CHAPTER ONE
INTRODUCTION

1.0 Background of the study:

Phonetics and phonology are the main branches to human sounds and speech, they deal with speech sounds, how they are made and how they are perceived, phonetics deals with the sounds of human speech, it concerned with physical properties of speech sounds, their physiological production, acoustic properties, auditory perception, Phonology deals with the systematic organization of sounds in languages, focused largely on the study of the systems of phonemes in particular languages. Sounds of the languages are pronounced differently according to sound symbols, consonants and vowels play a role where we are attempt to clarify a major distinction between sound types, in consonants there is some kind of obstruction in oral tract, whereas for vowels there is no such hindrance of the outflow of the air, it is particularly important to learn to think of English pronunciation in terms of phonemes rather than letters of alphabet, long vowels which tend to be longer than short vowels in similar contexts, the difference between them not only in length but also in quality. Languages have different accents pronounced differently by people from different geographical places, from different social classes, ages, and different educational backgrounds. Accent is often confused with dialect we use the word dialect to refer to a variety of languages which is different from others not just in pronunciation but also in vocabulary and grammar. BBC pronunciation is the accent that has usually been chosen by British teachers to foreign language, it is the accent that has been most fully described, and it has been used as the basis for textbooks and pronunciation dictionaries.
1.1 Statement of the problem:

The pronunciation of the native language may affect the student's ability to hear sounds, because it is the first aspect that people can notice when they are speaking English, due to differences in symbols of sound system between first language L1 and second language L2, when students cannot have good pronunciation of the foreign language they will have problems in their normal communication, that why the researcher going to investigate relationship between students' pronunciation and transcription.

1.2 Significance of the Study:

Pronunciation and transcription are correlated sub skills, pronunciation is the most important and difficult, yet non-native English speakers have to face when studying English, improper pronunciation can lead to negative impression that when you talk to people in real life, your pronunciation is the first thing they notice during the conversation, misunderstanding that when knowing a lot of vocabularies is meaningless if you cannot pronounce those words correctly, ineffective communication that when you are making it difficult for people who listen to you, they cannot figure out what you are saying, to fix these problems the learners needs to make correct pronunciation beside knowing the phonemic transcription of symbols sound.

1.3 Objective of the Study:

The study attempts to achieve the following:

1. To show some English transcriptions (symbols) that cause problems in pronunciation among students.

2. To investigate the cause of mother tongue interference within students' daily life.
3. To shed lights on the value of transcription skills for learner's pronunciation development.

4. Show the importance of teaching transcription to have a correct pronunciation.

1.4 Questions of the Study:

1. To what extent do students have an ability to pronounce words and sentences correctly?

2. To what extent does the mother tongue interference cause pronunciation problem?

1.5 Hypotheses of the Study:

The study attempts to verify these hypotheses:

1. The students have problems in pronouncing words and sentences transcription.

2. Mother tongue interference causes these problems.

1.6 Methodology of the Study:

This study is descriptive, the researcher is going to use the analytical method to analyze the data obtained.

1.7 Population and sample of the study:

The population of the study is third-year students at Sudan University of Science and Technology, College of Languages, English department. Their total number is hundred, twenty students are chosen randomly to represent the sample of the study, for collecting data.
**1.8 Limit of the study:**

This study is limited to:

1. Pronunciation and transcription of sentences and words to test the students' awareness.

2. Subjects third-year students at Sudan University of Science and Technology, College of languages, English department.

3. Academic year 2016-2017
CHAPTER TWO:
Literature review and previous studies

2.0 Introduction:

This chapter will be divided into two parts. The first part will be about an introduction to phonetics and phonology, organs of speech and its role of production of speech, airstream mechanisms and its role to provide source of energy for generating speech sound, long vowels, diphthongs, and consonants, International Phonetic Alphabet, phonetic and phonemic transcription, while the second part, will show some related previous studies.

2.0.1: A: literature review:

2.1 Phonetics:

According to (Skandera & Burleigh, 2005; 3) Phonetics divides concrete utterances into individual speech sounds, it concerned with parole or performance, phonetics can be divided into three distinct phases, articulatory phonetics, acoustic phonetics and auditory phonetics.

1. Articulatory phonetics; describes in detail how the speech organs, also called vocal organs or articulators, in the vocal tract are used in order to produce or articulate speech sounds.

2. Acoustic phonetics; studies the physical properties of speech sounds, in the air vibrates as sounds pass from speaker to listener.

3. Auditory phonetics; investigates the perception of speech sounds by the listener, how the air transmitted from the air to the brain and if they are processed. (ibid; 3)

According to (Crystal, 2008; 363) Phonetics is the science which studies the characteristics of human sound-making, especial sound used in speech, it provides method for their description, classification and transcription, it is of three
recognized; articulatory phonetics the study of the way speech sounds are made, acoustic phonetics studies the physical properties of speech sounds, as transmitted between mouth and air, auditory phonetics studies perceptual response to the speech sound, as mediated by air, auditory nerve and brain, the term instrumental phonetics used for the study of these aspects of subject using physical apparatus, the Experimental phonetics the term which reflects the general nature of pure scientist endeavor.

2.1.1 Phonology:
According to (skandera&Burleigh,2005;5) Phonology deals with speaker knowledge of the sound system of a language exclusively concerned with langue or competence.

Phonology can be divided into two branches:

1. Segmental phonology; is based on the segmentation of the language into individual speech sounds provided by phonetics, and not interested in production, physical properties, perception, but in the function and possible combination of sounds within the sound system.

2. Suprasegmental phonology; also called prosody, it is concerned with those features of pronunciation that cannot be segmented, because they extend over more than one segment, or sound such feature includes;stress,rhythm and intonation.

Phonology: is a branch of linguistics which studies the sound system of language, and very wide range of sounds, the aim of the phonology is to demonstrate the patterns of distinctive sound found in a language, and make general statement of sound system in the language of the world, phonology is concerned with the range and function of sounds in specific language 'functional phonetics', phonology is the branch of linguistics which investigates the ways in which speech sounds are
used systematically to form words and utterances, in order to understand phonology one must have a grasp of the basic concepts of phonetics.

2.1.2 Major Construct in L2 Phonology:

The construct of transfer; the effect of previously learned languages on subsequently learned languages has a major role in the theory of construction and pedagogical development in L2 phonology, transfer has been considered to be dominant, the influence both positively and negatively in the acquisition of L2 in the area of phonology, the development of the constructive analysis hypothesis focused on error production, specifically their explanation and predication.

CAH predicate aspect of features of the L2 that were similar to the L1 would be easy to acquire, while aspects were different in the two languages would be difficult to acquire (Hansen; 2008, 2)

Sound of the language or languages being spoken around us from the moment of our birth we ultimately come to understand and produce, at the same time we must also be able to differentiate speech sounds from all other sounds, the disturbance that take place in the world around us, learning to perceive and produce the sound of the first language are accomplished much more rapidly than the overall work involved in learning a language. (ibid; 19)

2.1.3 Teaching and learning pronunciation:

The teachers' role:

- Helping learners hear: to help learners perceive sound, learners will have a strong tendency to hear the sound of English in terms of their native language.
- Helping learners' make sounds: sometimes learners will be able to imitate the new sounds, but if they can’t, the teacher need to be able to give some hints which may help them to make the new sounds.

- providing feedback: both the above tasks require the teacher to tell learners how they are doing, by providing them with information about their performance.

- pointing out what's going on: learner need to know what to pay attention to, and what to work on, the teacher need to make learners aware of the potential of sound.

- Establishing priorities: the learners may notice that something about their pronunciation is not like the way English people do it and may automatically try to change, learners need the help of the teacher in establishing a plan for actions in deciding what to concentrate on and when to leave well enough alone.

- Devising activities: learning pronunciation is a complex; therefore the teacher must consider what types of exercises and activities will be helpful, the teachers must also keep in mind that certain activities suit the learning styles and approaches of some learners better than others.

- assessing progress: the most difficult things that learners face is how to assess their own progress, so teachers must provide the information, because the information about progress is often a crucial factor in maintaining motivation (Kenworthy;1987,2)

2.2: The Organs of Speech:

According (Hungarian institute, 2014; 4) the organs which are involved in the production in speech sounds are called speech organs, the study of speech organs helps to determine the role of organs in the production of sounds, these different parts are called articulators, air is the most important part in production of speech sounds.
All parts of the human body which are concerned in various way with the production of the speech, their primary function is to do with eating, chewing and swallowing food, namely the lungs, trachea, larynx, and oral cavities, and the nasal passages, are termed the vocal tract. (Clark & Yallop, 2007; 15)

1. **The lungs**: pull in and push out air, the amount of the air accumulated inside our lungs controls the pressure of the airflow. (Hungarian institute, 2014; 4).

2. **the larynx and vocal folds**: the larynx known as the voice box in the front of the throat, and the vocal fold generally called vocal cords, are like a pair of lips placed from front to back the are joined in the front and can be separated at the back, the opening between them called glottis, the opening of the vocal fold takes different positions. (Ibid; 5) **Wide apart**: do not vibrate this sound called voiceless sound for example, the letters /p/ and /f/.

**Narrow glottis**: the air passed through the glottis and there is friction also called v voiceless for example letter /h/

**Tightly closed**: the vocal folds pressed together so that the air cannot pass between them.

**Touches or nearly touched**: the folds vibrate when these two are touching each other or nearly touching, the air come from the lungs and makes them vibrate and produces a musical tone called voice, according to that the main functions of the vocal folds is to convert air delivered by the lungs into audible sound, the opening and closing process of vocal folds affect the air to control the pitch and the tone of the speech sounds, as a result we have different qualities of sounds. (Ibid; 6)

3. **the articulations**: articulators transform the sound into intelligible speech either active or passive, they include the pharynx, the teeth, the alveolar
ridge behind them, the hard palate, the soft velum behind it, the lips, the tongue, and the nose and its cavity. (ibid; 7)

1. **Pharynx**: it lies between the mouth and the food passage.

2. **roof of the mouth**: is considered as a major speech organ, it is divided into three parts:
   
   A. **Alveolar ridge**: it is situated after the upper front teeth, the sound which produced called alveolar ridge e.g.: t/d.
   
   B. **Hard palate**: it is at the roof of the mouth on the middle part of the roof.
   
   C. **Velum or soft palate**: it is the lower part of the roof of the mouth, it could be lowered or raised; when it is lowered the air stream from the lungs access to the nasal cavity, when it is raised the passage to the nasal cavity is blocked, the sound which are produced called velar sounds e.g.: /k/,/g/ (Ference hungarian institute, 2014; 8)

3. **The lips**: play an important role in the matter of articulation, lips pressed together like in the consonant sounds e.g.: /p/,/b/ called bilabial sounds, and /f/,/v/ when lip to teeth contact are called labiodentals sounds.

   **The lips may have the following positions:**

   A. **Rounded**: when we pronounce a vowel our lips be rounded, the corners of the lips are brought towards each other for e.g.: /əʊ/

   B. **Spread**: in this position the lips are moved away from each other (when we smile) for e.g.: /ɪː/ long vowel with slightly spread lips.

   C. **Neutral**: the lips position are not rounded or spread e.g.: /aː/

4. **The teeth**: the teeth are pronouncing various speech sounds, the sounds which are made with tongue touching the teeth are called dental sounds for e.g.: /θ/and /ð/
5. **The tongue**: is divided into four parts: (ibid; 9)

   A. **Tip**: it is the extreme end of the tongue.

   B. **Blade**: it lies opposite the alveolar ridge.

   C. **Front**: it lies opposite to the hard palate.

   D. **Back**: it lies opposite to the soft palate or velum.

   The **tongue** is responsible for the production of /p/, /t/ and many speech sounds; it can move fast to different places.

   - **Tongue height**: it is concerned with the vertical distance between the upper surface of the tongue and the hard palate, the sound can be described close as /ɪː/ and open as /æ/.

   **Tongue frontness/backness**: it is concerned with the part of the tongue between the front and back and classified as front vowel, and back vowels, during the articulation of the vowel /uː/ the back of the tongue is raised high so it’s a back vowel, on the other hand during the articulation of vowel /æ/ the front of the tongue is raise high therefore it’s a front vowel. (ibid; 10)

6. **The jaws**: is considered by some of the phoneticians as articulators, we can move the lower jaw a lot at time of speaking.

7. **The nose and the nasal**: they may also be considered as speech organs, the sound which are produced e.g.: /m/, /n/, /ŋ/. (ibid; 11).

   For functional and descriptive purposes, the tract is divided into two basic parts, larynx and other blow it, the aperture between the folds is known as the glottis and tract above the glottis is called supraglottis vocal tract, it is possible to block the cavity so the air flows through the pharyngeal and nasal cavities sound /m/. the obstruction pharyngeal and nasal cavity and the blocked mouth cavity contribute to the resonant properties of the sound. There are way of producing consonantl sound friction consonants in /h/, Occur both at the opening of vocal folds, all such sound are called voiced and voiceless, the fricatives can be voiceless or voiced, voiceless
/ f / is the counterpart of voiced /v /, the stops also are voiceless if the vocal fold vibration does not begin until after the start of the release of the blockage in the mouth cavity, the major types of the articulators processes involved in speech production occur very rapidly, the sound output can show rapid changes of quality, and the dynamic aspect of speech is important in providing cues that allow listeners to recognize a coherent sequence of speech sounds, in long vowels /ɪː/, /ɑː/, /ɔː:/ the vocal fold vibrate, and releasing a prosodic of air puffs, the soft palate hangs down to allow free air flow through nasal cavity. (Clark&yallop, 2007; 15)

2.3 Airstream mechanisms:

It provides source of energy for generating speech sounds, using airflow and pressure in the vocal tract, we can distinguish three basic mechanisms; lungs airflow, glottalic and velaric airflow, lung airflow and the respiratory cycle are basic to speech production, in principle air flowing either into or out of the lung during the respiratory cycle may be used in generating speech sound, the two mechanisms (outward and inward air) are referred to egressive Pulmonic and ingressive pulmonic, the majority of sounds used in languages of the world are produced by a pulmonic egressive airstream mechanisms, all the sounds in English are produced in this manner. (ibid; 16)

Mechanisms are used other airstream in other languages to produce sounds called Ejectives Implosive and Clicks, instead of lung air, the body of air in the mouth maybe moved, when this air is sucked instead of flowing out egressive sound, like implosives and clicks are produced, when the air in the mouth is pushed out, Ejective produced, they are also Egressive sounds, implosives and ejectives are produced by a glottalic airstream, while Clicks produced by a velaric airstream mechanisms, Ejective are found in many American Indian languages as well African, implosives also occur in language of the American Indians and throughout
African, Indian and Pakistan for examples ejective velar stop (contrasting with pulmonic [ k ] , ejective sibilant fricative ( contrasting with [ s ]). (ibid;17)

Clicks occur in the southern Bantu languages such as Zulu and languages spoken by the Bushmen and Hottentos, in these languages clicks are consonants functioning as part of the speech sound system (unlike tsk, tsk used to express disapproval, which cannot be considered a speech sound in the same way.(ibid;18)

2.4 Short vowels:

According to (Roach, 2009; 24) English has a large number of vowel sounds (ι,e,æ,a,d,u ) vowels can have quite different lengths in different contexts, each vowel is described in relation to the cardinal vowels.

ι : (example words: 'bit', 'pin', 'fish') this vowel is the close front area when it compared with cardinal vowel it is more open, the lips are slightly spread.

e : (example words: 'bet', 'men', 'yes') this is front vowel, the lips are slightly spread.

æ : (example words: 'bat', 'man', 'gas') this is front, but not quite as open as [a] the lips are slightly spread.

ʌ : (example words: 'cut', 'come', 'rush') third central vowel, it is more open, the lips is neutral.

ʊ : (example words: 'pot', 'gone', 'cross') this vowel is not quite fully back, the lips are slightly rounded.

u : (example words: 'put', 'pull', 'push') this vowel nearest cardinal vowel [u] but it more open, the lips are rounded. (ibid; 25)

1. The middle sound in (fish) represented by /ɪ/ the part of the tongue between the front and the center is raised above mid-close position and the lips are slightly spread.
2. The first sound in (egg), represented by /e/ the front of the tongue is raised between the mid-close and mid-open position, the lips are slightly spread.

3. The first sound in (apple), represented by /æ/ the front of the tongue is raised between the mid-open and fully open position, the lips are slightly spread.

4. The second sound in (butter) represented by /ʌ/ the center of the tongue is raised between the mid-open and fully open, the lips is neutral.

5. The first sound in (olive) represented by /ɒ/ the back of the tongue is lowered, the lips slightly rounded.

6. The second sound in (pudding) represented by /ʊ/ the part of tongue between the center and the back is raised above mid-close position, the lips are rounded.

7. The third sound in (spaghetti) represented by /ə/ the first sound in ago, the center of the tongue is raised between the mid-closes and mid-open, the lips are in a neutral shape. (Skandera&Burleigh, 2005; 36)

2.5 Long vowels:

There are five long vowels, and it tend longer than short vowels, the symbols consist of one vowel plus a length mark made of two dots :(ɪː, ɜː, ɑː,ɔː,uː) these five long vowel not only different in length but also in quality when compare some similar pairs of long and short vowels for example, ɪ with i: or o, with u: (because from differences in tongue, shape and lips position) as length in long and short vowels symbols would still different from each other even omitted the length mark, length mark used because it helps learners to remember the length differences. (Roach, 2009; 28)

ɪː: (example words: 'beat', 'mean', 'peace') this vowel is nearest to the cardinal vowel i it is closer and more front than short vowel in bed and pin.
ɜː (example words: 'bird', 'fern', 'purse') this is mid-central vowel, the lips position is neutral.

ɑː (example words: 'card', 'half', 'pass') this an open vowels in the region of the cardinal vowel [a] the lips position is neutral.

ɔː (example words: 'board', 'torn', 'horse') the tongue height, this vowel fully back and has strong lips-rounding.

uː (example words: 'food', 'soon', 'loose') this nearest cardinal vowel u, it is less back and less close, lips are rounded. (ibid; 28)

1. The last sound in the word bee, represented by /ɪː/ the front of the tongue is raised, touch palate, the lips are slightly spread.

2. The second sound in bird, represented by /ɜː/ this sound usually spelt er, the center of the tongue is raised between mid-close and mid-open position, the lips are in a neutral shape.

3. The third sound in (starling), represented by /ɑː/ the part of the tongue between the center and the back lowered to the fully open position, the lips are in a neutral shape.

4. The second sound in (horse), represented by /ɔː/ the back of the tongue is raised between mid-close and mid-open position, the lips are rounded.

5. The middle sound in (goose), represented by /uː/ the back of the tongue is raised touch the palate, the lips are rounded. (Skandera&Burleigh, 2005;35;36)

2.6 Diphthongs: according to (Roach, 2009; 29) BBC pronunciation has a large number of diphthongs sound which consists of a movement or glide from one vowel to another, in terms of length diphthongs are similar to the long vowels, the first part of diphthongs is much longer and stronger than the second part, the total
number of diphthongs is eight, the centering diphthongs glide towards the \( \varepsilon \) (schwa) vowel, as the symbols indicate.

\( \text{iə} \) : (example words: 'beard', 'weird', 'fierce') The starting point is a little closer than I in 'bit', 'bin'.

\( \text{eə} \) : (example words: 'aired', 'cairn', 'scarce') This diphthong begins with a vowel sound that is more open than the e of 'get', 'men'.

\( \text{ʊə} \) : (example words: 'moored', 'tour', 'lure') this diphthong has a starting point similar to \( \text{ʊ} \) input. (Roach, 2009; 29)

**Three of the diphthongs glide towards /u/, as described below:**

\( \text{ei} \) : (example words: 'paid', 'pain', 'face') The starting point is the same as the e of 'get', 'men'.

\( \text{ai} \) : (example words: 'tide', 'time', 'nice') This diphthong begins with an open vowel which is between front and back.

\( \text{ɔi} \) : (example words: 'void', 'loin', 'voice') The first part of this diphthong is in 'ought', 'born': Slightly more open than \( \text{ɔ} \) in ought, born.

**Two diphthongs glide towards /ʊ/,** the tongue moves closer to the roof of the mouth there is at the same time a rounding movement of the lips.

\( \text{əʊ} \) : (example words: 'load', 'home', 'most') the vowel position for the beginning of this is the same as for the "schwa" vowel /ə/ , the lips slightly rounded towards the glide \( \text{ʊ} \).

\( \text{ɑʊ} \) : (example words: 'loud', 'gown', 'house') This diphthong begins with open vowel, a glide to \( \text{ʊ} \) takes a large movement , there is only slight lip-rounding. (ibid; 29)
2.7 Consonants:

On the way out the air flow can be more or less obstructed, producing a consonant, the consonants are classified into VPM label:

Voicing: means that the vocal folds are used, if they are not, the sound is voiceless.

Place of articulation: is the place where the air flow will be more or less obstructed.

Manner of articulation: is concerned with the nature of obstruction.

Voicing: the larynx, also called Adams' Apple, inside it are the vocal folds, when the edge of the vocal fold touch each other, air passing through glottis cause vibration.

2.7.1 Place of articulation 1

Bilabial: sounds are produced when the lips are brought together e.g.: /P/, /b/, /m/.

Labiodental: sounds are made when the lower lips is raised towards upper front teeth e.g.: /f/, /v/. (Skandera&Burleigh, 2005:20)

Dental: sounds produced by touching the upper front teeth with the tip of the tongue e.g. /θ/, /ð/.

Alveolar: sound are made by raising the tip of the tongue toward the ridge E.g.: /t/ , /s/.

Palatoalveolar: sounds made by raising the blade of the tongue towards the part of the palate behind the alveolar ridge, e.g.; [ʃ, tʃ].

Palatal: sound very similar to palatoalveolar produced further back toward the velum, the only palatal sound in English is [ j ] e.g.: yes, yellow.
**Velar:** sounds are made by raising the back of the tongue toward the soft palate e.g.; [k, g, η, w] (ibid:21)

**Labiovelar:** a place of articulation which adds some quality to the main articulation is called secondary articulation.

**Uvular:** sounds are made by moving the root or back of the tongue against the uvular, which is the appendage that hangs down from the velum.

**Pharyngeal:** sound are made when the root of the tongue is pulled back in the pharynx, there are no pharyngeal consonant phonemes in English.

**Epiglottal:** sounds are produced by a movement of the epiglottis against the lower pharynx. Such sound do not exist in English.

**Glottal:** sounds are produced when the air are passes through the glottis e.g.: [h]. (ibid; 22)

**2.7.2 Manner of articulation 2**

**Plosive:** are sounds which there is a complete closure in the mouth, the air blocked and released with a small burst of sound, e.g. bilabial[ p, b ]alveolar[ t, d ]velar[ k, g ].

**Fricatives:** the air is not blocked, there is no plosive Ex; may be labiodentals /F/, /v/ dental /θ/, /ð/ alveolar /s/, /z/.

**Affricates:** are a combination of plosive and affricative, they begin like a plosive, and then slow release e.g. palatoalveolar /tʃ/, /dʒ/. (Skandera&Burleigh, 2005:22)

**Nasals:** like the plosive and there is a complete closure in the mouth, but when the velum is lowered the air escape through the nasal cavity Ex; /m/ bilabial /n/ is alveolar. (ibid; 23).
2.8 The International Phonetic Alphabet:

The most wildly used phonetic alphabet, and one that provides suitable symbols for the sound of any language is the International Phonetic Alphabet or IPA, it was first published in 1889 by international phonetic association in France, and has since then been revised and corrected in various ways, most recently in 1996, it was initially developed by a group of phoneticians, including Daniel Jones, from a concept proposed by the Danish linguist Jespersen (1860-1943), the IPA is used with minor modifications, in almost all English- language dictionaries, except for American publications, the IPA does not the means for a prosodic transcription, it cannot indicate suprasegmental features like rhythm or intonation. apart from a mark to indicate stress, there is no generally agreed system for writing down the prosody of speech, some IPA symbols have been devised to look like ordinary Roman letters, but have disadvantage may be misleading, because do not always represent the sound that a speaker of English or German would expect, in order to distinguish phonetic symbols from letters, phonetic symbols enclosed either in square brackets [   ] if they are used to represent a concrete utterance or in a slashes /   / when they indicate speech sounds a part of the sound system, letters are enclosed within point brackets <   > or they are appear in signal quotation marks, or in italics. (ibid; 8)

2.9 Phonetic and phonemic transcription:

There are two different kinds of transcription, transcription from dictation, the student must listen to a person or a tape recording and write down what they hear, transcription from written text, the student given a passage of dialogue and must use phonemic symbols, the Phonemic symbols must be exactly the same as the number of phonemes that exist in the language, we can treat tʃ in chip tʃip as one phoneme, phonemic transcription consisting of two character (t and ʃ), the advantage of learn more about phonetics will make the student to hear a lot of sounds differences not aware of before, the phonemic system described BBC accent the
contains 44 phonemes, and can displayed by classificatory methods used by phoneticians, such as vowels, diphthongs, consonant, and using much larger symbols when trig to represent sounds more accurately by using International Phonetics Alphabet. (Roach, 1991; 39)

Phonetic transcription much more accurate in phonetic detail, and contains much more information than phonemic transcription, phonetic transcription containing a lot of information about exact quality of sounds called Narrow phonetic transcription, while included little information than phonemic transcription called Broad phonetic transcription, the another called Allophonic transcription that contains additional symbolic information about allophones symbols, when symbols are used to represent precise phonetic valued rather than phonemes, often enclosed in square brackets [ ] and phonemic symbol are enclosed within slant brackets / / . (ibid; 42)

2.9.1 Phonemic transcription:

In the broadest sense aims to represent abstract speech sounds, idealized utterances conforming to speech community's shared knowledge of the sound system of a language, it does with moderate degree of accuracy showing only articulatory details that can be distinguish meaning, this type of transcription called broad transcription, the transcriber does not write down what he hears, but what he expects he would hear, it is best referred to as a phonological transcription, (Skandera & Burleigh, 2005; 49)

Phonemic transcription represent spoken language at the level of phonology, through phonetic symbols that are taken to represent phonemes (ibid; 50)
2.9.2 Broad phonetic transcription: An intermediate type.

For the leading and teaching of English pronunciation, the phonetic transcription proper shows too many fine details, whereas phonemic transcription often does not seem detailed enough, for that reason it has become customary for pedagogical purposes, to use an intermediate type of transcription, which is largely phonemic, but shows several more articulatory details, it shows linking r-sounds, syllabic consonants, and stress. It does not usually show allophonic variation, caused by such processes as devoicing, voicing, fronting, and retraction, this type of transcription is best regarded as broad phonetic transcription, transcription text must be enclosed in square brackets [ ]. (ibid:50)

People think when they learning phonetics will simply learning phonetic transcription, but there are more subject than learning to use a set of symbol a phonetician is a person who can describe speech and understanding the mechanism of speech production and speech perception and knows how languages use these mechanism, the Citation is style of speech to show how someone pronounce a word, this style useful in language documentation an lexicography, phonetics transcription of connected speech is the style that used in normal conversation, when two sounds can be used to differentiate words, belong to different phonemes, phonemic difference if two words are differ in only a single sound for example: (white and right) the differences between consonants cannot be used to distinguish words for Example beginning and end of word pop at first sound lips and be a puff of air before the vowel and after v the final consonant must be a puff of air, the word can take a same sound but have different spelling for Example ( phone - foam and key and car begins with same sound despite the fact that one is spelled with K and the other with C , but for these two examples the sounds are not exactly the same, Most American and some younger speakers of British English, the sound T in pity in the middle s different from the sound in T in the end pit in pity the sound of T is pronounce like D, For another e.g.: sound L is have a different pronunciation
when saying it in whole word Play, L here without voicing but in Lay L is voicing, this variation between sounds that cause a difference in meaning is called Phonemic transcriptions. (Ladefoged & Johnson, 2010; 33).

2.9.3 The transcription of Consonants:

The Rhyme in phonemes by considering the contrasting consonant sounds in English for Example: word with rhyme pie have only single consonant at the beginning, the different in words that found in only one sound is called Minimal set such as Spy, Try, Spry, the words may have two consonant letters for Example: thing, they, shy, and another consonant do not occur in word rhyming with pie we can find it in another large set of consonant beginning word with pea, the most of symbols in the table are the same letters we use in spelling these words, Phonetic usage in letter C sometimes represent a [ K ] sound in Cup or Bacon and sometimes to represent [ s ] in Cellar or Receive and two C's may represent a sequence of [ K ] and [ S ] sounds in the same word as ( accent – access). (ibid; 35).

In the letter [ g ] used in the sound guy- guess but never in the sound age, the velar nasal at the end of rang is written [ η ], a letter n combined with tail of the letter g. Greek symbol letter [ θ ] is used for the voiceless dental fricative in the word (thigh, thin, ether, breath), the symbol [ ɔ ] from an anglo-Saxon letter corresponding voiced sound Ex ( they, them) the spelling system of English language does not distinguish between [ θ ] and [ ɔ ], the letter [ ʃ ] it like along s in ( shy, sheep, rash) and voiced symbol both ascender-descended, the symbol [ z ] is like a long z descending line this sound found in middle of words such as (vision, measure, leisure), the symbol [ j ] for the initial sound ( yes, yet0 some books concerned with phonetics often use [ y ] and some other books used [ s ] in the place of IPA symbols [ ʃ ] and [ z ] [ ɔ ] in the letter in symbols [ t ʃ ] and [ d ʒ ], Symbol [ ] to distinguish affricate from consonant cluster, affricate in why choose written [ t ʃ ] and [ t ʃ ] in white shoes, The symbol
bases on the question mark in the difference between fleest and fleeced. (ibid;35).

2.9.4 The transcription of vowels:

The transcription of the contrasting vowels in English is more difficult than the transcription of consonants, for two reasons first accent of English differ more in their use of vowels than in their use of consonants, second authorities differ in their views of what constitutes an appropriate description of vowels, The major difference between British and American English the [r ] sounds the speaker of American English pronounce [ r ] sound after vowels whereas in most British English [ r ] occur only before a vowel, American English speakers distinguish between words such as heart and hot not only by difference in vowel quality but by pronouncing heart with [ r ] and hot without [r ],and the British English distinguish these words by using different diphthongs, most speakers of British forms of English and most Americans speakers distinguish between such as Cot and Caught by symbol [ɔ ], the symbol [ʊ ] thought of as letter u with the ends curled out, in hood, could)the symbol ø an upside-down letter e called schwa, The symbol [ʌ ] such as bud, hut called wedge. (ibid;38)

2.0.2: B: Previous studies:

1. Lintunen (2013) study the effect of phonetic knowledge on evaluated pronunciation problems, it focuses on the development of pronunciation awareness and how it is affected by phonetics teaching, in the Finnish university students of English, first–year students.

The subjects attended a pronunciation test and filled in two questionnaires (a pretest and posttest) on phonetically difficult words, the pronunciation test was held before the first questionnaire, the purpose of the pronunciation test was to reveal the actual phonetic difficulties of the subjects.
The study compares learner's pronunciation with their subjective evaluation of their pronunciation problems, the evaluation collected before and after a course in English phonetics area compared according to the results.

The subjects were given 10 minutes to prepare after which they had to read the text and the individual words out loud while being recording, 69 subjects were selected out of 156 randomly.

The study analyzed by two experienced pronunciation teachers.

The results revealed that: the subjects had problems in the pronunciation with a certain phonemes, e.g.: /V/, /w/ 69.6% (pronunciation errors), also found a problematic word stress and silent letters.

Subjective evaluation:

The subjects were partly aware of their problems and their awareness increased through teaching, when they come to the explicit teaching of pronunciation skills and phonetics.

2. Tiono& Yostanto (2008) A Study of English Phonological Errors Produced by English Department Students, (private university in Suranbaya) particularly English consonants sounds that don't exist in Indonesian phonetics system [v], [θ], [ð], [ʒ], [dʒ], and [tʃ].

The research method was conducted by using the qualitative approach, the subject had taken speaking class for six semesters and the source of data was from phonetic transcription of the recording pronunciation of twenty-five words contained six English consonantal English department student's.

The analysis were done by identification of the Error by comparing each student's actual pronunciation with standard phonetic transcription, and write the deviation founded base on each sound and each position of occurrences.
The results; the student's made phonological error in all of pronunciation of six English consonantal sounds, and made thirty four kinds of deviations with replacement [ð] with [d], [t], [θ], and the deletion of [θ], the substitution of [tʃ] with [c], [h], [s], [ʃ].


The subjects were 30 upper-intermediate learner's chosen randomly from among English students of kish English language institute, and randomly assigned into experimental group and a control group each group consisting of 15 people, a pretest-posttest design was utilized in this study, both group were measured before and after the treatment but the experimental group were exposed to the treatment by provided footnote phonetic transcription of new and unknown vocabularies for each page of their book.

The data was analyzed through statistical package of social sciences (SPSS), Using Paired Sample t-test and Independent t-test.

The results confirmed the significant effect of phonetic transcription as Footnotes on the experimental group learners' pronunciation improvement.

4. Lintunen (2005) his study Phonemic transcription and its effect on learning, its paper focuses on study in which 34 first–year Finnish university of English where taught pronunciation skills and phonemic transcription simultaneously, the subjects read aloud a short text or transcribed one phonemically, after a period of times they held another pronunciation test.

The results: the subjects performances in the pronunciation and transcription test were both qualitatively and quantitatively related, that means those subjects who were the best transcribers where also the ones those pronunciation developed.
CHAPTER THREE

Design & Methodology of the study

3.0 Introduction:

This chapter presents research design and methodology, including population specialization, the number of sampling that has been chosen to do the pronunciation test, method and procedures used in collecting and analyzing measures of the variables, and face validity.

3.1 Methodology of the Study:

The methodology that is being used in carrying out the research, and come out with results by researcher in this study on (Investigating relationship between student's pronunciation and transcription) is the descriptive method, because it suitable for this kind of research for viewing and recording the participants.

3.2 Population and sample of the study:

The population of the study is third- year students at Sudan University of Science and Technology, College of Languages, English department they were about one hundred, twenty students were chosen randomly from them, to represent the sample of the study.

3.3 Research tools:

The tool that is used for collecting the data Form third-year students at Sudan University of Science and Technology, College of Languages, English department is a pronunciation test, it is divided into two parts the first part is composed of sentences and second is composed of words.
3.4 Procedure:

The researcher gives the pronunciation test for twenty students includes two parts, then asked them to make pronunciation of the first question contains eight sentences and fifteen words, the second question same to the previous one, but with its correct transcription symbols, the researcher made recording while students pronouncing, in phase of the data analysis, the researcher listened to the first and second recording to decide which is correct and which is incorrect, after that the researcher made a comparison and contrast included the two questions to show the problems of pronunciation in words and sentences.

3.5 Face Validity:

The researcher give the test to four scholars related to the field of linguistics at Sudan University of Science and Technology, College of languages, to referee the test, and take their remarks under consideration.
CHAPTER FOUR

Data analysis & Discussion of the Results

4.0 Introduction:

This chapter includes data analysis which collected from sample of third-year students at Sudan University of Science and Technology, to investigate the relationship between student's pronunciation & transcription in words and sentences, discussion of the results which the researcher obtained after analyzing the data, hypotheses of the research is rejected or accepted.

4.1 Data analysis:

Part one of the test was given to students two time, one with transcription and other one without transcription, students asked to read sentences and words while the researcher recording.

The researcher will provided two version (compare and contrast) between student's pronunciation regarding each sentences and words via Microsoft office (Excel) in the following tables:
4.1.1 The analysis of part one of the test (Sentences)

In this section the researcher will analyze the pronunciation of the students’ pronunciation concern sentences.

1. Analysis of the 1st sentence:

   Table Chart A

Traffic accident caused by young drivers are the leading cause of death in society.

<table>
<thead>
<tr>
<th></th>
<th>Traffic</th>
<th>accident</th>
<th>caused</th>
<th>by young</th>
<th>drivers</th>
<th>are</th>
<th>the leading</th>
<th>cause</th>
<th>of death</th>
<th>in society</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wrong</td>
<td>0%</td>
<td>0%</td>
<td>10%</td>
<td>0%</td>
<td>20%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>10%</td>
<td>0%</td>
</tr>
<tr>
<td>Right</td>
<td>100%</td>
<td>100%</td>
<td>90%</td>
<td>100%</td>
<td>80%</td>
<td>100%</td>
<td>100%</td>
<td>90%</td>
<td>90%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Comment: The most word with incorrect pronunciation was society with the percentage of 100% of student's they pronounce it /səˈsæəti/ instead of the correct pronunciation/ səˈsæəti/ . and other words like drivers 20% of the students pronounce it /drəvəs/ instead of /drəvəs/, death 10% pronounce it /dez/ instead of /deθ/ the same results was reached by Tiono&Yostanto in the previous studies, leading pronounce it /lɒdɪŋ/ instead of /lɪdɪŋ/.
The most word with incorrect pronunciation was /jʌŋ/ with percentage of 60% the sound /ŋ/ they pronounce it /g/; /ɔv/60% of the students pronounce it /ɔvz/ /ef/, and also the sound / ɑː/ with percentage of 50% students they pronounce it /æ/- /, the word /drɑːvəs/40% they are unable to distinguish /ɑː/ by pronounce it /rɪ/, in the word /deθ/30% of students pronounce it /dez/ instead of /deθ/.

**Table Chart A: B**

**Comment:**

At table A the word (society) percentage of incorrect pronunciation was 100%, when the students pronounce it without transcription in the table B percentage of incorrect pronunciation minimize to 50% correct pronunciation, (Enhancing), no enhancing in death 10% increased to 30, Of 10% to 60%, the 10% to 60%, young 0% to 60%, the increasing of wrong pronunciation due of the mother tongue interference.
2. Analysis of the 2\textsuperscript{nd} sentence:

Table Chart A

It is undeniable that tobacco and alcohol cause many health troubles.

<table>
<thead>
<tr>
<th>It</th>
<th>is</th>
<th>undeniable</th>
<th>that</th>
<th>tobacco</th>
<th>and</th>
<th>alcohol</th>
<th>cause</th>
<th>many</th>
<th>health</th>
<th>troubles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wrong</td>
<td>0%</td>
<td>0%</td>
<td>60%</td>
<td>0%</td>
<td>50%</td>
<td>0%</td>
<td>30%</td>
<td>30%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Wright</td>
<td>100%</td>
<td>100%</td>
<td>40%</td>
<td>100%</td>
<td>50%</td>
<td>100%</td>
<td>70%</td>
<td>70%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Comment:

In this sentence the percentage of the right pronunciation is high, but the students commit a wrong pronunciation in the word undeniable with the percentage of 60% the students pronounce it /\underline{\text{ənd\textipa{1}ni\textipa{2}ə\textipa{3}\textipa{4}bəl}/ instead of /\underline{\text{ənd\textipa{1}ni\textipa{2}ə\textipa{3}bəl}/ , troubles 50% of the students pronounce it /\underline{\text{t}ræb\textipa{1}\textipa{2}\textipa{3}\textipa{4}l/} instead of /\underline{\text{tr}ə\textipa{1}\textipa{2}\textipa{3}l\textipa{4}z/ . alcohol 30% pronounced /\underline{\text{ælk\textipa{1}ð\textipa{2}hə\textipa{3}l/} instead of to /\underline{\text{ælk\textipa{1}ð\textipa{2}həl/} , cause 30% pronounced /\underline{\text{kə\textipa{1}z/ instead of /\text{kə\textipa{1}z/} , all the wrong pronunciation due to mother tongue interference. .
**COMMENT:**

In this sentence the percentage of the right pronunciation is high, but the students commit a wrong pronunciation, in the word /ʌndɪnəʊbəl/ with the percentage of 50% when the students pronounce the sound /æn/ to /uː/, the sound /ðæt/ 30% of the students pronounce it /ðat/ instead of /ðæt/, sound /æn/20% pronounced it /en/ instead of /ən/, /ʌ/ in the word /trəbəlz/20% pronounced to /rː-/ /uː:/ instead of /ʌ/ , finally the sound /ɔː/ in the word /kɔːz/ /20% of the students pronounce it /kərɛz/ instead of /kəz:/, the committing of wrong pronunciation due to mother tongue interference.

**Table Chart A:**

<table>
<thead>
<tr>
<th>Wrong</th>
<th>Right</th>
</tr>
</thead>
<tbody>
<tr>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>0.00%</td>
<td>100%</td>
</tr>
<tr>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>70%</td>
<td>70%</td>
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<tr>
<td>80%</td>
<td>80%</td>
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<td>80%</td>
<td>80%</td>
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<tr>
<td>10%</td>
<td>20%</td>
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<td>10%</td>
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<tr>
<td>10%</td>
<td>20%</td>
</tr>
<tr>
<td>10%</td>
<td>20%</td>
</tr>
</tbody>
</table>

**Table Chart B**

/ɪt  z ʌndɪnəʊbəl  δæt  ənbəlæsəʊ  æn  ælkəhɒl  kə:z  meni  helθ  trəbəlz/.

<table>
<thead>
<tr>
<th>Wrong</th>
<th>Right</th>
</tr>
</thead>
<tbody>
<tr>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>0.00%</td>
<td>100%</td>
</tr>
<tr>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>50%</td>
<td>50%</td>
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<td>70%</td>
<td>70%</td>
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<td>80%</td>
<td>80%</td>
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<td>80%</td>
<td>80%</td>
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<td>10%</td>
<td>20%</td>
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<tr>
<td>10%</td>
<td>20%</td>
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<tr>
<td>10%</td>
<td>20%</td>
</tr>
<tr>
<td>10%</td>
<td>20%</td>
</tr>
</tbody>
</table>

**Comment:**

In table A Word (undeniable was 60% incorrect pronunciation in the table B minimize to 50%, tobacco from 50% to 10%, troubles from 50% to 20% , alcohol from 30% to 10%, cause from 30% to 20% (Enhancing).
3. Analysis of the 3rd sentence: Table Chart A

Stress is one of the most popular and intractable health problems.

![Chart Title]

<table>
<thead>
<tr>
<th></th>
<th>Stress</th>
<th>is</th>
<th>one</th>
<th>of</th>
<th>the</th>
<th>most</th>
<th>popular</th>
<th>and</th>
<th>Interact</th>
<th>able</th>
<th>health</th>
<th>Problems</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wrong</td>
<td>40%</td>
<td>0%</td>
<td>20%</td>
<td>0%</td>
<td>0%</td>
<td>20%</td>
<td>40%</td>
<td>0%</td>
<td>10%</td>
<td>10%</td>
<td>40%</td>
<td></td>
</tr>
<tr>
<td>Wright</td>
<td>60%</td>
<td>100%</td>
<td>80%</td>
<td>100%</td>
<td>100%</td>
<td>80%</td>
<td>60%</td>
<td>100%</td>
<td>90%</td>
<td>90%</td>
<td>60%</td>
<td></td>
</tr>
</tbody>
</table>

Comment:

The most word with incorrect pronunciation was popular with the percentage of 40% students they pronounce it /pɒːpjʊlə / instead of /pɒpʃʊlə /stress 40% of /strɪs/ instead of /stres/ , poblems40% proːbləm/ instead students pronounce it of /prɒbləm/ , most 20% pronounced /məːst/-/mæst/ instead of /mæost/, health10% pronounced /helz, / instead of /helθ/, the same result was reached in the sound/ θ/ by Tiono& Yostanto in the previous studied, the rest of wrong pronunciation due to mother tongue interference.
**Table Chart B**

/stress z wʌn əv əʊ məʊst pɒpjʊlə in trækˈtəʊbəl helθ probləm/.

![Table Chart](image)

**Comment:** The most word with incorrect pronunciation was popular with the percentage of 60% the students they pronounce it /pɔːpjʊlə/ instead of /pɒpjʊlə/, intractable 60% of the students pronounce it/ intræktəʊbəl instead of /ɪntræktəʊbəl/, of 50% pronounced /æf/ instead of /əf/, is 50% pronounced /əð/ instead of /z/, the same results was reached in the sound / z/ by Tiono & Yostanto in the previous studies, the other wrong pronunciation due to mother tongue interference.

**Table Chart A:B  Comment:**

At table a word stress was 40% incorrect pronunciation minimize to 20% in the table B, Problems from 40% to 20%, most from 20% to 10% (Enhancing).
4. Analysis of the 4th sentence: Table Chart A

Cosmetic surgery involves both surgical and medical techniques.

Comment:

The most word with incorrect pronunciation was cosmetic with the percentage of 50% the students pronounce it /kɔ:zmetɪk/ instead of /kɒzmetɪk/, techniques 20% of the students pronounce it /teknuːk/, instead of /teknuːk/, involves 10% pronounce /ɪnvlʊvəlz/ instead of /ɪnvlʊvəlz/ /ɪnvʊlvəlz/ ,both 10% pronounced to /bəʊz/ instead of /bəʊθ/, the result of incorrect pronunciation due to mother tongue interference.
**COMMENT:**

The most word with incorrect pronunciation was /s3:dzəɬi/ with the percentage of 60% most of the students unable to pronounce it, in the word /kəzmetɪk/ 50% of the students pronounce it /kəzmetɪk/ /kəzmentɪk/, /s3:dʒɪkəɬ/ 50% pronounced it /sædʒɪkəɬ/ instead of /s3:dʒɪkəɬ/ this wrong pronunciation due to mother tongue interference.

**Table Chart A: B**

**Comment:**

At the table A word surgery was 10% incorrect pronunciation increased to 60% (transcription), surgical from 20% to 50%, involves from 10% to 30%, the cause of wrong pronunciation due to mother tongue interference.
5. Analysis of the 5th sentence: Table Chart A

Do not feed the animals.

![Chart Title](image)

<table>
<thead>
<tr>
<th></th>
<th>Do</th>
<th>not</th>
<th>feed</th>
<th>the</th>
<th>animals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wrong</td>
<td>0%</td>
<td>100%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Wright</td>
<td>100%</td>
<td>0%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Comment:

The most word with incorrect pronunciation was not with the percentage of 100% the students they pronounce it / nɔt/ instead of /nɔt/, the wrong pronunciation due to mother tongue interference.
Table Chart B

/duː not fiːd ðə ˈænɪməlz/.

<table>
<thead>
<tr>
<th></th>
<th>Wrong</th>
<th>Right</th>
</tr>
</thead>
<tbody>
<tr>
<td>du:</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>not</td>
<td>4.4%</td>
<td>100%</td>
</tr>
<tr>
<td>fiːd</td>
<td>10%</td>
<td>90%</td>
</tr>
<tr>
<td>ðə</td>
<td>20%</td>
<td>80%</td>
</tr>
<tr>
<td>ˈænɪməlz</td>
<td>0%</td>
<td>100%</td>
</tr>
</tbody>
</table>

COMMENT:

In this sentence the percentage of the right pronunciation is high, but the students pronounce the word / fiːd/ with the percentage of 10% / fiːld/ instead of / fiːd/, /ðə/ 20% of the students pronounce it /z/ instead of /ðə/, the same result was reached in the sound /z/ by Tiono & Yostanto in the previous studies, the other wrong pronunciation due to mother tongue interference.

Table Chart A: B

Comment:

At the table A word not was 100% incorrect pronunciation minimize to 0% in the table B (enhancing), and other words increased like feed from 0% to 10%, the from 0% to 20% no enhancing.
6. Analysis of the 6\textsuperscript{th} sentence

Shake well before serving.

<table>
<thead>
<tr>
<th></th>
<th>Shake</th>
<th>well</th>
<th>before</th>
<th>serving</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wrong</td>
<td>30%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Wright</td>
<td>70%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

**Comment:**

In this sentence the percentage of the right pronunciation is high, but the students commit incorrect pronunciation in the word shake with the percentage of 30\% they pronounce it /ʃɪk/ instead of /ʃeɪk/, the wrong pronunciation due to mother tongue interference.
COMMENT:

In this sentence the percentage of the right pronunciation is high, but the students commit incorrect pronunciation in the word /ʃeɪk/ with percentage of 30% they pronounce it /ʃɪk/ instead of /ʃeɪk/, also the word /sɜːvɪŋ/40% of the students pronounce it /sɪ:vnɪŋ/ instead of /sɜːvnɪŋ/, the result of wrong pronunciation due to mother ton due interference.

Table Chart A:B

Comment:

At the table a word serving was 0% incorrect pronunciation increased to 40%, before from 0% to 20%, well from 0% to 10% no enhancing due to mother tongue interference.
7. Analysis of the 7th sentence: Table Chart A

Replace cap after use.

<table>
<thead>
<tr>
<th></th>
<th>Replace</th>
<th>cap</th>
<th>after</th>
<th>use</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Wrong</strong></td>
<td>10%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Wright</strong></td>
<td>90%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Comment:

In this sentence the percentage of the right pronunciation is high, but the students commit incorrect pronunciation in the word replace with the percentage of 10% they pronounce it/ rɪplaɪs / instead of / rɪpleɪs/, due to mother tongue interference.
COMMENT:

In this sentence the percentage of the right pronunciation is high, but the students commit incorrect pronunciation in the word /juːz/ with the percentage of 40% they pronounce it /guːz/ instead of /juːz/; /kæp/30% of the students pronounce it /kɪːp/ instead of /kæp/; /rɪˈpleɪs/20% pronounced it /rɪˈplɪz/ instead of /rɪˈpleɪs/, the cause of wrong pronunciation due to mother tongue interference.

Table Chart A: B

Comment:

At the table a word use was 0% incorrect pronunciation increased to 40% in the table B, cap from 0% to 30%, replace from 10% to 20% no enhancing due to mother tongue interference.
8. Analysis of the 7th sentence:

Table Chart A

It is observed that extreme behaviors are exhibited by most children from dysfunctional families.

<table>
<thead>
<tr>
<th>It is observed</th>
<th>that extreme behaviors are exhibited by most children from dysfunctional families.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Comment:

In this sentence the percentage of the right pronunciation is high, but the students commit incorrect pronunciation in the word exhibited with the percentage of 50% /ɪgzɪːbrɪt/ instead of /ɪgzɪbɪt/, observed 20% of the students pronounce it /æbzɪːd/ instead of /əbzɪːd/, dysfunctional 50% pronounced /dæsfəŋkʃənl/, /dɪʃfəŋkʃənl/ instead of /dɪsfəŋkʃənl/, families 30% pronounced /fæməlɪz/, /frəməl/ instead of /fæməlɪz/, behaviors 30% pronounced /bərvɪəs/ instead of /bɪərvɪəs/, extreme 20% pronounced /ɪkstrɛm/ instead of /ɪkstrɪm/ this result of wrong pronunciation due to mother tongue interference.
Table Chart B

\[ /ɪt \ z \ əbзə:vɪd \ ðæt \ ɪkstrɪ:m \ bɛrvjəs \ ə: \ ɪgzɪbɪt \ bæɪ \ ɹɑːst \ tʃɪdrən \ ə\ɜ:ɱ \ dɪfəŋkʃənəl \ fæməlɪz/. \]

**TABLE CHART A: B COMMENT:**

At table a word exhibited was 50% incorrect pronunciation minimize to 30% in table B, dysfunctional from 50% to 30% (enhancing), and increasing in words behaviors from 30% to 50%, most from 0% to 20%, by from 0% to 50.

**COMMENT:**

In this sentence the percentage of the right pronunciation is, but the students commit incorrect pronunciation in the word / ðæt/ with the percentage of 40% pronounce it /zæt/ instead, instead of / ðæt /this the same result was reached by Tiono & Yostanto in sound /z/ in the previous studies, / ɪkstrɪ:m/ 40% of the students pronounce it to / ɪkstrɪm/ instead of / ɪkstrɪ:m/ instead of / ɪkstrɪ:m/ bervjəs/50% pronounced /bɛrvis/ instead of / bervjəs/ /, / bæ/50% pronounced /bɛ/ instead of / bæ/ fæməlis/30% pronounced / fæməlis/ instead of / fæməlis/, the cause of wrong pronunciation due to mother tongue interference.
4.1.2 The analysis of part two of the test (words).

In this section the researcher will analyze the student's pronunciation concern words.

1. Analysis of the 1st words:

Table Chart A

**Heat- Height- string-chair- Art.**

<table>
<thead>
<tr>
<th></th>
<th>Heat</th>
<th>Height</th>
<th>String</th>
<th>Chair</th>
<th>Art</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Wrong</strong></td>
<td>30%</td>
<td>30%</td>
<td>0%</td>
<td>20%</td>
<td>10%</td>
</tr>
<tr>
<td><strong>Wright</strong></td>
<td>70%</td>
<td>70%</td>
<td>100%</td>
<td>80%</td>
<td>90%</td>
</tr>
</tbody>
</table>

**Comment:**

In this words the percentage of the right pronunciation is high, but the students commit incorrect pronunciation in the word heat with percentage of 30% pronounce it /het/ instead of /hɪːt/ ,height30% of the students pronounce it /hɛt/ instead of /hɑːt/,chair20% pronounced it /ʃɪɹ/ instead of /ʃɪə/ or /tʃer/,art10% pronounced /ɑːrt/ instead of /ɑːt/ or /əːrt/,the wrong pronunciation due to mother tongue interference.
**Table Chart B**

$h:\text{i}$: $t$/ - $h\text{ait}$/ - $\text{strin}g$ / - $t\text{f}e\text{a}$/ - /$\alpha:t/$.

<table>
<thead>
<tr>
<th></th>
<th>$h:i$</th>
<th>$h\text{ait}$</th>
<th>$\text{strin}g$</th>
<th>$t\text{f}e\text{a}$</th>
<th>$\alpha:t$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wrong</td>
<td>60%</td>
<td>30%</td>
<td>30%</td>
<td>70%</td>
<td>50%</td>
</tr>
<tr>
<td>Right</td>
<td>40%</td>
<td>70%</td>
<td>70%</td>
<td>30%</td>
<td>50%</td>
</tr>
</tbody>
</table>

**COMMENT:**

The most word with incorrect pronunciation, the word / $t\text{f}e\text{a}$/ with the percentage of 70% students pronounce it /$t\text{f}ir$/ instead of / $t\text{f}e\text{a}$/, / $h:i$/ :60% of the students pronounce it /$h\text{e}t$/ /$h\text{e}t$ instead of / $h:i$/ , and / $h\text{ait}$/30% pronounced /$h\text{e}t$/ instead of/ $h\text{ait}$/ , the incorrect pronunciation due to mother tongue interference.

**Table Chart A:B**

**Comment:**

At the table word chair was 20% incorrect pronunciation increased to 70% in the table B, heat from 30% to 60%, art from 10% to 50%, string from 0% to 30% no enhancing due to mother tongue interference.
2. Analysis of the 2nd words: Table Chart A

**Historian-Impact-License-Pilot-Vision.**

<table>
<thead>
<tr>
<th></th>
<th>Historian</th>
<th>impact</th>
<th>license</th>
<th>Pilot</th>
<th>Vision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wrong</td>
<td>20%</td>
<td>0%</td>
<td>70%</td>
<td>40%</td>
<td>0%</td>
</tr>
<tr>
<td>Right</td>
<td>80%</td>
<td>100%</td>
<td>30%</td>
<td>60%</td>
<td>100%</td>
</tr>
</tbody>
</table>

**Comment:**

The most words with incorrect pronunciation was License with the percentage of 70% students pronounce it /laɪsɪns/ instead of /lɑːsnəs/, pilot 40% of the students pronounce it /prəˈlɔːt/ instead of /pərlət, historian 20% pronounced /ɪstrɪən/ instead of /ˈhɪstrəriən/, the cause of incorrect pronunciation due to mother tongue interference.
COMMENT:

The most word with incorrect pronunciation was /pəlat/ with the percentage of 70% students pronounce it /pæl t/ instead of /pəlat/, /laɪəns/ 60% of students pronounce it /laɪəns/ instead of /lɑɪəns/, all these wrong pronunciation due to mother tongue interference.

Table Chart A:B

Comment:

At the table a word license was 70% incorrect pronunciation minimize to 60% in the table B,( Enhancing), but the other words increased, vision from 0% to 30%, historian from 20% to 30%, pilot from 40% to 70% due to mother tongue interference.
3. Analysis of the 3rd words:

Table Chart A


Comment:
In this words there are no many of incorrect pronunciation, but the word permanent with the percentage of 50% pounced /prɪmənənt/. Instead of /pɜːmənənt/, headquarters30% pronounced /hedkwətəz/ instead of / hedkwətəz/, Intellectual20% pronounced to /ɪntɪlektʃəl/ instead of /ɪntɪlektʃəl/, the wrong pronunciation due to mother tongue interference.
COMMENT:

The most words with incorrect pronunciation was /pəmənənt/ with the percentage of 70% pronounced /pɜːmənənt/ instead of /pəmənənt/ and the word /ledʒɪsleɪʃən/ 60% of the students pronounce it instead of /ledʒɪsleɪʃən/, all incorrect pronunciation due to mother tongue interference.

Table Chart A:B

Comment:

At table a word permanent was 50% incorrect pronunciation increased to 70% in the table B, legislation from 30% to 60%, imagination from 0% to 30%, no enhancing due to mother tongue interference.
4.1.3 The whole percentages of student's pronunciation with & without transcription.

(Sentences):

<table>
<thead>
<tr>
<th></th>
<th>With transcription</th>
<th>Without transcription</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Wrong</td>
<td>right</td>
</tr>
<tr>
<td>1&lt;sup&gt;st&lt;/sup&gt; S</td>
<td>40%</td>
<td>59.2%</td>
</tr>
<tr>
<td>2&lt;sup&gt;nd&lt;/sup&gt; S</td>
<td>17.2%</td>
<td>82.7%</td>
</tr>
<tr>
<td>3&lt;sup&gt;rd&lt;/sup&gt; S</td>
<td>38.1%</td>
<td>61%</td>
</tr>
<tr>
<td>4&lt;sup&gt;th&lt;/sup&gt; S</td>
<td>35%</td>
<td>65%</td>
</tr>
<tr>
<td>5&lt;sup&gt;th&lt;/sup&gt; S</td>
<td>17%</td>
<td>94%</td>
</tr>
<tr>
<td>6&lt;sup&gt;th&lt;/sup&gt; S</td>
<td>25%</td>
<td>75%</td>
</tr>
<tr>
<td>7&lt;sup&gt;th&lt;/sup&gt; S</td>
<td>25%</td>
<td>75%</td>
</tr>
<tr>
<td>8&lt;sup&gt;th&lt;/sup&gt; S</td>
<td>32.8%</td>
<td>67.1%</td>
</tr>
</tbody>
</table>
### 4.1.4 The whole percentages of student's pronunciation with & without pronunciation.

(Words):

<table>
<thead>
<tr>
<th></th>
<th>With transcription</th>
<th>Without transcription</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Wrong</td>
<td>right</td>
</tr>
<tr>
<td>1(^{st}) words</td>
<td>48%</td>
<td>25%</td>
</tr>
<tr>
<td>One syllable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2(^{nd}) words</td>
<td>38%</td>
<td>64%</td>
</tr>
<tr>
<td>Two syllables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3(^{rd}) words</td>
<td>44%</td>
<td>54%</td>
</tr>
<tr>
<td>Three syllables</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4.2 Discussion of results:

After completing of analyzing the data the researcher found that, the majority of students performed badly in sentences and words transcription, because they are unable to distinguish transcription of symbols, as consequence lead them to committing errors in pronunciation by changing correct symbol to the following symbols: (/ɔɪ/ to /ɔː/), (/ʊ/ to /ʊ/), (/θ/ to /z/), (/æ/ to /ə/), (/ʌ/ to /ə/), (/æ/ to /ə/), (/j/ to /ɡ/), (/ɪː/ to /ʊ/), (/ɪː/ to /ɪː/). in the some words the students confused and commit incorrect pronunciation because they don’t know the meaning of it, other students trying to used their memory to remember words that written without transcription, when they comes in phase of transcription, also sometimes they pronouncing incorrect pronunciation not related to English symbols.

4.3 hypotheses of the study is rejected or accepted:

Rejected:

The hypotheses of the study rejected because the students didn't have enough practice moreover the transcribed sentences confused them while read, this result linked to the previous study of (Lintunen, 2005) on Phonemic transcription and its effect on learning, because the pronunciation and transcription is correlated to each ones.

Accepted:

The hypotheses of the study accepted because one word is easy to read without been confused, this agrees with (Lintunen 2013) on the effect of phonetic knowledge on evaluated pronunciation problems, they have taught phonetics transcription, this why their pronunciation benefit.
CHAPTER FIVE

Recommendations, Suggestion & Conclusion

5.0 Introduction:

This chapter includes the results of data analysis which the researcher obtained after comparing and contrasting between student's pronunciation regarding sentences and words, recommendations which the researcher think it may will useful in dealing with this investigation, suggestion for further studies related to this study.

5.1 Results:

1. The majority of the students performed badly in sentence transcription.
2. Transcription confused students' pronunciation regarding sentences.
3. Student's performance was better regarding words.
4. Mother tongue interference affects students' pronunciation.

5.2 Recommendations:

Based on the results of the study, the researcher recommends the following:

- Teaching of phonetic should be an integral part of listening and speaking courses, not only as separate courses.
- Language learners should pay more attention to the way they articulate the foreign vowels. Most important mastering the pronunciation of the language they are learning.
- Teachers should take care of their pronunciation, because this may help of reducing the errors of student's pronunciation.
- Teachers gives students CDs, Videos or web sites to help them to develop their English language.
5.3 Suggestion title for further researcher:

The researcher suggest further researcher to make a comparative study between native Arabic language and target English language concerning the sound system.

5.4 Conclusion:

This study attempts to discuss and investigate relationship between students pronunciation & transcription, the study is carried out on the students of third-year at Sudan University of Science and Technology, college of languages, department of English languages, the researcher has administrated pronunciation test to the population to examine their pronunciation ability with &without transcription, from results, it is clear that the students are unable to distinguish sound symbols, thus they commit errors in pronunciation, also the mother tongue interference have a role in incorrect pronunciation.