

In Name of Allâh, the Most Gracious, the Most Merciful



Sudan University of Science & Technology

College of Graduate Studies

Department of Languages



**Investigating the Difficulties Facing Tama Native Speakers
in Pronouncing Arabic Consonant Sounds**

(A Case Study of Tama Society in Khartoum State)

تقصي الصعوبات التي تواجه الناطقين الأصليين بالتاماوية في نطق الاصوات العربية الساكنة

(دراسة حالة مجتمع التاما بولاية الخرطوم)

A Thesis Submitted in Partial Fulfillment of the Requirement of MA.

In English Language (Linguistics)

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2018

In the Name of Allâh, the Most Gracious, the Most Merciful

Read ! In the Name of your Lord Who has create

(all that exists).

(And among His Signs is this, that He created for you wives from among yourselves, that you may find repose in them, and He has put between you affection and mercy. Verily, in that are indeed signs for a people who reflect.)

Sûrat Ar-Rûm (The Romans)XXX (verse 22)

قال تعالي :

وَمِنْ آيَاتِهِ خَلْقُ السَّمَاوَاتِ وَالْأَرْضِ وَاخْتِلَافُ أَلْسِنَتِكُمْ وَاللُّوَانِكُمْ ۚ إِنَّ فِي ذَلِكَ لَآيَاتٍ لِّلْعَالَمِينَ

(صدق الله العظيم)

(سورة الروم : الاية "22")

Dedication

This research is dedicated to my lovely parents, who encouraged me to educate my-self, and to the beloved members of my family.

Acknowledgement

(He who doesn't thank people never thanks God)

All my thanks and praise to Allah, who give me willingness and patience to accomplish this work.

I would like to thank my supervisor, Dr: Sami Balla Sanhori for his countless hours of mediating, with advice; and for his conscious encouragement, with patience throughout the process of this study.

My thanks are extended to my society standing beside me with their a great helping in data collection.

I would like to express my gratitude to all my colleagues at the College of Languages at Sudan University of Science & Technology who were a constant source of support, both moral and intellectual.

ABSTRACT

This study aimed at investigating the difficulty of Arabic consonant sounds pronunciation among “Tama Native Speakers (TNS)”. The study adopted descriptive analytical method in order to elaborate and analyze the causes of the community via statistical analysis of the gathered data. The samples of the study from Tama Society in Khartoum state; the samples were selected randomly from educated and uneducated people. To obtain the necessary data for the study, the researcher used only tool that is a diagnostic test for the Tama Native Speakers as a tool of the study. The researcher designed a diagnostic test which consists of 30 words that confined to the research hypotheses, to be read aloud by means of audio- recording. Data has been collected and analyzed statistically by means of percentage. The collected data reveals that Tama find difficulties in pronouncing some aspects of Sudanese Arabic consonant sounds such as; (ث, خ, ش, ض, ذ, ز, ظ) (غ,). Based on these result, the researcher made some recommendations and suggestions.

Abstract (Arabic Version)

ملخص البحث

هدفت الدراسة الى تقصي صعوبة نطق الاصوات الساكنة في اللغة العربية لدى الناطقين باللغة التاماوية , واتبعت في ذلك المنهج الوصفي التحليلي لتوضيح المشكلة وتحليلها, وتكونت عينتها من بعض المجتمع التاماوي بولاية الخرطوم, وقد تم اختيار العينة عشوائيا للحصول علي البيانات, واستخدم الباحث الاختبار التشخيصي وسيلة للدراسة؛ حيث اعد الاختبار التشخيصي الذي يتكون من (30) كلمة تتوافق مع اسئلة الدراسة, والتي قراءت بصوت يسمح بتسجيلها بجهاز التسجيل الصوتي, وبعد جمع البيانات المطلوبة؛ وحلتتم حساب البيانات عن طريق النسبة المئوية, فظهر تحليل البيانات ان هناك صعوبة لدى بعض الناطقين باللغة التاماوية عند نطقهم اصوات الاحرف العربية الساكنة على وهي (ث , خ , ش , ض , ذ , ز , ظ , غ) على ضوء هذه النتائج اوصى الباحث بعض التوجيهات كما اقترح بعض الدراسات في هذا المجال.

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CHAPTER ONE

INTRODUCTION

1.0 Overview:

This chapter provides description of theoretical framework of the study

1.1 Context of the Study

“Tama Native Speakers” are non-Arab, African ethnic group of people who live in eastern Chad and various places in Sudan. They speak Tama, a *Nilo-Saharan* language. The population is 200,000-300,000 people and they practice *Islam*.

The concept of second language acquisition and second language learning clarified by most of the linguists, eg; Avery & Ehrlich (1992) claims, in learning L2 one of the most difficult area facing L2 learners is getting a better grasp of pronunciation; compared with other branches of linguistics such as; syntax, morphology,...over which learners can have a reasonable understanding pronunciation poses a much difficult stance to learn. While Swan & Smith (1987) in the same view with above linguists, the nature of a L2 accent is determined to a large extent by the learners’ L1, In other words; the sound system and the syllable structure of L1 have some influence on the production of the L2. Also claim UllrichWeinreich (1953) suggest that the pronunciation errors made by L2 learners are considered not to be random attempts to produce unfamiliar sounds, but rather reflection of their L1 sound system. He also wrote about interference as instances of deviation from the norms of other languages which occur in the speech of bilinguals as a result of their familiarity with more than one language. consequently, this fits with the transferring of entire L1 system in the process of learning of L2. In the other words that is of transferring phonemes and their variants, stress, rhythm patterns and their interaction with other phonemes. Similarity of sounds structure and distribution in learning occurs by simple transfer without any sort of difficulty, but when there is no similarity, an L2 learner faced with difficulties.

Due to the interference of L1 in L2, as mentioned above, Tama Native Speaking learners of SAL as L2, are influenced by their L1 when they speak SA. Therefore, naturally Tama Native Learners of SAL face many difficulties in pronouncing SA words. Different accents or pronunciation is natural phenomena of L1 interference, in which L1 speakers substitute or transfer phonemes and their variants, and their interaction with other phonemes in speaking L2.

Mother tongue is a first language that we got in our parents. According to Awonilyi, (1978) argue that mother tongue is defined as the language which a group of people considered to inhabitants of an area acquired in the early years and which eventually becomes their natural instrument of thoughts and communication (you may wish to re-consider other definition of language). correlation of L1 and L2 is significant and both of them influence of language teaching. Mother tongue is crucial problem in language teaching. But, mother tongue or first language has role of important progress in second language acquisition. First or home language is particularly important for the child's development of positive self-concept and well-being. Children who have the chance to maintain their first language can extend to their cognitive development.

While it is true that many young children whose parents speak different language can acquire a second language in circumstance similar to those of first language acquisition, The vast majority of people are not exposed to a second language until much later, Moreover, for most people, the ability to use their L1 is rarely matched even after years of study, comparably ability in the L2.(siddig 2018).

This paper supports and highlights such findings. Tama learners of Arabic consonant encounter difficulties in their use of the Arabic consonant sounds, because of the differences between the consonant sounds system in both language. The Tama language has consonant sounds system that functions differently, the notion of definiteness and indefiniteness are encoded differently when in that of the Arabic language. Given the fact that consonant sounds are one of the most frequent sounds used in the Arabic language.

This study aimed at pinning down such an important issue. This study is to pinpoint to previous researcher findings regarding Arabic consonant sounds system; this is done by illustrating how the differences between the Tama and Arabic language concern to the consonant sounds system cause Tama learners of Arabic to make mistakes or even errors in their Arabic learning process.

Mother-tongue refer to one's native language or parent language. ("mother-tongue"). The tongue interference refers to the influence of the native language of the learner on her/his acquisition of the target language; what we mean by the target language is the language the learner is aiming to learn L2 ("contrastive analysis" 2015) when teaching Arabic as a second language, problems of the mother tongue interference arise. One of these problems is mother-tongue interference in TNS, acquisition of the ACS system. Contrastive analysis is concerned with the study aim of discovering their structural similarities & differences. Learners of Tama, despite their different backgrounds; face difficulties when it comes to learning Arabic as a second language nonetheless, it is found to be so because of the native of the Tama consonant sounds system and its influence on Tama Arabic learners. It is found that the cause of the learners' native language on second language learning. Therefore, it is found that the Tama language interfere with Tama learners of Arabic language; especially when it comes to using Arabic consonant. Due to the difference between the Tama & Arabic consonant sounds system such problem arise.

Inter-language hypothesis: the ILH was most notable formulated by Larry Selinker in 1972 and included interfere as a possible source of error. It explained that learners access a particular linguistic system when they try to acquire another language. This systematic set of rules is called inter-language is thus regarded as a

dynamic and constantly changing learner language (Cf. Ellis, Rod. 1997- the study of second language acquisition.

Acquisition and learning: perhaps the primary difficulty for most people can be captured in terms of a distinction between acquisition and learning.

The term “acquisition” when used in language, refers to the gradual development of ability in a language by using it naturally in communicative situation.

Yule claims that the *term “learning”* however, applies to a conscious process of accumulating knowledge of vocabulary and grammar of language. (mathematics for example, is learned; not acquired) Activities associated with learning have traditionally been used in language teaching in schools, and tend, when successful, to result in knowledge ‘about’ the language studied; / George Yule/.

Second language acquisition while in contrast (cf. Frawley, William J. (2003) refer to the process of language acquisition by a speaker who already has a knowledge of another language; the study of second language acquisition aims at describing and explaining that process.

The language learning & acquiring, needs to compare the target language and mother tongue. In order to find similarities and differences between the two languages, in order to make comparison between the two languages C.A.H. is the best method to do so.

Contrastive analysis hypothesis CAH according to the Ellis Rod (1986) the study of second language acquisition (SLA) was largely based on the contrastive hypothesis (or contrastive analysis hypothesis’ CAH) according to this hypothesis interference was a main source of errors in the process of second language acquisition. On the basis of a behaviourist view of language acquisition (*stimulus-and-response model*); the contrastive hypothesis regarded instances of interference between L1 and L2 as a result of (linguistic) habits that were transferred from the mother tongue to the language to be learnt. Accordingly, the contrastive analysis implied that most of the errors made by learners could be predicted by carefully comparing the two languages under comparison (*similar language patterns => positive transfer, different language pattern => negative transfer*).

Practitioners of contrastive linguistics at that time mainly aimed at improving second language teaching on the basis of a pair wise language comparison.

While Bloomfield (1933) CAH is the method of comparing two languages or more. It is structuralism, elaborated by Fries (1945) and Lado(1957). Structuralists assume that any language has its own structure which can be documented and compared with another language when this language is under focus to be learned.

1.2 Statement of the Problem

It has been observed that Tama Native Speakers (TNS), having difficulties in pronouncing some Arabic consonant sounds such as, (ث , خ , ش , ض , ذ , ز , ظ , غ)

Not exist in Tama language accordingly; Native Speakers of Tama face a number of problems in their attempt to acquire the SA. One of these problems is encountered in their attempt to use Arabic consonant sounds, learning Arabic consonant sounds by students whose mother-tongue is Tama is one of the most frequent and significant difficulties Tama learners of Arabic come across. In order to investigate these Tama difficulties, David.W (1990) two notions of the second languages should be taken as a point departure for the clarification of TNS difficulties. Accordingly to him, there are two situations in which learning of a second language typically takes place. The first is where the individual, usually but not inevitably a child, lives in an environment in which more than one language is used under conditions which lead that individual to become in some degree bilingual. In contrast, the other situation is one in which the learning is tutored, typically as a part of the curriculum of an educational establishment. Therefore, once differences between the two sound systems of Tama & Arabic languages, so we predict some difficulties in the realization of these sounds in connected speech.

1.3 Objectives of the Study

This study aim at investigating the difficulties encountered by Tama Native Speakers; in pronouncing SAL. The study is attempts to investigate the extent to which phonological characteristics of TNS interfere when the learners speak Arabic or interact with L1 speakers of Arabic. The process of describing and analyzing the difficulties of TNS when pronouncing Arabic, in both languages phonological systems will involve the following:

1. Investigating the extent to which the phonological characteristics of TNS interfere with Arabic language.
2. Identify the similarities & differences between two languages.
3. Investigating the most widely encountered difficulties of TNS pronunciation of Arabic language.
4. Identify, describing and analyzing the linguistic causes of pronunciation difficulties of TNS.

1.4 Questions of the Study

The study tries to find answers to the following questions:

1. To what extent Tama and Sudanese Arabic are different?
2. What are exactly the facing in consonant sounds that problem?
3. To what extent does mother tongue interfere?

1.5 Hypotheses of Study

In order to investigate the difficulties, the above questions been put into hypothetical statements.

1. The two languages are totally different.
2. The TNS facing there's problem in (ث, خ, ش, ض, ذ, ز, ظ, غ) consonant sounds system.
3. TNS problems in encountered when they using Arabic consonant sounds.

1.6 Significance of the Study

Why the study is important?

The significance of the present study arises from its attempts to highlighting those areas that potentially pose difficulty to TNS. It investigates for the first time the difficulties of consonant pronunciation among Tama Society. In order to help in giving full understanding of these difficulties which are faced by SLA.

The study also acquired significance of being one of the few studies carried out in this area targeting more specifically tutors upholding the SAL at tertiary level.

1.7 Methodology of the Study

The researcher uses two major methods in this study: descriptive and analytical. A descriptive method is used to describe what exists at the present. The main characteristic of this method is that the researcher has no any control over the variables. He is only concerned about reporting what has happened or what is happening. On the other hand, analytical method attempts to describe and explain why certain situation exist, by using facts or information already available, and analyzing these to make a critical evaluation of the material gathered.

1.8 The Limits of the Study

The study is limit to the difficulties of Tama, educated & uneducated people; pronouncing Arabic consonant sounds.

This study took place at Tama Native Society, in Khartoum state in 2018.

1.9 Summary of the Chapter

This chapter has provided description of the frame work or the plan of the study, in which the researcher display the statement of the problem, objectives, and the method of collecting the necessary data.

CHAPTER TWO

LITERATURE REVIEW AND PREVIOUS STUDIES

2.0 Introduction:

Arabic and Tama languages are two distinct languages. They are from two different families, i.e.; Semitic and Nilo-Saharan respectively.

Since there are so many differences exist in a wide range in all linguistics elements. In learning one of these two languages as L2 learners face some difficulty. These difficulties are based upon the amount of differences and similarities between L1 and L2 structures. Whiteman (1970) mentions two kinds of language transfer, negative and positive transfer. Negative transfer take place when the structures of two given languages are different, while positive transfer occurs when the two structures are similar. Accordingly, a negative transfer is likely to occur. In order to find out the differences between the two languages in this connection, Contrastive Analysis Hypothesis (CAH) can be drawn upon to clarify the whole point. CAH is method of comparing two languages or more. It is structuralism which was expounded by Bloomfield (1933), elaborated by Fries (1945) and Lado (1957). Structuralists assume that any language has its own structure which can be documented and compared with another language when this language is under focus to learn. CA was introduced when the structural linguistics and behavioral psychology were dominant in the sixties. The form of CA was originated from Lado's book "linguistics across culture" (1957)

2.1 Arabic language and Arabic dialects

The Arabic world deals with a collection of multiple among which modern standard Arabic (MSA) has the status of the formal written standard language of the media, culture and education. The other variants and informal spoken dialects, which are the true native languages of Arabic speakers used in daily conversation; these forms include the spoken form of many different dialects, which are quite a bit different from MSA and as well as from each other. The Arabic dialects are generally restricted to the use of informal daily communication. The form of now day dialects is result of the interaction between different ancient dialects of classical Arabic and other languages that existed in, neighbored and / or colonized what is today the Arab world. For example, Algerian Arabic has influences from Berber as well as French. Sudanese Arabic (SA) is one of those dialects that influenced by indigenous language (Jargon) such as Nubian language. Awn Eshrief (1995) gave a historical background and linguistic patterns of the Sudanese Arabic. According to him, the Sudan was important high way for civilization and had become a meeting –point of cultures. Our colloquial language represents in this respect the final product of this process of cultural cross-fertilization. The coming of Arabs into the Sudan was turning point that gave rise to ethnic and linguistic changes. This has resulted in a variety of Arabic that is unique to Sudan, reflecting the way in which country has been influenced by both African and Arab cultures. Therefore, many variants of Sudanese Arabic have been raised in Sudan, such as; Shaiqi, Shokri, western variety, and North Kordfan variety, but the Khartoum Arabic is dominant one especially among educated people.

2.1.1 Sudanese Arabic sound system


Arabic language has two forms of communications; i.e. MSA and spoken form of many different dialects, MSA is linguistically based on classical Arabic (language of Qur'an) and it's the official language of the Arabic world which it used in education and media. On the other hand, the Arabic dialects are the true native languages across the Arabic world. They are generally restricted to the daily use of communication; those dialects in turn differ quite a bit from each other especially in phonology. These differences mainly based on the influences of the neighboring languages and colonization. SA is one of the variants of Arabic which is influenced by indigenous language and colonization; thus, we can notice some variations between the two systems (SA and MSA).

MSA has 28 consonant sounds and three vowel sounds (i.e. -I, a and u) with their corresponding long vowel sound (ii, aa and uu) and two diphthongs (i.e. ai and au).

2.1.1.1 Consonant sounds

In MSA there are 28 consonant sounds while in SA there are 26. In MSA, unarticulated by SA speakers, in this matter SA speakers use to substitute these sounds by other sounds. And also there are some sounds that do not exist in MSA but exist in SA. The sounds that are not articulated by SA speakers are; fricative, /θ, ð, ðʔ/, emphatics, and uvular, stop, voiceless /q/. While the affricate, Plato – alveolar, voiceless /tʃ/, nasal / Plato – alveolar / voiced /ɟ/ and stop / velar / g / are exist in SA and not exist in MSA.

Table (1-2): SA consonant sounds (adopted from Sanhori (2018)).

| Place of Articulations  | Manner of Articulations | | | | | | | | | | | | | |
|--|-------------------------|----|------------|----|------------|----|--------|----|-------|----|----------|----|-------------|----|
| | Stops & Plosives | | Fricatives | | Affricates | | Nasals | | Trill | | Laterals | | Semi-vowels | |
| | -V | +V | -V | +V | -V | +V | -V | +V | -V | +V | -V | +V | -V | +V |
| Bilabial | - | b | | | | | - | m | | | | | - | w |
| Labio-dental | | | f | - | | | | | | | | | | |
| Alveolar (emphatics) | t | d | s | z | | | - | n | - | r | l | | | |
| | tʔ | dʔ | sʔ | zʔ | | | | | | | | | | |
| Plato-alveolar | | | ʃ | - | tʃ | dʒ | | ɲ | | | | | - | j |
| Velar | k | g | | | | | - | | | | | | | |
| Uvular | - | - | χʁ | | | | | | | | | | | |
| Glottal | - | ʔ | - | h | | | | | | | | | | |
| Pharyngeal | | | ħ | ʕ | | | | | | | | | | |

2.1.1.1.1 SA stops= /b, t, d, k, g, ʔ/:

Stop sounds are the result of a complete closure at some point in the mouth. The pressure builds up behind the point of articulation and the air is suddenly released causes audible explosion. The stops in SA are;

- Bilabial / b /

The sound /b/ is voiced and articulated by the two lips. It is the only bilabial stop in SA and as well as MSA. For example as in SA which appears in all positions; ‘gana’ child, ‘stana’ minute.

- Alveolar / t, d/

Alveolar stops in SA and as well as MSA are four number, these sounds are articulated by the tip of the tongue against alveolar ridge accompany with vibration of the vocal folds (voiced). For /d/ and no vibration for /t/ (voiceless); in such words as, ‘Teraha’ scarf. SA speakers substitute the affricate /voiceless/ interdental. MSA, /θ/ not exist in SA) with alveolar /stop/ voiceless because it’s difficult to be pronounced by SA speakers such in words as; /θ/ becomes /t/ in words such as, ‘Toam’ twin MSA.

- Velar / k, g /

MSA has only one velar sound /k/, while in SA there two sounds; /k, g/. the productions of these sounds articulated by the back of the tongue against soft palate; the vibration takes place in /g/ (voiced) and doesn’t take place in /k/ (voiceless). /g/ is not of the phonemic system of MS, but has existence in some Arabic dialects such as; (Yemen Arabic, and most of the gulf country Arabic) and widely used among SA speakers to substitute stop uvular voiceless /q/. for example; /gaadem/ old in the same process /k/ in some cases substitute uvular, and voiceless /q/ in words such as / waqt/ (MSA) → /wakit/ (time).

- Glottal /ʔ/

This sound, /ʔ/ is produced when the closure is made by bringing the vocal cords together. The glottal stop, know as ‘hamza’ in Arabic, was attested in prosodic positions in classical Arabic = word – initially, as in / kaʔs/ ‘cup’.

2.1.1.1.2 S A fricatives:

In the production of fricative sounds is made up, when the air stream is semi-blocked between two articulation making a narrow opening of the air to escape causes audible friction. These sounds are distributed below according to their point of articulation as in SA.

Fricative sounds in MSA are eleven in number including emphatics; /θ, ð, ðʔ, s, z, sʔ, ʃ, ʒ, ʁ, ħ, ʕ/. In fricatives SA are; /s, z, sʔ, zʔ, ʃ, ʒ, ʁ, ħ, ʕ/, SA speakers do not produce interdental sounds, i.e; /θ, ð, and emphatic ðʔ/

- Labiodentals /f/

/f/ has existence in all Arabic dialects, which articulated by the lower lip and the upper teeth, the vocal cords are not vibrated (voiceless). The SA /f/ is sometimes found in loan words such as in ‘villa’, ‘vona’ a name of powder soap products.

- Plain-alveolar /s, z/

These sounds are articulated by the tip of the tongue making contact with alveolar ridge and the air escapes through a narrow passage cause audible hissing. In the case of /s/ the vocal cords are not vibrated (voiceless), while in the case of /z/ are vibrated (voiced).

In MSA there are two plain-alveolar sounds /s, z/ the name as in SA. These sounds always replace the, interdental sounds /θ and ð/ in SA.

- Plato-alveolar. /ʃ/.

In the articulation of /ʃ/ the front of the tongue makes contact with the hard palate leaving a narrow passage for the air to escape causes an audible hissing sound. The vocal cords don't vibrate so the result is voiceless.

- Uvular /χ, ʁ/.

Uvular / χ, ʁ / are articulated by Wadson (2007), in which the tongue –root is restricted to the posterior wall of the upper pharynx. These sounds almost exist in all dialects of Arabic language. phonetically and phonologically, are better described as velar by Fischer and Jastrow (1980) or post-velar by Abdel-Massih (1975), e.g. Cairene dialects.

- Glottal /h/:

This sound is articulated by lightening the glottis. In the several dialects of Arabic, /h/ is maintained in content words, but the initial and final *h of pronoun suffixes has disappeared (Hamid 1984, for Sudanese; Nasr 1959 for a dialect of Lebanese; Fischer and Jastrow 1980 :53) while in many peninsula dialects, including Saudi, the feminine singular nominal ending is realized with final –h (/ah/ or /ih/), in the majority of dialects spoken outside the peninsula dialects, the feminine ending is realized as a short vowel /a/ or /i/; in SA, /h/ is unrealized in final position, such as 'lawuh' board.

- Pharyngeal /ħ, ʕ/:

These sounds are articulated by the back of the tongue and the pharynx. They appear in all positions (initial, middle, final). The pharyngeal set is equally

interesting with the voiceless /h/ occurring in only 13 languages while the voiced /ç/ is limited to only 8 languages new man (2002).

2.1.1.1.3 S A affricates / tʃ, dʒ/:

These sounds are produced by complete closure of the air stream by two articulators at some point in the mouth. The pressure builds up behind the closure, and the air is slowly released cause audible friction because the air escapes through a narrow passage.

The unvoiced /tʃ/ is corresponding to the Tama affricate sound /tʃ/. It seems this sound has been borrowed from one of the indigenous languages and it has no existence in MSA, but it has existence in some Gulf dialects such as Kuwaiti Arabic. In SA it exist in a few words such as; /tʃat/ (all), /jimaʃiʃ/ (a sound produced while eating), /jilatʃiʃ/ (speaking nonsense). /dʒ/ is the only affricate sound exists in MSA.

2.1.1.1.4 SA nasals / m, n, ŋ/:

Most MSA consonants the air escapes through the mouth (oral) however when the soft palate is lowered down and let the air escapes through the nose because the mouth is completely blocked by two articulators (two lips /m/, alveolar /n/, plato-alveolar /ŋ/) the resultant sound is called nasal.

SA has three nasal sounds / m, n, ŋ/ unlike MSA has only two nasal sounds / m, n/.the sounds /ŋ/ is one sound that borrowed from indigenous languages. It appears in a few words in SA such as; /ŋal/ which name,a person without clothes as the same of French word (null).

SA trill /r/

Alveolar ridge, this sound has existence in MSA and as well as SA. The vocal cords are vibrated then /r/ is voiced. In SA this sound has two allophones dark /r/ and light /r/ such as; /rudʒaal/ for the dark one.

SA lateral /l/:


This sound is articulated by the tip of the tongue pressing against alveolar ridge, so the air is forced to escape through the side of the tongue. Alveolar /l/ is voiced because the vocal cords are vibrated when air pass through. In MSA and as well as in SA /l/ has two allophone dark /l/ and light /l/, such as /ʔalah/ ‘God’.

2.1.1.1.5 Tama language sound system

2.1.1.2 Tama consonant sounds

Tama language has 23 consonant sounds, represented by 20 consonant sounds. And there is a mismatch between sounds and letters: sometime two sounds combine to represent one sound, so that; ‘s’ + ‘h’ combine to represent the sound /ʃ/ and ‘t’ + ‘h’ combine for /ð/. The number of consonant letters in Tama alphabet is relevant when considering the number of consonant sounds (phonemes) in Tama. They are; five plosives /b , t d, k g/, six fricatives /f, ð, s ʒ, h/, three nasals /m ,ŋ ,ŋ/, one lateral /l/, one trill /r/, and two semivowels /w j r /.

Table (2-2): Tama consonant sounds (adopted from siddig (2018)).

| Place of Articulations  | Manner of Articulations | | | | | | | | | | | | | |
|--|-------------------------|----|------------|----|------------|----|--------|----|-------|----|----------|----|-------------|----|
| | Stops & Plosives | | Fricatives | | Affricates | | Nasals | | Trill | | Laterals | | Semi-vowels | |
| | -V | +V | -V | +V | -V | +V | -V | +V | -V | +V | -V | +V | -V | +V |
| Bilabial | - | b | | | | | - | m | | | | | - | w |
| Labio-dental | | | f | - | | | | | | | | | | |
| Alveolar | t | d | s | | | | - | n | - | r | l | | | |
| Plato-alveolar | | | ʃ | - | tʃ | dʒ | | ɲ | | | | | - | j |
| Velar | k | g | | | | | - | | | | | | | |
| Glottal | - | ʔ | - | h | | | | | | | | | | |
| Pharyngeal | | | ħ | ʕ | | | | | | | | | | |

2.2.1.2.3 Plosive sounds (stops) / b, t d, k g/.

A plosive or stop consonant is produced by blocking the air passage in the mouth. The air from lungs is compressed and suddenly released this will cause explosion. The / b, t d, k g/ are articulated by the two lips, tongue tip against alveolar ridge and tongue back against soft palate, respectively.

- *Bilabial plosives, /b/.*

For /b/ the air passage in the mouth is closed by the two lips, and the soft palate is raised to shut off the nasal passage (cavity). The air from the lungs is compressed (obstructed), and when the lips are separated, it is released with explosion. When the air from the lungs passage through the vocal cords, it finds the vocal cords are held a part, wide-open causes vibration for /b/.

- *Alveolar plosives, /t d/.*

For /t, d/ the air passage in the mouth is closed by the tip of the tongue making a contact with the teeth ridge and the rims of the tongue touching the upper side

teeth. The soft palate is raised up to shut off the nasal passage. The air from the lungs is compressed, and when the tip of the tongue is suddenly removed from the teeth ridge (alveolar ridge), the air escape with explosion. When the air from the lungs passes through the vocal cords, it finds the vocal cords are held a part, wide-open, causes no vibration for /t/, and causes vibration for /d/.

- Velar plosives, /k g/

For /k, g/ the air passage in the mouth closed completely by the back of the tongue making a contact with soft palate. The soft palate is raised up to shut off the nasal passage. The air from the lungs is compressed, and when the tongue is suddenly removed from the soft palate. The air escapes with explosion. When the air from the lungs passes through the vocal cords, it finds the vocal cords are held a part, wide-open, causes no vibration for /k/ but causes vibration for /g/.

A plosive sound can be pronounced in different ways according to its context (depending on where it is in a word and what sound around it). Accordingly below are the different realizations of stops as; initial, medial and final positions.

According to Roach (2009) all five plosives can occur at initial, medial or final positions of words. At the closure phase they take place silently but during the hold phase there is no voicing in /t, k/ and /b, d, g/ there is normally little voicing – it begins only before the release. The release of /t, k/ is followed by audible plosion, that is a burst of noise. There are then, 8in the post-release phase a period during which air escape through the vocal folds, making a sound like /h/.This is called aspiration. In the realization of /b, d, g/ weak plosionwill take place and this happen at about the same time as the beginning of voicing.

- In initial position /b, d, g/ cannot be preceded by any consonant but /t, k/ may be preceded by /s/ unaspirated.
- In medial position, the pronunciation of all five plosives depends to some extent on whether the syllables preceding and following the plosives are stressed. In general we can say that a medial plosive may have the characteristic either of final or initial plosives.
- Final /b, d, g / normally have a little voicing; if there is voicing, it is at the beginning of compression phase; /t, k/ are always voiceless. The

plisonfollowing the release of /t, k/ and /b, d, g/ is very weak and often not audible. The vowel preceding /t, k/ are much shorter. The shortening effect of /t, k/ is most noticeable when the vowels is one of the long vowels or diphthongs. All the three may also be glottally reinforced at the ends of words.

2.1.1.3 Tama fricative sounds /f, ð, s ʒ, h/

Fricatives consonants are produced, by bringing two organs so near to each other that the air has to pass through a narrow a passage and come out with audible friction. The /f, ð, s, ʒ, h/ are articulated by; lower lip against upper teeth /f /, tongue tip between the upper and the lower teeth, / ð/, tongue blade against alveolar ridge, /s/ tongue front hard palate, /ʒ/ and by the glottis /h/.

- Labio-dental fricative /f, v/

For /f, v/ the lower lip is brought very close to the edge with the upper teeth, making a light contact with it. The soft palate is raised up closing the nasal cavity. The air escapes through the mouth between the lower lip and the upper teeth a narrow passage is built up that causes friction. The vocal cords are vibration in the production of /f/ because the air passes through a narrow open.

- Inter-dental fricative / ð/

For / ð/ the tip of the tongue is brought very near to the edge of the upper teeth to make a light contact, and the soft palate is raised up to close the nasal cavity. The air escapes through between the lip and the upper teeth produces audile friction. When the air passes through the vocal cords and the vocal cords are narrow-open, vibration will take place in the production of /ð/.

- Alveolar fricative /s/

For the /s/ the tip and the blade of tongue are brought very near to the teeth ridge and the air comes out through a narrow groove along the middle of the tongue with audible friction. The soft palate is raised up closing the nasal cavity. When the air passes through the vocal cords and the vocal cords are narrow-open, vibration will take place in the production of /ð/.

- Plato-alveolar fricatives /ʃ, ʒ/

For /ʃ, ʒ/ the tip and the blade of the tongue are brought very near to the teeth ridge, and the front of the tongue is also raised up to the hard palate. The air passes through the narrow passage with audible friction. The soft palate is raised up closing nasal cavity. When the air passes through the vocal cords and the vocal cords are narrow-open, vibration will take place in the production of /ʒ/. But no vibration will take place in production of /ʃ/ because the air passes through a wide-open.

- Glottal fricative /h/.

This sound is produced by the glottis, the area of the wind pipe behind the tongue, in which the air flows out through a tightening glottis which causes friction. The part of the windpipe below the tongue which contains the vocal cords, creating a narrow opening through which the air passes before entering the mouth, this narrow opening make the vocal cords vibrate.

Fricatives like stops divided into; fortis and lenis the fortis (voiceless) fricatives and said to be articulated with greater force than the lenis (voiced), and their

friction noise is louder. In realization, the lenis fricatives have very little or no voicing in initial and final positions, but voiced when they occur between voiced sounds in such example as in; ice and eyes', the fricative /ʃ / is a common and widely distribution phoneme but /ʒ/ is not. All the other fricatives /f, ð, s, h/ can be found in initial, medial and final positions. In the cause of /ʒ/, however, the distribution is much more limited. Very few Tama words begin with /ʒ/ (most of them have come into the language comparatively recently from Arabic) and not many end with this consonant. Only medially, in words such as 'machuri' /m:dʒ:r/, is it found at all commonly Siddig (2018).

2.1.1.4 Nasals /m, n̥, ŋ/

In the production of nasal sounds, the only way for the air to escape is through the nose. Because there is a complete closure inside the mouth, the mouth is closed, so the air escape through the nose during the time soft palate is lowered down. The vocal cords are narrow-open, vibration will take place for these sounds.

- Bilabial nasal /m/

For /m/ the mouth passage is completely closed the two lips. Once the air finds the mouth passage is blocked, immediately it will return, during this time the soft palate lowered to let the air escape through the nose.

- Alveolar nasal /n̥/

The /n̥/ the tip of the tongue makes a closure with the teeth ridge and the rims of the tongue are against the upper sides teeth, of there is no way for the air to escape except through nose. During this time and the soft palate lowered to let the air escape through the nose.

- Velar nasal /ŋ/

For /ŋ/ the back of the tongue makes a closure with the soft palate. During this contact the air immediately escapes through the nose, because the soft palate lowered down to let the air escape through the nose.

/m, ŋ/ occur freely in initial position as well as medial and final positions. /ŋ/ never occurs in initial position and it the Tama consonant that cannot occur in initial position. In medial position /ŋ/ occurs quite frequently when we ‘ŋ’ followed by ‘k’ and ‘g’ always be pronounced and this not always happen ‘g’, however in some words with ‘ŋg’ not always be pronounced in such as ‘ŋgor’ /not/.

2.1.1.4.1 Approximant:

Martine-celdran (2004:201) in this article points to Peter Ladefoged (1964), who coined the term approximant in the 1960s. Approximant as speech sounds that involve the articulators approaching each other but not narrowly enough nor with enough articulatory precision to create turbulent airflow. Therefore, approximants fall between fricatives, which do produce a turbulent airstream, and vowels, which produce no turbulence. This class of sound includes lateral approximants like /l/ as in ‘loaw’, drill approximants like /r/ as in ‘raboŋê’, and semivowels like (w) and (j) as in ‘wal’ and jaje.

- Alveolar approximant /l, r/

This includes the two sounds /l/ and /r/, both of them; vibration takes place, because the vocal cords are narrow open during the air passes through.

- Alveolar lateral /l/

For a lateral consonant there is a closure in the middle and the air comes out through the sides. In other words, a lateral consonant is in which the passage of the air through the mouth doesn't pass in the usual way along the center of the tongue but through the side of the tongue. For the Tama language, lateral /l/ the tip of the tongue are lowered, so that there is a free passage for the air to escape on the sides. The vocal cords are in vibration, because the air passes through a narrow-open cause vibration.

- Alveolar drill /r/

The consonant variety of RB., /r/ is produced by the raising of the tip of the tongue towards the back of the teeth ridge a frequent touch takes place, i.e. the air escapes through the frequent hitting of the tongue tip against alveolar ridge.

2.2 Tama & S A languages in contrast

Tama and Arabic are two distinct languages. In comparing the two languages sound systems much variation will be appeared on the surface. Therefore, in the learning one of these languages as L2, learners will experience some difficulties which are based on the amount of differences and similarities between L1 and L2 sound systems. In order to find out the points of differences and similarities between Tama & SA sound systems, the way to do is the use of CA. in the matter and by taking the all sound system of each language we bear in our mind the two linguistic tem classifications i.e; the phonetics and the phonology of Tama and SA.

The former one will be represented by speech sounds, consonant and vowel sounds, in addition to syllable structure and stress.

2.2.1 Tama and SA speech sounds in contrast:

Speech sounds are generally classified into two categories i.e.; consonant sounds and vowel sounds. There are 35 sounds in Tama, this includes 23 consonant sounds and 15 vowel sounds, 10 are pure vowels and 5 are diphthongs. In contrast, SA has 39 sounds; this includes 28 consonants six pure vowels and 5 diphthongs. But when we compare the sounds of SA with MSA the result will show that there are some sounds not exist in MSA. Thus, it's necessary to begin when comparing two sounds systems with identifying and explaining the phonetic base of sounds distinctive feature rather than the phonological description of sounds. In order give full understanding about the nature of similarities between the Tama and SA inventory systems.

2.2.2 Consonant sounds:

Tama language has 23 consonants generally classified according to their manner of articulations and place of articulation into seven. On the other hand SA has seven manners of articulations and eight places of articulations. Here we should note that MSA has the same number of place of articulations but in contrary has nine manners of articulations. Therefore, it is clear that there are some sounds that exist in Tama but not exist in SA and vice versa. In order find out the contrast between the two consonant sounds of Tama and SA, we should exhibit this according to their manner of articulations addition to their consonant realizations and their influences on the neighbor sounds.

- *Stops :*

Stops in Tama are six in number namely /b, t, d, k, g, ʔ/, while in SA there are eight /b, t, d, tʰ, dʰ, k, g, ʔ/. Tama lacks the equivalents /tʰ, dʰ/ and in the same manner of the stop voiceless /p/. the realization of the stops /t, k/ are aspirated /tʰ, kʰ/ in initial positions but are not aspirated in SA. One other features Tama stops /t, k/ is that are always voiceless and the vowels preceding them are much shorter. Stops in Tama are unrealized in syllabic-final position before a consonant for example as in the Tama word ‘gartted’ the Tama stops velar /k, g/ becomes palatal when followed by front vowel as in ‘kal’ /ki:l/ unlike SA stops, Tama stops are frequently lateralized and nasalized as in ‘bak’, ‘bauy’. The glottal stop /ʔ/ in the Tama and the SA are different in term of using, in SA it’s used to start syllables beginning with vowel sounds and elsewhere, unlike Tama language this sound, as Cleghorn&Rugg (2011), Crystal (1997) and Ladefoged (2005), claim that glottal stop /ʔ/in Tama often used in the way of to reinforce a voiceless stops /t, k/ at the end of a word and it’s rarely noticed because it doesn’t make a differences in the meaning of Tama words. Unlikely, SA speakers don’t tend to reinforce the voiceless stops /t, k/

- *Fricatives:*

The Tama language has six fricatives in the labiodentals, interdental, alveolar, palatal and glottal /f, ð, s, ʃ, ʒ, h/ respectively. While SA has eleven fricatives in the labiodentals, alveolar, palatal, glottal, uvular and pharyngeal /f, s, z, sʰ, zʰ, ʃ, h, χ, ʁ, ħ, ʕ/.

The Tama sounds /ʃ, ʒ, h/, these three sounds, two of them are exist in SA, I.e.; /ʃ/ and /h/ and the third one /ʒ/ has no existence in SA but exist in some Arabic

dialects to substitute /dʒ/, the glottal /has/ different realization in Tama and in SA languages.

Affricates:

Tama and Sudanese Arabic languages possess the four affricate sounds /ħ/. These four sounds create some difficulty to Tama native speakers learners of Arabic language.

Nasals:

Nasal in Tama has three sounds, bilabial /m/, alveolar /n/ and velar /ŋ/, while in modern Sudanese Arabic, /m, n/. In contrast SA has three sounds two of them and /ŋ/ exist in Tama. And MSA, /m/ and the other sounds is alveolar /n/, a palatal nasal sound /ɲ/ that doesn't exist; in neither MSA nor SA.

Lateral:

/l/ is a lateral consonant sound, articulated by the tightening the tip of the tongue against alveolar ridge so the air escapes through the sides of tongue. /l/ exist in Tama and as well as MSA and SA. In the Tama language found before vowels sounds quite different from that found in the other contexts. For example, the word 'laow' /læ:u.

Tap & flap in Tama or trill in MSA and SA /r/

/r/ is a consonant sound that exists in Tama and MSA and as well as SA, despite of the description of the position of the tongue against (touches or make contact) alveolar ridge is alveolar sounds. The realization of this sound differs in Tama and MSA and as well as SA. In Tama is considered as syllabic consonant as in ‘tret’ /tri:t/, syllabic /r/ is less common in RP (see Raoch 2001). In Tama is not pronounced in the middle of a word when preceded by a vowel sound. On the other hand the sound /r/ in SA is always pronounced in all position. One other feature that doesn’t exist in Tama i.e.; SA has two allophones of the alveolar sound /r/ similarly like alveolar sound /l/, these two allophones are light /r/ and dark /ɾ/ as word such as; /ɾaʔj/ (رأي) ‘an opinion’.

Semivowels:

Semivowels are two in number /w/ and /j/, exist in Tama and MSA and as well as SA. /w/ is articulated by the two lips while /j/ is articulated by front of the tongue against hard palate. /w/ in Tama becomes devoiced after aspirated sounds /t^h/ and /k^h/ and becomes labio-velar after /t^h/, and /k^h/. On the other hand /j/ in the Tama becomes fricative voiceless /ç/ after aspirated sounds /t^h/ and /k^h/ and /h/.

In the comparison, Tama language and has 22 consonant sounds while in SA there are 28 consonant sounds. There are some consonant sounds that do not exist in SA and as well as some consonants those do not exist in Tama language but exist in Sudanese Arabic.

SA consonant sounds has some consonant sounds that do not exist in Tama pharyngeal sounds /ħ, ʕ/ and lastly post-alveolar sound /ɲ/.

In contrast consonant sounds that exist in Tama language and do not exist in SA are; /ɲ, ŋ, ʃ/. SA-speakers may tend to substitute these sounds with their counterparts except the sound /ʒ/; /dʒ, n, ɣ,/. Hence these sounds are substituted by SA-speakers this may create problem on ineligibility. For example when an Tama native speakers learn of Arabic pronounce words like, اخضر, الحضرا, زيت, اجايت, الصحن, اسان, الجزيرة, اجبيرة, الشمالية, اسمالية

2.2.3 Comparative of Tama and S A languages alphabets & sounds:

| | |
|--|--|
| Alphabets that exist in Arabic and not exist in Tama language. | ث , ش , ض , خ , ذ , ز , ظ , غ / |
| Alphabet that exist in Tama language and not exist in Arabic. | /ɲ , ŋ , ʃ / |
| The similarity of two languages alphabets. | ا , ب , ت , ج , ح , د , ر , س , ص , ط ع , ف , ق , ك , ل م , ن , ه , و , ي |

2.2.4 Summary of the chapter:

This chapter has represented the different theories of the mother tongue interference in second language acquisition. The necessary literature has been collected from different sources in order to make a comparison between the sound systems of the two languages, and to make a clear cut of the expecting difficulties. The comparison has been between the Tama and SA languages, in order to find similarities and differences and to find the extent of mother tongue interference when Tama Native Speakers want to acquisition or learn SA language. The comparison that has been made between the two languages revealed that there many differences between Tama and SA sound systems.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction:

This chapter explains the method of the study that has been carried out during the test. However the researcher in this chapter illustrates the tool of data collection that used for collecting the data information needed for this study tape recording; This includes the study population, sample of the study, the procedures used in illustrating the test and reliability and validity of the test. The collected data were later analyzed from the recording of the participants.

3.1 Method of the Study:

The researcher used two major methods surveys in this study: descriptive and analytical. A descriptive method is used to describe what exist at the present. The main characteristic of this method is that the researcher has no any control over the variables. He only concerns about reporting what has happened or what is happening. On the other hand, analytical method attempt to describe and explain why certain situation exists, by facts or information already available, and analyzing these to make a critical evaluation of the material gathered.

3.2 Data Collection:

It is known that the tool of any study is the instrument which any researcher uses for collecting the required data for the study. There are many types of tools used in field of scientific research. Any scientific research, in order to find reasons which is white and effects, requires gathering relevant data from different available sources, such as books, journals, thesis, and gathered information from the case-

study to be described and analyzed to reach a complete understanding about the study. In this research, the researcher used study test as the only tool to collect data from the sample. The study test attempted to investigate Sudanese Arabic pronunciation difficulty among Tama Native Speakers. The study test which was designed by the researcher consists of 30 phrases and sentences focusing on the area of Sudanese Arabic pronunciation that is expected to create difficulty when Tama Native Speakers pronounce Arabic. The 30 phrases & sentences explicit difficulty of Arabic pronunciation on the areas of Arabic consonants, such as; (ث , غ , خ , ذ , ز , ش , ض , ظ , غ). Tama Native Speakers of Arabic language have difficulties in pronouncing Arabic consonants, and also face difficulty in Arabic connected speech such as; assimilation. The collected data of the study test will be analyzed to satisfy the questions and the hypothesis of the study.

3.3 Population and Sampling:

The sample of the study consists of 10 educated and 20 uneducated, as a case study; both including both sexes, and have been chosen randomly from Tama Native Speakers Society. The researcher asked the 30 participants to read the 30 words aloud and before involve in reading he asked them to have a look to the words to prepare themselves.

3.4 Procedures:

The researcher used audio-recording to collect the study data, by using such an instrument or electronic device in such a type of work that may save the researcher from having to make frantic notes and risk missing important information. In addition, audio recording is many projects including linguistics. In linguistics where the speech itself is the subject of analysis many works have been

investigated by using audio recorder. Thus, the researcher used one of the / Samsung/ electronic audio-recording productions i.e.; Samsung audio recording – ICD-BX180, with capacity of memory 62hrs and 20mins, allows the features of backward a forward, noise filtering.

As it was mentioned earlier in this chapter the sample of this study were 30 participants who are “*Native Speakers of Tamasociety*”.

The study test took place after all the necessary preparation were done, each the participants read the whole 30 phrases / sentences aloud, while at the same time of recording the researcher was holding the recording the device few centimeter from the participant’s mouth. Before the researcher started to listen to the recordings, he had already prepared necessary drafts needed to see the correctly and incorrectly pronunciations of the study test. The researcher started to listen carefully by repeating the target sounds several times using the feature of backward, this feature helped the researcher to recognize whether the target sound is correct or incorrect pronounced. In addition to this and to make the study authentic the researcher put the draft of the 30 words transcription in front of him while listening to the recordings. After he completed the task of listening and reported the data and the information needed for the analysis, then he calculated the figures using the percentage, that means the figures were calculated and computed to see the percentage of correct and incorrect of the target sounds. The collected data and information were analyzed descriptively and statistically.

3.5 Reliability and validity of the test:

3.5.1 Apparent reliability of the test:-

In order to check the apparent reliability and validity of the test according to the formulation and explanation, the researcher showed the test to 10 educated & 20 uneducated holders as referees who are specialized Tama Society in Khartoum state.

In this matter some of the referees made some valuable suggestions and others agreed that the test is appropriate to the study. The researcher took seriously the suggestions and corrections of the referees and has applied to the test.

3.5.2 Statistical reliability and validity:

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

1. Split-half by using spearman-Brown equation.
2. Alph-Cronbach coefficient.
3. Test and re-test method.
4. Equivalent images method.

5. Guttman equation.

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

$$\text{Validity} = \sqrt{\text{Reliability}}$$

The researcher calculated the reliability coefficient for the measurement, which used in the test, using (split-half) method. This method stands on the principle of dividing the answers of the sample individuals into two parts, i.e.; items of the odd numbers e.g. (1,3, 5,...). Then Pearson correlation coefficient between the parts is calculated. Finally, the (reliability coefficient) was calculated according to Spearman-Brown Equation as the following:

$$\text{Reliability coefficient} = \frac{2xr}{1+r}$$

r= Pearson correlation coefficient.

To calculate the validity and reliability of the test from the above equation, the test was distributed to the respondents. In addition, depending on the answers of the

pre-test sample, the above Spearman-Brown was used to calculate the reliability coefficient using the Split-half method, the table below shows the result:

table (3-1) the statistical reliability and validity of the pre-test sample is about 30 of the study test.

| | Reliability | Validity |
|------------|-------------|----------|
| Correct | 0.80 | 0.89 |
| In correct | 0.87 | 0.93 |
| Overall | 0.92 | 0.96 |

Source: the researcher from applied study

We from the results in the table above, that the overall Reliability and Validity coefficients for the questionnaire are greater than (50%), and some of them are nearest to one. This indicates to the high validity and reliability of the answers, so, the study test is valid and reliable.

CHAPTER FOUR

DATA ANALYSIS RESULTS & DISCUSSION

4.0 Introduction:

This chapter presents the analysis of gathered data collected from the research test via tape-recordings of the study. The researcher wants to assure that “Tama Native Speakers” experienced difficulty in Arabic pronunciation which is considered as the most difficult area. In order to achieve this, the researcher has already designed the required test in such cases and then asked the participants to read aloud the items of the test by means of tape recording. In this chapter the researcher the researcher is going to analyze the recorded data in details concerning the subject area accompany with discussion of the results.

4.1 Test Analysis:

As it had mentioned earlier in chapter three, as test was given to the participants (Tama Native Speakers) as main tool of this study; the main purpose was to investigate deeply the difficulty of Arabic pronunciation among Tama Society as a case study of the research. Fortunately, the participants showed much concern about the study and helped the researcher to accomplish this study.

The researcher divided the test items into two groups according to the questions and hypotheses of the research and then subdivided the first one into two groups and the thirty into two groups to make the analysis simple and understood.

So the tables below show the data analysis and discussion of the results as follows:

4.2 Data analysis

Table (4-1)The Frequency distribution of Educated “Tama Native Speakers”

| Sentence No. | target words/ sounds | correct | % | incorrect | % |
|--------------|----------------------|---------|------|-----------|-----|
| 1- | ثقب /سقب/ | 08 | 80% | 02 | 20% |
| 2- | مانشتر /مانستر/ | 10 | 100% | 00 | 00% |
| 3- | مستشفى /مستسفى/ | 07 | 70% | 03 | 30% |
| 4- | شاذلى /سادلى/ | 10 | 100% | 00 | 00% |
| 5- | شمالية /سمالية/ | 09 | 90% | 01 | 10% |
| 6- | شوف /سوف/ | 05 | 50% | 05 | 50% |
| 7- | مزاج /مجاج/ | 06 | 60% | 04 | 40% |
| 8- | خليل /حليل/ | 07 | 70% | 03 | 30% |
| 9 | نمشى /نمسى/ | 10 | 100% | 00 | 00% |
| 10- | مغفرة /معفرة/ | 06 | 60% | 4 | 40% |

The above table (4-1) displays the percentages of correct and incorrect pronunciation of Arabic consonant sounds in different contexts by Tama educated people. The word ‘شوف’ (ʃo:f) has the highest frequency of errors with 5 participants (50%).

while the lowest frequency is of 10 participants (100%) go to the words ‘شاذلي’ fth:li, ‘مانشتر’ mi:nftr, ‘نمشي’ n:iʃi. The other frequencies of errors that is out of 10 participants are: ‘مستشفي’ 3 (3%) ‘شمالية’ 1 (10%) ‘مزاج’ 4 (40%) ‘ثقب’ 20 (20%) ‘مغفرة’ 4 (40%) ‘خليل’ 3 (30%).

The overall calculated value of the median for participants’ correct pronunciation of the target sound above is 10 (100%) while it is 1 (10%) for participants incorrect pronunciation.

Table (4-2) The Frequency distribution of un-educated “Tama Native Speakers”.

| Sentence No. | Target words/sounds | correct | % | incorrect | % |
|--------------|----------------------|---------|------|-----------|-----|
| 1- | زعلان /جاعلان/ | 07 | 35% | 13 | 65% |
| 2- | ظلط /جلط/ | 08 | 40% | 12 | 60% |
| 3- | غالي /قالي/ حالي/ | 05 | 25% | 15 | 75% |
| 4- | غلطان /حيطان/ | 03 | 15% | 17 | 85% |
| 5- | ثمار /سمار/ | 14 | 70% | 06 | 30% |
| 6- | شمار /سمار/ | 08 | 40% | 12 | 60% |
| 7- | مزارع /مجارع/ | 02 | 10% | 18 | 90% |
| 8- | شرطة /سرطة/ | 10 | 50% | 10 | 50% |
| 9- | زاهراء /جهراء/ | 01 | 5% | 19 | 95% |
| 10- | الظروف /الجروف/ | 06 | 30% | 14 | 70% |
| 11- | انا ذاتي / انا جاتو/ | 09 | 45% | 11 | 55% |
| 12- | مؤذون /معجون/ | 20 | 100% | 00 | 00% |
| 13- | زلابية /جلابية/ | 07 | 35% | 13 | 65% |

| | | | | | |
|-----|------------------|----|-----|----|------|
| 14- | الضروس / الدروس/ | 00 | 00% | 20 | 100% |
| 15- | زيت /جيت/ | 00 | 00% | 20 | 100% |
| 16- | الجزيرة /الجيرة/ | 04 | 20% | 16 | 80% |
| 17- | مشغول /مسقول/ | 06 | 30% | 14 | 70% |
| 18- | اخضر / احدر/ | 02 | 10% | 18 | 90% |
| 19- | ضمير / دمير/ | 10 | 50% | 10 | 50% |
| 20- | غاب / قاب/ | 08 | 40% | 12 | 60% |

The above table (4-2) show the participants' correct and incorrect pronunciation of Tama uneducated people in SA. As seen from the table above that most of the difficulty in pronouncing SA.

The highest frequencies of the participants' error as shown in the table as read that the words 'الضروس' and 'زيت' take almost the 30 participants (100%). The other frequencies of participants' errors are includes the words; 'زهراء' 19 (95%), 'مزارع' 18 (90%), 'اخضر' 18 (90%), 'غلطان' 17 (85%).

4.3 Discussion of the result:

According to the table (4-1) that Tama educated people face little problem in pronouncing SA consonant sounds such as (ش, ز, غ, خ). While table (4-2) Tama uneducated people face much difficulties in pronouncing (ض, ز, خ, غ, ظ, ش). This is due to mother tongue interference. For educated they have enough knowledge about the Arabic sound system and much contact with the native speakers, in school, universities and works, in this sense they should do continuously updated.

Unlike un-educated one they are restricted interact with the native speakers.

CHAPTER FIVE

MAIN FINDINGS, CONCLUSION, RECOMMENDATION & SUGGESTION FOR FURTHER STUDIES

5.0 Introduction:

In this chapter the researcher is going to restate the research questions, hypotheses based on the research methodology, the question results and verification the research hypotheses of the collected data. This chapter also includes some suggestions for reading in order to discover other difficulty of Arabic pronunciation among “Tama Native Speakers”.

5.1 Finding & Conclusion

The results obtained from the analysis and discussion of the tables confirmed the research questions and hypotheses and also confirmed with some studies have been conducted in the difficulty of Arabic pronunciation among Tama Society. Thus the researcher here will restate the research three hypotheses based on the results of each hypothesis, in order to give a conclusion.

Accordingly, the first hypothesis stated that, the two languages there are totally different.

The researcher in the second assumed that “second language acquisition” the TNS facing there’s problem in (ث , خ , ش , ض , ذ , ز , ظ , غ) consonant sounds system.

The three hypothesis is restated as; that “second language acquisition” of Tama experience difficulty in pronouncing Arabic connected speech, TNS problems in encountered in their attempt to use Arabic consonant sounds.

5.2 Conclusions:

In conclusion we can say that (Tama Native Speakers) have difficulty in Arabic pronunciation do to mother tongue interference. Referring to the results of the study test in chapter four, we find that the results support the three hypotheses because the results of the study test show that (Tama Society as case study) experience difficulty in Arabic pronunciation. The results were confined with the theories of previous works on second language learning, such as; Swan & Smith (1987), Whitman (1970), Bloomfield (1933) and Lado (1957). The results also are confined with other previous study in some areas of this study such as difficulty in pronouncing consonant and vowel sounds, clusters; Alnoor (2017).

5.3 Summary of the Study

Since the objective of this research is to investigate the difficulty of Arabic pronunciation among “Tama Native Speakers”, and find the main cause and effects behind this difficulty. So at the beginning of this research the researcher assumed that the difficulty of Arabic pronunciation among Tama society learners of Arabic is due to the differences between Tama and SA languages, in other words is because of mother tongue interference. The differences between the two languages and basing on the different theories of mother tongue interference on learning second language led the researcher to observe (TNS) when pronouncing Arabic language. so, in order to see to when extent do (TNS) have difficulty in the pronunciation of Arabic, the researcher assumed some areas that Tama Society, as sample of the study, may experience some difficulty, so he assumes three hypotheses. In order to confirm or not to confirm the hypotheses and answer the questions mentioned in ‘Chapter One’the researcher have to choose a suitable research tool to reach the study objective. So, the researcher has chosen “study

test” as the only tool to be used in collecting the necessary data in such cases, by the means of audio recording. The study later was analyzed and the obtained figures of the two values, ‘correct’ and ‘incorrect’, were statistically calculated and computed. The obtain data were compared during the analysis with the help of the literature of the Tama and Sudanese Arabic sound systems in order to see the causes and effects of difficulty in pronouncing Arabic. Finally after the data were investigated and analyzed find that Tama Society experienced difficulty in pronouncing Arabic language. Therefore, based on the results as seen from the tables in the previous chapter of the three hypotheses, we can say that the findings of the research support the hypothesis that mother tongue interference, inconsistency; spelling and sound system / differences between L1 and L2 affect pronunciation’ and lead the learners of other languages to mispronunciation.

5.4 Recommendations:

The following are suggested based on the results & finding of the study:

- Tama native learners should pay more attention to their pronunciation by trying to produce Arabic speech sounds correctly, when interact with native speakers and try to avoid mother tongue interference.
- One of the most important thing in difficulty of Arabic pronunciation as general is the lack of target language environment, among Tama Society.
- Tama Native Speakers pay more attention to the speech production especially in connected speech, so they are advised to apply the rules of Arabic phonology and do practice on it.
- Tama Native educated has much knowledge of phonetic and phonological problems, in this sense they should do continuously updated.

- The researcher recommends that teachers must create a good environment to the students.

5.5 Suggestions for further studies:

The researcher suggests that further researches should be carried out on the following:

- This study has touched some difficult areas in the pronunciation of Arabic language, among “Tama Native Speakers”.
- These difficulties are mostly due to mother tongue interference, whereas, researchers should make a comparison between the mother tongue on one hand and the learned second language on the other hand; in this matter the comparison should be conducted between the speakers, true native language (the language that used in daily communication) and the target language.
- Tama language rich with rhythm and tone must be kept well.

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