NEAR EAST UNIVERSITY

GRADUATE SCHOOL OF EDUCATIONAL SCIENCES

DEPARTMENT OF ENGLISH LANGAUGE TEACHING

PRONUNCIATION DIFFICULTIES IN THE ENGLISH OF KHOWAR AND PASHTO SPEAKERS

MASTER THESIS

SAMI ULLAH KHAN

NICOSIA

JUNE, 2017

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DECLARATION

I hereby declare that all the information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare as required by these rules and conduct. I have fully cited and referenced all material and result that are not original of this study.

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ABSTRACT

PRONUNCIATION DIFFICULTIES IN THE ENGLISH OF KHOWAR AND PASHTO SPEAKERS

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Due to the first language influence and phonological traits the English as a second language (ESL) learner of English faces problems. Therefore, this study investigated the impact of the Pashto and Khowar languages on ESL learners' pronunciation of consonant sounds in Pakistan. The process of data collection was based on reading six English consonants ($/\theta/ /\delta/ /w/ /v/ /t/$ and /d/) inserted in words such as 'Either' 'Ether' 'Vine' 'Wine' 'Seat' and 'Seed' along with the distracters. For this purpose, total 30 participants of Pashto and Khowar in total took part in this study. The productions were analyzed acoustically through the Praat program. The results showed that English dental fricatives $/\theta/ /\delta/$ substituted with dental stops $/t^h/$ or /d/ and /v/ and /w/ produced as /v/ and /t/ /d/ produced as dental stop. The analysis of the findings exhibited the target sounds which are absent in Pashto and Khowar and Pashto speakers to produce.

Keywords: English as a Second language, Pronunciation, Khowar, Pashto, Sound Production, First language, and Second language.

KHOWARCA VE PEŞTUCA KONUŞANLARIN INGILIZCE'DEKI TELAFFUZ ZORLUKLARI

ÖZET

Sami Ullah Khan

İngiliz Dili Eğitimi Yüksek Lisans Programı Danışman: Yrd. Doç. Hanife Bensen Haziran 2017, 94 sayfa

İlk dilin etkisi ve fonolojik özelliklerinden dolayı İngilizce ikinci dil (ESL) öğrencileri İngilizce problemleri ile karşı karşıyadır. Bu nedenle, bu çalışma Pashto ve Khowar dillerinin ESL öğrencilerinin utangaç seslerin Pakistan'daki telaffuzu üzerindeki etkisini araştırdı. Veri toplama süreci, 'Either' 'Ether' 'Vine' 'Wine' gibi kelimelere eklenen altı İngilizce eşanlamlıları okumaya dayanıyordu (/ θ // \check{G} // w //v //t / ve / d / Dikkat çekenlerin yanında "Koltuk" ve "Tohum". Bu amaçla toplam 30 Pashto ve Khowar katılımcısı bu çalışmaya katılmıştır. Yapımlar, Praat programı ile akustik olarak analiz edildi. Sonuçlar, ///d / ve / d / ve / v / ve / w / ile diş hekimliği durağı olarak üretilen / v / ve / t // d olarak üretilen ingiliz diş çelişkilerinin / θ / δ / ikame edildiğini göstermiştir. Bulguların analizi, Pashto ve Khowar dillerinde bulunmayan, ancak İngilizce dilinde mevcut olan hedef sesleri sergiledi; bu nedenle, Khowar ve Pashto hoparlörlerinin üretmesi zor görünüyordu.

Anahtar Kelimeler: İkinci dil olarak İngilizce, Pronunciation, Khowar, Pashto, ses üretimi, Birinci dilde ve İkinci dil.

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LIST OF ABBREVIATIONS

- ESL: English as a Second Language
- ELT: English Language Teaching
- L1: First Language
- L2: Second Language
- PE: Pakistani English
- **RP:** Received Pronunciation
- UK: United Kingdom
- USA: United States of America
- EFL: English as a Foreign Language

CHAPTER I

INTRODUCTION

Introduction

The use of the English language brought changes in the pronunciation of the learners (Jenkins, 1998). However, due to the rise of variety in the English language the nonnative learners around the world were confused with which English (pronunciation) to follow (Rahman, 1990). In this aspect MacArthur (2001) put forth his opinion that it was easy to make an idea that Received Pronunciation is the standard one to follow in the 1900s because it was the only era of Queen's English. It was the time of British supremacy alone in the world and the non-native speakers had the only one option to adopt British English. After the emergence of America as a super power, it challenged to follow British English. The rise of America which influenced the entire world due to its power subsequently the American English also became inevitable to learn. Macarthur (2011) further narrated that the sign of Received Pronunciation (RP) is the variety used in the media, news, dictionaries and grammar. Standard variety is also taught in schools to the non-native speakers. He further stated that RP and American English carry a dominant era and people around the world have had the influence from both varieties therefore, RP and American English (pronunciation) go parallel in demand of the learners.

English is the dominant language throughout the world, therefore, bilingual and monolingual speakers, in their daily conversation, frequently use English words. Pakistan is a multilingual country and languages from three different families; Indo-Aryan, Iranian and Dravidian, are spoken in Pakistan. Among the other languages Pashto and Khowar languages are spoken in the northern part of Pakistan Khyber Pakhtunkhwa province of Pakistan. English is used as a second language (ESL) in Pakistan. This thesis will investigate the questions of pronunciation difficulties of English consonant sounds by Pakistani speakers whose first language (L1) is Pashto and Khowar. In this regard, the RP will be compared among the Pashto and Khowar speakers to reveal the similarities and differences within their productions. This chapter provides some background information on the linguistic variations in Pakistan including prominent characteristics of Pakistani English with reference to the consonants. It further narrates the scope of study followed by the aim, research questions and limitations of this study.

Background of the Study

With the name of trade English people had started ruling on technology, education culture and administration of the India and it is a fact that the people were not willing to accept anything from the English people being the invaders in the country (India) but gradually they came to know the importance of the English language which had become a lingua franca in India. According to Seidlhofer (2005) "English as a lingua franca emerged as way of referring to communication in English between the speakers with different languages" (p. 61). The English language was first introduced by the merchants of an East Indian Company in India to boost trade between the two countries of India and the United Kingdom in the 16th century (Rahman, 2009).

The people of Pakistan were compelled to learn English (RP) because it became the language of the elite class of the society and speaking English was impertinent to access white-color jobs after the partition from India in 1947. Therefore, the dwellers of the subcontinent realized the socio-economic and political importance of the English language. Rahman (1990) further claimed that English is very much in demand by Pakistani students and their parents and employers.

It was not surprising that English is the marker of elitist social status and the most desired skill for lucrative employment in Pakistan (Rahman, 2007). English is the official language of Pakistan since the inception whereas Urdu is the national language of Pakistan. However, it is a fact that English enjoys more privileges then Urdu because educational and official correspondence are mostly in English therefore, the waves of importance drifted more towards English than Urdu. The central government of Pakistan, the most provincial government, and institutions of higher education use English (Rahman 2007). English is the medium of instruction in all major institutions such as schools, courts, and higher education institutions. Since then English has been given the status of the official language of the country. English has been given another shape in the form of Pakistani English. It is because non-native teachers and learners do not access to the native-like accent and the same nonnative accent on the part of the teachers, transferred to the new generation (Rahman, 1990). Pakistani English has developed as a variety of English like other varieties, i.e., Indian English, South Asian English and so on. These are known as varieties because these are different from the British and American English in terms of lexical, grammatical and phonological features (Crystal, 2004). Due to the influence of the regional languages dialect of Pakistani English was also formed. Variation in the language occurs very often nowadays in languages. Therefore, such changes in the system go towards the creation of a new variety like Pakistani variety (Shabir, Rafiq, Bila Nazar & Rafiq, 2013).

Because of its wide spreading eminence, Kachru (1982) had divided English into three circles, inner circles, outer circles and expanding circles. The inner circle includes native speaking countries of English such as the United States of America (USA), the United Kingdom (UK), New Zealand, Canada and Australia. The outer circle includes the colonized countries like India and Pakistan where English was implemented as a second language (ESL) (Anbreen, 2015). In the expending circle countries like China and Turkey take place where English is used as a foreign language (EFL). All these circles are explained under one umbrella term, i.e., 'world Englishes.' The status of English from English to world Englishes, was declared because of the emergence of its new varieties. For example, south Asian English includes varieties of English of Pakistan, India, Bangladesh, and south Asian countries. These circles, English is used as a foreign, native and second language. Due to the status of English as foreign and second language, the speaker of other languages frequently uses its vocabulary in their daily lives in code-switching (Jenkins, 2003). In other words, using their first language with their second language and /or third forth language in the same discourse (Auer, 2013).

Problem of the Study

It becomes a language shock when a learner cannot produce the required pronunciation which triggers further frustration and causes discouragement. English as second language (ESL) learners in Pakistan have pronunciation problems. In educational institutions teachers mostly use translation methods where teaching pronunciation is ignored (Rahman, 2012). Teachers give preference to complete the concerned course therefore the learners also pay least attention towards improving pronunciation in the ESL setting. The influence of the L1 on the second language (L2) is always obvious (Wolter & Gyllstad, 2011). This could sometimes lead to pronunciation problems among the ESL learners of English in Pakistan when speaking. Mispronunciation of English sounds is often prominent in Pakistani English speakers because pronunciation is the least focused aspect in the adopted methodologies in Pakistani institutions. Thus, almost no attention is given to the speaking skills of the learners.

Aim of the Study

The aim of the study is to reveal the pronunciation difficulties of ESL Pashto and Khowar learners of English. In addition, this study aims to find out and compare the reasons behind the English pronunciation problems faced by Khowar and Pashto language speakers. This study is also focuses on the pronunciation error of ESL learners of English particularly the production sounds of English consonant sounds by Pashto and Khowar speakers.

To be able to reach the aim, this study seeks to answer the following research questions:

- 1. What are the pronunciation difficulties of English as a second language Pashto and Khowar learners in the production of six English consonant sounds?
- 2. Are the pronunciation difficulties in six English consonant sounds of English as a second language Khowar and Pashto learners similar?

Significance of the Study

No significant study has been carried out on L2 phonology of the learners of English in Pakistan. Rahman (1990) gives a brief description of Pakistani English generally and claimed in his study that Pakistani and Indian English is a variety of world Englishes. In his study, he thoroughly discussed the sociological and phonological variations occurred in Pakistani English. Another study conducted by Rahman (1991) who mainly focused on empirical studies of L1 of Pashto, Urdu, Sindhi and Panjabi. Ghani (2002) briefly studied the effect of societal, attitudinal and motivational factors in learning the English language at intermediate level. In the study, she discussed the prevailing situation of learning English in Pakistan. Talat (2003) offers the sociologic and stylistic point of view in which he comparative studied the

choice of words which are used in the conversation by Pakistani and native speakers of English. Mahboob and Ahmar (2004) worked on the syntax, phonology and morphology of Pakistani English. In their studies, they explained the features of L1 of Urdu speakers. The above studies show that only Rahman (1991) and Mahboob (2004) focused on the acquisition of English consonant. However, their studies are limited to the Sindhi, Urdu and Panjabi languages. In the light of the existing literature little studies are conducted on Khowar and Pashto L2 acquisition sounds. The Khowar and Pashto L2 phonology specifically remains unexplored. Due to this fact, this study attempts to find out the productions of English consonant sounds by Pashto and Khowar speakers. In addition, the productions of both (Pashto and Khowar) languages speakers will be compared.

Limitations of the Study

This study is restricted to the comparative study of English consonants produced by Pashto and Khowar language speakers. The present study is also limited to the analysis of only six consonant sounds of English. Vowels and other consonants are not part of this study. In addition, only 30 participants were chosen to take part in this study in which 15 participants were Pashto speakers and 15 participants were Khowar speakers.

Definition of the Phonological Terms

Dental fricative: ($\delta \& \theta$) the sound pronounced with the tip of the tongue.

Alveolar stop: (t & d) the tip of the tongue with the alveolar ridge and stop the air flow when produce this sound.

Labio dental approximant: (w & v) the sounds produced with narrow vocal tract and not enough airstream.

CHAPTER II

LITERATURE REVIEW

When the English ruler left the sub-continent in 1947, there were no native speakers left for Pakistani learners of English to follow. However, they still had to write and read English for the transaction of official business and for educational purposes because the language of education and official correspondence was English. Therefore, the English as a second language (ESL) learner were completely dependent on the language taught by Pakistani teachers who were non-native speakers of English (Mahboob, 2008). As a result, a specific type of English developed in the country which is currently called Pakistani English, (PE). PE has specific phonological features which is a variety of world Englishes (Rahman, 2014).

Theories Regarding Pakistani English

There are many theories related to the problem of acquisition of the second language by ESL learners in Pakistan. These theories explain the different aspects of phonological variations in Pakistani ESL learners of English.

The acquisition of L2 phonology indicates the different linguistic factors such as the position of the target sounds, situation the way specific sound produced, the influence of the L1 and marketness (Syed, 2013). There are also some non-linguistic features like age of acquisition, leaning environment, input and motivation. Because such situations language learners face difficulties in the acquisition of the target sounds. Syed (2014) has the view that the difference between L1 and L2 causes errors in acquiring the second language. He considers it the main sources of obstacle to acquire the second language. Eckman (2004) states that relatively less marked elements between L1 and L2 are easier to acquire than the marked. Brown (2000) expresses his idea that exposure does not count if the distinct features of the needed sounds are present in the L1. Flege (1995) maneuvers the same idea that if the target sound is blocked in corresponding to the L2 sound then less chances of improvement is expected. Syed (2012) claimed that context plays an important role in L2 acquisition when specific consonant sound occurs in the L2. In addition, Archibald (1998) put forth that L2

sounds are easier to learn in onset (initial) position than coda (final) as coda position is considering more marked. This idea further substantiates that the sound in the word can be learnt easier in onset position than coda. The position of a word does not create a problem in acquisition but the context also matters in acquiring the sound. The level of accuracy in production may differ the way the sound is produced in sentences (Syed, 2013)

Syed (2013) asserted that "dental stops exists most indigenous Pakistani languages" (p. 59) which was further discussed by Garesh (2006) that the fricatives $\langle \delta \rangle$, $\langle \theta \rangle$ are replaced by stop /th/, and /d/ and /dh/ by Indian learners (2006). Likewise, the results of this study of fricatives $\langle \delta \rangle$ and $\langle \theta \rangle$ indicated that Pashto and Khowar speakers produced it as dental-stop. However, RP speakers produced it as dental-fricative. According to Nasir (2013) "It is an important to point out an interesting fact that the letters for dental fricative consonants ($\langle \delta \rangle / \theta \rangle$) exist but the sounds themselves do not exist. This is because of the Pakistani languages got their script from Arabic and the sounds ($\langle \delta \rangle / \theta \rangle$) do exist in Arabic" (p. 62). Syed (2013) further claimed that the space between two vowels did not show any fricative noise which confirms that the target sound was produced as a stop not fricative.

The existing literature pertaining to the voiced and voiceless dental fricative sounds indicated that in the major languages (Sindhi, Panjabi, Urdu, Balochi and Pashto) also mentioned above, the same problems occur in Pakistan.

The aspiration contrast in RP stop is neutralized in English produced by Pakistani speakers. Thus, plosives are produced unaspirated (Mahboob & Ahmar, 2004). For example, /p/ is produced as unaspirated (p) in the words 'peak' as well as 'speak' in PE whereas native English speakers produce words like 'peak' with an aspirated stop (p^h) and 'speak' with unaspirated stop (p). Alveolar stop /t/ and /d/ are retroflex and dental fricatives /ð/ / θ / is dental stop in PE (ibid). The voiceless dental fricatives of English / θ / are produced with aspiration in PE. The difference between /v/ and /w/ is not maintained in PE (Mahboob & Ahmar, 2004; Rahman, (1990/1991). Rahman, (2007) mentioned that the Panjabi, Sindhi, Urdu and Saraiki speakers produced the /v/ and /w/ sound as one sound /w/ is which mentioned in the phonemic inventory of Panjabi language. In the phonemic inventory of Khowar and Pashto (see

Appendix G) the sound /v/ exists and sound /w/ is absent. Therefore, the approximant /w/ is produced as labio dental fricative /v/.

The existing literature on the acquisition of a second language gave us evidence that the position of sounds, context, input and environment play a key role in acquiring a language.

Teaching and Learning of Pronunciation

We can observe in our daily lives that the impact of globalization clearly exhibits through the interaction of people around the globe who are trying to upgrade their pronunciation. Today, English is considered a global language due to its 600 million EFL speakers (Moedijito, 2016). Due to this upgrade the status of English is not only visibly significant in the oral communication of native speakers but also visible in non-native speakers (Walker, 2001). The global impact of English also has affected the teaching pedagogy. Therefore, it has become important to implement it in professional teaching. As Tudor (2001) claimed that the command over phonology plays a vital role in communication. Moedijito (2016) consolidates this statement with the opinion that, pronunciation is crucial to be able to understand as well as in conveying messages. Change is also witnessed in teaching pronunciation particularly in the teaching and learning of aids and methodology. According to Brown (2007) teachers are more concerned about learning through tasks and games and use different tactics to enable learners to pronounce accurately. However, learners are more serious about understanding a message and pay, little attention to their pronunciation. So, due to the lack of attention towards pronunciation and influence of the L1, the learners of the L2 make errors in their pronunciation. This move may be acceptable for the teachers and learners as they understand each other in Pakistan, however, seems to be undesirable outside the classroom particularly across culture communication because outside of the classroom one has to face different people with different linguistics background. (Moedijito, 2016) Therefore, it is necessary to review the pronunciation of ESL learners while keeping in mind the correct pronunciation of English which is used around the globe.

Teaching and Learning Pronunciation in Pakistan

English came to the sub-continent with the purpose of 'trade' named as the East India Company in the 16th century (Ahmar, 1997). Gradually it had become the official language of India and obtaining a job became impossible without being well-versed in the English language. In 1857, the East India Company occupied India and the English language became the official language of India. Thus, the English language became the dominant language of the country. Pakistan parted from India in 14 August 1947. However; English had remained the official language of Pakistan. When the people of Pakistan became free from the shackles of colonization, the environment also came to an end but left its footprints due to its national and international importance. English was established as an official language and the people were bound to sort out official affairs in English along with educational affairs. When the native speakers of English left, no option was left to teach English except for the local teachers who had to teach at educational institutions. Consequently, the gap of British English was filled with Pakistani English. Since then a different variety of English was shaped in Pakistan which is simply called post-colonial variety (Syed, 2013). Though, the pattern of using English is similar in Pakistan and in India. The specific variety of English is called Pakistani English which carries its own linguistic features (Rahman, 2007).

The difference in pronunciation is seen to due to the influence of the mother tongue on the second language irrespective of mother tongue or interferences. Such influence is defined by Rehman, (1990) as the way language is perceived, the same way it is reproduced which is phonetical interference. It arises through the identification of phonemes by bilinguals.

According to the phonological rule the speakers' varieties are divided into four categories and each category is clear and distinct. A variety within non-native English is *acrolect*; a variety which is used by the elite class of the society who have an exposure of the foreign accent. The second variety is *mesolect* which is used by the middle class of the society who are educated from Urdu medium schools with least exposure of the native accent. The third variety is *basilect*; is a kind of dialect which is used by underdogs sections of the society which is based on typical clichés in expressions (Rehman, 1991).

There are some other factors which are also responsible for not focusing on pronunciation. In educational institutions teachers mostly use translation methods (translating to the common meaning) where teaching pronunciation is ignored. Teachers give priority to their courses for this reason the learners pay little attention to improve their English pronunciation. In addition, the learners also ignore the importance of pronunciation. This practice of teaching and learning English has been continuing for decades (Howlader, 2010). This is one of the reasons that regional languages are influenced by the English language in Pakistan.

According to Howlader (2010) most of the population in Pakistan live in rural areas where state-run-schools are Urdu medium in which the medium of instruction is Urdu. Therefore, the students studying in Urdu medium instruction are weak in the English language specifically in speaking skills. However, Pakistan is a multilingual country where English is the official language and Urdu is the national language which is used as a lingua franca around the country. Due to the influence of the national language English is not spoken with correct pronunciation.

Pronunciation Errors

There are certain factors involved in pronunciation errors such as the biological, social and linguistic factors. Levis and Lavelle (2012) explain the social factor of errors as the "social variable thought to influence pronunciation acquisition" (p. 1). However, according to the critical period hypothesis a child learns faster than an adult. After the age of 12 a learner may not acquire the language the way they can during the critical age (Krashen, 1989) Second, personality traits also plays a vital role in learning because the introverts (the person who feels shy and reticent when talking) abstaining interaction with people therefore they never overcome the errors produced by pronunciation whereas extroverts (the person who does not feel shy when talking) are considered to learn better with frequent interaction with people (Touchie, 1986). The third factor is in the linguistic features, i.e., if the sound of the native language resembles with the second language then the chances of pronunciation errors are lesser because the impact of the first language on the second is always high (Ojo, Okeke & Nneka, 2007). Roach (2000) puts forth that people who belong to different regions, social status, and even different ages, speak with languages differently. Ur (2000) penned down the

following pronunciation errors: a. due to the absence of particular sounds in the mother tongue, learners tend to alternate with the nearest sound: b. in certain languages the learners have learnt intonations in their mother tongue which is inappropriate in the second language: c. due to the different orthography, learners pronounce with different sounds.

Other factors which are involved in the pronunciation errors of the L2 are marketness, the influence of the L1, environment, input and age (Syed, 2012). However, it is also observed that when the structure and phonological aspects are different in one language from another then acquisition is also difficult. The environment may also play an important role in acquiring a language specifically, in terms of pronunciation.

Sources of Errors

Language learning is a kind of process in which committing errors are possible but research shows that the language teachers consider an undesirable attitude from the learners. Gradually, researchers came to the point that errors show the process of the second language. According to Touchie (1986) errors carry three types of significance; 1. Errors are necessary to commit for the learners because it shows their progress of learning. 2. Errors give an insight for the researchers about how learning takes place and 3. Errors are also important for the learners in order to get involved in the learning process.

There are two major sources of errors in a learning second language namely, interlingual and intralingual developmental. According to Keshavaraz (1994/2004) causes of interlingual errors are due to the transfer of phonological elements of the mother tongue such as morphological errors which is due to the wrong use of preposition, articles and inappropriate use of the plural morpheme for example putting a wrong morpheme in a wrong place and wrong time causes morphological errors. Moreover, grammatical error is a kind of error in which the wrong sentences are formed by putting the inappropriate words together which does not make any sense. Lexical is the minimal entity of a language and sociocultural elements which are involved the social and cultural factors. The second source of errors is intralingual and developmental errors which are caused by overgeneralization i.e. sometimes L2 learners construct an idea that the letter (s) can be pluralized in every form of words. Therefore, learners use, womens, mens and so on. Ignorance of rule restriction is another category of intralingual and development errors. In this category, the L2 learners do not

follow the grammar rules which cause errors. In addition, false analogy which is defined as incorrect hypothesis by learners for example, not putting a right word in the right place which is also called collocation. For example, when there is a need for the present perfect tense the simple present is used. Furthermore, Hyperextension is over generalizing the statement without knowing the rules of grammar. For example, "I and my friend will join your party". The last category is faulty categorization which is when L2 learners follow the wrong structure when trying to follow the teacher. For example, the teacher might have said, "I would like to tell you" the student says, "I like to tell you." In addition, errors are caused due to the teacher for example, when the teacher does not explain grammar properly, the confusion remains in the mind of the students. This is called teacher-induced error. The last is language learning strategies, which is used in the classroom to make the lesson effective. This strategy is applied according to the mental and aptitude level of the students. Therefore, if the learning strategy is not applied properly then it creates learning errors for the learners.

In the light of above, this study will focus on the teacher induced language learning errors as leaners in the context of this study learn English from non-native speakers.

Pashto Language

Pashto has about 40 to 50 million speakers. It is spoken in Pakistan, Afghanistan, and Iran as a native language. It is spoken in the afghan portion of Afghanistan and it is the official language of Afghanistan besides Dari. It is the provincial language in Khyber Pakhtunkhwa (KP) of Pakistan (Rahman et al, 2012). Due to dialectical differences the name of Pashto is taken very differently. Some call it Pashto and some Pokhto. According to Ullah (2011) Pashto has three main dialects: western dialects, central dialects and eastern dialects. Southwest areas of Balochistan and Afghanistan speak the western dialect of Pashto or can also be called the Kandahari dialect. Apart from these the Khattak and Wazir tribe of the KP province of Pakistan in their dialect have the characteristics of Kandahari dialects particularly the retroflex consonants are used by the mentioned tribes. The residents of Kabul, Parwan province, Logar and Ghazni speak the central dialect of Pashto. This dialect is also called Kabul dialect. The areas like northwest of Pakistan and northeast Afghanistan have the eastern dialect. This dialect is also known as Ningrahar dialect. Every language carries a family group; Pashto belongs to the indo-European language pertaining to the Iranian branch. It is the ability of a native speaker to identify the accent of a non-native speaker. The reason is that, non-native speakers cannot produce the sounds like the native speaker due to the intelligibility problem (Rahman, 2012). Intelligibility problem is, when the second language learners cannot learn the basic sounds of the first language and are not able to recognize the accent of first the language (Morley, 1991).

Khowar Language

According to Liljegren and Ali (2016) Khowar is an Indo-Aryan language spoken by 200,000-300,000 people in Pakistan's Khyber-Pakhtunkhwa province. The majority of the Khowar speakers are found in Chitral where the language is used a as lingua franca but there are also important pockets of speaker groups in adjacent areas of Chitral such as Gilgit-Baltistan and Swat district. However, a considerable number of recent migrants have migrated to larger cities such as Peshawar and other major cities of Pakistan. Khowar is a totally different language from Pashto which is rich in phonological variations and the language of Kho people of Chitral. Basically, Khowar is derived from the Kho that means the dweller and inhabitants of Chitral. Khowar is the mixture of many languages. The Persian language in particular is infiltrated in Khowar; it was a princely state and Persian was the official language of Chitral till 1973.

CHAPTER III

METHODOLOGY

Research Design and Procedures

This study considers the pronunciation difficulties of English of Pashto and Khowar speakers employing a survey design. As it was pointed out previously, the main purpose of this research was to investigate the pronunciation difficulties in English of Khowar and Pashto speakers. To be able to reach the aim, this study employed a quantitative method. According to Shuttleworth (2008) this method is the best way of approving and disapproving hypothesis. This kind of method is used mostly in social sciences for this reason a quantitative method was employed to effectively answer the research questions of this study. To be able to distinguish the pronunciation problems a table of words containing the target sounds was distributed (see Appendix H) to the participants to read the words and their voices were recorded while reading the given words. There are 24 consonant sounds /b/ /d/ / ∂ / / θ / /d₃/ /g/ $\frac{h}{j} \frac{j}{k} \frac{h}{n} \frac{n}{n} \frac{n}{n} \frac{p}{r} \frac{r}{s} \frac{j}{t} \frac{1}{r} \frac{1}$ only six consonants were selected. The current study focuses on finding out how these sounds are produced by Khowar and Pashto speakers. For this purpose six consonants were selected for recording. The consonants inserted words along with other distracters presented for the participants to read. The participants repeated each word three times in order to get a clear production of the specific sounds. Following this, the target sounds of Pashto and Khowar were compared with the Received Pronunciation RP which is today's version of English which has been used for centuries as a standard pronunciation of British English (Roach, 2004). In this regard, the RP of the target sounds were identified from a speaking dictionary. (Merriam Webster online). In Pakistan RP speaker of English is hard to find therefore, the recording was made from the speaking dictionary to accomplish the needs of this research.

Table 1

Sound	Word
/ð/	Either
/0/	Ether
/t/	Seat
/d/	Seed
/v/	Vine
/w/	Wine

Target Sounds with Sound-Carrying Words

Participants and Sampling

The population of the study was comprised of two groups who were Pashto and Khowar speakers. The total number of the students who took part in this study was 30 in which15 students were Khowar speakers and 15 Pashto speakers. Their average age was between 20 to 25 years. The participants were the undergraduate students Islamabad University in the English language and literature faculty, Balochistan, Pakistan. The idea behind the selection of the participants from the faculty of English language and literature was, attributed to the fact that the students of this faculty are considered to be better English speakers compared to the rest of the faculties in this University. Therefore, the participants were selected from this faculty only. The participants were selected among the native speakers of Khowar and Pashto languages in order to reach the aim. Therefore, a stratified sampling approach was adopted in this study. According to Semiz (2016) stratified sampling are a strata or group which are chosen specifically to represent the different characteristics within the population such as ethnicity, education, location, age, or occupation. So, two groups were involved in this study the speakers of Pashto and Khowar languages.

Data Collection

A list containing words called stimuli was employed to collect the related data (see Appendix H). The words carrying the target consonants were presented to the participants in words on an A4 sheet of paper written on the computer. The participants were asked to read the stimuli one by one and they were asked to read louder to get their voices recorded. The total Pashto participants were 15 who repeated each word three times that means that each word was produced 45 times by the total number of participants. Similarly, the Khowar participants also went through the same procedures, the number of participants was 15 who were requested to repeat each word three times. An Iphone 6 was used to record the sounds of the participants and each recording lasted for about two minutes each, in total 60 minutes. Iphone 6 carries an advanced recording used in m-learning for pedagogical purposes (Thomas & Roger, 2016).

Data Analysis

Praat is a free software program which is used to analyze the speech sounds acoustically (Goldman. 2011). It can be downloaded from the website Www.fon.hum.uva.nl.praat. Basically, the Praat program was designed and developed by Boersma and Weenink (1995) to be used to generate the waveform on a spectrogram. It is also used to make recordings, editing of sounds and to the extract the recorded sounds for further needful analysis. It provides the information of pulses, formants, intensity and pitch of the sounds. The program consists of the following properties (Boersma & Heuven, 2001).

- *Frequency:* It measures the vibration produced by the vocal cord which is depend on the thickness and length of the vocal cord.
- *Time:* Time shows the duration of the speech sounds produced in the given time by the speaker.
- *Amplitude:* It shows the darkness which represents (see spectrogram A) the intensity of the produced sounds. The more darkness means the greater intensity is produced.
- *Formants:* Praat carries three formants such as F1, F2 and F3. The first formant (F1) explained the height of vowels (low vowels have greater F1). The second formant (F2) differentiates the front and back vowels. The F3 (third formant) determines the involvement of lip-rounding.

However, this study only employed the F3 formant. Praat software was employed to note the required formant value (F3) the formants values of six consonants were taken from Pashto and Khowar participants. The significant difference between the formant value of English with Pashto and Khowar speakers were determined through the major number of participants and with percentage. The average value out of the three production sounds of each word was taken to note to determine the values of each participant.

After collecting the data, it was analyzed through Praat to be able to determine the differences between the production of Khowar and Pashto speakers (Boersama & Weenink, 2016) the recorded sounds of both languages (Khowar and Pashto) were put into Praat which analyzed the productions of each sounds produced by each participant. Following this, the productions of the participants were compared with each other to be able to reveal the results of the produced target sounds.

Ethical Consideration

Keeping into consideration the research ethics, written consent from the Faculty of the languages and literature was obtained (See Appendix I). He was informed about the nature of the research and the purposes of the recordings were briefly explained before data collection. The participants were also informed verbally about the aim of the recordings and their names would be kept anonymised and would not be used for any other purposes except this research.

CHAPTER IV

FINDINGS AND DISCUSSIONS

The present chapter presents the findings and discussion of this study. This study aimed to find out the significant differences between the pronunciations difficulties of Pashto and Khowar English as second language (ESL) learners when producing six English consonant sounds. To be able to reach the aim of this study, the following research questions were posed:

- 1. What are the pronunciation difficulties of English as a second language Pashto and Khowar learners in the production of six English consonant sounds?
- 2. Are the pronunciation difficulties in six English consonant sounds of English as a second language Khowar and Pashto learners similar?

Difficulties in the Production of English Consonant Sounds

The findings showed that the Pashto and Khowar speakers changed the Received Pronunciation (RP) of the targeted sounds. The formant values of six consonant sounds were taken from the Pashto and Khowar participants (see Appendix A). The significant difference between the formant values of English of Pashto and Khowar speakers were determined through the number of participants with percentage. The sounds which were selected for the current study went through the particular phonological variations. To see the differences among the production of Pashto, Khowar speakers, the target sounds of the Pashto and Khowar speakers were compared with the RP. Hence, the difference in the production of the target sounds explored through comparing the frequencies of each consonant.

The following section will present the RP of the targeted consonant sounds found in the word either, ether, seat, seed, vine and wine.

Production of RP. In this section, the results of the production of RP will be presented. The analysis of six English consonant sounds [$\delta \theta v w t d$] among the Pashto and Khowar speakers will be illustrated. The purpose of presenting the Praat analysis of the target sounds of RP sounds is to compare the sounds produced by Pashto and Khowar speakers when speaking in English.

RP production of 'either' (δ). The frequency of the sound of RP of the voiced dental fricative sound $/\delta/$ given in the word *either* is given below. The frequencies show the production pattern of the RP speakers.

Table 2

F3 Frequencies of RP for 'Either'

Word	Sound	Frequency
Either	/ð/	2745

The sound ∂ which is given in the word *either* was analyzed three times on the Praat program the Table 2 reveals the frequencies of F3 that shows the production frequency was 2745. The mentioned frequencies for the word *either* were compared with the production frequencies of Pashto and Khowar speakers. The analysis for the word *either* revealed that the there was no space between the production of the vowels and the sound is produced as stop in RP (see Appendix A). If the spectrogram shows no space between thee vowels then it meant that RP speakers produced the word with friction if the space was created in the spectrogram then the word would have been produced as stop.

RP production of 'ether' (θ). In order to see how the RP is produced the voiceless dental fricative sound θ given in the word *ether*. The frequency of the given sound was compared with frequencies with the production frequencies of Pashto and Khowar speakers. The production frequencies of the word ether produced in RP is illustrated in table 3 below.

Table 3

F3 Frequencies of RP for 'Ether'

Word	Sound	Frequency
Ether	/0/	2774

Table 3 demonstrates the three production frequencies of the voiceless dental fricative sound θ used in the word *ether* where the production frequency is 2774. The spectrogram

shows the production of the word *ether* as dental fricative as demonstrated in the picture of the spectrogram (see Appendix A) results reveal no burst between the vowels. This indicated that means that the RP the sound θ given in the word *ether* as voiceless dental fricative.

RP production of 'vine' (v). The sound /v/ is produced as labio dental fricative by the RP. It is also produced with lip-rounding. The production frequency of the word *Vine* is presented in Table 4 which is as under:

Table 4

F3 Frequencies of RP for 'Vine'

Word	Sound	Frequency
Either	/v/	2502

The word vine produced by RP shows that the production frequency is 2502.

RP production of 'wine' (w). The sound /w/ given in the word *Wine* is labio dental fricative in RP English. In order to analyze the production of RP the word was presented to the Praat program. Table 4 reveals the results of the analysis of the word *wine* produced by the RP speakers.

Table 5

F3 Frequencies of RP for 'Wine'

Word	Sound	Frequency
Wine	/w/	2974

The results of the production of the word Wine which were set into the program presented to the program. The results revealed that the frequency measurement was 2974. The mentioned frequency indicates that the RP speakers produce the sound /w/ given in the word *Wine* as labio dental fricative.

RP production of 'seat' (t). The sound /t/ given in the word *Seat* produced as alveolar stop by RP. For further clarification, the word was put to analysis through the Praat program. Table 6 reveals the production frequencies of the word *Seat*.

Table 6

F3 Frequency of RP for 'Seat'

Word	Sound	Frequency
Seat	/t/	3285

Table 6 shows the production frequency of the word Seat. It was revealed that the frequency of the production of RP speakers is 3285.

RP production of 'seed' (*d*). The RP produce the sound mentioned in the word *Seed* as alveolar stop. The high frequencies of the production of the word *Seed* confirm the word produced as alveolar stop.

Table 7

F3 Frequency of RP for 'Seed'

Word	Sound	Frequency
Seed	/d/	3707

Table 7 shows the consistency in the production of the word *Seed* by RP. The frequency of RP speakers was 3707.

All the aforementioned analysis of the target sounds of the RP speaker was presented here in order to compare the same frequencies with Pashto and Khowar speakers' production frequencies.

Pashto speakers' RP production. This section presents the acoustic analysis of Pashto speakers. Each participant produced the target sounds three times to be able to detect the exact production of the sounds. The production frequencies of each sound were recorded.

The acoustic analysis of the target sound on the Praat program detected the results of how many Pashto participants were able to produce the target sounds and how many failed. This section will present a detailed analysis of the production of the mentioned English consonant sounds by Pashto speakers. The consonant sounds were determined because of their resonance and formant frequencies. The productions of the consonant sounds were not as linear and simple as it seems. According to the findings of each word produced the following results were depicted:

Pashto speakers' production of 'either' (δ). The voiced dental fricative sound $/\delta/$ given in the word *either* was analyzed. The word either was repeated three times by the total 15 Pashto speakers. Table 7 presents the production results of the word *either* of the Pashto participants.
Participants	Word	Sound	P 1	P 2	P 3
1	Either	/ð/	×	x	x
2	Either	/ð/	x	x	x
3	Either	/ð/	×	\checkmark	\checkmark
4	Either	/ð/	x	x	x
5	Either	/ð/	x	x	x
6	Either	/ð/	x	x	x
7	Either	/ð/	\checkmark	\checkmark	\checkmark
8	Either	/ð/	×	x	×
9	Either	/ð/	×	x	×
10	Either	/ð/	×	x	x
11	Either	/ð/	\checkmark	\checkmark	\checkmark
12	Either	/ð/	x	x	x
13	Either	/ð/	\checkmark	\checkmark	\checkmark
14	Either	/ð/	×	x	×
15	Either	/ð/	x	×	x

Pashto Speakers' Production Frequencies of 'Either'

Key: P: Production

Table 8 presents the overall results of the analysis of the word *either*. It shows that out of 15 participants only four participants were able to produce the target sound $/\delta$ / given in the word *either* as voiced dental fricative like a RP. Eleven participants produced the word as dental stop. According to Table 3 the production frequency of F3 of the RP for the word either was 2745. However, only four Pashto speakers' production frequency reached up to the level of RP speakers (see Appendix D). The production frequency of F3 of Pashto speakers was lower than RP speakers. The eleven production frequencies of F3 of Pashto speakers were lower than the RP speakers (F3=2745). The lower f3 frequency means that the word was not produced like a RP speaker. Hence, the given results confirm that Pashto speakers could not

produce the voiced dental fricative sound of English. However, in order to reveal how Pashto speakers produced the English consonant sound $\langle \bar{\partial} \rangle$ in the word *either* (see Appendix A) the Praat program was employed. The spectrogram shows the space between the two vowels that means the Pashto participants did not create friction in the production of voiced dental-fricative sounds. The space (burst) between the two vowels means that instead of fricative the participants produced stops. So, the measurement indicated that voiced dental fricative $\langle \bar{\partial} \rangle$ was produced as dental stop revealing that it was not produced like the RP speakers.

Pashto speakers' production of 'ether' (θ). The voiceless dental fricative sound $/\theta/$ was analyzed in the form of word *either* though the Praat program. Fifteen Pashto speakers were asked to produce the word *ether*. The description of the production of the word is illustrated in Table 9.

Participants	Word	Sound	P 1	P 2	P 3
1	Ether	/0/	\checkmark	\checkmark	\checkmark
2	Ether	/0/	×	x	x
3	Ether	/0/	×	\checkmark	\checkmark
4	Ether	/0/	×	x	x
5	Ether	/0/	×	x	x
6	Ether	/0/	\checkmark	\checkmark	\checkmark
7	Ether	/0/	×	x	x
8	Ether	/0/	×	x	x
9	Ether	/0/	×	x	x
10	Ether	/0/	×	x	x
11	Ether	/0/	×	×	×
12	Ether	/0/	×	×	×
13	Ether	/0/	×	×	×
14	Ether	/0/	×	×	×
15	Ether	/0/	×	×	×

Pashto Speakers' Production Frequencies of 'Ether'

Key: P: Production

Table 9 reveals that only two Pashto speakers produced the voiceless dental fricative sound θ given in the word *ether* successfully. Out of 15 Pashto participants 13 produced the word as dental stop. The RP speaker production frequency of F3 was 2774 which was the highest frequency among the F3 production frequency of Pashto speakers. Only two Pashto speakers' production frequency of F3 reached to the figures of 2745 that means that the production was produced correctly (see Appendix D). Table 3 demonstrates the production of the Pashto speakers for the sound θ presented in the word *ether* (see Appendix D). The Praat program showed the space between two vowels that means the Pashto participants did not create friction in the production of voiceless dental-fricative sounds. If a friction was created

then it would be fricative sound. The space (burst) between the two vowels means that instead of fricative the participants produced the sound as stops. So the measurement indicated that voiceless dental fricative $/\theta/$ was produced as voiceless dental stop.

Pashto speakers' production of 'vine' (v). The word *vine* with the sound /v/ which is labio dental fricative was put to analyze on the Praat program to see the F3 production frequency of the Pashto speakers of English. The results showed that (see Appendix D) the F3 frequencies of the word *vine* were lower than the RP speaker except in the production of English among three Pashto participants. Table 10 presents the production of the word vine of Pashto speakers.

Participants	Word	Sound	P 1	P 2	P 3
1	Vine	/v/	×	×	×
2	Vine	/v/	\checkmark	\checkmark	\checkmark
3	Vine	/v/	×	×	×
4	Vine	/v/	×	×	×
5	Vine	/v/	×	×	×
6	Vine	/v/	×	×	x
7	Vine	/v/	×	\checkmark	\checkmark
8	Vine	/v/	×	x	x
9	Vine	/v/	×	\checkmark	\checkmark
10	Vine	/v/	\checkmark	\checkmark	\checkmark
11	Vine	/v/	\checkmark	\checkmark	\checkmark
12	Vine	/v/	×	x	x
13	Vine	/v/	×	x	×
14	Vine	/v/	×	×	×
15	Vine	/v/	×	×	×

Pashto Speakers' Production Frequencies of 'Vine'

Key: P: Production

As it could be seen in the Table 10 that out of 15 Pashto speakers, who repeated the same word three times, produced the word as labio dental fricative which were indicated from the production frequencies of F3 (see Appendix D) when the RP speakers produced the word vine so, the F3 frequency was 2502. These frequencies are higher than all F3 production frequencies of Pashto speakers this shows that Pashto speaker could not produce the sound /v/ as labio dental fricative like RP English speakers except for three Pashto speakers (see Appendix D). Twelve Pashto speakers produced the sound /v/ given in the word *vine* as labio dental stop. In the phonemic inventory of the Pashto language the sound /v/ exists. However, the Pashto speakers were unable to produce this sound the way native speakers produced it

because according to Syed (2013) that the sound /v/ is exists, however, the features of the language are different from English therefore, the sound was not produced the way RP speakers can.

Table 10 indicates that out of 15 productions 12 Pashto speakers produced the word *vine* with the sound /v/ as labio dental by eight Pashto speakers whereas 3 produced this sound as labio dental fricative. The findings confirm that the Pashto speakers could not produce the word *vine* with the sound /v/ like RP speakers. Here, it could be claimed that the mother tongue interference play an essential role in the production of RP sounds. This is in line with the claim made by the proponents of the contrastive analysis hypothesis who take mother tongue the main cause of errors (Richards, 2015).

Pashto speakers' production of 'wine' (w). The word wine with the sound /w/ of English labio dental fricative was asked to be pronounced by the Pashto speakers to see whether they can produce this sound like RP speakers. The overall production of Pashto speakers for the word *wine* is illustrated in Table 11.

Participants	Word	Sound	P 1	P2	P 3
1	Wine	/w/	x	x	×
2	Wine	/w/	x	x	×
3	Wine	/w/	x	x	x
4	Wine	/w/	\checkmark	\checkmark	\checkmark
5	Wine	/w/	x	×	×
6	Wine	/w/	x	×	x
7	Wine	/w/	x	x	x
8	Wine	/w/	x	×	×
9	Wine	/w/	x	x	x
10	Wine	/w/	\checkmark	\checkmark	×
11	Wine	/w/	x	×	×
12	Wine	/w/	\checkmark	\checkmark	\checkmark
13	Wine	/w/	x	×	×
14	Wine	/w/	x	×	×
15	Wine	/w/	×	x	×

Pashto Speakers' Production Frequencies of 'Wine'

Key: P: Production

Table 11 reveals that out 15 productions of the word *wine*, only three Pashto speakers were able to produce it as labio dental fricative. The F3 frequencies of the word *wine* determine the production of word. Therefore, the F3 frequencies productions of the word wine of Pashto speakers are lower than the RP (see Appendix D). The average F3 production frequency of the RP speaker was 2974 (see Table 5) but the results show only three Pashto speakers' F3 production frequencies reached to the figure of 2974 (see Appendix D) that confirms that out of 15 only three Pashto speakers were able to produce the word as labio dental fricative. In the phonemic inventory of the Pashto language the sound /w/ is shown as /v/ that means the sound /w/ is absent in the Pashto language. This may be the reason why the

Pashto language speakers were unable to produce this sound like native speakers. Here, it could be claimed that mother tongue interference plays an essential role in the production of second language which is obvious from the results of above analysis for the given word.

Pashto speakers' production of 'seat' (t). The Pashto language speakers were also asked to produce the sound /t/ found in the word *Seat* to check whether they can produce the word *seat* like RP speakers. In this regard, the Pashto speakers were asked to produce the word three times by each 15 participants. The word *seat* was analyzed on Praat program to get the F3 frequency that measures the fricative and stop sound. The following table presents the productions of *seat* of Pashto speakers.

Table 12

Participants	Word	Sound	P 1	P 2	P 3
1	Seat	/t/	×	×	×
2	Seat	/t/	\checkmark	\checkmark	x
3	Seat	/t/	\checkmark	×	\checkmark
4	Seat	/t/	x	x	x
5	Seat	/t/	x	\checkmark	\checkmark
6	Seat	/t/	×	×	×
7	Seat	/t/	×	×	×
8	Seat	/t/	x	x	x
9	Seat	/t/	×	×	×
10	Seat	/t/	\checkmark	\checkmark	\checkmark
11	Seat	/t/	×	×	×
12	Seat	/t/	×	×	×
13	Seat	/t/	x	x	x
14	Seat	/t/	x	x	x
15	Seat	/t/	\checkmark	\checkmark	\checkmark

Pashto Speakers' Production Frequencies of 'Seat'

Key: P: Production

According to Table 12 only five Pashto speakers were able to produce the word *seat* as alveolar stop and ten participants produced it as retroflex. The F3 frequencies of 15 Pashto participants revealed that (see Appendix D) only five participants' productions frequencies were equal to 3285 which is the F3 frequency of RP speakers (see Table 6). The remaining 10 participants' F3 values were lesser which shows that they failed to pronounce the word as alveolar stop. So, the findings confirm that the Pashto language speakers were unable to pronounce the word *seat* as alveolar stops rather they produced the given sound as retroflex.

Pashto speakers' production of 'seed' (d). The word *seed* which carries the sound /d/ is produced as an alveolar stop by RP speaker which was confirmed from the analysis of the F3 production of RP (see Table 7). To be able to reveal whether this sound was produced like RP speakers, the sound belonging in this word were analyzed on the Praat program. Table 13 presents the productions of this word produced by Pashto speakers 45 times.

Participants	Word	Sound	P 1	P 2	P 3
1	Seed	/d/	x	x	×
2	Seed	/d/	x	x	×
3	Seed	/d/	\checkmark	\checkmark	\checkmark
4	Seed	/d/	×	×	×
5	Seed	/d/	×	×	×
6	Seed	/d/	×	x	x
7	Seed	/d/	×	x	x
8	Seed	/d/	×	x	x
9	Seed	/d/	x	x	x
10	Seed	/d/	×	x	x
11	Seed	/d/	\checkmark	\checkmark	x
12	Seed	/d/	×	x	x
13	Seed	/d/	\checkmark	\checkmark	\checkmark
14	Seed	/d/	×	x	x
15	Seed	/d/	x	x	×

Pashto Speakers' Production Frequencies of 'Seed'

Key: P: Production

Table 13 reveals that out of 15 productions of the word *seed* only three Pashto language speakers were able to produce this sound like RP speakers. The word failed correct production 12 times the word failed correct productions. The RP speaker produced the word *seed* with the frequency of 3707. However, only three production frequencies of Pashto language speakers equated with the frequency of RP speaker (see Appendix D). The remaining F3 production frequencies of Pashto language speakers were lower than RP speakers this confirmed that Pashto language speakers could not produce the alveolar stop sound therefore, they substituted the alveolar stop into retroflex.

Khowar speakers' RP production. To be able to reveal whether the Khowar language speakers produced the six consonants like a RP speakers six words were asked to be produced 9 (see Appendix E). A total of 15 Khowar speakers repeated each word three times that means that each word was produced 45 times by the total number of the Khowar language speakers. The average of the three productions produced by each participant was considered for the results. The results of the finding for the six consonant sounds were as follow:

Khowar speakers' production of 'either' (δ). In the RP the sound $/\delta$ / is produced as dental-fricative. In order to see the production of this sound among the Khowar speakers, the English consonant $/\delta$ / was used in stimuli presented in the word '*Either*'. The spectrogram (see Appendix B) showed the sign of stop. This clearly showed the space between the two vowels which indicated that the Khowar language speakers did not produce the dental-fricative like RP speakers, but substituted with the stop in the production of dental-fricative sounds. The space between the two vowels means that instead of fricative the Khowar language speakers produced it as stops. After the spectrogram analysis it was confirmed that the Khowar language speakers produced the voiced dental fricative as stop. The word *either* was presented to analyze on the Praat program which gave the formant value of F3. Table 14 reveals the F3 results for the word *either*.

Participants	Word	Sound	P 1	P 2	P 3
1	Either	/ð/	x	x	x
2	Either	/ð/	x	x	×
3	Either	/ð/	x	×	x
4	Either	/ð/	x	x	x
5	Either	/ð/	x	x	x
6	Either	/ð/	x	x	x
7	Either	/ð/	x	x	x
8	Either	/ð/	x	x	x
9	Either	/ð/	\checkmark	\checkmark	\checkmark
10	Either	/ð/	x	x	x
11	Either	/ð/	\checkmark	\checkmark	\checkmark
12	Either	/ð/	\checkmark	\checkmark	\checkmark
13	Either	/ð/	x	x	x
14	Either	/ð/	x	x	x
15	Either	/ð/	×	×	x

Khowar Speakers' Production Frequencies of 'Either'

Key: P: Production

The Praat analysis for the word *either* (see Appendix E) showed that only three Khowar speakers were able to produce this sound like RP speakers which was determined through comparing the F3 values of Khowar speakers with RP (see Table 2). The average F3 value of RP was 2745. It is evident from the Table 13 that out of 15 Khowar speakers only three participants' F3 average values crossed the figure 2745 (see Appendix E) which indicated that they produced the correct pronunciation of the sound $/\delta/$ given in the word either. The F3 formant values of thirteen Pashto speakers were lesser than the production values of RP speakers which indicate that twelve Pashto participants were unable to produce

the target sound. So, the above analysis confirms that Khowar speakers cannot produce the English voiced dental fricative sound.

Khowar speakers' production of 'ether' (\theta). The sound voiceless dental fricative sound $|\theta|$ which is given in the word *ether* was to taken to acoustic study to see that Pashto speakers can produce the English target sound. Therefore, the word ether was analyzed on the Praat program to find out the F3 values. Table 15 shows the total number of Pashto participants who were able to produce the target sound which as under.

Table 15

Participants	Word	Sound	P 1	P 2	P 3
1	Ether	/0/	×	×	×
2	Ether	/0/	×	×	×
3	Ether	/0/	\checkmark	\checkmark	\checkmark
4	Ether	/0/	×	×	x
5	Ether	/0/	×	×	x
6	Ether	/0/	×	×	x
7	Ether	/0/	×	×	×
8	Ether	/0/	×	×	×
9	Ether	/0/	\checkmark	\checkmark	\checkmark
10	Ether	/0/	×	×	×
11	Ether	/0/	×	×	×
12	Ether	/0/	×	×	x
13	Ether	/0/	\checkmark	\checkmark	\checkmark
14	Ether	/0/	×	×	x
15	Ether	/θ/	\checkmark	\checkmark	\checkmark

Khowar Speakers' Production Frequencies of 'Ether'

Key: P: Production

To reveal the production of the results of the word *ether* carrying the sound θ the word was placed into the Praat program (see Appendix E). The F3 values of Khowar shows that only four Khowar speaker production values are equal to the production values of RP

speakers (see Table 3). On the basis of F3 results Table 15 also describes the entire production of the word ether of Khowar speakers. The spectrogram results showed the burst between the vowel sounds which was the sign of stop which confirmed that the Khowar speakers did not produce fricative sounds rather they produced stop. The space or burst indicated the stop sign if it were produced fricative then there was no sign of burst or any space left blank in the spectrogram. However, the sound $/\theta/$ (in *ether*) was produced as stop 12 times and 3 times participants produced as fricative. On the basis of above analysis it confirmed that Khowar speakers cannot produce the voiceless dental fricative sound.

Khowar speakers' production of 'vine' (v). This section focuses on the production of the English word *vine* with the sound /v/ by Khowar speakers. Corresponding to English [v], the Khowar language has labio dental /v/. Table 15 shows the F3 values of Khowar speakers' that only four Khowar speakers successfully produced the sound labio dental fricative.

Participants	Word	Sound	P 1	P 2	P 3
1	Vine	/v/	x	x	x
2	Vine	/v/	x	x	x
3	Vine	/v/	\checkmark	\checkmark	\checkmark
4	Vine	/v/	x	×	x
5	Vine	/v/	x	×	x
6	Vine	/v/	\checkmark	\checkmark	\checkmark
7	Vine	/v/	x	×	x
8	Vine	/v/	\checkmark	\checkmark	\checkmark
9	Vine	/v/	x	×	x
10	Vine	/v/	x	×	x
11	Vine	/v/	\checkmark	\checkmark	\checkmark
12	Vine	/v/	x	×	x
13	Vine	/v/	x	×	x
14	Vine	/v/	x	×	x
15	Vine	/v/	x	x	x

Khowar Speakers' Production Frequencies of 'Vine'

Key: P: Production

The production value of F3 of RP was 2502 (see Table 4) where only four F3 values touched the figure of 2502 (see Appendix E) which confirms that out of 15 Khowar participants four were able to produce the English labio dental fricative sound /v. Eleven Khowar participants failed to pronounce this sound like RP speakers.

The findings showed that the Khowar speakers produced the word carrying the sound /v/ as labio dental in English. So, the results of the findings revealed that the Khowar participants produced the sound /v/ with the word *vine* with a lesser F3 frequency except four of the Khowar speakers (see Appendix E). In contrast, the RP speaker produced the same sound with the frequency of 2502. The production frequency of the RP speakers was higher

than the majority of the Khowar speakers of English. This indicates that the Khowar participants were unable to produce the sound the way RP speakers do.

Table 16 reveals the total number of the Khowar speakers who produced the word *vine*. Out of 45 productions of this word, it was produced 11 times as labio dental and four times as fricative. The findings indicate that the Khowar speakers faced difficulty when producing this sound.

Khowar speakers' production of 'wine' (w). The production of the English sound /w/ by Khowar speakers corresponding to the English sound /w/ is called approximant. The findings pointed out that the Khowar speakers produced the word having the sound /w/ as labio dental /v/ because /w/ is absent in the Khowar phonetic inventory (see Appendix F). Table 16 reveals the production of the word *wine* by Khowar speakers.

Participants	Word	Sound	P1	P 2	P 3
1	Wine	/w/	×	×	x
2	Wine	/w/	\checkmark	\checkmark	\checkmark
3	Wine	/w/	×	x	x
4	Wine	/w/	\checkmark	\checkmark	\checkmark
5	Wine	/w/	×	×	x
6	Wine	/w/	×	×	x
7	Wine	/w/	\checkmark	\checkmark	\checkmark
8	Wine	/w/	×	×	×
9	Wine	/w/	×	×	x
10	Wine	/w/	×	×	×
11	Wine	/w/	×	×	×
12	Wine	/w/	×	×	×
13	Wine	/w/	×	×	×
14	Wine	/w/	×	×	×
15	Wine	/w/	×	×	×

Khowar Speakers' Production Frequencies of 'Wine'

Key: P: Production

According to the Praat analysis of the word wine the F3 frequencies of all the Khowar speakers (see Appendix E) showed that only three participants produced the labio dental approximant /w/ whereas twelve participants produced it as labio dental. The conclusion drawn with respect to the word *wine* when the F3 frequency production of RP speaker was compared with frequencies of Khowar speakers (see Table 5) indicate that the Khowar speakers faced difficulty in the pronunciation of the English sound /w/ in the word *wine*. The production frequency of the RP speakers was 2974 whereas Khowar speakers' frequency productions of the sound wine (except three) were lower than RP (see Appendix E). The

production frequency of a RP speaker was higher than the majority Khowar of the speakers which shows that the Khowar speakers were unable to produce this sound.

It is evident in Table 17 that the word *wine* was produced by12 Khowar speakers as labio dental instead of fricative and only three of the Khowar speakers produced it as fricative out of the 45 productions and 15 participants. This finding confirmed that Khowar ESL learners cannot produce the English labio dental fricative sound and faced difficulty when producing this sound.

Khowar speakers' production of 'seat' (t). Alveolar stop /t/ which was used in the word seat was acoustical analyzed in the English productions of Khowar ESL learners. In order to see how Khowar ESL speakers produced the word *seat* containing the sound /t/ an analysis was carried out (see Appendix E). Table 18 reveals the F3 frequencies of Khowar speakers.

Participants	Word	Sound	P 1	P 2	P 3
1	Seat	/t/	×	×	×
2	Seat	/t/	x	x	x
3	Seat	/t/	×	x	x
4	Seat	/t/	×	×	x
5	Seat	/t/	×	×	x
6	Seat	/t/	\checkmark	\checkmark	\checkmark
7	Seat	/t/	×	x	x
8	Seat	/t/	×	x	x
9	Seat	/t/	×	x	x
10	Seat	/t/	×	x	x
11	Seat	/t/	×	x	x
12	Seat	/t/	×	x	x
13	Seat	/t/	\checkmark	\checkmark	\checkmark
14	Seat	/t/	×	x	x
15	Seat	/t/	x	×	×

Khowar Speakers' Production Frequencies of 'Seat'

Key: P: Production

The analysis of data indicated that the target sound was produced as retroflex by 13 Khowar participants and only two produced the word *seat* as alveolar stop. The spectrogram showed the F3 frequency of the target sound *seat*. The F3 frequencies of Khowar speakers were lower than the RP which was 3255. Only two participants F3 production frequencies measured to the level of 3225 which indicates that the two Khowar participants produced the word like RP speakers.

It is evident from the finding that the Khowar speakers were unable to pronounce this word the way native English speakers do and therefore, they faced difficulty in pronouncing the sound /t/. The retroflex sounds are present in Khowar language therefore, they were

unable to pronounce the sound as retroflex but the alveolar stop is absent in the Khowar language. Secondly, in Pakistan the English teachers do not focus on the pronunciation skills in the classrooms setting therefore, due to the lack of practice of English sounds the influence of L1 is more dominant in acquisition of L2. So, this could be the underlying reason to why this word was mispronounced.

Khowar speakers' production of 'seed' (d). In order to see the results of how Khowar speakers produce the word *seed* it was analyzed. The frequency of the target sounds by Khowar speakers were allocated (see Appendix E). The production frequency of RP was 3707(see Table 7). However, all the produced frequencies of Khowar speakers were lower than the frequency of RP (see Appendix E) except for three of the participants. This indicates that means that the Khowar language speakers were unable to produce the sound /w/ given in the word *seed*. This confirmed that Khowar language speakers could not produce alveolar stop presented in English.

Word	Sound	P 1	P 2	P 3
Seed	/d/	x	×	×
Seed	/d/	x	×	x
Seed	/d/	×	x	x
Seed	/d/	\checkmark	\checkmark	\checkmark
Seed	/d/	x	x	x
Seed	/d/	x	x	x
Seed	/d/	x	x	x
Seed	/d/	\checkmark	\checkmark	x
Seed	/d/	x	x	x
Seed	/d/	x	x	x
Seed	/d/	x	x	x
Seed	/d/	x	\checkmark	\checkmark
Seed	/d/	×	×	×
Seed	/d/	×	×	×
Seed	/d/	x	×	×
	Word Seed Seed Seed Seed Seed Seed Seed Se	WordSoundSeed/d/	WordSoundP 1Seed $/d/$ ×	WordSoundP 1P 2Seed $/d/$ ××

Khowar Speakers' Production Frequencies of 'Seed'

Key: P: Production

Table 19 indicates that out of 45 productions of the word *seed* was produced by 12 Khowar speakers as retroflex and three Khowar speakers correctly produced as alveolar stop (like RP speakers). The results revealed that the Khowar ESL speakers faced difficulty in the production of the alveolar retroflex of English. The result of the sound /d/ given in the word *seed* indicated that Khowar speakers pronounced them as retroflex unlike English native speakers who pronounced it as alveolar stops. After the analysis of the given consonants, it was observed that the Khowar participants pronounced the word as retroflex due to L1 input. So, the result indicated that consonant /d/ is difficult to pronounce for the Khowar speakers.

The answer to the first research question was obtained in the above findings. The pronunciation difficulties of the ESL Pashto and Khowar language speakers when producing the six consonant sounds ($\frac{0}{\sqrt{10}}$, $\frac{10}{\sqrt{10}}$ be able to reveal the second research question of this study based on the similarities of difficulties when producing the RP in the production of Pashto and Khowar English speakers was compared. The following section will present the findings related to the second research question.

Comparison of Pashto and Khowar Speakers

The previous findings revealed each English consonant of RP, Pashto and Khowar speakers of the sounds which were all analyzed through the Praat program to obtain the English production F3 frequencies. The obtained frequencies of both languages (Pashto and Khowar) were then compared with the production F3 frequencies of RP speakers. The results are as follows:

Production of 'Either'. According to the previous findings when the voiced dental fricative sound /ð/ used in the stimuli as *either* which was analyzed acoustically, the results showed that only three Pashto participants could produce the voiced dental fricative sound (see Appendix D). The F3 production frequency of RP speakers for the word *either* was 2745 whereas the three Pashto participants' production values were measured as 2725, 2770 and 2703. These frequencies indicate that three Pashto speakers produced the voiced dental fricative sound /ð/ given in the word *either* like RP speakers. Out of 15 Pashto speakers 12 could not produce the word either as the production frequencies was lowered than the given RP speaker. On the other hand the Khowar speakers' production frequency of F3 for the dental fricative sound /ð/ which was given in the word *either* was 2736, 2717 and 2770. The mentioned three production F3 frequencies are equal to the frequencies of RP (see Appendix

D) which means that out of the 15 Khowar participants only three could produce the target sound.

From the above comparative study of the voiced dental fricative sound /ð/ in the word *either* it is confirmed that Pashto and Khowar speakers cannot produce the target sound. The spectrogram (see Appendix A) also showed that the space between the two vowels the burst space was created when producing the target sound which was indicated. Instead of producing the fricative sound Pashto and Khowar speakers produced the dental stop sound. So, from the overall analysis it confirmed that Pashto and Khowar speakers cannot produce the fricative sound rather they produced stop sound when speaking English.

Production of 'Ether'. The voiceless dental fricative sound $/\theta$ / which was used in the word *ether* was studied previously revealing that three Pashto speakers scored 2776, 2750 and 2725. These F3 frequencies of Pashto speakers are equal to the production frequency of RP which was 2774. These equal scores of Pashto and RP indicate that the three Pashto participants produced the target sound as voiceless dental fricative. Twelve Pashto participants failed to produce the fricative sounds. The spectrogram (see Appendix A) revealed that Pashto speakers were not able to produce the fricative sound. In addition, the space between the vowels in the spectrogram showed that Pashto speakers produced the stop sound while producing voiceless dental fricative sound of English (see Appendix A).

However, when we compare Khowar speakers' production of the voiceless dental fricative sound θ given in the word *ether* with Pashto it was revealed from the previous findings that three Khowar participants produced the voiceless dental fricative sounds. The F3 frequencies of the three correct pronunciations were 2776, 2770 and 2750 (see Appendix E). The correct pronunciation was determined based on the F3 scores which were compared with the production scores of the RP speaker. The F3 score of the Received Pronunciation was 2774. The spectrogram also confirms that Khowar speakers could not produce the voiceless fricative sound (see Appendix E).

While looking at the above results, we came to the conclusion that out of total15 Pashto participants only three were able to produce the target sound. The remaining twelve participants failed to pronounce the target sound given in the word (see Appendix B).

Similarly, the Khowar speakers were also not able to produce the target voiceless fricative sound θ of English. The previous findings show that out of 15 Khowar speakers only three participants successfully produced the target sound. The overall findings pertaining to the voiceless fricative sound of English revealed that the Pashto and Khowar speakers were unable to produce the target voiceless dental fricative sound θ .

The reason of not producing the voiced and voiceless dental fricative sounds by Pashto and Khowar speakers may be due to the absence of the target sounds in both languages which is obvious from the phonemic inventory of Pashto (see Appendix G) and Khowar languages (see Appendix F). The findings show that the Khowar and Pashto participants replaced the voiced and voiceless dental fricative sounds with stop as according to Syed (2013) these replacements occurs due to L1 features. The stop sounds are present in Pashto and Khowar languages but fricative sounds do not exist therefore, the fricative sounds are replaced with the stop sounds.

Production of 'Vine'. The acoustic analysis of the sound /v/ experimented in the word *vine* showed that eleven of the Pashto speakers produced the target sound as labio dental only four produced it as labio dental fricative. The production frequencies of the Pashto speakers were compared with the RP speaker. The F3 frequency of RP speaker was 2502. However, when the Pashto produced the target sound the F3 frequencies of all participants were lower except in the production four of the participants (see Appendix D). Three F3 values of the Pashto participants were greater like RP speaker (2552), i.e., 2548, 2510 and 2502. The mentioned frequencies indicated that the four Pashto participants were correctly produced the labio dental fricative sound /v/ found in RP. The findings show that the remaining eleven participants failed to pronounce the word like a Received Pronunciation speaker.

Regarding the Khowar speakers, the results showed that out of the15 participants only three of the Khowar speakers succeeded to correctly pronounce the labio dental fricative sound /v/. The Khowar participants, who pronounced the target sound like RP speakers, produced the F3 values as 2530, 2552 and 2537. These frequencies assured that the Khowar speakers produced the target sound accurately. The finding of the RP speaker pertaining to the production of the /v/ sound in the word vine was 2502. So, we can see that only 555three F3

frequencies of the word *vine* matched with the RP. The remaining twelve Khowar speakers failed to pronounce the target sound (see Appendix E).

From the above comparative study of Pashto and Khowar speakers it has become clear that both language speakers cannot produce the labio dental fricative sound. Instead of producing friction like RP speakers, they produced stop in the production of the /v/ sound in the word vine.

Production of 'Wine'. The previous findings revealed that in the experiment of the sound labio dental approximant /w/ three Pashto speakers were able to produce it like a Received Pronunciation speaker. According to Table 11 out of 15 Pashto speakers only three produced the correct pronunciation like RP speakers (see Appendix E). The F3 frequencies of the correct pronunciation of the word were pronounced as the labio dental approximant sound 2923, 2920 and 2950 values. However, the F3 frequency of RP was 2974. It is evident that the production values of the three participants and RP are equal in values this shows that only three Pashto participants' production values matched with the production value of RP. Twelve Pashto participants could not produce and the production values were lower than the values of RP. (see Appendix E).

Table 17 showed that four Khowar participants correctly pronounced the labio dental approximant sound /w/ given in the word wine. The correct pronunciation was identified through the F3 values. The values of F3 of Khowar speakers for the word wine were 2966, 2923 and 2948. However, the F3 value of British speaker for the word wine is 2974. The similarity of the frequencies of Khowar and RP speakers showed that the correct pronunciation was produced by three of the Khowar speakers. The remaining 12 Khowar participants failed to pronounce the target sound /w/.

It was revealed that there was no big difference in the production of labio dental approximant sound of Pashto and Khowar speakers. Both faced difficulties to pronounce the target consonant sound. The result of the production of the consonants /v/ sound indicated that Pashto and Khowar speakers substituted it with consonant /w/. The results showed that the participants replaced it because in the Pashto phonemic inventory (see Appendix G) the consonant /w/ is found this means that in Pashto the sound /w/is also used in place of the /v/

sound like other languages of Pakistan (Rehman, 2007). It is noticed that in Panjabi, Sindhi and Saraiki languages the same /w/ sound is used in place of /v/. In this study, the result of the Praat program also showed that the production of frequencies of Pashto and Khowar language speakers were lower than the RP speakers indicating failure in the correct Received RP of the words *vine* and *wine* (see Appendix B). Both were produced without lip-rounding resulting in incorrect pronunciation of the /v/ sound. Hence, it indicates that the problem of pronunciation is common in Pakistani ESL learners of Pashto and Khowar language learners.

Upon the findings related to the labio dental fricative sounds of English, the Pashto and Khowar participants failed to produce the labio dental fricative sounds. According to the phonemic inventory of Pashto and Khowar (see Appendix F) the sound /w/ is absent which means that the target is absent in both languages therefore, in this research findings, it has been clear that Pashto and Khowar speakers cannot produce the labio dental approximant sound. Due to the absence of the approximant sound in Pashto and Khowar language the participants replaced it with the stop sound as the stop sound is existed in both Pashto and Khowar language.

Production of 'Seat'. The sound alveolar stop /t/ experimented in the word *seat* was analyzed on the Praat program in order to find out the F3 frequency for the production of both Pashto and Khowar speakers. Both speakers were unable to produce this sound due to the fact that the voiced and voiceless dental fricative sounds are absent in these languages. (see Appendix G and F). The findings show that the Khowar and Pashto participants replaced the voiced and voiceless dental fricative sounds with stop as according to Syed (2013) these replacements occurs due to the L1 features. The stop sounds are present in Pashto and Khowar languages but fricative sounds are not existed therefore, the fricative sounds are replaced with the stop sounds. Basically, the F3 frequency was used to find out whether the target sound was produced with a friction or stop. According to the previous analysis it was evident that only five Pashto speakers produced the word as alveolar stop. These production values were indicated F3 frequencies as 3215, 3212, 3211, 3225 and 3215(see Appendix D). However, the RP was 3285. Through F3 frequencies we can conclude that the word was produced are correctly by five Pashto speakers and the remaining ten participants were failed to produce alveolar stop rather than produced it retroflex.

However, according to the previous findings only two Khowar participants successfully produced the sound as alveolar stop and thirteen produced it as retroflex (see Appendix E). In comparison we can see that, five Pashto participants and two Khowar participants were able to produce the word *seat* like RP speakers. The findings show that the majority of the Pashto and Khowar speaker failed to pronounce the sound /t/ given in the word *seat* correctly. Therefore, from this study it is concluded that Pashto and Khowar speakers cannot pronounce the alveolar stop of English sound in RP.

Production of 'Seed'. The previous analysis of the word *seed* showed that three speakers successfully produced the target sound among the total 15 participants of Pashto speakers (see Appendix B). The success was based on the measurement of F3 frequencies of the target sound of Pashto compared with the production frequency of RP (see Table 7). The Khowar speaker's production for the word also went on the Praat program. The previous findings related to the target sound *seed* of Khowar speakers showed that (see Appendix E) only three participants produced the word like a RP speaker.

On the basis of the above comparative analysis of Pashto and Khowar speakers, it is confirmed that in the production of the sound /w/ given in the word *seed*, three Pashto speakers pronounced the target word correctly out of 15 of the participants. However, twelve Khowar speakers failed to pronounce the word *seed* and three correctly pronounced the word out of the 15 participants. The analysis of this finding indicates that the Pashto and Khowar speakers cannot produce the alveolar stop sound.

The overall comparison of the Pashto and Khowar language speakers in the production of the target sounds $(/\delta / \theta / v / w / t / d)$ revealed that the target English sounds of this study were difficult for both language speakers (Pashto & Khowar). The majority of both language participants faced difficulty to produce the target sounds of RP in English.

When the target sounds are absent in the L1 then it becomes difficult to produce the same sound in the L2. Therefore, Pashto and Khowar speakers faced problem in the production of the target sounds. However, this could also be due to the reason that, in Pakistan, teachers specially the English teachers do not focus on the pronunciation skills which it could be helpful to polish the pronunciation errors therefore, this lack of

pronunciation practices the influence of mother tongue is dominant. ESL learners are not exposed to any foreign accent neither in the classroom setting nor outside of the classrooms therefore the learners are bound to acquire the local English accent (Pakistani English). The input receive from the teachers also carries the local accent which is also considered one of the prime hindrances in not acquiring the RP.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

This chapter presents the major findings presented earlier. It starts with an overview of the objectives along with the comparison of the findings.

Summary of the Findings

When the sounds are absent in the phonemic inventory of the first language (L1) then it becomes difficult to produce them. Brown (2000) in the opinion that experience and exposure do not count in the acquisition of the target sound if the distinct feature is active in the L1. There are some obstacles in the way of acquiring the Received Pronunciation (RP) sounds. One of the prime factors was the influence of the L1. The articulatory system of tongue is trained in such a way that it takes time to give shape for a new sound. Secondly, phonemic inventory of Khowar and Pashto are different from English. The manner of articulation of sounds varies from language to another language. Therefore, such difficulties occurred for Pashto and Khowar ESL learners of English.

However, in the light of the questions of the study, the difficulties occurred in the production of six target consonant sounds were due to the lack of practice during the sessions. Meager exposure of RP for ESL learners in the classes is also the reason of the problem. The influence of L1 sounds on L2 was observed in this study which is because of lack of the practice and poor pedagogical strategies for ESL learners. Another cause of the problem was the absence of the target sounds in the L1 therefore; the absent sounds were difficult to produce in the L2 without practicing them.

The pronunciation problems of English were similar among the Pashto and Khowar learners because the environment in Pakistan is 'conducive' to Pakistani English not to acquire foreign accent. The input of English is also Pakistani English around the country in the form of education therefore; irrespective of the language the ESL learners face the same problem of speaking English. The education system in Pakistan is the same whatever language the ESL learners speak so, this is one of the reasons that the pronunciation of English is common to all in Pakistan. Pakistan is a multilingual country where numbers of languages are spoken, however, when speaking English, pronunciation becomes a common no matter which native language you speak. Therefore, the pronunciation problem faced by Pashto and Khowar language speakers are similar to the problems faced by other Pakistani ESL learners (Syed, 2012).

Practical Implications

Based on this study there are certain points that could be fruitful for the future implications:

- ESL learning would be more effective if teachers focus on pronunciation along with the course.
- Teachers should be aware of the correct pronunciation of English (RP) and implement technical devices to implement it into the English classes. This will also raise the awareness among learners.
- Separate sessions should be arranged for the ESL learners to only practice English sounds.
- The integration of all the fundamental skill (listening, speaking, reading and writing) together with their language components (pronunciation, vocabulary, grammar), should be incorporated into language teaching methodologies.
- The findings of this study can be helpful to distinguish and differentiate the phonological variations of Pashto and Khowar consonant sounds and understand their acquisition process.

Recommendations for Further Research

The following recommendations are presented for further research.

• This study was related to the difficulties in the pronunciation of six English consonants only further research could be carried out to all of the consonant sounds produced in RP.

- A bigger sample from the Pashto and Khowar community could be employed in future research.
- It would be fruitful to see the results of the production of the consonant sounds produced by both languages (Khowar & Pashto) within a geographical perspective as regions have a vital role in effecting the pronunciation of RP sounds.
- A contrastive analysis of Khowar and Pashto speakers producing all consonant sounds are another base for further study.
- A study could be conducted within an environment where native speakers of the English are provided to the Pashto and Khowar English as second language (ESL) learners for a comprehensive study on Khowar and Pashto speakers which would give an idea to understand the sound systems of each language.

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APPENDICES

APPENDIX A

Spectrogram Results of Pashto Speakers

Spectrogram of sound /ð/ in Either



Spectrogram of sound θ in *Either*


Spectrogram of sound /v/ in Vine



Spectrogram of sound /w/ in *Wine*



Spectrogram of sound /t/ in Seat



Spectrogram of sound /d/ in Seed



Appendix B

Spectrogram Results of Khowar Speakers

Spectrogram of sound /ð/ in Either



Spectrogram of sound θ / in *Either*



Spectrogram of sound /v/ in Vine



Spectrogram of sound /w/ in Wine



Spectrogram of sound /t/ in Seat



Spectrogram of sound /d/ in Seed



Appendix C

Spectrogram Results of Received Pronunciation

Spectrogram of sound /ð/ in Either



Spectrogram of sound θ in *Ether*



Spectrogram of sound /v/ in Vine



Spectrogram of sound /w/ in Wine



Spectrogram of sound /t/ in Seat



Spectrogram of sound /d/ in Seed



Appendix D

Frequency Results of Pashto Speakers

Participant	Word	Sound	Production 1	Production 2	Production 3
1	Either	/ð/	2674	2662	2669
2	Either	/ð/	2066	2080	2066
3	Either	/ð/	2076	2730	2776
4	Either	/ð/	1923	1986	1923
5	Either	/ð/	2596	2510	2596
6	Either	/ð/	2563	2552	2569
7	Either	/ð/	2725	2748	2725
8	Either	/ð/	2674	2537	2574
9	Either	/ð/	2770	2712	2570
10	Either	/ð/	2420	2410	2420
11	Either	/ð/	2710	2702	2710
12	Either	/ð/	1950	1923	1950
13	Either	/ð/	2715	2733	2715
14	Either	/ð/	2522	2523	2522
15	Either	/ð/	2674	2662	2669

F3 Frequencies for Either of Pashto Speakers

Participant	Word	Sound	Production 1	Production 2	Production 3
1	Ether	/0/	2774	2762	2752
2	Ether	/0/	2266	2280	2266
3	Ether	/0/	2576	2730	2776
4	Ether	/0/	2523	2586	2523
5	Ether	/0/	2596	2510	2696
6	Ether	/0/	2763	2752	2769
7	Ether	/0/	2625	2648	2625
8	Ether	/0/	2574	2437	2174
9	Ether	/0/	2570	2512	2570
10	Ether	/0/	2420	2410	2420
11	Ether	/0/	2510	2502	2510
12	Ether	/0/	2550	2523	2250
13	Ether	/0/	2215	2214	2415
14	Ether	/0/	2422	2423	2522
15	Ether	/0/	2774	2762	2752

F3 Frequencies for *Ether* of Pashto Speakers

Participant	Word	Sound	Production 1	Production 2	Production 3
1	wine	/w/	2519	2427	2217
2	wine	/w/	1066	2380	2266
3	wine	/w/	2576	2030	2176
4	wine	/w/	2423	2386	2723
5	wine	/w/	2796	3310	2796
6	wine	/w/	2463	2052	2369
7	wine	/w/	2025	2248	2125
8	wine	/w/	2774	3037	2774
9	wine	/w/	1570	3312	2870
10	wine	/w/	2920	2410	1820
11	wine	/w/	2110	2602	2110
12	wine	/w/	1950	2323	1950
13	wine	/w/	2315	2614	2315
14	wine	/w/	2722	2823	2922
15	Wine	/w/	2519	2427	2217

F3 Frequencies for <i>Wine</i> of Pashto Speakers

Word	Sound	Production 1	Production 2	Production 3
Vine	/v/	2832	2562	2369
Vine	/v/	2380	2866	2380
Vine	/v/	2030	2976	2030
Vine	$ \mathbf{v} $	1986	2023	1986
Vine	/v/	3010	2796	3310
Vine	/v/	2552	2269	2052
Vine	/v/	2248	2025	2248
Vine	/v/	3037	2774	3037
Vine	/v/	3012	2570	3312
Vine	/v/	2410	2720	2410
Vine	/v/	2602	2110	2602
Vine	/v/	2323	2650	2323
Vine	/v/	2614	2315	2614
Vine	/v/	2323	2422	2323
Vine	/v/	2832	2562	2369
	Word Vine Vine Vine Vine Vine Vine Vine Vine	WordSoundVine/v/	WordSoundProduction 1Vine/v/2832Vine/v/2380Vine/v/2030Vine/v/1986Vine/v/3010Vine/v/2552Vine/v/2248Vine/v/3037Vine/v/3012Vine/v/2410Vine/v/2602Vine/v/2323Vine/v/2323Vine/v/2323Vine/v/2832	WordSoundProduction 1Production 2Vine/v/28322562Vine/v/23802866Vine/v/20302976Vine/v/19862023Vine/v/30102796Vine/v/25522269Vine/v/22482025Vine/v/30372774Vine/v/30122570Vine/v/24102720Vine/v/26022110Vine/v/23232650Vine/v/23232422Vine/v/28322562

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Participant	Word	Sound	Production 1	Production 2	Production 3
1	Seat	/t/	2670	2667	2125
2	Seat	/t/	2215	2315	2015
3	Seat	/t/	2312	2351	2045
4	Seat	/t/	2014	2045	2710
5	Seat	/t/	2011	2245	2085
6	Seat	/t/	2113	2141	2247
7	Seat	/t/	2233	2196	2465
8	Seat	/t/	2189	2163	2545
9	Seat	/t/	2256	2352	2322
10	Seat	/t/	2125	2044	2255
11	Seat	/t/	2145	2165	2045
12	Seat	/t/	2245	2174	2232
13	Seat	/t/	2211	2152	2041
14	Seat	/t/	2315	2045	2141
15	Seat	/t/	2215	2488	2061

F3 Frequencies for Seat of Pashto Speakers

Participant	Word	Sound	Production 1	Production 2	Production 3
1	Seed	/d/	2646	2774	2796
2	Seed	/d/	2212	2063	2112
3	Seed	/d/	2065	1852	2165
4	Seed	/d/	2145	2063	1045
5	Seed	/d/	2221	2445	1821
6	Seed	/d/	2065	2152	2265
7	Seed	/d/	2032	2089	1132
8	Seed	/d/	2211	2223	1511
9	Seed	/d/	2045	2280	1745
10	Seed	/d/	2285	2120	1685
11	Seed	/d/	2145	2289	2045
12	Seed	/d/	2315	2192	2296
13	Seed	/d/	2154	2456	1654
14	Seed	/d/	2156	2051	2456
15	Seed	/d/	2189	2147	1789

F3 Frequencies for Seed of Pashto Speakers

Appendix E

Frequency Results of Khowar Speakers

Participant	Word	Sound	Production 1	Production 2	Production 3
1	Either	/ð/	2674	2660	2661
2	Either	/ð/	2266	2082	2060
3	Either	/ð/	2576	2532	2475
4	Either	/ð/	2923	1983	1925
5	Either	/ð/	2696	2517	2594
6	Either	/ð/	2163	2556	2564
7	Either	/ð/	2525	2444	2526
8	Either	/ð/	2574	2534	2578
9	Either	/ð/	2770	2717	2575
10	Either	/ð/	2120	2418	2424
11	Either	/ð/	2210	2702	2715
12	Either	/ð/	2650	2528	2759
13	Either	/ð/	2515	2736	2717
14	Either	/ð/	2122	2522	2527
15	Either	/ð/	2674	2660	2661

F3 Frequencies for Either of Khowar Speakers

tion 3	Produc	Production 2	Production 1	Sound	Word	Participant
2552		2162	2174	/0/	Ether	1
2266		2580	2166	/0/	Ether	2
2776		2730	2776	/0/	Ether	3
2423		2486	2223	/0/	Ether	4
2596		2010	2696	/0/	Ether	5
2069		2452	2263	/0/	Ether	6
2425		2645	2620	/0/	Ether	7
2177		2430	2575	/0/	Ether	8
2775		2712	2770	/0/	Ether	9
2420		2410	2420	/0/	Ether	10
2510		2502	2510	/0/	Ether	11
2750		2723	2750	/0/	Ether	12
2415		2214	2215	/0/	Ether	13
2522		2423	2422	/0/	Ether	14
2552		2162	2174	/0/	Ether	15
		2430 2712 2410 2502 2723 2214 2423 2162	2575 2770 2420 2510 2750 2215 2422 2174	/0/ /0/ /0/ /0/ /0/ /0/ /0/	Ether Ether Ether Ether Ether Ether Ether Ether	8 9 10 11 12 13 14 15

F3	Freque	ncies	for	Ether	of	Khowar	S	beake	rs
							_		

Participant	Word	Sound	Production 1	Production 2	Production 3
1	Vine	/v/	2232	2262	2369
2	Vine	/v/	2280	2466	2180
3	Vine	/v/	2530	2576	2530
4	Vine	/v/	2186	2123	2182
5	Vine	/v/	2210	2096	2114
6	Vine	/v/	2552	2569	2558
7	Vine	/v/	2148	2225	2240
8	Vine	/v/	2537	2574	2531
9	Vine	/v/	2012	2170	2051
10	Vine	/v/	2110	2220	2210
11	Vine	/v/	2102	2510	2502
12	Vine	/v/	2323	2252	2523
13	Vine	/v/	2114	2413	2414
14	Vine	/v/	2223	2429	2123
15	Vine	/v/	2232	2262	2369

F3 Frequencies for Vine of Khowar Speakers

Participant	Word	Sound	Production 1	Production 2	Production 3
1	Wine	/w/	2519	2427	2217
2	Wine	/w/	2966	2980	2966
3	Wine	/w/	2576	2030	2176
4	Wine	/w/	2923	2986	2923
5	Wine	/w/	2796	3310	2796
6	Wine	/w/	2263	2057	2360
7	Wine	/w/	2025	2948	2924
8	Wine	/w/	2774	2537	2772
9	Wine	/w/	2670	3312	2879
10	Wine	/w/	2520	2710	1824
11	Wine	/w/	2910	2902	2916
12	Wine	/w/	2650	2523	2755
13	Wine	/w/	2315	2614	2317
14	Wine	/w/	2519	2427	2217
15	Wine	/w/	2966	2980	2966

F3 Frequencies for Wine of Khowar Speake	ers
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Participant	Word	Sound	Production 1	Production 2	Production 3
1	Seat	/t/	2670	2767	3125
2	Seat	/t/	2715	3015	2015
3	Seat	/t/	2812	2751	2245
4	Seat	/t/	2414	2945	2910
5	Seat	/t/	3011	2745	2285
6	Seat	/t/	3213	3241	2847
7	Seat	/t/	2733	2996	2765
8	Seat	/t/	3189	2763	2845
9	Seat	/t/	3056	2852	2922
10	Seat	/t/	2525	2944	2655
11	Seat	/t/	2745	2765	2945
12	Seat	/t/	2845	2874	2432
13	Seat	/t/	3211	3292	3241
14	Seat	/t/	2915	2645	2941
15	Seat	/t/	2915	2888	2761

F3 Frequencies for Seat of Khowar Speakers

Participant	Word	Sound	Production 1	Production 2	Production 3
1	Seed	/d/	3546	3274	3596
2	Seed	/d/	3712	3763	3712
3	Seed	/d/	3065	3052	2565
4	Seed	/d/	3745	3763	3745
5	Seed	/d/	2721	3245	3021
6	Seed	/d/	2865	3252	3565
7	Seed	/d/	2932	3089	3132
8	Seed	/d/	3711	3723	3011
9	Seed	/d/	2845	2980	3145
10	Seed	/d/	2985	2520	3485
11	Seed	/d/	3545	2989	3045
12	Seed	/d/	2515	3792	3796
13	Seed	/d/	3554	3356	3554
14	Seed	/d/	3356	2951	2456
15	Seed	/d/	3089	3347	2989

F3 Frequencies for Seed of Khowar Speakers

APPENDIX F

Khowar Phonemic Inventory	
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	Bila	abial	De	ntal/	Pos	t-	Post	-	Ve	elar	Uvular	Glottal
			alv	eolar	alve	eolar	alve	olar				
Plosive	Р	b	t	d	t	d			k	g	q	
	\mathbf{n}^{h}		ťh		ťh				$\mathbf{k}^{ ext{h}}$			
Nasal		m		Ν								
Affricate			ts	dî	tŝ	dî	tê	dz				
			tch		teh		tah					
Fricative	f		S	Z	ş	Z,	ç	Z	Х	Y		
Тар				ſ								
Approximant		υ						j				
Lateral				ł				1				

APPENDIX G

Pashto Phonemic Inventory

	Bilabial	Labio-	Dental	Alveolar Retroflex	x Pos	Velar	Glottal
		dental			Alveolar		
Plosive	рb		t d	T D		k g	h
Nasal	m			Ν			
Affricat e					ΤD		
Fricativ e	f			S Z		x	
Trill				R			
Flap							
Approxi m-ate	W				J		

APPENDIX H

Stimuli

Mother tongue		
Seat	vine	water
Vine	black	office
Peace	school	wine
Either	vine	seat
Seed	ether	either
Apple	seed	sweet
Wine	either	seed
Blue	mango	computer
Clear	seat	Wine
Ether	water	seed
Seat	rose	ether
Ether	either	water
Wine	choice	wine

APPENDIX I

Written Consent FACULTY OF LANGUAGES AND LITERATURE Lasbela University of Agriculture, Water and Marine Sciences, Uthal

Letter No. 0107/Sch/Eng/LU

November 2, 2016

TO WHOM IT MAY CONCERN

It is certified that Mr. Sami Ullah is a research scholar who is given permission to conduct interviews from the students. Faculty of Languages and Literature has no objection over it.

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