

## The Perception of Lexical Stress in Malaysian English

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### ABSTRACT

*Malaysian English is described as a variety of English that lacks perceivable lexical stress. This, in turn, could affect its intelligibility to non-Malaysian listeners. This paper examines if lexical stress can be detected in Malaysian English. The findings were based on two listening tasks completed by 65 respondents from three neighbouring countries: Indonesia, Thailand, and the Philippines. In the first task, they were required to listen to recordings of the Malaysian speakers, and mark the stressed syllables in the test words. In the second task, they wrote out the words they heard in the recordings. The findings indicate that most of the respondents were generally able to identify the stressed syllables in the test words. However, the more syllables a word had, the more difficult it was to identify the stressed syllable. Context was also an important factor as the listeners found it easier to identify, and make out the test words when they were placed in a sentence. Speakers who used less English in their daily interactions, and who declared a lower level of English proficiency had more difficulty identifying the stressed syllables, and making out the words being uttered by the Malaysian English speakers.*

*Keywords: Malaysian English; lexical stress; perception; stressed syllable; intelligibility*

### INTRODUCTION

Different spoken varieties of English display differences in terms of segmental features (e.g., Phoon & MacLagan, 2009; Pillai et al., 2010) and suprasegment features (Gut & Pillai, 2014; Gut, Pillai, & Zuraidah Mohd. Don, 2013; Tan, 2016). These differences might be the source of difficulties while communicating with speakers from different varieties of English and language backgrounds. One of the features is lexical stress, which is perceived as the syllable which is given the most emphasis in a word (Ladefoged, 2001; Roach, 2009). However, there appears to be no consensus as to whether lexical stress is important when speaking English. Jenkins (2002, p. 97), for example, suggested that stress is among the features that are not “crucial to intelligibility” for communication in English as an International Language contexts, although she considers contrastive stress to be an important element. Similarly, Hahn (2004) also found the latter to be important. On the other hand, Lepage and Busà (2014) showed that both stress and vowel reduction affect second language speakers’ intelligibility. In fact, Lewis and Deterding (2018), found that wrong stress placements did cause misunderstandings, and thus, question its exclusion when teaching English as a Foreign Language. Jeong, Thorén and Juliana Othman (2020) also felt that lexical stress needed to be focused upon.

However, the lack of stress placement or different stress placements from, for example, British English is common in ‘new’ varieties of English (Azirah Hashim & Tan, 2012; Baskaran, 2004; Chin, 2011; Li & Chen, 2019; Tan, 2016), specifically those that are categorised as being more syllable-timed (Chen & Wang, 2016; Fuchs, 2016; McArthur, 2001). In these varieties, there is typically a lack of vowel reduction. The Malaysian variety of English (MalE) is considered to be among these syllable-timed varieties of English. However, whether this distinction affects how non-Malaysians perceive the speech of MalE speakers remains understudied, especially in relation to the features that might contribute to the perception of stress (or otherwise). Findings on whether lexical stress is discernible in the speech of MalE will help to fill the gap in our understanding of the extent to which lexical stress can be perceived, and can affect intelligibility. In relation to this, the aim of this study is to examine how speakers from three countries perceive lexical stress in the speech of a group of Malaysian speakers. In particular, we seek to address the extent to which:

1. lexical stress is perceived in target words produced by a group of Malaysian student teachers.
2. the target words are intelligible to a group of non-Malaysian listeners.

Before we explain the methods used to address these points, it would be useful to look at the correlates of lexical stress and to discuss previous work on lexical stress in MalE.

## LEXICAL STRESS IN MALAYSIAN ENGLISH

As mentioned in the previous section, the production and perception of speech are inter-related, but the question of which features of language matter in ensuring comprehensible speech is produced by the speaker is still being explored. One of the features of that is considered important in English is lexical stress (Field, 2005; Hahn, 2004). Stress can be examined by looking at the features that make listeners perceive that a syllable in a word is stressed. It should be noted, however, that the production and perception of speech, although closely related, are non-identical (Roach, 2009).

There are four main acoustic features that contribute to lexical stress in a syllable, and these are loudness, length, fundamental frequency (F0) and vowel quality (Cutler, 2015). Thus, in English, a syllable is commonly perceived to be stressed when it is produced louder, and longer together with a higher F0 (Zhang, Nissen & Francis, 2008). English differentiates stressed and unstressed syllable segmentally in the patterning of vowels (Cutler, 2015). Vowels may be full (e.g., the first vowel in the word, *fabulous*) or reduced (e.g., the second vowel in the word *happy*), with a stressed syllable containing the full vowel. It is, however, important to note that not all these features always work in combination (Roach, 2009). In other words, one or two of these features may be more prominent.

In MalE, the distinction between syllables may not be as prominent as, for example, British English. Nor does it tend to observe the same patterns of stress placement. There is, for instance, said to be a tendency to shift stress frequently to the final syllable (Baskaran, 2004), often together with vowel lengthening (Platt, 1980). An example of this would be from (e.g., EXercise) to (exercISE). This, however, could be the effect of syllable-final lengthening, which is a distinct feature of MalE. In addition, the shift could happen both ways, from the penultimate syllable to the antepenultimate syllable (e.g., inSURance to INSurance), and from the antepenultimate syllable to a penultimate syllable (e.g., CAmera to caMEra (Azirah Hashim & Tan, 2012, p. 62). MalE speakers also have a tendency to give similar prominence to what would be primary and secondary stress in polysyllabic words (e.g., MISunderSTANDING

instead of MISunderSTANding (Baskaran, 2004). The number of syllables may also be different in Male compared to British English due to a lack of vowel elision or reduction (e.g., vegetaBLE compared to VEGtable). Another typical feature of Male is to not distinguish stress placement between the same words of different word class (e.g., for OBject for noun and obJECT verb).

In fact, it is not easy to determine stressed syllables in words produced by Male speakers as the stress placement may be random or not evident (Chin, 2011). This is why Chin (2011) questioned the existence of lexical stress in Male as the description of lexical stress is irrelevant due to the inconsistent patterns produced by the Male speakers. A similar finding was also mentioned in Yap and Pillai (2018) where the pattern was also found to be inconsistent. Rajadurai (2004) suggested that the distinctive features of Male lexical stress might be due to the vowel lengthening in the final syllable, a common feature in the first language of Male Malay speakers. She further added that it was common for Male speakers to produce weak vowels as full vowels (Rajadurai, 2006). However, there are some limitations to the findings from previous research as data were elicited impressionistically, or from the colloquial and learner varieties due to the assumption that the standard variety of spoken Male is similar to British English.

In the Malaysian context, a study conducted by Jeong, Thorén and Juliana Othman (2020) examined the perception of Male lexical stress by Swedish listeners. They discovered that the alteration of lexical stress that the Male speakers made contributed to a better intelligibility of their speech to the Swedish listeners. This suggested that this feature might be important in ensuring intelligibility in an international context. Apart from this study, most perception studies were carried out on other varieties of English (Kirkpatrick, Deterding & Wong, 2008; Lepage & Busà, 2014; Zhang, 2015), and mostly between native-speaker (NS) listeners and non-native speakers (NNS) (Fields, 2005; Jenkins, 2000; Smith & Nelson, 1985). Furthermore, these studies commonly focused on other language features, such as consonants and vowels, rather than stress (Becker & Kluge, 2014; O'Neal, 2015).

## METHODS

Prior to collecting the data for the study, emails were sent out to three lecturers at three universities, one each in Indonesia, the Philippines and Thailand. The lecturers then identified the possible respondents for this study. Written consent was obtained from all respondents. The respondents had to complete two tasks (Perception Task 1 and 2) online which they accessed via a google link provided to them.

## RESPONDENTS

The respondents comprised 52 undergraduates and 13 postgraduates majoring in English. The 65 respondents were aged between 17 to 31 years old with an average age of 22. A total of 13 respondents were from Indonesia, 14 from the Philippines and 38 were from Thailand. These three countries were chosen as they are neighbouring countries. Further, English can be considered as the lingua franca among these countries and Malaysia, although there is the option of using Malay between Malaysians and Indonesia. However, in the context of business communication, for example, English is more likely to be used. English is also the working language of the Association of Southeast Asian Nations (ASEAN), of which all four countries are member states (Low & Ao, 2018). The status of English in the Philippines is somewhat similar to Malaysia as both are placed in Kachru's outer circles. As pointed out by Borlongan (2017, p. 1), Philippines English is regarded as the "co-official to the national

language Filipino and the primary language of education, business, and science in the country”. In contrast, both Indonesia and Thailand are in Kachru’s expanding circle, and teach and use English as a foreign language (Aminuddin Aziz, 2003; Lee, 2019; Trakulkasemsuk, 2012, 2018).

The majority of the respondents were females (n=50). As anticipated, the Indonesian respondents stated that Bahasa Indonesia was their native language, while the respondents from Thailand said that their native language was Thai. Both groups stated that they used these languages at home and at their universities. However, the Filipino respondents stated that they used a mixture of English and Tagalog daily at both settings. As for their English language proficiencies, all of the respondents had at least a Band 5 for IELTS (for the Indonesian and Thai respondents) and Band 6.5 for IELTS for the Filipino respondents. Only eight of the respondents reported that they had been outside their home countries on holiday.

#### THE RECORDINGS

The recordings comprised 30 test words produced by 30 Malaysian student teachers (STs). These words were high frequency words automatically generated from the British National Corpus (Leech, Rayson, & Wilson, 2001), a corpus commonly utilised in second language research. The STs were recorded as part of a larger study on the production and perception of lexical stress (Ernie Adnan, Pillai & Chiew, 2019). They were aged between 18-20 years old (average age = 19), and consisted of equal numbers of the three main ethnic groups in Malaysia: 10 Malays, 10 Chinese and 10 Indians. They of them were all pursuing a bachelor’s degree in the Teaching of English as a Second Language (TESL) at local teacher training institutes in Malaysia. They all had a grade A for English at their fifth form government examination, the Malaysian Certificate of Education or *Sijil Pelajaran Malaysia*. Table 1 shows their most used language at home. Based on the demographic data, some of the Chinese and Indian STs used more than one language at home to communicate. In fact, four of the Chinese STs, as well as four of the Indian STs, reported that they used mostly Malay to communicate at home. Our ongoing study on the production of stress among these STs also indicates that there are no significant differences in the way stress is realised among them despite their differing home languages. This is consistent with findings on intonation patterns (Gut, Pillai, Zuraidah Mohd. Don, 2013) and the production of vowels in previous studies (Pillai et al., 2010).

TABLE 1. Most used language at home of Malaysian speakers

Languages	Malay	Mandarin	Tamil
No of speakers	18	6	6

#### PERCEPTION TASKS

The objective of Perception Task 1 was to understand if the respondent could identify lexical stress in the speech of Malaysian speakers. The objective of Perception Task 2 was to gauge if the respondents could make out what the STs were saying; in other words, if the words were intelligible to the listeners. We acknowledge that the notion of intelligibility can be defined in different ways. In this paper, we follow Smith and Nelson’s (1985, p. 334) concept of intelligibility as “word/ utterance recognition” which is distinguishable from utterance “comprehensibility” and “interpretability”. Two sets of recordings were used for the two tasks since they have different objectives.

In the first task, the three groups of respondents were asked to listen to the first set of recordings, and mark what they heard as the stressed syllables in the test words (see Appendix A). The words in the first set of recordings were divided into three sets based on different word

classes. There were an equal number of three two-syllable words and three-syllable words in each set that made up the eighteen test words. These words were embedded in the middle of sentences to provide context to the words. Each syllable of the words was represented by an X. All eighteen sentences are written in X, while the target word is represented by the bolded X. For example, the sentence with target word 'activist' was represented as X X X X **XXX** X X X X X X. The respondents had to listen to the recordings and select one of the four choices given: stressed syllable in the first syllable, stressed syllable in the second syllable, stressed syllable in the third syllable and no stressed syllable.

In the second task, the respondents were asked to listen to the second set of recordings containing different test words and sentences, and then write out the words and sentences that they heard orthographically (see Appendix B). There was a total of twelve test words, with six words in isolation and six words embedded in sentences. There were an equal number of three two-syllable words and three-syllable words in isolation and in sentences. The respondents were also asked to rate the level of difficulty (from 1 for 'very difficult' to 5 for 'very easy') they had completing the task, and to provide reasons for the difficulties they encountered. In addition, they were requested to state the number of times they had to listen to the recordings before they completed the tasks.

#### DATA ANALYSIS

The responses by the respondents were analysed in terms of the stressed syllables identified and the written responses of what they heard, and then comparing these to the actual production by the STs. The reported levels of difficulty were coded according to themes, and the number of times the recordings had to be listened to were also examined.

#### FINDINGS

The following sections present the findings from the two perception tasks.

##### PERCEPTION TASK 1

As shown in Table 2, more than 70% of the respondents perceived the first syllable as the stressed syllable in five test words: 'HEAvy', 'CItY', 'STUdy', 'HEsitate' and 'ACTivist'. For the other five test words, the second syllable was perceived as the stressed syllable. These words were 'diSEASE', 'aCCESS', 'exHibit', 'eFFECtive' and 'exClted'.

TABLE 2. Perceived stressed syllable

Test words	Syllable	f	%	
Two-syllable word	HEAvy <sup>1</sup>	1	53	82%
	CItY	1	46	71%
	STUdy	1	47	72%
	diSEASE	2	58	89%
	aCCESS	2	39	60%
Three-syllable word	HEsitate	1	53	82%
	exHibit	2	42	65%
	eFFECtive	2	45	69%
	exClted	2	41	63%
	ACTivist	1	51	78%

Table 3 shows the comparison between the most frequently perceived stressed syllable by the respondents and the actual stressed syllable produced by the STs in the recordings. The actual stressed syllable in the test words was determined through the measurements of three acoustic correlates of stress: duration (in milliseconds), average amplitude (in decibels) and

movement of pitch (in Hertz). To be consistent, all the measurements were done on the vowel segment of the test words. The most applied correlate across all the participants for the recorded test words, which is duration, was the determinant factor for the stressed syllable in the word. Based on the comparison, six of the ten perceived stressed syllables by the respondents matched the production of the STs. All the two-syllable words and one three-syllable word, ‘exCIted’, were perceived similar to the way in which they were produced in the respective recordings. However, in another four test words, they were perceived differently from the actual productions. These words were ‘HEsitate’, ‘exHlbit’, ‘eFFECtive’ and ‘ACTivist’.

TABLE 3. Comparison between the most frequently perceived stressed syllable to the actual stressed syllable produced by the STs

Test words	Selected stressed syllable	Actual stressed syllable
Two-syllable word	HEAvy	1
	Clty	1
	STUdy	1
	diSEASE	2
	aCCESS	2
Three-syllable word	HEsitate	1
	exHlbit	2
	eFFECtive	2
	exCIted	2
	ACTivist	1

Table 4 shows the remaining eight test words in which the perceived stressed syllables were different across respondents. For the words ‘diSCUSS’ and ‘POsitive’, the perception of stressed syllable varied across the three groups of respondents. Most of the Indonesian respondents (46%, n=6) perceived the first syllable as the stressed syllable in the word ‘diSCUSS’, but the Filipino respondents (71%, n=10) perceived the second syllable as the stressed syllable in this word. For the word ‘POsitive’, 62% of the respondents from Indonesia perceived the first syllable as the stressed syllable in comparison to 50% of the Filipino respondents who perceived the third syllable as the stressed syllable in the word. However, most of the Thai respondents perceived these words as having no stressed syllable: 39% for ‘diSCUSS’ and 53% for ‘POsitive’. Note that the same number of Thai respondents (39%, n=15) perceived the second syllable as the stressed syllable in the word ‘diSCUSS’. As for the other six test words, at least two groups of respondents perceived similar stressed syllables. These words were ‘iDEA’, ‘diSCUSS’, ‘Civic’, ‘outSIDE’, ‘obJECTive’, ‘poTAtato’, ‘SPEcify’, and ‘POsitive’.

TABLE 4. The most frequently perceived stressed syllable by Indonesian, Filipino and Thai respondents

Respondents Test words	Indonesian			Filipino			Thai			
	Syllable	f	%	Syllable	f	%	Syllable	f	%	
Two-syllable word	iDEA	1	11	85	1	8	57	X <sup>2</sup>	18	47
	diSCUSS	1	6	46	2	10	71	X/2	15/15	39
	CIvic	2	7	54	1	8	57	1	23	61
	outSIDE	2	7	54	1	9	64	1	19	50
Three-syllable word	obJECTive	X	10	77	2	10	71	X	13	34
	poTAtato	X	9	69	2	8	57	X	29	76
	SPEcify	1	11	85	1	8	57	2	19	50
	POsitive	1	8	62	3	7	50	X	20	53

In Table 5, it can be seen that in three out of four two-syllable words; ‘iDEA’, ‘Civic’, and ‘outSIDE’, there were at least two groups of respondents who perceived similar stressed syllables as those produced by the STs. However, for the three-syllable words, almost all the

stressed syllables in these words were perceived differently from the actual production of the words.

TABLE 5. Comparison between the most frequently perceived stressed syllable by Indonesian, Filipino and Thai respondents to the actual stressed syllable produced by the STs

Test words	Selected stressed syllable			Actual stressed syllable	
	Indonesian	Filipino	Thai		
Two-syllable word	iDEA	1	1	X	1
	diSCUSS	1	2	X	2
	Clvic	2	1	1	1
	outSIDE	2	1	1	1
Three-syllable word	obJECTive	X	2	X	3
	poTATO	X	2	X	3
	SPEcify	1	1	2	3
	POsitive	1	3	X	1

### PERCEPTION TASK 2

Figure 1 illustrates the recognition of six test words by the respondents from the three countries. These words were presented in isolation with no contextual clues provided. More than 65% of the Filipino respondents were able to recognise all the six words. In comparison, 60% of Indonesian respondents were able to perceive only three out of the six words that included 'body', 'happy' and 'specific'. The Thai respondents had trouble recognising almost all the words except for the word 'specific', where 89% of them were able to recognise this word.

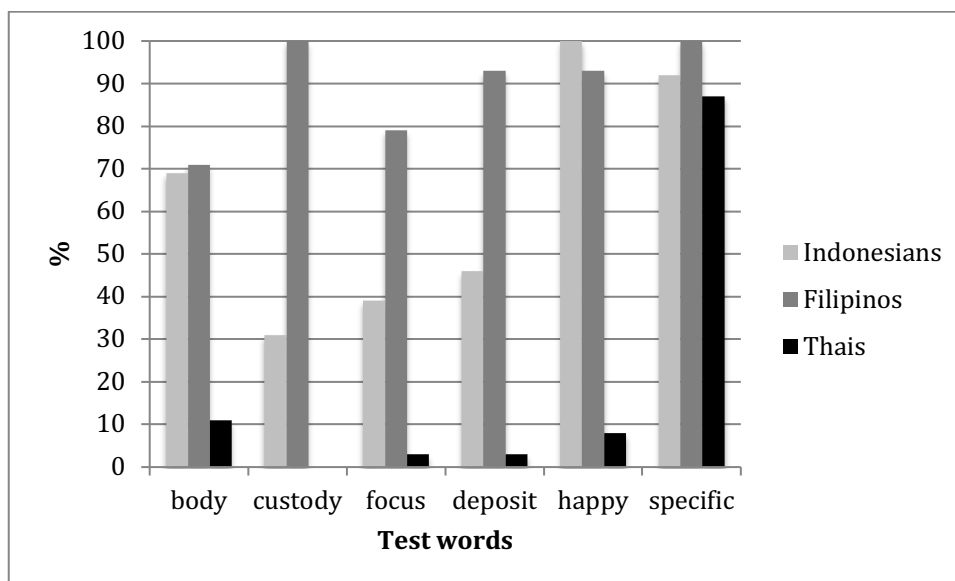


FIGURE 1. The recognition of test words in isolation

Recognition of the words improved when the test words were embedded in sentences (see Figure 2). All of the Filipino respondents were able to make out all the six test words in the sentences. In addition, more than 80% of the Indonesian respondents were able to perceive five out of six words, except for the word 'testify', where only 57% of the respondents recognised this word. The Thai respondents were able to make out four out of six test words. In spite of this, less than 20% of them were able to recognise the words 'testify' and 'exotic'.

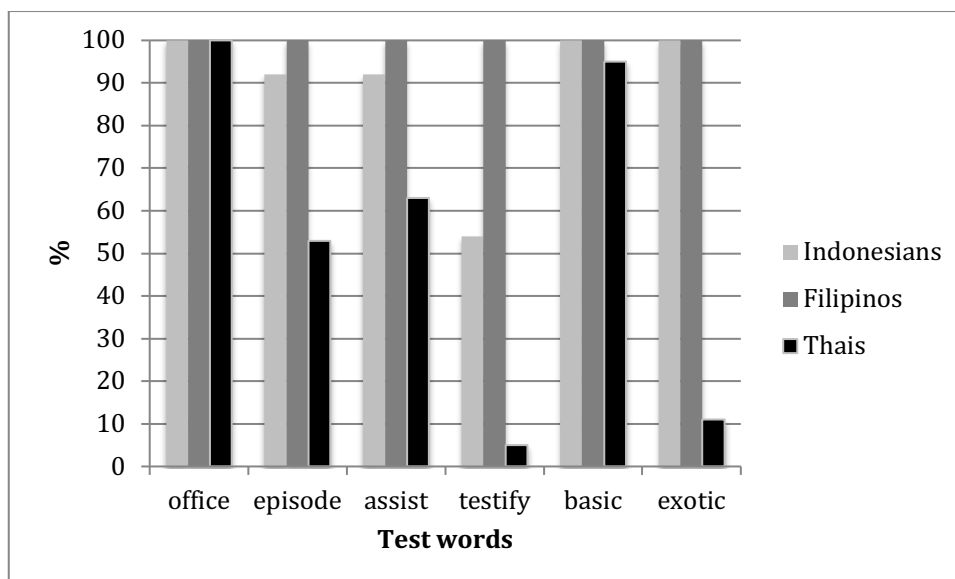


FIGURE 2. The recognition of test words embedded in sentences

Figure 3 shows the level of difficulty faced by the respondents in recognising the test words in isolation. The word 'specific' was rated as *very easy* to be recognised by the three groups of respondents. For the other three words, 'body', 'happy' and 'deposit', the level of difficulty ranged between *easy* to *very easy* for the Filipino and Indonesian respondents. However, the Thai respondents found it *very difficult* to recognise four out of six words which included the words 'body', 'focus', 'happy' and 'custody'.

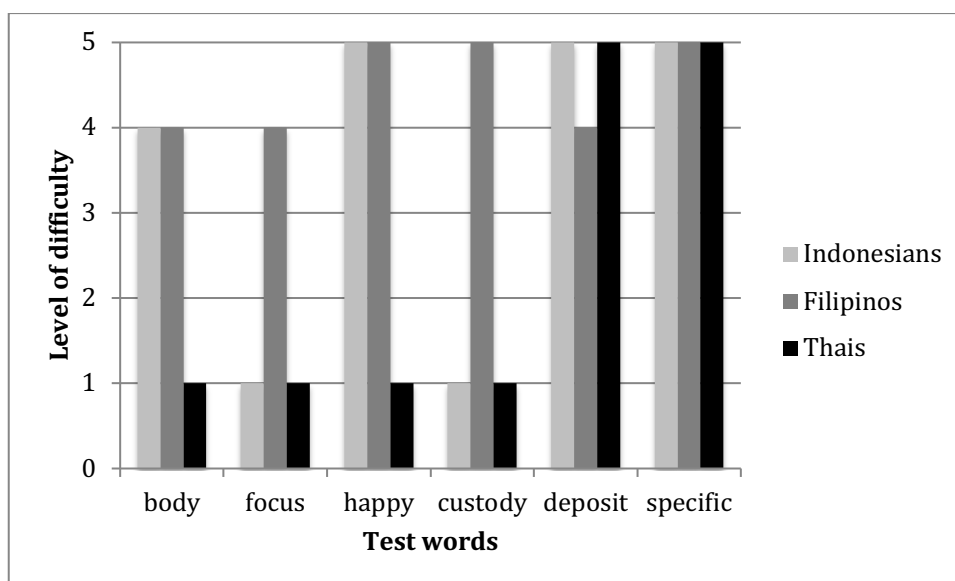


FIGURE 3. Level of difficulty in recognising the test words in isolation

In Figure 4, the level of difficulty in making out words decreased for all the respondents when the test words were embedded into sentences. At least three out of six test words were perceived as *easy* to *very easy* by the three groups of respondents. These words were 'office', 'assist' and 'basic'. Two test words were considered to be *moderately* to *easily* recognised by the respondents. These included the words 'assist' and 'testify'. However, the word 'exotic' appeared to be *difficult* for the Thai and Indonesian respondents but was *moderately difficult* for the Filipino respondents.



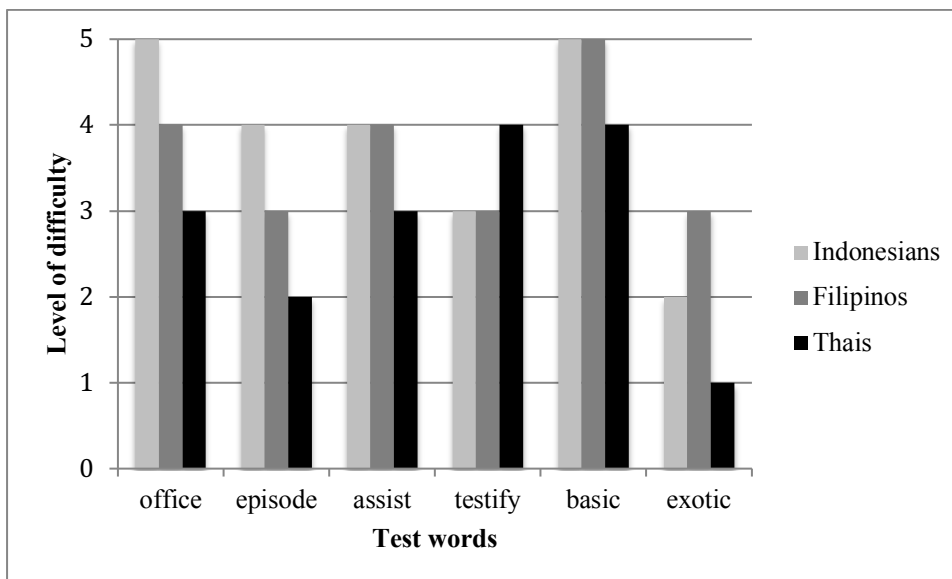


FIGURE 4. Level of difficulty in recognising the test words embedded in sentences

Figure 5 illustrates if the respondents repeatedly listened to the recordings of words in isolation for more than five times. Here, it can be seen that more than 75% of the Thai respondents indicated that they needed to listen to five out of six words more than five times compared to the Indonesian and the Filipino respondents. These words were 'body', 'custody', 'focus', 'deposit' and 'happy'. For the Filipino respondents, these words posed no problem for them. In fact, for the words, 'custody', 'deposit', 'happy' and 'specific', all of the Filipino respondents did not have to listen to the recordings more than once. As for the Indonesian respondents, more than 50% of them had to listen to the recording of the word 'focus' more than five times.

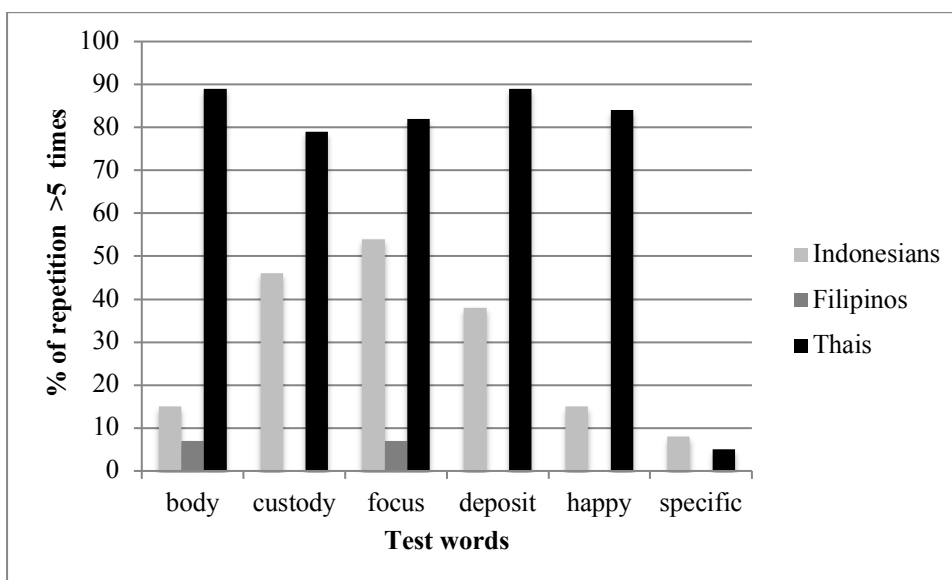


FIGURE 5. Repetition of audio for the test words in isolation (>5 times)

In Figure 6, the repeated listening of words by the respondents decreased when the test words were embedded into sentences. Less than 60% of the Thai respondents listened to half of the test words more than five times. These words were 'office', 'assist' and 'basic'. For the Indonesian respondents, less than 40% of them listened to five out of six words more than five

times. Only 10% of the Filipino respondents had to listen to the recordings of the words, ‘assist’ and ‘exotic’ more than once. They stated that they only listened to the other four test words once.

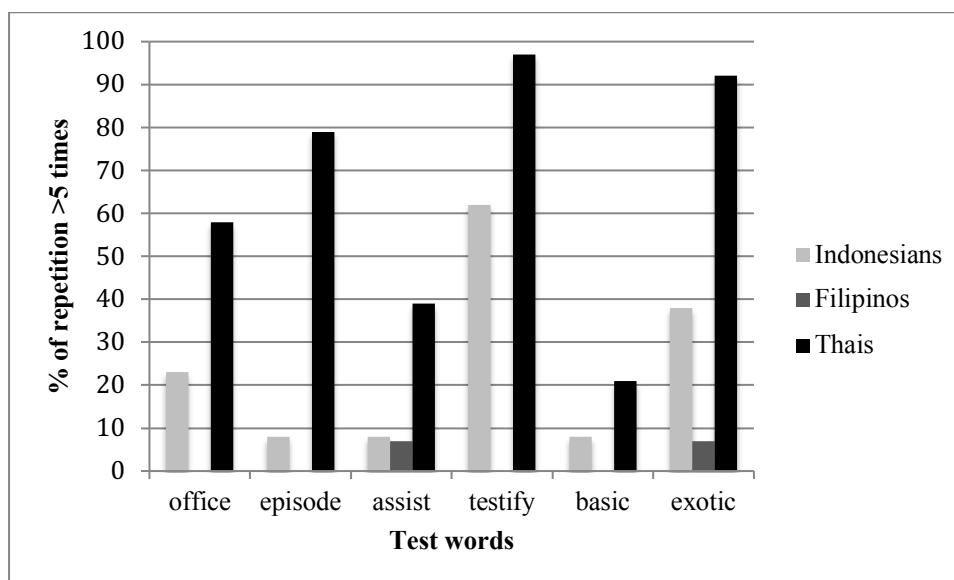


FIGURE 6. Repetition of audio for the test words embedded in sentences (> 5 times)

Table 6 illustrates the reasons behind the difficulties that the respondents faced while completing the perception tasks. A total of 38% of the respondents agreed that it was difficult for them to recognise the words due to the different accent used in the recording. In total, 18% of the respondents also stated that the difficulties were caused by the unclear audio although it should be noted that the quality of recordings was checked for clarity before being sent to the respondents. In addition, 15% of them argued that the accent was unfamiliar to them, while 12% admitted that they had poor proficiency in the language, and hence, this was why they had difficulty making out what was being said by the STs. Another 9% of the respondents agreed that some of the words in the audio were unfamiliar to them, while 11% did not state the reasons for the difficulties they had in completing the task.

TABLE 6. Reasons for the difficulties in completing the perception task

Reasons	f	%
1. Different accent	25	38
2. Unclear audio	12	18
3. Not stated	11	17
4. Unfamiliar accent	10	15
5. Poor proficiency	8	12
6. Unfamiliar words	6	9

## DISCUSSION

In general, it was easier to perceive which syllable was stressed by the Male speakers in 2-syllable words as shown in Perception Task 1 where all the perceived syllables matched the stressed syllable in the actual production of the STs. The respondents’ ability to recognise the stress in words decreased as the number of syllable in the words increased. This was based on the perception in the three syllable words which were mostly incompatible to the actual production in the recordings. This is perhaps predictable as the rules for stress placement change according to the number of syllables and word class, in addition to there being

exceptions to the rules. The difficulty of identification may have also been caused by the shift of lexical stress in the recordings, especially in the three syllable words.

In several words, the respondents, especially the Thai respondents, were not able to detect the stressed syllables. The recognition of words also became easier when the words were placed in sentences possibly due to the contextual clues from the neighbouring words. This suggests that rather than stress in itself, contextual clues play an important role in speech intelligibility. However, this was not the case with the Filipino respondents as they were able to identify the words easily in both conditions. They were the ones who used English as their dominant language (along with Filipino), and thus, used it much more on a daily basis compared to the respondents from the other two countries. In contrast, the Thai respondents found it hard to recognise the words even when they were embedded in sentences. Most of them said that they had to repeat the recordings more than five times. At the end of the task, some of them were still not able to recognise the words even after listening to the recordings many times. This could be related to the limited use of English in everyday communication (Lee, 2019). Despite the official English grades (see the Methods section), most of the Thai respondents felt that they had a low level of proficiency causing them to have problems recognising the words. Further, the familiarity with the accent also seemed to affect how easily the respondents could identify the stressed syllables, and make out what the STs were saying. Perhaps the Indonesian speakers did not have as much difficulty as the Thai speakers because they were more familiar with the Malaysian accent.

## CONCLUSION

In general, it can be concluded that the listeners from Indonesia, the Philippines and Thailand were able to perceive lexical stress in the speech of the MalE student teachers. The perception of stressed syllables was better in words with less syllables. As for the recognition of words and sentences produced by the MalE speakers, most of the listeners from the three groups of respondents were able to recognise most of the test words. Words in isolation tended to be more difficult if being compared to embedded words in sentences. This is common as contextual clues are provided in sentences to help better recognition of words (Li & Chen, 2019). Even though some respondents, particularly the Thai respondents, found it difficult to recognise the production of some of the words, the feedback on the reasons for the difficulty provided some insights. The familiarity with the variety, as well as the level of language proficiency of the listeners, appear to affect the ability to recognise what was being said.

This research focused on only one area of suprasegmental feature of language from the Malaysian variety of English, which is lexical stress, and how it is perceived by the listeners from three ASEAN countries. However, other suprasegmental features like intonation, rhythm and speech rate should be examined as these prosodic patterns contribute to listener perception (Chen & Wang, 2016). More work should be done to explore prosodic patterns in this particular variety, as well as other varieties of English, particularly in relation how they are perceived by listeners from other ASEAN countries. In addition to this, it is also important to further explore the impact of perception towards not just the recognition of speech, but also in the comprehension as well as interpretation, of the speech to listeners within the field of World Englishes.

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APPENDIX A

List of test words

Set 1 (nouns)

1. activist
2. objective
3. potato
4. idea
5. disease
6. city

Set 2 (verbs)

7. discuss

8. study

9. access

10. hesitate

11. specify

12. exhibit

13. effective

14. positive

15. excited

16. outside

17. civic

18. heavy

Set 3 (adjectives)

APPENDIX B

Set 1 - List of words in isolation

1. body
2. custody
3. focus
4. deposit
5. happy
6. specific

Set 2 - List of words in sentences

7. office
8. episode
9. assist
10. testify
11. basic
12. exotic