Analyzing Word Stress Pronunciation of the English Education Students Utilizing PRAAT Software

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Article Info	Abstract

Stress placement in English words is conducted with complicated rules. Hence, assigning stress correctly in English words is still a challenge for learners. This research explored the production of English word stress by 23 students of the sixth semester at Islam State University Raden Intan Bandar Lampung. This research used a qualitative approach, and the data were recorded by giving a task to pronounce 15 words. PRAAT software was utilized to analyze the recordings, including measuring the pitch, intensity, and duration as indicators. The result illustrated that the students' word stress pronunciation was average. Almost all the students were able to distinguish the placement of stress correctly, with a percentage of 82% on two syllables, 51% on three syllables, and 67% on four syllables. Mother tongue influence, local accent and lack of exposure to utilized word stress also contribute to the problem.

INTRODUCTION

Most people who rarely use English may perceive English as an "impressive" thing. However, nowadays, English is necessary for communication and study worldwide. Every citizen across the world, especially in non-anglophone countries. English has been utilized with the status of an international language, and non-native English speakers have universally used it as a tool of intercultural communication. English learners must master four basic language skills; listening, reading, speaking, and writing is crucial. Speaking skills are essential for foreign and second language learners and assist as efficient communication. To prevail in oral communication, language learners must master macro and micro skills of speaking to generate spoken language for better and effective interpersonal communication.

Speaking skills embrace four aspects that learners have to concern about; fluency, vocabulary, accuracy, and pronunciation, which are those aspects that are connected (University, n.d.). Hence, language learners must fulfill and be sufficient in four aspects to reach goal communication. In daily life, one fundamental unit of speaking is pronunciation. Learning a language is compulsory to master pronunciation. Even though language learners appropriately utilize other aspects of speaking, if

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pronunciation units like intonation, linking sound, and stress are not generated accurately, it may cause misunderstandings and failures to deliver intended messages (Lasabuda, 2017).

Pronunciation is one of the primary elements of language that is essential to be learned by language learners. In making better and more effective communication, people have sufficient to communicate competently, clearly, and dynamically (Syahrul Jihad, 2021). English pronunciation is one of the most challenging skills to acquire, and it takes much time for students to improve their pronunciation (Gilakjani, 2016). The low-ability pronunciation will make misunderstanding unpleasant for either speakers or listeners. In addition, inadequate pronunciation skills will make learners lose self-confidence and invent negative perceptions to estimate their credibility and abilities (Morley, 1991). In addition, to improve communication, people seek to learn how the interlocutor understands their point while speaking.

Pronouncing English words is perhaps tricky for Indonesian EFL learners; both Bahasa and English have significant differences in the production of the sounds. Following the production of words associated with elements of pronunciation are stress, rhythm, pitch, and intonation, which will impact when producing pronunciation. To illustrate, the problem facing Indonesian EFL learning English is having differences in word stress patterns. Indonesia is rich in diversity of ethnicity, which tends to Indonesia foreign learners have their characteristics in communicating. Most Indonesian foreign learners may speak with their local accent; it can be with a Lampung accent or even a Java accent. An English accent can influence the word's (Algifari, 2017).

In understanding speaking English, the first foundation is comprehending word stress. There are differences between native speakers versus non-native speakers in utilizing word stress. Non-native speakers are speaking in English, almost making mistakes in word stress. Otherwise, native speakers naturally pronounce every word with stress, so they do not even know they use it. In everyday settings, non-native English learners who learn English without knowing word stress encounter issues. non-native speakers may perceive it hard to understand native speakers and those speaking fast. Contrariwise, native speakers may find it hard to understand those speaking with wrong word stress. Word stress is linked with syllables. English is categorized as a lexical-stress language. The precise placement of stress on certain syllables is the main feature of communicating the intended meaning of a word in English (Hismanoglu, 2012).

Generally, word stress is an exception in learning amongst EFL perception and is not considered a significant problem in Indonesian EFL (Widagsa et al., 2019). The EFL Indonesian had difficulties producing word stress due to the influence of Indonesian prosodic, which is how Bahasa Indonesia and English differ. If the learner incorrectly stresses words in syllables, it will shift meaning or cause misunderstanding. On top of that, If the speakers perfunctorily use word stress, it would be confusing listeners. Listeners might not be recognized even with simple vocabulary if the speaker's stress syllables equally utilize incorrect word stress. Word stress is crucial to be learned owing to the differences in word stress patterns between Bahasa Indonesia and English. That indicates a problem for Indonesian learners who learn English. For the reason described above, Indonesian EFL sometimes felt difficulty pronouncing words in English and was confused about placing word stress in syllables.

Making mistakes in words stress also happens in the researcher's surroundings. To assert writer phenomena on students' pronunciation ability mainly in word stress. The writer conducted pre-research and distributed a questionnaire to acquire information. The questionnaire has several questions which encompass common questions related to topics. The participant of the questionnaire were English Education students from a different batch who passed subjects pronunciation and phonology. The writer found that almost participants considered that they did not become familiar with the word stress. In addition, most of the participants seldom and did not use the word stress in a common setting. From the questionnaire, the writer provides multiple-choice, which consists of phonetic transcription of words, and then the participant should choose which correct answer. The participant answered the question with an unsatisfied result; from the result majority of participants were wrong to identify the words PRODUCTION; on average, 62% of participants chose /prədək'SH(ə)n/ instead /prə'dəkSH(ə)n/. They did recognize that the stress falls on the second syllable; however, the correct stress is on the first syllable. Followed by the word YESTERDAY 54% of participants were chosen yestər'dē/ instead 'yestərdē/, which is wrong. Hence, based on the questionnaire result, the knowledge of words stress on participants is still low.

For this reason, the researcher wants to analyze pronunciation in word stress, especially in part word stress, in his junior English Department University Raden Intan Bandar Lampung depth. The researcher is considering taking this research due to the researcher's interest in pronunciation

METHOD

In this study, the research uses descriptive qualitative. Arikunto argues descriptive research is research whose purpose is to gather information about anything that take place in the setting according to the naturalistic occasion. The researcher chose this research design due to being able to elaborate on the problem of pronunciation in word stress.

To analyze the stressed pronunciation of students. The researcher chose 23 students from the sixth semester English Education study program at UIN Raden Intan Bandar Lampung. Because they are students in the English Education study program, they should have appropriate pronunciation.

The object of this research is to discover the student's pronunciation of stress words and the factors that induced the errors. The data were obtained from the recordings of students. The PRAAT software was utilized to acquire the student's word stress placement.

In collecting the data, the researcher applied two instruments were a task and a questionnaire. The researcher will ask the students to pronounce a list of words that are given. The instruments were a task and a questionnaire. The instrument consists of fifreen words (five in two syllables, six in three syllables, and four in four syllables). All the words have primary stress on the second syllable. The words are B1 (intermediate) vocabulary that has been chosen due to the level of participation. The students are asked to record all the words that have been given. After obtaining the data, the researcher analyzed the recording with PRAAT software, using pitch, intensity, and duration as indicators. The questionnaire was used for collected the student's problem in word stress.

RESULTS AND DISCUSSION

1. English Word Stress with Two Syllable

The result of the students' word stress pronunciation. The researcher presented the result of analyzing the data. The subjects were the sixth semester of class C UIN Raden Intan Bandar Lampung. The type of task that was done by the students was an oral task to pronounce a list of words that consisted of five words in different syllables, for instance, in two syllables; absorb, behind, divide, divorce, and forget. Then in three syllables: addition, existence, percentage, impression, frustration, and possession. Last, in four syllables; majority, significant, investigate, and recovery. After words, the researcher calculated and categorized each word's syllables by using a formula.

Table 1. The Students Total Result in Two Syllable

English Word Stress with 2 Syllables					Variety of Stressed Syllable	
Words	No. Of Respondents	Actual Data Recorded	Correct	Percentage	1st	2nd
Absorb	23	23	17	74%	6	17
Behind	23	23	20	87%	3	20
Divorce	23	23	20	87%	3	20
Divide	23	23	20	87%	3	20
Forget	23	23	17	74%	6	17
TOTAL	**115**	**115**	**94**		**21**	**94**
PERCENTAGE					**18%**	**82%**

As a result of analyzing the pronunciation of stress words among students, the researcher divided the discussion of each category by the number of syllables. In Table 1.1 above, explaining the result of the pronunciation of stress in two syllables, Two -syllable words only have two stress locations, for instance, penult and final (Karjo, 2016). Out of five words; absorb, behind, divorce,

divide, and forget, the primary stress is in the second syllable. The table above indicates that almost 82% of the students were able to pronounce words stressed correctly, and only 18% misplaced words stressed in the first syllable. The researcher found that in the words absorb and forget, students often pronounce them in the first syllable. In light of the previous research from Clara Herlina Karjo found in her research that the shifting of word stress in the two -syllable was caused by the vowel height influence (cite the clara karjo journal). The word 'absorb' (əb'zɔːrb) the vowel in the first syllable, so few of the students lengthened the vowel (ə) in the first syllable, so the pronunciation became ('əbzɔːrb). Clara Herlina Karjo stated that prolonging the pronunciation of the wrong vowel may cause the misplacement of word stress. Then, it would not sound like an English word to the students.

2. English Word Stress with Three Syllable

The table below explains the result of total word stress pronunciation in three syllables; however, the primary stress remains on the second syllable. Three-syllable words, also known as trisyllabic words, have three stress locations, for instance, antepenult (first syllable), penult (second syllable), and final (last syllable). The words that were examined in this research for three syllables are addition, existence, percentage, impression, frustration, and possession. The result from the table above indicates that 51% pronounce on the second syllable (penult), 27% on the first syllable (antepenult), and 22% on the third syllable (final stress). The error occurs in the first syllable (antepenult) of the word's impression and frustration. Then, the errors also occurred in the third syllable (final) of the word percentage. In the words impression (adds percentage) % of students fall on the first syllable (antepenult), the error occurred due to the words impression (ɪmˈpreʃ.ən) contain vowel (I), this factor can be one of the factors of errors. in-depth explanation, From the prior explanation, the researcher can conclude that the students stress the first syllable because they produce higher, which means they produce pitch in the first syllable.

Beside the first syllable, the students made an error on the third syllable (final) dominantly in the word percentage. out of students identified the stress on the last syllable in words (/p sen.'t ɪd /) with (adds percent) %. The researcher acknowledges that the students dominantly stress in the last syllable ('t ɪd /). The syllable parts of ('t ɪd /) is consist of consonants and vowels, whichever way the researcher can conclude that the students might think that they are right to position the stress; on the contrary, they are wrong to place stress. In that case, the students would likely produce more pitch and intensity in the last syllables. In English, phonetic vowels are linked with stress but consonants are not (Berg, 1990).

Table 2. The Students Total Result in Two Syllables

English Word Stress with 3 Syllable					Variety of Stressed Syllable		
Words	No. Of Respondents	Actual Data Recorded	Correct	Percentage	1st	2nd	3rd
Addition	23	23	10	43%	7	10	6
Existence	23	23	18	78%	3	18	2
Percentage	23	23	7	30%	5	7	11
Impression	23	23	8	35%	10	8	5
Frustration	23	23	9	39%	10	9	4
Posession	23	23	19	83%	2	19	2
	138	138	71	51%	37	71	30
					27%	51%	22%

3. English Word Stress with Four Syllable

The In analyzing the word of the student, show the outcomes that 67% of students are right to pronounce in the second syllable, followed by 21% in the first syllable, 9% in the third syllable,

and lastly, 3% in the last syllable. The prior number showed that the student was adequate to pronounce in the right position; however, the first syllable was dominantly incorrect. The word 'investigate had the most errors in the first syllable. From the analysis with the software PRAAT and the researcher's understanding, most of the students tend to prolong the first syllable (n). The cause of the error was the vowel in the word investigate. This can make it difficult to distinguish between short and long vowels. English has several types of vowel sounds, and they have two different characteristics: long and short. Some vowels, like (i) and (ə), are relatively shorter than other vowels (Karjo, 2016). This might happen because the students thought that (i) has a long vowel, so they lengthened the (i) vowels, thus producing an error. This case was related to the words absorb in the two syllables and the student's likely tendency to put long duration on vowels in (i) and (ə).

From the result, it is apparent that all the students often produce more pitch in the places they put stress, particularly in initial and final stress. The student may produce more pitch in initial and final stress because they presume that the stress was predictable, or it can be said to be an intonational factor. Dobrovolsky delivers his idea that initial and final stress is actually attributed to intonational prominence rather than true word-level stress (Gordon, 2010).

Besides that, the students make a long duration almost at the end of a syllable, especially in the word possession, where the syllable (ʃ.ən) was acquired in long syllables. The errors in duration and stress are not significant. Because duration is still debated as one of the cues of stress in English. Other cases reported did not find duration to be consistent in English. Even though, apparently, the duration is still debated as one of the cues of word stress in English. It remains to make the word stress sound unnatural.

Table 2. The Students Total Result in Four Syllable

English Word Stress with 4 Syllable					Variety of Stressed Syllable			
Words	No. Of Respondents	Actual Data Recorded	Correct	Percentage	1st	2nd	3rd	4th
Majority	23	23	19	83%	2	19	1	1
Significant	23	23	12	52%	6	12	4	1
Investigate	23	23	12	52%	9	12	2	0
Recovery	23	23	19	83%	2	19	1	1
TOTAL	**92**	**92**	**62**	**67%**	**19**	**62**	**8**	**3**
PERCENTAGE					**21%**	**67%**	**9%**	**3%**

4. The Factors Errors in Students Word Stress

To embark on this discussion. According to the questionnaire, nearly all the students stated that they had heard and known about word stress since they took the English pronunciation and phonology course. From the answers to the questionnaire, the students have known the definition of the word stress by their own knowledge, and despite some of the students have different perceptions of the word stress, it can be concluded that they recognize that the word stress is a series of rules that can determine placing the stress correctly in words to make those words understandable.

difficulty in the word stress was that the researcher found that the students had difficulty determining how to put stress or what syllable of the word should be stressed. This factor was also asserted by Kelly; he said that English word stress is also versatile, and the placement of word stress in English can be hard to predict according to a set of strict rules (Kelly, 2001). To expand the answer, the students not only have difficulty with word stress, but these factors also support the fact that they lack exposure, practice word stress either in class or in daily settings, and lack confidence in utilizing word stress.

The findings indicate that factors of mother tongue are the next topic for discussion. From the reasons of the students pertaining to the questions about the influence of mother tongue on their word stress,

they agreed that the interference of the L1 plays a role in these factors. All the students agreed that this factor could be a major factor in their performance, in other words, stress. Take a look at what the students thought about the mother tongue's influence on their word stress performance. Take a look at what the students thought about the mother tongue's influence on their word stress performance.

"In my opinion, it is very influential because mother tongue surely learned much earlier and also used in everyday life. So that, in learning a new foreign language, it will still carry some elements of the language that has long been learned"

"The influence of native language can sometimes lead to challenge in acquiring and producing word stress accurately in a second language or as foreign language. Learners may transfer the stress pattern from their native language to the second language, leading to pronunciation errors or misunderstanding"

From the first and second responses, it is very clear that they agreed that the interference of the L1 played a role in these factors. All the students agreed that this factor could be a major factor in their performance, in other words, stress. The experts in Second language acquisition (SLA) highlight that the existence of certain phonological features has an influence on the production of second language pronunciation (Adisasmito-Smith, 1999) . Previous statements have shown that the differences in characteristics of the mother tongue can influence the performance of pronunciation. Since the students mother tongue is Indonesian, they will face a challenge due to Indoensian and English having different phonetic characteristics. Zanten & Goedemas deliver their ideas that since Indonesian and English are different, it will affect the production of second language acquisition, especially in pronunciation (Boersma, 2003). The inexistence of prosody in Indonesian can have a negative impact on learning English since English has prosodic features. Indonesian has a prosodic system that is different from the English language. Indonesian word stress has unrecognizable features, while word stress in English is a distinguishing feature. The features of a language are unique because they differ from one another, thus they can affect the production of each other (McAllister et al., 2002).

Meanwhile, beside the mother tongue influence, other students also pointed out their ideas that the local language affected their pronunciation in word stress.

"Yes, it can affect it because like the Javanese. The emphasis is usually deeper when learning the pronunciation, I'm not used to it, so I'm still using the emphasis like when using Javanese".

In the statement above, the students stated that local language has played a role in their production of pronunciation in word stress. Accustomed to the social culture, like an accent or dialect, will affect you while learning a new language. Indonesia is diverse, with various cultures, backgrounds, and ethnicities. Errors in pronunciation are based on dialect and accent. Since Indonesia has many regional languages as their mother tongue, one of them is Javanese. The Javanese has a strong stress and accent when pronounced; it is different from that of a native speaker. Furthermore, Javanese, which has major differences in grammatical, lexical, semantical, and phonological systems with English. This issue can be a major interference for the English pronunciation learner.

CONCLUSION

The result of the research that the students word stress pronunciation is sufficient or even everage in placing stress on second syllables in different amounts of syllables. And based on the findings of this research, first, the students' performance in stressing two syllables or disyllabic sounds (82%) was good. Second, in three-syllable, three-syllabic words, 51% was sufficient. Last on four syllables was 67%, which was average. Additionally, the researcher found out that the factors that caused the errors that students encountered were a lack of exposure, practice, and confidence.

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