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Investigating Difficulties Encountered by Students in Learning Suprasegmental Phonology with Special Reference to Stress

(A Case study of fourth Year Students at Sudan University of Science and Technology-College of Education)

تقصي الصعوبات التي تواجه الطلاب في تعلم المخارج الصوتية فوق المقطعية

باشارة خاصة الي النبرة

A thesis Submitted in Fulfillment of the Requirements for Degree of PhD in English Language Teaching (ELT)

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2017

Dedication

To my beloved parents, brothers, sisters, and to all my family members
and friends as well.

Acknowledgements

Abstract

This study aimed at investigating difficulties encountered by undergraduates in learning suprasegmental phonology with special reference to stress. The researcher has adopted descriptive analytical approach. Two instruments have been used for collecting data relevant to the study, namely questionnaire to teachers of English at some Sudanese Universities and oral diagnostic test to the fourth year students of English at Sudan University of Science and Technology, College of Education. The sample of questionnaire comprises (105) teachers whereas the oral diagnostic test consists (44) students. The researcher applied SPSS program to analyze and verify the results. The results have showed that students get confused in pronouncing stress on word classes: noun, verb and adjective that have same spelling and pronunciation. Moreover, mother tongue interference (Arabic) affects students' stress placement when he/she involved in real communication. The inculcating techniques adopted by teachers for teaching English stress are currently obsolete. The study has recommended that teachers should raise students' awareness about the importance of learning stress. In addition, students should be encouraged by their teachers to use internet and communicate with English native speakers and are to be exposed to different authentic materials. Furthermore, stress is highly recommended to be integrated in the English curriculum in Sudan. Sudanese Education policy should recommend students to learn stress based on a communicative approach

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instead of structural approach. Some suggestions are also proposed for further studies.

Abstract

(Arabic Version)

هدفت هذه الدراسة إلى تقصي الصعوبات التي تواجه الطلاب في تعلم المخارج الصوتية فوق المقطعية بإشارة خاصة الى النبرة . وقد اتبع الباحث المنهج التحليل الوصفي ، وتم استخدام اثنين من الادوات لجمع البيانات المتعلقة بالدراسة ، المتمثلة فياستبيان صمم خصيصاً لأساتذة اللغة الإنجليزية في بعض الجامعات السودانية وايضاً اختبار تشخيصي شفهي لطلاب السنة الرابعة بكلية التربية جامعة السودان للعلوم والتكنولوجيا . قد تم اختيار عينه بحجم (105) بالنسبة لأداء الدراسة الأولى وعينه بحجم (44) طالب للاختبار الشفهى.وطبق الباحث برامج الحزم الاحصائية للعلوم الاجتماعية لتحليل وتأكيد النتائج . واتضح جلياً من خلال نتائج الدراسة ان الطلاب يعانون من مشكلة في النبرة عند نطق تصنيفات الكلمات كالأسماء و الافعال والصفات التي تتشابه من حيث الهجاء والنطق بالإضافة الى ذلك الى تأثير تداخل لغة الام (اللغة العربية) على مكان وضع النبرة عندما يشارك الطالب والطالبة في محادثة حقيقية كما ان الطريقة التلقينية التي يتبعها اساتذة اللغة الانجليزية في تدريس النبرة حاليا عفا عليها الزمن. وقدمت الدراسة عدد من التوصيات اهمها على الاساتذة تنبيه الطلاب بأهمية تعلم النبرة الصحيحة فى النطق بالإضافة الى ان الاساتذة عليهم ايضاً تشجيع الطلاب على استخدام شبكة الأنترنت والتواصل مع المتحدثين الاصليين للغة الانجليزية ، فان تضمن النبرة الى مناهج تعليم اللغة الانجليزية في السودان مطلوب بشدة وايضاً السياسة التعليمية فى السودان عليها حث الطلاب على تعلم النبرة الصحيحة عن طريق التخاطب بدلاً عن الطريقة النبوية .وايضا قدمت بعض المقترحات للدارسات المستقبلية.

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Definition of Study terms

1- **Suprasegmental features (Phonology)** are units which extend over more than one sound in an utterance such as stress and tone.

 2- **Syllable** is smallest segments   can be only observed only as aspect of syllables.

3- **Syllabic consonants** are syllable that contain consonant that consider the peak of the syllables

 4-**Stress** is a unit that smaller than word and bigger than single segment.

5-**Intonation** the rise and fall in the sound of your voice when you speak.

6- **Linking** happens when the last sound of a word is a consonant and the next word begins to a vowel sound. Therefore, linking is very common in spoken English.

7- **Assimilation** is one of the processes which effects individual segment. This means one segment become more like other, or two segments become more like each other. The sound is assimilated because it is influenced by the place of articulation from the neighboring.

8- **Elision** when native speakers of English talk to each other, a number of phonemes or segments are not pronounced.

CHAPTER ONE

INTRODUCTION

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1.0 Background of the Study

Pronunciation is very important in teaching and learning process, EFL learners and teachers should pay it great attention, pronunciation play crucial role in making learners comprehend the spoken language. The students need to improve their proficiency in English language to communicate with native speakers of English who have different cultures, and to speak English language with different accents. In addition a good command of English language sound system can help students enhance performance, personal and social interaction.

Pronunciation, as an umbrella term to cover not only the sounds but also features beyond individual sounds, is an integral component of the language. These latter features are generally known as suprasegmentals. In teaching the target language, however, not all language educators would agree that teaching the language through its spoken form is a better choice than through other means, for example, reading and little is known about how learners themselves attribute importance to aspects related to their development as language learners. This is mainly because, with the wide spread of English and its role as international languages in many arenas, nonnative speakers have far outnumbered its native counterpart and its ownership has been evolving. Even if a consensus is reached on this argument, the decision of which model or variety teachers should adopt in their classroom practice is a crucially pivotal one.

In order to master English, students should have to know the aspects of suprasegmental phonology; they have to know how to deal with these aspects. Students suffer a lot from lack of pronunciation basic knowledge and instruction strategies. In fact, they are nervous of dealing with sounds, intonation, stress, and other segmental and suprasegmental phonemes. This leads them to avoid learning it because they feel they have already too much to do and pronunciation learning will only make things worse.

Based on the fact that there are many differences between Arabic and English stress rules; English stress is not predictable for Arab learners. As a result, students face many difficulties regarding the place where stress should be assigned on a syllable, a word, a sentence or connected speech. Word stress is an especially crucial factor in proper pronunciation and language communication in English. Stress is not on the periphery of language as it is often treated in some language teaching curricula. Failing to pronounce a word correctly or misplacing a stress in a word often results in miscomprehension or changing the meaning of the word (Celce-Murcia, Brinton and Goodwin, 1996; Harmer, 2007; Hebert, 2002; Scrivener, 2005).

English word stress is very important to EFL learners and sufficient knowledge and practice in stress placement rules can certainly help enhance learners' communicative competence and language use.

Kharma and Hajjaj (1989), states that English and Arabic phonological systems vary extensively, not only in the range of sounds and relative importance of vowels, consonants and syllable structures of each language, but also in their suprasegmental features including the word stress placement. Stress in English and Arabic share some features, but there are also noticeable differences. Therefore, difficulties are likely to

arise due to differences in the way native speakers of the two languages use stress to express meaning.

Teaching of pronunciation means that making students aware of where words should be stressed all these things give extra information about spoken English and help them to achieve the goal of improved comprehension intelligibility (Harmer, 2001).

To sum up, background of study as the researcher mentioned above the suprasegmental phonology is an important area in the study of pronunciation, students should know this area so as to improve their oral communication, on the other hand, teachers should be well –trained to know how to teach suprasegmental phonology with particularly in the stress so as to facilitate the learning process.

1.1 Statement of the Study Problem

This research investigates the difficulties that encounter students in learning suprasegmental phonology with special to stress; they have particular difficulties with stress patterns of long polysyllabic words unreduced function.

The researcher has found that 4th year students of English suffer a lot in terms of using stress. He has an experienced through teaching suprasegmental aspects to students of English at Sudan University of Science and technology, College of Education which prompted the researcher to tackle this issue so as to diagnose this problem.

1.2 Objectives of the Study

The study aims to:

1- Explore students of English get confused in using words with stress in spoken form.

2- Find out mother tongue interference affects students' pronunciation of words having stress when they are involved in real communication.

3- Examine students of English are exposed to activities on stress in the university syllabus.

1.3   Questions of the Study

The study sets out to answer the following questions:

1- To what extent are students of English get confused when using words with stress in spoken form?

2- To what extent does mother tongue interference affect student's pronunciation of words having stress when they are involved in real communication?

3- To what extent are students of English exposed to activities on stress in the university syllabus?

1.4 Hypotheses of the Study

The study sets to test the following hypotheses:

1- Students of English get confused when using words with stress in spoken form.

2- Mother tongue interference affects student's pronunciation of words having stress when they are involved in real communication.

3- Students of English are exposed to activities on stress in the university syllabus.

1.5 Significance of the Study

The significance of this study stems from its attempt to bring up new insight into issue pertaining to the investigation of difficulties facing students in learning suprasegmental phonology with special reference to

stress, it examines first time in Sudan University four year students who experienced the difficulties of learning suprasegmental phonology, this study will cover the area of stress. It will help the teachers in Sudanese universities to be aware of difficulties that encounter students when learning lexical stress utterance-level stress, study will help the teachers in diagnosing the point of weakness regarding teaching English stress. Moreover, it will help the students to avoid the difficulties that hinder their learning of English stress.

So , it is hoped that the results arrive at the future will help the curriculum developers to take the right decisions with regards to promoting the students oral communication competence by learning stress , which is badly needed in their studies so people need to act globally so as to keep space with the rest of world. Therefore, the significance of this study stems from its emphasis on addressing these problems.

1.6 Scope of the Study

This study has limited to investigate the difficulties that encounter 4th year students of English in learning suprasegmental phonology with special reference to stress. The difficulties include the lack of using English stress due to poor pronunciation.

For these reasons, students suffer a lot particularly in learning polysyllabic words as well as stress placement. In terms of stress, the 4th year students have difficulties in recognizing lexical stress, utterance – level stress. It is hoped that this study will tentatively cover the period from (2015-2017). It was conducted at Sudan University of Science and Technology, College of education. Study sample was exclusively drawn from 4th year students of English at Sudan university, it was confined to

students majoring in English in college of Education at (SUST) located in Khartoum state.

1.7 Methodology of the Study

The researcher has adopted the descriptive analytical as well as quantitative and qualitative methods. Questionnaire and diagnostic test are used as primary tools for data collection. A questionnaire was distributed to teachers of English language in checking their point of views in terms of this issue. Diagnostic test aims to reveal the difficulties that encounter 4th year students of English when learning stress in spoken form. It was conducted at Sudan University of Science and Technology, College of Education.

1.8 Summary

This introductory chapter was concerned with presentation of statement of the problem, objectives of the study, questions of the study, hypotheses of the study, significance of the study, scope of the study, methodology of the study, definition of terms and outline of the research.

CHAPTER TWO

LITERATURE REVIEW AND PRVIOUS STUDIES

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LITERATURE REVIEW AND PRVIOUS STUDIES

2.0 Introduction

This introductory paragraph displays the relevant literature review on suprasegmental phonology with Special Reference to Stress .This chapter is called chapter two which is divided into two parts; the first part is called theoretical background and the second part is called previous studies.

Part one: Theoretical Background

2.1 Definitions of Suprasegmentals

According to Longman Dictionary of Applied Linguistic (Richard, Platt, and Weber, 1985, p. 281), Suprasegmentals are units which extend over more than one sound in an utterance such as stress and tone. Similarly, Ladefoged, (2006), defines that Suprasegmentals features are aspects of speech that involve more than single consonants or vowels. The principal Suprasegmentals features are stress, length, tone, and intonation.

Clark, Yallop and Fletcher (2007) define that Suprasegmentals features can be referred as prosodic or non segmental features. They are features of spoken language such as pitch, rhythm, and tempo which are not easily identified as discrete segments.

Fromkin, Rodman, and Hyams (2007) define that prosodic or Suprasegmentals features are over and above the segmental value since the word "supra" means above or beyond. Therefore, Suprasegmentals are units which govern more than one sound in an utterance. They cannot occur by themselves but they extend over the segments in words, phrases,

and sentences. In spoken language, not only the segmental elements but also the other units known as Suprasegmentals are involved. If learners know features from the smallest component of spoken language or segments to the larger one or Suprasegmentals units, they are likely to achieve their listening. Therefore, teachers who are plan the lessons for teaching each feature of Suprasegmentals apart from individual sounds of English words. Suprasegmentals features relate to sounds at the macro level. Advances in research have developed descriptions of the Suprasegmentals features of speech extending across whole stretches of language (prosody).

Jenkins (2002) emphasizes that can achieve effective communicative pronunciation competence through enhancing supra-segmental production in preference to segmental. Linking, intonation and stress are significant features for effective pronunciation at the Suprasegmentals level.

Bray (1995, p. 3) reports:

> *"Beginning in the late 1970s, several teachers/theorists took a stand by suggesting that at a very basic level if communicative competence was the goal of language learning, then it would have as one of its essential components, intelligible pronunciation. Intelligibility rather than the native-like competence valued in traditional approaches became the goal of phonological instruction".*

Therefore, teaching speech from the perspective of supra-segmental seems irreplaceable within the communicative approach to teaching ESL. However, he continuous to claim that in spite of many theorists began to make a case for the role of supra-segmental phonology in communication on this study, "many teachers continue with a limited conception of the role of explicit phonological instruction in the language classroom." We can say that curriculum and syllabus designers need to focus on the

Suprasegmentals (S) features of pronunciation. In making their case for emphasis in teaching rhythm to ESL learners in Sudan for example, students were not aware of the difference between the rhythms of the syllable-timed; the stress timed English language and therefore drawing their attention to this supra-segmental feature helped significantly in improving their communicative ability.

Crystal (2008) illustrates that Suprasegmental(S) is a term used in phonetics and phonology to refer to sound segment in an utterance, such as pitch, stress or juncture pattern. In its contrast with "segmental, it is seen as one of two main phonological units that can be divided".

Ball and Rahilly (1999) point out the importance of prosodic aspects of speech. They pointed out that prosodic aspects of speech (Suprasegmentals), have communicative and linguistic relevance and that prosody has paralinguistic importance.

Grice and Bauman (2007) claim that Suprasegmental features encode rich information structure that helps the listener locate emphasized words, phrase boundaries; speech acts (statements, questions, continuations, etc.) as well as the speaker's attitudes and emotions. Therefore, Suprasegmental features (stress, pitch, juncture, and intonation) are very important for giving the language its appearance, and they are central to the communication of meaning. Consonants and vowels constitute the basic speech units. But when people use language to express their thought, they do not use this segment in isolation. Instead, people combine them in certain patterns to form larger speech units. In addition, language users enrich their utterances by making certain syllables stronger than other, stress certain syllables and words, producing certain

syllables at a louder pitch, raising their voice at certain intervals during their speech, etc. The features that speakers superimpose on certain syllables are called prosodic or suprasegmental features.

Intonation also is one aspect of Suprasegmentals. Every language has melody; however, no language is spoken on the same musical tone all the time. As O'Connor, (1980:108) states

> *"The voice goes up and down and the different tones of the voice combine to make tunes. However, in English, the tone belongs not to the words but to the word group if the English word "No" is said in different tunes it is still the same word, nevertheless tune plays an important part in English".*

So, all the above- mentioned scholars and educationists come to define that, suprasegmental features (phonology) are units which extent over one sound in an utterance such as stress and tone. Whereas, one defines suprasegmental features are aspects of pronunciation that include more than single consonants and vowels such as stress, length and intonation. Furthermore, they can be described as prosodic or non-segmental features (phonology). They are aspects of spoken language such as pitch, rhythm and tempo. The notions of definitions are the same to some extent, as researcher point of view suprasegmental phonology is a level above the individual sound such as syllable, stress and intonation. Eventually, the area of suprasegmental aspects is so difficult for both teaching and learning. It needs to be focused on, so as to avoid confusion.

2.2 The Importance of Suprasegmentals

The sound system of English is studied under two main headings: segmental and suprasegmental. Seferoglu (2005) claims that "Segmental aspects of the sound system include individual vowels and consonants, and the suprasegmental aspect comprises words, phrases, and sentence stress, pitch contour or intonation, and rhythm" (p. 304).

Coniam (2002) confirms that the issue of teaching Suprasegmentals in preference to segmental is debatable. Because segmental phonology is relatively more easily explained and taught than the suprasegmental features, some studies focus on studying segmental phonology in preference to suprasegmental features. However, approaches to pronunciation have shifted in focus away from segmental to suprasegmental aspects of a sound system. Recent approaches to teaching pronunciation in computer-based contexts follow the communicative approach in teaching pronunciation.

Harmer (1993) stresses that the need for making sure that students can always be understood and say what they want to say. They need to master "good pronunciation", not perfect accents. That is, emphasis should be on suprasegmental features of pronunciation—not segmental aspects—to help learners acquire communicative competence.

Bott (2005:5) asserts

> "In recent years, increasing attention has been placed on providing pronunciation instruction that meets the communicative needs of non-native speakers (NNSs) of English. Empirical research and pronunciation materials writers suggest that teaching Suprasegmentals before segmental to intermediate and advanced NNSs could be more beneficial in a shorter period of time".

Seferoglu (2005) reports that integrating accent reduction software in advanced English language classes at the university level results in improvements in students' pronunciation at the segmental and suprasegmental levels, EFL learners may be provided with exposure and practice/interaction opportunities in the target language through specifically designed software programs.

Morley (1991) explains that providing detailed attention to suprasegmental features of pronunciation and their functions in interactive discourse and stressed their application in communicative approaches to pronunciation learning and teaching.

In sum, scholars and educationists mentioned that suprasegmental aspect is more significant than segmental ones. Therefore, the approaches of teaching pronunciation have relocated in concentrating away on segmental to suprasegmental features (phonology). On the other hand, new invented approaches for teaching pronunciation are focusing on computer-based contexts which are subordinate the communicative approach in teaching supra-segmental features, moreover, from the researcher point of view suprasegmental phonology should be taught through audiovisual aids. For this reason, teachers of English should be well- trained in teaching the area of phonology with special reference to suprasegmental aspects.

2.3 The Nature of the Syllable

The Syllable is basically significant unite both in phonetics and in phonology .Roach (2002:76) illustrates that phonetically ,we can notice that the flow of speech typically consists of an alternation between vowel –like states and consonant –like states where some obstruction to the air flow is made .Phonolagists are define syllables. First, there are theories in which the definitions are in terms of properties of sounds, such as sonority (acoustic energy) or prominence (some combination of sonority, stress and pitch).Second, there are theories based on the idea that a syllable is a unit in the organization of the sounds of an utterance. There are many theories in both interested in structure of the syllable since there

appear to be interesting observations to be made about which phonemes may occur at the beginning, in the middle and at the end of syllables.

Ladefoged (2006:242) finds out that we can observe that there are two types of theories attempting to phonetics and phonology which have tried to clarify matters phonetic approaches attempt to provide a definition of the syllable valid for all languages. Phonological viewpoints of the syllable focus on the ways sounds combines in individual languages to produce typical sequences.

Crystal (2003:448) states

> *"phonetically speaking, the first theory trays to define a syllable in auditory terms the prominence theory, according to Crystal (ibid) is a string of sounds some are intrinsically more sonorous than others and that each peak of sonority corresponds to the center of a syllable. The peaks are best illustrated by vowels, which have the greater carrying power".*

Jones (1969:56) indicates that when a consonant is immediately followed by a vowel, it is usually not syllables, since the vowel has the greater inherent sonority .However, a consonant in this position is sometimes given extra prominence by increasing its length, and it may thus become syllabic .Second theory is the pulse or motor theory.

Gimson (1980:52) conforms that this theory is concerned with the muscular activity controlling lung movement which takes place during speech and which is capable of being investigated by their experimental methods. It is stated that in any utterance are a number of chest pulses, accompanied by increases in air pressure, which determine the number of syllables uttered. Such a theory suggests that the syllable rather than the sound is the basic unit of speech, consonantal sounds acting typically as

the onset and closure of the syllable, while vowel sounds are nuclear to the syllable and rather the chest pulse audible .vowel as a nucleus, flanked by consonantal segments.

Ladefoged (2006:242) defines that "a syllable is the smallest segments can be observed only as aspects of syllables". To provide a precise definition for a syllable is not , in fact, an easy task to handle (possible unite of speech .Every utterance once must contain at least one syllable .It is convenient to talk of speech as being composed of segments such as vowels and consonants.

Eventually, there is no isolate theory is perfect or debatable; insufficiencies are always there. However, theories based on phonetics include: (i) the prominence for sonority theory; (ii) the chest –pulse or (motor) theory; (iii) the aperture theory; and (iv) the tension theory. Concerning this study much focus will be devoted to the first two theories since they are the most predominant ones among the others. One defines a syllable is the smallest segments can be noticed only as aspects of syllables, as researcher point of view syllable may defines the smaller than word and bigger than single segment.

2.4 The Structure of English Syllables

Syllables have internal structure; they can be divided into parts. The parts are onset and rhyme; within the rhyme we find the nucleus (peak) and coda. Not all syllables have all parts; the smallest possible syllable contains a nucleus only. A syllable may or may not have an onset and a coda.

Rubba (2000:1) defines an onset as the beginning sound of a syllable; the ones preceding the nucleus. These are always consonants in English .The nucleus a vowel in most cases. Onsets are not obligatory in English

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syllables. There may, therefore, be syllables having no onset; they immediately begin with the syllabic element. The syllable is then said to have a zero onset. The onset may consist of two consonant. This constitutes what is called a consonant cluster.

There is one exception to the rule that a syllable must have a vowel as its nucleus. This occurs when a certain vowel like consonant-/l/, /r/, or a nasal-act as the center of the syllable, as in bottle . The syllabic consonant is shown by a small vertical mark beneath the symbol. (Crystal, 2004:246)

2.5 Syllabic Consonants Syllables

Syllabic consonants syllables are syllables that contain a consonant that considers the peak of that syllable. In English, /l r m n ŋ / can be syllabic but only in unstressed syllables. Kim (2005) indicates that syllabic consonants in present-day English appear in unstressed syllables where their preceding vowels are normally lost. (e.g., sudden ['sʌdn̩].

Kreider (2004: 84) provides an example of how these syllabic consonants are produced. He explained that when pronouncing the word button, the tongue-tip touches the alveolar ridge for the [t], blocking the flow of air through the mouth, the velic is closed, blocking the flow of air through the nose, and the vocal cords are not vibrating. Then the velic opens and the vocal cords vibrate while the tongue remains against the alveolar ridge. Thus, a syllabic consonant is articulated without the tongue moving from the position of [t]. There is vowel between [t] and n̩].

It is significant to indicate that syllabic [n̩] is frequent in English. It is usually occurring after consonants: /t d s z ʧ, ʤ, ʃ, ʒ /.While /m/ and /ŋ/ are less common. They can be heard in a phrase like keep 'em [kiipm̩] or

looking good [lʊkŋ gʊd] respectively. The liquid consonants /l/ and /r/ may sometimes be considered to be syllabic, and in other times, they are not. This makes it so difficult to decide how many syllables the following words have: foul, girl, file, fire, and hour.

2.6 The Prominence of Syllables

Every utterance contains at least one tone unit, and every tone unit consists of at least one syllable. If this tone unit consists of more than one syllable, one of them is more prominent than the others. Take the following utterance as an example:

I read ten stories

Here, the word *stories* Seems to be more prominent than the other words in the utterance. Usually, this prominence is called accent of the tone unit. Accent emerges from a change of Pitch.

Kreidler (2004:70) confirms:

> *"A long with the change of pitch, there is typically a greater intensity, more force with which air is pushed up from the lungs, and greater length or duration, in the vowel and other sonorant elements of the accented syllable".*

If the accented word is disyllabic, one of these syllables is more prominence that the others. These Phenomena are associated with stress. In other words, the syllable that has a stress in the accented word is described to be more prominent that the other syllables in that word. For example, if we change the word 'story' in the previous utterance with the disyllable word 'reviews', this word is accented on the second syllable because the second syllable is stressed. It is important to mention that Kreidler (2004: 70) drew attention of the reader that when a syllable is stressed but not accented, it does not have a change of pitch. But relatively, it may be spoken at a higher pitch than the unstressed syllable

and with greater length and intensity. In general, as previously mentioned, stressed syllable is stronger and longer than the unstressed ones.

2.7 Strong and Weak Syllables

English syllables divided into two types, strong and weak. This feature is not in English language only but in many other languages. Crystal (2004: 247) mentions that strong (or full) forms are used when the word is said in isolation or is being emphasized. Weak forms are normal in connected speech: peripheral vowels (those which are articulated towards the edge of the vowel area in the mouth) are replaced by those of more central quality, and some consonants may be elided. Weak forms are sometimes represented in writing, though not usually very accurately. The prominence of sounds may be due to inherent sonority (carrying power) to length or to special intonation or stress or to combination of these. Thus, in every sentence there is a kind of undulation of prominence which is easily perceived by the hearer. This undulation may be visualized as a way line with peaks (denoting maxima of prominence) and troughs (denoting minima of prominence). It is generally quite easy to count the number of peaks of prominence in a word or phrase. Roach (1988:63) defines a weak syllable as the one that can only have four types of center:

1. The vowel "schwa"

2. A close front unrounded vowel in the general area of i: and

3. A close back rounded vowel in the general area of u: and u

4. A syllabic consonant

The vowel of a weak syllable tends to be shorter of lower intensity and different in quality, is less loud and has a vowel that cannot occur in strong syllable.   .

2.8 Focus on Unstressed Syllabes

There are many exercises that a teacher can use to focus on unstressed syllables, or weak vowel forms, in connected speech. Liang (2003) discusses those three strategies to teach weak vowel forms. Use function words. Introduce weak forms through the grammatical category of function words, such as articles, pronouns, auxiliary verbs, and prepositions. Present sentence drills where both strong and weak forms appear. For example, the teacher can read a passage while learners underline the weak forms in the passage. Allow learners to practice using weak forms in conversations in order to simulate real-life speech encounters. For example, the teacher might focus the lesson on the ability to do things. Student **A** can play the role of an interviewer, and student **B** can be the interviewee. Student **A** asks a list of questions regarding student B's ability to do things. For example, student **A** asks, ―Can you swim?‖ Student **B** uses both the strong and weak form of the vowel in can and can't in an answer such as this, ―I can't swim very well, but I can try.

2.9 The Nature of Intonation

Cruttenden (1986: 9) states that it is significant to explain the nature of intonation in English and Arabic, as an effort to enable both teachers and students to better understanding which helps them to avoid, or correct mistakes. It seems to equate intonation specifically with pitch movement while Coulthard (1992: 96) has identified it with prosody in general which would therefore include pitch movement but also loudness, length, speed, and even voice quality.

In clarifying pitch, Cruttenden (1986) illustrates that as the perceptual correlate of fundamental frequency, which is the continuous variation in the sounds people perceive as a result of the vibration of the vocal cords. Intonation, then, can be defined as the movements or variations in pitch to which we attach familiar labels (F0) describing the pitch levels (e.g. high/low) and tones (e.g. falling/rising), etc. There is another important component which is called prominence.

According to Roach (2008: 86) states that it is the propensity for speakers to make some syllables more remarkable than others. This is achieved by pronouncing them louder and longer, by attributing them a different pitch, or by uttering the phonemes (especially the vowel) more distinctly. Prominence is also sometimes referred to as emphasis, focus, main stress, nucleus or tonic accent. In the same context, pitch level, pitch movement and prominence are all relative value.

 Cauldwell and Allen (1997:6) notice that .one speaker.s .mid. pitch would be another speaker.s .low. pitch. and values vary from speaker to speaker and with the context of the situation. This relativity is important in distinguishing intonation from melody or music, to which it is often compared.

2.10 The Importance of Intonation

The results of practicing intonation during talking to native speakers that once a native speaker asks whether you are a native or from outdoors. So intonation "It is not what you say, it is how you say it! Considering the characteristics of the language: language is the means by which results of human thought and action are passed on, Language is a system of rules, language is learned behavior, language is an arbitrary system of vocal

symbols used to communicate ideas and express feeling among the members of a certain social community. From the previous characteristics of language the conclusion is, suprasegmental feature, especially intonation, is the flavor which makes spoken language has sense of meaning, which reflects the speaker and the listener thought and feeling. It is that part of language which completes the purpose of Communication, quantitatively and qualitatively. Intonation makes language more tasteful, easy to be interpreted and which makes a certain language more musical. It is obvious that intonation choices made by speakers carry linguistics information and in the same time its elements are seen to perform a variety of functions. Therefore, the way we say something can be as important in conveying a message as the words we use to say.

Crystal (1995: 249) identifies six intonational functions: emotional, grammatical, informational, textual, psychological and indexical, whereas Roach (2008: 163) illustrates four; namely attitudinal, accentual, grammatical and discourse. It seems that all languages share these functions by one or other and using one of these functions alone is rare. To convey the message by the best way, these functions always be used not separately, or the communication will failed on one stage or another.

2.11 Make Learners Aware of Prosodic Features

Word stress, intonation, and rhythm are the prosodic features of language. They are extremely important to comprehensibility. Teachers should include prosodic training in instruction (O'Brien, 2004; Bailly & Holm, 2005; Gauthier, Shi, & Yi, 2009). They might begin with listening activities. For example, they can ask students to listen for rising intonation in yes/ no questions, compare question intonation in English

with that of their native languages, and then imitate dialogues, perform plays (O'Brien, 2004), and watch videos in which yes/no questions are used (Hardison, 2005).

Munro and Derwing (1999) observe that even heavily accented speech is sometimes intelligible and that prosodic errors (i.e., errors in stress, intonation, and rhythm) appear to affect intelligibility more than do phonetic errors (i.e., errors in single sounds). For this reason, pronunciation research and teaching focus both on the sounds of language (vowels and consonants) and on supra-segmental features—that is, vocal effects that extend over more than one sound—such as stress, sentence and word intonation, and speech rhythm.

Languages have been classified as either stress timed or syllable timed. In stress-timed languages (e.g., British and American English), "stressed syllables fall at regular intervals throughout an utterance" (Crystal, 2003, p. 245), and rhythm is organized according to regularity in the timing of the stressed Syllables. That is, the time between stressed syllables is equal because unstressed syllables are spoken more quickly and vowel reduction occurs. For example, the sentence "John runs fast" is made up of three stressed syllables, as indicated by the letters in boldface. The sentence "Meredith can run fast" is made up of six syllables, but only three of them are stressed. The unstressed syllables -e-, -dith, and can are spoken quickly and vowel reduction occurs, so the time between the stressed syllables tends to be equal, and both sentences take approximately the same amount of time to say. In syllable-timed languages (e.g., some nonnative varieties of English, such as Singapore and Malaysian English, and languages such as Tamil, Spanish, and French), syllables are said to be equal in timing (Crystal, 2003).

All syllables are nearly equally stressed, vowel reduction does not occur, and all syllables appear to take the same amount of time to utter. Recent phonetic research has shown that languages cannot be strictly classified as syllable timed or stress timed. A more accurate description is that they are stress based or syllable based; that is, they are not completely in one category or the other, but tend to have more stress-timed or syllable-timed features (Low, 2006).

Stress-based rhythm is achieved through the presence of reduced vowels for unstressed syllables in a sentence. Function words (e.g., articles, helping verbs, prepositions) typically have reduced vowels instead of full ones, and the reduced vowel Version is known as a weak form. For example, in the sentence "Bob can swim," the words Bob and swim have the major stress, and can, which is unstressed, is pronounced [kin]—its weak form. The distinction between stress- and syllable-based languages is important, especially if an adult English language learner speaks a first language that is different rhythmically from stress-based British or American English. An understanding of whether a learner's first language is stress based or syllable based will help a teacher plan appropriate pronunciation exercises. In examining the role of stress—"the degree of force used in producing a syllable" (Crystal, 2003: 435).

In intelligibility, Field (2005) asked trained listeners to transcribe recorded material when the variables of word stress and vowel quality were manipulated. He determined that when word stress is erroneously shifted to an unstressed syllable, without a change in vowel quality, utterances are significantly less intelligible than when only vowel quality is manipulated. Native and nonnative English speakers responded

similarly when judging the intelligibility of words with misplaced word stress.

O'Brien (2004) claimed that results of research on the importance of stress, intonation, and rhythm for a native-like accent in German. Native speakers of German were asked to rate American university students reading aloud in German. It was found that the native speakers focused more on stress, intonation, and rhythm than on individual sounds when rating speech samples as native-like. Implications of this research for classroom instruction are that teachers need to spend time teaching learners the rules for word stress, intonation, and rhythm in English, as well as focusing on individual sounds that may be difficult for the learners in their classes.

2.12 Aspects of Connected Speech

2.12.1 Rhythm

 Since stress plays an important role in English language. Roach (2010) indicates that English speech has a rhythm that allows us to divide it up into more or less equal intervals of time called feet. Each foot begins with a stressed syllable; however, the number of unstressed syllables between each stressed one or in each foot varies. As a result, spoken English has stress-timed rhythm; that is the time from each stressed syllable to the next tends to be equal. Learners of English can practice to divide utterances into feet while listening.

2.12.2 Linking

As we have known that there are differences between pronunciation of words in isolation and in connected speech. British Council (2006) conforms that linking happens when the last sound of a word is a consonant and the next word begins to a vowel sound. Therefore, linking is very common in spoken English. Learners of English need to be aware of linking that they will meet in listening. Linking refers to the way the last sound of one word is joined to the first sound of the next word. To produce connected speech, we run words together to link consonant to vowel, consonant to consonant, and vowel to vowel. We also shorten some sounds and leave others out altogether. • consonant to vowel **an _Australian _animal** • consonant to consonant **next _week; seven _months** • vowel to vowel. Some sounds such as **r, w** and **j (y)** are inserted to link adjacent words ending and beginning with a vowel: *where (r_) are you?*; *you (w_) ought to*; *Saturday (y_) evening* • sounds that are shortened. When words begin with an unstressed sound they are often pronounced as a short schwa (ə) sound: **when do they arrive?; five o'clock** • sounds that are left out. Some sounds are that they virtually disappear (become elided): **does (_h)e like soccer? We might as well (h_a)ve stayed at home.**

Consonant + vowel

It usually happens in English speech that word-final consonant is linked to the first vowel sound of the following word. Hence, if we consider a sentence "These are old eggs", in connected speech it becomes [ði:.zə.rəʊl.degz] (Giererich 1992, p.280). What happens in this example

is what Underhill calls "fully liaised speech", "characterized by a seamless,

continuous quality, where final consonants are linked to following vowel sounds, and initial consonants to preceding final vowel sounds" (Underhill 2005). Giegerich (1992) sustains that such consonants are probably not totally disassociated from the preceding syllables, but they become ambisyllabic1.

Vowel + vowel (/w/ and /j/ glide)

These two phenomena are a natural way to connect two words where the first one ends in a vowel and the second start with a vowel.

When a word ends in /iː/, or a diphthong which finishes with /i/, speakers often introduce a /j/ to ease the transition to a following vowel sound and when a word ends in /uː/, or a diphthong which finishes with /ʊ/, speakers often introduce a /w/ to ease the transition to a following vowel sound (Kelly 2002, p.31).

„see it" [siː **j**ɪt]

„they always" [ðeɪ **j**ɔlwiːz]

„too easy" [tuː **w**ˈiːziː]

„go out" [goʊ **w**æʊt]

2.12.3 Assimilation

In speech, the sounds do not occur in isolation, but they come in sequences. Kuiper and Allan (2004) states that assimilation is one of the processes which affects individual segments. This means one segment become more like another, or two segments become more like each other. The sound is assimilated because it is influenced by the place or the manner of articulation from the sound neighboring. If learners know assimilation and understand how it happens, listening will not be difficult for them.

"Assimilation describes how sounds modify each other when they meet, usually across word boundaries" (Kelly 2002, p.109). When words are pronounced separately in their citation forms, their pronunciation differs from pronunciation in natural connected speech in which they are joined together without any clear boundaries. In such cases, "we employ an economy of effort, and get our articulators ready for the next sound. Certain sounds are either absorbed or modified into others" (Kelly 2002, p.109). It is important to note that, in its extent, assimilation is a variable phenomenon. "It is more likely to be found in rapid, casual speech and less likely in slow, careful speech. The cases that have most been described are assimilations affecting consonants" (Roach 110, 2009).

Kenworthy (1990) illustrates 7 basic rules for assimilation as explained below. The first five are examples of regressive assimilation, in which the first consonant of the second word influences the articulation of the last consonant at the end of the first word, and the last two are cases of progressive assimilation (coalescence), where the two consonants merge to create a sound that shares the characteristics of both of the consonants:
/t/, /d/ and /n/ often become bilabial before bilabial consonants /p/, /b/, /m/:
„fat boy" /t/→/p/
„good boy" /d/→/b/
„ten men" /n/→/m/
/t/ assimilates into /k/ before /k/ or /g/. /d/ assimilates into /g/ before /k/ or /g/:
„that cat" /t/→/k/
„that girl" /t/→/k/
„good concert" /d/→/g/

„good girl" /d/→/g/

/n/ can assimilate to /ŋ/ before /g/ or /k/:

„I've been going"

„his own car"

/s/ can assimilate to /ʃ/ before /ʃ/:

„this shiny"

/z/ can assimilate to /ʒ/ before /ʒ/:

„cheese shop"

/t/ and /j/ coalesce to from /tʃ/:

„last year"

„didn't you?"

/d/ and /j/ coalesce to form /dʒ/

„would you?"

All the above explained rules concern with assimilation of place. Another type of assimilation is assimilation of manner. "It is much less noticeable, and is only found in the most rapid and casual speech" (Roach 2009, p.112). This type of assimilation will not be discussed here in more detail as it was not included in the course syllabus so as to adjust it to the learners' level of English. Assimilation of voicing on the other hand is an important aspect of English pronunciation and therefore, it was included in the syllabus.

Final /v/ and /d/ becomes voiceless /f/ and /t/ because of the following voiceless /t/

„have to"

„used to"

„supposed to"

Interrelated topic is progressive assimilation of voice with the suffix "s" (third person singular suffix, noun plural suffix or possessive suffix). "[It] will be pronounced as /s/ if the preceding consonant is fortis ("voiceless")

and as /z/ if the preceding consonant is lenis ("voiced")" (Roach 2009, p.113), thus:

"cats" [kæts] "dogs" [dɔgz]

"jumps" [dʒʌmps] "runs" [rʌnz]

"Pat's" [pæts] "Pam's" [pæmz]

The same way the preceding consonant affects the articulation of "s", it does with the "-ed" verb and adjective suffix. Hence:

"kissed" [kɪst] "played" [pleɪd]

"washed" [wɒʃt] "bored" [bɔːrd]

"asked" [æskt] "explained" [ɪkˈspleɪnd]

In both cases, the distinction is most tangible when such a word is followed by a vowel sound, because the consonant is linked to the vowel creating a more resounding sound:

"kissed us" [kɪs təz]

"Peter's apple" [piːtər zæpl]

"Much more could be said about assimilation, but from the point of view of learning or teaching English pronunciation, to do so would not be very useful" (Roach 2009, p.113).

Roach (2009) argues that it is essentially a natural phenomenon and the only important matter is to remember the restriction, specific to English, on voicing assimilation mentioned above. A great deal of attention was also given to the study of coalescence in phrases such as "did you", "would you" or "don't you".

2.12.4 Elision

Roach (2010) states that when native speakers of English talk to each other, a number of phonemes or segments are not pronounced. Elision always occurs in less formal speech. Therefore learners of English should

not expect to hear every segment. Both consonant and vowel elision are common in spoken language.

"The nature of elision can be stated quite simply: under certain circumstances sounds disappear" (Roach 2009, p.113). It is, again, characteristic of rapid, casual speech. Roach (2009) says that foreign learners do not need to learn to produce elisions, but it is important for them to be aware that "when native speakers of English talk to each other, quite a number of phonemes that the foreigner might expect to hear are not actually pronounced" (p.113). The objective of the course was not for the students to start using elision and other linking features immediately, it was, however, supposed to help improve their receptive skills and possibly give them the opportunity to start incorporating it in their speech as they become more advanced and comfortable in all the areas of the English language.

Some basic rules for elision as Kelly (2002) lists them are:

/t/ and /d/ disappear in a consonant cluster:

„next day" /t/ elided between /ks/ and /d/

„reached Paris" /t/ elided between /tʃ/ and /p/

„stopped for lunch" /t/ elided between /p/ and /f/

„carved statue" /d/ elided between /v/ and /st/

Complex consonant clusters are simplified:

„She acts." [ækts] can be simplified to [æks]

„George the Sixth"s throne"

[sɪksθ θroʊn] can be simplified to

/ˈ[sɪks θroʊn]

/ə/ can disappear in unstressed syllables:

„police" [pəˈliːs] → [pliːs]

„perhaps" [pərˈhæps] → [prhæps]

/v/ can disappear in *"of"* before consonants:

„waste of time" [weɪst əv taɪm] → [weɪst ə taɪm]

„lots of them" [lɑts əv (ð)əm]→ [lɑts ə (ð)əm]

Linking "r" and intrusive "r"

In non-rhotic varieties of English, speakers often pronounce the phoneme "r" that would not normally be articulated to link the final "r" to a word beginning with a vowel. It can be demonstrated on the example of the word *car*:

car = [kɑː] but *car is* = [kɑːr ɪz]

In the second example, the "r" is clearly articulated as it is followed by a vowel sound. This phenomenon is called *linking "r"*. Similar case is that of *intrusive "r"*. "BBC speakers often use "r" in a similar way to link words ending with a vowel, even when there is no justification from the spelling" (Roach 2009, p.115).

pizza and chips [piːtsər ənd tʃɪps]

I saw a movie [aɪ sɔr ə muːviː]

Although these are important connected speech features, they were not included in the syllabus, mainly because they are specific to some non-rhotic varieties of English and the teacher-provided model was a rhotic one. Besides, the majority of the course participants employed rhoticity in their speech.

As seen above, sometimes it is a question whether to teach these aspects of English connected speech or not. Many would argue that these features are something students must pick up on their own as they become more competent in English. In my point of view it can be of great help to students at lower levels of English to learn about these aspects. Even though they can hear these subtle changes to the sound of words while they are connected into phrases and sentences, it is a matter of pointing these features out so that they become consciously aware of them. "The

simple awareness of their existence can help enormously in enabling students to better understand the language they hear" (Kelly 202, p.113). First, students start to consciously notice them while listening to native speakers, which is a good starting point for incorporating them into their own speech.

2.13 Stress

According to Trask (1996) mentions that stress as: A certain type of prominence which, in some languages. is present upon certain syllables. Native speakers and phoneticians find it easy to determine which syllables bear stress, and even to distinguish varying degrees of stress, but the phonetic characterization of stress is exceedingly difficult. Stress is variously associated with greater loudness, higher pitch and greater duration.

On contrary, Catford (1988) confirms that it is unwise to talk of stress in terms of loudness, since it is a part of inherent sonority of sounds. He thought it is much more reliable to think of stress entirely in term of degrees of initiator power - the amount of energy expended in pumping air out of the lungs. For this, Catford defined stress as initiator power. He mentioned " initiator power is infinitely variable, from zero (when the initiator is inactive, and consequently, there is no airflow and no sound to an indefinite maximum-depending on the size and muscular strength of the speaker- when the initiator is operating at full power, forcing the air out of the highest possible velocity against the resistance imposed upon the airflow by phonatory and articulatory strictures "Catford (1988: 175). However, to the researcher best knowledge, it seems that both previously mentioned definitions about English stress are correct. It is apparent that each author talked about it from different angles. Task for example,

portrayed the status of the syllable when producing stress. While Catford (1988) explains the process of stress production itself, he embodies what is involved when producing stress.

It is observed that Daniel Jones (1956:245) precisely states stress combining the former two notions about stress together. He says:

> *" Stress maybe described as the degree of force with which a sound or syllable is uttered. It is essentially a subjective action. A strong force of utterance means energetic action of all the articulating organs; it is usually accompanied by a gesture with the hand or head or other parts of the body; it involves a strong "push" from chest wall and consequently strong force of exhalation; this generally gives the objective impression of loudness. Weak force of utterance involves weak action of the chest wall resulting in weak force of exhalations, and giving the objective acoustic impression of softness".*

Therefore, stress is the perceived prominence of one more syllable elements over others in a word. And, this prominence derives from several phonetic factors such as increased length, loudness, pitch movement or a combination of these aspects.

Kenworthy (2000: 51) supports the readers with an explanation for four features involved in the perception of prominence:

a) Loudness: stressed syllables are louder than unstressed ones.

b) The length of syllable has an important part to play in its prominence. For example, if the vowel in a syllable is held longer before it is "cut off" by a following consonant sound, then that syllable will be heard as prominent.

c) Pitch the vocal cords can vibrate at different speeds. If there is a change of speed on a particular syllable, either faster (resulting in a higher pitch) or slower (resulting in a lower pitch) or some fluctuation in

speed, then this syllable will stand out from the others sounds around it if they do not have any or as much variation pitch.

d) Vowel quality: a syllable will be heard as stressed if it has a vowel that differs in quality from the others around it. For example, if you repeat the syllable /Di/ several times and then suddenly you insert another vowel for example / ɑː / instead of that / ɪ / in the repeated syllable. Then, you will feel that the syllable with different vowel will be pronounced stronger than those of the same vowel.

Thus, Kenworthy (2000) confirms a fourth phonological factor vowel qualities' besides the three determined by Ball & Rahilly (1999). To sum up, four factors produce prominence: Loudness, Length, Pitch, and Quality. On the other hand, it is important to indicate that the location of the major stressed syllable can be responsible for changing the intended meaning. For example,

a) "ThOUGHT you would eat it (intended meaning: You have eaten it)".

b) "I thought you would EAT it. (intended meaning: You have not eaten it)". Ball & Rahilly (1999:105).

It is important to mention that stress will be the core of this research, and this part of chapter just serves as an introductory speaking to what comes later on.

2.13.1 Types of Stress:

This portion of the dissertation provides mainly a deep background about one   part of suprasegmental features which considers the core of this study. It introduces the reader with the topic briefly and comprehensively. Out of this section, the reader can find:

1– The nature of stress.

2–Stress and intelligibility.

3– Levels of stress.

4 – Types of stress.

5–Stress placement.

2.13.2 The Nature of Stress:

Formerly, it is mentioned that stress can be recognized from two sides: the status of syllable when producing it, and the process of its production. Roach (2002 : 93) mentions that: " we can study stress from the point of view of production and of perception; the two are obviously closed related, but not identical ".The production of stress depends on the speaker using more muscular energy than is used for unstressed syllables. That is to say that when stressed syllables are produced, the muscles that are used to expel air from the lungs are often more active, producing higher sub glottal pressure.

As for the perception of stress, it is apparent that many different sound characteristics are important in making a stresses syllable. Roach (2002 : 94) explains that from the perceptual point of view, all stress syllables have one characteristic in common, and that is prominence. Stressed syllables are recognized as stressed because they are more prominent than unstressed syllables.

Formerly when talking about stress as one of Suprasegmentals, it is discussed that prominence is made as a result of at least four different factors. These factors are: Loudness, length, pitch, and vowel quality.

According to (Roach 2002, 95), these four factors work together in Combination, although syllables may sometimes be made prominent by

means of only one or two of them. Moreover, it is shown that the most important factor that effect the prominence production is the pitch, and then length, while loudness and quality have much less effect.

Ladefoged (2006) indicates that stress is a suprasegmental feature of utterances. It applies not to individual vowels and consonants but to whole syllables. When a syllable or a word is pronounced with more force than other syllables or words, we can say that it is stressed. At the same time, the listeners can hear that stressed syllable in a word louder, stronger, and slightly higher than the rest or the unstressed one. In general, at least one syllable is stressed in a word. For longer words, there is often more than one stressed syllable. However, in our daily life, we listen to speech with more than one isolated word, and it is not natural for English native speakers to emphasize the stress on each word in an utterance. Therefore, the stresses will be given only on content words which carry the important meaning in that connected speech. On the other hand, the function words which show only the grammatical relationship in the utterance are not stressed. The learners have to notice the stress placement in sentences when listening because the stress placement is important in conveying the meaning in spoken language.

2.13.3 Stress and Intelligibility

Intelligibility is "the prime goal of pronunciation. Harmer (2001: 184). .It is two way process that emphasizes the perception of listeners rather than the production of speakers.. He adds:

> *"If intelligibility is the goal then it suggests that some pronunciation features are more important than others. Some sounds, for example, have to be right if the speaker is to get their message across (for example /n/ as in / sɪnɪŋ/ versus /ŋ/ as in /sɪŋɪŋ/ though others (for example /ð/ and/è/ may not cause a lack of intelligibility if they are confused. Stressing words and phrases correctly is vital if emphasis is be given to the important parts of*

massages and if words are to be understood correctly. Intonation - the ability to vary the pitch and tune of speech - is an important meaning carrier too".

However, Feild (2005: 402) illustrates that almost researchers believe that Suprasegmentals play a more important role than segmentals. For example, he clarifies that Anderson - Hsieh,` Johnson, and Koehler (1992) contrasted the relative contributions made to intelligibility by prosody, segmental and syllable structure. Within 11 different Languages groups, they found that the score for prosody was most significantly associated with the overall score for pronunciation. This part of discussion concerns with highlighting the role of English stress in achieving intelligibility. Stress is important in individual words, in phrases, and sentences. By shifting it around in a phrase or a sentence we can change emphasis or meaning.

Ladefoged (1982 in Kim (2003: 26) discusses :

"Stress has several different functions in English. It can be used simply to give special emphasis to a word or to contrast one word with another. Another major function of stress in English is to indicate the syntactic relationships between words or parts of words, there are many noun-verb oppositions, such as in insult, to ins'ult".

Based on what is mentioned above, it is apparent that English has word stress and sentences stress which bear as great functions as other segmental. According to the position of primary stress within a word, the part of speech of a word changes in to a quite different one, as from noun to verb, from adjective to verb, and from adjective to noun. This means another function within a same word by shifting the stress position only. For example, **Noun**

2.13.4 Major Types of Stress

English stress has two major types: word stress and sentence stress. This reveals that stress differs between words in isolation and those same words in connected speech. Kharma and Hajaj (1997) discusses that Every word used in isolation must have at least one major or (primary stress), and usually has a fixed stress pattern if it is made up of more than one syllable. However, this is not the case in connected speech. When speaking, all sounds and syllables are not uttered with equal force. These sounds and syllables are pronounced with a stronger energy or effect. This is in case they are important, and we want to give them a particular emphasis. On contrary, if a sound or syllable of less importance, it will be pronounced with less emphasis. For example: In the sentence "I want to go now", the syllables of: I, want, go, and now can each altered more strongly than the other syllable, to. In brief, stress in isolated words is called word stress. While, stress in connected speech is called sentence or phrase stress. However, the following section entitled: placement of stress: General rules discusses deeply the rules of placing those two main types.

2.13.4.1 Word Stress

Stress can be referred to as the result of a stronger puff of air – or 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. The term stress is defined 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 (Ball and Rahilly, 1999:105; Celce-Murcia, Brinton and Goodwin, 1996; Hammond, 1999; Roach, 2000).

From a perception point of view, a 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. From a production point of view, stressed syllables involve a greater amount of muscular energy where the lungs produce higher sub glottal pressure (Roach, 2000).

Word stress is the term given to the accent or emphasis placed on a specific syllable of a word and it is more or less an invariable attribute of that word if spoken in isolation. The assignment of this stress is as much a part of the pronunciation of a word as are the phonemes themselves. In a multisyllabic word, one syllable normally stands out as more prominent than the other syllables. Three levels of stress are generally used to describe word stress. Primary stress is the most prominent syllable which is also called tonic strong stress (Roach, 2000).

It refers to the heaviest emphasis given to a syllable when spoken in isolation or placed on the most important syllable of an important word in context. Secondary stress involves giving emphasis to a lesser degree to that of the primary stress but still great enough to constitute stressing. A third level of stress is called unstressed which relates to the absence of any recognizable amount of prominence. These three levels of stress can be observed in a single word such as "substitution". The syllable /ˈtu/ exhibits the greatest prominence; the syllable /-tit/ and /-tion/ are least prominent, and the first syllable /ˌsubs/ shows intermediate, or secondary, prominence. Primary stress is normally shown by a superscript mark ['] placed above the stressed syllable, while a secondary stress is shown by a

vertical line below the stressed syllable [,] as in *[,expla'nation]* or [*,cate'gorical]*.

Stress in English serves several functions. It is used in the identification of words, their grammatical function and contextual prominence. It influences the form and selection of sounds and the form of morphemes. It signals that the speaker is reacting more strongly at some point in the discourse or that some significant relationship exists between parts of a sentence, a phrase or a word. Celce-Murcia, Brinton, and Goodwin (1996: 133) point out:

> *"A characteristic feature of word stress in English is that it can occur on virtually any syllable in the word. The factors which influence stress assignment patterns relate to the historical origin 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 mono-, di and polysyllabic words, affixes, and/or the grammatical category of the word. These factors are believed to have a significant impact on word stress placement in English. Within long words, some syllables are louder and longer than others, and some syllables are stressed while others are not.

Word stress relates to the prominence given to certain words in an utterance. These focus words are stressed (made long and loud) to convey:

A. the overall rhythm of the utterance
B. the most meaningful part of the utterance. At the meaning level ,some words are given more prominence than others to foreground which meaning is important. For example, compare:

*C. Can **YOU** take the scissors? (not someone else)*

*D. Can you take the **SCISSORS**! (not the knife)*

Recent approaches to teaching pronunciation in computer-based contexts follow the communicative approach in teaching pronunciation.

Harmer (1993) states the need for making sure that students can always be understood and say what they want to say. They need to master ―good pronunciation‖, not perfect accents. That is, emphasis should be on Suprasegmentals features of pronunciation—not segmental aspects— to help learners acquire communicative competence (Seferoglu, 2005).

Bott (2005) asserts that, ―In recent years, increasing attention has been placed on providing pronunciation instruction that meets the communicative needs of non-native speakers (NNSs) of English

1.13.4.2 Activities of Word Stress

There are a number of activities teachers can do to help learners use word stress correctly. Lead perception exercises on duration of stress, loudness of stress, and pitch. These exercises will help learners recognize the difference between stressed and unstressed syllables (Field, 2005). For example, learners can be taught to recognize where stress falls in words with two or more syllables by learning the rules of parts of speech and word stress (e.g., the primary stress is on the first syllable in compound nouns such as *air*plane, *lap*scape). Learners can also use a pronunciation computer program, such as American Speech sounds (Hiser & Kopecky, 2009), to learn the duration and loudness of stress. Do exercises on recognizing and producing weak, unstressed syllables (Field, 2005). For example, one exercise helps learners identify computer voice recognition mistakes that have occurred because of mispronunciation of weak vowel

forms (e.g., ―Alaska if she wants to come with us‖ instead of ―I'll ask if she wants to come with us . Present pronunciation rules for stress (Dalton & Seidlhofer, 1994). For example, teach learners that in reflexive pronouns, the stress is always on the syllable -self (e.g., her*self*, them*selves* . Teach word stress when teaching vocabulary . For example, any time that new words are introduced, point out to learners where the major stress falls. Use analogy exercises. Words sharing similar stress patterns are easier for listeners to remember. For example, give learners a list of words with similar stress and ask them to state the rule (e.g., in compound adverbs of location, such as out*side*, down*town*, and in*doors,* the stress is on the final syllable [Hancock, 1998, p. 69]).

2.13.5 Placement of Stress

House (1998: 148) claims:

> *"In old English, many words were monosyllabic. If the word was multisyllabic, the first syllable of word was always stressed with the exception of those words beginning with a prefix. If the word began with a prefix the next syllable was automatically stressed. This straightforward and consistent pattern of syllable stress was disrupted when loan words from various languages entered into middle and Modern English".*

For this, it is extremely not easy for foreign learners to identify which syllables in the English words should be stressed. For this reason, English stress is unpredictable. Thus, Foreign Learners find it better to learn how to pronounce the word with the correctness at the same time they learn the meaning of it. However, in order to decide on stress placement, Roach (2002: 97) intended to draw non-native Speaker's attention to the following:

A. Whether the word is morphologically simple, or whether it is complex as a result either of containing one or more affixes (that is, prefixes or suffixes) or of being a compound word.

B. What the grammatical category of the word is (noun, verb, adjective,...)

C. How many syllables the word has.

D. What the phonological structure of those syllables is: Whether the syllable is strong or weak.

E. In this section, the general rules of stress placement will be discussed. These rules are in particular dealing with:

   i. Placement of stress within the word: simple and complex words.

   ii. Placement of stress within the phrase.

2.13.5.1 Stress Placement within the Word

Firstly, it is illogic to talk about placement of stress within the word without having a clear knowledge about the type of the word that we are going to stress.

In English, There are two types of words:

–Simple words.

- Complex words.

Simple words:

They are composed of no more than one grammatical unit. These words contain one, two, or three syllables.

For example:

Care: simple word that has one grammatical unit and contains one syllable.

Apply: simple word of two-syllables.

Determine: simple word of three-syllables.

But, the question here is: How to stress such words.

General Rules about Stress on Words Have One Syllable:

Roach (2002: 97) points out that single syllable words does not cause problem regarding stress placement. That is, if these words are pronounced in isolation, they are said with primary stress.

Words have Two syllables:

It is crucial to determine which of those two syllables are strong, and which of them are weak. This is because only strong syllables are stressed. Usually, strong syllables have a rhyme either has a syllable peak which is a long vowel or diphthong, or a vowel followed by a coda. On contrary, weak syllables have a syllable peak which is a short, and no coda unless the syllable peak is the schwa vowel ə or (in some circumstances) ɪ. Roach (2002:98) regarding two-syllable words as: verbs, adjectives, adverbs and prepositions, they seem to have the same rules of stressing. These rules are:

1) If the second syllable of the verb, adjective, or adverb is a strong syllable, then that second syllable is stressed.

For example:

'attract' (v) ə'trækt

'divine' (adj) dɪ'vaɪn

2) If the final syllable is weak, then the first syllable is stressed

'enter' (v) 'entə

'lovely' (adj) 'lʌvli

In case of nouns, they have different rules as follows:

If the second syllable contains a short vowel, then the stress will usually come on the first syllable. Otherwise, it will be on the second syllable.

For example:

'money' 'mʌni

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'estate' ɪ'steɪt

– **Words have three syllables:**

The General Rule Concerning Stress on the Verbs has Three-Syllables:

1. If the final syllable is strong, then it will be stressed. As:

'entertain' entə'teɪn

'resurrect' rezə'rekt

2. If the last syllable is weak, then it will be unstressed and stress will be placed on the penultimate syllable if that syllable is strong. As:

'encounter' ɪŋ'kaʊntə

'determine' dɪ'tɜːmn

3. If both the second and third syllable are weak, then the stress falls on the initial syllable:

'parody' 'pærədi

 Nouns and Adjectives (three- syllables) usually have Different Rule:

Even if the final syllable is strong, stress is assigned on the first syllable. The final syllable usually has a secondary stress. As:

'intellect' (n) 'ɪntəlekt

'opportune' (adj) ' ɒpətjuːn

2.13.5.2 Stress on Complex Words

Complex words are words that composed of two or more grammatical units.

They are of two major types:

1) Words made from a basic word form (called stem), with the addition of an affix; and

2) Compound words, which are made of two (or occasionally more) independent English words as: 'ice-cream', 'armchair'. Roach (2002:125).

– **Words made with affixes:**

Affixes are of two sorts in English: prefixes and suffixes. Prefixes are affixes that come before the stem as: prefix un + stem happy 'unhappy'. While, suffixes are affixes that come after the stem as: the stem 'happy' + the suffix "ness" happiness.

Roach (2002: 105) points that affixes have one of three possible effects on word stress:

1) The affix itself receives the primary stress as: 'personality' pɜsòn'æləti.

2) The word is stressed just as if the affix were not there as in: 'pleasant' 'pleznt.

3) The stress remains on the stem, not the affix, but is shifted to a different syllable as in:

'magnet' 'mægnət, 'magnetic' mæg'netɪk.

– **Rules Relevant to Prefixes:**

 Prefixes do not have any predictable affect on the location of word stress. Only in the case of (re), it may carry a secondary stress, if it adds the sense of 'again' to the word. But, if it does not, /r/ should not be stressed. In the first case, it is pronounced /ri:/ means again. In the second case, it is pronounced /r

ˌre'call [to call again] re'call [remember]

ˌre'cover [to cover again] re'cover [to get well].

– **There some Exclusion Relevant to Prefixes:**

1. some words with prefixes have main stress on the prefix and a secondary stress later in the word as:

subway - /'sʌbweɪ/ superpower /'suːpə ˌpaʊɳ /

2. Most words that have main stress on prefix are nouns and include:

'co-driver 'sub ˌsection 'super ˌmarket

'under ˌcurrent ' hyperspace ' interface

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3. Other words with these prefixes have main stress on a syllable after the prefix. Most words like this are adjectives as:

ˌco-eduˈcation ˌcounter inˈtelligence ˌhyper ˈactive

ˌInter ’changeable ˌ sub' conscious ˌsuper' natural

4. In many words with a prefix, there is secondary stress on the prefix and with main stress

later in the word:

ˌimpre’cise ˌdisa’gree ˌhyper’active

− **Rules Relevant to Suffixes:**

Suffixes are divided into two types: derivational and Inflectional.

− Inflectional suffixes are suffixes that do not change the grammatical status of the word. Such suffixes do not affect the stress of the words.

For example:

'table 'tables

'student 'students 'student's

− **Derivational Suffixes:**

They are suffixes that change the grammatical status of the word. They fall into two classes: (a) those which do not affect the word stress (b) those which do.

▪ **Suffixes that do not affect the word stress:**

− ent \ ənt\

− ant \ ənt\

− ance \ əns\

− age \ ɪʤ \

− ence \ əns\

− en \ ən\

− er, or \ ər\

− ess \ ɪs\, \es\

− ful \fl\

− fy \faɪ \

− hood \hʊd\

− ice \ ɪ s\

− ish \ ɪʃ \

−ism \ ɪ zəm\

− ive \ ɪv\

− less \lɪs\

− ly \lɪ \

− ment \mənt\

− ness \nɪs\

− zen \zn\

− ship \ ʃɪp\

− ter \tə \

− ure \ ə \ \jə \

There some Exclusion Relevant to Suffixes:

Exceptions with -able and al include: ad'mire - 'admirable - 'medicine - me'dicinal. Hewings(2007).

According to Hewings (2007: 30) states that nouns and adjectives ending with the suffixes .ant, -ent, - ance, or .ence, stress placement depends on the spelling of the syllable before the suffix (the pre-suffix syllable):

If the pre-suffix ends with a single vowel letter (v) or a single vowel letter plus a single

consonant letter (vc), stress usually goes on the syllable before the pre-suffix syllable if there is one:

'ignorant (vc) 'variant (v) 'fraudulent (vc)

continuance (v) 'reference (vc) 'ambience (v)/

If the pre-suffix syllable has any other spelling, then stress is usually on the pre-suffix syllable itself:

appearance (vvc) ˌcor2 €pondent (vcc) con'vergence (vcc)/

If the pre-suffix ends with the letter ; and the root word ends with the letter y in a stressed syllable, the stress is usually on the pre-suffix syllable:

com'ply - com'pliance re'ly - re'liant

Exception 2: some of words ending with the suffix .ant, -ent, -ance, or .ence have a different stress placement from the root:

ig'nore - 'ignorant re'fer . reference.

-Exception 3: some words end with .ment. have a different stress placement from the root:

'advertise . ad'vertisement.

▪ **Suffixes which do affect the word stress:**

• **Suffixes carrying primary stress themselves:**

– '_ee': 'refugee' ˌrefjʊ'dʒ:

– '_eer': 'mountaineer' ˌmaʊntɪ'nɪə

– '_ese': 'Portugese' pɔːtʃə'giːz

– '_ette': 'cigarette' ˌsɪgr'et

– '_esque': 'picturesque' pɪktʃr'esk.

   Exceptions of this rule include: 'Omelette, 'etiqette, em'ployee (although less commonly we

use ˌemploy'ee). Hewings, M. (2007).

Suffixes that influence stress in the stem:

Here, stress is not the last syllable of the stem:

– '_eous': 'advantage' əd'vantɪdʒ

– '_graphy': 'photo' 'fəʊtəʊ

– '_ial': 'proverb' 'prɒvɜːb

– '_ic': 'climate' 'klaɪmɪt

– '_ion': 'perfect' 'pɜːfɪkt

– '_ious': 'injure' ' ɪndʒə

– '_ty': 'tranquil' 'træŋkwɪl

– '_ive': 'reflex' 'riːfleks

• The Influence of suffixes on words that have main stress

In some cases, adding suffixes to the root of some words do not change their stress pattern. But it changes the pronunciation of the vowel in the main stressed syllable.

For example:

ex'treme - ex'tremity de'rive - de'rivative

\ iː \ \e\ \aɪ\ \ɪ\

'natin - 'national ex'plore - ex'ploratory

\eɪ\ \æ\ \ɔː \ \ɒ\

In some words, adding suffixes to the root of some words change not only the pronunciation of the vowel in the stressed syllable, but also the spelling of either the vowel and / or the consonants

that follow it:

\aɪd\ col'lide - col'lision \ɪʒ\

\aɪb\ de'scribe - de'scription, pre'scriptive \ɪp\

\ ɪː v\ de'ceive - de'ception, de'ceptive \ep\

\ɪː \ re'peat - re'petitive \e\

\ɑː \ ex'ample - ex'emplary \e\

\eɪ\ ex'plain - ex'planatory \æ\

\eɪ\ re'tain - re'tention \e\

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\aɪ\ ap'ply - ap'plicable \ɪ\

There are other words that do change their stress pattern when a suffix is added to the stem

(root). Also, they change their pronunciation in one or more syllable:

pro'nounce - pronunci'ation - pre'fer - 'preferable

/ə/ \aʊ\ \ə\ \ʌ\ \ɪ\ \ɜ ː \ \e\\ə\

• **Compound words:**

Compound words are words that consist of two words. Both of them can be exist independently as English words. Roach (2002: 108) explains that compounds are written indifferent ways, sometimes they are written as one word - e.g. 'armchair', sometimes with the words separated by a hyphen (-) as: fruit-cake, and sometimes with two words separated by a space as: 'desk lamp'. When stressing compound words, stress can be assigned whether on the first syllable of the first word or the first syllable of the second word. This is according to the functions they serve.

Roach(2002: 108) reports that" the most familiar type of compound is the one which combines two nouns and which normally has the stress on the first element, as in: 'typewrite' ʜtaɪpraɪtə. However, stress can fall on the first syllable of the second word in the following cases stated by Roach (2002: 109):

1. Compounds with an adjectival first element and the _ed morpheme at the end as in:

bad _'tempered

half _'timbered.

2. Compounds in which the first element is a number in some form also tend to have final stress:

three _'wheeler

second _'class

3. Compounds functioning as adverbs are usually final - stressed:

head _'first

North _ 'East

4. Compounds which function as verbs and have an adverbial first element take final stress:

down _'grade

back _'pedal

2.13.5.3 Stress Placement on the Phrase

Here, two rules regarding the placement of stress on phrases should be taken into consideration:

1) If the phrase comes in isolation and without any special emphasis, then the main accent falls on the rightmost lexical word. This can be seen in the following examples taken from Spencer (1996: 255):

a. a large black CAT.

b. almost as bulky as an elephant in SPACE suit.

2) If this phrase spoken in a 'neutral' context, the final word of it will bear the most prominence. The following example taken also from Spencer (1996: 255) explained this idea:

▪ The parcel Tom was carrying seemed almost as bulky as an elephant in a SPACE suit.

Concerning this rule, Spencer (1996) confirms that this phrase - final prominence is called the Nuclear. Additionally, he describes this rule as the most important rule governing the placement of accents in phrasal accent. It is important to mention that any word in the phrase, when spoken in 'neutral' context can be given extra emphasis. This is in order to establish a contrast or emphasis between two ideas.

For example:

a. SABIR writes French.

b. Sabir WRITES French.

c. Sabir write FRENCH.

• Compound words and phrasal verbs are given more explanation in the following section entitled the grammatical functions of stress.

2.13.5. 4 Stress Regarding the Grammatical Functions

It is known previously that the major function of stress in English is to indicate the syntactic relationships between words or part of words as: noun, verbs, adjectives, and adverbs, compound noun, modifier plus noun ... and so on. This section exhibits some of these grammatical functions of stress.

 Stress grammatical functions to distinguish between nouns, verbs and adjectives:

In English, there are several pairs of two-syllable words with identical spelling which differ from each other in stress placement. These words can either be verbs, nouns, or adjective. All consists of prefix + stress. In this case, if the word is a verb, it is stressed on the second syllable. But, if it is a noun or adjective, it is stressed on the first syllable. The following examples taken from Roach (2002: 110) illustrates the rule:

Verb Noun Adjective

'abstract' æb'strækt - 'æbstrækt

'conduct' kən'dʌkt 'kɒndʌkt -

'present' prɪ'zent 'prezòt 'prezòt

Stress role in distinguishing compound words and phrases:

Stress also sometimes helps distinguishing the compound noun from noun phrase (modifier +noun) and verb plus adverbial collocations. That

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is to say that in case of compound noun, primary stress is assigned on the first syllables of the first word because both words consider to be one word. But, in case of noun-phrase or verb-plus-adverbs, primary stress is allocated for the first syllables of both words. This is because the serve as two separate words. For examples:

(A) (B)

'black bird 'black 'bird

'black board 'black 'board

As a matter of fact, in the first column the meaning that the speaker intends to convey is one of the bird species, and a material that school use to write on respectively. While in the second, it is meant: a bird that is colored with black, and a board that is colored with black respectively.

The following section discusses in details the following:

Stress in compound nouns.

    Stress in compound adjectives and abbreviations.

    Stress in longer compound nouns.

    One stress phrasal verbs.

    Two-stress phrasal verbs.

2.13.5.5 Stress Concerning with Compound Nouns

A compound noun is a fixed expression which is made up of more than one word and which has the function of a noun. Some is written as two words, some with a hyphen, and some as one word. Hewings (2007: 38).

For example:

'crash ˌbarrier 'baby ˌsitter

In fact, some compound nouns have main stress on the first part and others have main stress on the second.

Compound nouns have four different types that all have main stress on the first part these types are:

1. **Noun + noun:** 'arms race - 'news ˌpaper - 'airport.

2. **Noun + ing form:** 'bird - ˌwatching - 'house - ˌhunting.

3. **Ing form + noun:** 'dressing ˌgown - 'stitting ˌroom.

4. **Verb + noun :** 'search ˌparty - con'trol ˌtower.

Most adjective + noun compound nouns have main stress on the second part and secondary stress on the first part:

ˌsocial se'curity - ˌhot po'tato - ˌabsolute 'zero

Actually, this type of compound nouns includes:

Adjective + ing form: ˌcentral 'heating - ˌglobal 'warming

Past participle + noun: ˌsplit in'finitive - inˌverted 'commas - ˌlost 'property

Stress in compound adjectives and in abbreviations:

2.13.5.6 Stress on Compound Adjective

A compound adjective is a fixed expression which is made up of more than one word and which has the function of an adjective. Most compound adjectives are written with a hyphen, but a few are written as one word. Hewing, M. (2007: 40).

For example:

Skin-deep long-term threadbare

Types of compound adjective that usually have main stress on the first part:

1. Compound adjectives usually written as one word

'airtight 'carefree 'pasise 'worthy.

2. Noun + ing form:

'hair-ˌrassing 'fee-ˌpaying 'time-consuming.

3. Noun + past participle:

'poverty-ˌstricken 'pear-shaped 'health-reˌlated

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Types of compound adjective usually have main stress on the second part:

a) Noun + adjective:

ˌfat - 'free ˌsky - 'high ˌsnow - 'white.

b) Adjective + noun:

ˌLong + 'term ˌfull . 'length ˌhigh 'profile

c) Adverb or adjective + past participle:

ˌFully - 'grown ˌlong - 'sighted ˌwell - 'dressed

d) Adverb or adjective + ing form:

ˌEasy - 'going ˌhard - 'working ˌwell - 'meaning

e) Self , as the first part:

ˌSelf - 'confident ˌself - 'inflicted ˌself - 'governing

– Stress in abbreviations:

Two- three . and four . letter abbreviations said as individual letters often have main stress on the last letter and secondary stress on the first:

the ˌU'K the ˌBB'C ˌDN'A

2.13.5.7 Stress on Polysyllabic Compound Nouns

Some compounds are made up of three parts. They may have two words or three words, and sometimes the first and second words are hyphenated: (Hewing, M. (2007: 42)).

-Longer compound nouns are of three types:

1. Three - part compounds usually have main stress on the third part as:

ˌBall room 'dancing ˌdesktop' publishing

In this type of compound, the first two parts serves as an adjective to describe the third part as:

ˌState - owned 'industry (the industry is state - owned).

ˌClosed - circuit 'television (the television is closed circuit).

2. Three part compounds that have secondary stress on the first part and main stress on the second as:

ˌSchool 'learning age

ˌLeft - 'luggage office

ˌParent -'teacher association

3. Three part compounds that have main stress on the first part and secondary stress on the third as:

'No, man's land

'Real estate ˌagent

'Pick, up ˌtruck

2.13.5.8 Stress Regarding Phrasal Verbs

Phrasal verbs are phases that composed of a verb and a particle. This section discusses two cases of stress in phrasal verbs:

a) One - stress phrasal verbs:

When two-word phrasal verbs have main stress on the verb and no stress on the particle, these phrasals are called one- stress phrasal verbs.

For example:

'dream of I wouldn't **DREAM** of asking you to do it

'hear from we never **HEARD** from them again.

Here, it should be noted that in most one - stress phrasal verbs the particle is a preposition.

In fact, particle usually is unstressed in conversations. However, it can be made prominent if we went to highlight it for emphasis or contrast.

For example,

'Smell of **as in** the room **SMELT of** roses.

It certainly smells odd, but I'm not sure what it smells **OF**.

b) Two-stress phrasal verbs:

When two-word phrasal verbs have main stress on the particle and secondary stress on the verb, these are two-stress phrasal verbs. (Hewing (2007)).

It's important to the particle in most two-stress phrasal verbs is an adverb.

c) Rules related to two-stress phrasal verbs:

1. When two-stress phrasal verbs are used in context, both the verb and the particle are usually made prominent.

For Example:

ˌHang around I was freezing cold, so I didn't want to HANG a ROUND.

ˌCall 'back I'm busy at the moment can I CALL you BACK.

However, the particle is often non-prominent in the following cases:

1. When there is a noun (the object) after the phrasal verb but still in the same clause as:

Shall I WRITE down the NUMber for you?

2. When we want to put special emphasis on the verb as in the following dialogue:

A: I can't remember Trudi's address.

B: Why didn't you WRITE it DOWN?

A: IWROTE it down.

3. When there is a prominent noun (the object) between the verb and the particle as :

Can you CALL the DOCtor back? He called about your test result.

However, according to the meaning that intended to be convoyed, a few phrasal verbs can be either one-stress or two-stress phrasal verbs.

For Example:

ˌLive on He had to LIVE on less than 810 a day (= the amount of money he had to buy things).

ˌLive 'on the tradition LIVES ON in many parts of the country. (=continues).

2. Three-word phrasal verbs also have two stresses, with secondary stress on the first word (the verb), and main stress on the second word (the first particle).

For Example:

ˌlook 'up to I'd always LOOKED UP to her.

ˌgo 'through with when the time came to leave I couldn't GO THROUGH with it.

6 A brief contrastive analysis between Arabic and English Stress systems

Stress is there in both languages: Arabic and English. But, it is apparent that the nature of stress in Arabic is totally different from that in English. Moreover, it is believed that the importance of stress in Arabic is not as its importance in English. In English, stress plays a crucial role in determining not only the utterances. meaning but also their grammatical class. While in Arabic, stress has nothing to do with changing meaning or grammar. It is only used to emphasize the meaning of the stressed utterance. In short, English stress is phonemic while Arabic stress is non phonemic. English and Arabic stress differ in their rules. For instance, Arabic stress rules refer to the edge of the word (either the beginning or the end). While in English, Marlett (2001) believes that some stress rules refer to initial syllables, others to final and others to penultimate (next to last) among other

2.14 Contrastive Analysis between Arabic and English Stress

The analysis focuses on the following:

1. Stress Rules predictability and its effect on stress placement.

2. Similarities and differences in English and Arabic sentence stress.

3. The difference in the rhythmic pattern in Arabic and English.

2.14.1 Predictability of Stress Rules and its Influence on Stress

It is assumed that languages with predictable rules of stress influence negatively on the perception and production of other languages stress. This can easily be concluded through the found generalization that made based on the mother-tongue rules.

Regarding to this idea, Hajjaj and Kharma (1997:24) stated: .When a person speaks a foreign language, he tends to place the stress according to the rules of his own language. This is what we mean we say that somebody speaks with a .foreign or heavy accent...

Here, Arabic is one of those languages that have clear and predictable rules for stress while English have not. Hajjaj and Kharma (1997: 24) illustrated: it used to be thought that stress patterns in English are unpredictable, and that there are no rules that can be learnt and applied to learners. Now such rules have been discovered, but many of them have proved to be more complicated to be useful for pedagogical purposes..

However, when Arab learners tend to learn English stress, Kenworthy (1987: 125) illustrates that they tend to transfer three of their mother-tongue habits to English:

1. Learners put stress on the final syllable of English words ending in a vowel followed by two consonants, as in .difficult., .comfort. and .expert..

2. A tendency in Learners to place stress on endings such as .-est., .-ism., .less. and .-ness., This is because these endings formulated from a vowel and two successor consonants

3. Learners put stress on the last syllable at a word ending a diphthong or a long vowel plus a single consonants, as in .irritate., .gratitude., and .institute.. Thus, it is shown that because of the predictable nature of stress on Arabic, Arabs tend to apply the rules of their language when learning the stress of English. According to Altmann (2006:135) states that he conducted to distinguish the perception and production of stress

between language with predictable and non-predictable stress, it is found that .Arabic speakers experienced greater difficulty in the perception of stress than speakers of the other two languages (French and Turkish) with predictable stress, and of course, the speakers of other languages as well.. Actually, Arabs were the worst among those asked to produce the English stress in the experiment.

2.16 Arabic Word Stress

It is commonly accepted that Arabic has syllable-timed rhythm which means that the time taken to produce each syllable whether stressed or unstressed is the same. English, on the other hand, has stress-timed rhythm where stressed syllables occur at regular intervals with a random number of syllables occurring between stresses. So the rhythmic pattern of an English sentence is dependent on the number of stressed syllables.

 Kharma and Hajjaj (1989) point out that Arabs fail to adopt the stress-timed rhythm of English. This is often observed in Arab learners stressing all words in a sentence irrespective of their context, nature and importance. This also includes stressing function words which are invariably unstressed in spoken English. Arabic word stress has been the subject of various studies. The system, degree, placement types, and location of stress in Arabic differ completely from English stress. Arab stress location patterns also differ considerably in colloquial and modern standard Arabic. Arabic lexical stress is more predictable than English stress and has stress placement rules that operate at the word level (de Jong and Zawaydeh, 1999).

Word stress is not phonemically contrastive in standard Arabic, but it does bear a strong relationship to vowel length and syllable shape, and the correct word stress aids intelligibility. The placement of stress is

determined by the number and length of the syllables in the word. The general pattern of stress placement is that the last heavy syllable, which falls on the long vowel, receives the primary stress. If the last syllable is long, then the last syllable is stressed, e.g. [ki'taab] 'book', the stress is on /'taab/ which is the last syllable. If the penultimate syllable of a word is long and the last is short, then the second-to-last syllable is stressed [a'boohu] 'his father'. When there are no heavy syllables in a word, then stress falls in some other predictable place. Both Palestinian and Ammani-Jordanian Arabic dialects have a stress pattern where it usually falls on either the penultimate or the antepenultimate syllable (de Jong and Zawaydeh, 1999).

The stress falls on the penultimate syllable if it is heavy; otherwise, it will be placed on the antepenultimate syllable. However, the falls on the final syllable if it contains a long vowel or have a consonant cluster. Similar stress placement patterns in Cairene and San'ani Arabic dialects are also discussed in Watson (2002). In Arabic, every syllable, regardless of whether it is short or long, should be clearly and distinctly pronounced. Syllables do not just disappear or get reduced when they are not stressed.

2.17 Learning English Word Stress by Arabic EFL Learners

While there are some similarities between Arabic and English stress systems, noticeable differences exist between them which create problems for Arabic students in producing and comprehending English stress patterns. A learner's inability to recognize stress location would lead to problems in communication. It has been shown that because of the predictable nature of stress in Arabic, Arabic speakers tend to apply the rules of their mother tongue when learning stress in English. Arabic speakers have problems grasping the unpredictable nature of English

word stress since English is a stress-timed language (Kharma and Hajjaj, 1989).

In a study by Altmann (2006:135), it is found that Arabic speakers experienced greater difficulty in the perception of English stress than speakers of the other two languages with predictable stress in their L1 (i.e., French, Turkish). Correspondingly, Arabic speakers were the worst among those asked to produce the English stress in this study. English has phonological vowel reduction; most unstressed vowels tend to be reduced to the central vowel, the schwa /ə/. Heavy syllables will be more stressed than light syllables. Generally speaking, the words that usually receive the stress are: nouns, adjectives, adverbs, and verbs. These words are not usually shortened in the sentence. Other connecting words such as articles, prepositions, conjunctions and helping verbs are normally unstressed. Unlike English, each single word in Arabic can be stressed. Vowel length is phonemic in Arabic, and therefore, there is no vowel reduction and no weak forms in Arabic such that all vowels are maintained. Thus, there is a tendency among Arab learners to pronounce all short and long vowels. This tends to create speaking problems for Arab learners in that they do not reduce vowels in unstressed syllables, thereby producing language in an unnatural manner.

Kenworthy (1987:125) points out that Arab learners tend to transfer three of their mother-tongue speaking habits into English: 1) Learners put stress on the final syllable of English words ending in a vowel followed by two consonants, as in "difficult", "comfort" and "expert", 2) They tend to place stress on endings such as '-est', 'ism', -less', and '-ness'. This is because these endings are formulated from a vowel and two successor consonants, and 3) Learners put stress on the last syllable of a word

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ending with a diphthong or a long vowel plus a single consonant as in "irritate", "gratitude

2.18 Teaching Word Stress

No doubt lexical stress is specific to individual words. So there lies a responsibility for presenting stress patterns while teaching vocabulary and the oral practice of new words should most definitely include word stress practice. Late learners of English may rely more heavily on word-by-word learning of stress patterns particularly if they are from tone language backgrounds. This word-by-word learning may occur while learning new vocabulary. It is important to be reminded that word stress learning cannot be taught in isolation. It is clearly linked to other aspects of pronunciation, vocabulary learning and grammar (Wayland, Guion, Landfair & Li, 2006).

 Although English word stress has been demonstrated to have certain regularity it is still more complex than in other modern languages, a fact that discourages many teachers and textbook writers from teaching stress prediction techniques (Hubicka 1981; Baptista, 1989).

In spite of these observations were made a couple of decades ago, it is unfortunate that pronunciation textbooks still offer limited resources in terms of aspects of word stress such as depth, accuracy, variety or real functional communication. Marianne Celce-Murcia's much-cited work encourages a communicative approach to teaching pronunciation, but she has herself stated that teaching word stress in her communicative way is more difficult than teaching phonemic aspects of pronunciation (Celce-Murcia, 1987). However, in a more recent co-authored study she suggests methods for presenting word stress to students through listening

discrimination activities followed by guided practice and then communicative practice using games (Celce-Murcia, Brinton & Goodwin, 1996).

The difficult something is to learn through simple association, either due to it being too distant, rare, unreliable or too hard to notice then the more important 'explicit' learning is and adults should be exposed to and taught formal rules to draw on their explicit learning skills (De Keyser, 2003). In particular, as teachers we need to make explicit the features of English (Taylor, 1981). As this is the case, then due to the variance and less predictive patterns of English word stress, it has been recommended to teach word stress rules (Kenworthy, 1987; Dalton & Seidlhofer, 1994).

Three main rules have been discussed in the literature. The first of the three is phonological similarity. This is when students use known stress patterns from other similar words and transfer them to new words. For example, a student may know the word stress pattern of 'humanity' and apply its word stress structure to a new vocabulary item such as 'absurdity'. It is particularly of note that late learners of English rely most on the stress patterns of phonologically-similar known words (Guion, 2006). The placement of certain suffixes in English can alter a stress pattern. For example, adding '-ian' to a root word changes the stress (consider LIbrary and LibrARian), while other suffixes do not have this effect(evident in 'FRIEND' and 'FRIENDship' where both place stress on the same syllable .It is suggested that this feature of stress patterns in English be explicitly taught and practised in the classroom (Ghorbany, 2011).

 The explicit teaching of suffix rules may assist in accessing the students' ability to learn stress through the use of phonological similarity. Additionally, analogy exercises, where students group words with similar

stress patterns or finds the odd one out (Field, 2005), again rely on phonological similarity. It has been shown how early and late bilinguals both demonstrated ability for analogical extension and learning simple patterns (Guion,2004).

The second rule relates to word class. Just over 80% of two syllable nouns and adjectives place stress on the first syllable, e.g., 'KITCHen' and 'EXTra' (Hammond, 1999). However, verb stress works in the opposite manner (consider 'achIEVE' and 'agREE'). The word class rules appear in many English teaching textbooks but there is little evidence for the effectiveness or transfer of this rule. An important third rule concerns the syllabic structure of word. English stress tends to fall on syllables with longer vowels or when the word ends in two or more consonants. However, it may be that consonant clusters are less important than vowel length and there are many exceptions to this rule. Early bilinguals can pick up more complex pattern learning such as syllabic structure rules but still show some slight deficits in this area (Guion,2004).

Whatever rule is decided upon, they have one thing in common; all of these explanations take time and need to be broken down to teachable concepts, if they can be at all. Mastering a linguistic rule may happen but internalizing the stress patterns for specific words is not the same (Field, 2005).

The use of visual prompts to support students' learning processes in language acquisition is well documented for both segmental and suprasegmental aspects of pronunciation. Providing clear visual cues to students to help emphasize word stress, such as underlining, using bold or

capitals, circling or using ticks may be routine. Clapping or tapping the relevant word stress by the teacher or in student-led small groups has also been described. Other visual cues include vowel stretching. This is when a piece of elastic is stretched by the teacher while modeling to emphasize the stressed syllable which additionally adds a kinesthetic dimension to the learning process (Gilbert, 1978; Lin, Fan & Chen, 1995).

Second language learners struggle with hearing intonation well as they focus on trying to understand different sounds, word meaning and grammar. Developing students' awareness of intonation patterns in English can be augmented by providing auditory cues. Gilbert describes the kazoo as the best tool a pronunciation teacher can have. By humming the word shape into the kazoo, students can hear the intonation pattern of the syllables without worrying about the sounds (Gilbert,1978).

 Another similar trick to this could be using nonsense words so students focus on acoustic patterns rather than semantics (Mekhoukh, 2010). Another study reported that during a four week project involving six students in an intense program of learning both sentence and word stress using rap music that students were perceived as having improved oral performance (Fischler, 2005). The course was designed to include adequate and appropriate auditory discrimination and controlled, guided and communicative practice. While this innovative approach is to be applauded, it is unclear whether using rap music is any more beneficial than using other word stress teaching methods in an intensive program. Certainly it may appear to be motivational to certain student groups and we are fully aware that motivation is critical to language acquisition (Smit & Dalton 2000; Smit 2002; De Graff & Housen, 2009).

Technological advances have widened computer-assisted language learning practices but technology is only as good as the practitioner or user. It has been shown that the use of computerized material for pronunciation learning is a promising area but should incorporate empirical findings to provide worthwhile training for learners. Levis further notes that teachers need to be more aware of computerized assisted language learning (CALL) and they need to know what exercises are effective using CALL, understand its strengths and limitations and overall be familiar with available CALL tools and associated terminologies. The evidence for CALL and word stress acquisition is very limited (Derwing & Munro, 2005; Levis, 2007).

One researcher, using a program called Wave surfer which allows acoustic visualization of sound, found that students were enthusiastic and were able to make long-term acquisition of particularly difficult words including polysyllabic words. However, it was also found that this practice was not generalizable to a large amount of vocabulary and was time-consuming (Hincks, 2002).

Eventually, when targeting phonemic accuracy, we should aim to use words where the target phoneme is contained in a stressed syllable. For example, if refining a student's pronunciation of 'l', it is better to practice with words like 'allow' or 'aloud' than 'follow' or 'bellow' so that students do not pause before the stressed syllable. It is also common for language learners to emphasize many words in a sentence; however, this confuses the English listener. In our aim to increase intelligibility through clearer sounds, we should ensure that students are not stressing every sound they make but are maintaining naturalness associated with correct word stress usage (Gilbert, 1978).

To sum up, teaching word stress can take place as part of any lesson if the teachers empowered with the knowledge of word stress and the enthusiasm or ability to teach it. Less competent students should be well-trained in word stress. Whereas, more proficient students can better cope with learning rules associated with word stress. Moreover, teaching new vocabularies and word stress are closely interrelated. So, some techniques have summarized date back over thirty years, including those who are using CALL, it's limited.

2.19 Part Two: Previous Studies

According to Sawaengmongkon (2012) handled Teaching Suprasegmental Features of Spoken English through Films to Develop Listening Achievement of Learners. The research was aimed to investigate the efficiency of the lessons designed for teaching Suprasegmentals through films, to compare learners' achievement in listening before and after the treatment, to find out the correlation between learners' competence in Suprasegmentals and listening achievement, and to evaluate learners' attitudes towards teaching Suprasegmentals of spoken English through films. The subjects were 34 first-year students from various faculties of Rajamangala University of Technology Krungthep, involved by purposive sampling. Teaching experiment was conducted for 5 weeks in April-May 2012. The research instruments were score profiles of the tests taken at the end of each lesson, a pre and post listening test, a test on Suprasegmentals, and questionnaire. From the findings, the efficiency value, E1/E2 of the designed lessons was 72.98/70.68, lower than the estimated value 80/80. Furthermore, there was no correlation at the level of significance 0.05

between the test scores for Suprasegmentals and for listening at the end of the project.

This paper is similar to the present study in a number of aspects such as educational context and sample of the study. However, the present study differs from this paper it has a more focused approach since it is limited to only stress whereas the previous study dealt also with teaching suprasegmental features. The previous study has adopted experimental and descriptive methods whereas the present study has adopted descriptive analytical method.

Accordingly, Abdul –Aziz (2010) tackled Difficulties Faced by Iraqi EFL College Students in the Area of English Syllables. In most languages, in general, and in English, in particular, we do not speak each sound separately from the other sound; rather, we combine sounds into groups or syllables to form words which in turn form utterances. This research tries to shed the light on the notion of syllable and tries to infer the main difficulties that may face Iraqi students in this specific area. This research aims at investigating Iraqi EFL learner's performance in the area of English syllables at recognition and production levels, so as to know the difficulties faced by them in this area, and investigating Iraqi instructor's opinions in the same area in order to limit the difficulties faced by Iraqi students. To achieve the aims of the study, a hypothesis has been posed as follows: "Iraqi EFL college learners face difficulties in the area of English syllables". To verify a hypothesis, a sample of fifty students (test sample) are chosen randomly from the third year, department of English, University of Diyala. Another sample is consist of twenty instructor (questionnaire sample) from the college of education and the college of basic education, University of Diyala. Two instruments are used in this

research, the first one is the test and the second is the scaled questionnaire.

This paper is similar to the present study in a number of aspects such as methodology, instruments and population of the study. However, the present study differs from this paper it has a more focused approach since it is limited to only stress whereas the previous study dealt also with the area English Syllables.

Relatedly, Ahmadi (2011) handled why is Pronunciation So Difficult to Learn? In many English language classrooms, teaching pronunciation is granted the least attention. When ESL teachers defend the poor pronunciation skills of their students, their arguments could either be described as a cop-out with respect to their inability to teach their students proper pronunciation or they could be regarded as taking a stand against linguistic influence. If we learn a second language in childhood, we learn to speak it fluently and without a 'foreign accent'; if we learn in adulthood, it is very unlikely that we will attain a native accent. In this study, the researchers first review misconceptions about pronunciation, factors affecting the learning of pronunciation. Then, the needs of learners and suggestions for teaching pronunciation will be reviewed. Pronunciation has a positive effect on learning a second language and learners can gain the skills they need for effective communication in English.

 This paper is similar to the present study in a number of aspects such as educational context, methodology, instruments, findings and population of the study. However, the present study differs from this paper it has a more focused approach since it is limited to only stress whereas the previous study dealt also with pronunciation.

Relevantly, Likitrattanaporn (2014) tackled Teaching Phonological Accuracy and Communicative Fluency at Thai Secondary Schools. The purpose of this investigation was to determine the opinions of secondary level Thai teachers who teach English. Their perspectives were collected and compared concerning phonological accuracy practice, communicative fluency activities, authentic teaching techniques and determining appropriate ways to solve the problems of phonological teaching and communicative English language teaching in Thailand. The subjects of the study were 96 teachers from 8 secondary schools in Bangkok, Thailand. The research instrument included a questionnaire with thirty items measured on a five point rating scale plus four open-ended questions seeking descriptive data. The data were statistically compiled according to arithmetic mean and percentage. The results showed that the teachers have very highly positive attitudes towards teaching phonological accuracy and highly positive attitudes towards communicative fluency activities. However, teachers' attitudes do not relate to the pedagogy conducted in their classrooms as highly as expected.

This paper is similar to the present study in a number of aspects such as educational context and instruments and population of the study. However, the present study differs from this paper it has a more focused approach since it is limited to only stress whereas the previous study dealt also with teaching phonological accuracy and communicative fluency. Both of them have adopted descriptive analytical method.

Kadiri (2015) investigated the paper entitled: Contrastive Analysis of Some Suprasegmentals features of I gala and English Phonology. This paper is an attempt to do a contrastive study of some aspects of the supra-segmental features of Igala and English phonology. It provides an

opportunity to analyze the errors in the speech of Igala second language (L2) speakers of English. The framework used in the analysis is the autosegmental theory. Autosegmental theory lays claim to non-linear representation of sounds. Autosegmental phonology is adopted for its theoretical elegance and empirical relevance. A tiered approach to the study gives one an opportunity to analyse the speech errors in terms that are easy to appreciate; especially since the processes are characterized in such a way as to reflect the realities of phonological structure and organization. Interviews and participant observation were used to obtain data. These were later supplemented by listening comprehension tests. This paper is similar to the present study in a number of aspects such as a linguistic context, methodology and population of the study. However, the present study differs from this paper it has a more focused approach since it is limited to only stress whereas the previous study dealt also with contrastive analysis of some suprasegmentals features of I gala and English Phonology.

Kurt and Medlin (2014) consider the contradictory research on explicit teaching of suprasegmentals; the present study aims to investigate the effects of explicit instruction of L2 English learners' perception of prosodically ambiguous intonation patterns, as well as the possible effects of reported musical familiarity on intonation acquisition. A control group and a treatment group of low-intermediate international English students were asked to judge the meaning of three types of sentence-final intonation patterns: declarative sentences, tag questions, and wh-questions. Overall, the group that received explicit instruction during the four-week treatment phase scored higher on the perception post-test than those who received no treatment, although the improvement was not found to be statistically significant. A small number of learners with

self-reported musical familiarity in the experimental group did not significantly improve in their perception of intonation patterns compared to their peers. For a second language learner, intonation, stress, feet, and syllable structure could be considered crucial components in phonological acquisition. Among these suprasegemental features, intonation is an under researched aspect of L2 phonology. This scarcity of studies in the acquisition of L2 intonation (Ritchie & Bhatia, 2009, p. 255) can be attributed to the lack of agreement on a model for L1 acquisition of intonation in the generative literature (see Ladd 1996 for a discussion, cited in Ritchie and Bhatia, 2009). This challenge is also evident by the lack of attention to suprasegmentals in Flege's Speech Learning Model (Flege,1995) and Best's Perceptual Assimilation Model (Best, 1995).

This paper is similar to the present study in a number of aspects such as educational context, instruments, findings and population of the study. However, the present study differs from this paper it has a more focused approach since it is limited to only stress whereas the previous study dealt with explicit teaching of suprasegmentals

According to Said (2014) explores the difficulties that face IUG students in learning intonation in written and spoken contexts. Based on literature review, related studies thought to be important for the present study have been reviewed. The researcher applied two valid and reliable tools: a diagnostic test and an observation cards. The diagnostic test was basically designed to measure intonation learning difficulties in written contexts, while the observation cards was developed to measure intonation learning difficulties in spoken contexts.

Two samples were chosen randomly to conduct at the current study. They consisted of 99 male and female junior students: Forty four (44) subjects were exposed to the diagnostic test. While fifty five (55) subjects were

chosen for the observation cards. They previously attended the course "Phonetics and Phonology". The researcher adopted the descriptive analytic method. The data were tested by Frequencies and Percentages, One sample t-test, Two Independent Sample t-t-tests and Cooper Coefficient method. Having analyzed the data, the following results were obtained:

On applying a diagnostic written test, it is found that English junior students at IUG face areas of difficulties when learning intonation in the written contexts. During observation, it is noticed that English junior students at IUG face more serious difficulties when learning intonation in spoken contexts. In addition, it was found that students' awareness regarding the intonational functions in written contexts was better than their awareness in spoken contexts, and their awareness regarding the simple intonation pattern (Falling, Rising) was higher than that of the complex intonation pattern, (Falling-Rising, Rising-Falling). Their awareness regarding the intonational attitudal function was weak.

This study similar to the present study in a number of aspects such as educational context and instruments and population of the study. However, the present study differs from this study it has a more focused approach since it is limited to only stress whereas the previous study dealt also with intonation. Both of them have adopted descriptive analytical method.

2.20 Summary

This chapter has been concerned with the presentation of theoretical framework of the research, reporting the relevant literature review on suprasegmental phonology with special reference to stress. It has focuses on the definitions of suprasegmental features and its types, and the definition of stress and its classifications.

CHAPTER THREE

RESEARCH METHODOLOGY

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This chapter has discussed the following methods of the study, description of sample and the instruments, validity, reliability and data analysis procedures. The study has adopted the descriptive analytical method. Two tools were used as data collecting methods in this study (questionnaire for teachers, oral diagnostic test for students).

3.1 Research Tools

The researcher has adopted two tools to collect the information of this study. The first tool includes the questionnaire which was given to 105 teachers of English language at some Sudanese Universities whom were selected randomly. The second tool was oral diagnostic test which was given to fourth year students of English at Sudan University of Science and Technology, College of Education.

3.1.1 The First Tool (Questionnaire)

The first tool is a questionnaire which was distributed to the teachers from both sexes. This questionnaire has included a covering page which introduces the topic of research identifies the researcher. It uses likert 5-point scale (strongly agree, agree, neutral, disagree and strongly disagree). A questionnaire was designed based on the questions of the study. The questions of the study were turned to statements that provide suggested answers from the teachers at university level were supposed to select the option which correspond to their believes.

3.1.2 The Second Tool (Oral Diagnostic Test)

The second tool was an oral diagnostic test which contained four questions. The questions correspond directly to the questions of the study. The diagnostic test was distributed to fourth year students of English at Sudan University of Science and technology, College of Education. The answers of the oral diagnostic test were treated statistically for the purpose of reading real results. The aim of oral diagnostic test is to diagnose the area of difficulties that encounter fourth year students in learning English stress in spoken form. The researcher himself and his colleagues conducted and collected the responses by using smart phone-recorder.

3.2: Population of the First Tool (Questionnaire)

The populations for this study are university staff members at some Sudanese universities. The researcher used the simple random sampling to select the population of the study. The following table and figure show the number of distributed questionnaire, the number of received questionnaire with full-required information and percentages.

3.3 The Sample of the First Tool (Questionnaire)

The study sample respondents differ according to the following characteristics:

- The respondents according to gender (Male, Female).
- The respondents according to faculties of graduation (Education, Arts, Other).
- The respondents according to Academic qualifications (Bachelor, Master, Ph.D).
- The respondents according to their experience years (1-5 years, 6-10 years, 11-15 years, 16 years above).
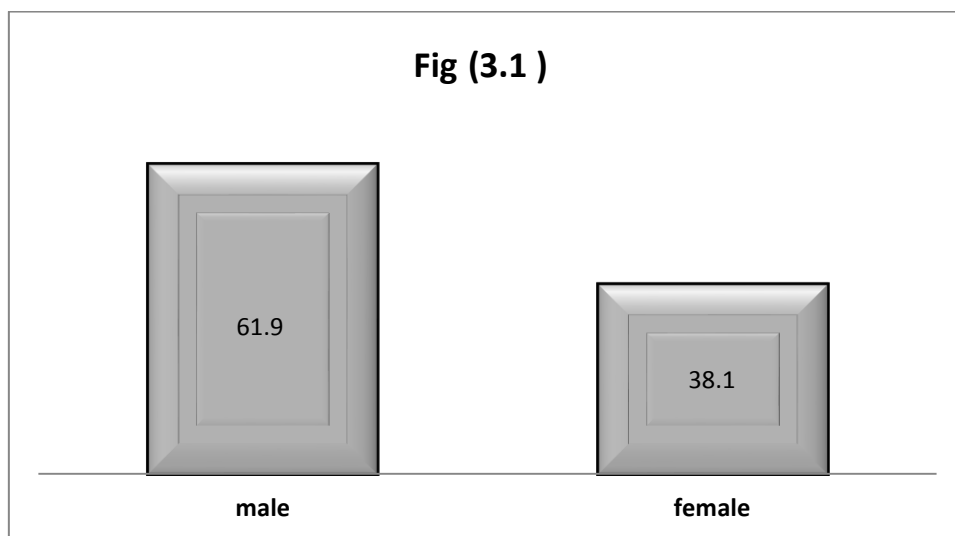
The following is a detailed description for study sample individuals according to the above characteristics:

- The respondents were either from faculties of Education or Arts.

The gender:

Table No.(3.1) The Frequency Distribution for the Study Respondents According to gender:

| Gender	Frequency	Percent
Male	65	61.9
Female	40	38.1
Total	105	100.0

Fig (3.1)

From above table No.(3.1) and figure No.(3.1), it is shown that most of the study's respondents are males, the number of those was (65) participants with percentage (61.9.2%). The female respondents number was (40) participants with (38.1%). It is clear that the number of male questionnaire respondents is higher than the number of female. In my view of view this could be attributed to willingness of male teacher to teach phonetics and phonology courses.

2-The Faculty of Graduation:

Table No.(3-2) The Frequency Distribution for the Study
Respondents According to Faculty of Graduation

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
education	16	15.2	15.2	15.2
languages	50	47.6	47.6	62.9
Arts	39	37.2	37. 2	100.0
Total	105	100.0	100.0	

Fig (3.2)

education 15.2   languages' 47.6   arts 37.2
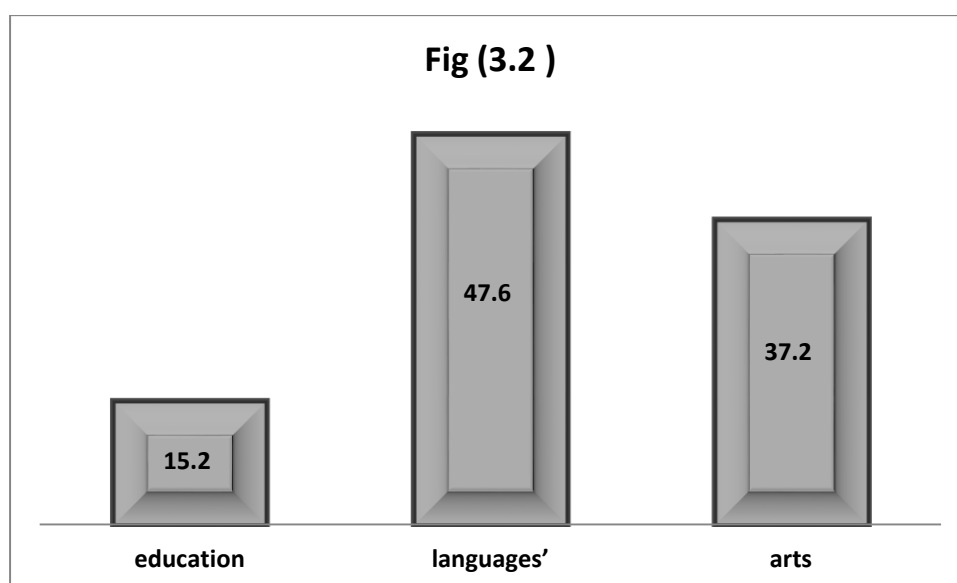
From the above table No. (3.2) and figure No.(3.2), it is shown that most
of the study respondents have graduated from faculty of languages . The
number of those was (50) participants with percentage (47.6%). The
respondents who have graduated from faculties Arts were (16) persons
with (37.2%). In addition, there are (16) participants with percentage
(15.2%) who have graduated from faculty of education. universities. It is
clear that the number of ESP teachers who graduated from college of
languages is greater than the number of teachers from other colleges.

3-The Academic Qualifications:

Table No.(3-3)

The Frequency Distribution for the Study Respondents According to the Academic Qualifications:

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
PH.D	12	11.4	11.4	11.4
MA	68	64.8	64.8	76.2
high DIP	10	9.5	9.5	85.7
BA	15	14.3	14.3	100.0
Total	105	100.0	100.0	

Fig (3.3)
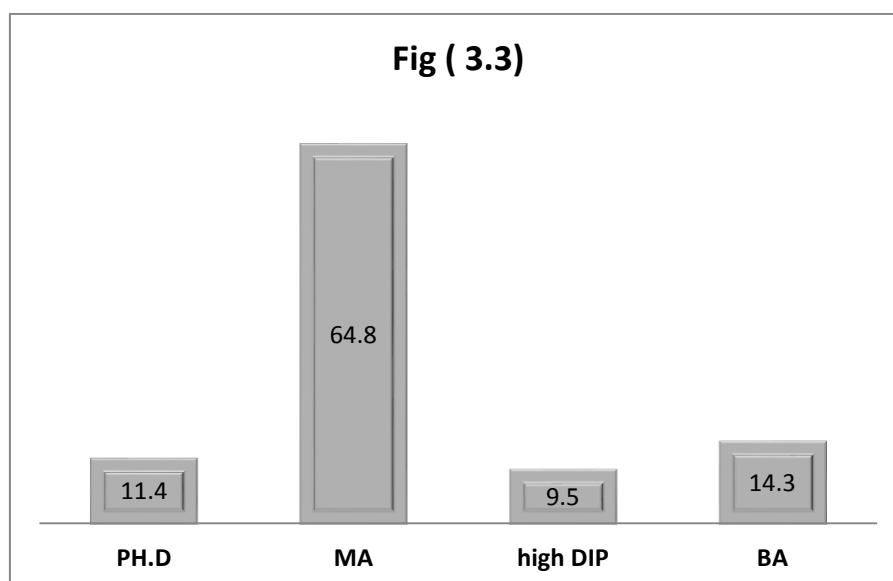
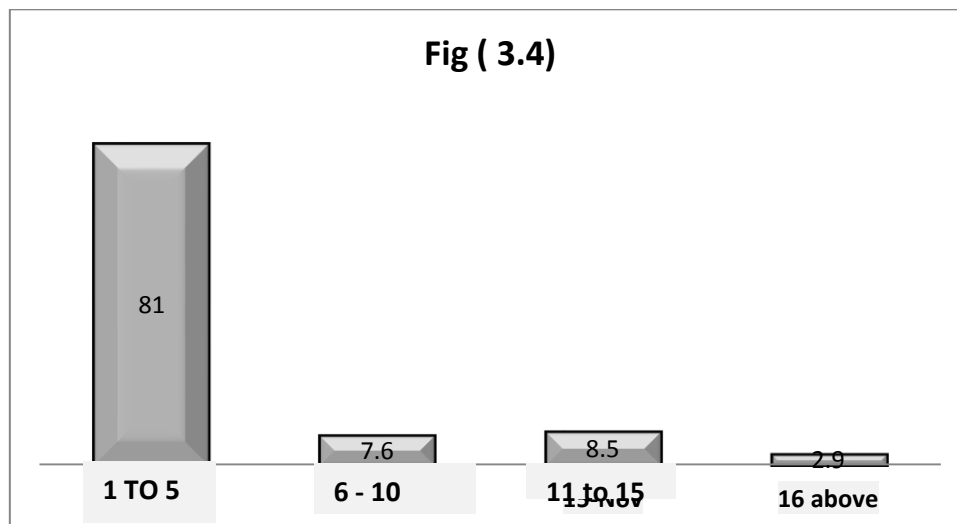From the above table No. (3.3) and figure No. (3.3), it is shown that most of the study respondents have Master as qualification, the number of those was (68) participants with percentage (64.8%). The respondents who have bachelor as qualification were (15) participants with (14.3%). In addition, there are (12) participants with percentage (11.4%) have Ph.D. degrees. It is clear that the number of those who obtain master

qualification is the biggest. This is due to the fact that some Sudanese universities do not allow bachelor degree teachers to participate in the teaching process, on the other hand those who have PhD degree always migrate to gulf countries for better life conditions.

4- The Experience:

Table No.(3-4) The Frequency Distribution for the Study Respondents According to Experience:

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
1 - 5	85	81.0	81.0	81.0
6 -10	8	7.6	7.6	88.6
11 - 15	9	8.5	8.7	97.1
16 above	3	2.9	2.9	100.0
Total	105	100.0	100.0	

Fig (3.4)

It is noticed from the above table No.(3-4) and the figure No.(3-4) that, most of the sample respondents have experience between (1) and (5) years, their number was (85) participants with percentage (81.0%). The number of sample's respondents who have experience between (6) and

(10) years was (8) participants with percentage (7.6%). The number of sample respondents who have experience between (11) and (15) years was (9) participants with percentage (8.5%). The number of sample respondents who have experience above (16) years was (3) participants with percentage (2.9%). It is clear that most of the respondents experience range between 1- 5 years which constitute (81.0%) of the total number. This is because most phonology teachers were from the young generation who seek to enrich their experiences.

3.4 Population of second tool (oral diagnostic test)

 the test were carried out with fourth year students of English at Sudan University of Science and Technology, College of Education.

3.5 The Sample of the second tool (oral diagnostic test)

Forty four students of English at Sudan University of Science and Technology. Who are responded to the test questions, they were only four questions which directly relate to the research.

3.6 Pilot study

A pilot study for the test was conducted before collecting the results of the sample. It provides a trail run for the test, which involves testing the wordings of question, identifying ambiguous question, testing the techniques used to collect data, and measuring the effectiveness of standard investigation to respondents. In order to achieve these purposes, two different instruments used: oral diagnostic test and questionnaire. To ensure these tools validity and reliability, the reseacher has conducted deliberately chosen sample for oral diagnostic test which is consists of (10) subject. For questionnaire, the reseacher randomly shosen sample which is cosists of (20) subject   .

3.7 Validity and reliability of the research tools

3.7.1Validity of the Questionnaire

By examining the validity for the study questionnaire and validation of its statements according to the layout and illustrations, the questionnaire was judged by four Ph.D. holding referees who were specialists in the study field of English. Some of the referees made some amendments, and others recommended that the questionnaire was reasonable in terms of items . In this case , the researcher revised all amendments, and some of typing mistakes on his questionnaire have been corrected.

3.7.2 Statistical Reliability and Validity of questionnaire

Reliability refers to the reliability of any test, to obtaining the same results if the same measurement is used more than one time under the same conditions. In addition, the reliability means when a certain test was applied on a number of individuals and the marks of every one were counted; then the same test applied another time on the same group and the same marks were obtained; then we can describe this test as reliable. In addition, reliability is defined as the degree of the accuracy of the data that the test measures. Here are some of the most used methods for calculating the reliability:

. Alpha-Cranach coefficient.

On the other hand, validity also is a measure used to identify the validity degree among the respondents according to their answers on certain criterion. The validity is counted by a number of methods, among them is the validity using the square root of the (reliability coefficient). The value of the reliability and the validity lies in the range between (0-1). The validity of the questionnaire is that the tool should measure the exact aim, which it has been designed for.

In this study the validity calculated by using the following equation:

$$Validity = \sqrt{Reliability}$$

The reliability coefficient was calculated for the measurement, which was used in the questionnaire using Alpha-Cronbach coefficient Equation as the following:

For calculating the validity and the reliability of the questionnaire from the above equation, the researcher distributed (20) questionnaires to respondents to calculate the reliability coefficient using the Alpha-Cronbach coefficient; the results have been showed in the following table

Reliability Statistics

Cronbach's Alpha	N of Items
.792	105

3.7.3 Validity of oral diagnostic test

In order to check the apparent validity for the study test and validation of its statements according to the formulation and explanation, the questionnaire was checked by four Ph.D. holding referees who were specialists in the study field. Some of the referees made some suggestions, and others still confirmed that the test was suitable. In any way, the researcher studied all suggestions, and some corrections on his test have been made.

3.7.4 Reliability of oral diagnostic test

The test is reliable when it gives consistent result if it is reapplied in the same conditions Brown and Rogers (2002: 241). The researcher piloted the tools to calculate the reliability of the oral diagnostic test.

Statistical Reliability of the test

Cronbach's Alpha	N of Items
.89	10

The above table shows the reliability of the test which was 0.89 .That means if we redistribute the test gain the percentage of the same results

3.8 Summary

This chapter has discussed the research methodology and the research tools adopted for data collection. The chapter has provided a detailed description of all the stepts and procedures followed in each tools, including populatiom, sample, validitiy and reliability of each tool.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSIONS

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.0 Introduction

This chapter is devoted to the analysis, evaluation, and interpretation of the data collected through the questionnaire which was given to 105 respondents who represent the teachers' community in Sudanese universities and oral diagnostic test which was given to 44 respondents who represent fourth year's students of English at Sudan University of Science and Technology, College of Education.

4.1 The Responses to the Questionnaire

The responses to the questionnaire of the 105 teachers were tabulated and computed. The following is an analytical interpretation and discussion of the findings regarding different points related to the objectives and hypotheses of the study.

Each item in the questionnaire is analyzed statistically and discussed. The following tables will support the discussion.

## 4.2 Analysis of the Questionnaire

The researcher distributed the questionnaire on determined study sample (104), and constructed the required tables for collected data. This step consists transformation of the qualitative (nominal) variables (strongly disagree, disagree, neutral, agree, and strongly agree) to quantitative variables (1, 2, 3, 4, 5) respectively, also the graphical representations were used for this purpose.

The First Hypothesis: Students of English get confused when using words with stress in spoken form.

Statement No (1): in oral communication students give less attention to stressed syllables

Table No (4-1) The Frequency Distribution for the Respondents' Answers of Statement No (1)

| Valid	Frequency	Percent	Valid Percent	Cumulative Percent
strongly agree	20	19.0	19.0	19.0
Agree	57	54.3	54.3	73.3
Neutral	7	6.7	6.7	80.0
Disagree	21	20.0	20.0	100.0
Total	105	100.0	100.0	
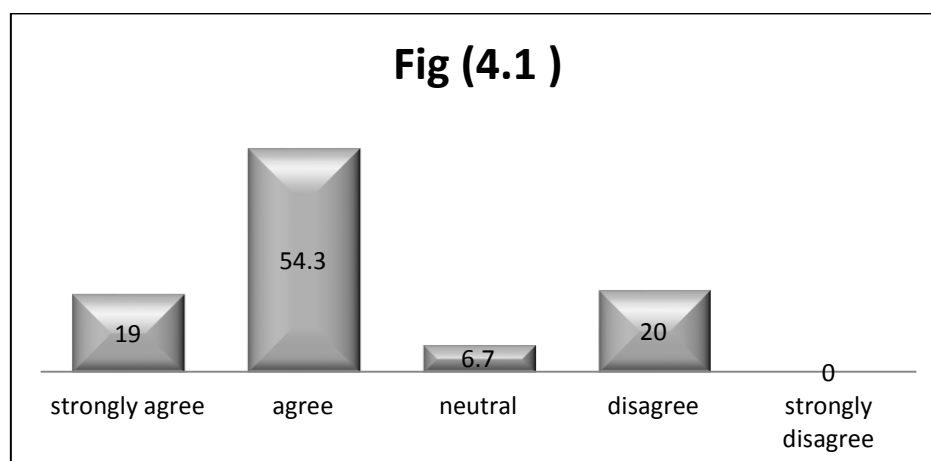
Fig (4.1)

It is obvious from the above table and figure show that there are (20) respondents in the study sample with percentage (19%) strongly agreed with that "in oral communication students give less attention to stress syllables ". There are (57) respondents with percentage (54.3%) agreed with that and (7) respondents with percentage (6.7%) were neutral. Whereas, (21) respondents with percentage (20.0%) disagreed. This justifies that students should be well-trained in using stress so as to develop their oral communication.

Statement No (2): when student's pronouns words with wrong stress, message will be misunderstood.

Table No (4.2) The Frequency Distribution for the Respondents' Answers of Statement No.(2)

| Valid	Frequency	Percent	Valid Percent	Cumulative Percent
strongly agree	34	32.4	32.4	32.4
agree	19	18.1	18.1	50.5
neutral	26	24.7	24.7	75.2
disagree	22	21.0	21.0	96.2
strongly disagree	4	3.8	3.8	100.0
Total	105	100.0	100.0	

Fig (4.2)
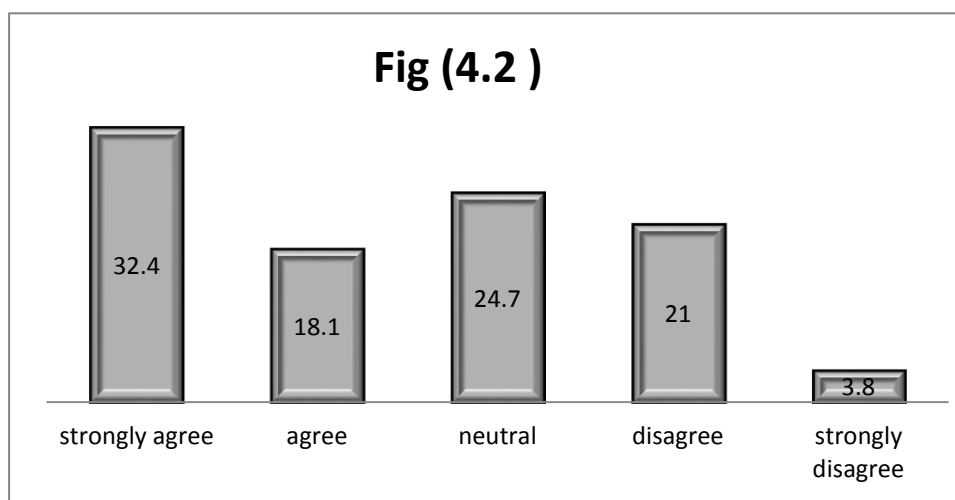
It is obvious from the above table and figure illustrate that there are (34) respondents in the study sample with percentage (32.4%) strongly agreed with that "when students pronouns words with wrong stress message misunderstood ". There are (19) respondents with percentage (18.1%) agreed with that and (26) respondents with percentage (24.7%) were neutral and (22) respondents with percentage (21.0%) disagreed. Whereas, (4) respondents with percentage (3.8 %) strongly disagreed. This indicates that students should be well-trained and developed in terms of pronouncing right stress in right places.

Statement No (3): it's difficult to predict stress in syllables in different word classes as such its confusing.

Table No (4.3) The Frequency Distribution for the Respondents' Answers of Statement No.(3)

| Valid	Frequency	Percent	Valid Percent	Cumulative Percent
strongly agree	25	23.8	23.8	23.8
Agree	48	45.7	45.7	69.5
Neutral	11	10.5	10.5	80.0
Disagree	17	16.2	16.2	96.2
strongly disagree	4	3.8	3.8	100.0
Total	105	100.0	100.0	

Fig (4.3)
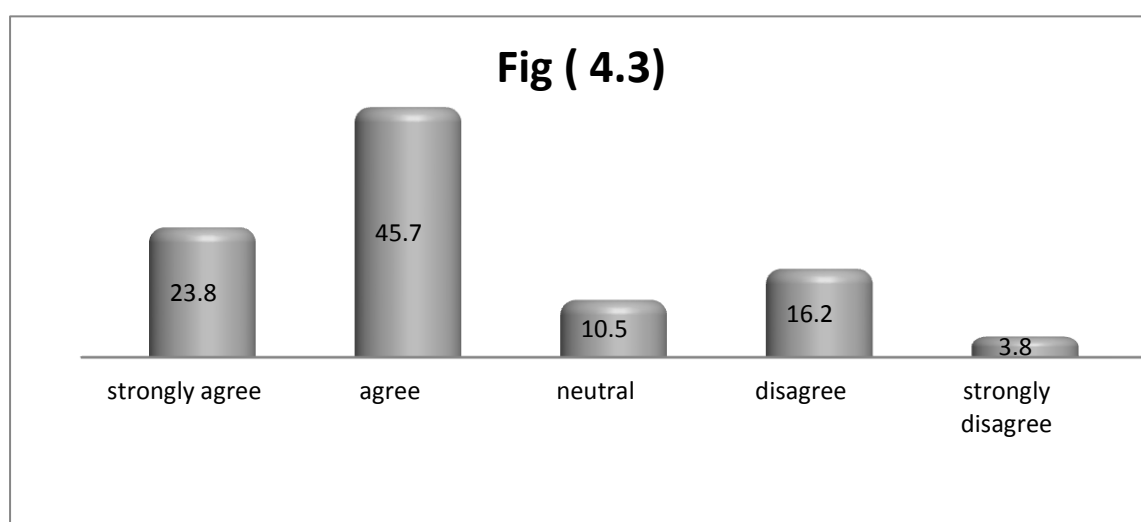
It is obvious from the above table and figure show that there are (25) respondents in the study sample with percentage (23.8%) strongly agreed with that "it's difficult to predict stress in syllables in different word classes as such its confusing ". There are (48) respondents with percentage (45. 7%) agreed with that and (11) respondents with percentage (10.5%) were neutral and (17) respondents with percentage (16.2%) disagreed. Whereas, (4) respondents with percentage (3.8 %) strongly disagreed. This proves that students should be informed by their teachers about the different types of word classes.

Statement No (4): students get confused in pronouncing stress on word classes –noun –verb – adjective that have the same spelling and pronunciation.

Table No (4.4) The Frequency Distribution for the Respondents' Answers of Statement No (4)

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
strongly agree	37	35.2	35.2	35.2
Agree	52	49.5	49.5	84.8
Neutral	12	11.5	11.5	96.2
strongly disagree	4	3.8	3.8	100.0
Total	105	100.0	100.0	

Fig (4.4)
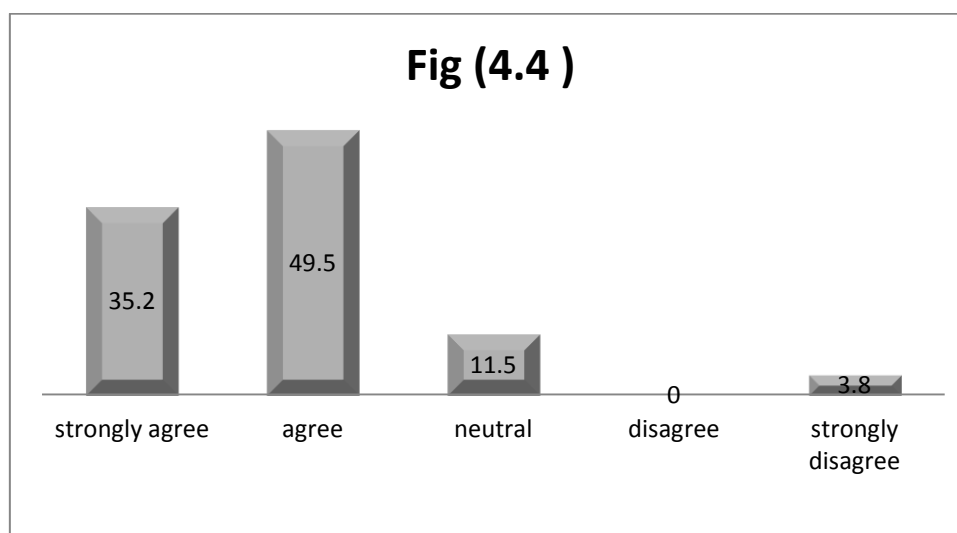
It is obvious from the above table and figure illustrate that there are (37) respondents in the study sample with percentage (35.2%) strongly agreed with that " students get confused in pronouncing stress on word classes – noun –verb – adjective that have the same spelling and pronunciation ". There are (52) respondents with percentage (49. 5%) agreed with that and (12) respondents with percentage (11.5%) were neutral. Whereas, (4) respondents with percentage (3.8 %) strongly disagreed. This justifies that students should be well-trained and developed so as to differentiate between the word classes that have the same spelling and pronunciation.

Statement No (5): students have difficulties in recognizing the effect of affixes on the stress placement.

Table No (4.5) The Frequency Distribution for the Respondents' Answers of Statement No.(5)

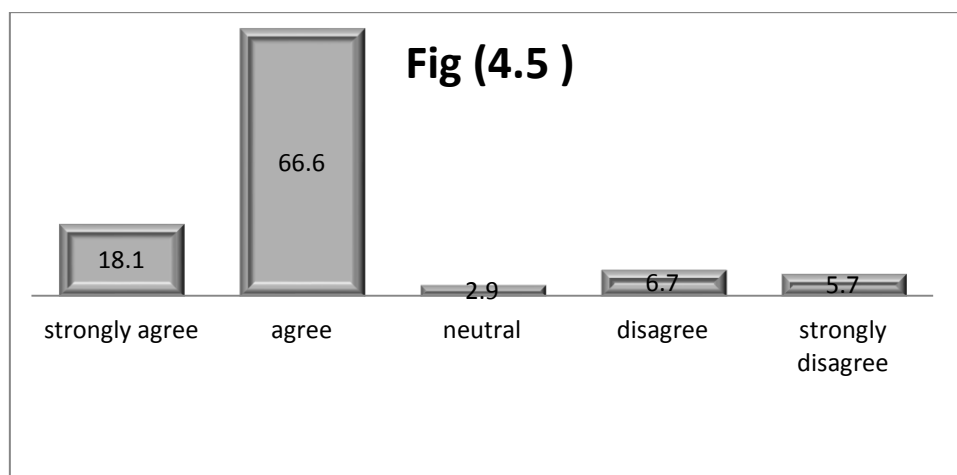| Valid	Frequency	Percent	Valid Percent	Cumulative Percent
strongly agree	19	18.1	18.1	18.1
agree	70	66.6	66.6	84.8
neutral	3	2.9	2.9	87.6
disagree	7	6.7	6.7	94.3
strongly disagree	6	5.7	5.7	100.0
Total	105	100.0	100.0	

Fig (4.5)

It is obvious from the above table and figure show that there are (19) respondents in the study sample with percentage (18.1%) strongly agreed with that "students have difficulties in recognizing the effect of affixes on the stress placement ". There are (70) respondents with percentage (66.6%) agreed with that and (3) respondents with percentage (2.9%) were neutral and (7) respondents with percentage (6.7%) disagreed. Whereas, (6) respondents with percentage (5.7 %) strongly disagreed. This indicates that students should be well-trained and developed in identifying the affixes on placement of stress.
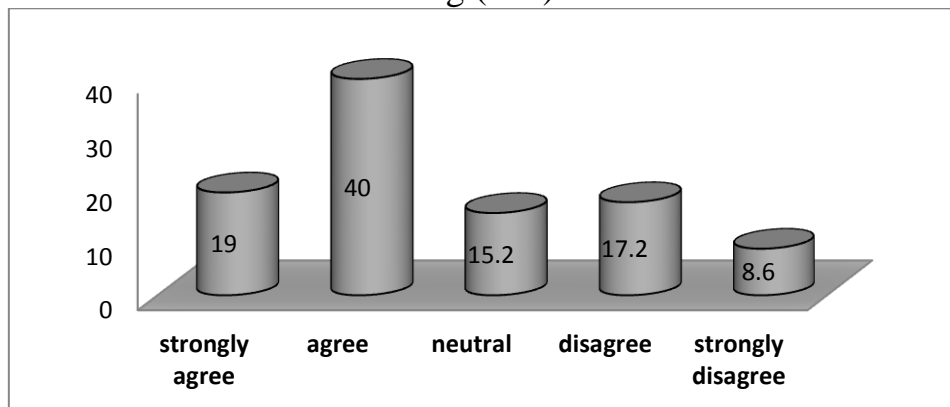
The second Hypothesis: Mother tongue interference affects students' pronunciation of words having stress when they are involved in real communication.

Statement No (6): mother tongue interference (Arabic) effects student's stress placement when he /she involved in real communication

Table No (4.6) The Frequency Distribution for the Respondents' Answers of Statement No.(6)

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
strongly agree	20	19.0	19.0	19.0
agree	42	40.0	40.0	59.0
neutral	16	15.2	15.2	74.3
disagree	18	17.2	17.1	91.4
strongly disagree	9	8.6	8.6	100.0
Total	105	100.0	100.0	

Fig (4.6)

It is obvious from the above table and figure show that there are (20) respondents in the study sample with percentage (19%) strongly agreed with that "mother tongue interference (Arabic) effects students' stress placement when he /she involved in real communication ". There are (42) respondents with percentage (40%) agreed with that and (16) respondents with percentage (15.9 %) were neutral (18) respondents with percentage (17.2%) disagreed. Whereas, (9) persons with percentage (8.6%) strongly disagreed. This demonstrates that students should avoid mother tongue interference when they are involving in real communication.

Statement No (7): mother tongue interference (Arabic)effect students' pronunciation of stress due to the absence of such sounds (e.g p.v).

Table No (4.7) The Frequency Distribution for the Respondents' Answers of Statement No.(7)

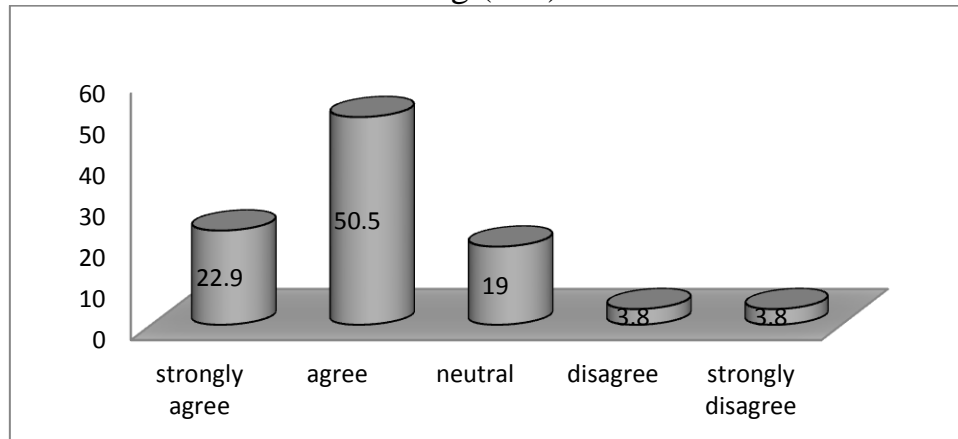| Valid	Frequency	Percent	Valid Percent	Cumulative Percent
strongly agree	24	22.9	22.9	22.9
agree	53	50.5	50.5	73.3
neutral	20	19.0	19.0	92.4
disagree	4	3.8	3.8	96.2
strongly disagree	4	3.8	3.8	100.0
Total	105	100.0	100.0	

Fig (4.7)

It is obvious from the above table and figure illustrate that there are (24) respondents in the study sample with percentage (22.9%) strongly agreed with that "mother tongue interference (Arabic) effects students' pronunciation of words having stress due to the absence of such sounds (e.g.p.v)." There are (53) respondents with percentage (50.5%) agreed with that and (20) respondents with percentage (19.0 %) were neutral,(4) respondents with percentage (3.8%) disagreed. Whereas, (4) respondents with percentage (3.8 %) strongly disagreed. This justifies that mother tongue interference should be avoided by students.

Statement No. (8): Arabic speakers tend to insert vowel to break the consonant cluster in words like: extra, spring and school.

Table No (4.8) The Frequency Distribution for the Respondents' Answers of Statement No.(8)

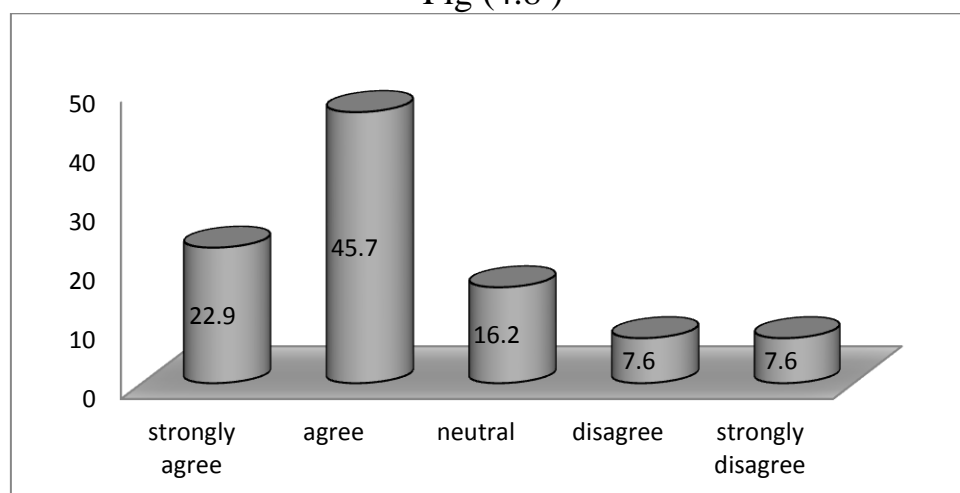| Valid	Frequency	Percent	Valid Percent	Cumulative Percent
strongly agree	24	22.9	22.9	22.9
agree	48	45.7	45.7	68.6
neutral	17	16.2	16.2	84.8
disagree	8	7.6	7.6	92.4
strongly disagree	8	7.6	7.6	100.0
Total	105	100.0	100.0	

Fig (4.8)

It is obvious from the above table and figure show that there are (24) respondents in the study sample with percentage (22.9%) strongly agreed with that " Arabic speakers tend to insert vowel to break the consonant cluster in words like: extra, spring and school." There are (18) respondents with percentage (45.7%) agreed with that and (17) respondents with percentage (16.2 %) were neutral, (8) respondents with percentage (7.6%) disagreed. Whereas, (8) respondents with percentage (7.6%)   strongly disagreed. This proves that students should be well-trained and developed so as to avoid the insertion of vowel when learning stress.

Statement No (9): native speakers of English can be misunderstood by students when they talk to them.

Table No (4.9) The Frequency Distribution for the Respondents' Answers of Statement No.(9)

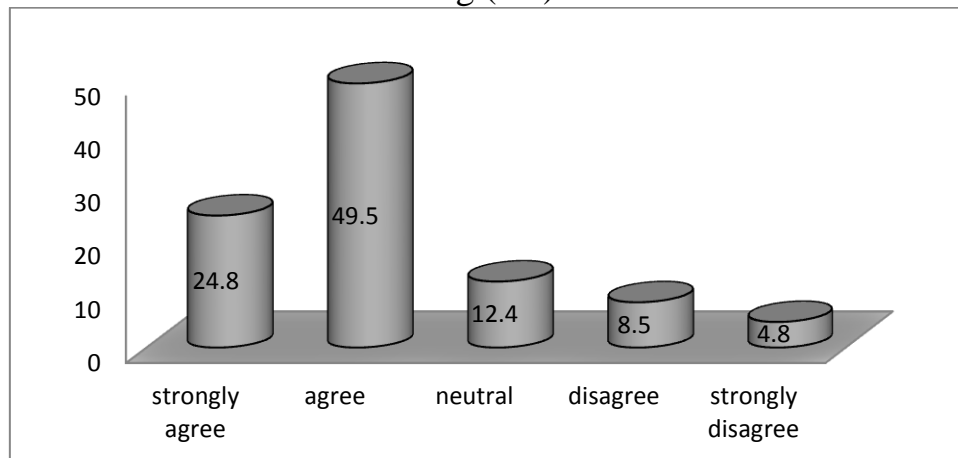| Valid	Frequency	Percent	Valid Percent	Cumulative Percent
strongly agree	26	24.8	24.8	24.8
agree	52	49.5	49.5	74.3
neutral	13	12.4	12.4	86.7
disagree	9	8.5	8.5	95.2
strongly disagree	5	4.8	4.8	100.0
Total	105	100.0	100.0	

Fig (4.9)

It is obvious from the above table and figure show that there are (26) respondents in the study sample with percentage (24.8%) strongly agreed with that "native speakers of English can be misunderstood by students when they talk to them." There are (52) respondents with percentage (49.5%) agreed with that and (13) respondents with percentage (12.4 %) neutral, (9) respondents with percentage (8.5%) disagreed. Whereas, (5) respondents with percentage (4.8%) strongly disagreed. This demonstrates that students should be well-trained in using stress so as to understand native speakers of English.

Statement No (10): student's mother tongue interference transfers the rules of L1 into L2 when they are learning stress.

Table No (4.10) The Frequency Distribution for the Respondents' Answers of Statement No.(10)

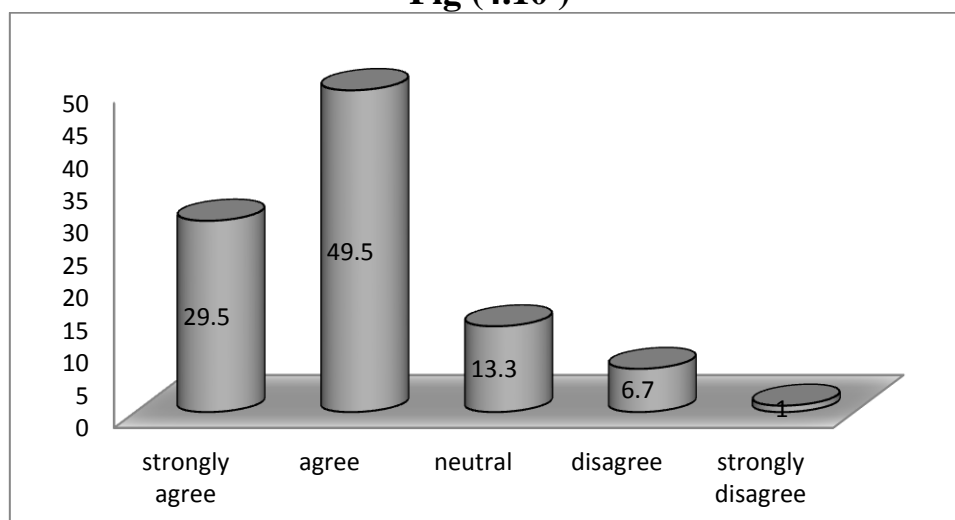| Valid	Frequency	Percent	Valid Percent	Cumulative Percent
strongly agree	31	29.5	29.5	29.5
agree	52	49.5	49.5	79.0
neutral	14	13.3	13.3	92.4
disagree	7	6.7	6.7	99.0
strongly disagree	1	1.0	1.0	100.0
Total	105	100.0	100.0	

Fig (4.10)

It is obvious from the above table and figure illustrate that there are (31) respondents in the study sample with percentage (24.8%) strongly agreed with that "student's mother tongue interference transfers the rules of L1 into L2 when they are learning stress." There are (52) respondents with percentage (49.5%) agreed with that and (14) respondents with percentage (12.4 %) were neutral, (7) respondents with percentage (8.5%) disagreed. While (1) respondents with percentage (4.8%) strongly disagreed. This justifies that students should avoid mother tongue interference when learning stress.

The third Hypothesis: Students of English are exposed to activities on stress in the university syllabus.

Statement No (11): students are insufficiently exposed to cassettes CD's recorded by native speakers of English which are needed for practicing stress.

Table No (4.11) The Frequency Distribution for the Respondents' Answers of Statement No (11)

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
strongly agree	16	15.2	15.2	15.2
agree	58	55.2	55.2	70.5
neutral	15	14.3	14.3	84.8
disagree	4	3.8	3.8	88.6
strongly disagree	12	11.5	11.5	100.0
Total	105	100.0	100.0	

Fig (4.11)
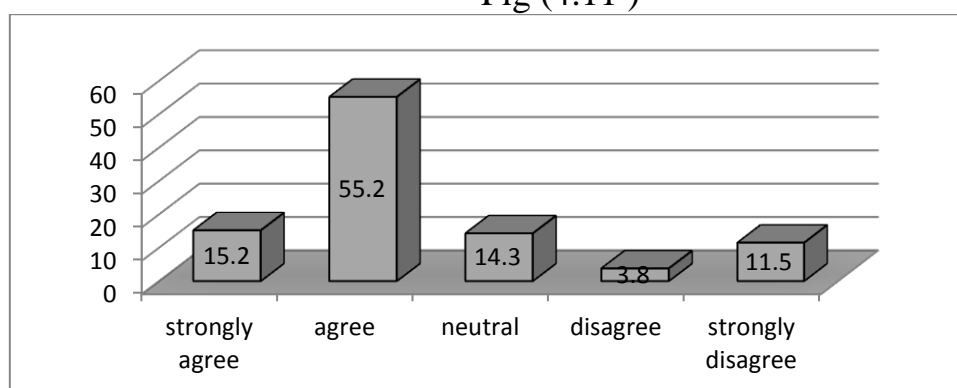
It is obvious from the above table and figure show that there are (16) respondents in the study sample with percentage (15.2%) strongly agreed with that " students are insufficiently exposed to cassettes CD's recorded by native speakers of English which are needed for practicing stress " There are (58) respondents with percentage (55.2%) agreed with that, and (15) respondents with percentage (14.3 %) were neutral, (4) respondents with percentage (3.8%) disagreed. Whereas, (12) respondents with percentage (11.5%) strongly disagreed. This demonstrates that students should be exposed to recorded materials by native speakers of English when learning stress.

Statement No (12): the university English syllabus insufficiently covers the primary and secondary stress.

Table No (4.12) The Frequency Distribution for the Respondents' Answers of Statement No (12)

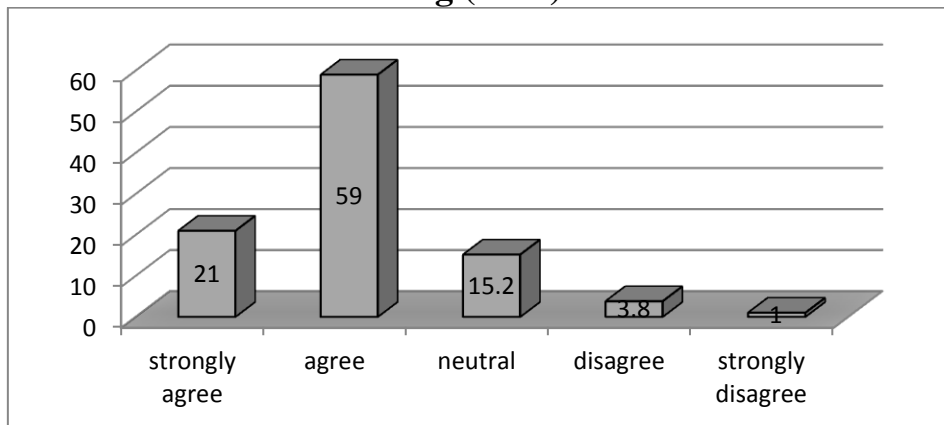| Valid	Frequency	Percent	Valid Percent	Cumulative Percent
strongly agree	22	21.0	21.0	21.0
agree	62	59.0	59.0	80.0
neutral	16	15.2	15.2	95.2
disagree	4	3.8	3.8	99.0
strongly disagree	1	1.0	1.01	100.0
Total	105	100.0	100.0	

Fig (4.12)

It is obvious from the above table and figure illustrates that there are (22) respondents in the study sample with percentage (21.1%) strongly agreed with that " the university English syllabus insufficiently covers the primary and secondary stress " There are (62) respondents with percentage (59.0%) agreed with that, and (16) respondents with percentage (15.2 %) were neutral, (4) respondents with percentage (3.8%) disagreed, while (1) respondents with percentage (1.0%) strongly disagreed. This justifies that students be given activities concerning stress, University English syllabus should be covered the area of primary and secondary stress.

Statement No (13): the inculcating technique adopted by the teacher of teaching English stress are out of date.

Table No (4.13) The Frequency Distribution for the Respondents' Answers of Statement No. (13)

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
strongly agree	30	28.6	28.6	28.6
Agree	36	34.3	34.3	62.9
Neutral	16	15.2	15.2	78.1
Disagree	14	13.3	13.3	91.4
strongly disagree	9	8.6	8.6	100.0
Total	105	100.0	100.0	

Fig (4.13)
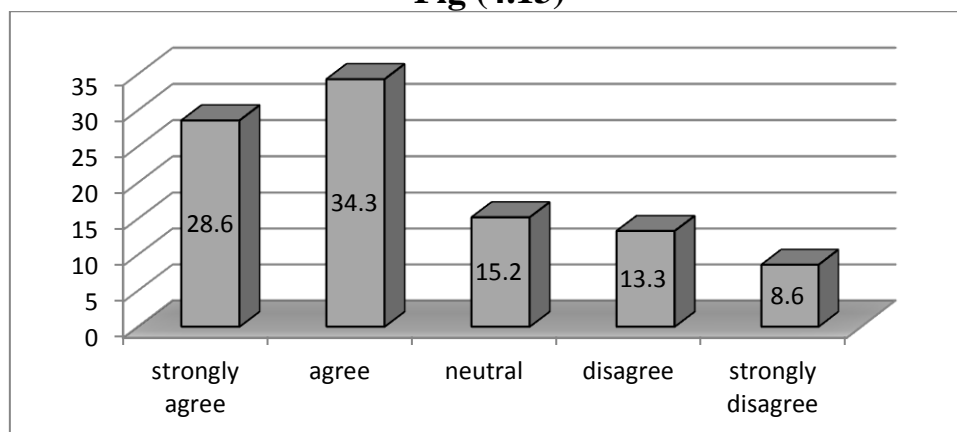

It is obvious from the above table and figure show that there are (30) respondents in the study sample with percentage (28.3%) strongly agreed with that " the inculcating technique adopted by the teacher of teaching English stress are out of date" There are (36) respondents with percentage (34.3%) agreed with that, and (16) respondents with percentage (15.2 %) were neutral, (14) respondents with percentage (13.3%) disagreed. Whereas, (9) respondents with percentage (8.6%) strongly disagreed. This justifies that teachers of English should avoid inculcating method when teaching stress.

Statement No (14): teacher's cultural background can greatly affect student's pronunciation of English stress.

Table No (4.14) The Frequency Distribution for the Respondents' Answers of Statement No. (14)

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
strongly agree	47	44.8	44.8	44.8
agree	30	28.6	28.6	73.3
neutral	11	10.4	10.4	83.8
disagree	11	10.4	10.4	94.3
strongly disagree	6	4.8	4.8	100.0
Total	105	100.0	100.0	

Fig (4.14)
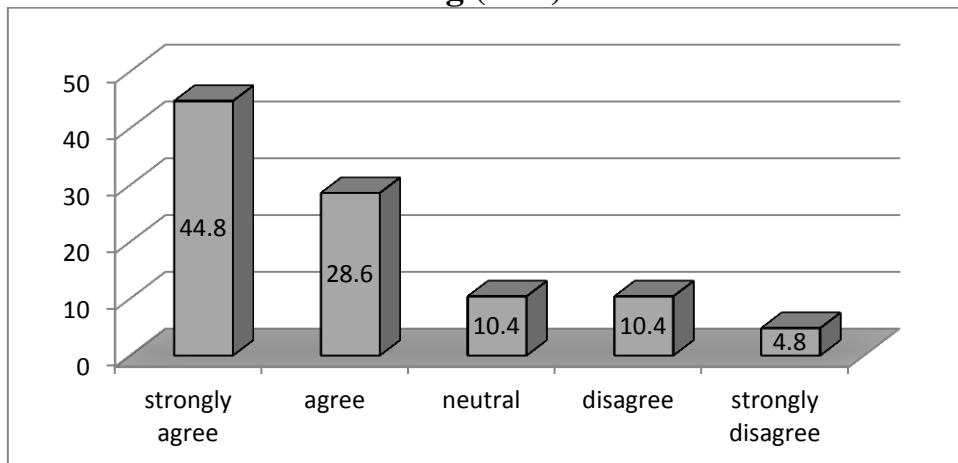
It is obvious from the above table and figure illustrates that there are (47) respondents in the study sample with percentage (44.8%) strongly agreed with that " teacher's cultural background can greatly affect student's pronunciation of English stress " There are (30) respondents with percentage (28.6%) agreed with that, and (11) respondents with percentage (10.4 %) were neutral, (11) respondents with percentage (10.0%) disagreed, while (6) respondents with percentage (4.8%) strongly disagreed. This demonstrates that teachers should reduce cultural background when teaching stress.

Statement No (15): the English syllabus at University does not provide enough practice on stress.

Table No (4.15) The Frequency Distribution for the Respondents' Answers of Statement No.(15)

| Valid	Frequency	Percent	Valid Percent	Cumulative Percent
strongly agree	22	21.0	21.0	21.0
Agree	42	40.1	40.1	61.0
Neutral	13	12.4	12.4	73.3
Disagree	11	10.5	10.5	83.8
strongly disagree	17	16.2	16.2	100.0
Total	105	100.0	100.0	

Fig (4.15)
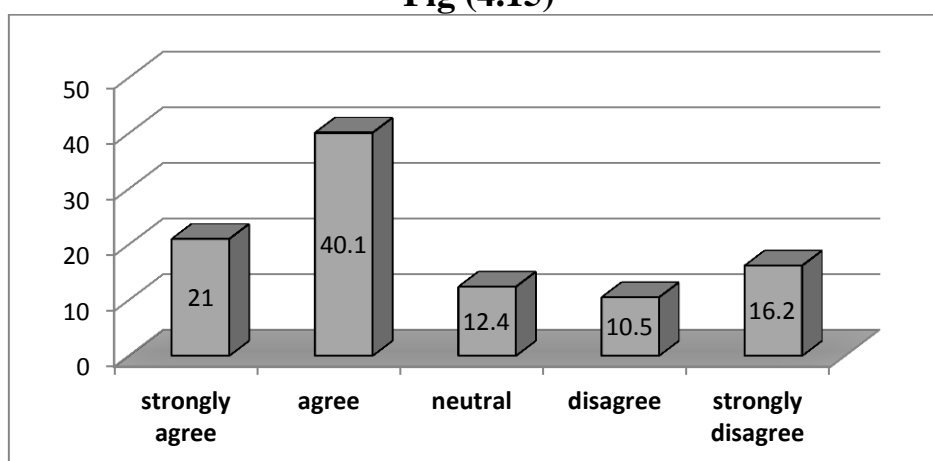
It is obvious from the above table and figure show that there are (22) respondents in the study sample with percentage (21%) strongly agreed with that " the English syllabus at University does not provide enough practice on stress " There are (42) respondents with percentage (40.1%) agreed with that, and (13) respondents with percentage (12.4 %) were neutral, (11) respondents with percentage (10.5%) disagreed, while (17) respondents with percentage (16.2%)   strongly disagreed. This indicates that University syllabus should provide enough practice on stress.

4.3 Test of the Study Hypotheses

To answer study questions and check its hypotheses, the median will be computed for each question from the questionnaire that shows the opinions of the study respondents about the problems "investigating difficulties encountering students in learning suprasegmental phonology with special reference to stress". To do that, we will give five degrees for each answer "strongly agree", four degrees for each answer "agree", three degrees for each answer" neutral", two degrees with each answer "disagree", and one degree for each answer with "strongly disagree". This means, in accordance with the statistical analysis requirements, transformation of nominal variables to quantitative variables. After that, we will use the non-parametric chi-square test to know if there are statistical differences amongst the respondents' answers about hypotheses questions.

Results of the First Hypothesis:

The First Hypothesis in this study States the Following:

"Students of English get confused when using words with stress in spoken form."

The objective of this hypothesis is to explore that students of English get confused in pronouncing words with stress.

To test this hypothesis, we must know the trend of respondents' opinions about each question from the hypothesis's question, and for all questions. We compute the mean, standard deviation, chi square and p-value which is the most central tendency measures, that is used to describe the phenomena, and it represents the centered answer for all respondents' answers after ascending or descending order for the answers.

Table (4.16) testing the first hypothesis of the study

No	Statement	mean	SD	Chi square	p-value
1	In oral communication, students give less attention to stress syllables.	2.5	0.8	35	0.000
2	when students pronouns words with wrong stress message misunderstood	2.7	1.8	27	0.000
3	It's difficult to predict stress in syllables in different word classes as such its confusing.	2.8	0.7	23	0.000
4	Students get confused in pronouncing stress on word classes –noun –verb – adjective that have the same spilling and pronunciation.	2.6	0.6	29	0.000
5	Students have difficulties in recognizing the effect of affixes on the stress placement.	3.0	3.3	32	0.001

▪ The calculated value of chi-square for the significance of the differences for the respondent's answers in the statement No (1-1) was (35) which is greater than the tabulated value of chi-square at the degree of freedom (4) and the significant value level (5%) which was (14.7). This indicates that, there are statistically significant differences at the level (5%) among the answers of the respondents, and also the calculated mean is (2.5) which is greater than the hypothesized mean (2.3) which support the respondents who agreed with the statement "in oral communication students give less attention to stress syllables   ".

▪ The calculated value of chi-square for the significance of the differences for the respondent's answers in the statement No (1-2) was (27) which is greater than the tabulated value of chi-square at the degree of freedom (4) and the significant value level (5%) which was (14.7). This indicates that, there are statistically significant differences at the level (5%) among the

answers of the respondents, and also the calculated mean is (2.7) which is greater than the hypothesized mean (2.3) which support the respondents who agreed with the statement "it's difficult to predict stress in syllables in different word classes as such its confusing".

- The calculated value of chi-square for the significance of the differences for the respondent's answers in the statement No (1-3) was (23) which is greater than the tabulated value of chi-square at the degree of freedom (4) and the significant value level (5%) which was (14.7). This indicates that, there are statistically significant differences at the level (5%) among the answers of the respondents, and also the calculated mean is (2.8) which is greater than the hypothesized mean (2.3) which support the respondents who agreed with the statement "it's difficult to predict stress in syllables in different word classes as such its confusing".

- The calculated value of chi-square for the significance of the differences for the respondent's answers in the statement No (1-4) was (29) which is greater than the tabulated value of chi-square at the degree of freedom (4) and the significant value level (5%) which was (14.7). this indicates that, there are statistically significant differences at the level (5%) among the answers of the respondents, and also the calculated mean is (2.6) which is greater than the hypothesized mean (2.3) which support the respondents who agreed with the statement "students get confused in pronouncing stress on word classes –noun –verb – adjective that have the same spilling and pronunciation".

- The calculated value of chi-square for the significance of the differences for the respondent's answers in the statement No (1-5) was (32) which is greater than the tabulated value of chi-square at the degree of freedom (4)

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and the significant value level (5%) which was (14.7). This indicates that, there are statistically significant differences at the level (5%) among the answers of the respondents, and also the calculated mean is (3) which is greater than the hypothesized mean (2.3) which support the respondents who agreed with the statement "students have difficulties in recognizing the effect of affixes on the stress placement.

Table (4.17) testing the second hypothesis of the study

No	Statement	mean	SD	Chi square	p-value
1	Mother tongue interference (Arabic)effect someone's pronunciation when he /she involved in real communication.	2.9	1.8	30	0.000
2	Mother tongue interference (Arabic) effects someone's pronunciation due to the absence of such sounds (e.g p.v).	2.5	1.5	22	0.000
3	Arabic speakers tend to insert vowel to break the consonant cluster in words like: extra ,spring and school .	2.8	1.6	26	0.000
4	Native speakers of English can be misunderstood by students when they talk to them.	2.7	0.7	37	0.000
5	Student's mother tongue interference transfers the rules of L1 into L2 when they are learning stress.	3.2	0.7	22	0.000

- The calculated value of chi-square for the significance of the differences for the respondent's answers in the statement No (2-1) was (30) which is greater than the tabulated value of chi-square at the degree of freedom (4) and the significant value level (5%) which was (14.7). This indicates that, there are statistically significant differences at the level (5%) among the answers of the respondents, and also the calculated mean is (2.9) which is greater than the hypothesized mean (2.3) which support the respondents

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who agreed with the statement "mother tongue interference (Arabic) effect someone's pronunciation when he /she involved in real communication".

- The calculated value of chi-square for the significance of the differences for the respondent's answers in the statement No (2-2) was (22) which is greater than the tabulated value of chi-square at the degree of freedom (4) and the significant value level (5%) which was (14.7). this indicates that, there are statistically significant differences at the level (5%) among the answers of the respondents, and also the calculated mean is (2.5) which is greater than the hypothesized mean (2.3) which support the respondents who agreed with the statement "mother tongue interference (Arabic) effect student's pronunciation due to the absence of such sounds (e.g. p.v).

- The calculated value of chi-square for the significance of the differences for the respondent's answers in the statement No (2-3) was (26) which is greater than the tabulated value of chi-square at the degree of freedom (4) and the significant value level (5%) which was (14.7). this indicates that, there are statistically significant differences at the level (5%) among the answers of the respondents, and also the calculated mean is (2.8) which is greater than the hypothesized mean (2.3) which support the respondents who agreed with the statement "Arabic speakers tend to insert vowel to break the consonant cluster in words like :extra .spring .school.

- The calculated value of chi-square for the significance of the differences for the respondent's answers in the statement No (2-4) was (37) which is greater than the tabulated value of chi-square at the degree of freedom (4) and the significant value level (5%) which was (14.7). This indicates that, there are statistically significant differences at the level (5%) among the answers of the respondents, and also the calculated mean is (2.7) which are greater than the hypothesized mean (2.3) which support the

respondents who agreed with the statement "native speakers of English can be understood by students when they talk to them".

- The calculated value of chi-square for the significance of the differences for the respondent's answers in the statement No (2-5) was (22) which is greater than the tabulated value of chi-square at the degree of freedom (4) and the significant value level (5%) which was (14.7). This indicates that, there are statistically significant differences at the level (5%) among the answers of the respondents, and also the calculated mean is (3.2) which is greater than the hypothesized mean (2.3) which support the respondents who agreed with the statement "student's mother tongue interference transfers the rules of L1 into L2 when they are learning stress".

Table (4.18) testing the third hypothesis of the study

No	Statement	mean	SD	Chi square	p-value
1	Students are in sufficiently exposed to cassettes CD's recorded by native speakers of English which are needed for practicing stress.	2.4	1.0	19	0.010
2	The university English syllabus insufficiently covers the primary and secondary.	2.5	0.2	30	0.002
3	The inculcating techniques adopted by the teacher of teaching English stress are out of date.	2.9	1.1	27	0.000
4	Teacher's cultural background can greatly affect student's pronunciation of English stress	2.7	0.7	37	0.000
5	The English syllabus at University does not provide English practice on stress.	2.8	0.7	26	0.000

- The calculated value of chi-square for the significance of the differences for the respondent's answers in the statement No (3-1) was (19) which is greater than the tabulated value of chi-square at the degree of freedom (4) and the significant value level (5%) which was (14.7). this indicates that, there are statistically significant differences at the level (5%) among the answers of the respondents, and also the calculated mean is (2.4) which is greater than the hypothesized mean (2.3) which support the respondents who agreed with the statement "students are in sufficiently exposed to cassettes CD's recorded by native speakers of English which are needed for practicing stress".

- The calculated value of chi-square for the significance of the differences for the respondent's answers in the statement No (3-2) was (30) which is greater than the tabulated value of chi-square at the degree of freedom (4) and the significant value level (5%) which was (14.7). This indicates that, there are statistically significant differences at the level (5%) among the answers of the respondents, and also the calculated mean is (2.5) which is greater than the hypothesized mean (2.3) which support the respondents who agreed with the statement "the university English syllabus insufficiently covers the primary and secondary stress".

- The calculated value of chi-square for the significance of the differences for the respondent's answers in the statement No (3-3) was (27) which is greater than the tabulated value of chi-square at the degree of freedom (4) and the significant value level (5%) which was (14.7). this indicates that, there are statistically significant differences at the level (5%) among the answers of the respondents, and also the calculated mean is (2.9) which is greater than the hypothesized mean (2.3) which support the respondents

who agreed with the statement "the inculcating technique adopted by the teacher of teaching English stress are out of date ".

- The calculated value of chi-square for the significance of the differences for the respondent's answers in the statement No (3-4) was (37) which is greater than the tabulated value of chi-square at the degree of freedom (4) and the significant value level (5%) which was (14.7). This indicates that, there are statistically significant differences at the level (5%) among the answers of the respondents, and also the calculated mean is (2.7) which is greater than the hypothesized mean (2.3) which support the respondents who agreed with the statement "teacher's cultural background can greatly affect student's pronunciation of English stress".

- The calculated value of chi-square for the significance of the differences for the respondent's answers in the statement No (3-5) was (26) which is greater than the tabulated value of chi-square at the degree of freedom (4) and the significant value level (5%) which was (14.7). this indicates that, there are statistically significant differences at the level (5%) among the answers of the respondents, and also the calculated mean is (2.8) which is greater than the hypothesized mean (2.3) which support the respondents who agreed with the statement "the English syllabus at University does not provide English practice on stress ".

4.4 The Responses to the Oral Diagnostic Test

The responses to the oral diagnostic test of the 44 students were tabulated and computed. The following is an analytical interpretation and discussion of the findings regarding different points related to the objectives and hypotheses of the study.

Each statement in the test is analyzed statistically and discussed. The following table will support the discussion.
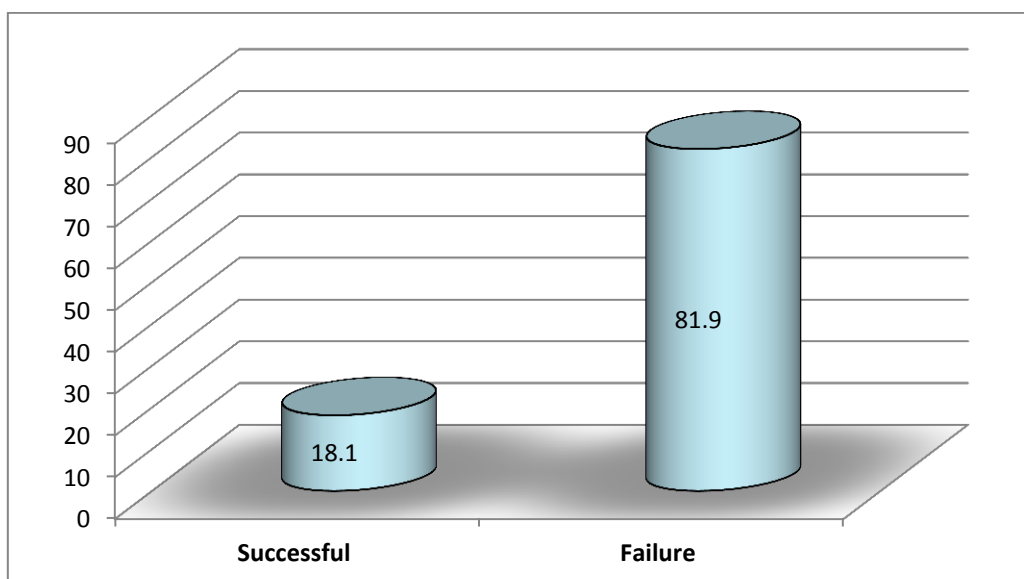
Question One

Hypothesis One:

Students of English get confused when using words with stress in spoken form

Table (4.19) : The Frequency Distribution for the Respondents'
Answers of table No.(19) :

Number	Frequency	Percentage
Successful	8	18.1
Failure	36	81.9
Total	44	100

The above table and figure illustrate the percentage and frequency of the answers of the study sample that concern with the questions and shows that most of the sample answers were failure which are represented by the percentage (81.9%). This justifies that students need to be given adequate activities on stress focus on words that encourage students to master it in spoken.

Question Two

Table (4.20) : The Frequency Distribution for the Respondents' Answers of table No.(20) :

Number	Frequency	Percentage
Successful	14	31.8
Failure	30	68.2
Total	44	100

The above table and figure illustrate the percentage and frequency of the answers of the study sample that concern with the questions and shows that most of the sample answers were failure which are represented by the percentage (68.2%). This justifies that students need to be trained and developed in using English stress.

Question Three

Hypothesis Two:

Mother tongue interference affects student's pronunciation of words having stress when they are involved in real communication.

Table (4.21) : The Frequency Distribution for the Respondents' Answers of table No.(21) :

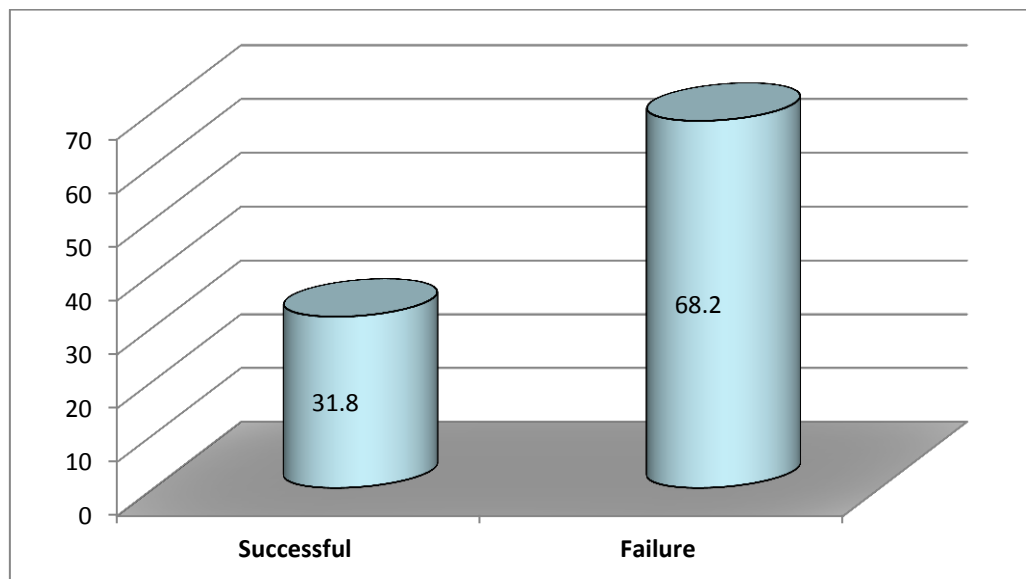| Number	Frequency	Percentage
Successful	16	36.4
Failure	28	63.6
Total	44	100
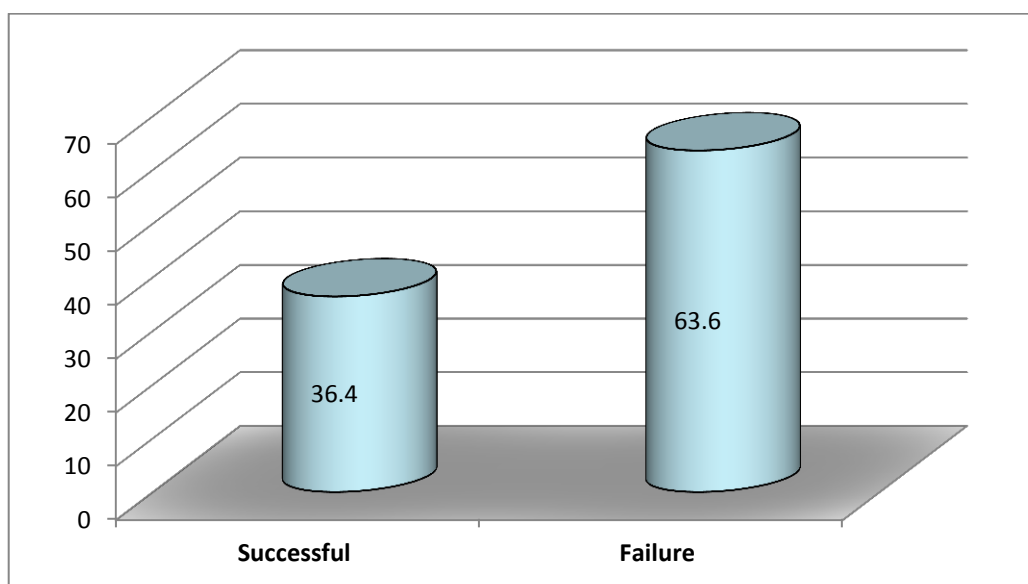
The above table and figure illustrate the percentage and frequency of the answers of the study sample that concern with the questions and shows that most of the sample answers were failure which are represented by the percentage (63.6%). This justifies that students need to be trained and developed so as to avoid mother tongue interference when pronouncing word stress.

Question Four

**Table (4.22) : The Frequency Distribution for the Respondents'
Answers of table No.(20) :**

Number	Frequency	Percentage
Successful	19	43.1
Failure	25	56.9
Total	44	100

The above table and figure illustrate the percentage and frequency of the
answers of the study sample that concern with the questions and shows
that most of the sample answers were failure which are represented by the
percentage (56.9%). This justifies that students need to be trained and
developed so as to avoid mother tongue interference when pronouncing
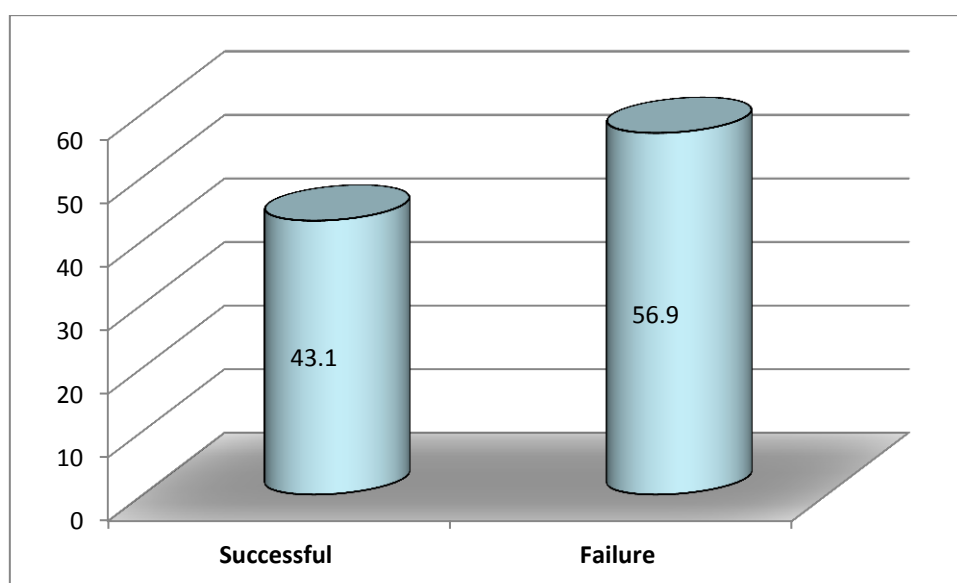words stress within sentences.

Table (4.23) one sample T-TEST for the questions of the study

Question s	N	mean	SD	t-value	DF	p-value
1	11	1.4	2.2	12.7	`10	0.00
2	11	1.5	1.81	7.75	10	0.00
3	11	1.3	0.3	4.2	10	0.00
4	11	1.2	0.4	3.3	10	0.00

The calculated values of T – TEST for the significance of the differences for the respondent's answers in all questions is greater than the tabulated value of T – TEST at the degree of freedom (10) and the significant value level (0.05%) which was (2.34). This indicates that, there are statistically significant differences at the level (0.05 %) among the answers of the respondents. this mean that our hypotheses are accepted.

4.5 Report Discussion

After comparing the percentages above and calculating the total average of all percentages; the researcher has found that the first and second question percentages which equal average percentage (83.2%) which represents the failure respondents. Accordingly, this justifies that students need to be trained and developed in using stress in spoken form.

After comparing the percentages above and calculating the total average of all percentages; the researcher has found that the third and fourth question percentages which equal average percentage (64.7%) which represents the negative respondents. Accordingly, this justifies that students need to be trained and developed so as to avoid mother tongue interference.

4.6 Summary

This chapter has covered the data analysis of the study which is about investigating difficulties encountered by students in learning suprasegmental phonology with special reference to stress. This is done through a questionnaire to the teachers and oral diagnostic test to the fourth year students. Moreover, it showed the data tabulated in figures and tables. Then, interpretations were made from the collected data. Finally, the researcher has discussed the results of the study.

CHAPTER FIVE

MAIN FINDINGS, CONCLUSIONS,

RECOMMENDATIONS AND
SUGGESTIONS FOR FURTHER STUDIES

CHAPTER FIVE

MAIN FINDINGS, CONCLUSIONS, RECOMMENDATIONS AND SUGGESTIONS FOR FURTHER STUDIES

5.0. Introduction

Stress has been described as the most difficult aspect of a foreign language to acquire and is held responsible for numerous instances of miscommunication between native and non-native speakers. This study sheds light on the English stress which is considered to be one of the crucial topics in the field of Phonetics and Phonology. Stress varies regarding to its placement of stress: words stress, sentence stress and phrasal stress. Obviously, this stress is overlapped in general. The researcher attempted to outline a roadmap to reveal the difficulties facing students in learning suprasegmental phonology with special reference to stress. To fulfill the purpose of the study, the researcher applied two tools, namely, questionnaire and diagnostic test activities. When one diagnoses the problems and the difficulties, it becomes easier to cure and remedy it as soon as possible by using the best strategy and technique. This chapter includes the discussion of main findings gained when applying the tools and conclusions. Moreover, a brief recommendations and suggestions were given at the end of the chapter.

5.1. Main Findings

The results of this study proved that there are difficulties encountered by students in learning suprasegmental phonology with special reference to stress. The results indicated that these difficulties vary regarding the stress patterns. Researcher has summarized following findings:

1- In oral communication, students give less attention to stressed syllables.

2-when students pronounce words with wrong stress, message will be misunderstood.

3-It is difficult to predict word stress in syllables in different word classes, as such it is confusing.

4-Students get confused in pronouncing stress on word classes: noun, verb, adjective that have same spelling and pronunciation.

5-Students have difficulties in recognizing the effect of affixes on the stress placement.

6- Mother tongue interference (Arabic) effects student's stress placement when he /she involved in real communication

7-Mother tongue interference affects students' pronunciation due to absence of such sounds (e.g. p ,v)

8-Arabic speakers tend to insert vowel to break the consonant clusters in word like: extra, spring and school..

9-Native speakers of English can be misunderstood by students when they are talking to them.

10- Student's mother tongue interference transfers the rules of L1 into L2 when they are learning stress.

12-The University English syllabus insufficiently covers the primary and secondary stress.

13-The inculcating techniques adopted by teachers for teaching English stress are out of date.

14- Teachers' cultural background can greatly affect students' pronunciation of English stress.

15- The English syllabus at University does not provide enough practice on stress.

5.4. Conclusion

According to the scholars, it has been stated that a number of linguistics, such as Jenkins (2002) and Burns(2003), have agreed on effectiveness of communicative pronunciation competence that can be achieved more through improving supra-segmental production in preference to stress, Linking and intonation. Trask (1996) mentioned that stress as: A certain type of prominence which, in some languages are present upon certain syllables. Native speakers and phoneticians find it easy to determine which syllables bear stress, and even to distinguish varying degrees of stress, but the phonetic characterization of stress is exceedingly difficult. Stress is variously associated with greater loudness, higher pitch and greater duration. On contrary, Catford (1988) confirmed that it is unwise to talk of stress in terms of loudness, since it is a part of inherent sonority of sounds. He thought it is much more reliable to think of stress entirely in terms of degrees of initiator power - the amount of energy expended in pumping air out of the lungs. Kharma and Hajjaj (1989), point out that Arabs fail to adopt the stress-timed rhythm of English. This is often observed in Arab learners stressing all words in a sentence irrespective of their context, nature and importance. This also includes stressing function words which are invariably unstressed in spoken English. Arabic word stress has been the subject of various studies. The system, degree, placement types, and location of stress in Arabic differ completely from English stress. Arab stress location patterns also differ considerably in colloquial and modern standard Arabic. Arabic lexical stress is more

predictable than English stress and has stress placement rules that operate at the word level.

To sum up, the viewpoint of researcher, students should be well- trained in using stress in real communication. Moreover, students of English should be exposed to cassettes, CDS and videos recorded by English native speakers which are needed for practicing stress.

5.2. Recommendations

In the light of the results of the present study, the following recommendations are presented. Those seem to be relevant to EFL students, English teachers and university stakeholders:

1. Teachers should raise students' awareness about the importance of the stress.

2. EFL students in Sudan should be recommended to develop their language skills and to give more attention to the suprasegmental features.

3. EFL teachers in Sudan should use stress in real communication. It is very important to teach stress naturally, especially through dialogue and situational-based texts designed for role play.

4. Students should be encouraged by teachers so as to use internet and communicate with English native speakers and to be exposed to different authentic materials.

5. Students should be informed by their teachers about the different types of stress patterns so as to practice in producing them.

6. Stress is highly recommended to be integrated in the English curriculum in Sudan. Sudanese education policy should recommend students to learn English based on a communicative approach instead of adopting the structural approach.

7. Songs, rhymes, and chants are wonderful means of teaching stress and intonation patterns of English.

9. Stress should be introduced in context so that the learners may be able to associate an attitude with the stress patterns being used to realize it.

10. In any case, it is perhaps most crucial to practice stress after a native English speakers utterance. In this case, the voices of different people should be introduced.

5.3. Suggestions for further research

The present study presents the following suggestions for further research:

1- Handling training programs for developing stress awareness to both students and teachers.

2- Investigating the obstacles of teaching other aspects of suprasegmental features which are not tackled by the current study such as: juncture and pause.

3- Exploring the errors made in English intonation among Arabic speakers by analyzing and tackling these errors.

4- Application of phonological strategies to handle suprasegmental learning difficulties among Arabic speakers.

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APPENDICIES

APPENDIX (A)

Teachers' Questionnaire

Dear………

This questionnaire is part of a PhD study entitled" **Investigating Difficulties Encountered by Students in Learning Suprasegmental phonology with Special Reference to Stress."**

I would be thankful for your assistance by applying your opinion about the questionnaire statements. For doing so, **please Put "√" in front of your choice**. Your assistance is highly appreciated.

Part One:

1- Age:

  (a) Less than 25 ☐   (b) 25-35 ☐   (c) 36-45 ☐

  (d) 46-60 ☐   (e) 60 above ☐

2- Gender:

  (a) Male ☐   (b) Female ☐

3- Qualifications

    (a) Ph.D.   ☐   b) M.A   ☐ (c) B.A   ☐ (d) High Dip ☐

4- Years of experience as language teacher:

  (a) 1-5 ☐   (b) 6-10 ☐   (c) 11-15 ☐   (d) 16 -above ☐

Part Two:

	Statements	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	In oral communication, Students give less attention to stressed syllables.					
2	When students pronounce words with wrong stress, message will be misunderstood.					
3	It is difficult to predict word stress in syllables in different word classes, as such it is confusing.					
4	Students get confused in pronouncing stress on word classes: noun, verb,					

	adjective that have same spelling and pronunciation.					
5	Students have difficulties in recognizing the affect of affixes on the stress placement.					
6	Mother tongue interference (Arabic) affects students' stress placement when he/she is involved in real communication.					
7	Mother tongue interference affect students' pronunciation due to absence of such sounds (e.g. p ,v)					
8	Arabic speakers tend to insert vowel to break the consonant clusters in word like: extra, spring and school.					
9	Native speakers of English can be misunderstood by students when they are talking to them.					
10	Student's mother tongue interference transfers the rules of L1 into L2 when they are learning stress.					
11	Students are insufficiently exposed to Cassettes, CDs recorded by native speakers of English which are needed for practicing stress.					
12	The University English syllabus insufficiently covers the primary and secondary stress.					
13	The inculcating techniques adopted by teachers for teaching English stress are out of date.					
14	Teachers' cultural background can greatly affect students' pronunciation of English stress.					
15	The English syllabus at University does not provide enough practice on stress					

APPEDIX (B)

Sudan University of Science and Technology

Faculty of Education

Diagnostic test

Subject: Stress

Name: ………………………………… **Class:** …………

<u>**Question One:**</u>

Identify the stressed syllable in the following words:

 1- record (N) 2- subject (V) 3- contents (N) 4- occurrence 5- determine

6- resurrect 7- industrialist 8- imperialism   9- extraordinary 10- executive

<u>**Question Two:**</u>

Pronounce the stressed patterns in the underlined words:

1- There is no <u>record</u> of their first name.

2- The city was <u>subjected </u>to heavy bombing

3- The bedroom's <u>contents</u> have all been packed.

4- Lighting is a natural <u>occurrence</u>.

5- He is trying to <u>resurrect</u> his acting career.

6- An inquiry was set up to <u>determine </u>the cause of accidents.

7- There are <u>industrial</u> uses for plastic.

8- British <u>imperialism</u> created the enormous British Empire.

9- The researchers made an <u>extraordinary </u>discovery.

10- He has an <u>executive</u> position in the company.

Question three

Identify stressed syllable in the following words:

1-text 2- spring 3- next 4- allow 5-connect 6- cotton 7- little 8- clothes 9- months 10- street

Question four:

show the place of stress underlined words :

1- The newspaper had printed the full <u>text</u> of the president's speech.

2- There's a feeling of <u>spring</u> in the air today.

3- The <u>next</u> six months will be harder.

4- She won't <u>allow</u> herself to be dictated to.

5- The towns are connected by train and bus services.

6- They are in the field picking <u>cotton</u>.

7- I got very little <u>sleep</u> last night.

8- I need some new <u>clothes</u> for the summer.

9- He had to wait for <u>months</u> for visas to come through.

10- He is used to being recognized in the <u>street</u>.