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**Using Minimal Pairs to improve Tertiary Students  
Problems in Consonant Sounds A case study of  
Level One Students at University of Holy  
Quran and Islamic Sciences (2021-2022)**

*A Thesis Submitted in Partial Fulfillment of the Requirements for PhD in  
Applied Linguistics (ELT)*



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# **DEDICATION**

To the souls of my parents and to my family

## **Acknowledgements**

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## **ABSTRACT**

The objectives of this research were to find out the use of the minimal pair technique in teaching pronunciation for the first-year students at Holy Quran University and Islamic Science. The effectiveness of the minimal pair technique in teaching pronunciation to first-year students at Holy Quran University and Islamic Science is examined. The researcher used both qualitative and quantitative methods for collecting the data. A questionnaire is used as a tool for collecting data about EFL teachers' attitudes towards using minimal pairs as an oriented approach in EFL classes. Moreover, the researcher selected 46 EFL learners to conduct the study. The participants were divided into two groups: a control group and an experimental group. The result of the data indicated that there was a significant difference in performance between students in the experimental class and the control class. The mean score of the test in the experimental class was 38.04, which was greater than the mean score in the control class (28.74). The result of this study implies that the use of the minimal pair technique was effective in improving the students' pronunciation ability in the first-year students at Holy Quran University and Islamic Science. Besides, significant improvement can be seen in the students' response. Moreover, the teachers' attitude towards using minimal pairs was positive. Therefore, the researcher suggests that the English language teacher should implement the minimal pair technique in teaching pronunciation to improve students' pronunciation ability.

## المستخلص

هدفت هذه الدراسة إلى معرفة مدى فعالية أسلوب الأزواج الحد الأدنى في تدريس النطق لدى طلاب السنة الأولى في جامعة القرآن الكريم والعلوم الإسلامية. وقد استخدم الباحث المنهجين النوعي والكمي لجمع البيانات. وقد استُخدمت استبانة كأداة لجمع البيانات حول اتجاهات معلمي اللغة الإنجليزية كلغة أجنبية نحو استخدام الأزواج الحد الأدنى كنهج موجه في فصول اللغة الإنجليزية كلغة أجنبية. علاوة على ذلك، اختار الباحث (46) طالبًا من متعلمي اللغة الإنجليزية كلغة أجنبية. وقد قُسم المشاركون إلى مجموعتين: مجموعة ضابطة ومجموعة تجريبية. وقد أشارت نتائج البيانات إلى وجود فروق ذات دلالة إحصائية بين نتائج الاختبار للطلاب في الفصل التجريبي وفصل الضابطة. كان متوسط درجات الاختبارات (38.04) في الفصل التجريبي أكبر من متوسط درجات الاختبارات في (28.74) في الفصل الضابط. وبناءً على نتيجة هذه الدراسة، فإن استخدام أسلوب الزوج الأدنى كان فعالاً لتحسين قدرة الطلاب على النطق في السنة الأولى بجامعة القرآن الكريم والعلوم الإسلامية. وإلى جانب ذلك، كان للمعلمين رأي أكثر إيجابية في استخدام أسلوب الزوج الأدنى. لذلك، يقترح الباحث أن يقوم مدرس اللغة الإنجليزية بتنفيذ أسلوب الزوج الأدنى في تدريس النطق لتحسين قدرة الطلاب على النطق.

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# CHAPTER ONE

## 1.0 . Background

Language is defined as “A system of communication consisting of sounds, words, and grammar, or context.” (Cambridge English dictionary). From the above definition we realize the importance of speech in communication, to become a well-rounded, one needs to be competent in each of the four language skills: listening, speaking, reading, and writing, but the capacity to express one’s thoughts, opinions, and feelings in a meaningful way that’s to say; the ability to speak fluently provides the speaker with several distinct advantages. The researcher assumes that many learners of English have problems with their English-speaking skills and struggle to become fluent; moreover, it is difficult for so many English language learners to understand the rapid speech of native speakers’ pronunciation. This research study investigates whether the Minimal Pairs’ strategy enhances the correct pronunciation of unfamiliar English Consonant sounds among Sudanese EFL learners in Level 1 at the University of the Holy Quran and Islamic Science. The term minimal Pair refers to two words that differ in only one sound, such as pin and bin, bet and bed (Roach 2000). The participants in this study are 46 native Arab students from Level 1 who have enrolled in an English language course. The course is compulsory for the completion of graduation. The researcher used a questionnaire and a test after the intervention to find out the exact problematic consonants.

### 1.1. Statement of the Problem.

According to the background of the study above, the problem of this research can be formulated as follows: How can the adoption of using ‘Minimal Pairs’ help improve the correct pronunciation of some unfamiliar English Consonant Sounds for Level-1, University of Holy Quran, and Islamic Science?

## **1.2. Objectives of the Study**

a. The objective of this study is to improve students' speaking fluency. There are also two other objectives in this research. General and specific objectives. The general objective is to determine the pronunciation problems of Level-1, University of the Holy Quran, and Islamic Science.

b. The specific objective is to find out how the use of the minimal pair strategy improves pronunciation of unfamiliar consonant sounds in English among Level 1 EFL classrooms of the University of the Holy Quran and Islamic Science. Moreover, to investigate teachers' attitudes towards using minimal pairs.

## **1.3. Questions of the Study**

The research intends to find answers to the following questions:

1. To what extent does using minimal pairs as an oriented approach help students improve their pronunciation?
2. How teachers improve a positive attitude towards using the Minimal Pairs' strategy to help students learn English?
3. To what extent do teachers use the Minimal Pairs' strategy to help students learn English?
4. How do learners' mother tongue affect understanding of minimal pairs?

## **1.4. Hypotheses of the Study**

The study attempts to prove the following hypotheses:

- a. Using the Minimal Pairs approach can improve students' pronunciation.
- b. Teachers have a positive attitude towards using Minimal Pairs strategy-based lessons.
- c. Teachers think that minimal pairs help students to communicate easily by enriching their vocabulary and understanding.

d. Learners' mother tongue negatively affects understanding of minimal pairs.

## **1.5. Significance of the Study**

The significance of the study lies in:

For teachers, the researcher hopes that the results of the study can be a reference for English teachers. It may also be a good guide for the teachers to teach their students properly, especially in teaching the English language in general, or in reading/speaking to reproduce correct English phonetic sounds, especially the unfamiliar consonant sounds.

On the other side of the students, the study is expected to help the students to know how to read/speak fluently, comprehend, and pronounce correctly. Furthermore, the study can give some useful knowledge and experiences in learning and improving English. It may offer some information to other researchers who are interested in researching similar topics to carry out further studies on speaking skills.

## **1.6. Methodology**

The study follows experimental and descriptive analytical approaches to find answers to the research questions and to test the hypotheses of the research using the following tools:

### **A. Test:**

The test has been given to two groups (controlled and experimental) of students to find out the problematic consonant sounds for EFL learners from the teachers' point of view after a course in minimal pairs.

B. A **questionnaire** is intended for the teachers to find out their awareness and knowledge about using minimal pairs.

## **1.7. Limits of the Study**

The study is limited to investigating the effect of using the ‘Minimal Pairs’ strategy in helping EFL students of EFL classrooms of the University of the Holy Quran and Islamic Science, Level-1, in the academic years (2020-2021).

## **1.8. Definitions of Key Terms**

Some operational definitions of key terms are used in this study. They are as follows:

### **1.8.1. Consonant sounds:**

Is speech sound is produced by partially or completely obstructing the flow of air through the vocal tract.

### **1.8.2. Minimal pairs:**

There are different definitions for the term Minimal pairs. It is defined by.

McGilvray (2005) provides a clear definition of a minimal pair in The Cambridge Companion to Chomsky: "A minimal pair is a pair of words that differ in a single phoneme.

### **1.8.3. Pronunciation:**

Lado (1964:70) defined “Pronunciation is the use of a sound system in speaking and listening.” Based on his statement, pronunciation is merely treated as the act that happens in speaking and listening. Hadi (2015) analyzed students’ difficulty in pronouncing English segmental phonemes, particularly in a pronunciation class context.

### **1.8.4. Minimal Pairs as an Oriented Approach:**

Blache et al., 1981; Weiner, 1981). Minimal Pairs targets specific phonological errors by focusing on contrasting pairs of words that differ by only one sound (e.g., "bat" vs. "pat"). This approach is based on the idea that a learner’s difficulty with sounds may be due to a misunderstanding of how different sounds can change word meaning.

### **1.8.5. EFL:**

Abbreviation for English as a foreign language.

# **CHAPTER TWO**

## **REVIEW OF LITERATURE**

### **2.0. Introduction**

The chapter discusses the literature related to using Minimal pairs in the classrooms and how this develops the students' language proficiency in general and their oral skills in particular, with special attention to the connected speech. It also discusses all the related theories of pronunciation and speaking skills, and the problems and solutions related to oral skills.

### **2.1 A Theoretical Framework**

#### **2.1.1 Definition of minimal pairs**

In linguistics, a minimal pair, as defined by Daniel Jonas,(1909) is pair of words that differ in only one phoneme (the smallest unit of sound that distinguishes meaning in a language) and have different meaning. The words in a minimal pair have completely different, often unrelated definitions. Minimal pairs are useful to linguists because they provide insight into how sound and meaning coexist in language.

McGilvray (2005) provides a clear definition of a minimal pair in *The Cambridge Companion to Chomsky*:

"A minimal pair is a pair of words that differ in a single phoneme. Minimal pairs are often used to show that two sounds contrast in a language. For example, we can demonstrate that [s] and [z] contrast in English by adducing minimal pairs such as sip and zip, or bus and buzz. Since the only difference in these words is the [s] vs. [z], we conclude that they belong to distinct phonemes. However, a similar test would show that [a:j] and [Aɹ] are distinct phonemes in English, since writer and rider appear to be minimal pairs distinguished in their second elements, not their fourth."

#### **2.1.2. Types of minimal pairs**

A minimal pair refers to two words that sound the same but have one different sound. This could be at the beginning of words like cap/tap, sun/done, and four/poor. At the

ends of words, the sound may be different, i.e., win/wing, dog/dot, map/mat. This could also be with vowels like men/man, bed/bad, knee/know.

### **2.1.2.1. True minimal pairs**

A minimal pair is a set of words that mean two different things but differ by a single speech sound. If a unit of sound changes the meaning of a word, it is called a phoneme in linguistics. For example, bat and bad are similar-sounding words that differ by one consonant sound at the end (/t/ vs /d/).

### **2.1.2.2. Near Minimal Pairs**

Gordon (2019) explains that true minimal pairs aren't too common, but near-minimal pairs are easy to find. Sometimes it is not possible to find perfect minimal pairs differentiated by only a single sound for every phoneme. Sometimes it is necessary to settle for near minimal pairs ... Pleasure and leather qualify as a near minimal pair, since the sounds immediately adjacent to the target sounds, [ð] and [ʒ], are the same in both words: [ɛ] before the target sound and [ɹ] after it. Like minimal pairs, near minimal pairs are usually sufficient to demonstrate that two sounds are separate phonemes in a language. If one desires to make progress in the analysis in such a methodological situation, a possible solution is to loosen the requirements. The device frequently invoked is the near-minimal pair. A German example of a near minimal pair opposing [ç] (the other allophone of /ç/) to [h] is Chinin 'quinine' - hinan 'upwards'. As may be seen, the two words differ not only in the sound in question, but also in the vowel of the second syllable.

A near minimal pair does not demonstrate that only the sound in question is sufficient to distinguish a meaning and therefore must be distinctive. The other difference occurring in the near minimal pair is equally responsible for the difference in meaning. In such a situation, it is important that the phonetic difference at stake cannot possibly be conditioned by the other difference in its context. For the example in question, this means that the alternation of [ç] ~ [h] in Chinin vs. hinan cannot be conditioned by the contrast between /i:/ and /a/ in the following syllable. If this were the case, then [ç] ~ [h] would be (conditioned) allophones of one phoneme, and the argument based on a

near minimal pair would be spurious. The exact opposite of what one wanted to demonstrate would be shown.

In the case at hand, such a conditioning can indeed be excluded. No phonological rule is known by which /i:/ vs. /a/ would condition an alternation of [ç] ~ [h] in the onset of the preceding syllable. What is more, vowels do not, in general, condition the consonantal allophone in the onset of the preceding syllable. Thus, a conditioned allophone can safely be excluded for this near minimal pair; and /ç/ ~ /h/ come out as German phonemes, even though their contrast carries an extremely low functional load.

An example of a phonetic difference for which there is not a single minimal pair in the language is presented by the pair [ð] vs. [θ] in English. What we have are exclusively near minimal pairs like that - thatch, these - thesis, this - thistle, thou - thousand, and thy - thymus (the enumeration is complete). In comparing these pairs, one notes two kinds of differences between their members:

- a. The member of the pair containing [θ] is longer by a few phonemes than the member containing [ð].
- b. The member of the pair containing [ð] is a monomorphemic and monosyllabic grammatical formative, while the member containing [θ] is a lexical word.

While no phonological mechanism of English is known that would condition an alternation of these two phones at the onset of a word simply because one is longer than the other, there might well be a condition restricting initial [ð] to grammatical formatives. Thus, the decision whether these two phones are considered distinct phonemes of English depends on whether one accepts such a morphological condition as [ð] for a complementary distribution of phones.

### **2.1.2.3 Optimal minimal pair**

Christian Lehmann said, the condition on minimal pairs can also be straightened. An optimal minimal pair is one in which the two significant units compared differ only in the value of one phonological feature. For instance, pet vs. bet differ only in the voicing of the initial bilabial stop; all their other features are the same. This is, thus, an

optimal minimal pair. On the other hand, pet vs. let is a minimal pair, too, but a suboptimal one. Such a pair can prove that [p] and [l] must represent distinct phonemes. But it does not exclude the possibility that [p] is a conditioned variant of [b]. This is only excluded by the optimal minimal pair adduced.

The net balance of the phonological contrasts of a language is best demonstrated and illustrated by optimal minimal pairs. Failing these, minimal pairs in general mostly do the service. In the absence of minimal pairs, near minimal pairs can be resorted to. However, their controlled use presupposes a degree of knowledge of the phonological system, which is generally beyond the endeavor of discovering the phoneme system of the language.

### **2.1.3. Pronunciation**

Pronunciation is an essential component not only of learning a language but also of using that language. According to Lado (1964:70), “Pronunciation is the use of a sound system in speaking and listening.” Based on his statement, pronunciation is merely treated as the act that happens in speaking and listening. Hadi (2015) analyzed students’ difficulty in pronouncing English segmental phonemes, particularly in a pronunciation class context. Besides that, Dalton (1998:3) stated that pronunciation is the production of significant sound in two senses. First, sound is significant because it is used as part of the code of a particular language. Second, sound is significant because it is used to achieve meaning in contexts of use. So, the sound is very important in pronunciation because the sound is used as the code of language and contains a specific meaning. Pronunciation is not easy to define by linguists. They have various definitions, and the aim of pronunciation is similar. As Kreidler (2004) viewed, pronunciation is a term that is correlated with speech and language. He said that speech is an activity that is carried on in numerous events; language is knowledge, a code which is known and shared by people who use their knowledge for transmitting and interpreting messages in the events. It means that when someone delivers the message to the listener by his/her voice, then its message could be received by the listener clearly and understood, but the listener sometimes does not understand and

even seems confused about what the speaker said. To catch those sounds, the hearer absolutely has a sense to differentiate the word that the speaker said by his/her knowledge or code. That is why the language is defined as knowledge or code. According to Brown (1980:70), “Teaching means showing or helping someone to learn how to do something, giving instruction, guiding the knowledge, causing to know or to understand.” It means that teaching aims to make the students know about the material of the lesson and make them understand it. Teaching pronunciation is very important because pronunciation can influence communication. One of the goals of teaching pronunciation is to help students to pronounce English accurately to be understood by the listener. This means that their pronunciation should be at least adequate for that purpose.

Teaching pronunciation involves a variety of challenges, and the study of Pronunciation became an important aspect in teaching English as a foreign language. The students may face difficulty in the learning process, which is crucial to be described and analyzed. Harmer (1994) said, “Pronunciation teaching not only makes the students aware of different sounds and sound features, but also improves their speaking immeasurably. Concentrating on sounds, showing where they are made in the mouth, making students aware of words, should be stressed-all these. Things give them extra information about spoken English and help them achieve the goal of improved comprehension and intelligibility.” Based on Harmer’s statement, the goal of teaching pronunciation is to help students improve their ability to speak. Students are not only introduced to the sound system of English, but they are also given other information or aspects in pronunciation that related to the improvement of their speaking ability and that can help their communication to be understood.

Some students have the most difficulty in differentiating and pronouncing vowel sounds in words meet /mi:t/ and mitt /mit/ and least /li: st/ and list /list/. In addition, the students also have difficulty in differentiating and pronouncing consonant sounds in words like/larv/ and life /laɪf/, and words bath /baθ/ and bathe /bað/. They should have mastered this basic pronunciation in the first year. This is the reason why the

The researcher is interested in using the appropriate technique that can help the students improve their English pronunciation in similar sounds of words, with the hope that the technique can solve the problem.

There are many problems in teaching English pronunciation, especially with the similar sounds of words. Similar sounds of words are words that sound the same but are spelled differently and have different meanings. The only thing that the students can learn is the differences in spelling. The most trouble they caused is that their meanings are closely related. They both have something to do with influence. In their most common uses, affect is a verb and effect is a noun, but they have more obscure uses where it is reversed, and it causes additional confusion.

Avery and Ehrlich (2009) noticed some several factors to be considered in the teaching pronunciation in the EFL classroom that may influence the students' encouraging in pronouncing the English words or sentences, there are: (1) Biological factors, the influence of the students' mother tongue in acquiring native-like pronunciation in a second language. (2) Socio-cultural factors. These factors strongly influenced the students in different cultures, which also influence their achievement in transferring a sound native-like pronunciation in LT.

(3) Personality factors: the students who are outgoing, confident, and willing to take risks probably have more opportunities to practice their pronunciation inside and outside the classroom. These factors affect the acquisition of the sound system of a foreign and second language. Based on the explanation of the three factors above, biological factors are very influential in teaching pronunciation because it is related to their organ of speech, especially the tongue. Besides that, Avery and Ehrlich (2009) also said that the biological factor is stated as the influence of the student's mother tongue. So, teaching pronunciation is a biological factor that relates to the students' way of pronouncing words, and that factors affect the students' effort in developing their target language, and the personality factor in line with the students' desire to expand and practice their target language in daily life. Many techniques could be done by the language learner to improve their English pronunciation. One of the techniques

recommended by some linguists is a minimal pairs drill. According to Avery and Ehrlich (2009), “Minimal pair refers to pairs of words which have different meanings, and which differ in pronunciation based on one sound only.” It means that a minimal pair is viewed as a technique to distinguish English sounds in words that have quite similar sounds but indeed have different meanings. Besides that, Michael Ashby and John Maidment (2008) argued, “To prove that a phonetic distinction is contrastive in a particular language, it is necessary to find a pair of words in the language that differ in only one segment.” It means that the minimal pair is one of the appropriate techniques to prove that the single phonetic sound in a pair of words is contrasted. There are two kinds of sample teaching materials of minimal pairs, it demonstrated in word drills and sentence drills. In the word drills, the teacher drills the students by contrasting two different words, but the pronunciation seems similar, but the sound of the words is different by one sound. Then, in the sentence drills, there are two kinds of materials that can be presented in teaching learning activity, they are syntagmatic drills and paradigmatic drills. Syntagmatic drills contrast two words within a sentence, and paradigmatic drills contrast two words across two sentences.

Minimal pairs drill hopefully can help students in differentiating and pronouncing words that have similar sounds and practicing their accuracy and fluency in reading aloud, as well as their oral ability. The minimal pairs drill is considered to help students overcome their difficulty in the pronunciation of English sounds.

### **2.1.3.1. Teaching English pronunciation**

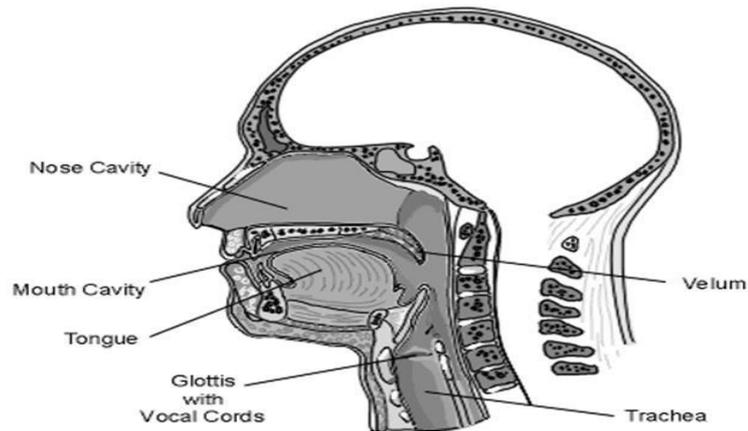
Teaching English pronunciation means teaching English sounds through phonemic symbols, which represent the sounds of the English language. Using phonemic symbols is a valuable tool to improve students’ pronunciation. So, in this case, English letters are not a suitable tool to teach pronunciation because some letters have more than one sound, and sometimes letters are not pronounced at all. Some sounds represented by different letters, some syllables indicated by the spelling, are not pronounced at all. In articulator phonetics, a Consonant is a speech sound that is articulated with complete or partial closure of the vocal tract. Examples p pronounced

with the lips, t pronounced with the front of the tongue, h pronounced with the back of the tongue, h pronounced in the throat, and f and s, pronounced by forcing air through a narrow channel (fricatives); and m and n, which have air flowing through the nose (nasals). Contrasting with consonants are vowels.

Since the number of consonants in the world's languages is marginally greater than the number of consonant letters in any one alphabet, linguists have devised systems such as the International Phonetic Alphabet. (IPA) to assign a unique symbol to each attested consonant. The Latin alphabet, which is used to write English, has fewer consonant letters than English has consonant sounds, so digraphs like “Ch”, sh, “th”, and „ZH” are used to extend the alphabet, and some letters and digraphs represent more than one consonant. For example, the sound spelled “th” in “this” is a different consonant than the “th” sound in “thistle”. (In the IPA, they are transcribed as (ð) and (θ) respectively.

#### **2.1.4. The difference between consonants and vowels**

The words vowels and consonants are very familiar, but when studying the sound of speech scientifically, we found that it is easy to define what they mean. The most common view is that vowels are sounds in which there is no obstruction to the flow of air as it passes from the larynx to the lips. Most people would have no doubt that sound like /s/ and |d| should be. Called consonants, but some English sounds at the beginning of the words. 'hay' and 'way' do not really obstruct the flow of the air more than some vowels. We can say that the difference between the vowels and the consonants is a difference in the way that they are produced. It is possible to establish two distinct groups of sounds (vowels and consonants) consider English words beginning with sound /h/ we found that most of the sound flow the sound /h/ in the word /hen/ we class /h/ as consonant and /e/ as the vowels, in this case we are looking at different context and position in which sounds can occur.



*Figure 2.1 Places of Articulation*

The study of the distribution of sound at the beginning of the word in English. The English word is divided into two groups: consonants and vowels, but the most important difference between vowels and consonants is not the way they are made, but their different distribution. Of course, the distribution of vowels and consonants is different in each language. There are many theoretical problems connected with vowels - consonants.

Distinction.

1. The matter to consider is the shape and position of the tongue; we describe two things:

- a. The vertical distance between the upper surface of the tongue and
- b. And the palate.

2. The part of the tongue between the front and back.

In articulatory phonetics, a consonant is a speech sound that is articulatory with complete or partial closure of the vocal tract. Examples are, pronounced with the lips; pronounced with the front of the tongue; pronounced with the back of the tongue; pronounced with the throat; and pronounced by forcing air through a narrow channel (fricative). The consonants (W) and (Y) are consonants, but sometimes they are vowels in the word (myth); the letter (y) is pronounced (i). The most sonorous part of the syllable, called the syllabic peak, or nucleus, is typically a vowel, while the less sonorous margins (called the onset and coda) are typically consonant. However, the distinction between the consonant and vowel does not always go on this way. The

most difference between the consonant and the vowel is the manner of articulation, such as nasal (nose), stop (complete obstruction of air), or approximant. The place of articulation is where in the vocal tract the obstruction of the consonant occurs. The phonation of the consonant is how the vocal cords vibrate during the articulation. By comparing consonants and vowels, we must investigate the place of the produced sound and notice that the position of the organ of speech differs when we utter vowel and consonant letters.

### **2.1.5. Features of Spoken Consonants**

According to Brown, G. and G. Yule (1983), Geddes (1988). Debska (1983). Thornbury (1999), Brown (1994 b), spoken English has special features.

Idiosyncrasies that it different from the written English and which in turn make listening somewhat difficult to acquire. Each spoken consonant can be distinguished by several phonetic features: The manner of articulation is the method that the consonant is articulated, such as nasal (through the nose), stop (complete obstruction of air), or approximant (vowel-like).

### **2.1.6. Problematic consonants sound**

The unnatural consonant sound production is felt as problematic consonant sounds. The problematic sounds are [v], [θ], [p], [z], [tʃ], [ʃ], [t], [dʒ], [ʒ], [l], and [w]. Consonants are formed by interrupting, restricting, or diverting the airflow in a variety of ways (Kelly, 2000, P.47). There are many difficulties in English pronunciation face students at Faculty of Education, from the fact that the sound systems of Arabic and English are different in number, as well as in place and manner of articulation some English consonants do not exist in the Arabic sound System like /p/, /v/, /ŋ/. For Nation and Newton (2009) argue, “when some teachers and students complain about difficulties in speaking, they are often talking about pronunciation” (P.75). For Watson (2002) the following consonants /p/, /b/, /f/, /v/, /ʃ/, /tʃ/, /dʒ/, seem to be problematic for students learning English. Arabic is a consonant-heavy language compared to English. Even though Arabic is a consonant-heavy language, English uses many more consonant clusters to form words (Majeed, 1999). In English, the essential factors or

features to be included when describing English consonants are voicing, point of articulation, and manner of articulation. English consonants are, for example, different in number as well as in place and manner of articulation.

### **2.1.7. Voice quality**

Voice quality refers to the habitual settings of the vocal apparatus (tongue, lips, larynx, vocal cords, etc.), which give an overall coloring to the voice. They characterize the speaker on an individual, social, geographical, or native language basis. Jenner (1992) describes the typical voice quality of Southern British English speakers: Neutral or slightly lowered laryngeal position Low laryngeal tension Neutral and relaxed subpharyngeal tract Active tongue tip Lax jaw Slight lip rounding and spreading, but without tension He further claims that assuming the correct typical voice quality for a foreign language ('getting into gear' as Honikman (1964) calls it) helps in the articulation of the individual vowels and consonants of that language. In other words, an inability to distinguish between [θ] and /θ/ may reflect a more deep-seated problem with the overall setting of the tongue. It may therefore also affect other consonant sounds in perhaps less obvious ways. He offers several exercises of a Suggestopedia type, aimed at improving voice quality settings for English. Type, aimed at improving voice quality settings for English.

## **2.2. The Previous Studies**

Over the past two decades, many studies have dealt with pronunciation problems and minimal pairs. Influenced by this trend, some Sudanese researchers tried to probe this issue from different sides. In this section, I will briefly mention some of the recent studies that were done in Sudan and worldwide. For each study, the purpose, the methodologies, and the findings are highlighted. It is divided into two parts: local and international.

### **2.2.1 Local Studies**

#### **2.2.1.1. Hassan (2014)**

This study which entitled “Pronunciation Problems: A Case Study of English Language Students at Sudan University of Science and Technology,” aims to

investigate the problems in English pronunciation experienced by learners whose first language is Sudanese Spoken Arabic. In other words, to find the problematic sounds and the factors that cause these problems. Then find some techniques that help the Sudanese Students of English improve their pronunciation. The subjects for the study were fifty students from the University of Sudan of Science and Technology (SUST), and thirty university teachers of English language from the same university. The instruments used for collecting data were observation, recordings, and a structured questionnaire. The data collected were analyzed both statistically and descriptively. The findings of the study revealed that Sudanese Students of English whose language background is Sudanese Spoken Arabic, had problems with the pronunciation of English vowels that have more than one way of pronunciation in addition to the consonant sound contrasts e.g., /z/ and /ð/, /s/ and /θ/, /b/ and /p/, /f/ and /tʃ/. Based on the findings, the study concluded that factors such as Interference, the differences in the sound system in the two languages, inconsistency of English sounds and spelling militate against Sudanese Students ' English competence in pronunciation.

**2.2.1.2. Mugadem & Dona (2015)** This study aimed to know the extent of Sudan University English language students. Ability to produce different tones and tonic syllables in the intonation of English. Language. Moreover, it seeks to find out if this knowledge could be improved through. Teaching students different tones and tonic syllables. The objectives of this study are to determine to what extent students can produce various tones and if they can apply the tonic syllable correctly. Also, it aimed to show whether there are any statistically significant differences before studying intonation and after studying it. To achieve this, the researcher selected a sample of 92 third-year English language students from the English Department, College of Languages at the Sudan University of Science and Technology to be the target of the study. Then a pre-test was conducted to determine the students' standard before studying intonation then a post-test was also conducted. The results showed that students' performance has improved regarding the three questions; it is also observed that they have improved more. In the level of the tonic syllable. This reveals the fact

that the students acquired new knowledge in understanding the idea of content words and structure words, and strived to apply this knowledge while speaking.

**2.2.1.3. El-haj (2017)** This research tries to shed light on the Difficulties that face Sudanese Students regarding the Pronunciation of Weak and Strong Syllables. The data collection took place at the English department, Faculty of Arts-Alneelain. University. The problem of the research is projected by Sudanese students. Those who are learning English as a foreign language face difficulties in learning how to pronounce weak and strong syllables and where these are. Syllables occur in English. The research adopted the descriptive method.

The study aimed to investigate students' awareness of English syllables.

Structure. And to identify the problematic areas in learning English syllables by Sudanese students. The research hypothesized that students are not able to identify English syllables and that they are not able to differentiate them. Between short, long, and diphthongs while pronouncing words. And students cannot differentiate between strong and weak syllables while speaking. English. The main results show that most students have shown. Poor performance in the basics of pronouncing functional words (the weak and strong forms). The main recommendations are that teachers of English language at the universities should raise students' awareness about the use of strong and weak forms, also they should devote more of their time. For training students in producing strong and weak syllables, by giving them exercises on pronunciation practice.

**2.2.1.4. Hamid (2020)** This study aims at investigating the difficulties encountered by Sudanese EFL basic government schools' pupils in articulating some consonant sounds participants of the study are forty pupils of the 6th level at Al Izba Basic School for Girls-Al-Amlak-Khartoum North, and twenty teachers of English language from the same school and others in same area. The study pursues descriptive analytical methods. A pronunciation diagnostic test and questionnaire are used as tools to obtain data from pupils and teachers. The results show that the majority of Sudanese EFL basic school pupils mispronounce the consonant sounds that do not exist in Sudanese

spoken Arabic. Based on the findings, the study revealed that some factors hurt pronunciation, such as the sound systems differences between English and Arabic, inadequate training in phonetics and phonology, in addition to the irrelevance of the syllabus to the Sudanese pupils 'needs. Accordingly, the study concludes with suggested recommendations that can contribute to rectifying such a situation. The study ends with some suggestions for further studies.

**2.2.1.5. Abdallah. (2020)** The study is about the factors influencing Sudanese university students' oral communication skills. The main aim of the study is to find out the Sudanese university students' weaknesses and problematic areas that hinder their oral communication skills in English. The study applied the descriptive and analytical methods to achieve the desired goals. The sample of the study includes undergraduate students and university instructors from Bakht-er-Ruda University. The data gathering instruments, namely, the questionnaire and interview, were used to collect the data for the study. However, the data were analyzed using the Statistical Package for Social Sciences (SPSS) program. The findings of the study revealed that factors contributing to reducing students' oral communication skills were students' personality factors, Limited access to the language lab, and syllabi used provided very minimal exposure to the use of language. Based on the findings, the study recommends that more emphasis be placed on the psychological needs of students to help them develop their oral communication skills. In addition to that, instructors should encourage students to be engaged in a competitive language atmosphere through language labs and language societies. Students should be exposed to a variety of language contexts.

## **2.2.2. International Studies**

**2.2.2.1. Trong (2010)** conducted a study entitled "Teaching English Discrete Sounds through Minimal Pairs." This study attempted to minimal pairs bear great benefits in pronunciation teaching and learning, which have long been of fruitful use. However, the full use of these pairs has not yet been made in the setting of Hung Vuong University. This paper sought to examine possible problems facing English non-majored students at Hung Vuong University in recognizing and producing English

discrete sounds, as well as what way and to what extent minimal pairs facilitate the teaching and learning of English discrete sounds. The data were collected both quantitatively and qualitatively from various sources: questionnaires for and interviews with both the teacher and student subjects, tests of students' sound recognition, regular real-time observations, audio recordings of students' sound productions, and spectrogram-based analyses of these recordings. The findings revealed that virtually all of the student subjects face the six pronunciation problems: omitting the word-final consonant, adding the word-final /s/ to English words not ending in /s/, adding the schwa /ə/ in the middle of a consonant cluster, mispronouncing strange sounds to Vietnamese people, e.g. /t/ and /d/, failing to differentiate between long and short vowels, and failing to differentiate between voiced and voiceless consonants. Both the student and the teacher subjects also show high appreciation of the pedagogical effectiveness of minimal pairs when employed either as a teaching or learning tool within the extent to which English discrete sounds are concerned.

**2.2.2.2. Barlow (2018)** conducted a study entitled “Minimal Pair Approaches to Phonological Remediation”. This article considers linguistic approaches to phonological remediation that emphasize the role of the phoneme in language. We discuss the structure and function of the phoneme by outlining procedures for determining contrastive properties of sound systems through evaluation of minimal word pairs. We then illustrate how these may be applied to a case study of a child with phonological delay. The relative effectiveness of treatment approaches that facilitate phonemic acquisition by contrasting pairs of sounds in minimal pairs is described. A hierarchy of minimal pair treatment efficacy emerges, as based on the number of new sounds, the number of featural differences, and the type of featural differences being introduced. These variables are further applied to the case study, yielding a range of possible treatment recommendations that are predicted to vary in their effectiveness.

**2.2.2.3 Fadhilah Rahman (2018)** conducted a research paper " The Use of Minimal Pair Technique in Teaching Pronunciation at the Second Year Students of Sman 4

Bantimurung.". The objectives of this research were to find out the use of the minimal pair technique in teaching pronunciation to the second-year students of SMAN 4 Bantimurung, and whether the minimal pair technique is effective in teaching pronunciation or not at the second-year students of SMAN 4 Bantimurung. This researcher applied a quasi-experimental design with a non-equivalent control group design. The sample was taken by using purposive sampling, that divided into two groups were 25 students in the experimental class and 25 students in the control class. The result of the data indicated that there was a significant difference between students' post-test scores in the experimental class and the control class. The mean score of post-tests (2.96) in the experimental class was greater than the mean score of post-tests (2.2) in the control class, and the standard deviation of the post-test (0.83) in experimental class was greater than the standard deviation of the post-test (0.4) in control class and the value of t-test (5.84) was higher than t-Table (2.021). The study implies that the use of the minimal pair technique was effective in improving the students' pronunciation ability. The researchers suggest that the English teacher should implement the minimal pair technique in teaching pronunciation to improve students' pronunciation ability.

**2.2.2.4. Hasanah (2019)** conducted a study entitled "Pronunciation Error in Minimal-Pair Words Committed by Junior High School Students in Waru Sidoarjo ". This research focuses on pronunciation errors committed by Junior High School students in Waru Sidoarjo. They are in eighth grade at State Junior High School in Waru Sidoarjo. The data are from four State Junior High Schools in Waru Sidoarjo, consisting of 15 students from each Junior High School. Furthermore, all of the students who participate are 60 students. To analyze the data, the writer chose minimal pair words which are focused on thirteen English consonant sounds: /ð/, /t/, /d/, /s/, /z/, /f/, /v/, /k/, /g/, /ʃ/, /tʃ/, /dʒ/, and /h/, then nine vowel sounds, there are: /i:/, /ɪ/, /e/, /o/, /ɔ:/, /eɪ/, /i:/, /əʊ/, and /æ/. This research aims to describe pronunciation errors and correct pronunciation in English consonants and vowels by the participants. Then, the writer identifies who makes errors in pronouncing English consonants and vowels. Finally, the writer

analyzes how many of them made errors in pronunciation and describes the situation in which a pronunciation error might happen. The writer uses a descriptive-quantitative design for this research. For collecting the data, firstly, the writer recorded the pronunciation of Junior High School students in Waru Sidoarjo when they read the list of words from the researcher individually. Then, the writer transcribes their pronunciation guided by Pratt software and the Cambridge Advanced Learner's Dictionary – 3rd edition as a guide for phonetic transcription. The results of this research show that the most pronounced errors made by Junior High School students in Waru Sidoarjo are English consonant sounds /tʃ/ - /dʒ/. The students who made pronunciation errors were 58 students from 60 participants, which is 96%. Based on the data sources of pronunciation error committed by Junior High School students in Waru Sidoarjo, it shows the students who get the most pronunciation error in minimal pair words are from Junior High School 1 Waru, while Junior High School 4 Waru students are the least from the other schools which made pronunciations error in minimal pair words. That might be due to pronunciation errors there are lack of learning English, and students' daily activities. The influence of learning English pronunciation by applying English in daily life includes listening to English music, watching English movies, and playing online games with English instructions. Students' interest in learning English included where and with whom they learn English.

**2.2.2.5. Sanjaya (2019).** Conducted a study " The Ability of Students in Understanding Minimal Pair". The main objective of this study was to describe how the students' ability in understanding minimal pairs and the factors that influenced the students' ability in understanding minimal pairs at all the students of the English Department at Universitas Baturaja. The descriptive method was used in this research. The sample was taken by using proportional random sampling. The population of this study was all the all-semester students of the English Department at Universitas Baturaja in the academic year 2018/2019. The sample was 51 students, and try try-out was 20 students from the non-sample. In collecting the data, this study used a test consisting of a listening and pronunciation test and a questionnaire. The results of the

listening test were average. Ten minimal pairs were focused on the initial consonant sound. Then, the results of the pronunciation test were average. Eleven minimal pairs were focused on the initial consonant sound. So, the total average of students' test score was 68.26. It was concluded that the students were able or have an ability to understand minimal pairs.

# **CHAPTER THREE**

## **METHODOLOGY AND PROCEDURES**

### **3.0. Introduction**

This chapter describes and explains the methodology followed, which includes the methods of the selection of participants, materials, and instruments of research. In addition to the procedures that were used for data collection and analysis. The researcher adopts analytical descriptive methods to collect the information and analyze the data received from the participants to find the correlation between the variables being studied. For data analysis the researcher used Statistical Package for the Social Sciences program (SPSS) version 26 to analyze the result of the test and the questionnaire.

### **3.1. Population of the Study**

The research populations are chosen from University of the Holy Quran and Islamic Science, Level-1 in the academic years (2020-2021), English language department. The population consists of both students and teachers. The teachers are English language teachers with different qualifications.

#### **3.1.1 Samples of the study**

##### **3.1.1.1 Students**

There are forty-six students (divided into two equal groups, experimental and controlled) who are enrolled in the second term Faculty of Arts and majoring in English language. All of them are descended from Sudanese origin, with the same Islamic and Arabic as their 1<sup>st</sup> language.

##### **3.1.1.2 Teachers**

There are (41) teachers from the English department, (31) are PhD and (10) are MA holders (Table 3.1) from different nationalities and various experiences Table 3.2).

Table (3.1)

**Teachers' qualifications**

| <b>Qualifications</b> | <b>Frequency</b> | <b>Percent</b> |
|-----------------------|------------------|----------------|
| Master                | 10               | 24.4%          |
| PhD                   | 31               | 75.6%          |
| Total                 | 41               | 100%           |

Table (3.2)

**Teaching experience**

| <b>Teaching Experience</b> | <b>Frequency</b> | <b>Percentage</b> |
|----------------------------|------------------|-------------------|
| less than 5 yrs            | 0                | 0%                |
| 5 to 10 yrs                | 7                | 17.1%             |
| 11 to 15 yrs               | 8                | 19.5%             |
| 16to 20 yrs                | 14               | 34.1%             |
| more than 20 yrs           | 12               | 29.3%             |
| <b>Total</b>               | <b>41</b>        | <b>100%</b>       |

**3.2. Tools for Collecting Data**

The selected tools for this study are a pronunciation test for university students and a questionnaire for English language teachers. The data for this study were collected during the academic year (2020-2021).

**3.2.1. The test**

The test was prepared by the researcher to examine the students' ability to differentiate between minimal pairs. The test was distributed to 23 students of the English language; it was made up of four parts. The questions were matching, give the phonetic symbol, choose, listen, and circle the word you hear. (Appendix A)

The course was designed by the researcher to help students master reading minimal pairs.

### 3.2.1.1. The reliability of the test

Table (3-3)

#### Standard error for accuracy and consistency of the test.

| Descriptives                     |                   |            |
|----------------------------------|-------------------|------------|
| Statistic                        |                   | Std. Error |
| Mean                             | 33.39             | 1.293      |
| 95% Confidence Interval for Mean | Lower Bound 30.79 |            |
|                                  | Upper Bound 35.99 |            |
| 5% Trimmed Mean                  | 33.59             |            |
| Median                           | 33.00             |            |
| Variance                         | 76.866            |            |
| Std. Deviation                   | 8.767             |            |
| Minimum                          | 14                |            |
| Maximum                          | 49                |            |
| Range                            | 35                |            |
| Interquartile Range              | 12                |            |
| Skewness                         | -.195             |            |
| Kurtosis                         | -.431             |            |

The table shows the reliability of the test based on the small standard error (1.293) we can trust the results of the exam and students` scores. This indicates that the exam is reliable and stable and can be used to accurately measure the students` level.

### 3.2.2. The questionnaire

The questionnaire was composed of 10 items (Appendix B), distributed to English language teachers to identify and measure the influence of minimal pairs on learners` perception. It includes one category; one consists of ten items representing three hypotheses of the research.

The participants are asked to answer according to the following options (agree, strongly agree, neutral, disagree, and strongly disagree).

### 3.2.2.1. The validity of the questionnaire

To guarantee the validity of the questionnaire, it was submitted to a panel comprising one professor and three associate professors all specialized in English language were kindly asked to validate the questionnaire for this study. To show to what extent the items of the questionnaire were suitable in terms of instructions, the types of items and their suitability for the subjects, the style and the language used in the tools, and the illegibility of the items. The Adjustments and corrections which have been recommended by the jury were applied in the final version of the questionnaire.

### 3.2.2.2. The reliability of the questionnaire

The researcher used the odd-even reliability technique (split-half), where it was administered to a pilot sample, after then the study sample. The pilot sample was 10 teachers from the same population.

Table 3.4

**Value of Reliability Level in the Split-half method**

| No. of cases | No. of items | Correlation between forms | Split-half coefficient value |
|--------------|--------------|---------------------------|------------------------------|
| 10           | 10           | .866                      | .99                          |

The data in Table (3.4) indicates that the value of reliability is reaching up to 0.9) which means that the questionnaire is reliable and consistent.

# CHAPTER FOUR

## DATA ANALYSIS AND DISCUSSION

### 4.0. Introduction

This chapter is primarily concerned with describing in detail the results of the data collected by the questionnaire and the test, including the following:

- 1- Results concerning the analysis of the questionnaire, 2- Results concerning the test,
- 3- Results concerning the research hypotheses.

### 4.1. The Analysis of the Questionnaire

#### 4.1.1 Qualifications and experience

Table 4.1

| <b>Experience</b> | <b>Bachelor</b> | <b>MA</b> | <b>PhD</b> |
|-------------------|-----------------|-----------|------------|
| Less than 5 yrs.  | 0               | 0         | 0          |
| 5 to 10 yrs.      | 0               | 2         | 5          |
| 11 to 15 yrs.     | 0               | 3         | 5          |
| 16 to 20 yrs.     | 0               | 3         | 11         |
| More than 20 yrs. | 0               | 2         | 10         |
| <b>Total</b>      | 0               | 10        | 31         |

Table (4.1) illustrates that 10 of the 41 subjects of the study, or 24.4%, were MA holders, and 31 of the study subjects, or 75.6%, were PhD holders. Their experience ranges from 5 to more than 20 years. The table shows that 21 of the total subjects (51%) have an experience range between 16 to more than 20 years.

Table 4.2

#### Using minimal pairs as an oriented method is very effective in ELT.

| <b>Response</b>   | <b>Frequency</b> | <b>Percent</b> |
|-------------------|------------------|----------------|
| Strongly agree    | 16               | 39%            |
| Agree             | 22               | 53.7%          |
| Neutral           | 3                | 7.3%           |
| Disagree          | 0                | 0%             |
| Strongly disagree | 0                | 0%             |
| <b>Total</b>      | 41               | 100%           |

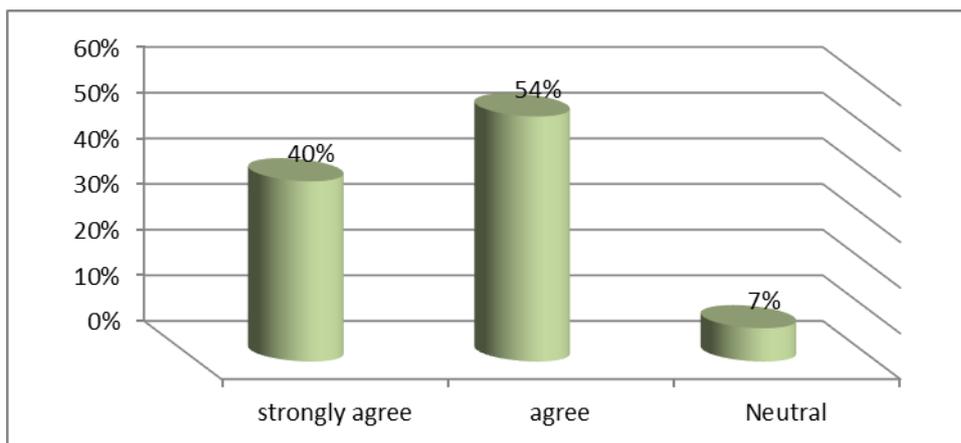


Fig 4.1

*Using minimal pairs as an oriented method is very effective in ELT.*

Table (4.2) and fig. (4.1) show that most of the participants supported that using minimal pairs as an oriented method is very effective in ELT (Both strongly agree and agree more than 94%)

Table 4.3

**Using minimal pairs as an oriented approach improves students' pronunciation.**

| Response          | Frequency | Percent |
|-------------------|-----------|---------|
| Strongly agree    | 11        | 26.8%   |
| Agree             | 22        | 53.7%   |
| Neutral           | 2         | 4.9%    |
| Disagree          | 0         | 0%      |
| Strongly disagree | 6         | 14.6%   |
| Total             | 41        | 100%    |

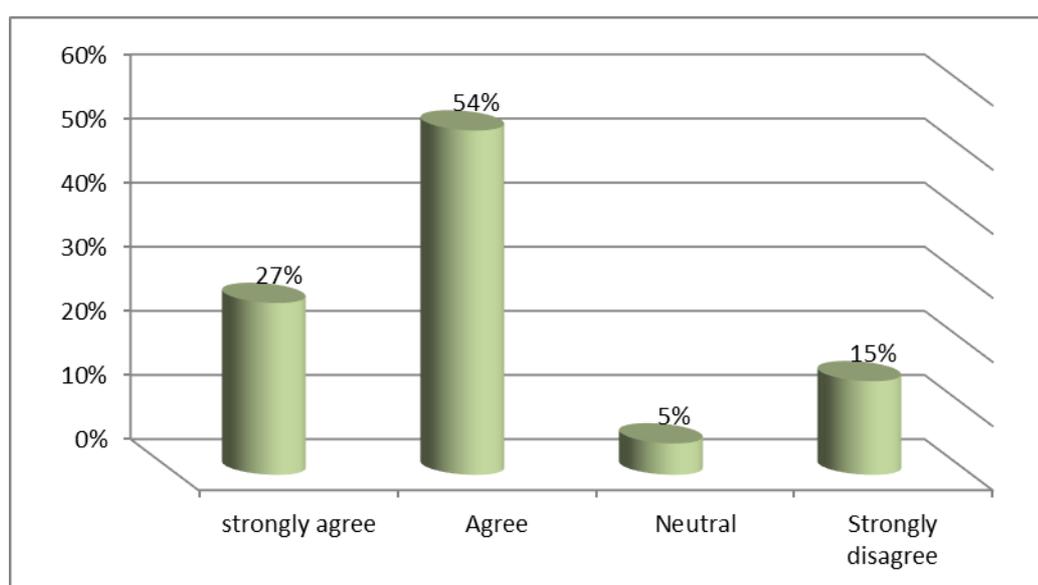


Fig 4.2

*Using minimal pairs as an oriented approach improves students' pronunciation.*

From the table (4.3) above, it appears 81% of the participants were aware that using minimal pairs as an oriented approach improves students' pronunciation, but (14.6% were not.

Table 4.4

Using minimal pairs-based teaching helps students to understand language in use.

| Response          | Frequency | Percent |
|-------------------|-----------|---------|
| Strongly agree    | 10        | 24.4%   |
| Agree             | 23        | 56.1%   |
| Neutral           | 2         | 4.9%    |
| Disagree          | 1         | 2.4%    |
| Strongly disagree | 5         | 12.2%   |
| Total             | 41        | 100%    |

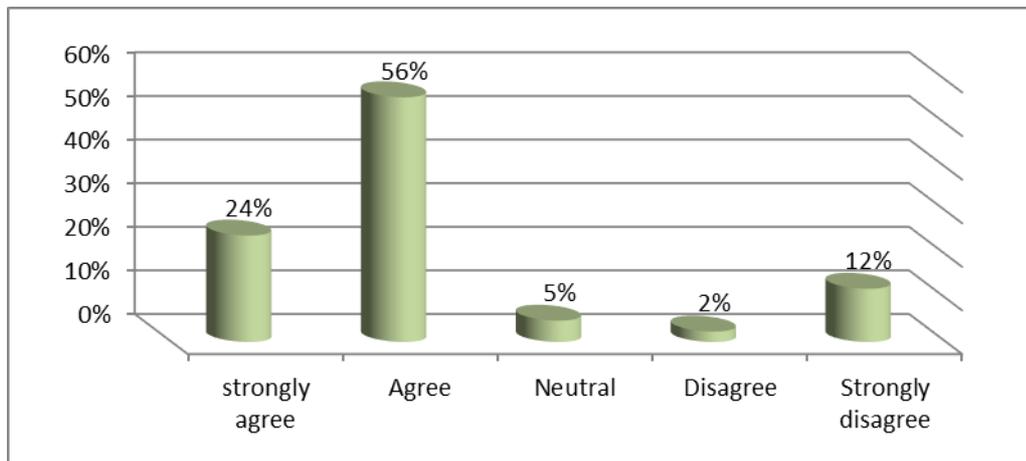


Fig 4.3

*Using minimal pairs-based teaching helps students to understand language in use. From the table (4.4), it seems that (80%) agreed that using minimal pairs-based teaching helps students to understand language in use, while (14%) of them were not in Favor of that.*

Table 4.5

**Using minimal pairs-based teaching motivates students to read.**

| Response          | Frequency | Percent |
|-------------------|-----------|---------|
| Strongly agree    | 12        | 29.3%   |
| Agree             | 21        | 51.2%   |
| Neutral           | 2         | 4.9%    |
| Disagree          | 1         | 2.4%    |
| Strongly disagree | 5         | 12.2%   |
| Total             | 41        | 100%    |

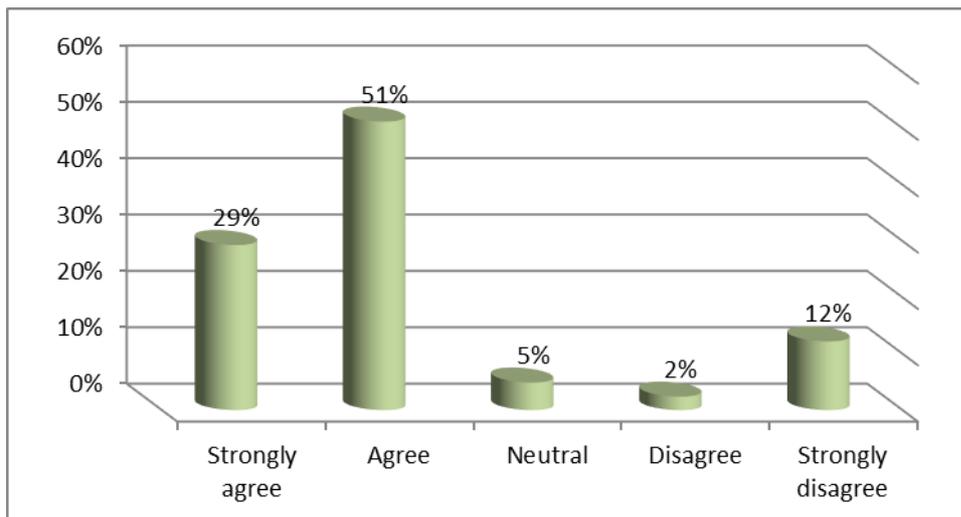


Fig 4.4

*Using minimal pairs-based teaching motivates students to read.*

In Table (4.5).(80%) of the participants agreed that using minimal pairs-based teaching motivates students to read , on the other hand (14%) of the participants neglected that.

Table 4.6

**Understanding minimal pairs helps the speaker and hearer in receiving message in communication.**

| Response          | Frequency | Percent |
|-------------------|-----------|---------|
| Strongly agree    | 11        | 26.8%   |
| Agree             | 21        | 51.2%   |
| Neutral           | 4         | 9.8%    |
| Disagree          | 2         | 4.9%    |
| Strongly disagree | 3         | 7.3%    |
| Total             | 41        | 100%    |

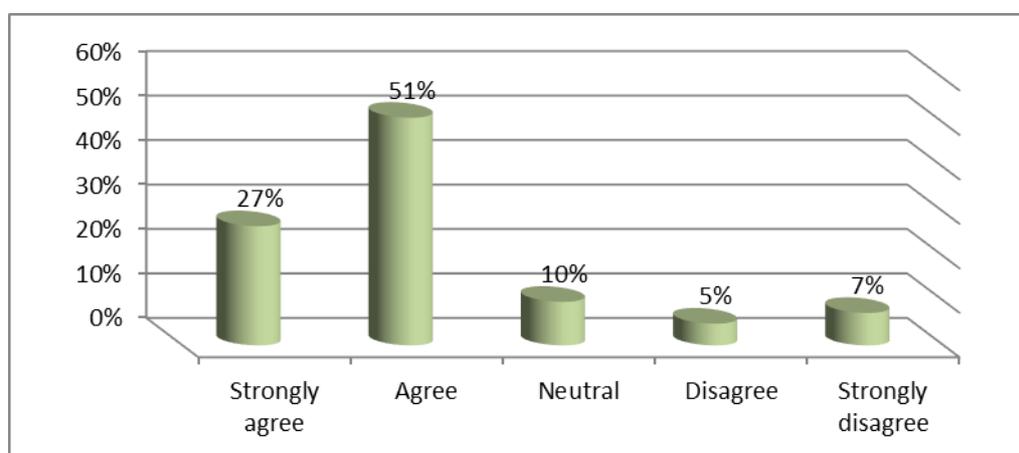


Fig 4.5

*Understanding minimal pairs helps the speaker and hearer in receiving the message in communication.*

Table (4.6) reveals that more than half of the participants, 32 out of 41 (78%), thought that understanding minimal pairs helps the speaker and hearer in receiving the message in communication, while 5 (13%) never supported it.

Table 4.7

**Mastering minimal pairs is useful for both the speaker and hearer in practicing speaking English.**

| Response          | Frequency | Percent |
|-------------------|-----------|---------|
| Strongly agree    | 12        | 29.3%   |
| Agree             | 22        | 53.7%   |
| Neutral           | 2         | 4.9%    |
| Disagree          | 0         | 0%      |
| Strongly disagree | 5         | 12.2%   |
| Total             | 41        | 100%    |

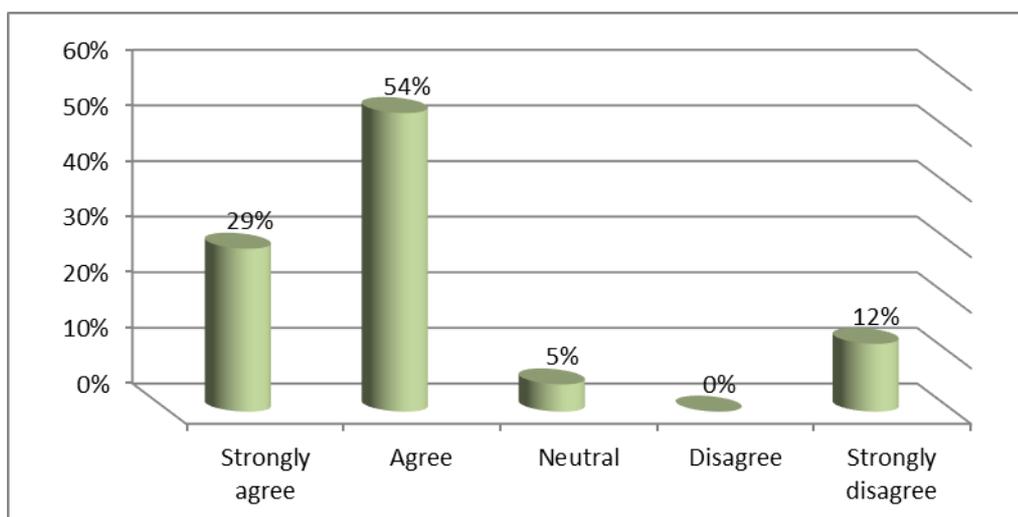


Fig 4.6

*Mastering minimal pairs is useful for both the speaker and the hearer in practicing speaking English.*

Table 4.7) illustrates that most of the participants (83%) believed that mastering minimal pairs is useful for both the speaker and hearer in practicing speaking English.

Table 4.8

**Listening and pronunciation tests improve the students' ability to understand minimal pairs.**

| Response          | Frequency | Percent |
|-------------------|-----------|---------|
| Strongly agree    | 12        | 29.3%   |
| Agree             | 22        | 53.7%   |
| Neutral           | 2         | 4.9%    |
| Disagree          | 0         | 0%      |
| Strongly disagree | 5         | 12.2%   |
| Total             | 41        | 100%    |

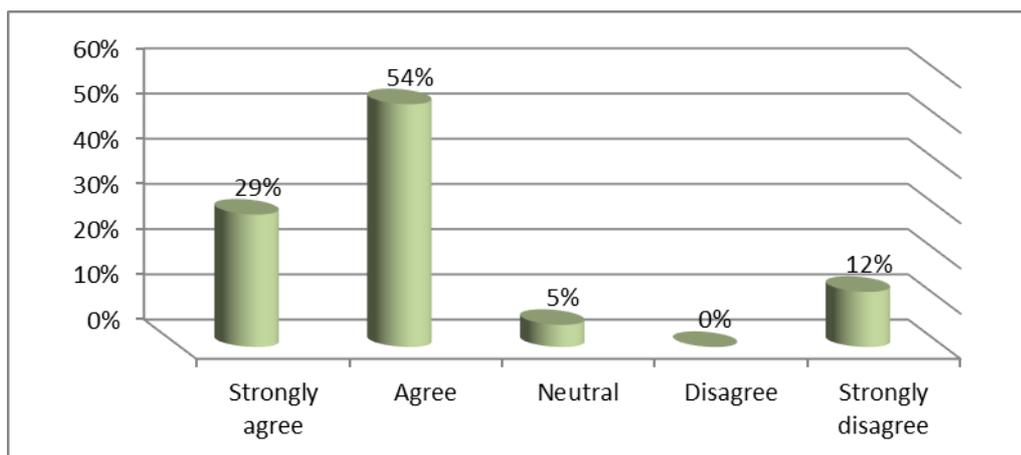


Fig 4.7

*Listening and pronunciation tests improve the student's ability to understand minimal pairs.*

From the table (4.8) above, we notice that 34 teachers (83%) of the whole sample show that listening and pronunciation tests improve the students' ability in understanding minimal pairs. On the other hand (12%), they didn't agree with that.

Table 4.9

**Recognition and production of minimal pairs enrich learners' vocabulary.**

| Response          | Frequency | Percent |
|-------------------|-----------|---------|
| Strongly agree    | 12        | 29.3%   |
| Agree             | 22        | 53.7%   |
| Neutral           | 2         | 4.9%    |
| Disagree          | 0         | 0%      |
| Strongly disagree | 5         | 12.2%   |
| Total             | 41        | 100%    |

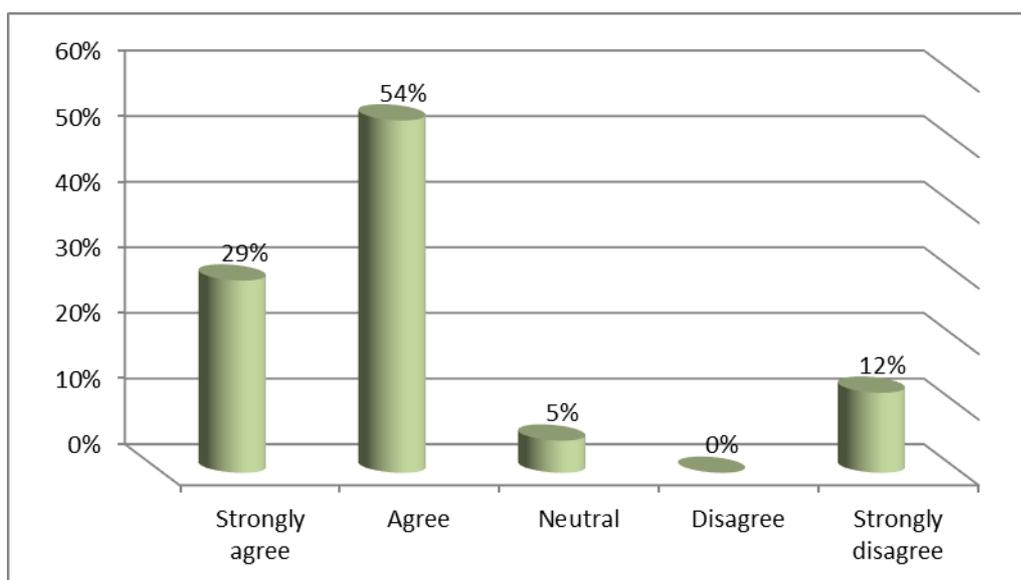


Fig 4.8

*Recognition and production of minimal pairs enrich learners' vocabulary.*

Table (4.9) shows that the item: Recognition and production of minimal pairs enrich learners' vocabulary, was considered very important by (83%) of the participants, while only (12%) against that claim.

Table 4.10

**Learners' mother tongue negatively affects the understanding of minimal pairs.**

| Response          | Frequency | Percent |
|-------------------|-----------|---------|
| Strongly agree    | 7         | 17.1%   |
| Agree             | 16        | 39%     |
| Neutral           | 8         | 19.5%   |
| Disagree          | 7         | 17.1%   |
| Strongly disagree | 3         | 7.3%    |
| Total             | 41        | 100%    |

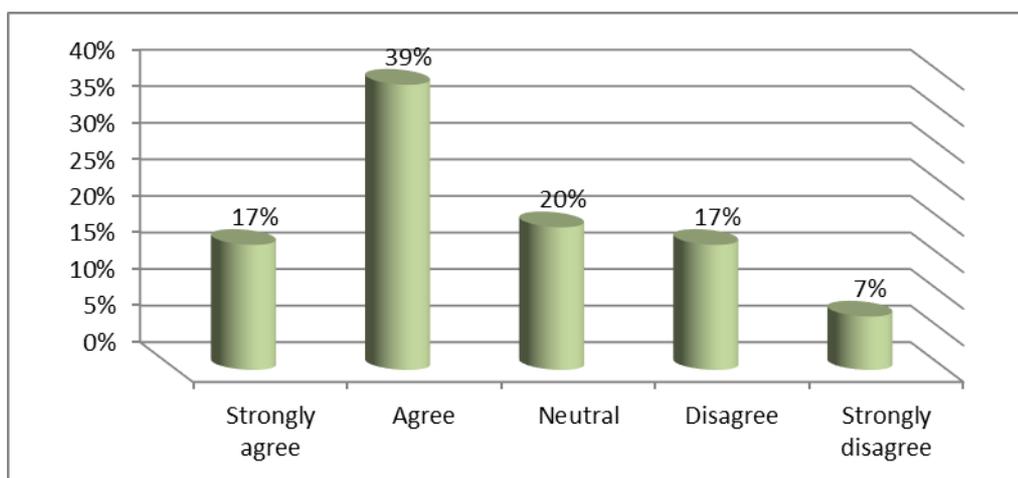


Fig 4.9

*The learner's mother tongue negatively affects the understanding of minimal pairs.*

The above table (4.10) reveals the participants' views about the learners' mother tongue's negative effect on the understanding of minimal pairs. We can notice that 23 or (57%) agreed, while 41 (20%) were neutral, and 10 participants (24%) did not agree.

Table 4.11

**Teaching pronunciation through the minimal pairs technique helps the students establish the habit of thinking in English.**

| Response          | Frequency | Percent |
|-------------------|-----------|---------|
| Strongly agree    | 6         | 14.6%   |
| Agree             | 24        | 58.5%   |
| Neutral           | 4         | 9.8%    |
| Disagree          | 2         | 4.9%    |
| Strongly disagree | 5         | 12.2%   |
| Total             | 41        | 100%    |

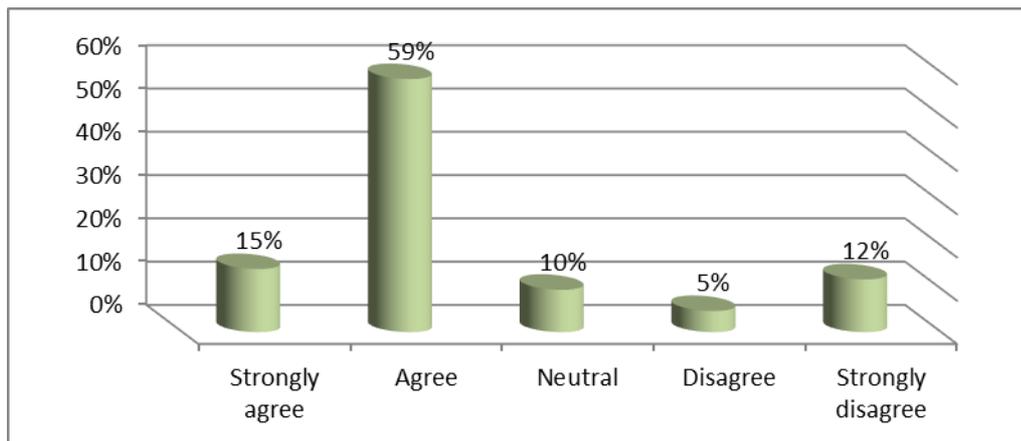


Fig 4.10

*Teaching pronunciation through the minimal pairs technique helps the students establish the habit of thinking in English.*

In the above table (4.11), we can notice that the item “Teaching pronunciation through minimal pairs technique helps the students establish the habit of thinking in English” received an agreement of 74% of the participants, while 17% did not.

## 4.2. The Analysis of the Test Results

The test was analyzed statistically using an independent t-test to compare the means of the two groups.

Table 4-12

### Control group and study group samples test

|                    | N  | Mean  | Std. Deviation | Std. Error Mean |
|--------------------|----|-------|----------------|-----------------|
| Control group      | 23 | 28.74 | 7.581          | 1.581           |
| Experimental group | 23 | 38.04 | 7.382          | 1.539           |

Table (4-12) shows the number of students in each group (23); moreover, it indicates the mean of each group. It is widely clear that the mean in the experimental group (study group) (38.04) is greatly higher than the mean in the control group (28.74). So that means the performance of the students in the experimental group becomes better after they have been trained in using minimal pairs to improve pronunciation.

### 4.3 Testing Hypotheses

To illustrate the results of the questionnaire and the test, and then to make a clear judgment, the researcher will test the hypotheses of the study to discuss the results of the hypotheses as follows:

#### 4.3.1 Hypothesis (1)

Using the Minimal Pairs approach can improve students' pronunciation.

Table 4.13

| Independent Samples Test                |      |      |                              |        |                 |   |                      |        |       |
|---|------|------|------------------------------|--------|-----------------|---|----------------------|--------|-------|
| Levene's test for equality of variances |      |      | t-test for equality of means |        |                 | 95% confidence interval of the difference |                      |        |       |
|   | F    | Sig. | t                            | df     | Sig. (2-tailed) | Mean difference                           | Std error difference | lower  | upper |
| Equal variances assumed                 | .006 | .940 | 4.217                        | 44     | .000            | 9.304                                     | 2.206                | 13.751 | 4.858 |
| Equal variances not assumed.            |      |      | 4.217                        | 43.969 | .000            | 9.304                                     | 2.206                | 13.751 | 4.857 |

T (degree of freedom) = t-value significance level. In this case, it would be  $t=4.217$ ,  $p < 0.0005$ . Due to the means of the two groups and the direction of the t-value, we can conclude that there was a statistically significant difference in the mean between the two groups. (28.74) In the controlled group and (38.04 in the study (experimental) group. From the above analysis, it is shown that the above hypothesis, "Using the Minimal Pairs approach can improve students' pronunciation," is accepted.

#### 4.3.2. Hypothesis (2)

Teachers have a positive attitude towards using the Minimal Pairs strategy-based lessons.

Table 4.14

| Response | Frequency | Percent |
|----------|-----------|---------|
| Agree    | 137       | 83.5%   |
| Disagree | 18        | 11%     |
| Neutral  | 9         | 5.5%    |
| Total    | 164       | 100%    |

This hypothesis is supported because 136 responses of the sample of teachers (83.5%) out of the total responses of 164 claimed that Teachers have a positive attitude

towards using Minimal Pairs strategy-based lessons. According to the results of the questionnaire, it appears that Hypothesis 2 is verified.

### 4.3.3. Hypothesis (3)

Teachers think that minimal pairs help students to communicate easily by enriching their vocabulary and understanding.

Table 4.15

| <b>Response</b> | <b>Frequency</b> | <b>Percent</b> |
|-----------------|------------------|----------------|
| Agree           | 163              | 79.9%          |
| Disagree        | 27               | 13.2%          |
| Neutral         | 14               | 6.9%           |
| Total           | 204              | %100           |

This hypothesis is supported because 163 or 79.9% of the teachers responded that they think that minimal pairs help students to communicate easily by enriching their vocabulary and understanding. This hypothesis is also validated because a high percentage of the study sample agreed with the statement.

### 4.3.4. Hypothesis (4)

Learners' mother tongue negatively affects understanding of minimal pairs.

Table 4.16

| <b>Response</b> | <b>Frequency</b> | <b>Percent</b> |
|-----------------|------------------|----------------|
| Agree           | 23               | 56.1%          |
| Disagree        | 10               | 24.4%          |
| Neutral         | 8                | 19.5%          |
| Total           | 41               | %100           |

This hypothesis is proved because (56.1.1%) of the teachers' responses indicate that mother tongue affects understanding of minimal pairs negatively. The above number and percentage verified the hypothesis.

# CHAPTER FIVE

## CONCLUSION

### 5.0. Introduction

The findings, recommendations, and suggestions for further studies are extracted here in the light of the hypotheses of the research, questions of the research, review of literature, and the sample of the study. What is worth mentioning is that all the findings are in favor of the research hypotheses.

### 5.1. Findings

*Based on this study, the following findings are drawn:*

- 1- The use of minimal pairs improves the students' oral skills.
- 2- Teachers are familiar with using minimal pairs in the classroom.
- 4- Some teachers use minimal pairs in their English classes as an orientation approach.
- 5- Teachers focus on improving listening and speaking skills in EFL classrooms.
- 6- Teachers believe that using minimal pairs in EFL classes creates an interactive discussion group among the students, and this helps them develop their speaking and listening skills.
- 7- Using minimal pairs is very effective in ELT.
- 8- Teachers believe that minimal pairs enhance the students' cultural respect for both language and culture.
- 9- Using minimal pairs dominates most of the young learners' aspects of life.
- 10- Using minimal pairs makes language learning easier.
- 11- The students who listen to consonant minimal pairs in their English classes are more interactive than those who do not.
- 12- The students who intentionally listen to well-selected examples of the minimal pairs in their classes are much more fluent than those who do not.
- 13- Students' first language can affect their pronunciation in the target language. Students negatively.

## **5.2. Recommendations**

After stating the findings and concluding this study, the researcher would like to make the following recommendations:

- 1 - The study encourages Teachers to update themselves to be on the same technological track as their students.
- 2- The study encourages the teachers to develop a unit of language materials using a natural integration of materials based on well-selected words and sentences of minimal pairs.
- 2- The study also draws the teachers' attention to discuss and describe how the curriculum should be developed, and how to integrate minimal pairs to develop the correct pronunciation.
- 4- It is advisable that English teachers should make use of the minimal pairs' corpus-based genre approach to supplement the textbook they teach.
- 5- English departments in the universities should be well equipped with the common use of minimal pairs.
- 6- Textbooks taught at the university level should be relevant to the students' interests and language level so that they can understand them well.
- 7- As there is always room for improvement, the use of minimal pairs should remain under constant check and scrutiny by experts and teachers.
- 8- English teachers should be provided with opportunities for developing in-depth knowledge and experience in using minimal pairs in the classrooms.
- 9- Teachers should share experiments and research interests in using minimal pairs in the pedagogical context.
- 11- Teachers should use the appropriate devices when using minimal pairs so that they can help the students improve their oral skills.
- 12- Teachers should develop their attitude towards using minimal pairs so that they can integrate them into the language materials they teach.
- 13- Teachers should be very careful when choosing minimal pairs to teach to the students.

### **5.3. Suggestions for Further Studies**

The researcher suggests the following further studies in the same area:

- 1- Future studies should be held on the integration of minimal pairs in teaching materials in terms of their suitability and the students' interaction and likability.
- 2- Future studies should be held in teacher training and development.
- 3- Future studies should be held using ICT. & TELL in the pedagogical context.
- 4- Future studies should be held on the integration of minimal pairs in syllabus design.
5. Further studies should be conducted to investigate the effect of teachers' training in using minimal pairs as an oriented approach.

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# Appendix A

## Students' Test

Student ID,.....

Student Name .....

### Question One: Match A and B

| A          | B         | Answer  |
|------------|-----------|---------|
| 1. price   | a) lose   | 1. .... |
| 2. loose   | b) grow   | 2. .... |
| 3. simple  | c) ledger | 3. .... |
| 4. leisure | d) prize  | 4. .... |
| 5. glow    | e) symbol | 5. .... |

**Question Two: Give the phonetic symbol for the underlined consonant sound(s) in each of the following words.**

ship //      write /      /      place /      /      tongue /      /      beige /      /

**Question Three: Look at the phoneme for each question: Which one of the four words contains that phoneme?**

1. / dʒ /    jet    yet    baize    garden
2. / θ /    thing    sing    Thomas
3. / ʒ /    show    sing    leisure    genius
4. / ð /    clothe    math    breeze    teeth
5. / v /    measure    leave    jumps    safe
6. / s    /    shop    ceiling    vision    close
7. /ʃ/    candles    cushion    treasure    just
8. / j /    just    jar    yeast    play
- 9.

**Question Four: Listen to one word or sentence and circle the one you hear:**

1. a. horse      b. course
2. pin    bin
3. a. sing b. thing
4. class    glass
5. hill    mill
6. hit    hid
7. gate    Kate

## Appendix B

### Teachers` Questionnaire

Dear Colleagues,

I should be grateful to receive your responses to the following questionnaire. I kindly request you to tick the options you think as suitable with your opinion. Your responses are confidentially saved and only used for accurate scientific research, which would likely identify and evaluate the influence of using minimal pairs on the learner's performance.

Degree: Bachelor ( ) MA ( ) PhD ( )

Experience  Less than 5 yrs.  5 to 10 yrs.  11 to 15 yrs.  16to 20 yrs.  More than 20 yrs.

Strongly Agree = 5 Agree = 4 Neutral = 3 Disagree= 2 Strongly Disagree = 1

|      | Statement   |   |   |   |   |   |
|------|---|---|---|---|---|---|
| Item |   | 5 | 4 | 3 | 2 | 1 |
| 1    | Using minimal pairs as an oriented method is very effective in ELT.   |   |   |   |   |   |
| 2    | Using minimal pairs as an oriented approach improves students' pronunciation.   |   |   |   |   |   |
| 3    | Using minimal pairs-based teaching helps students to understand language in use.                                      |   |   |   |   |   |
| 4    | Using minimal pairs-based teaching motivates students to read.  |   |   |   |   |   |
| 5    | Understanding minimal pairs helps the speaker and hearer in receiving message in communication.                       |   |   |   |   |   |
| 6    | Mastering minimal pairs is useful for both the speaker and hearer in practicing speaking English.                     |   |   |   |   |   |
| 7    | Listening and pronunciation tests improve the students' ability in understanding minimal pairs.                       |   |   |   |   |   |
| 8    | Recognition and production of minimal pairs enrich learners' vocabulary.  |   |   |   |   |   |
| 9    | The learners mother tongue negatively affects the learners understanding of minimal pairs.                            |   |   |   |   |   |
| 10   | Teaching pronunciation through minimal pairs technique helps the students establish the habit of thinking in English. |   |   |   |   |   |

## Appendix C

### Students` marks

| No | Control group | Experimental group |
|----|---------------|--------------------|
| 1  | 33            | 37                 |
| 2  | 21            | 24                 |
| 3  | 27            | 49                 |
| 4  | 17            | 44                 |
| 5  | 26            | 31                 |
| 6  | 29            | 43                 |
| 7  | 23            | 45                 |
| 8  | 26            | 48                 |
| 9  | 28            | 47                 |
| 10 | 30            | 46                 |
| 11 | 23            | 33                 |
| 12 | 37            | 30                 |
| 13 | 31            | 27                 |
| 14 | 37            | 33                 |
| 15 | 36            | 37                 |
| 16 | 14            | 38                 |
| 17 | 34            | 25                 |
| 18 | 32            | 41                 |
| 19 | 31            | 39                 |
| 20 | 30            | 40                 |
| 21 | 45            | 38                 |
| 22 | 36            | 35                 |
| 23 | 15            | 45                 |