

## Types of English Pronunciation Errors among Egyptian English Major Post-graduate Students

Neveen Galal-Eldin\*

[ngm01@fayoum.edu.eg](mailto:ngm01@fayoum.edu.eg)

### Abstract

This paper is conducted to identify and investigate English pronunciation errors among Egyptian English major post-graduate students at Faculty of Arts, Fayoum University. It also seeks to discover the phonological processes implemented by Egyptian graduates to overcome their pronunciation problems. The data of the study include 18 oral presentations of post-graduate students at a pre-MA course in linguistics in the academic year 2019/2020. The study employs a random sampling technique for selecting the sample. It adopts a descriptive statistic approach as the researcher is concerned with describing and classifying the data statistically. Error analysis is employed as a method of analysis of the post-graduate students' pronunciation errors. Based on the results of the pronunciation recordings of the selected sample, it can be concluded that there are fifteen sound errors at the segmental level. They were /p/, /ŋ/, /θ/, /ð/, /tʃ/, /dʒ/, /z:/, /ə/, /ʊ/, /ɔ:/, /ʌ/, /eɪ/, /əʊ/, /ɪə/ and /ʊə/. The findings also reveal that the samples' errors are mostly related to the phonological processes of voice alternation, vowel replacements, monophthongization at the segmental level while the subjects tend to commit errors of vowel insertion, consonant doubling and stress shift at the syllable level of analysis. It is hoped that this study will provide English language learners and new teachers with precious experience of how to self-evaluate their own errors.

**Keywords:** pronunciation errors, Egyptian post-graduate Students, segmental and suprasegmental features.

---

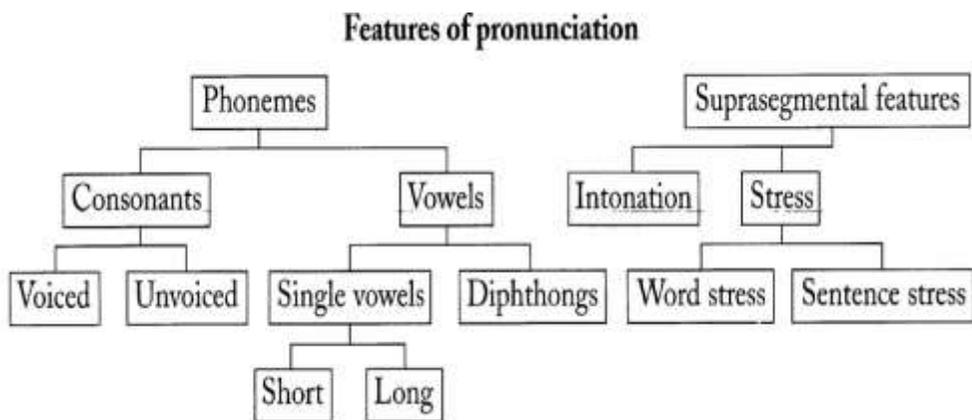
\* Lecturer of Linguistics at English Department, Faculty of Arts, Fayoum University.

## 1. Introduction

Pronunciation for any language learner is a crucial element for the assessment of her/his speaking skill. In the process of language acquisition, error is unavoidable and making errors is considered part of learning (Dulay et al., 1982). Errors in pronunciation are common to all non-native users of English. Most learners of English as a foreign language encounter some pronunciation problems reflected in their perception, identification and production of various English speech sounds. Egyptian learners of English are no exception to the rule. They commit pronunciation errors in all stages of learning English as a second foreign language. The current study aims to identify the most common pronunciation errors made by Egyptian English department post-graduate students when they give their English oral presentations.

### 1.1 Features of Pronunciation

Pronunciation can be discussed through two main features: they are segmental features (phonemes) and suprasegmental features. In his book on how to teach pronunciation, Kelly (2001, p.2) summarizes the main features of pronunciation in the following figure.



(Kelly, 2001, p.2)

### 1.1.1 Segmental Features (Phonemes)

These features include the segments or the phonemes of a language. English sound system consists of 44 phonemes; 24 consonants and 20 vowel sounds. Consonants can be divided into voiced or unvoiced consonants. Voiced sounds are produced when there is vibration at the vocal cords. They are /b/, /d/, /g/, /v/, /ð/, /z/, /ʒ/, /dʒ/, /h/, /m/, /n/, /ŋ/, /l/, /r/, /w/ and /j/. Unvoiced consonant sounds are articulated without vibration at the vocal cords. They are represented in /p/, /t/, /k/, /f/, /θ/, /s/, /ʃ/ and /tʃ/. Vowels can be either single pure vowels or diphthongs. Single vowels can be short or long vowel sounds. In English, there are 12 monophthongs (single pure vowels) that can be divided into 7 short vowels: /ɪ/, /e/, /æ/, /ʌ/, /ʊ/, /ʊ/, /ə/ & 5 long vowels: /i:/, /ɑ:/, /ɔ:/, /ɜ:/, /u:/. There are also 8 diphthongs: 5 closing: /eɪ/, /aɪ/, /ɔɪ/, /aʊ/, /əʊ/ and 3 centring diphthongs: /eə/, /ɪə/, /ʊə/. On the other side, supra-segmental features are represented in stress and intonation.

Arabic language has a very different phonological system. While English has twenty-four consonants, Arabic has twenty-eight and this phonemic difference would create some problems for Arab learners especially with the sounds that are absent in Arabic language (Kharma & Hajjaj, 1997, p.13). It is also noticed that English has a greater number of vowels than Arabic. Arabic Language has only eight vowels and diphthongs: three short, three long vowels and two diphthongs (Swan & Smith, 2001). Due to the “relatively small number of vowels in Arabic, learners tend to use just one (Arabic or English) vowel to represent more than one English sound” (Kharma & Hajjaj, 1997, p.14).

### 1.1.2 Suprasegmental Features

The prefix (supra-) refers to what is above the segments. Therefore, the suprasegmental features describe the units larger than the phonemes. These features look at “larger units of speech such as the syllable and at aspects of speech such as stress (which could be roughly described as the relative strength of a syllable) and intonation (the use of the pitch of the voice to convey meaning” (Roach, 2009, p.3). In the current study, aspects of sentence stress, pitch, rhythm and intonation are excluded from the analysis.

#### 1.1.2.1 The Syllable

It can be defined as “a unit of pronunciation typically larger than a single sound and smaller than a word” (Crystal, 2003, p.447). The distinction between the syllable structure of the native language and the target language causes phonological errors (Keshavarz, 2012).

#### 1.1.2.2 Consonant clusters

When consonant sounds combine together, they form consonant clusters as in *matchbox* /mtbks/ (Kelly, 2001). In English, the maximum number of consonants at the beginning of any syllable is three consonants while the maximum number of consonants at the end of any syllable is four consonants (Roach, 2009). Consonant sequences in Arabic and English differ greatly as Arabic has no sequence of more than two consonants whereas English has up to four consonants at the end of the syllable (Kharma & Hajjaj, 1997). These consonant groups can provide many difficulties for learners, particularly when the consonant cluster is not possible in the first language.

### 1.1.2.3 Stressed syllables versus Unstressed ones

Stress is the degree of prominence or force one gives to a specific sound or syllable or word. Stressed syllables are characterized with 4 main factors: loudness, length, pitch and quality (Roach, 2009). They are longer in duration, louder in volume, higher in pitch and different in quality than the neighboring sounds. On the other hand unstressed syllables are shorter, faster, quieter and lower in pitch.

Some words of two-syllable length have the same spelling but they differ in their pronunciation according to their dual roles either as a noun or as a verb. What really differentiates between them is the placement of stress. If we stress the first syllable then the word will tend to be a noun and the verb is mostly stressed on the second syllable. If the wrong syllable is stressed, the meaning may be spoiled and as a result the hearer may find some difficulty in recognizing the word and its meaning. Some errors result from misplacement of word stress such as the confusion that may occur with the word "PREsent" as a noun stressing the first syllable and "preSENT" as a verb that should be stressed on the second syllable. If the speaker misplaces the stress, it may cause total ambiguity for the hearer (El Zarka, 2013).

## 1.2 Types of Pronunciation Errors

According to the above division of pronunciation features, pronunciation errors can be divided into phonemic or segmental errors and suprasegmental errors. When investigating the mentioned features, "errors have been studied to discover the processes learners make use of in learning and using a language"(Richards et al, 1985). In relation to the current issue, phonological rules allow adding or deleting or reordering entire segments (Fromkin et al., 2011). Similarly, it can be

argued that deviation from the intended utterances also show phonological rules in action (Fromkin et al., 2011). Therefore, pronunciation errors involve phonological processes of segments insertion or deletion or substitution This study is not merely to identify and analyze pronunciation errors and their potential causes among post-graduate students but also to find out the phonological processes implemented by the subjects of the sample in order to overcome their pronunciation problems.

### **1.2.2 Phonemic or Segmental Errors**

They include errors related to the mispronunciation of phonemes (consonants, vowels and diphthongs). The phonological processes related to phonemic errors are segments addition, deletion or substitution (replacement).

### **1.2.3 Suprasegmental Errors**

Generally, they include errors at the syllable level as well as errors of stress, rhythm, pitch and intonation. In the current study, aspects of utterance stress, rhythm, pitch and intonation errors are excluded. The phonological processes related to suprasegmental errors at the syllable level are consonant doubling, vowel insertion and stress shift.

## **1.3 Aim of the study**

This paper aims to identify and classify different types of pronunciation errors committed by post-graduate students and newly-graduated teachers. It also seeks to discover the phonological processes implemented by Egyptian graduates to overcome their pronunciation problems. The researcher also intends to shed light on probable causes of their pronunciation errors.

#### **1.4 Significance of the Study**

Generally, studying errors provide teachers with information about the problematic areas where the students commit the most errors (Dulay et al., 1982). The current study is anticipated to be a valuable contribution to the teaching and learning of English pronunciation in general and of error analysis in pronunciation in particular. It can serve as a reference or guidance to language teachers and learners with interests in studying learners' problematic areas. It is expected to help learners and teachers of English language to be aware and achieve the accuracy of using language in speech. It will also provide English language learners and new teachers with experience of how to self-evaluate their own errors.

#### **1.5 Research Questions**

This study attempts to answer the following research questions:

1. What are the most frequent phonemic errors in spoken English made by Egyptian English major post-graduate students in the selected sample?
2. What are common word stress errors committed by Egyptian graduates in the sample?
3. What are the phonological processes implemented by Egyptian graduates in the sample to overcome their pronunciation problems?

#### **1.6 Limitation of the Study**

This study is limited to the randomized selected sample for the purpose of providing an approximate picture of the types of errors committed by English major graduates in the academic year 2019-2020. The researcher focuses on the words which deal with the

production of the English phonemes at the segmental level and on word stress at the suprasegmental level. All the psychological or emotional factors are excluded since the subjects are just simply presenting pre-planned texts.

The study seeks to identify the types of pronunciation errors on both segmental and supersegmental levels. At the segmental level, it examines phonemic errors of consonants, vowels and diphthongs. At the suprasegmental level, it only investigates the main word stress in the subjects' utterances in their English oral presentations. The sentence stress, pitch and intonation errors are excluded since their inclusion requires a different approach of analysis. The researcher analyzed the oral presentations in order to identify the graduates' pronunciation errors and the potential causes of these errors.

## **2.0 Theoretical Framework**

### **2.1 Contrastive Analysis (CA)**

Prior to Lado's publication of his book *linguistics across cultures* (1957), there had been no serious steps towards examining language difficulties resulting from differences between native language and target language. Since then contrastive analysis holds the floor as “a subdiscipline of linguistics which is concerned with the comparison of two or more languages (or subsystems of languages) in order to determine both the differences and similarities that holds between them”(Fisiak, 1981, p.1). Pointing out the tenets of contrastive analysis hypothesis, Gass and Selinker (2008, p. 96) view contrastive analysis as “a way of comparing languages in order to determine potential errors for the ultimate purpose of isolating what needs to be learned and what does not need to be learned in a second- language-

learning situation”. Therefore, the ultimate objective of contrastive analysis is to predict and describe points of difficulties in learning a second language as well as points of easiness that would enable language teachers to come up with the difficult points as sources of errors.

For a while contrastive analysis seemed to remain valid to help teachers and learners with second language learning. However, by the 1980s its validity had been seriously questioned and it was not a satisfactory approach for language scholars in identifying and analyzing all possible sources of errors. Criticisms directed against contrastive analysis were attributed to its theoretical and methodological problems in classes. A figure of speech was provided by Sanders (1976) in the following statement “To use the results of CA raw in the classroom is rather like presenting a customer in a restaurant with the ingredients and a recipe”. In this concern, Sanders (1976) elucidates that we cannot rely on a hierarchy of learning difficulties based on contrastive analysis as a basis for the sequencing of teaching materials. Supporting the above perspective, Odlin (1997, p.17) states that “some differences between languages do not always lead to significant learning difficulties”. In addition, Odlin argues that “... empirical research was beginning to show that learning difficulties do not always arise from cross-linguistic differences and that difficulties which do arise are not always predicted by contrastive analyses”. That means that predicting difficulties by means of contrastive analysis was not a satisfactory process to describe all types of linguistic errors.

## **2.2 Error Analysis as a Method of Analysis**

In the 1960s, Error analysis has been developed as a branch of applied linguistics and began to replace contrastive analysis (Richards & Schmidt, 2002). Following the publication of Corder's article, "the significance of Learner's Errors" (1967), error analysis began to take a new perspective towards the concept of error. Corder (1967; 1981) argues that identifying learner's errors is a significant issue for teachers, learners and researchers. Conducting an error analysis is firstly important to the teachers since errors are indications of learning progress (Corder, 1967; 1981). It enables teachers to recognize how far their students have learned and progressed in their language learning. It is especially important to the learner himself as the errors serve as a device which can be employed to develop the learner's target language. Finally, error analysis is also significant for language scholars and researchers, as these errors can give evidence on how the second language is learnt and what strategies or procedures are employed in the discovery of language. Moreover, he asserts that by producing errors, the learners can realize that they are progressing and participating (Corder, 1967).

### **2.2.1 Definition of Error Analysis**

Crystal (2003, p.165) defines EA as:

A technique for identifying, classifying and systematically interpreting the unacceptable forms produced by someone learning a foreign language, using any of the principles and procedures provided by linguistics. Errors are assumed to reflect, in a systematic way, the level of competence achieved by a learner; they are contrasted with,

mistakes, which are performance limitations that a learner would be able to correct.

Moreover, it has been argued that “Error analysis provides a broader range of possible explanations than contrastive analysis for researchers/teachers to use account for errors as the latter only attributed errors to the NL” (Gass & Selinker, 2008, p.103). Therefore, what really distinguishes error analysis from contrastive analysis is that error analysis is capable of examining errors attributable to all possible sources of difficulty not only those resulting from negative transfer of the native language. That's why it can offer “explanations for the many as yet unexplained but frequently observed students' errors” (Dulay et al. 1982).

Therefore, error analysis method is adopted in the current study as the most appropriate tool for analyzing students' pronunciation errors. It has been argued that studying learners' errors could be the first step to introduce teachers of second language to the knowledge of the student' language (Al-Khrsheh, 2016). Thus, error analysis enables us to obtain data from which we can provide inferences about the process of language learning. Moreover, it specifies the common points that cause difficulty in the language learning process.

### **2.2.2 Errors versus Mistakes**

In order to give an appropriate analysis of learners' language, it is crucial to distinguish between the two different concepts; errors and mistakes. Conforming to Corder (1981, p.10), errors are deviances which are caused by lack of learners' competence, while mistakes are seen as the performance of errors which are considered not significant. Errors result from learners' transitional competence, while mistakes are

caused by an external factor to the competence of the speaker. Going in agreement with the above distinction, Richards & Schmidt (2002, p. 184) state that an error results from "incomplete knowledge" while the learner commits a mistake when writing or speaking because of his "lack of attention, fatigue, carelessness or some other aspect of performance". Therefore, errors reflect gaps in the competence of the learner while mistakes refer to an occasional performance error caused by being tired or hesitated or even hurried.

Committing errors is an inevitable aspect of learning any skill or acquiring a language, since people cannot learn languages without first systematically committing errors. Therefore, they are different from mistakes which are unsystematic deviations (Corder, 1967). Mistakes are committed by native and non-native users of language due to memory lapses, physical states and so forth; of which the speaker is immediately aware and is able to correct them. Errors, on the other hand, are committed by learners due to lack of the knowledge of the rule and therefore learners are unable to correct their errors. It has been argued that one of the factors that cause learner's errors is related to the influence of the mother tongue or the native language (Dulay et al., 1982).

### **2.2.3 Classification of Errors**

Classifying errors is a serious issue as many language scholars have attempted to categorize errors from different perspectives. A distinction is provided by Corder (1967) into two types of errors; competence errors and performance errors. The first type is the most crucial as it reveals the learner's underlying knowledge of the language while the latter is not that serious and should not be considered as errors

because they are made when learners are hesitated or tired or in a hurry. Moreover, they are more accessible to automatic self- correction.

Richards (1973, p.174) discusses three sources of learner's errors; interference errors, intralingual errors and developmental errors. The first type is related to errors caused by negative transfer from the learner's mother tongue or native language. If the structure of the learner's native language is different from the structure of the target language which is being learnt, that would certainly lead the learner to commit an error (Richards, 1973, p.94). The second type of errors is represented by intra lingual factors which refer to items that do not reflect the structure of the native language but indicate generalization based on partial exposure to the target language (Richards, 1973, p.174). The third type, i.e., developmental type of errors happens when the students strive to develop target language hypotheses based on restricted insights (Richards, 1973, p.174).

Related to the issue of the study, a lot of Egyptian learners of English language find difficulty in pronouncing some English sounds because of the distinction between English and Arabic sound systems. For this reason, the researcher conducts the current study in order to investigate the type of errors committed by Egyptian post-graduate students in their pronunciation of English language.

### **3.0 Literature Review**

The past few decades have witnessed an increasing attention towards studying linguistic errors in second language learning. This section reviews a selection of different linguistic researches that tackle English pronunciation errors committed by Arab speakers. Some of previous studies have paid attention to pronunciation problems

resulting from contrasting between the mother tongue and the foreign language. Other studies have been carried out employing error analysis technique in order to investigate errors attributable to all possible sources of difficulty not only those resulting from negative transfer of the native language. Some of the relevant works published on linguistic errors in English with reference to Arabic speakers include, among others, Tushyeh (1996), Kharma & Hajjaj (1997), Smith (2001) and Khalifa (2020). Among recent material that deals with pronunciation problems facing Arab learners of English as a foreign language are papers and unpublished dissertations by El-Zarka (2013), Hassan (2014), Hago and Khan (2015), Hameed and Aslam (2015), Benhima (2016), Ababneh (2018), Alzinaidi and Abdel Latif (2019), Huwari (2019), Abd Elwahab (2020), Fouly et al (2020) and Adel (2023).

In the past few decades, there has been an increasing attention towards error analysis as an important branch in the rapidly expanding field of applied linguistics (Tushyeh, 1996). In his article, linguistic problems facing Arab learners of English, Tushyeh discusses the importance of error analysis, types and causes of errors in second language learning with specific reference to Arab learners of English. The article works on describing and interpreting different types of errors committed by the second language users including those resulting from the first language learning and those which are not traced to the learners' native language. Tushyeh (1996) has listed multiple intralingual errors: simplification, overgeneralization, hypercorrection, faulty teaching, avoidance, inadequate learning and false concepts hypothesized.

Kharma and Hajjaj (1997) identify different types of language difficulties encountered by Arabic speakers when learning English describing them in sound linguistic terms. The authors tackle phonemic problems as well as problems of stress, rhythm and intonation. In relation to vowels, they made a distinction between certain pairs such as /ɪ/ and /e/ in 'sit' and 'set'; /ʌ/ and /ɒ/ as in 'luck' and 'lock'; /əʊ/ and /ɔ:/ as in 'coat' and 'caught' (Kharma & Hajjaj , 1997). The second type of difficulty is represented by diphthongs which are replaced by other sounds, for example, /eə/ in 'there' is mispronounced as the colloquial Arabic sound /e:/ as in / de:r/ (monastery); /ʊə/ is replaced by /u:/; /ɪə/ is replaced by /i:/ ; and /əʊ/ is replaced by /ɔ:/ (Kharma & Hajjaj , 1997). As for consonants, they provided two main problematic areas: confusion of some pairs such as /p/ and /b/ as in 'pin' and 'bin'; /s/ and /θ/ as in 'sin' and 'thin'; /ʃ/ and /ʒ/ in 'chair' and 'share'; /v/ and /f/ as in 'vast' and 'fast' (Kharma & Hajjaj , 1997). The authors also tackle the pronunciation problems in the area of connected speech. They provide a selection of the types of mistakes that result from misplacement of stress or failure to follow patterns of stress shift as well as intonation errors.

Swan and Smith's book (2001) is a useful guide for teachers and researchers who are interested in finding out the main types of interference and other expected problems encountered in the learning process English language. With reference to Arabic speakers, Smith (2001) tackles the different nature of Arabic and English phonological systems. Therefore, Arabic speakers do find some pronunciation difficulties in their learning process with English speech sounds. It has

been argued that all English vowel sounds can cause problems for Arabic speakers and the most common confusions are the following:

- 1./I/and/e/are often confused: bit for bet.
2. /ɔ/ and/ɔ:/ are often confused: cot for caught
3. Diphthongs /eI/ and /əʊ/are usually pronounced rather short and are confused with/e/ and /ɔ: / red for raid; hop for hope (Swan & Smith, 2001, p.199).

Running along similar lines, Khalifa's study (2020) seeks to analyze Arabs' interlingual errors in English pronunciation concerning segmental features-consonants, consonant clusters and vowels-and suprasegmental-main word stress. It also explains the main interlingual reasons behind these errors and presents some teaching suggestions for overcoming them. The participants are forty five EFL Arab learners: fifteen Saudi Arabians, fifteen Egyptians and fifteen Libyans. His study is based on two hypotheses. First, the subjects substitute their own Arabic sounds (i.e. L1 negative transfer) for the unfamiliar English ones, producing incorrect English sounds. Second, the subjects apply Arabic main word stress rules (i.e. L1 negative transfer) instead of English ones, producing incorrect English stress patterns. These hypotheses were confirmed, albeit to different degrees due to sounds and stress patterns (word class). The results show that the subjects found difficulty in pronouncing some English consonants such as /p/, /v/, /ŋ/, dark /h/, syllabic consonants and consonant doubling. They also had trouble with two-element clusters beginning with /p/, /s/,/g/, /θ/, consonant + /j/, /dw/ and all three-element clusters. In addition, they inserted a vowel between the elements of medial and final clusters. As for vowels, the subjects confused most of the English vowels and

diphthongs with each other or substituted Arabic vowels for English ones. Finally, they stressed the last syllable of English words ending in V:, V:C and VCC and the first syllable of words having the syllabic pattern CVCVCV(C).

Among previous studies that have attempted to classify pronunciation problems to find out the reasons that hinder EFL learners from pronouncing correctly are studies by El-Zarka 2013; Hassan 2014; Hago & Khan 2015; Benhima 2016 and Ababneh 2018. In his thesis, El-Zarka (2013) has investigated the pronunciation errors of Arabic learners of English as a second language. His study tackles how the vernacular dialects of the native speakers of Arabic affect the pronunciation of English. It examines the role of first language transfer of native Arabic speakers' pronunciation errors in English in an attempt to find out the underlying causes of these pronunciation errors (Elzarka, 2013). It also attempts to find out the repair strategies employed by the participants in order to overcome their pronunciation problems. The controlled group includes 10 participants of different Arab nationalities; three of them are Palestinians, two are Egyptians and one participant from each of the following Arab countries; Emirates, Syria, Jordan, Tunisia and Morocco. The researcher analyzes the errors employing two approaches, i.e., contrastive analysis and error analysis shedding the light on Arabic linguistic input.

Hassan's article (2014) has been conducted to investigate the pronunciation problems among students at Sudan University of science and technology. The subjects of the study are fifty first year students and thirty university teachers of English language from the same university. The data were analyzed statistically and descriptively. The

results revealed that Sudanese Students of English whose language background is Sudanese Spoken Arabic, encountered pronunciation problems with English vowels that have more than one way of pronunciation in addition to the consonant sound contrasts such as z/ and /ð/, /s/ and /θ/, /b/ and /p/, /ʃ/and /tʃ/. The study attributed these problems into factors such as Interference, the differences in the sound system in the two languages, inconsistency of English sounds and spelling.

Hago and Khan (2015) have examined the pronunciation problems faced by Saudi secondary school students learning English consonants. Their study aims to highlight the area of English consonant clusters. The results reveal that eleven consonant phonemes and three areas of consonant clusters have been identified as problematic (Hago & Khan, 2015). Finally, the researchers have concluded that most of Saudi learners of English insert a vowel sound in the onset as well as in the coda of certain English syllables. The results have shown that the major reason for the declusterization process is the mother tongue influence.

Exploring the pronunciation problems that face Saudi University students, Hameed and Aslam's study (2015) is designed to find out the pronunciation difficulties encountered by the Saudi students in an attempt to find some possible remedial measures to solve these pronunciation problems. The data have been collected from the students and the teachers as well through using surveys, interviews, and observations. The results of the study have described that the students have problems in pronouncing some sounds, using intonation, and stress making sentences clear, most of the students did not know where

the sentence stops, and the consonant clusters has represented a problem too.

Benhima (2016) investigates the pronunciation patterns of errors committed by Moroccan EFL learners. The study adopts models of contrastive analysis, error analysis, and interlanguage in an attempt to describe the phonological interlanguage of EFL learners in order to set a universal grammar of language learners. It examines the pronunciation errors in vowels and consonants at the segmental level and in stress at the suprasegmental level.

The results of the Benhima's study (2016) reveal that Moroccan learners commit a common pattern of errors that indicate the recurrent mispronunciation of vowels particularly in diphthongs. Furthermore, substitution and replacement errors are predominant in the spoken language of Moroccan EFL learners in that the schwa is replaced by other vowels due to the inconsistency between spelling and pronunciation. The study also provided other explanations for errors that are recognized in other linguistic aspects such as the L1 and L2 transfer and extra-linguistic factors.

Ababneh (2018) tackles English pronunciation errors committed by two groups of Saudi students. The first group includes English major students while the second group involves Arabic majors. It has been argued that Arabic speakers generally use direct transfer and interference from Arabic in addition to stress shifts in their pronunciation that are not recognized stress patterns in English. Moreover, Ababneh (2018) mentions that there are some sounds in English that have no equivalence in Arabic, which lead to vowel and consonant errors. The findings of the study reveals that the students in

both groups made vowel insertion, confusion, orthography, stress, and intonation errors, but more trained students in group 1 made less errors than the students in group 2.

In their attempt to identify the difficulties that Saudi university students encounter in pronouncing the English consonant sounds, Alzinaidi and Abdel Latif (2019) conduct their study in order to find out which English consonant sounds and clusters are considered problematic for Saudi university students. The participants include a group of forty female university students who completed a pronunciation test that examines their errors in pronouncing English consonants and clusters. The data analysis of the study reveals that the common pronunciation errors were in pronouncing: /ʒ/, /ŋ/, /p/, /r/ and /f/. There have been similar problems in pronouncing the /t/ and /d/ of the regular past morpheme -ed. The study has shown that the consonants in the word-initial and -final positions are likely to cause more pronunciations problems than the ones in the word-medial place (Alzinaidi and Abdel Latif, 2019).

Abd Elwahab (2020) investigates the effect of the local dialects and accents of the Arab students and how these dialects and accents can lead to problems in pronouncing the English sounds. He argues that Arabic ESL students encounter many pronunciation difficulties such as adding or replacing new phonemes that do not exist in the target language. Contrasting the English and Arabic sounds, Abd Elwahab (2020) clarifies the differences between the two languages in sounds such as: /p/, /v/, /θ/, /dʒ/, /r /, /l/. He also stated that the students replace the problematic sounds with the similar sounds in their dialect.

Among recent studies that discuss the common pronunciation errors made by Egyptian EFL learners is Bayoumi's study (2013) which is conducted on undergraduate Egyptian students at Faculty of Arts, English department, Ain Shams university. The sample includes forty students from the four study years who answered questionnaires while twelve of the students have recorded samples of live English language pronunciation. The findings show that /p/, /dʒ/ and /d/ are three sounds the participants believe they usually mispronounce. The results indicate that /ŋ/, /d/ and /ð/ are the mispronounced sounds.

Another study on mispronounced English sounds made by Egyptian speakers is Huwari's article (2019) which is a qualitative case study that aims to identify the pronunciation errors commonly committed by Egyptian Speakers of English language on YouTube as well as the strategies they use to improve their pronunciation. The sample included five videos for Egyptian local speakers of English. The findings showed some mistakes in pronouncing /p/, /t/, /v/, /θ/, /ð/ and the vowel sound /ɒ/.

Fouly et al (2020)'s study is another qualitative case study that examines the pronunciation errors and repair strategies made by Egyptian EFL learners in producing English segmental features. The participants of the study are 12 first year students in English department, Faculty of Arts, Beni-Suef University in the academic year 2016/2017. The findings reveal that 14 English sounds represent a source of difficulty for learners including the nine consonants; /v/, /ʒ/, /dʒ/, /ŋ/, /tʃ/, /θ/, /p/, dark /l/ and /ð/, and the six vowel sounds /ʌ/, /ɔ:/, /ɜ:/, /ə/, /ʊ/ and /e/.

errors to the learners' mother tongue or to the effect of negative transfer.

The most recent study is an empirical study conducted by Adel (2023) in which it examines the common pronunciation problems encountered by Egyptian university students when learning English consonants and to rectify the problematic sounds in pronouncing RP consonant sounds. The study presents an applied contrastive analysis between Egyptian Colloquial Arabic and the Received Pronunciation of British English. The participants are fifty two Egyptian university students. The findings of the study reveal that Egyptian university students encounter difficulties in pronouncing eleven English consonant sounds including: /p/, /t/, /d/, /θ/, /ð/, /ʒ/, /tʃ/, /dʒ/, /ŋ/, /l/ and /r/. The results also show that employing contrastive analysis has a significant effect on 92.3% of students' pronunciation of English consonants.

After reviewing the previous studies, it has been observed that many linguists and language scholars have discussed pronunciation Errors made by Arab learning English as a second language (Kharma & Hajjaj, 1997). However, little or no recent research has been found on pronunciation errors of Egyptian pre-Master students at the time this study has been conducted. Therefore, the current study aims to identify, classify and analyze different types of pronunciation errors committed by Egyptian English Major post-graduate students and newly-graduated English teachers. It also seeks to discover the phonological processes implemented by Egyptian graduates to overcome their pronunciation problems. The researcher also intends to shed light on probable causes of their pronunciation errors.

## **4. Research Design and Methodology**

### **4.1 Research Design**

This paper is a descriptive analytic study in that the researcher is interested in describing, categorizing and analyzing the data represented in pronunciation errors committed by a group of 18 Egyptian University graduates. It adopts a mixed-approach of qualitative and quantitative techniques for data analysis. The researcher will start with reporting the quantitative statistical results followed by discussing the qualitative findings and accordingly the quantitative results could point towards the types of qualitative research questions (Creswell, 2014).

### **4.2 Methodology**

This section includes the sample that describes the subjects who participated in the study, the instruments used, the procedures and finally how the analysis was performed.

#### **4.2.1 Sample**

This study employs a random sampling technique for selecting the sample. The subjects of this study are 18 post-graduate students who belong to different educational backgrounds. They were graduated from different universities in Egypt and they were gathered to study their pre-MA program in linguistics at Faculty of Arts, Fayoum University. They are in the age range of 22 to 30 years old. Three subjects of lowest and highest values are excluded from the analysis (Two due to their perfect performance), (one due to level deficiency).

#### **4.2.2 Instruments**

The following instruments were used to help the researcher to collect the data needed for the study. In conducting the study, the

researcher was the key human instrument who was responsible for collecting, classifying and analyzing the data. Besides, the researcher used a cell phone to record the oral presentations produced by the post-graduate students. She used *Cambridge Advanced Learner's Dictionary-Third Edition* to analyze the data. She also asked for help from three other English department lecturers who have a long experience in teaching Phonetics and Phonology to recheck the recordings of the graduates' pronunciation of the oral presentation and the result of the analysis done by the researcher: the first and second raters are lecturers at Faculty of Arts, the third is a PhD candidate specialized in studying phonetics. All of them are specialists in teaching Phonetics for more than five years. The reason for selecting three raters is to guarantee the reliability of checking the data collected from the subjects.

#### **4.2.3 Research Procedures**

Gass and Selinker (2008, p.103) provide six steps in conducting an error analysis: collect data, identify errors, classify errors, quantify errors, analyze source and remediate. Adopting these steps, the procedures for this study are as follows:

1. Recording the spoken data from the Pre-MA students
2. Collecting the data. The researcher collects the recorded material
3. Transcribing the data
4. Identifying pronunciation errors
5. Classifying and sorting out the errors
6. Quantifying the errors
7. Analyzing the errors (explaining their causes)

The researcher first makes use of uncontrolled observation in order to collect data as many as possible. Then she recorded the students' oral presentations. Samples of material have been audio-recorded from March 2020 till August 2020. The instruments employed here are observation sheet in order to take notes and audio recording in order to record the students' utterances. The recorded material has been transcribed in IPA as a primary step before analysis. The data selected have been searched for all segmental errors but only main word stress in terms of suprasegmental errors of pronunciation.

Through audio recording, the researcher can identify the pronunciation errors often found among Egyptian University graduates. The researcher wrote and made a list of the graduates' words and puts all the students' words side by side with the correct forms which are pronounced in the CD of *Cambridge Advanced Learner's Dictionary*. From the comparison between the forms pronounced by the MA students and the correct forms pronounced in the CD, the researcher found the errors made by the graduates. Later on, by gathering the errors into some categories, the researcher classified and sorted out the errors into phonemic errors and syllable errors. In order to recheck the result of the analysis, it was passed to three volunteer raters of English department who have experience in teaching phonetics and phonology. Finally, the researcher summarized the finding and drew a conclusion of the study.

#### 4.2.4 Data Analysis

The data analysis includes the separation of errors and then classifying them in tables in order to identify their types. The researcher first took notes of the data collected from uncontrolled observation of post-graduate students. The following table exposes the types of pronunciation errors mostly made by Egyptian university graduates in the uncontrolled observation. The table includes five columns; the word number, the original English word, the correct transcription in IPA, the deviated transcription and the type of error. Pronunciation errors mostly committed by the graduates involve some phonemic errors, namely errors of consonants, vowels, diphthongs, and supra-segmental errors represented in stress shift.

**Table1**

*Types of Pronunciation Errors mostly made by Egyptian University Graduates in the uncontrolled observation*

No.	Word	IPA transcription	Deviated transcription	Type of Error
1	Person	/ˈpɜ:(r)sən/	/ˈpɜ:(r)sən/ or /ˈbɜ:(r)sən/	Vowel replacement + Voice alternation
2	Reason	/ˈri:zən/	/ri:zən/	Vowel replacement
3	Lesson	/ˈlesən/	/lesən/	Vowel replacement
4	Words	/wɜ:dz/	/wɔ:dəs/	Vowel replacement+ vowel insertion
5	World	/wɜ:ld/	/ wɔ:rləd	Vowel replacement + vowel insertion
6	Journal	/ˈdʒɜ:(r)nəl/	/ˈʒɔ:(r)nəl/	vowel replacement & Substitution
7	Books	/bʊks/	/bɒks/	Vowel replacement

8	Good	/gʊd/	/gɒd/	Vowel replacement
9	Core	/kɔ:(r)/	/ku:(r)/	Vowel replacement
10	Papers	/ˈp <sup>h</sup> eɪpə(r)z/	/p <sup>̄</sup> e:pə(r)z/or /beɪbə(r)z/	Voice alternation
11	Paraphrase	/ˈpærəfreɪz/	/bærəfre:z/	Voice alternation & monophthongization
12	Hypothesis	/haɪˈpɒθɪsɪs/	/haɪˈbɒsɪsɪs/	Voice alternation & Substitution
13	Thanks	/θæŋks/	/sæŋkəs/ /θæŋkəs/	Substitution or Vowel insertion
14	Judgments	/ˈdʒʌdʒmənts/	/ˈʒʌʒmənts/ or /dʒʌdʒmənts/	Substitution & Stress shift
15	Imagine	/ɪˈmædʒɪn/	/ɪˈmæʒɪn/	Substitution
16	Breathing	/ˈbrɪ:ðɪŋ /	ˈbrɪ:ðɪŋg/ or /brɪ:zɪŋg	Substitution & Consonant addition
17	Clear	/kɪə(r)/	/kli:(r)/	Monophthongnizing
18	Dear	/dɪə(r)/	/di:(r)/	Monophthongnizing
19	Fear	/fɪə(r)/	/fi:(r)/	Monophthongnizing
20	Here	/hɪə(r)/	/hi:(r)/	Monophthongnizing
21	There	/ðeə(r)/	/ze:(r)/ or /zi: (r)/	Substitution & Monophthongnizing
22	Sure	/ʃʊə(r)/	/ʃu:(r)/	Monophthongnizing
23	Show	/ʃəʊ/	/ʃɔ:/	Monophthongnizing
24	Know /No	/nəʊ/	/nɔ:/	Monophthongnizing
25	Go	/gəʊ/	/gɔ:/	Monophthongnizing
26	So	/səʊ/	/sɔ:/	Monophthongnizing
27	Over	/ˈəʊvə(r)/	/ˈɔ:və(r)/	Monophthongnizing
28	Code	/kəʊd/	/kɔ:d/	Monophthongnizing
29	Low	/ləʊ/	/lɔ:/	Monophthongnizing
30	Terms	/tɜ:mz/	/tɜ:məz/	Vowel insertion
31	Facts	/fakts/	/faktəs/	Vowel insertion

32	Concerned	/kən'sɜ:nd/	/kən'sɜ:nəd/	Vowel replacement & vowel insertion
33	Observed	/əb'zɜ:vɪd/	/ɒb'zɜ:(r)vəd/	Vowel replacement & vowel insertion
34	Involved	/ɪn'vɒlvɪd/	/ɪn'vɒlvəd/	Vowel insertion
35	Results (n)	/ri:'zʌlts/	/ri:zʌlts/	Stress shift
36	Accurately	/ækjʊrɪtli/	/ækj'ɔrɪtli/	Stress shift
37	Recently	/ri:səntli/	/ri:'səntli/	Stress shift
38	Dictionary	/ˈdɪkʃənəri/	/dɪk'ʃənəri/	Stress shift
39	Interpret	/ɪn'tɜ:prɪt/	/ɪntɜ:'prɪt/	Stress shift
40	Literature	/lɪtərə'tʃə(r)/	/lɪtə'retʃə/	Stress shift & vowel replacement
41	Collection	/kə'leɪʃən/	/kə'lleɪʃən/	Consonant doubling & vowel replacement
42	Account	/ə'kaʊnt/	/ək'kaʊnt/	Consonant doubling and vowel replacement
43	Allow	/əlaʊ/	/ællaʊ/	Vowel replacement & Consonant doubling
44	Correct	/kə'rekt/	/kɔr'rekt/	Vowel replacement & Consonant doubling
45	Wrong	/rɒŋ/	/rɒŋg/	Consonant addition
46	Abstracts	/æbstræktɪs/	/æbstræktəs/	Vowel insertion
47	Plagiarism	/ˈpleɪdʒərɪzəm/	/ˈplɪdʒərɪzəm/ or /ˈpleɪzərɪzəm/ or /ˈbleɪzərɪzəm/	Vowel replacement or Consonant substitution or Voice alternation
48	Key	/ki:/	/keɪ/	Diphthongization
49	Quay	/ki:/	/keɪ/	Diphthongization
50	Determine	/dɪ'tɜ:mɪn/	/dɪɪtɜ:'mɪn/ /dɪtɜ:'m aɪ n/	Diphthongization & Stress shift
51	Combination	/kɒmbɪ'neɪʃən/	/kɒmbaɪ'neɪʃən/	Diphthongization
52	About	/ə'baʊt/	/æ'baʊt/	Vowel replacement

53	Attend	/ə'tend/	/æt'tend/	Vowel replacement & consonant doubling
54	Among	/ə'mʌŋ/	/æ'mʌŋg/	Vowel replacement & consonant addition
55	Appropriate	/ə'prəʊpriət/	/æprɔ'preit/	Stress shift & vowel replacement
56	Thursday	/θɜ:zdeɪ/	θʌrɜzdeɪ/	Vowel replacement and vowel insertion
57	Initial	/ɪnɪ'ʃəl/	/ɪnɪ'ʃjəl/	Semi-Vowel insertion
58	Egyptian	/ɪ'dʒɪpjən/	/ɪ'ʒɪpjən/	Substitution and Semi-Vowel insertion
59	Specially	/ˈspeʃəli/	/ˈspeʃjəli/	Semi-Vowel insertion
60	Property	/ˈprɒpəti/	/ˈprɒ'pɜ:ti/	Stress shift & vowel replacement

Below is an analysis of the data of 15 subjects from Egyptian graduates of English department. The researcher does not claim to cover the complete range of pronunciation errors available. The analysis just gives an approximate picture of the types of pronunciation errors still committed by the graduates in the sample.

**Audio 1:** duration is 11min.:30 sec.

This audio shows the following types of errors:

- Monophthongizing of /ei/ into /e:/ in “APA” (repeated) and “paper”.
- Monophthongizing of /əʊ/ as /ɔ:/ as in “endnote”, “footnote” and “open”
- Doubling of the consonant in pronunciation of “official”, “correct”.
- Vowel replacement of /ɜ:/ as /ɔ:/ in “journal”, “world and “works”.
- Substitution of /dʒ/ with /ʒ/ in “journal”.

- Inserting /ə/ before the plural morpheme in “lists, “works”.
- Inserting a semi- vowel /j/ in “especially”.

**Audio 2:** duration is 7min: 55 sec.

The audio shows the following errors:

- Monophthongization of /əʊ/ as /ɔ:/ as in “hello”.
- Monophthongizing of /ei/ into /e:/ in “presentation” and “paper”.
- A stress shift in pronouncing the word “literature” (repeated several times) as well as a stress shift in “results” mispronouncing it as /ˈri:zʌlts/.
- Addition of /g/ after /ŋ/ in “writing”
- Doubling of consonant in “attention, “allow, and “collected”.
- Vowel replacement in “about”, “attention and “allow”.
- Vowel replacement in “collected”.
- Inserting a vowel sound in “researched” and “performed”.
- Vowel replacement in “journal”.
- Monophthongization of /Iə/ into /i:/in “clear”.

**Audio 3:** duration is 4 min.:21sec.

By listening to this audio, the following errors appear:

- Substitution of /ð/ as /z/ in “this” (repeated).
- Voice alternation of /p/ as /b/in “presentation”, “paper” and “topic”.
- Monophthongization of /ei/ into /e:/ in “presentation” and “paper”.
- Vowel replacement of initial /ə/ with /æ/ in “about”, “according”.

- Monophthongizing of /əʊ/ as /ɔ:/ as in “overview” and “roadmap”
- Inserting a vowel before the –s plural morpheme in “interests”.
- Inserting a vowel before the –ed past tense in “narrowed” and “worked”.
- Vowel replacements in “Journal” and in “collect”.
- Substitution of /dʒ/ with /ʒ/ in “journal” (repeated).
- Vowel replacements of /ʊ/ as /ɔ/ in “look” “books” and “good”.
- Doubling of the consonant in “according and “correct”.
- Monophthongization of /ʊə/ into /u:/in “sure”.

**Audio 4:** duration is 6 min.:30 sec.

The participant commits the following pronunciation errors:

- Voice alternation of /p/ as /b/in “presentation”, “part” and “previous”.
- Monophthongization of /ei/ into /e:/ in “presentation”.
- Inserting a vowel before the past-tense morpheme in “concerned, “observed”.
- Vowel replacement of schwa into /ʌ/ in “concerned, “observed”, “collection”, and “collected”.
- Doubling the consonant in “collecting” and “collected”.
- Inserting a vowel in “depends” (repeated).
- Stress shift in “results and “ideas”.

**Audio 5:** duration is 12 min.:35 sec.

This audio reveals the following errors:

- Monophthongization of /əʊ/ as /ɔ:/ as in “hello” and “show”.
- Substitution of /ð/ as /z/ in “this” (repeated).

- Voice alternation of /p/ in “plagiarism”, “topic”, “paper”, “person”, “published”, “paraphrase”, “passage”, “points” and “people”.
- Monophthongization of /ei/ into /e/ in “plagiarism” (repeated).
- Vowel replacement of schwa into /ɔ:/ in :“works, “words”, “person” & into /ɔ/ in “incorrect” into /æ/ “about”, “allows” and “according”
- Vowel replacement of /ɔ:/ into /æ/ in “altering”.
- Vowel replacement of /ʊ/ into /ɒ/ in “books”.
- Addition of /g/ after /ŋ/ in “wrong”, “giving, “copying”.
- Doubling of consonants in “incorrect”, “allows”, and “according”.
- Stress shift in “benefits”, “attributed” (repeated), “significantly”.

**Audio 6:** duration is 4 min.: 08 sec.

The participant commits the following errors:

- Voice alternation of /p/ in “hypothesis”, “specifying”, “planning”, “predictable”, “preparatory”, “population”, “presumed”, “possible”.
- Substitution of /θ/ with /s/ in “hypothesis”, “think” and “method”.
- Vowel replacements of /ʊ/ into /ɒ/ in “look” and “good”.
- Inserting a vowel before {-s plural} in “forms, “things and “tests”.
- Doubling of consonants in “affect”, “effect, and “effective”.
- Stress shift in “differences” and “result” (repeated).

- Monophthongizing of /ʊə/ into /u: in “sure”
- Monophthongizing of /ɪə/ into /i:/in “clear”.
- Monophthongizing in “compiling”.
- Inserting a vowel sound in “depends, “changed”.

**Audio 7:** duration is 2 min.: 37 sec.

This audio shows some errors as follows:

- Voice alternation of /p/ in “presented”, “develop”, “topic”, “paper”.
- Monophthongization of /ei/ into /e:/in “paper” and “great”.
- Stress shift in “ideas”
- Vowel replacements in “working”, “work”.
- Addition of /g/ after /ŋ/ in “working” and “interesting”.
- Vowel replacements in “good”.
- Vowel replacement of /ɔ:/ into /u:/ in broad” (repeated)
- Monophthongization of /əʊ/ as /ɔ:/ in “overwhelming” and “overview”
- Substitution of /dʒ/ with /ʒ/ in “generate” and “general”
- Inserting a vowel before –s plural morpheme in “words” and “terms”.
- Doubling the consonant in “select and “allow”.

**Audio 8:** duration is 6 min: 33 sec.

This audio shows some errors as follows:

- Voice alternation of /p/ in “presentation”, “project,popular” and “paper”.
- Consonant doubling in “effective”
- Stress shift in “idea” and “literature”.

- Substitution of /ð/ as /z/ in “these” (repeated).
- Substitution of /θ/ with /s/ in “things”.
- Inserting a vowel before –s plural morpheme in “things” (repeated), “concepts”, “interests” and “terms”.
- Monophthongization in “paper”.
- Vowel replacement of /ɔ:/ into /u:/ in “broad”.
- Vowel replacement in “word”, “keyword”, “journal”.

**Audio 9:** duration is 2 min: 08 sec.

The participant here made some errors such as:

- Inserting a vowel before –s plural morpheme in “interests”, “facts”.
- Doubling the consonant in “allow”.
- Vowel replacement in “allow”.
- Vowel replacement of /ʌ/ into /æ/ in “structure” (repeated).
- Monophthongization of /əʊ/ as /ɔ:/ in “quotation” and “over”.

**Audio 10:** duration is 4 min: 11 sec.

This audio shows the following errors:

- Substitution of /ð/ as /z/ in “this”, “there” and “these”.
- voice alternation of /p/ in the following words; “presentation”, “plagiarism”, “papers”, “pasting”, “permission”, paraphrasing”, “publishing”, “people”, put”, printed”.
- Monophthongization of /ei/ into /e:/ in “plagiarism and “paper (repeated
- Monophthongizing of /əʊ/ as /ɔ:/ as in “No”, “notes” and “quoting”.

- Substitution of /tʃ/ into /ʃ/ in the words; “cheating” and “checker”.
- Vowel replacement of /ɜ:/appears in the words; “work” and “words”.
- Intrusive vowels appear in the words: “friends”, “words” and “facts”
- Stress shift in “literature and “consequences”.
- Addition of consonant /g/ after /ŋ/ appears in the words “wrong” and “according” and “quoting”.
- Doubling of the consonant appears in the word “according (repeated).
- Vowel replacement of the schwa into /æ/in “according (repeated).

**Audio 11:** duration is 9 min.: 37 sec.

The participant here made the following errors:

- Stress shift in “interprets”, “objects”, “result”.
- Inserting a vowel in “formed”.
- Doubling the consonant in “collect”, “collection”.
- Vowel replacement in “collect”, “collection”, “conducted”, “observable”.
- Vowel replacement of short schwa into /æ/ in “among” and “upon”.
- Addition of consonant /g/ after /ŋ/ appears in the word, “among”.

**Audio 12:** duration is 4 min.: 26 sec.

This audio reveals the following errors:

- Voice alternation of /p/ in “paper, “plagiarism”, “copied”, “paraphrasing
- Consonant replacement of /ð/ as /z/ in “this”, “there”, “these”.
- Monophthongizing of /ei/ in “paper, “restate (repeated) and “plagiarism”
- Vowel replacement of /i/ in “work” and “words”.
- Monophthongization of /ʊə/ in “sure”.
- Doubling the /l/ in “Select” (repeated).
- Inserting a vowel before the plural morpheme in “works” and “marks”.

**Audio 13:** duration is 10 min.:12 sec.

This audio shows the following errors:

- Vowel replacement in “explore”.
- Stress shift in “Industrial” and “preferable”.
- Inserting a vowel before-ed morpheme in “concerned” and “asked”.
- Consonant doubling in “Affect”, “collecting”.
- Vowel replacement in “concerned” and “collecting”.
- Vowel replacement of /ʊ/ in “good”.
- Monophthongization of /əʊ/ in “hope”

**Audio 14:** duration is 5 min.: 66 Sec.

This audio reveals the following errors:

- Substitution of /ð/ as /z/ in “this”.
- Voice alternation of /p/ into /b/ in “presentation”.
- Consonant doubling in “collected” and “allows”.

- Inserting a vowel before 3<sup>rd</sup> person singular morpheme in “involves”.
- Inserting a vowel before past participle morpheme in “solved”.
- Addition of /g/ after /ŋ/ appears in “defining”, “writing”, “making”.
- Vowel replacement of short schwa into /ɒ / in “factors” and “obtain”.
- Vowel replacement of /ɔ:/with /æ/ in “alternative”.
- Monophthongization of /Iə/ into /i:/ in “clearly” and “clear”.
- Monophthongizing of /əʊ/ as /ɔ:/ in “open”.
- Vowel replacement of initial short schwa into /æ/ in “about”.

**Audio 15:** duration is 8min.: 12 sec.

- Vowel replacement of short schwa into /æ/ in “about”.
- Inserting a vowel in “involves” (repeated).
- Monophthongization of /Iə/ into /i:/ in “here” (repeated).
- Monophthongizing of /əʊ/ as /ɔ:/ in “also” (repeated).
- Stress shift in “ideas” and “adequate”.
- Inserting a vowel before –s plural morpheme in “terms”.
- Monophthongization of /ʊə/ in “pure” and “cure”.
- Inserting a vowel before-ed morpheme in “concerned” and “attached”.
- Consonant doubling in “commercial” and “collection”.
- Vowel replacement of long schwa in “word” and “world”.
- Addition of consonant /g/ after /ŋ/ appears in “understanding”.

## 5.1 Results

The mispronunciations identified in the sample of 15 participants' presentations were coded in terms of individual occurrence as well as co-occurrences. If one type of mispronunciation appeared alone in the participant's presentation, it will be counted once as an individual occurrence of error. If the error appeared more than once in the presentation it will be counted also as an individual error. It should be noted that the repetition of the sound or word mispronunciation more than once as well as the sound mispronunciation in more than one word assures that it is an error and not just a mistake.

The total number of occurrences will be then counted in the whole data and then the values will be analyzed to determine the top most frequently committed pronunciation errors among Egyptian English major graduates. If an error has a higher total number of occurrence value than other errors, it would qualify it to be considered a top ten error. According to the data that have been collected from the recordings of the participants, the common problematic sounds have been highlighted. It has been revealed that the participants have common pronunciation errors.

### 5.1.1 Graduates' Errors at the Segmental Level

The types of errors working at the segmental level are represented in the phonemic errors in consonants, vowels and diphthongs. The following table exposes the miscues in pronouncing consonant sounds.

**Table 2**

***Graduates' Errors in Pronouncing English Consonants***

No.	Problematic Consonant	Type of Error	Frequency of Error	Percentage %
1	/p/	Voice alternation	10	66.6%
2	/ŋ/	Addition	7	46.6%
3	/ð/	Substitution	5	33.3%
4	/θ/	Substitution	4	26.6%
5	/dʒ/	Substitution	3	20%
6	/tʃ/	Substitution	1	6.6%

The above table shows that there were six consonants which were spoken incorrectly by the MA students. They were /p/, /ŋ/, /θ/, /ð/, /tʃ/ and /dʒ/. As it is shown in table 2 only 5 (33.4%) of the Egyptian graduates of English department out of 15 subjects pronounced the initial voiceless bilabial stop /p/ correctly, while 10 (66.4%) of the subjects failed to pronounce it correctly as they pronounced the voiced bilabial stop /b/ instead of /p/. This phonological process is called voice alternation in which the speaker resorts to voice alternation of /p/. One possible justification is that most of the Egyptian learners mispronounce this sound because it is not a separate phoneme in Arabic language, so the students tend to replace /p/ in initial position with /b/ as the closer sound in the position of articulation; so in many words such as “paper, “presentation and “plagiarism they mispronounce them as /beibə(r)/ and /brezen<sup>1</sup>teɪʃən/and /bleɪzərɪzɪm/. Moreover, when /p/ occurs initially it has another level of difficulty for Arab EFL learners

which is called aspiration which does not exist in Arabic phonological system ( El Zarka, 2013).

It was noticed that 46.6% of the subjects add voiced velar stop/g/ after the voiced velar nasal /ŋ/ in word-final position. Therefore, /ŋ/ is the second most trouble sound for Egyptian graduates. It was also observed that a few participants commit miscues in pronouncing dental fricatives/θ/, /ð/as in audios 6, 10 and 12. The recorded samples indicate that some of the participants mispronounce these sounds because they do not exist in Egyptian speaking Arabic and they were substituted by /s/ and /z/ respectively. Similarly, the voiceless affricate /tʃ/ was substituted by the voiceless palato-alveolar fricative /ʃ/and the voiced palate- alveolar affricate/dʒ/ was substituted by /ʒ/. It is also noticed that /dʒ/ is mispronounced only in initial position as in “journal“ and “general not in all positions. For example, in word-medial position as in the word “plagiarism, it is pronounced correctly.

The third table shows the miscues in pronouncing vowel sounds. It exposes that there were five vowels which are spoken incorrectly by the sample. They were /ɜ:/, /ə/, /ʊ/,/ɔ:/and/ʌ/.

**Table 3**

***Graduates' Errors in Pronouncing English Vowels***

No.	Problematic Vowel	Types of vowel Errors	Frequency of Error	Percentage%
1	/ɜ:/	Vowel replacement	10	66.6%
2	/ə/	Vowel replacement	8	53.3%
3	/ʊ/	Vowel replacement	5	33.3%
4	/ɔ:/	Vowel replacement	5	33.3%
5	/ʌ/	Vowel replacement	1	6.6%

It was perceived that the majority of the participants continue to mispronounce long and short schwa in their oral presentations. As it is shown in table 3 only 5 (33.4%) of the Egyptian graduates of English department out of 15 subjects pronounced the long schwa /ɜ:/ correctly, while 10 (66.6%) of the subjects failed to pronounce it correctly as they replace the /ɜ:/ with the long rounded vowel sound /ɔ:/ instead. One possible justification is that most of the Egyptian learners mispronounce this sound due to the inconsistency between sounds and letters in English language, so the students tend to replace /ɜ:/ with /ɔ:/ in many words such as “words, “world and “journal and they mispronounce them as /wɔ:dəʊs/, /wɔ:rləd and /ˈdʒɔ:(r)nəl/. The second position of vowel errors is occupied by the short schwa as 8 (53.3%) of the subjects failed to pronounce it correctly as they replace the central short /ə/ with other vowel sounds instead. Moreover, some participants in Audios 5 and 7 committed miscues in the pronunciation of some rounded vowels. However, only 6.6 % of the subjects mispronounced the single vowel /ʌ/. The next table tackles the errors in the diphthong pronunciation.

**Table 4**

***Graduate' Errors in Pronouncing Diphthongs***

No.	Diphthongs	Types of Error	Frequency of Error	Percentage%
1	/eɪ/	Monophthongization	9	60%
2	/əʊ/	Monophthongization	9	60%
3	/ʊə/	Monophthongization	4	26.6%
4	/ɪə/	Monophthongization	4	26.6%

As shown in the above table, there were four diphthongs that were mispronounced by the subjects; they were /eɪ/, /əʊ/, /ʊə/ and /ɪə/. The closing diphthong/eɪ/is substituted by the Colloquial Arabic vowel sound /e:/ in Audios 2, 5, 10 and12 while /əʊ/ was substituted by the monophthong /ɔ:/as in the words “hope” and “so” in Audios 1,9,10 and 13. Furthermore, it has been noticed that monophthongization errors are predominant in the spoken language of Egyptian graduates of English department in which the diphthong is mispronounced as a monophthong. One possible explanation of this miscue in producing some diphthongs may be attributed that English has a greater number of diphthongs than Arabic language (Kharma& Hajjaj, 1997).

### 5.1.2 Graduates' Errors at the Suprasegmental Level

The types of errors at the suprasegmental level are limited in this study to analyze only errors at the syllable level. The following table tackles the errors committed by graduates at the syllable level.

**Table 5**

#### *Graduate' Errors in Pronouncing syllables*

No.	Type of Error	Frequency of Error	Percentage%
1	Intrusive vowel	14	93.3%
2	Consonant doubling	14	93.3%
3	Stress shift	10	66.6%

It is observed that 14 (93.3%) of the graduates in the sample seemed to insert a vowel splitting the consonant cluster and adding a new syllable. This phonological process is called “Epenthesis” which is “a type of intrusion, where an extra sound has been inserted in a word”

(Crystal, 2003, p.163). It can be found in final consonant cluster when the participants insert a schwa or /I/ before some inflectional morphemes (e.g. –s plural, -ed past tense, 3<sup>rd</sup> person singular present simple or possessive).The word “worked for example is transcribed in IPA as/w3:(r)kt/, yet, the Egyptian speakers tended to insert a vowel sound mispronouncing it as /w3:(r)kIt/ or /w3:(r)kId/. The second top syllable error is the consonant doubling which is attributed to the influence of Arabic language. In this concern, Kharma & Hajjaj (1997) state that “doubling is ...a feature of Arabic pronunciation, and this tends to make Arabic speakers double the pronunciation of English consonants, especially when they meet them in written English”. The third type of error is the stress shift in which the learner misplaces the stressed syllable. It has been argued that “the stress patterns of Arabic and English are sufficiently different to create difficulty for the Arab learner” (Kharma , Hajjaj, 1997, p.24).

## **6.1 DISCUSSION**

The objective of this study is to identify different types and probable causes of pronunciation errors committed by Egyptian English department post-graduate students and newly-graduated teachers. To achieve this objective, the researcher studied 18 oral presentations which were provided by 18 post-graduate students. Three participants of lowest and highest values are excluded from the analysis.

The results of the analysis reveal that Egyptian graduates in the sample continue to commit a common pattern of errors that indicates the recurrent mispronunciation of consonants, vowels and diphthongs. The data analysis at the consonant level presented in table 2 reveals that there were six types of errors in consonant pronunciation made by the

graduates in providing their oral presentations in English. The first top error that the subjects tend to mispronounce when they are speaking is the voice alternation of initial voiceless bilabial plosive /p/ which is replaced with voiced bilabial plosive /b/ in words like paper, presentation, plagiarism. The findings of the previous studies (e.g., Huwari, 2019; Fouly et al, 2020 & Adel, 2023) support the view that such sound is a problematic sound for Egyptian students because they do not have it in their mother tongue. The results support the view because in the recorded presentations we have only 5 (33.4%) of the subjects who were able to produce the sound /p/ correctly, while 10 (66.4%) of the subjects failed to pronounce it correctly as they replaced it with /b/ instead. It is stated that the reason for this shifting is due to the fact that /p/ occurs in Arabic as an allophone, i.e., there is no phonemic contrast as they are in English (Hajjaj & Kharma, 1997). The results also show an agreement with El-Zarka, 2013; Huwari, 2019; Fouly 2020 & Adel, 2023 that Egyptian Students tend to substitute /θ/ with /s/ and /ð/ with /z/.

As for English single vowels, the researcher does not agree with Smith (2001, p. 196) that "... virtually all vowels may cause problems" but she agrees with Fouly et al. (2020) that /ɜ:/, /ə/, /ʊ/, /ɔ:/ and /ʌ/ are the problematic vowel sounds for Egyptian EFL learners. In table 3, vowel substitution errors are predominant in the spoken language of Egyptian graduates of English department in that the long schwa /ɜ:/ is replaced by other vowels such as /ɔ:/ due to the inconsistency between spelling and pronunciation. It can be argued that vowel replacement errors are the main phonological processes used in the spoken language of Egyptian graduates in that the schwa is substituted by other vowels due to the

changeability between spelling and pronunciation. There are other explanations for errors that are recognized in other linguistic aspects such as the L1 and L2 transfer and extralinguistic factors.

In agreement with Smith's (2001) findings about the most problematic diphthongs, the current study shows that the top diphthong errors as shown in table 4 are the front closing diphthong/eɪ/which the subjects tend to substitute with the Colloquial Arabic vowel sound /e:/ and the back closing /əʊ/ that was substituted by the monophthong /ɔ:/. One possible explanation of this miscue in producing some diphthongs may be attributed that English has a greater number of diphthongs than Arabic language (Kharma& Hajjaj, 1997). Moreover, it has been observed that monophthongization errors are predominant in the spoken language of Egyptian graduates of English department in which the diphthong is mispronounced as a monophthong.

Regarding syllable level of analysis, it is noticed that 93.3% of the Egyptian graduates in the sample seemed to insert a vowel splitting the consonant cluster and adding a new syllable. They also tend to shift the stress. El- Zarka's (2013) findings supported this view as he attributed this problem to the differences of the syllable structure and stress patterns in Arabic and English. El-Zarka (2013, p.49) also adds that “this results in subsequent phonological and repair strategies processes such as vowel omission, vowel insertion, syllable omission and consonant substitution”.

The types of errors working at the phonemic level represented in errors in consonants, vowels and diphthongs are mostly related to the phonological processes of voice alternation, consonant or vowel substitutions, and monophthongization. At the syllable level of analysis,

vowel insertion or addition (epenthesis), consonant doubling and stress shift are the predominant strategies used by the graduates in the sample. The first top phonemic error that the subjects tend to mispronounce when they are providing their oral presentations is the voice alternation of voiceless bilabial plosive/p/ which is replaced with voiced bilabial plosive /b/. The next is the consonants or vowels substitutions in which the subjects substitute the sounds that they are not accustomed to with the sound that they are familiar with. It can be found in the case of pronouncing the sounds /tʃ/which is substituted by the more familiar /ʃ/and /ɜ:/ for example which is replaced with the rounded vowel/ɔ:/. The last type of phonemic error is called monophthongization. It is a process in which the speakers monophthongize a diphthong sound. It occurs in most of the errors on the diphthong pronunciation analyzed by the researcher.

From the data analysis, it was found that mostly the errors occurred for various reasons including the interference of the first language, the difference of phonological system between the first language and the English as the second language, the gap between pronunciation and spelling and the lack of vocabulary knowledge of the target language. The first potential cause of pronunciation errors is the mother tongue interference. Previous studies have shown that certain sounds are more problematic for non-native speakers such as the English /p/, /ŋ/, /tʃ/ and /dʒ/ due to the influence of the mother tongue (e.g., Hassan, 2014; Huwari, 2019; Fouly 2020 & Adel, 2023). Therefore, the mispronunciation in this case is due to the process of fossilization (Hassan, 2014). It has been explained that “if some learners develop a fairly fixed repertoire of L2 expressions, containing

many forms that do not match the target language, and seem not to be progressing any further, their interlanguage is said to be 'fossilized' ” (Yule, 2014, p.192). The second possible cause is the sound system differences between the first language and English as a second language. The third potential cause is the non-correspondence between spelling and pronunciation. The learner is inclined to pronounce words according to the word spelling (Keshavarz, 2012). In this concern, Kharma and Hajjaj (1997) have referred to the above two features of English that are considered as sources of pronunciation difficulties. They are the articulatory differences between English and Arabic sounds as well as the gap between spelling and pronunciation. In English there are Forty-four sounds while there are only twenty-eight sounds in Arabic. The difference of the sound system would create difficulty in pronouncing some English vowels, e.g., the short and long schwa as well as some diphthongs such as /eɪ/, /əʊ/, /ɪə/ and /ʊə/. As for the non-correspondance between spelling and pronunciation, one cannot rely on spelling in order to know how to pronounce a word as the same letter can be pronounced differently in different words such as “cough”, “ought” and “through”. The fourth cause could be the limited knowledge of English vocabulary. Therefore, the subjects sometimes over generalize depending on their experiences of similar words when pronouncing any new word (e.g., “thesis” and “hypothesis”).

## 7. CONCLUSION

Based on the results of the pronunciation recordings of the sample, it can be concluded that there were fifteen sound errors at the phonemic errors. Firstly, there were six consonants that were mispronounced.

They were /p/, /θ/, /ð/,/tʃ/, /dʒ/ and /ŋ/. The subjects tended to make pronunciation errors of the consonant /p/. It is due to the absence of /p/ in the phonological system of Arabic language. Secondly, the pronunciation errors in the vowels were five. They were /ɜ:/, /ə/, /ʊ/, /ɔ:/ and /ʌ/. The subjects of the sample mostly tended to make errors in the pronunciation of the vowels /ɜ:/, /ə/, /ʊ/. The third type of segmental errors was the diphthong errors. There were 4 types of diphthong errors. They were /eɪ/, /əʊ/, /ɪə/ and /ʊə/ and in the diphthong pronunciation errors, the subjects mostly tended to make errors in the diphthongs /eɪ/and/əʊ/. At the syllable level, there were three pronunciation errors. Epenthesis and consonant doubling errors are predominant in the spoken language of Egyptian graduates of English department. The majority of the subjects of the sample tended to insert a vowel before some inflectional morphemes in final consonant cluster. They also have the tendency to double the consonant sound in pronouncing double consonant letters. Finally, the results of the current study confirm the sample's use of five types of phonological processes: addition or insertion, consonant or vowel substitutions, monophthongization, consonant doubling and stress shift.

For future research, more studies with a deeper analysis on other phonological aspects are required. The researcher hopes that this study would be beneficial for teachers, EFL learners and other researchers as a guideline or reference to conduct many other studies in phonology or pronunciation analysis. For teachers and EFL learners, it is recommended to get intensive training courses in phonetics and phonology to raise their awareness of the English phonetic system. It is also preferable that these courses are taught by specialized native

speakers. Nevertheless, studying phonetics and phonology in isolation might not achieve the desired purposes. Therefore, practical courses of Error Analysis and Contrastive Analysis are recommended to enable teachers as well as learners to predict and/or analyze errors that might occur. For scholars of Linguistics, studying and discovering errors can provide evidence on how the second language is learnt and what strategies or procedures are used in the discovery of the target language.

### Works Cited

Adel, M. (2023). *An applied contrastive analysis of consonants in Egyptian Colloquial Arabic and Received Pronunciation of British English*. Unpublished MA Thesis. Fayoum University.

Ababneh, I. (2018). English pronunciation errors made by Saudi students. *European Scientific Journal*, 14 (2), 244-261.  
[http://doi:10.19044/esj.2018.v14n2\\_p\\_244](http://doi:10.19044/esj.2018.v14n2_p_244)

Abd Elwahab, W. (2020). The effect of local Arabic dialects on learning English language pronunciation. *Arab World English Journal*, 11(1) 489-499.

<https://dx.doi.org/10.24093/awej/vol11no1.33>

Al-Khresheh, M.H. (2016). A review study of contrastive analysis theory. *Journal of Advances in Humanities and Social Sciences*. 2, 330-338. Doi:10.20474/jahss-2.6.5.

<https://www.researchgate.net/publication/270580983>

Alzinaidi, M. H., & Abdel Latif, M. M. (2019). Diagnosing Saudi Students' English Consonant Pronunciation Errors. *Arab World English Journal*, 10 (4) 180- 193. DOI:

<https://dx.doi.org/10.24093/awej/vol10no4.14>

- Bayoumi, A. (2013). Common pronunciation errors in the speech of undergraduate Egyptian students at Ain Shams University and ways of dealing with it. <https://languagers.wordpress.com>
- Benhima, M. (2016). *The Errors Made in the Pronunciation of Moroccan EFL Learners: The Case of English Department Students in Sidi Mohamed Ben Abdellah University* (A master dissertation).
- Corder, S.P. (1967). The significance of learners' errors. *International Review of Applied Linguistics*, 5.
- Corder, S.P. (1981). *Error Analysis and Interlanguage*. Oxford University Press.
- Creswell, J.W. (2014). *Research design: Qualitative, quantitative and mixed methods approaches*. Sage Publications.
- Crystal, D. (2003). *A dictionary of Linguistics and Phonetics*. Basil Blackwell Ltd.
- Dulay, H. C., Burt, M.K., & Krashen, S.D. (1982). *Language Two*. Oxford University Press.

- El Zarka, A. M. (2013). *The pronunciation errors of L1 Arabic learners of L2 English: The role of modern standard Arabic and vernacular dialects transfer*. Unpublished Thesis. The British University in Dubai.
- Fisiak, J. (1981). Some introductory notes concerning contrastive linguistics. In Fisiak, J. (Ed.) *Contrastive linguistics and the language teacher*. Pergamon Press LTD.
- Fouly, S. A. et al. (2020). Pronunciation Errors and Repair Strategies made by Northern Upper Egypt EFL learners: A case Study of the production of English sound segments by first year English department students in Beni-Suef University. *Journal of the Faculty of Arts- B.S.U.*
- Fromkin, V., Rodman, R. & Hyams, N. (2011). *An introduction to language*. Wadsworth.
- Gass, S. & Selinker, L. (2008). *Second Language Acquisition: An introductory course*. 3<sup>rd</sup> edition. Routledge.
- Hago, O.E., Khan, W.A. (2015). The pronunciation problems faced by Saudi EFL learners at secondary schools. *Education and linguistics research, 1*. 85-99. Doi:10.5296/10.5296/elr.v1i2.7783

- Hameed, P. & Aslam, M. (2015). Pronunciation as a stumbling block for the Saudi English learners: An analysis of the problems and some remedies. *Theory and Practice in Language Studies*. 5. 1578-1585. DOI: <http://dx.doi.org/10.17507/tpis.0508.06>
- Hassan, E.M. (2014). Pronunciation problems: A case study of English language students at Sudan University of Science and Technology. *English Language and Literature Studies*, 4 (4).
- Huwari, I. F. (2019). Pronunciation errors in Egyptian English. *Literary Endeavour* (ISSN0976-299x): Vol. x: Issue: 5. <https://www.literaryendeavour.org>
- Kelly, G. (2001). *How to teach pronunciation?* Longman.
- Keshavarz, M.H, (2012). *Contrastive analysis & error analysis* (Ph.D.dissertation). Rahnama Press.
- Khalifa, M.F. (2020). *Errors in English Pronunciation among Arab Speakers: Analysis and Remedies*. Cambridge Scholars Publishing.
- Kharma, N. & Hajjaj, A. (1997). *Errors in English among Arabic speakers: Analysis and remedy*. Librarie du Liban.
- Lado, R. (1957). *Linguistics across cultures: Applied linguistics for language teachers*. University of Michigan Press.

- Odlin, (1997). *Language Transfer: Cross-Linguistic Influence in Language Learning*. Cambridge University Press.
- Richards, J. C. (Ed.) (1973). *Error Analysis: Perspectives on Second Language Acquisition*. Longman.
- Richards, J. C., & Schmidt, R. (2002). *Longman Dictionary of Language Teaching and Applied Linguistics* (3<sup>rd</sup> Edition). Pearson Education Limited.
- Roach, P. (2009). *English Phonetics and Phonology*. Cambridge University Press.
- Sanders, C. (1976). Recent Development in Contrastive Analysis and their relevance to Language Teaching. *IRAL*, XIV,1: 67-74
- Swan, M. & Smith, B. (2001). *Learner English: A teacher's guide to interference and other problems*. Cambridge University Press.
- Tushyeh, H .(1996). Linguistic problems facing Arab learners of English. *ITL-International Journal of Applied Linguistics*. pp.109-117.
- Yule, G. (2014). *The study of language: An introduction*. Cambridge University Press.

## أنواع أخطاء نطق اللغة الإنجليزية لدى طلاب الدراسات العليا المصريين في

### تخصص اللغة الإنجليزية

#### ملخص

تهدف هذه الدراسة إلى تحديد وتقصى أخطاء النطق في اللغة الإنجليزية لدى طلاب الدراسات العليا المصريين بقسم اللغة الإنجليزية بكلية الآداب جامعة الفيوم. كما تسعى إلى اكتشاف العمليات الصوتية التي يقوم بها الخريجون المصريون للتغلب على مشاكل النطق لديهم. تتضمن بيانات الدراسة ١٨ عرضاً شفهيًا لطلبة الدراسات العليا في إحدى مقررات السنة التمهيديّة للماجستير في اللغويات في العام الدراسي ٢٠١٩/٢٠٢٠. تستخدم الدراسة أسلوب العينة العشوائية لاختيار العينة. وتعتمد الدراسة على المنهج الإحصائي الوصفي حيث تهتم الباحثة بوصف البيانات وتصنيفها إحصائياً. كما يستخدم منهج تحليل الأخطاء كوسيلة لتحليل أخطاء النطق لدى العينة المختارة من الطلاب. وبناء على نتائج تسجيلات النطق للعينة المختارة يمكن استنتاج وجود خمسة عشر خطأ صوتياً على المستوى القطعي كانوا /p/، /ŋ/، /θ/، /ð/، /tʃ/، /dʒ/، /:z/، /ə/، /ʊ/، /ɔ:/، /ʌ/، /eɪ/، /əʊ/، /ɪə/ و /ʊə/. وتكشف النتائج أيضاً أن أخطاء العينات ترتبط في أغلب الأحوال بالعمليات الصوتية لتناوب الصوت، واستبدال حروف العلة، وأحادية الصوت على المستوى القطعي، بينما يميل الأشخاص إلى ارتكاب أخطاء في إدخال حروف العلة، ومضاعفة الحروف الساكنة، وتحول النبر على مستوى تحليل المقطع. ومن المأمول أن تزود هذه الدراسة متعلمي اللغة الإنجليزية والمدرسين الجدد بخبرة جيدة حول كيفية التقييم الذاتي لأخطائهم. الكلمات المفتاحية: أخطاء النطق، تحليل الأخطاء، طلاب الدراسات العليا المصريين، السمات القطعية وفوق القطعية.