรื่องความชัดเจนของเสียงที่ง่ายต่อการรับรู้เสียง ระดับคะแนนของนิสิตเอกภาษาอังกฤษสูงกว่าคะแนนของนิสิตที่ไม่ใช่เอกภาษาอังกฤษอย่างมีนัยสำคัญที่ระดับอัลฟาที่ 0.05 สำหรับเสียง [z] และ [Iz]; ($t = -.95$; $p < 0.05$) และ ($t = -2.86$; $p < 0.05$)

คำสำคัญ: การรับรู้ รูปแบบพหูพจน์ปกติภาษาอังกฤษ นิสิตเอกภาษาอังกฤษ นิสิตที่ไม่ใช่เอกภาษาอังกฤษ

Introduction

Many Thai students have been taught English as a foreign language; however, many do not have the opportunity to practice speaking with and listening to native English speakers. Although Thai students spend many years studying the English language, it is clear to most Thai citizens that students still continue to have some difficulties with all four language skills—listening, speaking, reading, and writing. The problems which Thai students face is that they are not immersed into an English-speaking environment. Because they are not entangled in that culture, and students are not able understand the nuances or appreciate the importance of English (Sawat, 2017), they are not able to develop their proficiencies. Pachontarapak, Photaksin, and Mookmanee (2021) stated that Thai students had the most difficulty with developing their listening skills, for retention of details when speaking in long sentences.

Cross-Linguistic influence is the common problem that can happen to anyone learning a second language (Harshim, 1999). Mendes (2017) investigated the perception of plural morphemes in Brazilian EFL students, the result showed that plural morphemes namely [z] is the most difficult to perceive, this result supported the Speech Learning Model (Flege, 1995); Learning English as a second language made it difficult for Brazilian EFL learners to differentiate between many -s morphemes, and that the realization of the -s morphemes appear to be significantly influenced by the phonological context. Chanthawee (2018) also studied in the field of the perception and production of regular plural sounds by Thai EFL university students, using a test, questionnaire, and an interview as the instruments. Furthermore, they perceived the plural morphemes, namely [z], difficult the most as the same as Brazilian EFL students did. This findings also supported the

markedness theory of Eckman (1977); the [z] sound is the most difficult for EFL learners to perceive and produce because it does not exist in the native language.

According to previous studies, only Brazilian students and Thai English-majored students participated in the studies. As a result, we are unable to determine how Thai EFL students who are non-English majors perceive the English regular plural sounds. Therefore, the present research aims to investigate the fourth-year Naresuan University students' perception of which English regular plural sounds are the most problematic and the least problematic. This study also compares the difference between fourth-year English major students and non-English majors. The results of this study will help us determine the ability to perceive the English regular plural sounds among Thai EFL students from both groups by using a test. Moreover, it will help many teachers to create lesson plans that give students opportunities to practice all four skills equally.

Literature Review

Theoretical Framework

Eckman (1977) has indicated that if the target language is different and more marked than the mother tongue, learning the target language will be difficult. Furthermore, if the target language is different from the mother tongue, but is less marked, learning the target language will not be difficult. The degree of difficulty is determined by the degree of markedness. The scale below was constructed by Solt, Pugach, Adams, Stoynezhka, and Rose (2004). It is based on markedness theory which is utilized as a theoretical framework for this research. The scale told us the level of the English regular plural sounds that the [z] was the most problematic, followed by [s], and [Iz] respectively.



Figure 1 The scale of the degree of English regular plural forms difficulty sounds
Solt, Pugach, Adams, Stoynezhka, and Rose (2004).

Previous studies

Many prior studies that have been conducted by non-Thai scholars mostly focused on the perception and identification of regular plural forms, the errors in plural usage by EFL learners, the materials, and environments that aid in developing listening skills, and the perception through listening and reading (Adejare,



2019; Al-Jarf, 2022; Barreiro, 2017; Daniel & Núñez, 2018; Liando et al., 2018; Mendes, 2017; Samhudi, 2016; Walker, 2020). Mendes (2017) stated that Brazilian EFL students can perceptually identify the difference between English regular plural sounds [s], [z], and [ɪz] sounds. However, they have difficulty identifying English regular plural sounds [z], implying that [z] sound was the most difficult to identify. The finding supported the Speech Learning Model (Flege, 1995), which claimed that "position sensitive allophone" in the first hypothesis; therefore, Brazilian English language learners should have trouble distinguishing between the many realizations of the -s morphemes in the target language. Moreover, EFL learners experienced problems with the difficulty of distinguishing voiced and voiceless fricative sounds. The results showed that they can identify the difference between the [s] and [ʃ] sounds better than the [s] and [z] sounds (Barreiro, 2017). Al-Jarf (2022) investigated plural errors made by EFL students from King Saud University, Saudi Arabia. The results showed that the vast majority of plural errors were caused by over-modifying the plural sound structure, followed by adding a plural suffix to words that were needed. In addition, the findings from the study by Samhudi (2016) also supported these results. Most students in the English Education Program used plural forms correctly; however, only a small percentage used them incorrectly (Adejare, 2019). English major students believe that watching English language movies has a greater and more direct impact on their listening development ability, helping them to become more fluent speakers, and good environments also affect their learning (Liando et al., 2018; Daniel & Núñez, 2018). Walker (2020) referred to the fact that perception through reading and listening enhances our understanding, increases our retention of important information, and increases our productivity not different.

Many previous studies which have been done by Thai researchers focused mostly on the perception of English final consonants, the usage of plural forms, the problems with English listening, developments in the plural usage of Thai EFL learners, and similarities and differences between syllable structures of English and Thai (Atthaphonphiphat, 2019; Chanthawee, 2018; Chumkamon, 2017; Kongbang & Pongpairaj, 2020; Noobutra, 2019; Suphatti, 2019; Techa, 2016). Atthaphonphiphat (2019) stated that more than 50% of students were able to perceive the final consonant, namely the [z] sound most correctly (95.4%), followed by the [ʃ] sound (92.4%), and the last [s] sound (88.2%). Furthermore, Chanthawee (2018) investigated the perception and production of 30 first year and 30 fourth-year students in the field of English regular plural forms, namely [s], [z], and [ɪz] sounds. Utilizing a perception test, a production test, a questionnaire, and an interview to collect the data. The results of this research showed that the part of perception the [z] sound was the most difficult to perceive or produce, followed by the [s] sound, while the [ɪz] sound was the least. This findings also supported the markedness theory of Eckman (1977) that demonstrated the [z] sound is the most difficult for EFL learners to perceive and produce. Kongbang and Pongpairaj (2020) investigated the acquisition of English regular and irregular plural morphemes. The findings illustrated that the lack of plural inflection morphology in the Thai grammatical system makes Thai learners struggle to acquire English regular and irregular plural morphemes. Suphatti (2019) said that listening to standard accents and listening to final consonants were the most common problems among Thai students. However, Thai EFL learners perceived plural -s morphemes as the best among

English grammatical morphemes; besides, their ability to use English plurals developed in the same way as their educational stage (Chumkamon, 2017; Techa, 2016). In terms of syllable structures, English and Thai are similar, yet there are some syllable structures in English that do not exist in Thai, making Thai EFL learners struggle to learn those syllables (Noobutra, 2019).

A few prior studies with Thai EFL learners have been carried out, notably on the perception of English regular plural forms, and Chanthawee's (2018) study only compared the English major population. We are unable to determine which sounds in English regular plural forms are the most and least difficult to perceive for non-English majors, or how non-English majors perceive English regular plural forms differently from English majors. As a result, the present study intends to analyze the statistically significant differences in the perception of English regular plural forms between fourth-year English and non-English major students and investigate which sound in English regular plural forms is the most and least difficult to perceive by these two groups. Also finding reasons behind those chosen plural form items. In order to obtain the most accurate results, the test in this study has been improved for efficiency. The instruments used in the present research were a test and an interview.

Research questions

1. Which English regular plural forms are the most problematic and the least problematic to perceive by the fourth-year English majors and non-English majors at Naresuan University?
2. Is the perception of English regular plural forms among English-major students better than that among non-English-major students?

Research Methodology

Participants

The total number of participants was 62 fourth-year students at the Naresuan University of Thailand, which were divided into two groups. The first group is the 31 fourth-year students who were English majors. The second group was the 31 fourth-year students who were non-English majors. Purposive sampling was used to select the participants.

Instruments

The design of the test was adapted from Chantawee's (2018). The perception test is divided into three parts, as follows: The first part consists of 12 items; the students choose the word by marking the correct word after listening to the sound from the audio file. This part has been utilized to measure the ability to perceive the plural sounds [s], [z], and [ɪz]. The second part consists of 12 items; the students identify the syllables of a given word (the word in plural form). This part measures the ability to identify syllables without listening. The final part consists of 12 items; the students identify syllables as in the second part, but in this part, they will listen to the sound from the audio file. This part measures the ability to identify syllables through listening.



Data collection

The data collection consists of two stages as the follow.

1. The researchers sent the online test link or QR code (Google Form) to 62 participants and also informed them of the details of the test and the time taken to complete the test was 25 minutes.
2. After the participants completed the test, the researchers checked the test and combined the scores of each participant. The test consists of 36 questions, which are divided into three parts and have a total score of 36.

Data analysis

Analysis of quantitative data, the test consists of 36 items, divided into three parts. Thirty-six scores are the total score. Students will receive one point if they answer the question correctly. They will receive a zero point if they answer the question incorrectly. An independent t-test was used to assess the data that was obtained. Calculating the participants' ability using the mean score, and standard deviation.

Findings

This section presents the findings based on the research questions.

Research question 1: Which English regular plural forms are the most problematic and the least problematic to perceive by the fourth-year English majors and non-English majors at Naresuan University?

Table 1 Statistics Score of the Participants on the Perception Test Part 1

Major	English regular plural forms											
	[s]				[z]				[ɪz]			
	Max	Mean	Min	S.D.	Max	Mean	Min	S.D.	Max	Mean	Min	S.D.
English (N = 31)	4	3.62	1	.803	4	3.81	3	.40	4	3.94	3	.25
Non-English (N = 31)	4	3.10	0	1.19	4	3.10	1	1.27	4	3.45	0	1.15

According to Table 1, the English regular plural sound with the lowest mean score among English majors is the [s] sound, with a score of 3.62, followed by the [z] sound, with a score of 3.81, and the English regular plural sound with the highest mean score among English majors is the [ɪz] sound, with a score of 3.94. The maximum score for each English regular plural sound was four, however, the minimum scores vary depending on the English regular plural sounds: the [s] sound has a minimum score of one, while the [z] and [ɪz] sounds have a minimum score of three. The English regular plural sounds with the lowest mean score among non-English majors are the [s] and [z] sounds, scoring 3.10, and the English regular plural sounds with the highest mean score among non-English majors is the [ɪz] sound, scoring 3.45. The total score of Part 1 is 12 points.

Research Question 2: Is the perception of English regular plural sounds among English-major students better than that among non-English-major students?

Table 2 Statistic Evidence of English Plural Sound Perception Performance between English and Non-English Majors

English regular Plural forms	Major	Mean	S.D.	t	p-value
[s]	English	3.61	.80	-1.99	.051
	Non-English	3.10	1.19		
[z]	English	3.81	.40	-2.95	.005*
	Non-English	3.10	1.27		
[ɪz]	English	3.94	.25	-2.86	.029*
	Non-English	3.45	1.115		

Note: *sig. <0.05

Table 5 illustrates that English major students and non-English major students performed similarly on the [s] English regular plural sounds with no statistically significant differences between both groups at an alpha level of 0.05 ($t = -1.99$; $p > 0.05$). In the English regular plural sounds: [z] and [ɪz]. The score of English major students was significantly higher than non-English major students.

Discussion and Conclusion

This present study investigated the perception of English regular plural sounds of fourth-year students in English majors and non-English majors. Moreover, this present study investigated the statistically significant differences in terms of perception of the English regular plural sounds between both groups. The results of the perception test part 1 of English majors revealed that the English regular plural sound [ɪz] was the highest score. This findings is consistent in another study, Chanthawee (2018) examined that the maximum level of perception was the English regular plural sound [ɪz] sound; a noun with a sibilant ending gained an extra syllable when the [ɪz] sound is added. As a result, this one is easier to hear than the other two: the [s], and [z] sounds. Additionally, non-English majors had the best perception of the English regular plural sound [ɪz] sound. The regular plural sound [s] was the most problematic to perceive for English majors. This findings was not in line with the markedness theory and previous studies that stated [z] sound was the most problematic to perceive (Chanthawee, 2018; Mendes, 2017). The possible reasons that the finding was not in the same direction with previous studies might be that Thai EFL learners disregarded the phonological rules for English plural sounds, and they had little practice (Kongbang et al., 2022). Athaphonphiphat (2019) stated that more than 50% of students can correctly perceive the final consonants of the English language, yet students were able to perceive the final consonant, namely the [z] sound, more correctly than the [s] sound. For non-English majors, two English regular plural sounds, [s] and [z], are the most problematic to perceive. This finding also was incompatible with



the markedness theory. Most non-English majors might not have enough training to distinguish the three sounds, making it challenging for them to discern between voiced and voiceless English regular plural sounds. Additionally, they did not take phonology courses; thus, they have a very limited understanding of English phonology and find it difficult to distinguish between voiced and voiceless sounds. Bilbao (2017) claimed that EFL learners can identify the difference between the [s] and [ʃ] sounds better than the [s] and [z] sounds. EFL learners have trouble distinguishing between the [s] and [z] sounds, which supported the present study. The [z] sound does not exist in the Thai sound system, thus students had trouble acquiring this sound (Noobutra, 2019). These were the possible reasons that the finding rejected the theory. The findings showed that between English majors and non-English majors, there was a statistically significant difference in the perception of English regular plural sounds: [z] and [ɪz] sounds. In addition, the English major students can perceive the English regular plural sounds better than non-English major students. Due to the fact that English majors have taken phonology courses before taking the perception test, they have gained more knowledge of the English sound system. Daniel and Núñez, (2018) claimed that environmental factors and continuous learning can help L2 learners learn a target language more successfully.

Conclusion

The findings demonstrated that the most problematic English regular plural form perceived by English majors was the [s] sound. This perception is the result of the fact that few English majors who took the test or participated in the interview applied the phonological rules of English plurals; most of them disregarded the rules. However, the most problematic English regular plural forms perceived by non-English majors were the [s] and [z] sounds. These perceptions resulted from the difficulty that most non-English majors had in distinguishing the differences between the voiceless and voiced sounds: [s] and [z], as well as the absence of the [z] sound in the Thai sound system. According to the results of the most problematic English regular plural forms perceived by both groups, they did not support the markedness theory. The least problematic English regular plural form perceived by English majors and non-English majors was the [ɪz] sound due to an extra syllable provided a clue to the perception of the [ɪz] sound. In accordance with the results of the least problematic English regular plural forms perceived by both groups, they supported the markedness theory. Furthermore, the perception of the English regular plural forms varied significantly between English majors and non-English majors. English majors outperformed non-English majors in the perception of the English regular plural forms [z] and [ɪz] at an alpha level

Recommendations for Future Research

1. In this study, the test utilized to gather data had a small number of questions. Therefore, in future research, the test should include more questions to gain more comprehensive and accurate data.



2. In this study, the number of plural morphemes in each test section was formerly not identical, so the researchers had to reanalyze the results. Consequently, in future research, the number of plural morphemes in each test section should be identical to ensure that the statistical values are accurate and reliable.

3. In this study, the three test sections were carried out continuously without any breaks. Thus, in future research, the researchers should schedule the second and third section of the test to be taken at least a week apart from the first section to avoid arbitrary guesses or a rush to complete the test.

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Appendix

The perception test

Part 1

Command: Have the test taker listen to the sound from the audio file by scanning QR code below then tick ☑ the word you heard.



SCAN ME

Caution! The test taker can only listen to the audio from the audio file once.

- | | | | |
|-------------------------------------|------------------------------------|----------------------------------|-----------------------------------|
| 1) <input type="checkbox"/> Neeches | <input type="checkbox"/> Neef | <input type="checkbox"/> Nees | <input type="checkbox"/> Neesh |
| 2) <input type="checkbox"/> Log | <input type="checkbox"/> long | <input type="checkbox"/> lodge | <input type="checkbox"/> logs |
| 3) <input type="checkbox"/> Kor | <input type="checkbox"/> Kots | <input type="checkbox"/> Kost | <input type="checkbox"/> Kot |
| 4) <input type="checkbox"/> Device | <input type="checkbox"/> Delighted | <input type="checkbox"/> Delight | <input type="checkbox"/> Devices |
| 5) <input type="checkbox"/> Month | <input type="checkbox"/> Monk | <input type="checkbox"/> Months | <input type="checkbox"/> Much |
| 6) <input type="checkbox"/> Mishes | <input type="checkbox"/> Mish | <input type="checkbox"/> Minish | <input type="checkbox"/> Minished |
| 7) <input type="checkbox"/> Tent | <input type="checkbox"/> Tents | <input type="checkbox"/> Ten | <input type="checkbox"/> Test |
| 8) <input type="checkbox"/> Fis | <input type="checkbox"/> Finc | <input type="checkbox"/> Fing | <input type="checkbox"/> Fings |
| 9) <input type="checkbox"/> Keps | <input type="checkbox"/> Keg | <input type="checkbox"/> Keb | <input type="checkbox"/> Kes |
| 10) <input type="checkbox"/> Lek | <input type="checkbox"/> Leks | <input type="checkbox"/> Lep | <input type="checkbox"/> Lef |
| 11) <input type="checkbox"/> Wishes | <input type="checkbox"/> Witch | <input type="checkbox"/> Wish | <input type="checkbox"/> Wind |
| 12) <input type="checkbox"/> Citing | <input type="checkbox"/> Cite | <input type="checkbox"/> City | <input type="checkbox"/> Cities |

The perception test

Part 2

Instructions: Ask the test taker to identify the number of syllables in each word.

Caution! This part doesn't have to listen to the audio from the audio file.

ข้อ/คำศัพท์	จำนวนพยางค์	ข้อ/คำศัพท์	จำนวนพยางค์
1. Jips		7. Animals	
2. Bozzes		8. Beaches	
3. Deds		9. Items	
4. Kies		10. Proofs	
5. Buzzes		11. Titches	
6. Daths		12. Nafs	

The perception test

Part 3



SCAN ME

Instructions: Have the test taker listen to the sound from the audio file by scanning the QR code below, then specify the number of syllables of each of the following words.

Caution! The test taker can only listen to the audio from the audio file once.

ข้อ/คำศัพท์	จำนวนพยางค์	ข้อ/คำศัพท์	จำนวนพยางค์
1. Jips		7. Animals	
2. Bozzes		8. Beaches	
3. Deds		9. Items	
4. Kies		10. Proofs	
5. Buzzes		11. Titches	
6. Daths		12. Nafs	