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GAZA UNIVERSITY STUDENTS' PERCEPTION AND PRODUCTION OF ENGLISH LEXICAL STRESS: REASONS AND FACTORS

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Abstract:
English word stress has been long considered a problematic area for those learning and speaking English as a foreign language (Waniek-Klimczak, 2014). In fact, English lexical stress has not received adequate attention from Palestinian researchers. Therefore, the present study aimed to examine Gaza University students' recognition and oral production of English lexical stress. A lexical stress recognition test and a production test were administered to a group of students, and two semi-structured interviews were conducted with 12 students and three instructors. Results indicated that the students' recognition of English word stress patterns was very low. Moreover, the interview data revealed the reasons behind the students' poor recognition of English syllable stress, such as lack of teacher instruction and assessment of English word stress, due to their beliefs in the unimportance of English word stress to comprehension. Finally, the study recommended that the English linguistics instructors at Al-Aqsa University should focus on conscious instruction and assessment of English syllable stress so as to raise the students' awareness of syllable stress.

Keywords: English lexical stress, Gaza students, perception, production

1. Introduction

Word stress refers to the emphasis given to an individual syllable, as the stressed syllable becomes longer and higher in pitch (Nunan, 2015). While some languages have fixed lexical stress rules (*fixed-stress languages*), other languages have movable stress (*free-stress languages*). English is considered a free-stress language since English lexical stress rules proposed by some linguists have numerous exceptions (Skandera & Burleigh, 2011). Thus, word stress has long been considered a problematic area for English as a foreign language (EFL) speakers (Waniek-Klimczak, 2014).

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Indeed, many studies revealed EFL learners' problems with lexical stress. For example, Bu and Zhou (2021) displayed that assigning the wrong lexical stress and stressing unstressed syllables were the most common errors among Chinese EFL learners. Jayasundara and Farook (2020) reported the causes behind Sri Lankan EFL students' problems with English stress and intonation, such as lack of pronunciation practice, inadequate phonetic knowledge and adult age.

Furthermore, Khazneh (2015) indicated that Syrian EFL university students transferred the stress patterns of their mother tongue when producing English words. Additionally, Karjo (2016) concluded that Indonesian EFL students encountered problems with three-syllable words rather than two-syllable words. Liu (2017) revealed that Chinese EFL students' incorrect placement of stress occurred in two-syllable and three-syllable words. Mohamed (2017) showed that Sudanese EFL college students encountered problems related to discriminating between strong and weak syllables. Tuan (2017) concluded that Vietnamese students' production of English stress was unsatisfactory due to the students' unintelligible production of vocabulary and the interference from their mother tongue language.

Syllable stress should receive more attention in EFL contexts and courses (Wong, 2016). Lexical stress was not emphasized by Palestinian EFL researchers either. The only Palestinian study that probed this research area was Amer and Amer (2011), who investigated the effect of explicit instruction of word stress patterns on Palestinian EFL university students' use of word stress. The study presented neither a detailed description of Palestinian EFL students' perception and production of lexical stress nor the factors affecting their use of it. Through her long experience as a teacher of English in Gaza schools and universities, one of the researchers noticed over time that EFL students in Gaza had real problems with their perception of English word stress. Therefore, the present study examined Gaza students' recognition and oral production of English lexical stress through the following research questions:

1) What is the level of Al-Aqsa University students' perception of English word stress?
2) If the level of Al-Aqsa University students' perception of English word stress is low, what are the reasons behind such poor level?
3) What are the most common English lexical stress errors of oral production among the students with excellent and very good average university grades (80%-99%) at Al-Aqsa University?

2. Literature Review

2.1 Definition of Lexical Stress

According to Buck (2001, p. 35), 'lexical stress' is "*the relative emphasis of the various syllables within a word*." Nunan (2015) refers to 'lexical stress' as the emphasis given to an individual syllable, as the stressed syllable becomes longer and higher in pitch. Boyer (2003) also states that 'lexical stress' is the strongest sound in words with more than one

syllable. Additionally, Forward (2001) provides that syllable stress is produced with four vocal changes, including the following:

1) Pitch/resonance change: the stressed syllable is higher or lower in pitch/resonance than other syllables).
2) Duration: the stress syllable takes longer to say than the other syllables in the words.
3) Volume: the stressed syllable is said slightly louder than the other syllables in the word.
4) Force: the stressed syllable is given a little extra energy in the sound by extra push with the support muscles.

According to Roach (2012), there are two levels of word stress, including primary word stress and secondary word stress. Secondary stress (e.g., orthographic /ˌɔːr.θəˈgræf.ɪk/, photographic /ˌfoʊ.ţəˈgræf.ɪk/) is weaker than primary stress, but stronger than unstressed syllables. The present study adopts the definition of Forward (2001), since it is the most comprehensive one. The current study focused on Al-Aqsa University students' perception and oral production of English primary word stress.

2.2 Importance of English Lexical Stress

Rogerson and Gilbert (1990) show that research has proved that incorrect stress placement could cause real confusion among native English speakers since they are used to store words according to stress patterns. Moreover, Jones (2013) and Sardegna and Jarosz (2022) view that lexical stress marking is crucial to language performance and recognition, and wrong word stress causes intelligibility problems for EFL learners, and may hinder communication among them. However, Jenkins (2000) states that word stress is not important in EFL contexts.

2.2.1 EFL Learners' Problems with Word Stress

Many previous studies investigated the problems EFL students encountered when learning English word stress. For example, Bu and Zhou (2021) explored 25 Chinese EFL learners' problems with lexical stress. Three recording tests were used in the study. Findings revealed that assigning the wrong lexical stress and stressing unstressed syllables were the most common errors among the participants. Khazneh (2015) also investigated 78 Syrian EFL university learners' knowledge of syllable weight and extrametricality. Additionally, the study identified the types of incorrect placement of English stress. The results of a test and a questionnaire indicated that the participants transferred the stress patterns of their mother tongue language when producing English words. Jayasundara and Farook (2020) investigated the causes behind Sri Lankan EFL students' problems with English stress and intonation. Using a test, the study reported the participants' problems, such as lack of pronunciation practice, inadequate phonetic knowledge, and adult age. Karjo (2016) assessed the production of word stress by 30 English department students at an Indonesian university. The participants were asked to repeat words with correct stress placement. The study concluded that the participants

encountered problems with three-syllable words rather than two-syllable words. Mohamed (2017) examined 50 Sudanese EFL university students' difficulties of placing stress on English words. The study employed a test, and results showed that most participants were not able to discriminate between strong and weak syllables. Liu (2017) considered 70 Chinese college students' production of English word stress. Recordings were collected and coded. Findings revealed that incorrect placement of stress occurred in two-syllable and three-syllable words. Tuan (2017) explored Vietnamese students' recognition and production of English stress. The recognition and production tests results showed that the participants' production of English stress was unsatisfactory due to the students' unintelligible production of vocabulary and the interference from their mother tongue.

Stress pattern is the way syllables are stressed in a word (Collins, 2022). In English, there are words with one, two, three, four, five, six, or even seven syllables. In a word of more than one syllable, one of the syllables receives a major stress (Kharbe, 2009; Shevchenko & Pozdeeva, 2017). Thus, every multi-syllable English word has a stress pattern. Some English words have more than one stress pattern (e.g., 'produce' functioning as both a verb and as an adjective) according to the parts of speech they occupy (Lems, Miller, & Soro, 2017).

Ball and Muller (2011) view that word stress patterns are not predictable, as words that have similar structures may have different stress patterns, e.g., sedate and rebate. Roach (2012) also views that deciding the correct syllable to stress in English is not an easy matter as can be done in French or Polish. English stress placement cannot be predicted, and it is easier to learn stress placement when learning the word itself.

However, Halle (1973) provides many rules for predicting stressed syllables. Fudge (1984) states that Chomsky and Halle (1986) showed that stress placement in a word can be predicted based on the segmental make-up of the word i.e., long and short vowels (tense or lax in their forms) and the internal structure of the word i.e., whether the word can be divided into smaller parts and the relations among the parts.

In this context, Coelho (2004) also suggests some generalizations that may help in predicting the English stress patterns. Such suggestions include the following:

1) In most two-syllable words, the first syllable is stressed.
2) In some two-syllable words, the second syllable is stressed.
3) When the word is a noun, the first syllable is stressed, whereas when the word is a verb, the second syllable is stressed.
4) Words of three or more syllables usually include a major stress, minor stress, and one or more unstressed syllables.
5) The vowel sound in unstressed syllables is reduced.

In compound nouns, the primary stress is placed on the first part (handbag). In compound verbs, the primary stress is on the second part, and the minor stress is on the first part. In the case of adding a suffix, the stressed syllable does not usually change (/ˈdɪf.ə.kəlt/ difficult vs /ˈdɪf.ə.kəl.ʧ/ difficulty). In another situation of adding a suffix to a word ending in *tion*, the primary stress is usually on the syllable preceding *tion*.

2.2.2 Strategies for Improving EFL Students' Perception and Production of Word Stress

Because English lexical stress rules are found to have numerous exceptions and irregularities, Jones (2013) views that each new English word should be pronounced by the teacher aloud for the students, and students should chorally repeat after the teacher many times. Students can also pull on a rubber band as they stress syllables.

Moreover, Ghosh and Levis (2021) point out that, for deciding word placement, one should consider whether a word is morphologically simple or complex (containing one or more affixes or having two independent words), the grammatical category of the word (nouns, verbs, adjectives), the number of syllables the word has, and the phonological structure of the syllables. Ghosh and Levis (2021) add that instructors should be aware of the importance of word stress and must recognize all possible rules of using English word stress. Some researchers confirmed the importance of teaching the possible rules and patterns of English word stress—for example, Amer and Amer (2011) investigated the effect of explicit instruction of word stress patterns on 80 Palestinian EFL university students' use of word stress. Results of a pre/post-test showed statistical differences between the pre-measurement and post-measurement in favour of the post-measurement.

Rahbar, Jahandar, and Khodabandehlou (2013) also explored the effectiveness of sentence stress patterns instruction in improving 20 Iranian EFL college learners' listening comprehension. A standardised test was administered, and results indicated that English word stress instruction enhanced the participants' production of word stress. Waniek-Klimczak (2014) examined the impact of some factors (word frequency and amount of explicit instruction) on the recognition of word stress of 100 Polish EFL university students. Findings revealed that explicit instruction improved the participants' recognition of incorrect forms. Furthermore, Yenkimaleki and Van Heuven (2021) studied the effect of instructional training of segmental and suprasegmental aspects on EFL students' intelligibility and comprehensibility. The findings demonstrated that segmental and suprasegmental instruction followed by production-focused practice improved the participants' speech intelligibility.

Teacher's feedback is another strategy that can enhance EFL students' use of word stress. For Pennington and Rogerson-Revell (2011) and (Szpyra-Kozłowska 2014), teachers should provide feedback on students' inaccurate production of pronunciation features, including word stress error correction. Abdul Rahman, Kahfi, and Dalimunthe (2020) concluded that teacher's corrective feedback improved Indonesian students' English pronunciation. Nguyen and Luu (2021) also reported that instructors' oral corrections had a positive effect on EFL students' pronunciation.

Moreover, practicing different types of pronunciation learning strategies is essential. According to Pennington and Rogerson-Revell (2011), students need to practice different types of pronunciation strategies like cognitive strategies (listening to native English speakers, songs and movies, mimicking native speakers interlocutors and actors, and repetition of speech samples), memory strategies (learning songs by heart), metacognitive strategies (consulting a pronouncing dictionary), and affective strategies

(having good feeling about English pronunciation). Students need to produce, contextualize, and generate pronunciation elements in a new context.

Related to pronunciation learning strategies, Al-Jaraf (2012) provides that self-study and extensive listening are very useful for improving students' word stress use. Waniek-Klimczak (2014) also emphasizes that increased language experience leads to the successful acquisition of English word stress. In this context, Omer (2021) reported that listening to recorded materials by native speakers developed Sudanese university students' production of English word stress.

Some other research focused on employing training programs for enhancing EFL students' production of word stress. For example, Sardegna and Jarosz (2022) investigated the effect of using YouGlish in developing 12 Polish students' use of English word stress. A test and a questionnaire were used, and results showed that the participants' perceptions of word stress had been improved. Kevin (2018) explored the effectiveness of training program in improving the participants' acquisition of word stress. Findings indicated that the training program improved the students' acquisition of word stress.

3. Method and Design

3.1 Methodology

The researchers utilized the descriptive method to examine Gaza EFL students' perception and oral production of English word stress. According to Hazra (2022), the *descriptive method* is concerned with present conditions, relationships, practices, attitudes, and viewpoints.

3.2 Participants

The sample of the study consisted of 80 female and male students majoring in English language teaching at Al-Aqsa University. The researcher selected 33 % of all fourth-year students (244) who completed linguistics courses. The researchers utilized the stratified random sampling technique for selecting the study participants, as they considered the students' gender (female and male) and the university average grades (19 high achievers, 41 intermediate achievers, and 20 low achievers). In this context, Ravid (2020) states that the stratified random sampling technique is employed for obtaining a sample representing the various subgroups in the population by dividing the population into subgroups. All subjects had been studying English as a foreign language for 15 years, and their ages ranged from 20 to 21 years old.

Semi-structured interviews were conducted with 12 students with different proficiency levels selected from the 80 students and three instructors so as to identify their viewpoints on the reasons behind the students' poor perception of English syllable stress. The three instructors were teaching English to English department students at Al-Aqsa University. The first was a female instructor of three years; the second was an

experienced male instructor of 14 years; and the third was an experienced female instructor of 16 years. All the participants were willing to participate in the study.

3.3 Research Instruments

Four instruments were employed in this study, i.e., a lexical stress recognition test, a word stress production test, and two semi-structured interviews. A group of instructors who teach English to Palestinian university students validated the study instruments. One of the researchers administered the recognition test to a pilot sample and made sure that the words included in the recognition test were familiar to the students and relevant to their proficiency level, as most students wrote the correct meanings of all words. The number of syllables was also considered when selecting the target words, as the words were divided into six groups: two-syllable, three-syllable, four-syllable, five-syllable, six-syllable, and seven-syllable words. The reliability of the recognition test was achieved through Cronbach Alpha prior to administering it to the study participants (Table 1).

Table 1: Cronbach Alpha Coefficients for the Recognition Test Categories

Category	Number of Items	Cronbach Alpha Coefficient
Two-syllable words	10	0.79
Three-syllable words	4	0.73
Four-syllable words	4	0.74
Five-syllable words	4	0.75
Six-syllable words	4	0.72
Seven-syllable words	4	0.78
Total	**30**	**0.83**

3.4 Data Collection and Analysis Procedures

One of the researchers implemented the study instruments at Al-Aqsa University in January 2023. Based on Jaiprasong and Pongpairoj (2020) and Tuan (2017), the researcher administered the recognition test to 80 students as follows: The students were asked to identify the primary stress syllables in 30 words. The sound recordings of the 30 words were taken from the online Cambridge dictionary. The order of the words on the test sheet followed the order of the recording. The participants took about 30 minutes to finish the recognition test. Then, 33 students with high and intermediate proficiency levels were asked to pronounce the same list of words. The rest of the 80 participants refused to take part in the production test due to their unintelligible pronunciation. The students listened to the sound recording. Then, they were requested to read the words aloud. The students' pronunciation was audio-recorded.

To identify the reasons behind the students' poor recognition of word stress, one of the researchers conducted semi-structured interviews with 12 male and female students with different proficiency levels. The 12 students were interviewed in four groups. Additionally, three English department instructors were interviewed in this study. Each interview lasted 30 minutes and was audio-recorded with a written transcription.

Each perception test sheet was scored manually with 1 point for each correct answer and 0 points for an incorrect answer. The maximum score was 30 (100%). The participants' recordings (students' oral production) were listened to and analyzed by two raters, including a native English speaker. The judgment agreement rate between the raters was 90%. The researchers also used the scoring rubric utilized in Aungcharoen (2006) and Tuan (2017): 1 point was given to the participants who read a word with correct primary stress and intelligible pronunciation, and 0 points were given to the participants who read a word with incorrect primary stress, correct primary stress and unintelligible pronunciation, or equal stress on two or more syllables. It is essential to mention that intelligible pronunciation should be considered when scoring the students' oral production of English word stress since unintelligible pronunciation may prevent students from pronouncing unstressed syllables correctly. The recognition and production test data were analysed by SPSS software.

The qualitative data analysis steps (Lodico, Spaulding, and Voegtle, 2006) were employed in this study. The interviews were transcribed, coded and organized into categories, and the data credibility was checked through calculating the consistency between the data analyzers (87%). The students' interviews included three main categories i.e., lack of teachers' instruction of English word stress, lack of teachers' assessment of students' recognition of English word stress, lack of students' self-study (lack of dictionary use and lack of listening practice to native English speakers), and lack of teachers' oral feedback. The teachers' interview data included the following category: teachers' beliefs in the unimportance of English word stress to comprehension.

4. Results

4.1 Result of First Research Question

The first question was "What is the level of Al-Aqsa University students' perception of English word stress"? In order to identify the participants' performance in the perception test, the researchers employed the rubrics suggested by three specialists at Al-Aqsa University.

- 90% - 100% : very high,
- 89.9% - 80%: high,
- 79.9% - 70%: good,
- 69.9% - 60%: low,
- 59.9% - below: very low.

Tables 2 and 3 show the percentages of the participants' scores in the English word stress recognition test.

Table 2: Percentages of the Participants' Scores in the English Word Stress Recognition Test categories

No.	Categories	Percentage (%)
1	Two-syllable Words	36.3
2	Three-syllable Words	46.5
3	Four-syllable Words	46.5
4	Five-syllable Words	42.5
5	Six-syllable Words	40.2
6	Seven-Syllable Words	39
Total		**41.8**

Table 2 reveals that the percentage of the participants' scores in the recognition test was 41.8 %, which means that the students' recognition of English word stress patterns was very low. Moreover, Table 2 shows that percentages of the students' scores in the categories were as following: two-syllable words, 36.3%; three-syllable words, 46.5%; four-syllable words, 46.5%; five-syllable words, 42.5%, six-syllable words, 40.2%; seven-syllable words, 39%. Thus, the table data demonstrates that the students' incorrect assignment of word stress occurs in all types of words.

Table 3: Percentages of the Participants' Scores in the English Word Stress Recognition Test Items

No.	Word	Percentage (%)
1	Passage	28.0
2	Exceed (verb)	44.0
3	Present (verb)	34.0
4	Increase (noun)	23.0
5	Record (verb)	44.0
6	Handsome	30.0
7	Alone	34.0
8	Brother	28.0
9	Complex	44.0
10	Progress	54.0
Total		**36.3**
1	Humorous	48.0
2	Comfortable	24.0
3	Absolute	58.0
4	Distinguished	55.0
Total		**46.5**
1	Entertainment	41.0
2	Technology	39.0
3	Impersonal	62.0
4	Statistically	44.0
Total		**46.5**
1	University	39.0
2	Investigation	34.0
3	documentary	58.0
4	Participation	39.0

Total		**42.5**
1	Responsibility	44.0
2	Invisibility	38.0
3	Capitalization	27.0
4	Imaginatively	52.0
Total		**40.2**
1	Multiculturalism	46.0
2	Unsatisfactorly	27.0
3	Individuality	51.0
4	Industrialization	32.0
Total		**39**

Table 3 indicates that most of the words fell within the low level. In fact, the students seemed to have difficulties with placing English stress on penult, ultima, and antepenult syllables.

4.2 Results of the Second Research Question

The second research question was "If the level of Al-Aqsa University students' perception of English word stress is low, what are the reasons behind such poor level"? Results of the first question showed that the students' recognition of English word stress was very low. According to the students' interview analysis, most students complained that their university teachers neglected teaching suprasegmental features, including lexical stress. The following quotes show this theme:

> *"The teachers in our schools and universities are not interested in teaching English syllable stress. They ignored all activities and exercises related to such topic. Most of our teachers did not even provide any oral feedback on our incorrect use of English word stress."* (Participant T. 12, a female student)

> "*I did not study English word stress in any of the linguistics courses I had."* (Participant T. 2, a male student):

> *"I do not know why most linguistics instructors exclude lexical stress from English courses outlines."* (Participant T. 1, a female student)

> "*I used to recognize each unknown word through looking up its meaning and segmental transcription in a dictionary. I never looked at stress marks*." (Participant T. 6, a male student)

Furthermore, the interview data revealed that most students were concerned with graduating from the university and obtaining high scores apart from their proficiency in language use, like the correct perception and production of English lexical stress.

"*Learning English syllable stress is so difficult. I, as a student, have to choose one of two options: the first is listening to native English speakers and using dictionaries to be aware of the accurate pronunciation, like recognizing correct stress placement in words. This option requires much time and effort. The second option is much easier, as it requires studying and memorizing the teaching materials and getting high scores in the university final exams. I think that most of us prefer the second choice*." (Participant T. 10, a female student)

"*I do not have time to listen to native English speakers' recordings; what is important to me is obtaining high scores and getting a job*." (Participant T. 9, a male student)

"I wonder why I should waste time on learning word stress. What is important for me is passing the university exams, and such exams do not focus on English lexical stress. This the first time I see like this perception test we have just administered." Participant T. 11, a female student)

The interview analysis also reported that while only a few students preferred to practice through listening and watching English media and imitating native English speakers' accents, most students seldom listened to native English speaker recordings.

As for the teacher interview data, two teachers reported that they neglected teaching English word stress in English classes at the university due to the difficulty of acquiring English word stress among non-native speakers and the unimportance of English word stress to the recognition of word meanings.

"*Syllable stress is not of great importance to the recognition of most English words among FL students. I can understand English listening materials even if I can not perceive correctly stressed syllables. I can also use clues in guessing the meaning*." (Participant 1, female, three years of experience)

"*Since English word stress does not affect the recognition of word meaning, why then let students spend much time and effort on learning it?*" (Participant 3, male, 14 years of experience)

In short, the participants' interviews revealed the factors contributing to the students' poor perception of English lexical stress. Such factors encompass lack of teachers' instruction of English word stress, lack of assessment of students' recognition of English word stress, lack of teachers' oral feedback, teachers' beliefs in the unimportance of English word stress to comprehension, and the lack of students' self-study (lack of dictionary use and lack of listening to native English speakers).

4.3 Results of the Third Research Question

The third research question was "What are the most common oral production errors of English word stress among the students with excellent and very good university average grades (80%-99%) at Al-Aqsa University"? Table 4 and Table 6 show the participants' scores in the English word stress production test.

Table 4: Percentages of the Participants' Scores in the Word Stress Production Test Categories

No.	Category	Percentage (%)
1	Two-syllable words	80.0
2	Three-syllable words	68.2
3	Four-syllable words	92.5
4	Five-syllable words	97.0
5	Six-syllable words	98.5
6	Seven-syllable words	78
Total		**85.7**

Table 4 reveals that the percentage of the participants' scores in the production test was 85.7% %, which means that the students' oral production of English word stress patterns was very high. Moreover, Table 4 shows that percentages of the students' scores in the categories were as following: two-syllable words, 80.0 %; three-syllable words, 68.2 %; four-syllable words, 92.5%; five-syllable words, 97.0 %, six-syllable words, 98.5 %; and seven-syllable words, 78%. More details about the students' oral production errors are discussed below. Furthermore, the researchers discussed the reasons behind the difference between the students' scores in the recognition test and the oral production test in the discussion section.

Table 5: The Percentages of the Participants' Scores in the Word Stress Production Test Items

No.	Word Item	Percentage (%)
1	Passage	100.0
2	Exceed (verb)	97.0
3	Present (verb)	33.0
4	Increase (noun)	0.0
5	Record (verb)	82.0
6	Handsome	100.0
7	Alone	100.0
8	Brother	100.0
9	Complex	94.0
10	Progress (noun)	94.0
Total		**80.0**
1	Comfortable	12.0
2	Humorous	70.0
3	Absolute	94.0
4	Distinguished	97.0
Total		**68.2**
1	Entertainment	91.0
2	Technology	100.0

No.	Word Item	Percentage (%)
3	Impersonal	94.0
4	Statistically	85.0
Total		**92.5**
1	University	100.0
2	Investigation	97.0
3	Documentary	94.0
4	Participation	97.0
Total		**97.0**
1	Responsibility	97.0
2	Invisibility	100.0
3	Capitalization	100.0
4	Imaginatively	97.0
Total		**98.5**
1	Multiculturalism	100.0
2	Unsatisfactorily	21.0
3	Individuality	91.0
4	Industrialization	100.0
Total		**78**

The tables above show that most participants had some difficulty in placing the stress to the right position in the two-syllable, three-syllable, and seven-syllable words for the following five words: increase (noun) 0.0, present (verb) 33%, comfortable 12%, and 21%, unsatisfactorily.

Most of the students placed incorrect syllable placement for "increase". The participants pronounced the verb form and used the verb stress placement instead of the noun stress placement (*in*-crease, the noun vs in-*crease*, the verb). Similarly, this was also the same issue with "present". Most of the participants used the noun stress placement instead of the verb stress placement (*pre*-sent, the noun vs pre-*sent* the verb). *Comfortable* was another word with a lot of incorrect stress placement. A majority of the students placed the stress on "-*fort*-" instead of "c*om*-". Many students also pronounced *unsatisfactory* when they should have said *unsatisfactorily*. This could be because "r" and "L" letter pronunciation is sometimes difficult for non-native speakers, especially when the two letters are placed right next to or near each other in a word. Please note that the students listened to the pronunciation of all words prior to reading them aloud.

5. Discussion and Implications

The study results revealed that the students' recognition of English word stress patterns was very low. The statistical data also showed that the students' incorrect assignment of word stress occurred in most words. In line with this result, Bu and Zhou (2021) indicated that assigning wrong lexical stress and stressing unstressed syllables were the most common errors among Chinese EFL students. Ismail (2018) indicated that Syrian university students' perception of English word stress was unsatisfactory. Karjo (2016)

also concluded that Indonesian university students encountered problems with three-syllable words. Mohamed (2017) showed that Sudanese students had problems with English word stress due to their inability to discriminate between strong and weak syllables. Additionally, Liu (2017) revealed that Chinese EFL students found difficulties in assigning stress in two-syllable and three-syllable words.

As for the students' production of English word stress in this study, only the students with excellent and very good university average grades were willing to take part in the production test. The rest of the 80 students (who took the perception test) refused to have the production test due to their intelligible pronunciation. The students listened to the sound recording of the target words, then they were requested to read the words aloud. It is noteworthy that while the students' scores in the production test were high, none of the students' perception test scores fell into the high level. This might indicate that the problem lies in their awareness of English word stress rather than in their imitation of oral production of stressed syllables.

Indeed, the interview data revealed the reasons behind the students' poor perception of English word stress. The main reason was neglect of instruction for English word stress. In this context, Gilbert (2012) and Sardegna and Jarosz (2022) pointed out that EFL teachers rarely devote class time to teaching word stress, and students think that word stress is some sort of added decoration. The interview data presented in the study showed that both instructors and most students did not believe in the importance of English word stress to comprehension. Related to this point, Zielinski (2015) and Lewis and Deterding (2021) state that there is a debate on the role of word stress in enhancing understandable speech in a foreign language. While some teachers believe that the pronunciation of a word is built on syllable stress, others think that lexical stress should be disregarded in EFL contexts. Thus, EFL researchers and practitioners are advised to conduct more empirical research on the significance of English word stress to comprehension. In line with this suggestion, Lewis and Deterding (2021) believe that more research needs to be conducted on the importance of suprasegmental features, including word stress in EFL contexts.

Apart from the importance of English word stress to successful communication, it is essential for learners to have adequate knowledge about English syllable stress. According to Jones (2011), good pronunciation is a key part of confidence in speaking a language. Jones also views that teachers of English should integrate a concern for pronunciation into every lesson (e.g., teaching vocabulary items with correct stress placement). Furthermore, Song (2005) provides that it is important to achieve a native-like or near native-like pronunciation of a foreign language. Consequently, it is essential for English linguistics instructors at A-Aqsa University to focus on conscious instruction of English syllable stress so as to raise the students' awareness of syllable stress.

The interviews analysis also revealed that most students were concerned with obtaining high scores and graduating from the university. Some students reported that they neglected English word stress since it was not emphasized in the university tests, quizzes, and exams. To supplement the effectiveness of English syllable stress

instruction, students need to recognize that their use of English word stress should be assessed through various activities like English word stress perception and production quizzes, speaking tests, and oral presentations. Szpyra-Koztowska (2014) views that it is essential for EFL teachers to assess the students' pronunciation performance. Therefore, it is advisable for Al-Aqsa University instructors to assess the students' pronunciation performance in general and their use of English word stress in particular.

Furthermore, the students' interviews indicated that the teachers did not provide the students with oral feedback on the students' word stress errors. According to Pennington and Rogerson-Revell (2011), teachers should provide feedback on students' inaccurate production of pronunciation features, including word stress error correction. It is advisable for Al-Aqsa University instructors to provide the students with suitable oral feedback when necessary.

Additionally, the interview data showed that lack of students' self-study was another important reason for the students' poor perception of word stress. Al-Aqsa University EFL students need to spend time and effort on enhancing their knowledge and use of lexical stress. They should practice listening to native English speakers' recordings and check phonetic dictionaries regularly. Among the learning strategies Pennington and Rogerson-Revell (2011) suggest for developing EFL students' use of word stress are getting exposed to native speakers' materials and consulting pronunciation dictionaries. Waniek-Klimczak (2014) also emphasizes that increased language experience leads to the successful acquisition of English word stress.

5.1 Research Limitations

It is worth mentioning that though the study test was administered to 33 % of all fourth-year students who completed linguistics courses at Al-Aqsa University (80 students), the semi-structured interviews were conducted with only 12 students and three instructors so as to identify their viewpoints on the reasons behind the students' poor perception of English syllable stress. Interviewing a limited number of participants might not provide adequate knowledge about this research area. Therefore, more research might be required about this issue.

Declaration of Conflicting Interests

The author declared no potential conflicts of interest with respect to the publication of the research.

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Appendices

Appendix A: The English Word Stress Perception Test
Listen carefully, then select the pattern of stressed and unstressed syllables of the words:

1. ……
a. o O o o
b. O o o
c. O o

2. ……
a. O o o
b. O o
c. o O

3. ……
a. O o
b. o O
c. O o o

4. ……
a. O o.
b. o O o o.
c. o O

5. ……
a. O o
b. o O o o
c. o O

6. ……
a. O o
b. o O o o
c. o O

7. ……
a. o o O o
b. o O o o
c. O o o o

8. ……
a. O o
b. O o o
c. o O

9. ……
a. o o O o
b. o O o o
c. O o o

10. ……
a. o o o O o
b. o o O o o
c. o O o o

11. ……
a. O o
b. O o o
c. o O

12. ……
a. o O
b. O o
c. O o

13. ……
a. o O o
b. o O o o
c. O o o

14. ……
a. o O o
b. O o
c. o O o o

15. ……
a. o O
b. o O o
c. O o

16. ……
a. O o
b. o O
c. O o o

17. ……
c. O o
b. O o O
c. o O

18. ……
a. o O o o
b. o O o
c. O o o

19. ……
a. o O o o o
b. o O o o
c. O o o

20. ……
a. o o o O o
b. o O o o o
c. O o o o

21. ……
a. o o o O o
b. o o O o o
c. O o o

22. ……
a. o o o O o
b. o o O o o
c. O o o

23. ……
a. o o o O o o
b. o o o O o
c. O o o

24. ……
a. o o o o O o
b. o o o O o o
c. O o o o

25. ……
a. o o o O o o
b. o o o o O o
c. o o o O o

26. ……
a. o o o O o o
b. o o o o O o
c. o O o o o o

27. ……
a. o o o o O o o
b. o o O o o o o
c. o O o o o o

28. ……
a. o o o O o o o
b. o o O o o o o
c. o o o o O o o

29…….
a. o o o O o o o
b. o o O o o o
c. o o o o O o o

30. ……
a. o o o o o O o
b. o o O o o o o
c. o o o O o o

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

21	22	23	24	25	26	27	28	29	30

The words: humorous, passage, exceed (verb), present (verb), increase (noun), record (verb), entertainment, handsome, technology, university, alone, brother, statistics, distinguished, complex, comfortable, progress, absolute, impersonal, investigation, documentary, participation, responsibility, invisibility, capitalization, imaginatively, multiculturalism, unsatisfactorily, individuality, industrialization.

Appendix B: The Student Interview

How is your perception of English word stress? Is it unsatisfactory? Why?

a) Do you have any knowledge about English word stress? If no, why?
b) Is English word stress difficult to learn? Why/ Why not?
c) Do you usually look at stress marks when checking the pronunciation of words in dictionaries? Why/Why not?
d) Do you practice listening to native English speakers? Why/Why not?

Appendix C: The Teacher Interview

Why is the students' perception of word stress low?

a) Do you teach English word stress to the students? Why/Why not?
b) Do the students persist in learning English word stress?
c) Do the students practice listening to native English speakers?