Sudan University of Science and Technology
College of Graduate Studies
College of languages

كلية الدراسات العليا

Investigating the Difficulties Encountered by Sudanese Arabic Speakers in
Pronunciation of English Sounds
(Case Study for Fourth Year Students)

دراسة الصعوبات التي تواجه متحدثي اللغة العربية في السودان
في نطق اصوات اللغة الإنجليزية
(دراسة حالة لطلاب المستوى الرابع)

A Thesis Submitted to in Partial Fulfillment of the
Requirements for the Degree of (M.A) in English
Language

Submitted by:
Rashid Altahir Alsmani
Supervised by :
Dr Tag Elsir Hassan Bashoum

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Dedication

To my family

To my dear friend Mustaf's soul

Acknowledgements

ABSTRACT
(English version)

This study aims at Investigating the Difficulties Encountered by Sudanese Arabic Speakers in English Pronunciation of English Sounds, The study adopts a descriptive analytic method which tend to describe the problems to find the solutions.

The data has been collected from sample of students who responded to provide answers for pronunciation test concerning the English sounds which do not exist in Arabic, and also the impact of English spelling in English pronunciation, to select out English sounds pronunciation difficulties which encountered by Sudanese Arabic speakers in English sounds pronunciation. The test has been given to 30 students from Sudan University of Science and Technology, College of Languages, English Department, fourth level students, the study comes out with findings that some English sounds which do not exist in Arabic cause difficulties for Sudanese Arabic speakers who are learners of English, moreover English language has complex spelling system in some words that lead to wrong pronunciation. The study offered some recommendations that may help to overcome these problems.

مستخلص البحث

(Arabic version)

هدفت هذه الدراسة لتقصي الصعوبات التي تواجة متحدثي اللغة العربية السودانيين في نطق أصوات اللغة الإنجليزية, وقد اتبعت الدراسة المنهج الوصفي الذي يقضي بوصف المشكلة بدقة لإيجاد حل لها. أتاحت البيانات التي نتجت عن عينة التلاميذ الذين أجابوا على أسئلة من خلال الخضوع لإختبار النطق الصوتي عن طريق تسجيل أجوبتهم المتعلقة بالمشاكل التي تتعلق بنطق أصوات اللغة الإنجليزية الغير متوفرة في اللغة العربية, وايضا أثر النظام الإملائي للغة الإنجليزية في نطق أصواتها, لتحديد الأصوات الإنجليزية التي تسبب مشاكل نطقية لمتحدثي اللغة العربية. وقد خضع للإختبار عدد ثلاثون من طلاب المستوى الرابع بجامعة السودان للعلوم والتكنلوجيا من كلية اللغات قسم اللغة الإنجليزية. وقد كانت نتائج الدراسة ان بعض أصوات اللغة الإنجليزية الغير موجودة في اللغة العربية تسبب مشاكل في النطق عند متحدثي اللغة العربية السودانيين الذين يدرسون اللغة الإنجليزية, وايضا أن اللغة الإنجليزية تحتوي على نظام املائي معقد في بعض الكلمات والذي بدوره يقود الى أخطاء نطقية . قدمت الدراسة بعض التوصيات التي قد تساعد في تخطي مثل تلك المشاكل.

List of abbreviations

L1= first language

L2= second language

NL= native language

TL= target language

CAH= contrastive analysis hypothesis

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INTRODUCTION

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INTRODUCTION

1.1 Back ground of the study

One of the best ways of communication as human beings is to use spoken language, which includes words, sentences, and utterances and so on, so the word language can be define as "it is the way of delivering feelings, thoughts, emotions and desires".

 (Sapair,1921).

Spoken language depend on pronunciation, to have good pronunciation is helpful in normal communication as cited in (Nation & Newton, 2009).

English has complex set of sounds (phonemes) which make most of EFL students face difficulties when they speak which may lead them to commit errors for several reasons such as the differences in the sounds systems.

English sounds are divided into two (consonant and vowels), according to (Roach peter, 1985) vowels are the sounds which are pronounce without air blocking, while consonants are the sounds which is difficult for the air to pass through the mouth. There are twenty four consonant sounds, and twenty vowel sounds, the total number is forty four sounds. The point is that with all these sound it will be so difficult to the one who speaks Sudanese Arabic to pronounce all the words of English correctly.

Arabic language as standard language has twenty eight letters each one of them represents one sound (phoneme). (Janet C. E. Watson 2002) , but in Sudanese Arabic the twenty eight sounds are not used in the standard Arabic, such sounds like / ð / and /θ/.

In this research the researcher tries to investigate the difficulties that encounter Sudanese Arabic speakers in English pronunciation. There are some equivalents in English and Sudanese Arabic in some sounds which cause no difficulties for example /b, t, d, f, k…/. On the other hand, there are sounds in English that do not exist in Sudanese Arabic for example /v, p, ŋ, ʤ,ʒ../, also there is a problem with vowel sounds such as differentiating between the pronunciation of the sound /a/ for example as in the words (car and care), also the sounds /e/ and /i/ in (set and sit). So the researcher tries to study those difficulties, and the factors behind them, and how to overcome them.

1 .2 Statement of the problem

Sudanese Arabic speakers face difficulties in English sound pronunciation, because there some English sounds that do not exist in Sudanese Arabic, such sounds make them commit errors when they pronounce some English words. In this research the researcher will study the problems encounter fourth year students from Sudan University, who speak Sudanese Arabic. Also will study the factors behind these problems, and find out some ways to overcome them.

1.3 Questions of the study

This study tries to provide answers to the following questions:

1) What are the English sounds that are difficult for Sudanese Arabic speakers to pronounce?

2) What are the factors behind the errors of pronunciation?

1.4 Hypotheses of the study

The following are the hypotheses of the present study:

1) Sudanese Arabic speaker students of Sudan University have difficulties in English pronunciation for the sound that do not exist in their language.
2) English spelling system cause difficulties in pronunciation for Arabic speakers.

1.5 Objectives of the study

The objectives of the study will be:

Turn the teachers and the students to be attention to one of the languages problems which is pronunciation.
Find simple way to help students to improve their pronunciation.

1.6 Significant of the study:

This research is important to the students, who study English as second language, in general and for beginners in specific in order to avoid wrong pronunciation which causes misunderstanding.
.
Also this study will help the teachers and the syllabus designers.

1.7 Methodology of the study

In this research the researcher will use the descriptive analytical methodology. The instrument for data collection will be a test for the students. The sample will be 30 students from Sudan University for Science and Technology – fourth Year. The data will be analyzed statistically to provide answers to the research questions and to verify the hypotheses.

1.8 Limitation of the study:

This study is about the difficulties encountered by Sudanese Arabic speakers in English pronunciation, especially fourth year student of Sudan University.

The study will be carried out during the second semester.

CHAPTER TWO

LITRETURE REVIEW AND PREVIOUS STUDIES

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LITRETURE REVIEW AND PREVIOUS STUDIES

2.0 Introduction

This chapter will discuss the theoretical aspects related to the research problem. It will also present some previous studies which were conducted in the same field.

2.1 back ground

Linguists depend on different back grounds and beliefs to define the word pronunciation, one of these definitions as mentioned at Bever, Garrelt & Foder (1974: 434) is anything that can be said about the speech production even by the standard of current in psycholinguistics that lead to the importance of the relationship between linguistics and psychological rules in the sound production, with giving attention to the other fields of knowledge in relation.

  Hycraft(1980 : 9) describe pronunciation the phonology which used in the real life.it means how to use language to deliver certain idea, which lead to easy and good communication.

According to Nation (2009:75) when teacher and students complain about difficulties in speaking, they often talk about pronunciation, also anther one has been mentioned at Derwing & Munro (2005:10) having good pronunciation is helpful in everyday communication.

According to Roach (1992: 11) to produce understandable utterance and that by make its sounds clear and easy to understand by the others who speak the same language.

Wells & Colson(1994:83) stated that pronunciation has something to do with phonetics and phonology, as phonetics study the description of pronunciation by describing how each sound is pronounce, and tell about the place of articulation as well as the manner of articulation, phonology concerns with how sounds are combine together to produces word ,utterance, sentence, or group of sentences.

What is suppose to say about phonetics, phonology, or pronunciation there is no way to separate between them in study of speech production.

2.1.1The Place of Pronunciation in Linguistics

Pronunciation can be classified under two related fields of study, one of them deals with production of sounds which is phonetics, and the other one deals with the interpretation of the sounds structure as word or sentence which is phonology.

According to Malmbery (1963: 2) Phonetics has four branches which are:

1. General phonetics: which study man's sounds of whatever that language, focusing in the production possibilities and the function of his origins of speech.
2. Descriptive phonetics: which study sounds system of particular language or dialect.
3. Evolutionary phonetics: it is known as historical phonetics which studies the change of a language through time.
4. Normative phonetics: it is determined the aspects of good pronunciation of a language, it's presuppose the existence of a norm or standard way of pronunciation.

Crystal (1971: 175) stated distinction between phonetics and phonology, in his distinction that phonetics deals with the sounds of all languages,

phonology study the sounds of specific language, also mentioned other three branches for phonetics which are:

1. Articulatory phonetics: study how sounds are produced and that by study speech mechanisms.
2. Auditory phonetics: study the speech which received by the listener through the perceptual system.
3. Acoustic phonetics: study of the sound waves, and the way they be sent through the air.

2.1.2 The Problems of Pronunciation

Any child born with the ability to learn the language, and that by imitate his mother, except those children who born deaf, so learning language cannot be without learning its sounds.

Some present studies came out with the fact that a child of ten years can acquire the language as well as the native speakers whatever that language, but after the age of ten that ability will became less than before, and that according to simple fact which is the mother tongue domination, its sounds will be fossilized inside the brain of the learner, so the mother tongue habits control over the target language. O'Conner (1980: 1)

Inside the minds of any language speaker there is what is called sounds boxes, which mean every sound of his language is put in a box (place) inside the mind of that speaker, surely the number of the boxes is different from one language to another, so when that speaker tend to learn a new language which contain more than his language sounds the new sounds make the learner confuse and that drive him to substitute those sounds to the nearer ones in his mother tongue O'Conner (1980: 2).

The difficulties of English pronunciation have come because English has borrowed many foreign words, but they adapted those words with some changes in the form and pronunciation James and Smith (2011: 6).

Also James and Smith (2011:7). Stated that Some studies discovered that non native speakers tend to use correct and well formed sentences, but the fact that the native speakers tend to use less grammar in their speech, also stated that when a speaker of a language just as English language for example when speaks a foreign language such as French, he may substitute an English sound for non English sound, also French people as example pronounce English words like (this) and (that) as if they were (zis) and (zat).

2.1.3 Short History of English Pronunciation

The problem of English pronunciation is that English borrowed foreign words and kept their foreign spelling, but anglicized their pronunciation, Those borrowed words became the problem of the native speakers, because they do not recognize them, after years the pronunciation of these words is changed regardless to the pronunciation or the spelling of the original word, for example: the word (Worcester) is pronouncing (Wooster).

For two centuries English speakers have tried to contact with the foreign speakers to learn how to pronounce words in their original spelling, but still far to some extent from the original ones.

In UK the foreign born speakers do not like the American pronunciation, and they tend to back to the origin of the word James and Smith (2011: 7).

2.2 Pronunciation Theories

According to Zumrawi (2004:15), the word theory can be define as the scientific way to study thoughts, which relate to specific topic or activity; it can shows the topic as something which has strong relation to its parts.

The following points some theories which concern with pronunciation and the differences between the scholars views will be provided.

2.2.1 CAH

Contrastive analysis hypothesis originated from Lado's book linguistics across culture (1957) he provided assumption pattern that will cause difficulties in language learning can be predict as well as those which cause no difficulties, and that can be done through comparing the target language with the native language and the culture of the students. Lado (1957:7).

In the comparison between the native language and the foreign language, those elements that are similar to the native language are simple and easy to the learners, but those elements which are different will be difficult for them. Lado (1957:2).

According to CAH in the case of comparison of Arabic and English languages as example in Arabic there is /b/ sound which is the same as English /b/ here it causes no difficulty to the learners, while /p/ sound is found only in English so some learners may face difficulty to pronounce it right.

There is another view among CAH which is the behaviorism approach, and that can be obvious from the behaviorist theory which sees language as habits that can be learn through stimulus, response and reinforcement, for example the audio-lingual theory which attempt to use the habits formation

of the first language (native) to recognize patterns and sounds of the second language (target). Lightbown & Spada (2006: 7)

2.2.2 Error Analysis

It is type of linguistics analysis that focuses on the errors of the learners when they tend to speak the target language (TL). Error analysis concerns with errors investigation not errors prediction.

Through their journey from native language (NL) to the target language (TL), learners attempt to hypothesize the target language rules, therefore they will create a new system that does not belong to their (NL) or to the (TL) , this system known as (interlanguage) such as errors of first language transfer .

The errors vary from one learner to another and that depend on (learning strategies, different training procedures, individual differences of teachers, text books..etc).

The learner can avoide these errors by improving the performance and the competence of the (TL). Richards (1971:19).

Corder (1971:19)

Errors are divided into two:

- Performance errors: the learner commits these errors because of being tired or nervous.
- Competence errors: it is done because of the lack of the grammatical knowledge and structure of the (TL).

2.3 The Production of Speech Sounds

All the sounds that produced by human beings come from muscles movement, the lungs is one of these muscles, it produces the air that is used for breathing, which is also important to produce all of speech sounds, the muscles of the larynx have a job which is shaping the air from the chest to the mouth, after that the air goes through what is called the vocal tract which ends in the nasal cavity, finally that the air goes through the atmosphere, and face large number of muscles which produce the changes for making a particular sound, those different parts are called articulators, and the study of them is called articulatory phonetics. Roach (2000: 8).

2.3.1 The Classification of English Sounds

In the following points the researcher is going to speak about the classification of English sounds which are two groups vowels and consonants.

O 'Connor (1980: 24) stated that English sounds divided into two (vowel and consonant sounds), consonants are easily to identify and to understand by the learners, for example this word (ach__l) English speaker can read it and understand it, even with the omission of the vowels, but word like (_oa__) cannot be read by any one, so consonant sounds is a base of all English language.

2.4.1 Vowels

According to Roach(2000: 10) vowels are the sounds where the air does not stopped or blocked when it goes from the lungs to the mouth.

Vowels are different from each others for two reasons: one of them is the tongue position, in other words, is it tens or lax, is the distance between the tongue and the upper surface of the mouth is wide or narrow, also which part of the tongue is used for each vowel sound, is it the front part or the back part.as example the differences between the following two vowels:

- /i:/ sound in the word "see" it is obvious that the tongue is too close to the roof of the mouth, but there is no contact, while the vowel /æ/ in the word "cat" the distance between the tongue and the palate is wider than in /i:/.

- Also the sound /i:/ in see is different than /a:/ in the word calm, if it about which part that is used to produce the sound, it can be obvious that the vowel /i:/ is front vowel, while/ æ / sound is back vowel sound. Roach (2000: 12).

2.4.2 The lips

The lips are important articulators in production of both vowels and consonant, when it concerns with vowels, there are three positions for the lips:

- Rounded: the lips are brought to each others, and pushed like kissing shape. In order to produce sounds like /u:/.
- Separate: the lips are moved away from each others, like in the vowel /i:/.
- Neutral: here the lips are not rounded and not separate, such positions for sound like schwa /ə/.

2.4.3 Short English Vowels

According to Roach (2000: 15) English has large number of vowels, the first part should be studied is the short vowels, their name come from their length, and they are six (I, e,∧ ,æ ,ɒ, u).

- /i/ it is front sound, the lips are slightly far than each others, like the vowel in these words (bit, pin, and fish).
- /e/ it is also front sound, the lips are separate, and the position of the mouth is half close, like these words (bet, men, yes).
- /æ/ it is front vowel, the mouth is open, and the tongue is low, like the vowels in these words (bat, man, gas).
- /∧/ t is central sound, it is open more than open mid, the position of the lips is neutral like in these words (but, some , rush).
- /ɒ/ it is not fully back, it is between half open and open, and the position of the lips are rounded, like the words (pot, gone, cross).
- /u/ it is short and nearer to center , and the lips are rounded like the words (put, pull, push).
- /ə/ still remind one central vowel which known as "schwa" it is like "er" like in these words (about, perhaps). Roach (2000: 16).

2.4.4 English Long Vowels

According to Roach(2000: 19) in English there is five long vowels which are longer than the short ones, and that length is according to the context (such as the sound that follow them), and the presence or absence of the stress.

To make long vowel the symbol will remind as it is, but little addition should be, and that by adding the length mark, which can be presented by two dots {:}.

There is five long vowels which are (i:, ɜ:, a:, ɔ:, u:), these sound are not different from the short vowels in the length, but also in the quality, that quality comes from the tongue position differences, and the lips shape as well as its position. The length mark is not important, but it can help the learner to remember the length differences.

2.4.5 The Classification of The Long Vowels:

- /i:/ it is same as the short vowel /i/according to the lips position, and also it is front sound, but it is longer than /i/, as in these words (beat /i:/ different than bet /i/).

- /3:/ it is central vowel. Known in a lot of English accents as hesitation sound like in the words (bird, fern).

- /a:/ it is open back vowel, it is like /ɒ/, but longer than it, in such words like (card, half).

- /ɔ:/ it is back sound with strong lips rounding, like in the words (board, torn).

- /u:/ it is close back sound, the lips are rounded, it is like the short vowel /u/ but longer, like the words (food, soon).Roach (2000: 20).

2.4.6 Diphthongs

Roach (2000: 21) diphthongs are sounds which have what is called vowel glide, it is a movement happens in one vowel, and the other remind as it is, and this sound known as "pure vowel".

What is important about diphthongs is that the first part tends to be longer and stronger than the second part, and all the diphthongs contain two vowels.

There is eight diphthongs, found in three groups:

1. Centering end in "schwa", which are (iə, eə, uə).
2. Closing end in (i) which are (ei, ai, ɔi).
3. Closing end in (u) which are (əu, au).

- /iə/ like in the words (ian, beard, it is glide from the close front /i/ to the central /ə/.
- /eə/ as in the words (aired, cairn). It is glide from the half close /e/ to the central vowel /ə/.
- /uə/ as in (moored, tour), it is glide from the close back sound/u/ to the central sound /ə/.

Notice that close diphthongs glide toward close vowels.

- /ei/ in the words (paid,pain), it is a glide from the half close sound /e/to the close /i/.
- /ai/ as in the words (tide, time), it is glide from the open vowel /a/ , which is between front and back, to the close front vowel /i/.
- /ɔi/ like in (void, loin), it is a glide from the half close /ɔ/ to the close front /i/.
- /əu/ as in (load, home), it is a glide from the central /ə/ to the close back /u/.
- /au/ like in the words (loud, gown), it is a glide from the back sound /a:/, to the back close /u/.

2.4.7 Triphthongs

Known as the most complex vowels in English, and also there is difficulties to pronounce and to recognize, it contains three glides, from vowel (1), to vowel (2), to vowel (3),for example the word

"hour" contains triphthongs which is /auə/, there is three glides from the vowel /a/, moving to the back sound /u/, and last to the central sound /ə/. There is five triphthongs which are made up of closing diphthongs with adding "schwa ".

ei+ə = eiə like in the word "player".

ai+ə = aiə like the word "fire".

ᵒi + ə =ɔiə like the word "loyal".

əu + ə = əuə like the word "slower".

au + ə= auə like the word "hour" Roach (2000: 24).

2.4.8 English Consonants

Consonants are sounds which produce by the air blocking in different places, not like vowels which need an open vocal tract to the flow of the air without block. Underhill (2005: 29).

	Bilabial	Labio-dental	dental	alveolar	post alveolar	palatal	velar	glottal
plosives	P b			t d			k g	
fricatives				s z	ʒ ʃ			
affricate		f v	θ ð		tʃ dʒ			h
nasal	m			n			ŋ	
lateral				l				
approximant	w				r	j		

Table(1): chart of English consonant phonemes Roach (2000: 65).

Roach (2000: 32) plosives are the sounds which produced by blocking the air in different places, and follow by sudden release, that cause something like explosion, they can be divided into two groups: the voiced plosives which are also known as (lenis), there is three voiced plosives (b, d, g), also there is voiceless plosives or (fortis) which are also three (p, t, k), both of them can be classified according to the place of articulation as the following: (b, p)in such words like (bed, pen) are bilabial plosives, the air blocked in the lips then suddenly released, while (t, d) in such words like (tea, die)are dental plosives, the tip of the tongue touch the upper teeth and block the air in the dental area. The last couple of plosives are (k, g) in such words like (kick, gas) which known as velar plosives, because the air blocked in the soft palate.

	Bilabial		Alveolar		Velar	
	Labio-dental	Dental	Alveolar	Post-alveolar		Glottal

Fortis "voiceless"	P	t	k
Lenis "voiced"	b	d	g

Table(2) English consonant plosives Roach (2000: 35).

The second type is fricatives which can be define according to Roach (2000: 48) the sounds that produce by narrowing the air pass, the result is hissing or friction, fricatives are (f, v, s, z,θ, ð, ʃ, ʒ, h), and also can be divided into voiced fricatives which are (v, z, ʒ, ð), and voiceless (f, s, h, ʃ, θ).

According to the place of articulation (f, v) in such words like (fan, van) are labio-dental fricatives which produce by using the upper teeth with the lower lips, with leaving narrow space, while (s, z) in such words like (see, zoo) are dental fricatives which produce by the upper and the lower lips without complete closure, also there is (θ, ð) which are labio- dental sounds in such words like (thin, father).

Fortis "voiceless"	f	θ	s	ʃ	h
Lenis "voiced"	v	ð	z	ʒ	

Table (3): English fricatives Roach (2000: 49).

Roach (2000, p.48) affricates are the most complex consonant, because they start as plosives, but end as fricatives. There are two affricates (ʧ and ʤ) like in words (church and judge).

Nasal sounds as defined by Roach(2000:58) are the sounds which produced by not allow the air to pass through the mouth, the soft palate is lowered and the tongue is up the result that the air will go through the nose, nasal sounds are three (m, n, ŋ), like in the words (man, net, eating).

Lateral consonant as in Roach(2000: 61) defined are the sounds in which the air does not pass through the center of the tongue, instead of that, it goes by the sides of the tongue, there is one lateral sound in English which is (l) sound, in BBC pronunciation the consonant (l) has different realization when comes before vowels than be with the other sounds, for example the in the word "lea" is different than "eel" in this case the (l) in the second word known as "dark" (l).

The consonant (r) found in a lot of English accents pronounce differently, but there is one way of pronunciation for the foreign learners which is known as post-alveolar approximant, they can be produced when the articulators come to each others, but without complete closure, to produce approximant (r) sound the tongue should come close to the alveolar ridge, but without contact, try this (drdrdrdr), this (r) sound is known as "retroflex" as in the word (red).

Also there another approximant sounds which are (j, w) they are phonetically vowels, but phonologically consonant, phonologically known as (semi-vowels) as the words (pure, twin) Roach (2000: 62).

2.5 The Description of Arabic Sounds System

Arabic (العربية‎ *al-ʿarabīyah* or عربي/عربى‎ *ʿarabī*) is a name applied to the Classical Arabic language of the 6th century . This includes both the literary language and the spoken Arabic varieties.

The literary language is called Modern Standard Arabic or *Literary Arabic*. It is currently the only official form of Arabic, used in most written documents as well as in formal spoken occasions, such as lectures and news broadcasts. The spoken Arabic varieties are spoken across the Middle East and North Africa .The modern written language (Modern Standard Arabic) is derived from the language of the Quran (known as Classical Arabic or Quranic Arabic). The two formal varieties are grouped together as (Literary Arabic). Javed(2013:1).

2.5.1 The Development of Arabic

The modern Arabic is derived completely from the old dialects of Central and North Arabia which were classified by the classical Arab grammarians into three groups:which are(Hijaz, Najd, and the language of the tribes among these areas).

the language of the(Hijaz) was tend to be the purest, while that of the neighbouring tribes was felt to have been affected by other Semitic and non-Semitic languages. It has been estimated recently that Arabic is the native language of about 200 million people. Arabic is the sole or joint official language in twenty countries in a region stretching from Western Asia to North Africa. These are (Morocco, Algeria, Mauritania, Tunisia,

Libya, Egypt, Sudan, Djibouti, Somalia, Saudi Arabia, Kuwait, Bahrain, Qatar, the United Arab Emirates, Oman, Yemen, Jordan, Syria, Iraq, and Lebanon. It is spoken by Israel's Palestinian population and by Palestinians living in the West Bank and Gaza. It also has speakers in the south-western corner of Iran, in southern Turkey, in Chad, in some areas in the south of the Sahara, in some enclaves of the Central Asian republics of the old Soviet Union, in francophone West Africa, and among Arab communities in Europe and America.G.E Watson (2002: 22).

According to Karouri (1996:20) Arabic consonant can be divided into four groups:

- Firstly: the back consonant which contain (laryngeal, pharyngeal, uvular).
- Secondly: liquids.
- Thirdly: the front consonant (sibilants, dental, inter-dental).
- Fourthly: labials.

  There is also two concepts which are (MAJHOUR/ MAHMUS) which correspond to (voice/ voiceless).

  MAJHOUR are (13) sounds (b, j, d, r, z, l, m, n, ḍ, ð, ʕ,ðˤ)

  The MAHMUS are (12) which are (t, h, s, f, q, k, Ś, Ṣ, ṭ, χ, ġ, ḥ).

The following chart shows the Arabic consonant sounds:

	Bilabial	Labio-dental	Interdental	Velarized – interdental	Dental	Velarized dental	Alveolar	Velarized - alveolar	Palato – alveolar	Palatal	Velar	Uvular	Pharyngeal	Laryngeal
Stops :														
Voiceless					t	ṭ					K	q		?
Voiced	b				d	ḍ				j				
fricatives:							s	Ṣ	Ś					
voiceless		f	ɵ				z					χ	ḥ	H
Voiced			ð	ðˤ								ġ	ʕ	
resonant														
Trill							r							
Lateral														
Nasal	m						n							
approximant	w									Y				

Table (4): Arabic consonant according to Karouri (1996:17)

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2.5.2 Arabic sounds and Arabic Alphabets:

b	ب
f	ف
θ	ث
ðˤ	ظ
ð	ذ
t	ت
d	د
ṭ	ط
ḍ	ض
s	س
z	ز
Ṣ	ص
Ś	ش
j	ج
y	ي
k	ك
q	ق
χ	خ
ġ	غ
ḥ	ح
ʕ	ع
ʔ	ء
h	ه
r	ر
n	ن

Table (6): Arabic sounds javed(2013:11).

According to Karouri(1996:17), the sounds /w,y/ are vowels according to their phonetics features, but consonants according to their phonological features, so the linguist (Ladefoged) classify them as approximants.

The two sounds /k/, /q/ tend to be the voiceless and the voiced which produced from the back of the tongue with contact to the palate, in addition the allophone / ġ/ tend to be dalect version of the phoneme /k/ in the place of /q/ which used by some Bedouins.

2.5.3 The Emphatic Consonant: (Velarized):

The term used by traditional Arab grammarians to refer to the sounds which called (MUFAχχAMA) as for example the(pharyngealized dental).

The emphatic sounds remarked by using double articulation, the result is sound different than the plain version, for example the velarized consonant:

Plain	b	d	t	z	ð	s	m	n	l	r
velarized	ḅ	ḍ	ṭ	ẓ	ðˤ	Ṣ	ṃ	ṇ	ḷ	ṛ

Table (7): Aabic emphatic and plain sounds Karouri (1996:17).

- /ḍ/ sound which known as the letter (ḍaḍ) is a lateral sound, nearer to /l/.
- their high frequency, and they are six /l, r, n, b, m, f).

2.5.4 Arabic Vowels:

Table (8): Arabic vowels Karouri (1996:79).

	Front				Central				Back			
	Round		Spread		Round		Spread		Round		Sepreat	
	Short	long	Short	Long	short	Long	Short	Long	short	Long	Short	Long
Close			I	Ī		℧			u	ῡ		
Half Close			E	ē						ō		
Half Open												
Open			A	ā							ᾱ	

According to Karouri(1996: 95), Aarabic language has short vowels which are called (HARAKĀT), and they are postulate sometimes before long vowels which known as (FATHA MUMĀLA NAHW AD-DAMM) For the long emphatic vowels which known as (alif al-taf$_\chi$Īm) in word like (salᾱt) " pray), it is like /o/ or /ᾱ/.

Also /i:/ can be represented by /Ī/ and /u:/ by /ῡ/, finally there is also diphthongs in Arabic which are two (ay) and (aw) which correspond to /ai/ and /au/.

According to G. E Wtson(2002:22) In contrast to short vowels, the opposition between /i/ and /u/ exists in all dialects in the long vowels. All modern dialects of Arabic have at least three long vowels /ɑ̄/, /Ī/, and /ῡ/, /Ī/ and /ῡ/ have an articulation which is closer than that of their short counterparts, and /ɑ̄/ has a front articulation.

2.6 Arabic vs English

In the following points it is important to make comparison between the both Arabic language and English language, to state the similarities and the differences between them in the sound system.

2.6.1 Sounds only in Arabic

q	ق
ṣ	ص
ḥ	ح
χ	خ
ṭ	ط
ḍ	ض
ðˤ	ظ
ʕ	ع
ġ	غ

Table (9): javed (2013:9).

- "k" (q vs k)

    The Arabic sound /q/ (ق) it is different from the /k/, in English /q/ is further back in the throat, the differences can be obvious in the following example /k/ in (key), and /q/ in (quarter).

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- "h"

- it is correspond to three sounds in Arabic which are(h, ḥ, χ), the first /h/ is the same like the English one, but in /ḥ/ there is friction in the upper throat, while /χ/ is rough like the sound which comes from the deep sleeping.

- "h" sound has two different sound in Arabic when it vocalized, which are /ç/ and / ġ/, /ç/ sound is like English sound /a/ , but it is deep in the throat, like when the doctor ask somebody to say (ahhh) to look inside the throat, while / ġ/ is produce with vocal cords vibration,

Also there is the soft and the hard version of the sounds, which known as "emphatic and plain" the plain version of (s, t, d, �) are the same as the English ones, but the emphatic or the hard version is different and only found in Arabic which are (ṣ, ṭ, ḍ, ðˤ). javed (2013:9).

2.6.2 Sounds only in English

- /p/ the voiceless plosive.

- /v/ the voiced fricative.

- /ŋ/ the nasal sound.

- /ʧ/ and/ʤ/ the lateral affricates.

- /ʒ/ the fricative sound.

- The short vowels such as /ɒ/ and /ʌ/.

- The long vowels such as /ɜ:/, /ɑ:/, /ɔ:/.

- All the diphthongs of English are not found in Arabic except /ai/ and /au/.

- Trephthongs are only in English.

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These are the points of differences between the two languages Arabic and English, and it is obvious that English language sounds are more than Arabic sounds, which means new sounds for the Arabic speaker who is an English learner, and of course more pronunciation difficulties.

In the following points the researcher will provide some previous studies which relate to the present study.

2.7 Previous Studies

2.7.1 The first Study

This study investigating pronunciation problems encountered by EFL learners, a case study of Sudan University second year students, it presented by Safa Ibrahim Adam Ahmedin 2016, and supervised by Dr. Ayman Hamad Elneel.

The study aimed to investigate pronunciation problems of English, which encountered by Sudanese learners who speak Arabic, the study include (30) students as sample from Sudan University of Science and Technology, then two types of tools have been used for data collection, which are the oral test and the observation, the researcher used descriptive statistical method for the data analysis, The study came out with the following results that:

- Sudanese students of English have difficulties in pronounce vowel sounds, which has one way to pronounce.
- Consonants sounds of English have equivalence in Arabic, which cause no difficulties.
- The mother tongue interference affecting student pronunciation.

2.7.2 The Second Study

This study is an (MA) research inThe awareness of pronunciation among Sudanese EFL students at tertiary level of Sudan University of science and technology , college of graduate studies .

The study conducted by Muhamed Zumrawi Ali Fahal in(2004) , and Supervised by Dr.Alsadig yahya Abdalla.It aimed to study and show the importance of pronunciation, and how to balance between the fluency and accuracy, which make pronunciation gain it's full communicative competence . the study specifically tend to investigate Sudanese learners' awareness of English pronunciation , which reflected in misunderstanding and miscommunication , the researcher used practical , experimental and analytic approach to the data and two instruments , which are Questionnaire and test , and the result was :

- Adult learners of foreign language face difficulties, which rooted in the parents loss in natural abilities which important for pronunciation .

- Some of the problem sources is the native phonological system transfer and interference.

- The learners tend to apply their native pronunciation rules on the target language .

- English pronunciation problems come from the differences between the written and the spoken forms such as (Homophones – homographs , double and silent).

2.7.3 The Third Study

 The study conducted by Balla Alsammani Balall mohmed in (2016) and supervised by Dr. Abdarahman Abulgasim Salih , it was in the difficulties facing university students in pronouncing English vowel sounds, in Sudan University of Science and Technology, College of Graduate studies.it is

similar to the present study because the present study share a part of this study which is the difficulties in the pronunciation of vowels, but it contains the consonants too.

The study investigating some difficulties encountered by Sudanese students of English language, and the researcher used two tools to collect the data : a questionnaire was given to (50) university teachers , and test for 100 university Students for Sudan university college of Education – English department

The study concluded by the following:

The problem of vowels pronunciation comes from the fact that Arabic vowels are less than English vowels and   easier to pronounce, while the vowels that do not exist in Arabic and which are in English cause difficult for the learners.

CHAPTER THREE

METHODOLOGY

CHAPTER THREE

METHODOLOGY OF THE STUDY

3.0 Introduction

The previous chapter has presented review of related literature to the topic. This chapter is going to introduce the methodology of the study, tool of the study, population of the study, sample of the study, as well as validity and reliability of instruments.

3.1 Methodology of the study

The study adopts the descriptive analytic method, which tend to describe the problem and the phenomenon as it is, the analytical method to test the hypotheses of the study by using suitable statistical procedure in order to find out the reasons.

3.2 The population of the study

The population of the study were 30 students chosen from Sudan University of Science and Technology (SUST)- College of languages   fourth year students. All of them are about 22 years old, but one of them is about 30 years old,

.They belong to both sexes with no intent to focus on one sex, and all of them are Sudanese who learn English as a foreign language. They were chosen to do a recorded test.

3.3 Data collection instrument

In this study only one tool has been used which is a test. It is composed of two parts, one of them contains (18) statements, and the other contains (12)

statements. Each part of the test covered one of the two hypotheses of the study.

3.4 Procedure of the data collection

The researcher distributed about (30) copies of pronunciation test, they were given to (30) students. Each statement of the test requires the students to underline a word that contains a certain sound to be examine and the check would be according to the pronunciation of that sound, with no focus on the rest of the statement. Te researcher saved the records on a memory to make the marking job easier and trustable.

The test was done in a quiet hall inside the University building, but ten of the thirty records were done outside with giving attention to the noise around.

The record time was open to give the student more time to think about the sound that needed.

3.5 Reliability

It means to obtain the same result if the same measurement used more than one time under the same conditions.

In order to measure the reliability the researcher used SPSS package, and the Reliability and validity of the test were calculate using Cronbach's Alpha and Pearson Correlation co-efficient, so the result show that the tool is reliable comes from the fact that its statements concentrate on the area of the study.

3.6 Validity

It means to insure that the test meets its value. Here it was calculated by computing the square root of Reliabilityco-efficient (Cronbach's Alpha) after statistical analysis the result that the test was valid, it contains (30) items every one covers certain sound to be pronounce.

3.7 Piloting

In order to do this pronunciation test, a piloting test has been given to (10) MA students batch5 from Sudan University of Science and Technology, the test was through tap recording for all the ten participants, and it has come with the result that it is reliable and valid, according to SPSS statistical analysis.

piloting test Reliability Statistics

N of Items	Cronbach's Alpha	Validity
28	.701	.84

The correlation of the test parts:

Correlations		Whole test	sounds pronunciation	spelling
Whole test	Pearson Correlation	1	.900**	.809**
	Sig. (2-tailed)		.000	.005
	N	10	10	10
sounds pronunciation	Pearson Correlation	.900**	1	.472
	Sig. (2-tailed)	.000		.169
	N	10	10	10
Spelling	Pearson Correlation	.809**	.472	1
	Sig. (2-tailed)	.005	.169	
	N	10	10	10
**. Correlation is significant at the 0.01 level (2-tailed).				

Study test Reliability Statistics

Subject	N of Items	Cronbach's Alpha Based on Standardized Items	Validity
Pronunciation	18	.78	.88
Spelling	12	.70	0.84
Whole Test	30	.79	.89

CHAPTER FOUR

DATA ANALYSIS AND DISCISSION

CHAPTER FOUR

DATA ANALYSIS AND DISSCISON OF THE RESULT

4.0 Introduction

This chapter presents and analyzes the data collected through the test. It will also analyze the sample to provide answers to data drawn from the test designed by the classroom teachers. The results will be used to provide answers to the research questions.

the researcher provided 30 statements which contain certain sounds, also the researcher provided two examples for each one of /əu/ and /ɑ:/ in order to measure the frequency of these sound and to give reliable assessment.
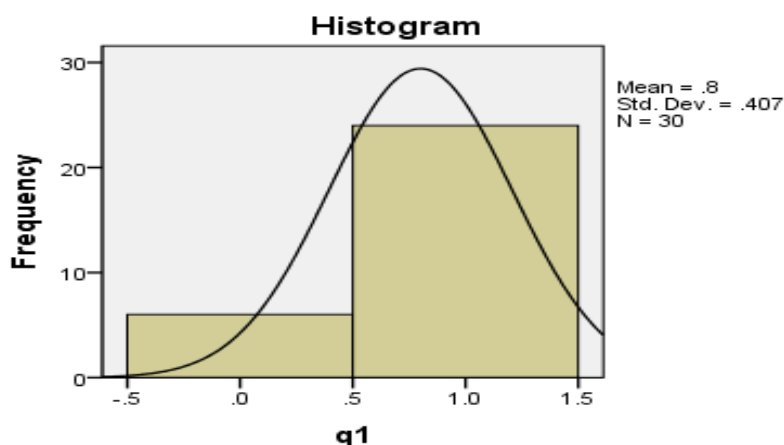
4.1 The Data Obtained From the Test

4.1.1Part one: Pronunciation test for sounds which don't exist in Arabic and which may cause difficulties.

Question 1: The book needs a <u>cover</u>.

Table (4.1) /ʌ/ sound pronunciation:

		Frequency	Percent
	Failed	6	20.0
Valid	Pass	24	80.0
	Total	30	100.0

Histogram

Mean = .8
Std. Dev. = .407
N = 30

Histogram (4.1) /ʌ/ sound pronunciation:

Histogram and table (4.1) shows that (24) of the (30) of the students who succeed in pronunciation of /ʌ/ sound in the word (cover) which is pronounce and written /kʌvə/, but (6) out of (30) pronounced it as /o/ sound. Although the /ʌ/ does not exist in Arabic, (24) students succeeded in its pronunciation and that is because of the common use of the word.

Question2: She went to the <u>church.</u>

Table (4.2) /ʧ/ sound pronunciation

		Frequency	Percent
	Failed	13	43.3
Valid	Pass	17	56.7
	Total	30	100.0

Mean = .57
Std. Dev. = .504
N = 30
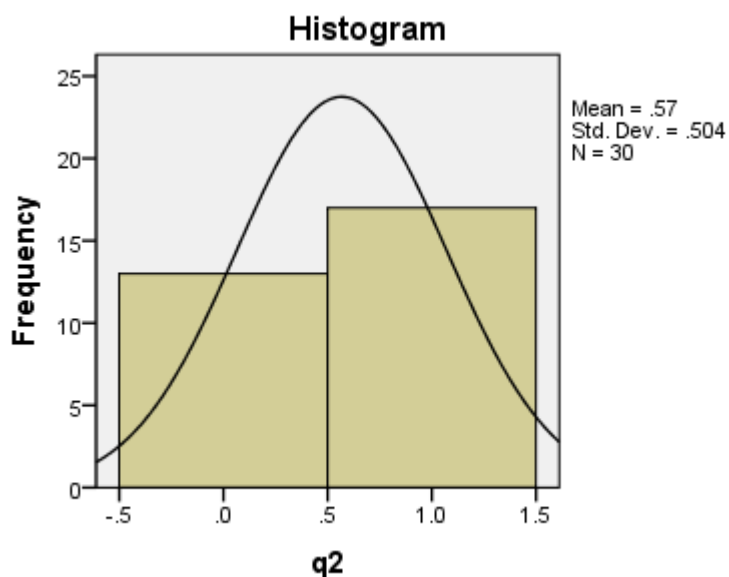
Histogram (4.2) /ʧ/ sound pronunciation

Histogram and table (4.2) shows that only (17) of the (30) succeeded in pronunciation of /ʧ/ sound contained in the initial and the final position of the

word (church) which is written and pronounced /ʧɜːʧ/, but (13) out of (30) students pronounce it /ʃ/.

Question3: My shirt is <u>beige.</u>

Table (4.3) the vowel /ei/

		Frequency	Percent
	Failed	23	76.7
Valid	Pass	7	23.3
	Total	30	100.0

Histogram

Mean = .23
Std. Dev. = .43
N = 30
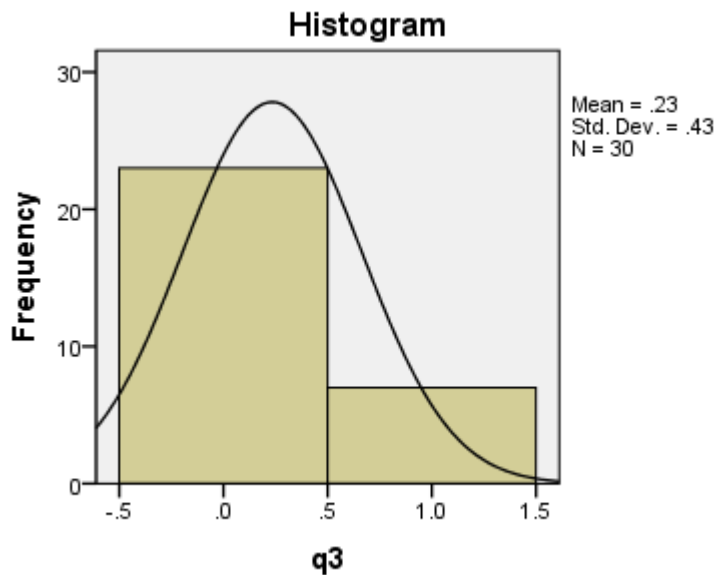
Histogram (4.3) the vowel /ei/

Histogram and table (4.3) shows that (7) of (30) students gave correct pronunciation for /ei/ vowel sound, but (23) out of (30) of the students failed to pronounce the diphthong sound /ei/ in the word /beiʒ/, some of them tend to pronounce it as the long vowel /iː/ and the others as /ai/, because there is no/ei/ sound in Arabic.

Question4: Peter is a pupil.

Table (4.4) /p/ sound pronunciation

|		Frequency	Percent
	Failed	20	66.7
Valid	Pass	10	33.3
	Total	30	100.0
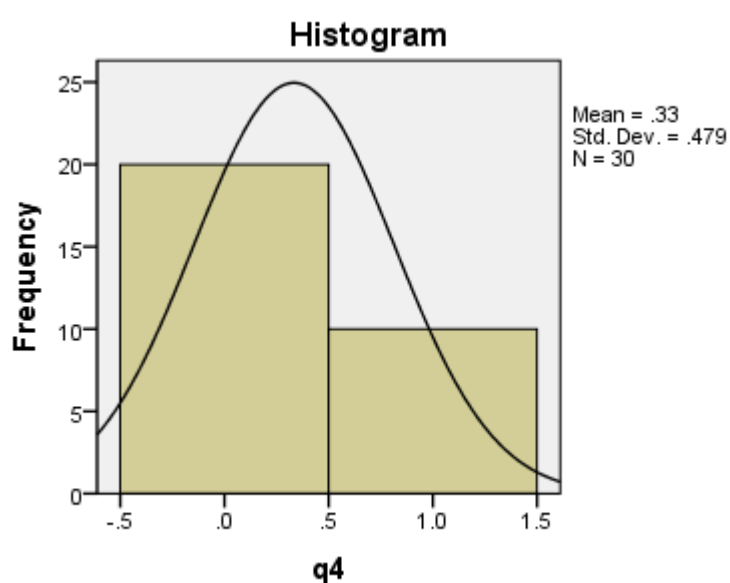
Histogram (4.4) /p/ sound pronunciation

The Histogram and table (4.5) show that (10) out of (30) students gave correct pronunciation to /p/sound, but (20) of (30) of the students gave wrong pronunciation to the bilabial plosive voiceless sound /p/ in the word /pi:tə/,all of the (20) students pronounced it /b/ sound which is bilabial plosive voices sound, and that because /b/ sound is found in Arabic, but /p/ is not, it set to be mother tongue interference.

Question5: He is a judge.

Table (4.5) pronunciation of /ʤ/ sound

		Frequency	Percent
	Failed	11	36.7
Valid	Pass	19	63.3
	Total	30	100.0

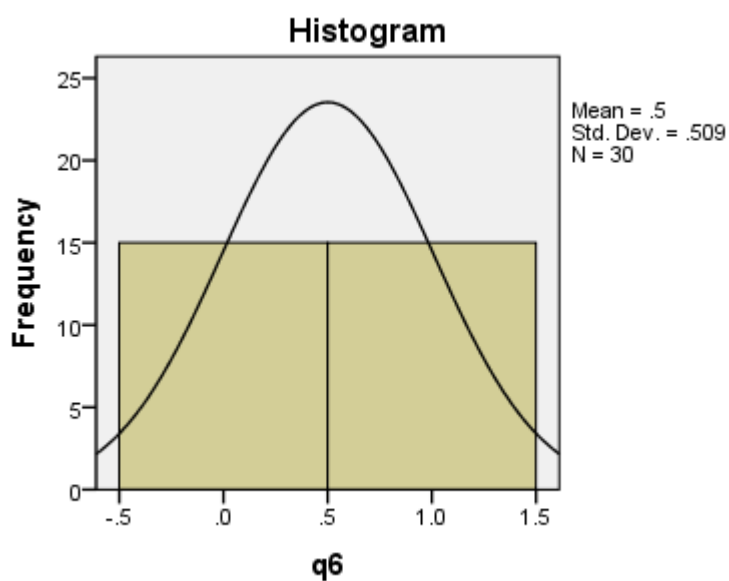

Histogram

Mean = .63
Std. Dev. = .49
N = 30
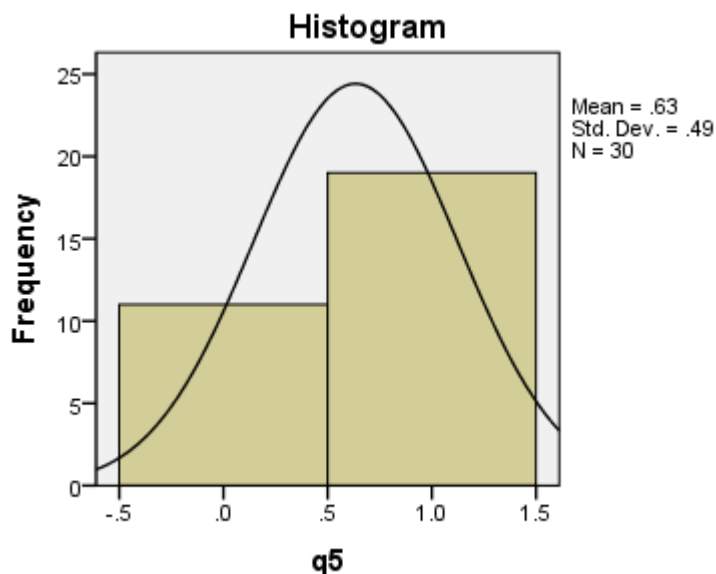
Histogram (4.5) pronunciation of /ʤ/ sound

 Histogram and table (4.5) show that (11) out of (30) students gave wrong pronunciation to the consonant soud /ʤ/ in the word (judge) which is written and pronounced /ʤ˄ʤ/, they tend to pronounce it as the Arabic or the English/j/ sound, but (19) of (30) gave correct pronunciation./ʤ/ sound does not exist in Arabic, the students who gave high marks because of the common use.

Question6: Fill the pot with water.

Table (4.6) /ɒ/ vowel sound pronunciation

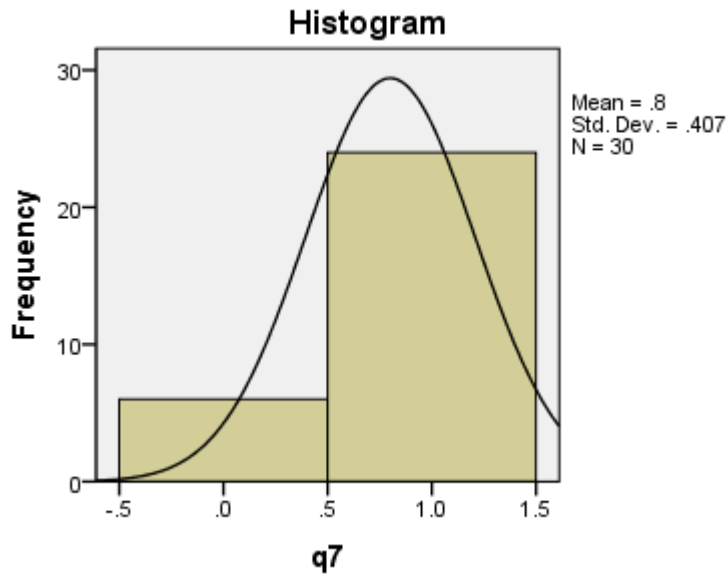|		Frequency	Percent
	Failed	15	50.0
Valid	Pass	15	50.0
	Total	30	100.0

Histogram (4.6) /ɒ/ vowel sound pronunciation

Histogram and table (4.6) show that (15) out of (30) gave correct pronunciation , as well as (15) of (30) students gave wrong pronunciation to the short vowel /ɒ/ in the word (pot) /pɒt/, most of them pronounce it /u/, because there is no /ɒ/ sound in Arabic the nearer one is /u/ sound.

Question7: The cars crash make <u>banging</u>.

Table (4.7) /ŋ/ sound pronunciation

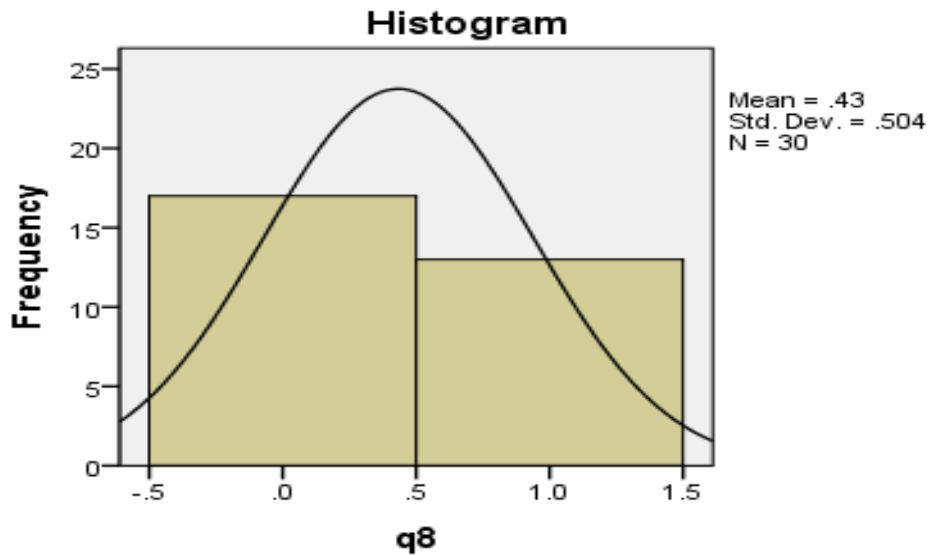|		Frequency	Percent
	Failed	6	20.0
Valid	Pass	24	80.0
	Total	30	100.0

Histogram (4.7) /ŋ/ sound pronunciation

Histogram and table (4.7) shows that (4) of (30) students pronounce the /ŋ/ sound as /In/ in the end of the word (banging), /bæŋiŋ/ and that because of the non standard pronunciation on the standard one, while (26) of (30) gave correct pronunciation because the/ŋ/ does not exist in Arabic, yet it's easy because of the common use of this word.

Question8: Put it in my <u>purse.</u>

Table (4.8) /ɜ:/ long vowel pronunciation

|		Frequency	Percent
Valid	Failed	17	56.7
	Pass	13	43.3
	Total	30	100.0

Histogram (4.8) /ɜ:/ long vowel pronunciation

Histogram and table (4.8) shows that (17) of (30) students mispronounce the long vowel /ɜ:/ in the word /pɜ:s/, most of them pronounce it with the short vowel /u/ which is found in Arabic.

Question9: The bus was <u>comfortable</u>.

Table (4.9) /ə/ the central vowel pronunciation

|		Frequency	Percent
Valid	Failed	12	40.0
	Pass	18	60.0
	Total	30	100.0
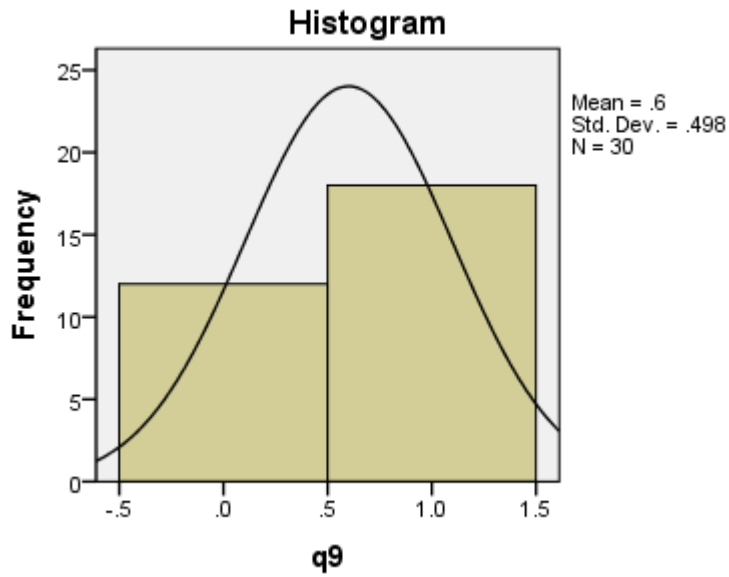
Histogram (4.9) /ə/ the central vowel pronunciation

Histogram and table (4.9) shows that (18) of (30) gave correct pronunciation to the central sound /ə/, while (12) of (30) students gave wrong pronunciation for the central vowel /ə/, they tend to pronounce it /o/ sound, because there is no /ə/ sound in Arabic.

Question10: Mona likes rouge.

Table (4.10) /ʒ/ sound pronunciation

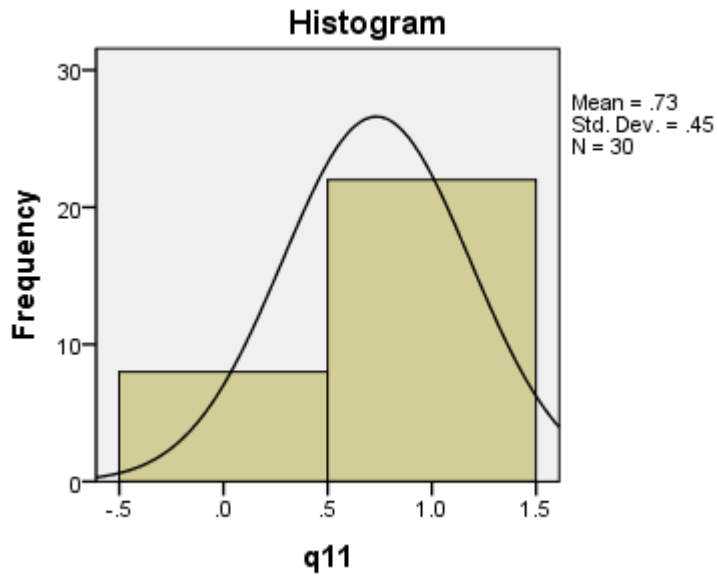|		Frequency	Percent
	Failed	13	43.3
Valid	Pass	17	56.7
	Total	30	100.0
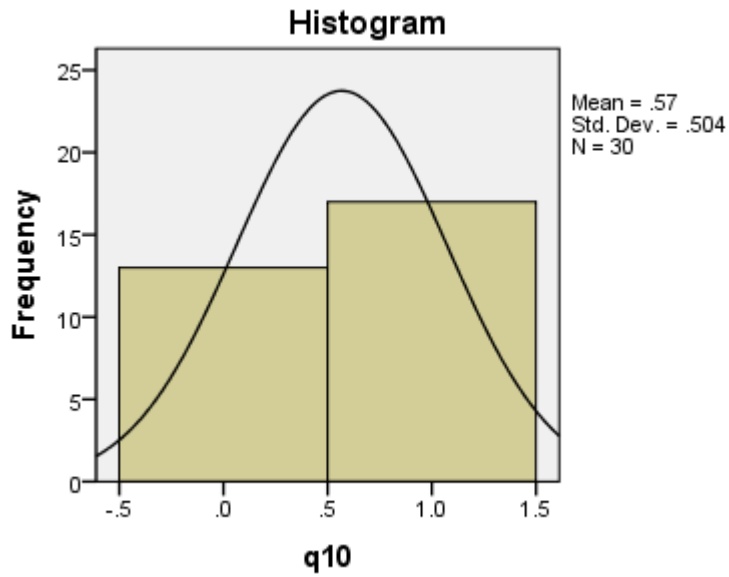
Histogram (4.10) /ʒ/ sound pronunciation

Histogram table (4.10) shows that (13) of (30) students gave wrong pronunciation for the consonant sound /ʒ/ in the word (rouge) which is written and pronounced /ruːʒ/, they tend to pronounce it /j/, and that because there is no /ʒ/ sound in Arabic, but there is /j/. the rest of the students gave correct answer.

Question11: Football is my <u>favorite</u> sport.

Table (4.11) /v/ sound pronunciation

		Frequency	Percent
Valid	Failed	8	26.7
	Pass	22	73.3
	Total	30	100.0

Histogram (4.11) /v/ sound pronunciation

Histogram and table (4.11) shows that (22) of (30) students gave correct pronunciation for the /v/ sound because it is common, while (8) students gave wrong pronunciation to the consonant sound /v/, they changed into /f/.

Question12: Trees provide us with <u>coal</u>.

Table (4.12) /əu/ sound pronunciation

		Frequency	Percent
	Failed	14	46.7
Valid	Pass	16	53.3
	Total	30	100.0
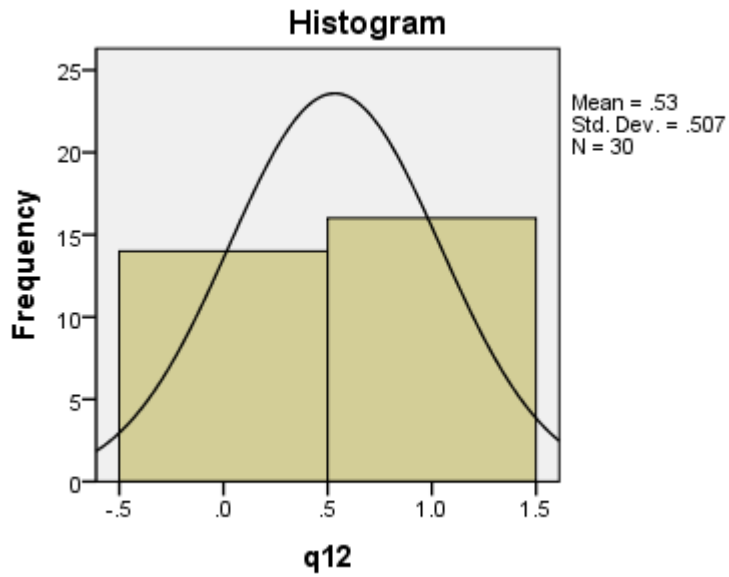
Histogram (4.12) /əu/ sound pronunciation

Histogram and table (4.14) shows that (14) of (30) students failed to pronounce the diphthongs vowel/əu/ in the word /kəul/ most of the students pronounce it /u:/or /o:/ sounds, while (16) of them gave correct pronunciation.

Question13: Is it <u>clear</u>?

Table (4.13) /iə/ sound pronunciation

		Frequency	Percent
	Failed	4	13.3
Valid	Pass	26	86.7
	Total	30	100.0

Histogram

Mean = .87
Std. Dev. = .346
N = 30

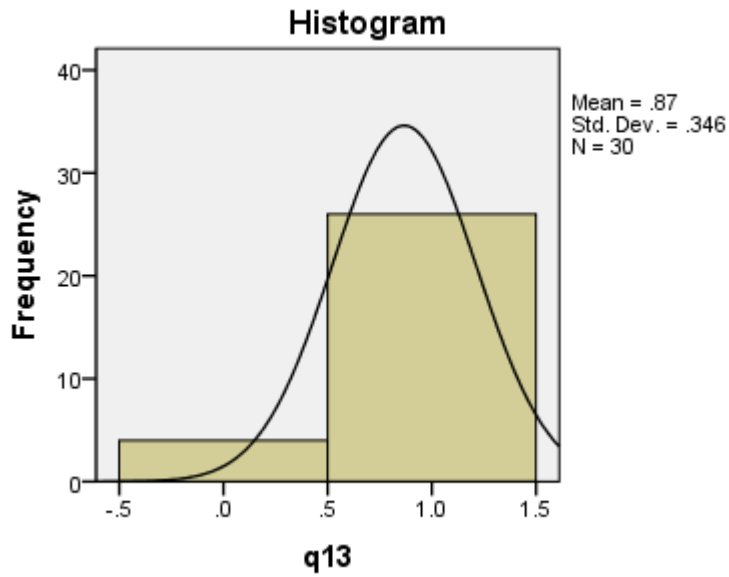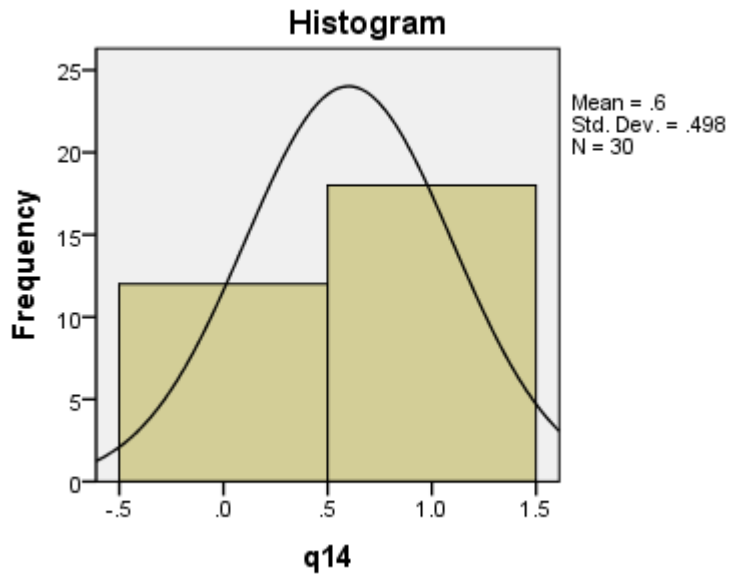**Histogram (4.13) /iə/ sound pronunciation**

Histogram and table (4.13) shows thatjust (4) of (30) students failed to pronounce the diphthong sound /iə/ in the word (clear) which is written /kliə/, they changed it into /i:/, while (24) of (30) gave correct answer.

Question14: I love this Part.

Table (4.14) /ɑ:/ sound pronunciation

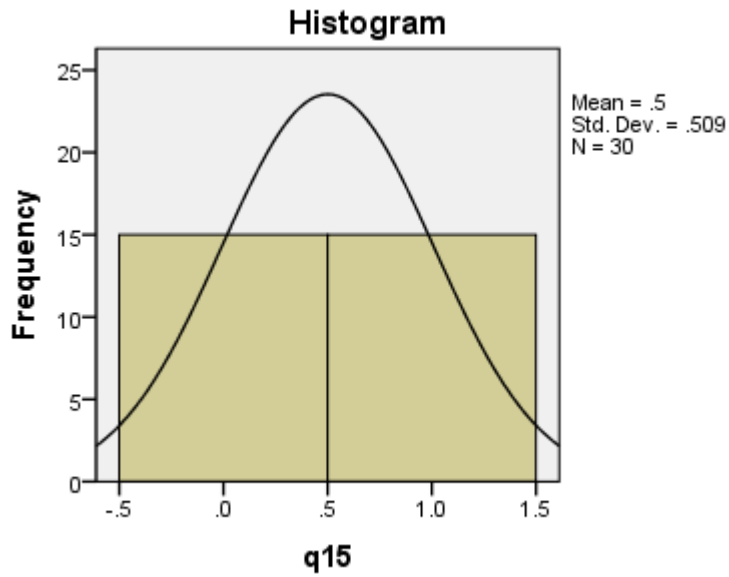|		Frequency	Percent
	Failed	12	40.0
Valid	Pass	18	60.0
	Total	30	100.0

Histogram (4.14) /ɑ:/ sound pronunciation

Histogram and table (4.14) shows that (12) of (30) students gave wrong pronunciation to the long back vowel /ɑ:/ in the word /pɑ:t/ they tend to pronounce it as /æ/ the front sound, (18) of (30) gave correct pronunciation.

Question15: Kids love snow.

Table (4.15) /əu/ pronunciation

|		Frequency	Percent
	Failed	15	50.0
Valid	Pass	15	50.0
	Total	30	100.0

Histogram (4.15) /əu/ pronunciation

Histogram and table (4.15) shows that (15) of the students succeed in the pronunciation of the /əu/ sound and the second (15) didn't pronounce it right they tend to pronounce it as double/oo/ sound, the researcher gave two examples to /əu/ sound in order to measure the frequency of the sound.

Question16: The Island brings <u>tourists</u>.

Table (4.16) /uə/ sound pronunciation

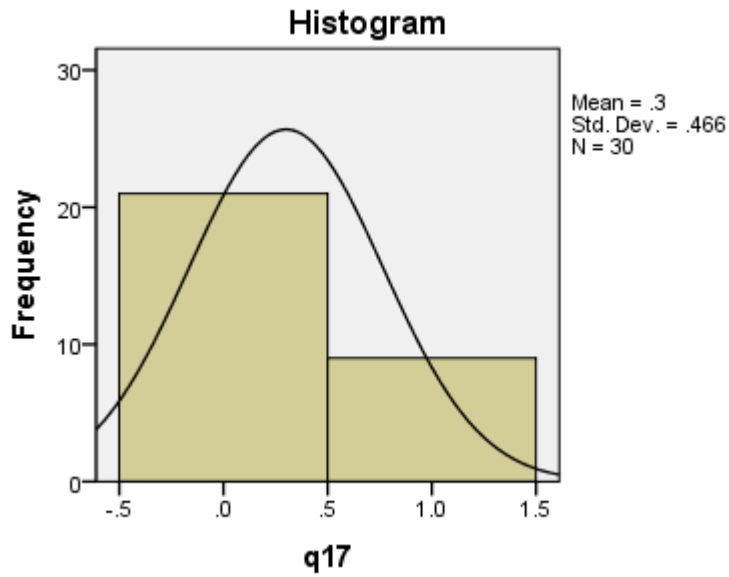|		Frequency	Percent
	Failed	13	43.3
Valid	Pass	17	56.7
	Total	30	100.0
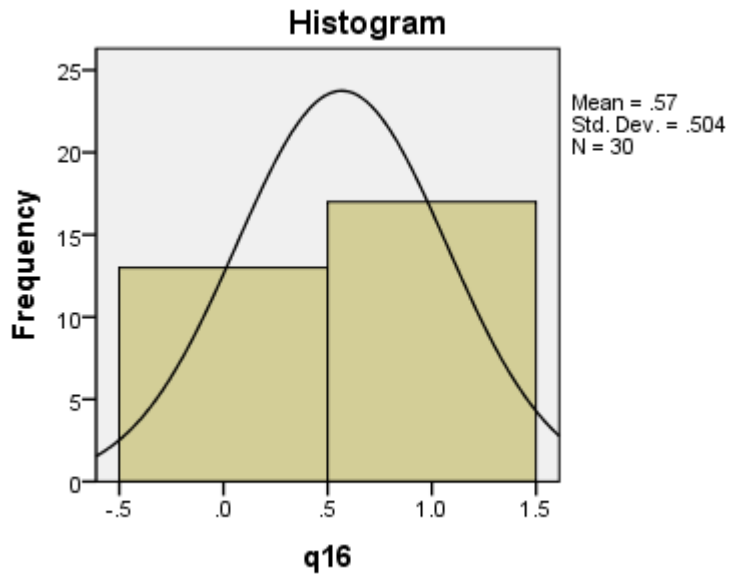
Histogram (4.16) /uə/ sound pronunciation

Histogram and table (4.16) shows that (17) of (30) gave correct pronunciation for /uə/ for the word /tuərists/, while (13) of (30) students gave wrong pronunciation, they tend to change into /au/ sound which is found in both Arabic and English.

Question17: He halves the loins.

Table (4.17) /ɔː/ sound pronunciation

|		Frequency	Percent
	Failed	21	70.0
Valid	Pass	9	30.0
	Total	30	100.0

Histogram (4.17) /ɔ:/ sound pronunciation

Histogram and table (4.17) shows that (21) of (30) students failed to pronounce the diphthong vowel /ɔi/ in the word (loin) which is pronounce /lɔin/,they tend to pronounce it /u/ the short vowel which is found in both Arabic and English, while (9) of (30) gave correct pronunciation.

Question18: They hid in a <u>cart</u>.

Table (4.18) /ɑ:/ sound pronunciation

		Frequency	Percent
	Failed	6	20.0
Valid	Pass	24	80.0
	Total	30	100.0
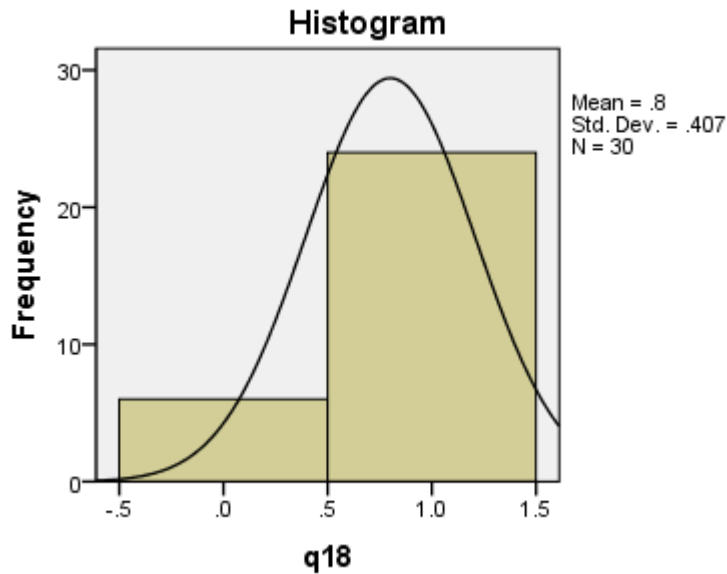
Histogram

Histogram (4.18) /ɑ:/ sound pronunciation

Histogram and table (4.18) shows that (6) of (30) students failed to pronounce the /ɑ:/ in the word /cɑ:t/,they tend to pronounce it /æ/ sound which is found in both languages, while (24) gave correct pronunciation, which means this sound cause little difficulty to the students, in order to measure the frequency the researcher gave two example for this sound.

4.1.2 PART TWO

English Pronunciation According to English Spelling:

English spelling system is complex, because it works in two directions: many sounds stand for one spelling, and many spellings stand for one sound. For example the'eye-rhymes' which means the forms that seem as if they ought to have the same pronunciation, but don't. There are various comic poems about this type of ambiguity like what is written by non-native speakers who faced difficulties with the system, one and that by select out a set of eye-rhymes – 'here is some words which are popular and known to the most of English foreign speakers (*plough, cough*, *through* and *dough*). Those four words, expected to rhyme on the basis of the spelling, actually end in completely four different vowels, and *cough* has a final
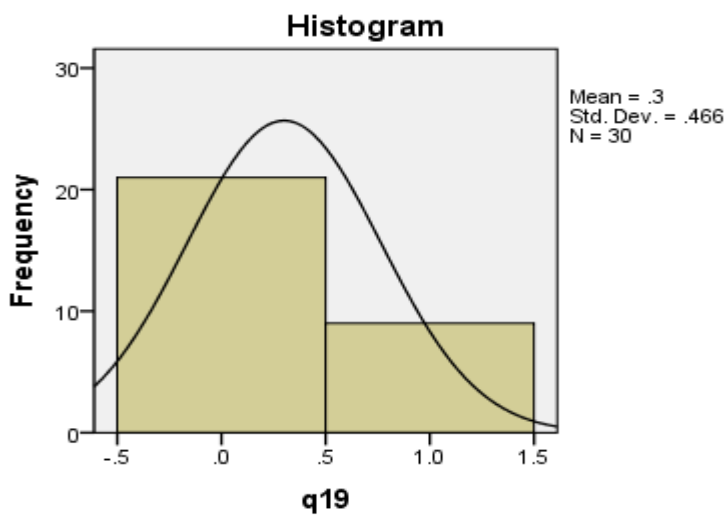
consonant too. Also we have, *see*, *sea*, *people*, and *fiend* have the same long [i:] vowel, but four different spellings. April McMahon, (2002:7).

Here the researcher provided some of these examples in the following statements.

Question1: Mona prepared the <u>dough</u>.

Table (4.19) the pronunciation of (ough)

|		Frequency	Percent
	failed	21	70.0
Valid	pass	9	30.0
	Total	30	100.0

Histogram (4.19) the pronunciation of (ough)

Histogram and table (4.19) shows that the word (dough)which is pronounce /dəu/the (ough) pronounce as one sound which is /əu/, so (21) 0f the students gave wrong pronunciation. Only (9) of (30) gave the right pronunciation, because of the mismatching between this word in its pronunciation and its spelling.

Question2: The cat <u>caught</u> the mouse.

Table (4.20) the pronunciation of (augh)

		Frequency	Percent
Valid	failed	14	46.7
	pass	16	53.3
	Total	30	100.0
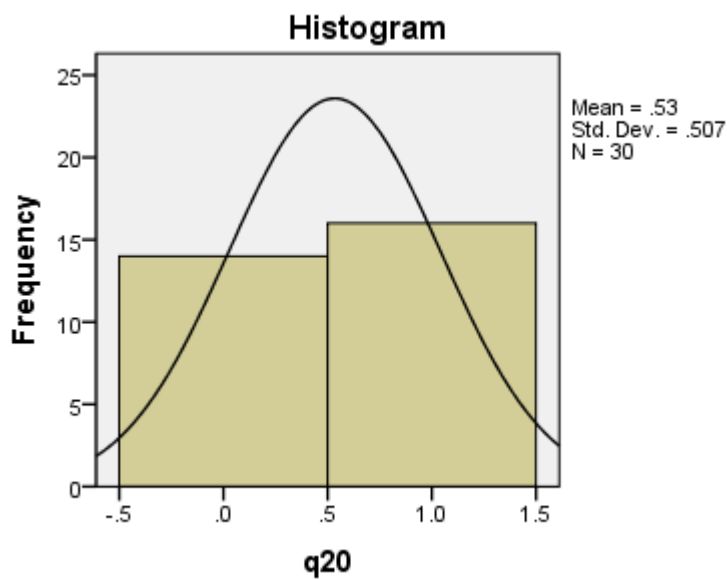
Histogram (4.20) the pronunciation of (augh)

Histogram and table (4.20) shows that only (16) of (30) students succeeded in (augh) pronunciation within the word (caught) which is /ɔ:/ or /ɔ/, but (14) out of (30) pronounced it as diphthong /au/ which is found in Arabic. , it is obvious that there is mismatching between this word in its pronunciation and its spelling, yet over the half of (30) gave right pronunciation, that may be the reason is   the common use of this word by most non native speakers.

Question 3: We <u>laughed</u> at him.

Table (4.21) the pronunciation of (augh)

		Frequency	Percent
	failed	10	33.3
Valid	pass	20	66.7
	Total	30	100.0

Mean = .67
Std. Dev. = .479
N = 30

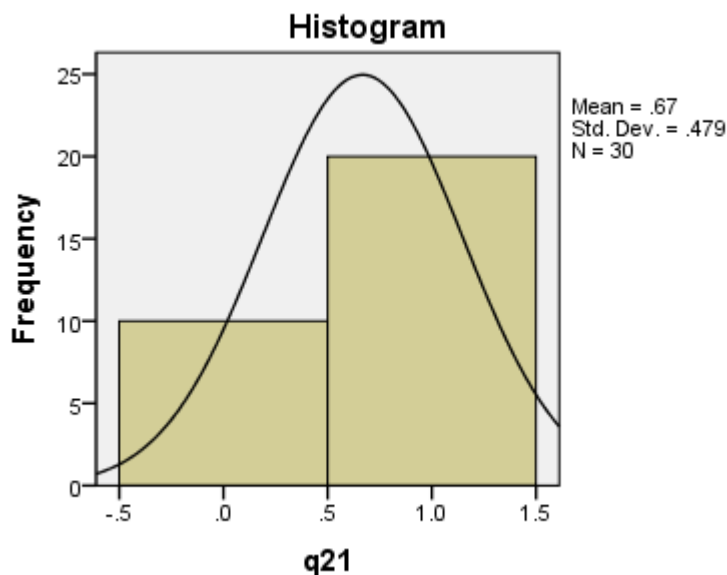**Histogram (4.21) the pronunciation of (augh)**

Histogram and table (4.21) that (20) of (30) students succeeded in (augh) which end in a consonant sound/f/, preceded by /ʌ/ vowel sound in the word (laughed), /lʌft/, (10) of the students pronounced it /laud/ with diphthong /au/ which is found in Arabic. Instead of the mismatch between the word spelling and the pronunciation, still the students who pass are more than the ones who failed, and that because of the word common usage.

Question22: The referee whistle went out.

Table (4.22) the silent sound in the word whistle.

		Frequency	Percent
Valid	failed	15	50.0
	Pass	15	50.0
	Total	30	100.0
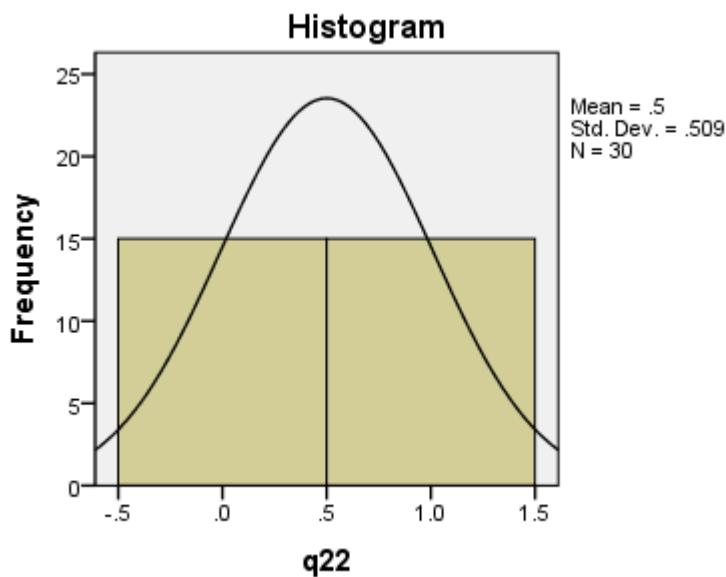
Histogram (4.21) the silent sounds in the word whistle.

Histogram and table (4.21) shows that there is (16) of (30) students who gave wrong pronunciation and that by pronouncing the silent sound which is /t/, in the word (whistle), which is pronounce /wisl/, but (14) gave right pronunciation. silent letters cause difficulties for Arab speakers who learn English as foreign language in the first time within a word, because in Arabic language there is one silent letter which is (AL) ALSHAMSYA in the word (ALSHAMS) the sun, its pronounce without the /l/ sound and it is the only Arabic case.

Question 5: He is cutting the <u>boughs</u>.

Table (4.23) the pronunciation of (ough)

		Frequency	Percent
	failed	27	90.0
Valid	pass	3	10.0
	Total	30	100.0

Histogram

Mean = .1
Std. Dev. = .305
N = 30

q23
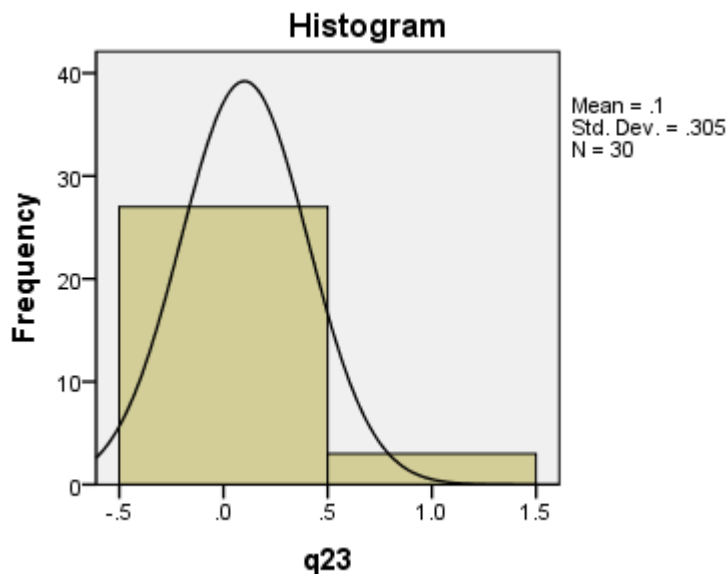
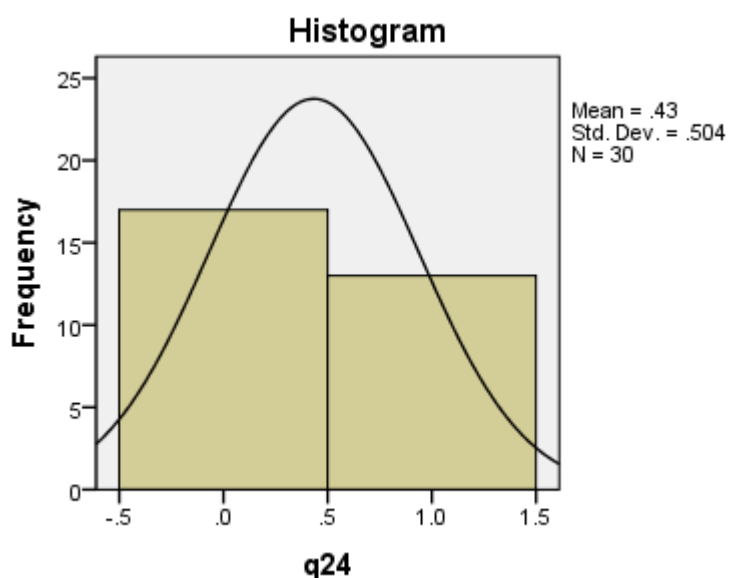**Histogram (4.23) the pronunciation of (ough)**

Histogram and table (4.23) shows that (27) of (30) failed in (ough) pronunciation in the word (boughs) which is pronounce /bous/with diphthongs /ou/, they tend to pronounce it the same as the word (enough) as overgeneralization of the pronunciation. Only (3) of the (30) gave the right answer, also here the mismatching problem is the main cause which led them to fail.

Question 6: She studied <u>chemistry</u>.

Table (4.24) the pronunciation of (ch)

|		Frequency	Percent
	Failed	17	56.7
Valid	Pass	13	43.3
	Total	30	100.0

Histogram (4.24) the pronunciation of (ch)

Histogram and table (4.24) shows that (17) of (30) of the students failed to pronounce the word (chemistry) and (13) gave the right answer. The students who failed were tending to pronounce the (ch) as one sound which is /tʃ/, the right pronunciation for the first sound is /k/ and the /h/ is silent, here the main cause that led them to fail.

Question 7: John is <u>naughty</u>.

Table (4.25) the pronunciation of (augh)

		Frequency	Percent
	Failed	19	63.3
Valid	Pass	11	36.7
	Total	30	100.0
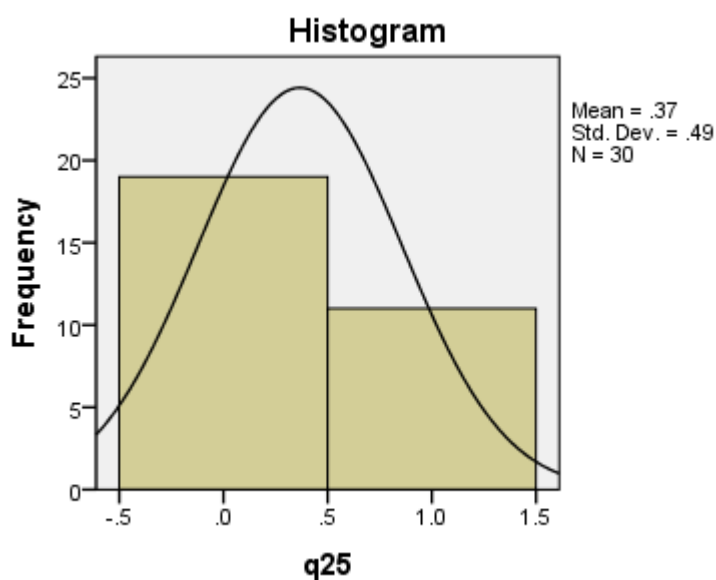
Histogram (4.25) the pronunciation of (augh)
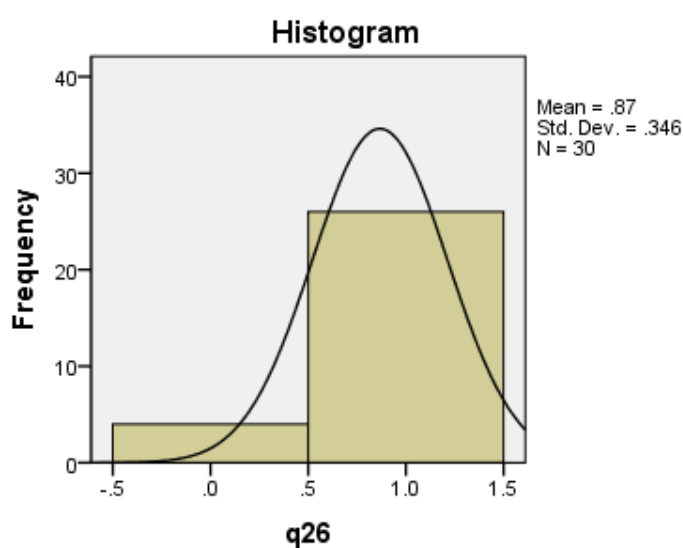
Histogram and table (4.25) shows that only (11) of (30) students pronounce (n**aughty**) as /ɔ:/ the whole word is /nɔ:ti/. Some of the others pronounced it /f/ as /næfti/ as overgeneralization for the pronunciation, and the rest pronounced it /neiti/ with /ei/.The mismatching between the spelling and the pronunciation makes (19) student fail to give the right pronunciation.

Question 8: we <u>record</u> a song.

Table (4.26) the pronunciation of the word record (V)

		Frequency	Percent
	Failed	4	13.3
Valid	Pass	26	86.7
	Total	30	100.0

Mean = .87
Std. Dev. = .346
N = 30

Histogram (4.26) the pronunciation of the word record (V)

Histogram and table (4.26) shows that (26) of (30) students gave right pronunciation to the word (record) which is pronounce as verb in the previous statement /re'kɔ:d/ because of their previous knowledge about the use of it as verb, (4) of them pronounce it as noun /'rekɔ:d/ which is wrong.

Question 9: They study <u>psychology</u>.

Table (4.27) the pronunciation of the word (psychology)

		Frequency	Percent
	Failed	12	40.0
Valid	Pass	18	60.0
	Total	30	100.0
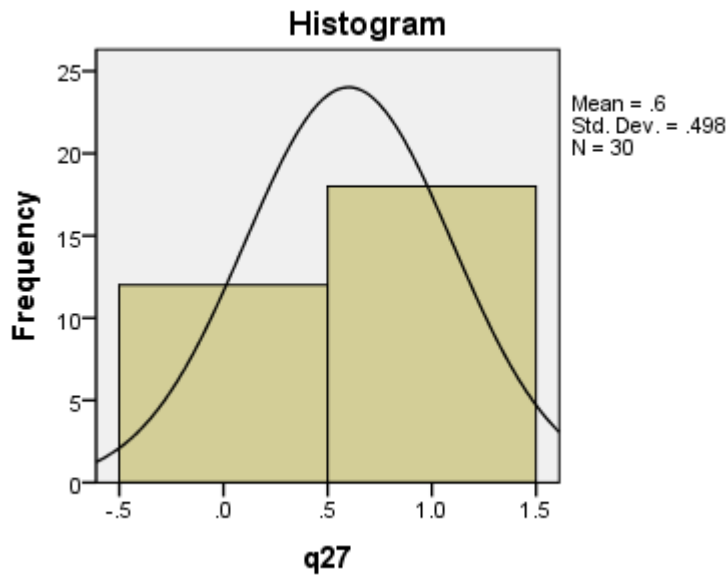
Histogram (4.27) the pronunciation of the word (psychology)

Histogram and table (4.27) shows that (18) gave right pronunciation for the word (psychology) which set to be pronounce with silent/p/, (12) of the whole total which is (30) students gave wrong pronunciation and that by pronouncing the /p/ sound in the beginning of the word. There is no way the subjects can relate (psychology) to its pronunciation as there is no relationship between the spelling of the word and its pronunciation under the present context.

Question 10: She liked the <u>latter</u> plan.

Table (4.28) the pronunciation of (a) in the word (latter)

		Frequency	Percent
	Failed	27	90.0
Valid	Pass	3	10.0
	Total	30	100.0
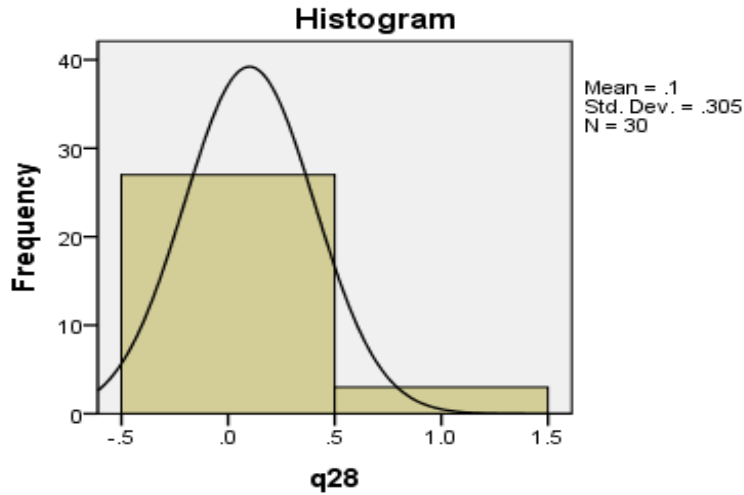
Histogram (4.28) the pronunciation of (a) in the word (latter)

Histogram and table (4.28) shows that (27) of (30) gave wrong pronunciation for the sound /æ/ in the word (latter) which is pronounce /lætə/, (3) of the (30) pronounce it /e/ sound. The students do not aware of /a/ sound before double consonant, and that it should pronounce /ɑ/ like the above word, and /ei/ before single consonant.

Question 11: It is my <u>pleasure</u>.

Table (4.29) the pronunciation of (sure)

		Frequency	Percent
	Failed	6	20.0
Valid	Pass	24	80.0
	Total	30	100.0

65
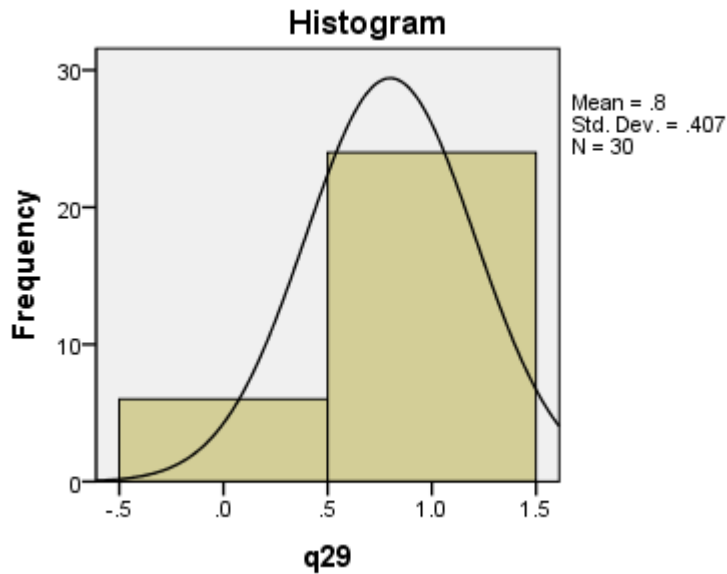
Histogram (4.29) the pronunciation of (sure)

Histogram and table (4.29) shows that (23) of (30) students succeeded in (plea**sure**) within this word and which is /ʒə/, the whole word is /pleʒə/, but (7) of (30) pronounce (sure) as /j/ or /ʃ/ because of the mother tongue sounds interference. Instead of the mismatching the students gave high mark in (sure) within the word (pleasure) and that because of the common use of it.

Question 12:Thank you for this.

Table (4.30) the pronunciation of /θ/ and /ð/.

		Frequency	Percent
	Failed	20	66.7
Valid	Pass	10	33.3
	Total	30	100.0
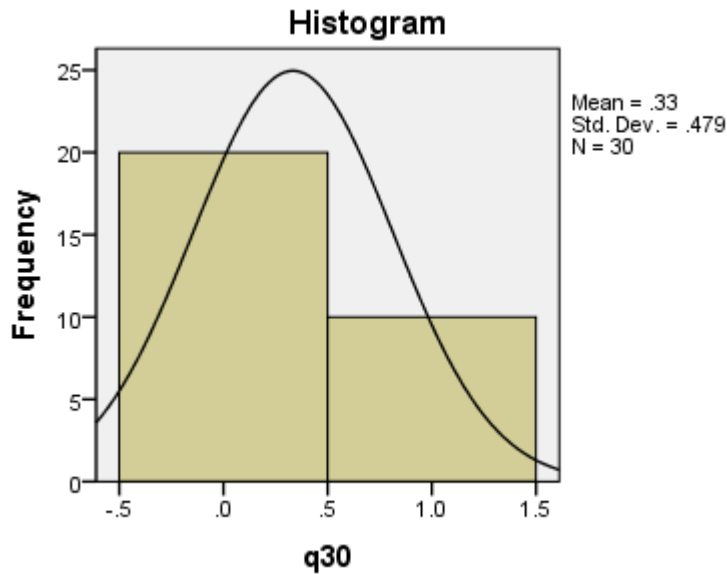
Histogram

Histogram (4.30) the pronunciation of /θ/ and /ð/.

Histogram and table (4.30) shows that only (10) out of (30) gave right pronunciation for the initial sounds in the words (thank- this) which are /θ/ and / ð /, (20) of (30) gave wrong pronunciation and that by change them into /s/ and /z/ which is mother tongue interference.

4.1.3 The summary of the result

Statistics						
	N		Mean	Std. Deviation	Variance	Total marks out o
	Valid	Missing				
q1	30	0	.80	.407	.166	24
q2	30	0	.57	.504	.254	17
q3	30	0	.23	.430	.185	7
q4	30	0	.33	.479	.230	10
q5	30	0	.63	.490	.240	19
q6	30	0	.50	.509	.259	15
q7	30	0	.80	.407	.166	24
q8	30	0	.43	.504	.254	13
q9	30	0	.60	.498	.248	18
q10	30	0	.57	.504	.254	17
q11	30	0	.73	.450	.202	22
q12	30	0	.53	.507	.257	16
q13	30	0	.87	.346	.120	26
q14	30	0	.60	.498	.248	18
q15	30	0	.50	.509	.259	15
q16	30	0	.57	.504	.254	17
q17	30	0	.30	.466	.217	9
q18	30	0	.80	.407	.166	24

The analysis and the discussion has been done to 30 statements, which contains two parts: the first one concerns with pronunciation of English sounds which do not exist in Arabic, and the result shows that some sound cause difficulties, and the other make little difficulty although they are not exist in Arabic, the reason behind that is they are known for the foreign speakers according to the fact that they set to be used a lot in the communication.

The second part concerns with English spelling system which is complex and ambiguous to the foreign speakers, about 12 statements to show some of these difficulties.

The final table shows the whole participant's marks out of 30, in every statement, the validity of every statement, the mean, as well as measuring the student's deviation.

CHAPTER FIVE

RESULTS AND RECOMMENDATIONS

CHAPTER FIVE

RESULT AND RECOMMENDATIONS

5.0 Introduction:

This chapter presents the conclusion of the study. It relates to the analysis and discussion of data to the research questions and the hypotheses. It will also offer recommendations and suggestions for further research.

5.1 RESULT

5.1.1 Question one and Hypothesis one

Q1: What are the English sounds that are difficult for Sudanese Arabic speakers to pronounce?

H1: Sudanese Arabic speaker students of Sudan University have difficulties in English pronunciation for the sound that do not exist in their language.

The statistical analysis of chapter four shows that, there is some English sounds which cause difficulties for Sudanese Arabic speakers who are learning English as foreign language, and those sounds belong to both English vowel and consonant sounds, such as /p/, /ei/, /ɜ:/, /əu/, /ɔ:/, /θ/, /ð/ and /ɒ/.

5.1.2 Question two and Hypothesis two

Q2: What are the factors behind the errors of pronunciation?

H2: English spelling system cause difficulties in pronunciation for Arabic speakers.

The statistical analysis in chapter four shows that, English spelling can affect English pronunciation for English non native speakers such as Sudanese Arabic speakers in some words which have sequence of letters such as (augh, ough), the words which contain silent sounds such as the word (whistle), the vowels which seem monothong, but they pronounce diphthongs, and also the differences in a word pronunciation when it set to be a noun and when it set to be a verb.

What can be said about the result of the two questions and the two hypothesis as conclusion is:

- ❖ Some English sounds which do not exist in Arabic language are difficult for Sudanese Arabic speakers who are EFL students, such as /p/, /ei/, /ɔ:/, /əu/, /ɜ:/, /ɒ/,/θ/, /ð/.
- ❖ There is a lot of English sounds which do not exist in Arabic, but the degree of the difficulty depend on the word which the sound contained in, if it is popular or less use in every day conversations.
- ❖ The mother tongue interference is the one of the causes of the wrong pronunciation in sounds such as /p/ which is replaced by /b/.
- ❖ The complexity of English spelling system can cause pronunciation errors.
- ❖ Silent sounds are affecting Sudanese Arabic speakers EFL students pronunciation, because there is no silent sounds in Arabic but (AL) ALSHAMSYYA.

5.2 Recommendation:

The researcher recommends that:

- Teaching English through minimal pairs can reduce the degree of the difficulties for EFL students.
- Pronunciation activities should take part of every English lesson.
- Listening to the student's pronunciation can help the teacher to select out the difficulties to solve them.

5.3 SUGGESIONS FOR FURTHER RESEARCHES

One of the areas of pronunciation that can be investigated is:

- The impact of English mismatching on Sudanese Arabic speakers EFL student's pronunciation.

5.4 Summary

This chapter concluded the study by providing answers to the research questions and verifying the hypotheses. It also summarized the main findings, offered some recommendations and suggested a topic that can be investigated in the future.

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APPENDIX

5.6 Appendixes

Sudan University for Science and Technology

Pronunciation test

Name:………………………………………………………

Class: ……………….Semester: ……………….…………

__Part one:__

__Read the following sentences loudly:__

1. The book needs a <u>cover</u>.
2. She went to the <u>church.</u>
3. My shirt is <u>beige.</u>
4. <u>Peter</u> is a pupil.
5. He is a <u>judge</u>.
6. Fill the <u>pot</u> with water.
7. The cars crash make <u>banging</u>.
8. Put it in my <u>purse.</u>
9. The bus was <u>comfortable</u>
10.   Mona likes <u>rouge.</u>
11.   Football is my <u>favorite</u> sport<u>.</u>
12.   Trees provide us with <u>coal.</u>
13.   Is it <u>clear</u>?

14. I love this Part.

15. Kids love snow.

16. The island brings tourists.

17. He halves the loins.

18. They hid in a cart.

Part two:

Read the sentences bellow, be attention to the underline words.

1. Mona prepared the dough.

2. The cat caught the mouse.

3. We laughed at him.

4. The referee whistle went out.

5. He is cutting the boughs.

6. She studied chemistry.

7. John is naughty.

8. we record a song.

9. They study psychology.

10. She liked the latter plan.

11. It is my pleasure.

12. Thank you for this