

التعرف على حذف الاصوات الصحيحة لطلبة الدراسات العليا الناطقين باللغة العربية

Recognition of Arabic Consonants Deletion for Native Arabic

Postgraduate Students

أ.م.د. رافدة منصور محمود

أ.م.د. منال نعمت عبدالهادي

كلية الاداب/الجامعة المستنصرية

كلية الاداب/الجامعة المستنصرية

Asst.Prof.Dr.Rafida Mansoor Al hilou

Dr.Manal Ni'met Abdulhadi

College of Arts / Mustansiriyah University/ Baghdad, Iraq

المستخلص :

تتميز اللغة العربية بنظام غني من الاصوات الصحيحة . تم فحص هذا النظام من قبل عدد من العلماء على سبيل المثال (شحاتة : 2015) مع التركيز بشكل اساسي على التمثيلات والميزات العامة . يدرس اخرون الاصوات الصحيحة فيما يتعلق بالنطق على سبيل المثال (عبد القادر ورامانا : 2018) ، والمفاهيم الخاطئة مثلا (سنكر:2015) و اللفظ مثلا (شوستد واخرون 2018) .

ولكن يبدو ان مجال حذف الاصوات الصحيحة قد تم تجاهله . قد يتم تغيير الاصوات المتوافقة في ظروف معينة ولاسباب معينة ، ومع ذلك ، لا توجد بيانات تفحص الحالات التي يتم فيها تغيير الاصوات الصحيحة او حذفها باللغة العربية . المشكلة هي ان العديد من المتحدثين الاصليين للغة العربية بما في ذلك طلاب الدراسات العليا قد يواجهون صعوبات في تحديد هذه التغييرات في النطق . تهدف الدراسة الحالية الى لقاء الضوء على الحالات التي يتم فيها حذف الاصوات الصحيحة للوصول الى فهم افضل للنطق الصحيح للغة العربية . علاوة على ذلك ، ستدرس قدرات طلاب الدراسات العليا لتحديد هذه الحالات . لتنفيذ هدف الدراسة تم تطوير استبيان للدراسات العليا ماجستير ودكتوراه . تظهر نتائج الدراسة ان الطلاب فشلوا في تحديد الاصوات الصحيحة المحذوفة ونوع الحذف . وبالتالي لم يتمكنوا من نطق الكلمات بشكل صحيح.

الكلمات المفتاحية: النظام الصوتي العربي ، علم الصرف العربي ، الاصوات الصحيحة ، الحذف.

Abstract:

Arabic is distinguished by a rich system of consonants. This system has been investigated thoroughly by a number of scholars (Shehata, 2015) focusing mainly on the general representations and features. Others study consonant sounds with respect to pronunciation (Ramana, 2017), misperceptions (Sanker, 2015) articulation (Shosted R. F., 2018), etc. But, the area of consonant deletion seems to be ignored. Consonant sounds may be changed in certain conditions and for certain reasons, however, there is no data examining the instances in which consonants are changed or deleted in Arabic. The problem is that many native speakers of Arabic including post graduate students may face difficulties in identifying these changes in pronunciation. The present study aims at shedding light on the instances in which consonants are deleted so as to reach to a better understanding of the correct pronunciation of Arabic. Further, it will examine the abilities of post graduate students to identify these instances. To carry out the aim of the study, a questionnaire has been developed for post graduate M.A. and Ph.d. college students. The results of the study show that the students failed to identify the deleted consonants, and the type of deletion. Thus, they were unable to produce the words correctly.

Key words: Arabic phonemic system, Arabic morphology, consonants, deletion.

1.Introduction

The sound system of any language is the first to be developed more than its grammatical or semantic aspects, because it is easier to change what is spoken more than what is written and that spoken language may face certain situational or

contextual influences that may not be present in written language (Lyons, 1981). This is the case with Arabic, which is often described as a continuum of varieties (Alhajya, 2018). This paper is organized into two parts. The first is theoretical and the second is practical. In the theoretical section, a skeletal account of the Arabic phonemic system will be given. It introduces the consonantal and the vocalic systems. It also sheds some light on the Arabic morphology and gives an overview of the instances in which consonants are deleted in Arabic.

1.1 Arabic Phonemic System

In order to study the Arabic phonemic system the researcher gives a detailed description of the of the vowel system, consonant system

1.1.1 Vowel System

The vocalic system of Arabic involves three short vowels; guttural /a/, palatal /i/, labio-velar /u/. These are represented by ḥarakāt "diacritics" which are attached to the root consonants in the Arabic script by placing them below and above. Short vowels are contrasted phonemically along their lengthy counterparts, /a:/, i:/, u:/, yet joining lengthy mid vowels /e:/, o:/. Long vowels are twice the length of short vowels, whether in isolation or in speech. This is may be because long vowels are normally stressed and carefully spoken (Abdoh, 2010)and (Haddad, 2016)

It should be noted that there is no lexical schwa in the vocalic dictation regarding Hijazi Arabic. Nevertheless, (Abdoh, 2010)states that there are two types of schwa in Arabic:

- a- **a- epenthetic**, brought through phonological rules after store the sonority hierarchy (e.g. [gabr] > [gabər] „tomb“; [tamr] > [tamər]„dates“).

b- **Phonetic**, that is phonologically a full vowel serving a morphological function as a suffix standing for the feminine gender, (e.g. the last vowel in the following words [bagarə] „cow“, [sadagə] „charity“).

To distinguish between the previously mentioned vowels, the following parameters should be taken into consideration: (a) Tongue height: High, Mid, and Low (b) the part involved of the tongue: Front, Central, Back (c) Lip rounding: Rounded or Unrounded (d) Tenseness or what is called laxness of the vocal tract: Tense as well as Lax (Price, 2017)

In addition to short vowels, Classical Arabic (CA) and Modern Standard Arabic (MSA) also recognize two diphthongs. The first is /ai/ which is equivalent to ay. It is produced as a mixture between the vowel [a] and the vowel [i], as in /bait/ house. The second diphthong is /au/ which is equivalent to aw. It is produced so a combination between [a] and [u], namely in /laun/ color (Abdoh, 2010). It should be noted that vowels never come initially, but they are almost initiated with a ‘hamza’, that is a glottal stop /ʔ/, and that all words in Arabic are begun with consonants (ibid).

1.1.2 Consonant System

Arabic system of consonants includes triads of (28) voiceless, voiced, and emphatic consonants. Most of them have counterpart sounds into English (Bani Salameh, 2015), and (Shosted R. F., 2017).

In what follows is a brief representation of the whole Arabic consonants as stated in (Al Zoubi, 2019)

Table (1): Representation of Arabic Consonants

No.	Arabic consonant	English equivalent	Description
1	ب	(b)	(bilabial, voiced and stop). It is articulated by both lips together, e.g., (b) of boy
2	ت	(t)	(alveolar , voiceless and stop). Articulated when the tongue tip touches the alveolar ridge and lowering the tongue back, e.g., (t) of team
3	ث	(th)	(dental , voiceless and fricative). Articulated by the tongue tip and the upper teeth(with the tongue back lowered), as (th) of thank
4	ج	(j)	(alveo-palatal fricative, voiced). It is articulated by the tongue tip and the alveolar ridge and the middle of the tongue becomes against the palate,e.g, (j) of jam
5	ح	(h)	(pharyngeal, voiceless and fricative). Articulated in the middle of the windpipe with no complete closure. The same as when producing a breath with a sound. The sound differs from (h) e.g., in hat, which is produced in the larynx
6	خ	(kh)	(velar, voiceless and fricative). Articulated by the back of the tongue to be raised against the roof back of the mouth
7	د	(d)	(alveolar, voiced and stop). Articulated by the tongue tip touching the alveolar ridge, e.g, (d) of deer
8	ذ	(dh)	(dental, voiced and fricative). Articulated with the tongue tip and the upper teeth, e.g, (th) of this
9	ر	(r)	(alveolar, voiced and trill). Articulated by the tongue tip and the alveolar ridge and the tongue back lowered, or raised) e.g, (r) of roof .
10	ز	(z)	(alveolar, voiced and fricative). Articulated by the tip or blade of the tongue becoming in front of the alveolar ridge, e.g, (z) of zoo
11	س	(s)	(alveolar, voiceless and fricative). Articulated by the tongue tip against the alveolar ridge, e.g, (s) of see
12	ش	(sh)	(voiceless palato- alveolar fricative). Articulated by the middle

			of the tongue and that of the palate(without complete closure), e.g, (sh) of shoes
13	ص	(s)	(alveolar, voiceless, fricative and emphatic). Articulated by the tongue tip against the alveolar ridge (with the tongue back to be raised), as (s) of saw
14	ض	(D)	(alveolar, voiced, stop and emphatic). Articulated by the tongue tip and the alveolar ridge, with pressure being applied from the tongue both sides in front of the inner sides of the upper molars. Accordingly, the sound is not just the emphatic (similar to the heavy version of the voiced alveolar stop (d)). The similar English sound is (d), e.g, in dish
15	ط	(T)	(alveolar, voiceless, stop and emphatic). Articulated with the tip of the tongue and the alveolar ridge (with the back of the tongue raised), e.g, (t) of tomato.
16	ظ	(Z)	(dental, voiced, fricative and emphatic). Articulated by the tongue tip and the upper teeth and the tongue back is raised, e.g, (th) of thin.
17	ع	-----	(pharyngeal, voiced and fricative). Articulated in the middle part of the wind pipe by obstacle the air passage without complete closure. It should be differentiated from 'hamza', the glottal stop (') e.g, in co'opt, being produced in the larynx.
18	غ	(gh)	(velar, voiced and fricative). Articulated by the tongue back raising against the back of the mouth roof. It is somehow similar to the gurgling or to the (r) in French.
19	ف	(f)	(labio- dental, voiceless and fricative). Articulated by the upper incisors tip and the lower lip inner part, e.g, (f) in field.
20	ق	(a)	(uvular, voiceless and stop). Articulated with the tongue back against the uvular, e.g, caw.
21	ك	(k)	(velar, voiceless and stop). Articulated by the tongue back becomes against the soft palate, e.g, (k) of kind
22	ل	(l)	(alveolar, voiced and lateral). Articulated by the tongue both front sides and tip against the alveolar ridge, e.g, (l) of loan.
23	م	(m)	(bilabial, voiced and nasal). Articulated by the two lips, e.g, (m) in mall.
24	ن	(n)	(alveolar, voiced and nasal). Articulated by the tongue tip and

			the alveolar ridge and the tongue back is to be lowered, e.g, (n) of nest.
25	هـ	(h)	(glottal, voiceless and fricative). Articulated in the larynx, e.g, (h) of home.
26	ء	(')	(glottal, voiceless and stop). Articulated in the larynx just like the catch (') between two syllables in co'opt. It is articulated when the glottal stops.

Table (1) above illustrates Arabic consonant sounds with their English counterparts as well as their descriptions with respect to voicing, place of articulation and manner of articulation. In what follows another table summing up the Arabic consonantal system with regard to place and manner of articulation as stated in (Bani Salameh, 2015, p. 17)

Table (2): Arabic consonantal system with respect to place and manner of articulation.

	Labial	Labio-dental	Dental-alveolar	Palatal-0-alveolar	Velar	Uvular	Pharyngeal	Laryngeal
Plosive	B		t d		k g	Q		ʔ
Emphatic			<u>t</u> <u>d</u>					
Affricate								
Fricative		F	s z	ʃ ʒ	x			
Emphatic								
Nasal								
Lateral								
Trill								
Glide								

Furthermore, (Al Zoubi, 2019) also writes that vowels and consonants in Arabic can be phonologically long or short. In Latin, phonological system, long consonants are typically written double (i.e. bb, dd, etc.), reflecting the Arabic diacritic remark šaddah, which means doubled consonants. Furthermore, Arabic has three inflections sounding as consonants. These are called ‘tanwiin’ or ‘nunation’, signifying indefiniteness (that is equivalent to the English indefinite article ‘a’). These signal the [n] given to the grammatical case endings [a], [u], [i] (ibid). Accordingly, there are three types of nunation: one of fatha used in the accusative case, the other of damma used in the nominative case and that of kasra used in the genitive case.

1.2 Arabic Morphology

Arabic morphology studies the aspects of words from two perspectives, the structural level and the phonological level in the sense that sounds can be good representatives to different linguistic aspects. The ت [t] sound for instance in words like ضَرَبْتَ [darabta] (you hit) ، ضَرَبْتِ [darabti] (you hit) ، ضَرَبْتُ [darabtu] (I hit) can mark the difference in meaning between these words (as to whom the verb is directed, is it to the first or the third person pronouns). Similarly, the ن [n] sound in words like ‘مُسْلِمِينَ’ [muslmeen] indicates a plural form whereas in ‘مُسْلِمِينَ’ [muslmain], it refers to the number of two (Ryding, 2014). This suggests that sounds in Arabic may behave as numerals. Arabic morphological scale studies the progressive changes that may affect the words including various kinds of linguistic sound changes and pronunciation shifts. One of these changes is deletion.

1.2.1 Sounds Deletion

It is the case when certain sound or sounds are deleted for the ease of articulation (MULYANI, 2018) . In English, it is of three types:

Apheresis: when the phoneme is removed from the beginning of a word;

Syncope: when the sound is removed from the middle of a word;

Apcope: when the phoneme is removed from the end of a word.

(Salih, 2017)

These types of deletion are mostly applied to the vowel sounds in English and Arabic as well. In Arabic , the vowel sounds are: ا (alif), و (waaw), and ي (yaa), as well as their short counterparts, the inflections; fatha, damma, and kasra. These sounds are likely to be deleted for the sake of easiness. This is because vowel sounds seem to be harder to pronounce than consonant sounds. Vowels require greater energy than consonants in their manner of articulation. Still, there are many instances in which consonants in Arabic are deleted. To reach to a better understanding of the phenomenon, this paper will be limited to tackle consonant letters deletion as is shown below:

A-Complete Assimilation

It is when two sounds are involved, one of them becomes just like the other. The assimilating phoneme adopts the features of the nearby phoneme. This is what is called ([edgam], ادغام). It is likely to be found in rapid speech and less in careful speech. Speakers of all languages uses assimilation to make words less difficult to produce (Schilling, 2016) . Assimilation in Arabic occurs in the following instances as stated in (Hassanien, 2006):

- When two similar sounds occur together in two different words and the first sound is inflected:

[katə Bakr] كت بكر → [kətəba Bakr] (Bakr wrote) is pronounced as
(Bakr wrote)

[rəbiḥə tijaratihim] ربح تجارتهم → [rəbiḥat tijaratihim] is pronounced as
[rəbiḥat tijaratihim]

- When two different but adjacent sounds occur together either in one word or two different words:

[iddərəhu] اطره → [idtərəhu] (be forced) is pronounced as

[akhatum] اختم → [akhadhtum] (you took) is pronounced as

[o'tu] عت → [o'dtu] (I come back) is pronounced as

- The [l] sound in the definite article may be assimilated if it is followed by one of the sun letters (ط, ز, س, ص, ض, ن, ر, ش, ذ, ث, ظ, د, ت),
[t,d,z,th,dh,sh,r,n,d,s,s,z,t]:

e.g/ اذا الشمس كورت [idha al shəmsu kurit] (if the sun rounded) , (the [l] sound in الشمس [ashəmsu] (the sun) is not pronounced.

- The silent ن [n] as well as the inflection marker (Al- Tanwin) may be changed to م [m], if it is followed by ب [b]. This is called alteration (اقلاب) [iklab].

e.g/ أنبعث [inba'th] (exhale) is pronounced as → أمبعث [imba'th] (exhale), the ن [n] sound is deleted and changed.

The silent ن [n] may also be deleted if it is followed by a silent sound:

e.g/ من ما [min ma] (from anything) is pronounced as → ممّا [mima] (from anything)

[a'n ma] عن ما (about anything) is pronounced as → عمّا [a'ma] (about anything)

- The م [m] sound is deleted and changed into ن [n] if it is followed by ط [t]:

e.g/ ممطر [mumter] (rainy) is pronounced as → منطر [munter] (rainy)

B- Dissimilation

It is the case of two sounds when one of them turns less as the other. The dissimilating phoneme loses one or even more of the qualities it shares with some other nearby phoneme. So, the two phonemes become more distinct. For instance in English, the word 'pilgrim' (Faiq, 2016). It is suggested that consonants of Arabic if geminated or occur in close proximity, are more likely to be dissimilated, even in varying proportions. (ibid:3) as shown in the examples below:

ضمضم [damdam] (brave) → دارضم [dardam] (brave as a lion)

كهوور [kuhhu:r] (frown) → كهوور [kuhru:r] (frown) (Ibid)

C-Whispering and Loudness

The whispering sound is affected by the loud sound following it, so it becomes also loud and when the loud sound is followed by a whispering one, it is whispered too. Here are some examples taken from (Hassanien, 2006, p. 136):

ص [s] + د [dh] → ز [z]

e.g/ فصد [fsd] (bleed) → فزد [fzd] (bleed) (the ص [s] sound before د [d] is deleted and changed to ز [z]).

In the colloquial Arabic, ص [s] before غ [gh] is deleted and replaced by ز [z]:

e.g/ صغير [sghir] (young) → زغير [zghir] (young)

D-Whispering

- د [d] sound before ق [q] is deleted and replaced by ث [Θ], as in:
يمذق [emdhk] (Shreds) → يمثق [emΘk] (Shreds)
- ض [d] sound before ح [h] is deleted and replaced by ص [s], as in:
ضاحب [dahib] (owner) → صاحب [sahib] (owner) (Ibid)

E- Elision (tarkheem, ترخيم)

It is when a sound is eliminated out of a word. Example from English: The final [b] has been elided from the word ‘thumb’. (Roach, 2002) states that certain sounds can be heard only if the words having them are produced slowly and clearly. These may not be produced if the words having them are said rapidly, or if they come within colloquial style. The missing sounds are called elided (Brown G. , 2017). In Arabic, elision involves the deletion of more than one inflections from a word especially in certain speech styles or forms, like; vocative (Niddah), question, salutation (Tahyia), and swear expressions (Qasm), etc. (عبدالنواب، 1999). These forms differ from the ordinary speech in that they have certain styles which require modulation or deletion of sounds, as is shown in the following examples:

- In question: اي شئ [ae shai'] (which thing) → ايش [ae shai] (which thing)
(hamza is deleted)
- In salutation: انعم صباحا [an'im sabahən] (good morning) → عم صباحا [i'm sabahən] (good morning)
- In swear expression: ايمن الله [aimn Allah] (by Allah) → م الله [um Allah] (by Allah)

In certain instances when two adjacent phonemes have the same sound and sometimes the same inflections, one of them is deleted as in:

تقاتلون [tətəkātəlun] (you are fighting) → تقاتلون [tukatilun] (you fight)

يَقْتُلُونَنَا [yæktlunana] (they kill us) → يَقْتُلُونَا [yæktluna] (they kill us) (Hassanien, 2006, p. 136) Additionally, there is another type of elision in Arabic represented by the word “سوف” [saufə] which is reduced to “س” [s] before present tense verbs (ibid).

F- the Deletion of the Glottal Stop (Hamza)

According to (شاهين، 1980), junctive hamza (glottal stop) can be deleted in the following instances:

- In rapid speech as in:
أَكْتُب [o'ktub] (write) → كَتَب [ktub] (write)
- In certain diminutive words, as in
ابن [ibin] (son) → بُنِي [buni] (son)
اسم [isim] (name) → سُمِّيَ [sumai] (name)
- The present verb forms, as in
أَكْرَم [əkrəmə] (was generous) → يَكْرِم [eukrimu] (be generous)
- The active and passive participle forms, as in
أَكْرَم [əkrəmə] (was generous) → يَكْرِم [eukrimu] (be generous) → مُكْرِم [mukrim] (being honored) (active participle)
أَكْرَم [əkrəmə] (was generous) → يَكْرِم [eukrimu] (be generous) → مُكْرَم [mukrəm] (being honored) (passive participle)
- The imperative verb form, as in
أَخْذ [əkhədhə] (take) → خُذْ [khudh] (take)
أَكُل [əkələ] (eat) → كُلْ [kul] (eat)
- Hamza is deleted and changed to ‘madda’, a sign over alif (~) denoting initial long a, [ä], when the past form of the verb starts with hamza sound and the second one is silent, as in
أَأْمَنْتَ [ʾʾmant] (believe) → أَمَنْتَ [ämant] (believe)

Arabic phonetic system is full of irregularities in its orthographic system. A good mastery of the spelling rules of the Arabic language is important for achieving competence in other aspects of the language production. Consonants deletion is one of the major irregularities in the spelling system of Arabic. It accounts for a vast number of pronunciation errors made by native speakers of Arabic. To the best of the researchers' knowledge, there is no single study that has the task of studying the instances in which consonants are deleted in Arabic and the application of this deletion in language production. This study is the first of its kind in this concern because it is an attempt to examine post graduate students' recognition and production abilities towards correct Arabic consonantal articulation.

1.4 Objectives of the Study

The purpose of this paper is to state that consonant deletion is not haphazardly done in Arabic, rather it is systematic and governed by certain rules obtained from the phonemic system of the language itself. The non-observance of these rules may result in pronunciation errors and may also portray a speaker as being incompetent while using the language. The present paper aims to bridge this yawning gap by studying the Arabic phonemic system and providing the speakers of Arabic whether native or learners with some insights towards a correct sounds production that can rehabilitate their spelling mistakes. To fulfil this aim, a questionnaire has been developed to examine a sample of (37) post graduate M.A. and, Ph.D. native Arabic college students.

1.5 Hypotheses of the Study

It is hypothesized that: There are some difficulties that the students may have in identifying and recognizing consonants deletion. The matter which results in ill formed language production.

2. Methodology and Results

This section will illustrate the practical part of the study, the following points would be investigated in this section, the sample of the test, the design of the test, the validity of the test, the announcement over the test, the reliability of the test, the state of the take a look at, the scoring scheme, the statistical means and finally the result and conclusion of the study.

2.1 Sample

The sample of the study is (37) post graduate students M.A. , Ph.D. college students/ Department of English language and literature/ college of Arts/ University of Baghdad and Mustansiriyah University . During the educational 12 months (2019-2020), all the students are of Iraqi-Arabic nationality.

2.2 The Test Design

The test which is used for this study is" **recognition-production**" test. It is designed to fulfill the goal of the study of measuring the students' ability to recognize the deleted consonants and their ability to produce the correct answer.

2.3 Test Items

The test consists of items taken from the wholly Quran and from other sentences having consonants deletion. To the best of the researchers' knowledge, only the present verses from Quran contain consonants deletion. Actually, there is a lot of word deleted but not consonants.

2.4 Validity

(Anastasi, 1976) defines validity as "the degree to which a test actually measures what it purports to measure". Validity is then concerned with what the test measures and how well it does and it is very important when the test is using the questionnaire

2.4.1 Face validity

It shows whether the test looks valid to the testees (the participants of the test) and administrative personnel who decides on its (Anastasi, 1976, p. 28). So this type of validity can be gained when the expert judge the test , they would give their opinion whether the test is valid or not. The form of the test has been submitted to experts in the field of linguistics, to decide on its face validity. The experts have been requested to judge whether the test item fulfill the aims of the study or not and to mention any necessary modifications . After some modifications, all the members of the jury affirmed the test validity.

2.5 Reliability

The reliability of the test concerns its accuracy or exactness as a measuring instrument, "it asks whether a test given to the same respondents a second time would yield the same results" (Cohen, 2001). (Brown D. H., 2010)says that the principles of reliability can be capsulated in the following points:-

- 1-It is consistent among its prerequisites across two or greater administrations.
- 2- Manifests clear instructions about scoring /evaluation.
- 3-Gives indiscriminate rubrics about scoring / evaluation.
- 4-Lends itself according to constant utility concerning these rubrics with the aid of the scorer.
- 5- Contains items/ duties so are apparent for the test-taker.

2.6 Answer sheet

The answer sheet contains six sentences five of them are taken from the wholly Quran and one isn't. In the test, the students are asked to identify the word in which the consonant deletion occurs, and to identify the consonant being deleted. Then they have to determine the type of deletion and finally to write the transcription of the word as they produce it.

2.7 Administration of the Test

The students have been submitted to the test in their class rooms at each university: Baghdad University / College of Arts, and Mustansiriyah University/college of Arts. The classes are suitable for taking the test. After submitting the students the answer sheets, they were given instructions of how to answer. The time of the test took about 60 minutes.

2.8 The scoring scheme

Scoring refers to the process of correcting the test and assessing their numerical scores. In order to get objectivity and reliability of the questionnaire, the researchers rely on the scheme which depends on the right-wrong or the (1-2) principle in scoring the students' answers which gives (2) mark for the correct answer and (1) for the incorrect answers.

2.9 The Statistical Means

To get perfect and precise results of the test, certain statistical means is used. The statistical tool is Chi square equation

2.10 Results

By applying chi square on the test the result is as follows:

$$\text{Chi square } X^2 = \sum \frac{(f_o - f_e)^2}{f_e}$$

Fe	Fo	X ²
16	37	27.0938

The theoretical value (χ^2 value) is 27.0938 it is < than table value (3.84) and this means there is no variance. Variance between observer frequency and expected frequency is of statistical means.

This means that the sample of the study was not able to distinguish the missing consonant sounds

2.11 Conclusion

Languages are not static means of communication. They are in a continuous progress and development since the needs for new changes in a language have emerged from the changes in all fields of life. After testing the sample of the study who was 37 students and using chi square equation, the researchers find that the students tested are unable to distinguish the missing consonant sounds. Thus they are unable to identify the type of deletion or even to transcribe the words in the right way. The research also show that Arab native speakers may encounter many problems in their mother language production especially with unfamiliar. Though, the researchers suggest some procedures to overcome such difficulties:

- 1– Theoretical and practical aspects of teaching in this concern are required;
- 2-Teachers should encourage their students using media or tape recorders to have more and more ear-training to develop their pronunciation competence;
- 3 - Teachers may use more authentic texts teaching the students of the correct pronunciation;
- 4- They should do practical training on different texts loudly.

3. English References

1. Abdoh, E. (2010). *A study of the Phonological Structure and Representation*. University .
2. Al Zoubi, S. (2019). The Speech Sounds of Arabic language and Their Effect on learning Engloish Pronunciation: Contrastive Analysis. 9(1).
3. Alhajya, N. A. (2018). The Impact of Virtual Trips on the develoment of Arabic language oral Skills among third grade students in Jordan. *A journal of Technology and Science Education* , 8(1), 72-85.
4. Anastasi, A. (1976). *Psychological testing* (4 ed.). New York City: Macmillan Publishing Co., Inc .
5. Bani Salameh, M. (2015). *The phonetic Nature of Consonants in Modern Standard Arabic. English linguistic Research* (3 ed., Vol. 4).
6. Brown, D. H. (2010). *langauge Assessment , Principles and Classroom Practices* (2 ed.). New York: Person Longman .
7. Brown, G. (2017). *Listening to Spoken English*. Routledge .
8. Cohen, A. (2001). *Second language Assessment in Murica, C. M. Editor Teacher English as a second of Foreign language* (3 ed.). Boston: Iteinle&Iteinle, a division of Thomas Learning INC .
9. Faiq, A. a. (2016). The Process of Dissimilation in English and Arabic: Comparative study. *International Journal on studies in English language and Literature* , 4(6).
- 10.Haddad, Y. a. (2016). *Perspectives On Arabic Linguistics XXVIII*. Philadelphia : John Benjamins Publihsing Company .
- 11.Hassanien, A. (2006). *Modren Standards Arabic Grammar: A Concise Guide*. Cairo : American University Press .
- 12.Lyons, J. (1981). *Language and Linguistics*. Cambridge : Cambridge Press .
- 13.MULYANI, S. (2018). The Use of Consonant Elision. 54. (T. banker, Interviewer) Eltin Journal .
- 14.Price, L. a. (2017). *The Hearing Sciences* . San Diego: Plural Publishing , Inc .

15. Ramana, L. A. (2017). *A handbook on "introduction to Phonetics and Phonology" : For Arabic Students*. Notion Press.
16. Roach, P. (2002). *English Phonetics and Phonology: A practical course*.
17. Ryding, K. (2014). *Arabic: A Linguistics Introduction*. Cambridge: Cambridge University Press .
18. Salih, A. (2017). Difficulties Encountered by EFL Learners in Elision. (2074-9554), 396-397.
19. Sanker, C. (2015). *patterns of Misperception of Arabic Consonant*. Cornell University .
20. Schilling, N. a. (2016). *American English: Dialects and Variation*. Blackwell Publishing. Ltd. .
21. Shehata, A. (2015). *Problematic Arabic consonant for Native English Speaker: Lerner's Perspective* (9 ed., Vol. 2).
22. Shosted, R. F. (2017). *Routledge Handbook of Arabic linguistics*. In Benmamoun , E. and Bassiouney, R. (Eds). Routledge: London.
23. Shosted, R. F. (2018). *Arabic Pharyngeal and Emphatic Consonants*. The Routledge Handbook of Arabic Linguistics .

Arabic References

1. رمضان عبدالنواب. (1999). *فصول في فقه اللغة* (الإصدار 6). القاهرة : مكتبة الخانجي .
2. شاهين عبدالصبور. (1980). *رؤية جديدة في الصرف العربي*. بيروت: مؤسسة الرسالة.

APPENDIX

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

- وما فعلته عن أمري ذلك تأويل ما لم تسطع عليه صبرا ...الكهف82
- وأمرت أن أكون من المسلمين ...النمل91
- ألم يؤخذ عليهم ميثاق الكتاب أن لا يقولوا على الله الا الحق ...الاعراف 69
- إن يمسسكم قرح فقد مس القوم قرح مثله وتلك الايام نداولها بين الناس وليعلم الله الذين امنوا ويتخذ منكم شهداء والله لا يحب الظالمين ...آل عمران 141
- ولیمحص الله الذين امنوا ويمحق الكافرين...آل عمران
- مررت بمحمد وخالد

Choose the words in which the consonants are deleted, then write the missing consonants and transcribe the words.

No	The word	The deleted sound	Type of deletion	Transcription of the word
1-				
2-				
3-				
4-				
5-				
6-				