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‘INVESTIGATING THE EFFECT OF MISPLACEMENT STRESS ON CHANGING SYNTACTIC CATEGORIES OF WORDS (A CASE STUDY OF ALBAHA UNIVERSITY STUDENTS AT TERTIARY LEVEL - FACULTY OF SCIENCE AND ARTS - ALMANDAQ)’

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ABSTRACT

The purpose of this study is to look into the effect of misplacement stress on changing syntactic categories of words used by Albaha University students at the Faculty of Science and Arts – Almandaq at the tertiary level. The aim of this research is to demonstrate the effects of misplaced stress on the syntactic categories of words (verbs and nouns). To get and process the gathered data, a descriptive qualitative method is used. The study's population is third-year English department students' for the academic year 2021–2022. In the first semester, the students take a phonology course, which is beneficial to our study. The study's sample included 20 male students. The researcher designed an oral recorded test and a written test to collect the data. To measure the acoustic properties of English words for the oral recorded test, the data was analyzed using "Praat soft wave." For the written test, the SPSS program was used. The findings revealed a clear

deficiency in the students' ability to manage stress effectively. This failure attributed to a lack of knowledge about stress placement and its effect on syntactic category. Furthermore, students do not get enough practice and feedback on stress placement while speaking and reading activities.

Keywords: Stress Placement, Word Stress, Syntactic Category, Albaha University Students.

INTRODUCTION

The spoken language contains characteristics that make our speech understood by others. The meaning of a spoken message is encrypted by segmental (consonants and vowels) and suprasegmental features (stress, pitch, intonation and rhythm) which are substantial in carrying meaning in the spoken message and giving language its overall appearance (Celce-Murcia, Brinton, and Goodwin, 1996).

Roach (2000) sees the stressed syllables in a word from different point of views; in perception, the stressed syllable is more prominent than an unstressed syllable if it is louder, longer, higher in pitch and/or the vowel in a stressed syllable is different in quality from neighboring vowels. In production, the stressed syllables involve greater amount of muscular energy where the lungs produce higher sub glottal pressure.

According to (Fraser, 2001), stress is the one of the main tools used in English to convey word and sentence meaning. Some linguists see that failing to use stress in the correct place is more serious than any other deviation in language. Fraser (2000) thinks that English speakers who make grammar errors or have a lack of vocabulary are still intelligible and understood by the listeners rather than English speakers that make pronunciation errors. According to Roach (2009), incorrect stress placement is a major cause of intelligibility problems for foreign learners and therefore stress placement become a subject that needs to be treated very seriously.

Scrivener (2005) claims that word stress is crucial factor in proper pronunciation and failing to utter a word properly or misplacing a stress in a word result in miscomprehension or changing the meaning of the word. English word stress is significant to learners and adequate knowledge and exercise in stress placement rules can support learners' communicative competence and language use.

Bach, E. (1974) states that a syntactic category is a syntactic unit that theories of syntax assume. Word classes, largely corresponding to traditional parts of speech (e.g. noun, verb, preposition, etc.) are syntactic categories. Brinton, L. (2000) sees that in phrase structure grammars, the phrasal categories (e.g. noun phrase, verb phrase, prepositional phrase, etc.) are also syntactic categories.

The researcher chooses in this study nouns and verbs. The selection of these two syntactic categories is on purpose, for the students show poor performance and abilities in employing stress correctly in nouns and verbs.

Objectives of the Study

The study tries to investigate the effect of stress placement on changing syntactic categories of words employed by Albaha University students at the Faculty of Science and Arts – Almandaq. To discuss the whole scene, related areas of the topic are also discussed. So, the study attempts to:

- a) Look into the causes of misplacement stress.

- b) Describe the various types of stress.
- c) Shed light on misplacement stress sequences
- d) Emphasize the significance of proper emphasis on meaning.
- e) Make recommendations for ways to raise students' awareness of stress placement.

Research Questions

The researcher uses the following questions to conduct the study:

- 1) Do students correctly use word stress in speaking activities?
- 2) Are the students aware of the relationship between stress placement and word syntactic category?
- 3) Why do students struggle with stress placement?

Hypotheses of the Study

- 1) The students face difficulties in employing the words' stress properly.
- 2) The students aren't aware of the stress placement in the syntactic category.
- 3) The difficulties that students face in stress placement can be attributed to a variety of factors.

LITERATUR REVIEW

Word Stress

Word stress pattern is different from one language to another. So, no two languages in the world have the identical word stress system. Halle and Samuel (1971) think that stress location in words differs completely from language to other. English has a far more complex system of stress, so when a speaker from a different language background learns English encountering a considerable difficulty in grasping the position of stress in the word. Ladefoged (2001) argues that English adopts more use of modifications in stress than most of the languages of the world.

According to Roach (2000) stress can be referred to as the result of a stronger puff of air and an increased articulatory effort of some kind which gives relatively greater prominence to some portion of an utterance than to others, creating thereby a suprasegmental signal which is critical for the communication of lexical or affective meanings. Ball and Rahilly (1999:105) define the term stress as "syllable prominence which may derive from several determining phonetic factors such as increased loudness, duration, pitch movement, sound quality or a combination of these factors".

Roach (2009) thinks that the vital characteristic of stressed syllable is prominence and is affected by four important factors:

- 1. Loudness is a component of stressed syllable. Stresses syllables are all louder than unstressed ones. This is a direct result of speech production factors.
- 2. Length is one of the affective components in the prominence. A stressed syllable has a longer duration and strong vowels than unstressed syllable.
- 3. Pitch is a very important part of perceptual characteristic of speech sound. Each syllable of the word is produced either as low or high pitched. Stressed syllable is resulted as higher pitch which makes it prominent.
- 4. Vowel quality is one of the affective parts in determining the prominence of stressed syllable. Stressed syllable contains a vowel that is different from other syllables around it. So that, the prominence of stressed syllable can be showed by comparing it with other syllables near it.

Celce-Murcia, Brinton, and Goodwin (1996) think that the factors which influence stress forms refer to the historical source of a word, affixation, and the grammatical category of the word in an utterance. Word stress placement in English mainly depends on the number of syllables including polysyllabic words, affixes, and the grammatical category of the word. These factors are thought to have a weighty impact on word stress placement in English. In long words, some syllables are louder and

longer than others, and some syllables are stressed while others are not.

Characteristics of Stressed Syllables

Ladeforge (1993) asserts that stressed syllables occur by extra contraction of the muscles of the ribcage and by extra activity of the laryngeal muscles, and possibly also by increases in the muscular activity in the articulatory movements. So Ladeforge (1993) suggests the following characteristics of stressed syllable as:

- 1) It is louder because there is more air coming from the lung by extra contraction of the muscles of the rib cage (Spoken more loudly).
- 2.) It is high in pitch because there may be extra activity of the pharyngeal muscles (higher pitch of voice).
- 3.) It is longer because the speech sound is produced by using more muscular energy in the articulatory movements in the vocal tract (longer vowel).

Degrees of Stress

Ashby (2011) emphasizes that there are only three main levels of stress in English language: primary stress, secondary stress and unstressed. These stresses are sufficient to serve two main roles—they show the features of the word itself (word stress) and they also show the points in the word which may carry the important information when the word is used in longer utterance (sentence stress). Roach (2009) suggests Tertiary level as a fourth level of stress, but it is rarely used in English language.

Primary Stress

Collins and Mess (2013) believe that Primary stress represents the maximal prominence of the syllable in a word. There are some syllables which are very prominent and strong because of stress. Roach (2009) remarks that primary stress is on the strongest syllable in a word which appears to be more prominent than other syllables. Collins and Mess (2013) state that primary stress can be marked with a vertical mark ['] placed above and in front of the syllable.

Examples of primary stressed syllable:

a'part

de'fine

'pattern

'metal

'realise

'miserable

Secondary Stress

Gussenhoven and Jacobs (2011) think that this type of stress takes place in long words where more than one syllable is found. It is weaker than primary stress. The marking for secondary stress is [,] and it is placed before the syllable concerned.

Examples of secondary stressed syllable:

,**a**cademic
,**g**enerosity
en,**v**ironment
,**e**xplanation

Unstressed

Unstressed syllables indicate the absence of louder, higher-pitch, and longer-duration features. Unstressed syllables do not have a mark.

Examples of unstressed syllable:

'robot
'icon
'syntax
'contact
'open

Placement of Stress

Burquest (2001) suggests stress placement to three types of words, hoping to help learners of English pronounce words more accurately:

Two-syllable Words

The assumption here is that, if the first syllable is stressed, automatically the second syllable is unstress.

- primary + unstress e.g. ' whistle - ' little
- primary + secondary e.g. ' pas ,time - ' guide ,book
- unstress + primary e.g. re 'place - be 'long
- secondary + primary e.g., ,un 'fair - ,dis 'arm

Three-syllable Words

- primary + unstressed + secondary e.g. organize - advertise
- primary + unstressed + unstressed e.g. history - memory
- secondary + unstressed + primary e.g. uncontrolled - personnel
- secondary + primary + unstressed e.g. bilingual - fantastic
- unstressed + primary + unstressed e.g. continue – emotion

Compound Words

The main characteristic of compounds is that it can occur independently as English words e.g. 'mailbox' is composed of two independent English words. Compounds are written in three different ways.

- 1) As one word e.g. armchair - keyboard
- 2) As words separated by a hyphen e.g. fruit-cake and gear-change
- 3) As two words separated by a space e.g. tea tree - horse racing

Generally, compounds have the stress on the first element e.g. **TYPE**writer and **SUIT**case.

Problems of Misplacement Stress

According to Roach (2009), there are two classes of languages in the world based on placement of the stress. The first one includes languages with fixed stress placement (French language) where

the last syllable is mostly stressed. The second type includes languages where no fixed stress placement existed (English language).

Uttering words with incorrect stress placement create crucial confusion for listeners. For instance, the shift of stress in words such as ('present) / and (pre'sent) make embarrassment if they are not uttered with appropriate stress.

Kenworthy (1987:28) demonstrates the problem of misplacement stress and urges that "If a non-native speaker produces a word with wrong pattern, an English listener may have great difficulty in understanding the word, even if most of the individual sounds have been well pronounced. In listening, if learners of English expect a word to have a particular stress pattern, they may not recognize it when a native speaker says it. In other words, what they hear doesn't match what they have in their mental dictionary".

McMahon (2002) signifies that English language has couples of two-syllable words in which the placement of stress plays main role in determining their syntactic category (noun, adjective or verb).

Functions of Stress

Roach (2000) sees that stress serves to achieve three main targets:

a) To show the syntactic function of the words. In so many cases, if the stress occurs on the first syllable it is a noun but when the stress falls on the last syllable, it is a verb. These noun – verb pairs e.g., object and perfect.

b) To distinguish between a compound word and a noun phrase. For example: ENGLISH teacher (a teacher's nationality is English) a compound

English TEACHER (a teacher that teaches English) a noun phrase

c) To provide certain emphasis on certain situation. For example, the request, "call me at 10:30." Can have different meanings according to the placement of the stress. So, if the speaker stresses the word, "me", it means "call me but not someone else." And if the speaker stresses the word "10:30. "it means "call me at 10:30, but not at 11:00 or anytime else.

MATERIALS AND METHODS

Participants

This study included twenty tertiary-level students as participants. They're taking a phonology class, which is exactly what we're looking for in this study. The students are from Almandaq's Faculty of Sciences and Arts-English Department. They are between the ages of twenty-one and twenty-two and have been studying English for twelve years. This research was carried out in 2021.

Data Collecting Tools

For this study, the following instruments were carefully chosen to collect the necessary data:

Oral Recorded Test

The researcher selected some sentences, including verbs and nouns, with similar spelling but different syntactic categories, and thus different stress placement. While the recording process is in progress, the students are asked to read the sentences. The collected data is processed using the specialized program 'Praat soft wave.' Praat is a free scientific software program for phonetic speech analysis that allows phoneticians to analyze, synthesize, and manipulate speech. The purpose of this procedure is to determine the precise placement of stress expressed by the students.

Written Test

The written test was designed to meet the needs of the study. It measures the correct usage of syntactic category according to the stress placement. It consists of ten sentences, where two stress options are given. The students are asked to fill the gap with the suitable stress placement. Finally, the collected data is analyzed through SPSS program.

RESULTS AND DISCUSSION

Results

After the completion of analysis and manipulation of data, the researcher presents the results as follows:

Oral Recorded Test

The test was carefully designed to meet the needs of the study. The test consists of ten statements in which the category of the words is clearly presented through stress markers and the general meaning of the sentence. The students were instructed to read the sentences correctly, with special attention paid to the articulation of the stressed words.

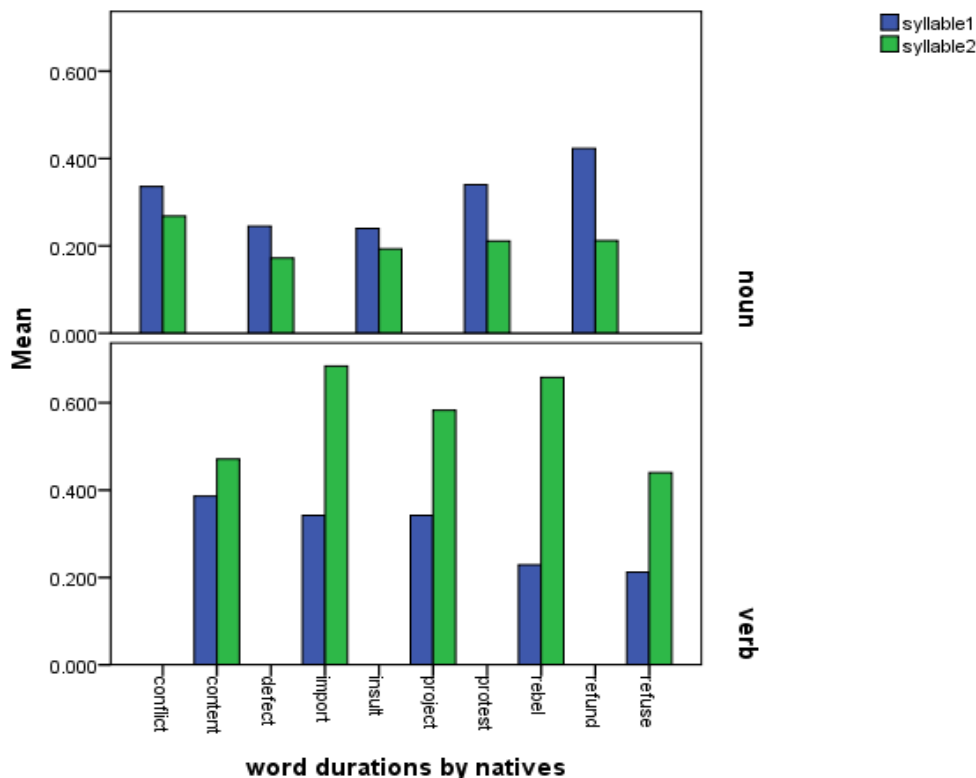


Figure 1: Native Speakers' Average Duration of Stressed Words for Nouns and Verbs

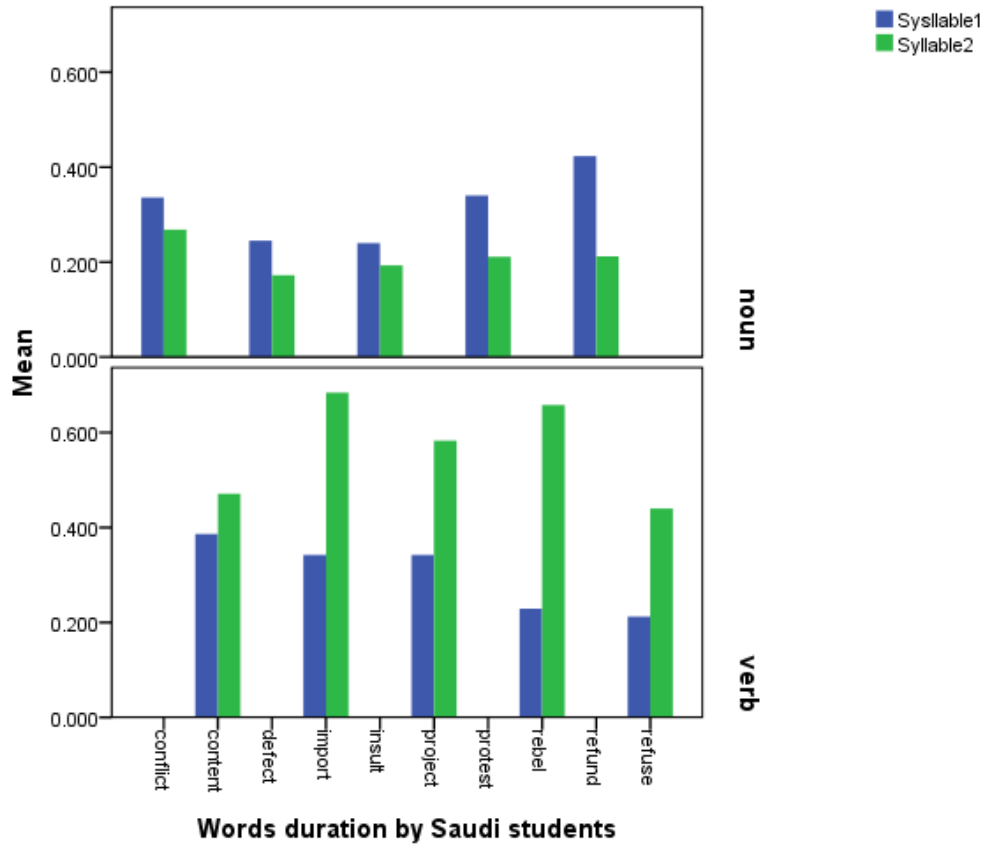


Figure 2: Students' Average Duration of Stressed Words for Nouns and Verbs

Table 1

Standard Duration of Stress Position Comparing to the Students' Performance

No.	Words	Word Category	Standard stress duration		Students' stress duration	
			1 st syllable	2 nd syllable	1 st syllable	2 nd syllable
1	<i>rebel</i>	V	0.228832	0.657664	0.737404	0.474807
2	<i>import</i>	V	0.341893	0.683787	0.685159	0.370317
3	<i>refuse</i>	V	0.219853	0.439705	0.619853	0.239721
4	<i>project</i>	V	0.341485	0.582971	0.724342	0.448685
5	<i>content</i>	V	0.385159	0.470317	0.632914	0.265828
6	<i>insult</i>	N	0.239205	0.192961	0.422562	0.711281
7	<i>conflict</i>	N	0.335215	0.267608	0.553175	0.776587
8	<i>refund</i>	N	0.422562	0.211281	0.674807	0.737404
9	<i>defect</i>	N	0.244195	0.172098	0.439523	0.619853
10	<i>protest</i>	N	0.339705	0.210855	0.605420	0.802710

Figures (1) and (2) and Table (1) show the duration of the standard pronunciation of stressed syllable by native speakers of English comparing with the performance of non-native speakers of English (students). The researcher chose some students at random based on their performance in terms of the stress duration of verbs and nouns. The mean of the students' total scores was calculated using a statistics equation. Before delving into the specifics of the students' performance in comparison to the standard, it was clear that the students' achievement was far below that of native speakers. For the word *rebel* (v), the standard duration of stress is 0.228832 for the first syllable and 0.657664 for the second, whereas the students' stress duration was 0.737404 for the first syllable and 0.474807 for the second. The verb content is another example of how native speakers and students perform differently. The standard duration of the first unstressed syllable is 0.385159, and the standard duration of the second stressed syllable is 0.470317, while the students' stress duration for the first syllable was 0.632914, and the students' stress duration for the second syllable was 0.265828.

The duration of the native speakers' stress on the noun insult for the first syllable is 0.239205 and 0.192961 for the second syllable, whereas the duration of stress on the students of the first syllable was 0.422562 and 0.711281 for the second unstressed syllable. The word *protest* represents the inconsistency of the students' attainment, where the difference in the duration between the standard stress and the student one is significant. The standard duration for the first syllable is 0.339705 and 0.210855 for the second one. However, the duration of the first syllable by the students was 0.605420 and 0.802710 for the second one, which is much longer than the stressed syllable.

Written Test

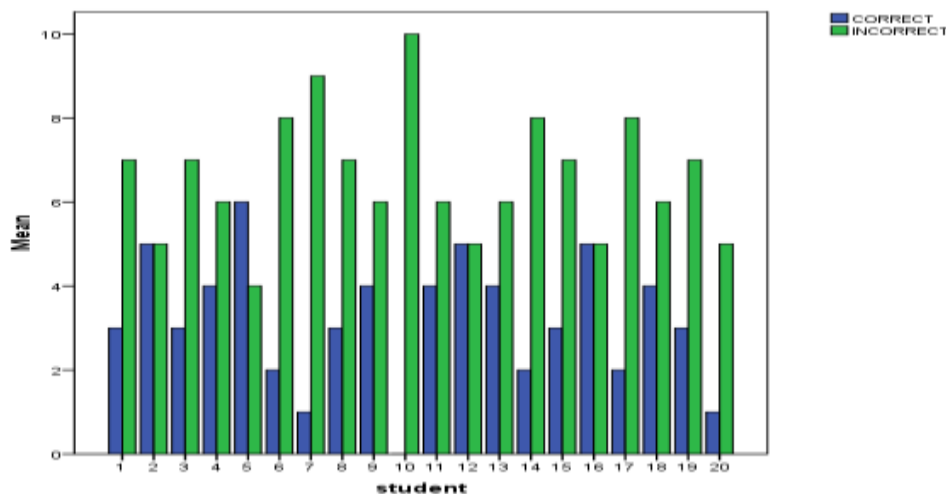


Figure 3: Correct and Incorrect Results of English Stress Placement of Nouns and Verbs by Students'

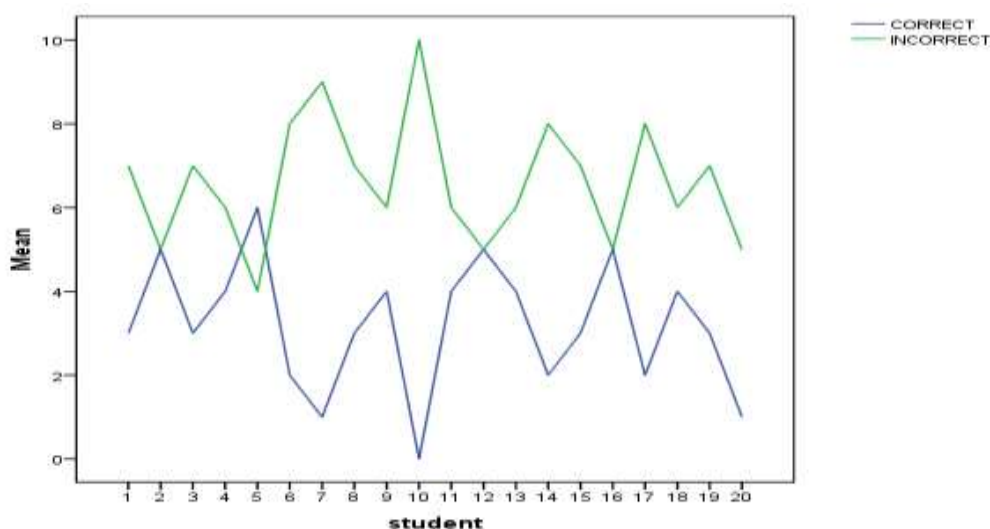


Figure 4: Correct and Incorrect Results of English Stress Placement of Nouns and Verbs by Alabaha University Students' (Linear Model)

As shown in figures (1) and (2), approximately 66 percent of students' scores are incorrect, while 34 percent of students' scores are correct. The correct answers totaled 68, while the incorrect answers totaled 132. The results show that the students performed poorly. Question 4 had the highest percentage of correct answers, with 11 students answering correctly. Question 8 had the lowest correct answer score, with only four students getting it right. As a result, 16 students provided incorrect answers to question 8. Though the students are taking stress topics in their phonology course, their performance was disappointing. One of the students got a zero and another one got one mark.

Table 2
Correlation

Stress placement	Correct	Incorrect
Correct	Pearson Correlation	-.828**
Incorrect	Pearson Correlation	-.828**

** . Correlation is significant at the 0.01 level (2-tailed).

The computation of the correlation coefficient provides a negative relationship between the two results but that is a significant at $r = -.828$ ($p < .01$).

The correlation coefficient expresses the strength of the linear relationship between the correct answers and the incorrect ones. Positive relationships are indicated by a linear correlation coefficient greater than zero. A negative relationship is represented by a value less than zero. A value of zero, on the other hand, indicates that the two variables have no relationship.

DISCUSSION

The purpose of this study is to show how misplaced stress affects the syntactic categories of verbs and nouns. To conduct the study properly, precise hypotheses were developed to make the findings more realistic and authentic.

The first hypothesis asserts that the students face difficulties in employing the words' stress properly. To investigate this hypothesis, a written and oral test were created to determine whether

or not the students encountered difficulties. The performance of the students in the tests revealed that there are significant difficulties in applying stress in the appropriate positions.

According to the second hypothesis, the students aren't aware of the stress placement in the syntactic category. The written and oral tests investigate this hypothesis, with many students selecting the incorrect option because they are unsure where to place the correct stress. The third hypothesis demonstrates that the difficulties that students face in stress placement can be attributed to a variety of factors. According to the results of the tests and the performance of the students, there are numerous factors that contribute to the students' poor achievement. Students are unconcerned about stress placement. Furthermore, the students demonstrate carelessness in the area of pronunciation. More stress placement practice is required for the students.

CONCLUSION AND RECOMMENDATION

The outcomes of this study shows the state students in applying stress to the verbs and nouns. The misplaced of stress is common among non-native speakers. Learners of English want to be as good as possible at all English-related skills. When they speak English, proper pronunciation and stress on each syllable are critical. In fact, non-native speakers who are learning English as a foreign language aspire to be like native speakers. The word stress system is one of the most difficult problems for correctly and accurately pronouncing English words.

The study's findings provide answers to the research questions. The first research question, for example, is: do students correctly use word stress in speaking activities? The findings revealed that the majority of students did not correctly use word stress. The findings also revealed that many students were unaware of the relationship between stress placement and word syntactic category, so they stressed the first syllable for verbs and the second syllable for nouns.

Teachers and syllable designers will benefit from the research. More practice with stress activities should be given to students. More topics regarding stress positions and pronunciation should be included.

Conflict of Interest: No conflict of interest relevant to this article.

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