

CHAPTER ONE: INTRODUCTION

1.1. Introduction

Vocabulary study has been neglected by linguists, applied linguists and language teachers. Although interest has grown quite rapidly during the 1980s, there is certainly not much evidence of interest in vocabulary in the last twenty-five years taken as a whole, and relative to investigation at other linguistic levels. For taken over the last sixty years, the picture is rather different, because the 1930s witnessed the beginnings of what has come to be called the ‘vocabulary control movement’. It may be useful, however, to begin this chapter by listing some questions which teachers and students have asked, usually quite persistently, about vocabulary and language study.

1. How many words provide a working vocabulary in a foreign language?
2. What are the basic words to learn first?
3. In the early stages of learning a second or foreign language, are there some more useful strategies to the learner than others?
4. Is it more practical to learn words as single items in a list, in pairs (for example, as translation equivalents) or in context?
5. What are about polysemous, or ambiguous words? Should they be avoided? If not, should some meanings be isolated for learning first?

6. Are some words more likely to be encountered in spoken rather than written discourse? If so, do people know what they are?

The proposal for Basic English was first put forward in the early 1930s. Essentially, it was a project designed to provide a basic minimum vocabulary for learning of English. The originators of the proposal were C.K. Ogden and I.A. Richards (Ogden 1930; 1968), though the latter author was responsible for numerous revisions, refinements and extensions of the scheme. Throughout the project there were two main aims: ‘the provision of a minimum secondary world language and the designing of an improved introductory course for foreign learners, leading into general English’ (Richards 1943, p. 62). Its design has been outlined succinctly as follows by Richards (who, in fact uses Basic English for the outline).

Basic English in English made simple by limiting the number of words to 850 and by cutting down the rules for using them to the smallest number necessary for the clear statement of ideas. And this is done without change in the normal order and behaviour of these words in everyday English. And though it is designed to give the learner as little trouble as possible, it is no stranger to the eyes of readers than these lines which are, in fact, in Basic English (Richards 1943, p. 20). In other words, for Ogden and Richards (Year) it is a basic principle that, although their scheme will not embrace full English, it will at least not be un-English.

At the basis of Ogden and Richards’s *Basic English* is the notion of a communicative adequacy whereby, even if periphrastically, an adult’s fundamental linguistic needs can

be communicated. Ogden and Richards made a list of about eighteen main verbs, or ‘operations’ as they prefer to term them. The verbs are *send, say, do, come, get, give, go, keep, let, make, put, seem, take, see*, plus the modal verbs *may* and *will* and the auxiliary words *be* and *have*. The only inflections to be learned (on verbs and nouns) are *-er, -ing,* and *-ed*, and Basic English does not even permit the bound morpheme inflection *s* for verbs, so that *he make(s)* becomes ‘ungrammatical’. An example of the kind of periphrasis made possible, unnaturally enforced by the system, is the omission of the verbs: *ask* and *want* from the list of operators for the simple reason that they can be paraphrased. That is:

ask ----- make a question;

want ----- have a desire for.

The idea that many notions can be re-expressed using more basic language is central to the Basic English project. Other examples might be:

smoke ----- have a smoke;

walk ----- have a walk

Closer scrutiny of the word list reveals further difficulties in the way of answers to some of the questions posed at the beginning of this chapter. Firstly, learning 850 word forms is not the same thing as learning 850 single senses. One calculation is that the 850 words of Basic English have 12, 425 meanings (Nation 1990, p. 11). Which meanings should be learned first? Are there core meanings which are more easily retrained or which are more important? Ogden and Richards (1976) seem to suggest

that there are. For example, they have a category of 200 ‘pictured’ words which, presumably, have defined physical or concrete properties. But even these items can be polysemous. Which ‘picture’ of the following items is the right one, and should it be learned first: *pipe, head, stamp, line*? Secondly, it is interesting to note just how many of the 850 words have more than one sense. This applies to both lexical and grammatical words as well as to words such as *round* or *right* or *past*, which can have either primarily lexical or grammatical functions. This raises an interesting psycholinguistic question of whether the senses of single word forms (however polysemous) are easier to retain than the same number of monosemous words with different word forms. Ogden and Richards (1976) offer no guidance here (and do not seem particularly aware of the question), although, to be fair to them, this is still a problem today which requires more extensive exploration. Thirdly, there is little guidance given as to how Basic English might be extended, and thus how this list and any additions to it might be graded for relative difficulty or usefulness, or, indeed, how much further, if at all, a learner would need to go to have a ‘working vocabulary’. Fourthly, the system is not designed to enhance social interaction through language. The object is one which bears not only on more specific features such as the fact that items such as *goodbye* or *thank you* or *Mr* and *Mrs* do not appear in Basic English, or that communication would be inevitably rather neutral or slightly formal stylistically (for example, *have a desire for, take a walk*), but also on the fact that the extent of periphrases required can make communication a relatively clumsy affair. Additionally, there is the problem already noted that in the process of transfer to Standard English, a

relatively large number of constructions which will have been created in the course of learning Basic English will have to be unlearned.

This is not to say that Basic English is not eminently 'useable' as an auxiliary language for a general purpose of simplified international communication, and as a practical introduction to a more standardised form of English that can be found in many international contexts of English usage. It is also, as Ogden and Richards (1976) themselves have amply demonstrated a useful system of producing clear and comprehensible *written* texts, particularly where high degrees of communicative expressivity are not required, such as in expository texts or material with high levels of information content. Although *Basic English* is not widely used or referred to today, the underlying impulse to provide systematically graded instructions to language, to specify lexical syllabus and to construct core or nuclear English for language learning purposes, is still an active one.

This research about the learning of vocabulary with help of morphological and morphophonemic awareness is an attempt to conclude that if the rules related to morphology and morphophonemics are kept in mind, the learners can have the knowledge of more words.

The morphological and morphophonemic awareness of learners of English as second language (ESL/L2) are very important aspects to learn vocabulary of language but awareness at the level of derived words practical investigation has not yet been done.

The investigating of learner's performance on derivatives has been mostly about the pronunciation while the relationship between phonological performance and formal representation of derivatives and base words has been neglected. Moreover, an integrated perspective of L2 learners' lexica concerning derivatives has not been presented in research as studies have so far restricted their scope to one aspect of derivatives, namely phonology or morphology. In addition, semantic representations of morphologically related words in the lexica of learners have not been examined.

This study is an attempt to examine morphological and morphophonemic awareness of the students of L2 as part of their L2 competence; that is, the lexical competence, in terms of their perception, production, and decoding of derivatives and their recognition of the semantic association of morphologically related words.

1.2. Morphological Awareness

English Orthography is morphophonemic in nature, which means that words are characterized by the way they sound (phonemes) and by their meanings (morphemes). If the English language was purely based on phonetics, words would be spelled the way in which they sound (e.g. the past tense of trap would be (trapt). Morphological awareness refers to the conscious ability to understand and manipulate small units of meaning (morphemes) such as prefixes, suffixes, and root words, to produce complex words (Carlisle, 1995). For example, readers demonstrate morphological awareness by their ability to recognize that the word thoughtful comprises of two morphemes: the root noun thought, which when combined with the suffix –ful, generates an adjective. Additionally, a thought represents a free morpheme because the word can stand alone,

whereas –ful is a bound morpheme because it does not have independent lexical status (Carlisle, 2003). There are four primary types of morphemes that are utilized in the formation of words: root morphemes, prefixes, suffixes, and inflections (Arnbak & Elbro, 2000). Root morphemes represent free morphemes and all morphologically complex words contain at least one root morpheme. Compound words represent the linkage of two root words: base + ball becomes baseball. In contrast, prefixes, suffixes, and inflections all represent bound morphemes, which are meaningful units added to root words to produce complex words. When affixed, prefixes alter the meaning of the root word but not the grammatical class, whereas suffixes change both the meaning and the grammatical class. For example, adding the prefix re- to the root word align results in realign, which changes the meaning but not the grammatical class. In contrast, adding the suffix -ment to the root word align generates alignment, which is a change in both meaning and grammatical class. Inflectional morphemes, such as –s, -ing, and –ed, alter the tense or pluralize the word, but keep the word class intact (Carlisle, 2003). For example, the root word pull can be changed to the past tense with the addition of –ed (pulled) or transformed to the present participle by adding –ing (pulling). Adding an –s inflected morpheme to the end of a root word (dog to dogs) pluralizes the root word but does not change its meaning. Morphological research typically differentiates between inflected and derived morphology, in that inflectional morphology is mastered in early elementary school whereas derivational morphology continues to develop through the high school levels. In contrast to inflectional morphemes, derivational morphemes usually change the meaning of the root word and can also alter the word class. For example, the root verb know could be altered to become knowledge (a noun),

knowingly (an adverb) or knowledgeable (an adjective). Derived words are typically more complex than inflected words. Derivational morphology also requires understanding that adding certain morphemes, such as -less (meaning without), can alter the meaning of the word (hope to hopeless). Some derivational transformations involve a phonological shift, in which the pronunciation from the root word to the derived word changes (local to locality). A word in which the pronunciation does not change from the root to the derived form (grow to growth) is referred to as phonologically transparent. An orthographic shift represents a change in spelling from the root to the derived word; however, the pronunciation of the root is maintained (rely to reliable). A shift in both phonology and orthography is represented by a change in spelling and pronunciation from root to derived form (long to length).

1.3. Morphophonemic Awareness

Morphophonemics, a branch of morphology, deals with the variation in the forms of morphemes because of a phonetic factor. The smallest units of concern are morphemes. The ways in which morphemes are put together into utterances and the phonemic shapes which represent the morphemes are of great concern to the researcher. Here is the list of several English words taken here for example: *brought*, *went*, *sold*, and *sang*, each consists of two morphemes: one is asserted to be the verb stem *bring*, *go*, *sell*, and *sing*, while the other, common to all four, is asserted to be the past tense morpheme. The elements mentioned are the obvious differences between the phonemic shapes representing these various morphemes in the different words.

There are morphemes which are represented in all occurrences by a single phonemic shape: for example, *pay*, represented by /peɪ/ in *pays*, *paid*, *paying*, *payer*, *payee*, *payment*, and so on, as well as in the whole word "pay". If all the morphemes of English were like this, then the morphophonemics of the language would be clear/easy. But there are complications in the English language. Thus, in English, the past tense morpheme is represented by a suffixed /d/ in *paid*, but by a combination of infixes /ou/ and suffixed /d/ in *sold*, and in various other ways in *brought*, *went*, *sang*. "Sell" is represented by /seɪl/ in most contexts, but by /sɔɪld/ when accompanied by the past-tense morpheme /sɔɪld/ + /...ou...-d/ = /sɔɪld/; *sing* is usually /sɪŋ/, but is also represented by /sæŋ/, /sɒŋ/, into which fit infix representations of certain inflectional morphemes, to yield *sang*, *sung*.

When a morpheme is represented sometimes by one phonemic shape and sometimes by another or others, it is said that the shapes stand in alternation with each other. Each representation is a morph; all the morphs that represent some given morpheme are called allomorphs of that morpheme.

/seɪl/ and /sɔɪld/ are both allomorphs of the morpheme {sell}.

{pay} manifests invariant alternation—being represented, in all environments, by a single allomorph /peɪ/.

Two morphs are distinct if they differ in phonemic shape, as /seɪl/ and the /sɔɪld/ of "sold". They are also distinct if they are allomorphs of different morphemes, even if

they are identical in shape: /seùl/ representing {sell} and /seùl/ representing {cell} thus as two different morphs.

Vocabulary is an integral part of every language. Vocabulary items are sets of words which form the basis for structuring and understanding sentences (Miller, 1991). Therefore, Angelin, Miller & Wakefield argued that “without some knowledge of that vocabulary, neither language production nor language comprehension would be possible” (1993, p.2). Words are the primary carriers of meaning, and it is widely recognized that there is a strong relationship between the individual’s stock of vocabulary and his/her general language proficiency (Vermeer, 2001; Zimmerman, 2005). Methods for learning vocabulary, then, are important parts of language learning. Learners and teachers can adopt various strategies for learning and teaching vocabulary. Vocabulary learning strategies are the processes, by which vocabulary is obtained, stored, retrieved, and used (Schmitt & McCarty, 1997). One of the strategies of word instruction is using Word-Part Clues/Morphology. As stated by Carlisle (2004), a morpheme is the name of meaningful word parts that readers can identify and put together to determine the meaning of an unfamiliar word. Knowledge of morphemes and morphology, or word structure, plays a valuable role in word learning from a context, because readers can use such knowledge to examine unfamiliar words and figure out their meanings. Morin (2003) proposed the strategy of using morphological knowledge to infer word meanings, and with it, the need to develop morphological awareness in the L2 would become more realized. She characterized morphological awareness as the ability to reflect on and manipulate morphemes and word formation rules in a language (ibid).

Pica (1988, as cited in Morin, 2003, p.107) argued that “morpheme analysis can provide important insights into the sequences, processes, and input relevant to second language acquisition”. Kuo and Anderson (2006) suggested that a learner who understands how words are formed, by combining prefixes, suffixes, and roots, tends to have larger vocabulary repertoire and better reading comprehension. Anglin (1993) identified five different morphological word types in English. They are root words (e.g., short, closet), inflected words (e.g., smoking, reports), derived words (e.g., shortish, treelet), literal compounds (e.g., sunburn, birthday), and opaque, idiomatic compounds or lexical idioms, which are then called simply ‘idioms’ (e.g., mouse tail, “a plant of the crowfoot family”; pink lady, “a cocktail”). In the present study, four of the morphological word types (root words, inflected words, derived words and literal compounds) were used to investigate the two types of morphological awareness:

The Morpheme Identification and Morphological Awareness are defined as the ability to distinguish different meanings across homophones. Morphological Structure Awareness is defined as the ability of learners to make use of linguistic knowledge to derive new meaning (Chang et al., 2005). In fact, this study, the Morpheme Identification task examines the participants’ knowledge of root words and use of morphemes to guess meaning, whereas the Morphological Structure task assesses the ability to create literal compounds, inflected, and derived words. Of interest here is whether the knowledge required completing these. Morpheme Identification and Morphological Structure Awareness tasks relate to L2 vocabulary knowledge. Chang et al., (2005) believe that this is important because it demonstrates that there are two

different aspects of morphological awareness and that both might be important in fostering vocabulary acquisition.

Nunes et al., (2006) reported that children whose L1 is English took several years to learn the use of *-ed* ending systematically to denote the past of regular verbs interestingly, even at the age of 10 years old many children still make mistakes with this morphologically based rule. The authors concluded that awareness of morphology influences children's knowledge of when to use or not to use the morpheme *-ed*. However only a few studies (Morin, 2003; Chang et al., 2005; and Schiff & Calif, 2007) have examined the role of morphological awareness in L2 vocabulary development, the findings suggest that different aspects of morphological awareness may be useful for vocabulary building. Prince (2007) reported in a study conducted by Lesaux which indicates that a learner understands how words are formed by combining prefixes, suffixes, and roots to have larger vocabularies and better reading comprehension.

In order to investigate the role of morphological awareness in developing vocabulary for L2 learners, Morin (2003) studied Spanish classes to examine the acquisition of derivational morphology- the use of suffixes that can change the part of speech and cause variations in meaning- by native English-speaking learners of Spanish. This study is related to the students whose mother tongue is Arabic and who learn English as a foreign or second language. To conduct this study certain questions were kept in mind such as 1)-Do the beginner L2 learners focus on Arabic derivational morphology learn more vocabulary than learners who do not? 2) Can they apply morphological

knowledge receptively and productively? And 3)-Does their success depend on their L2 proficiency level? The results indicated that the strategy for building vocabulary by consistently focusing on English derivational morphology may yield immediate benefits in the area of production at least among one experimental group, the learners who were introduced to English morphology. There is also a suggestion that for learners for whom there may be benefits or effects of such knowledge of derivational morphology with respect to their receptive morphological knowledge. In addition, the second-semester experimental group demonstrated a significantly greater knowledge of productive English derivational morphology than any of the other groups studied. In her conclusion, Morin (2003) emphasized that the results of her study could not make specific claims to all learners generally. However, it does indicate a positive trend in the effectiveness of morphological knowledge as a tool for building vocabulary knowledge.

Bertram et al., (2000) examined the role that morphology plays in vocabulary acquisition in L1 Arabic. Systematically, they investigated the role that affix frequency and productivity might play in the development of the children's knowledge of word. The results showed that the Finnish elementary school children benefit significantly from utilizing morphology in determining word meaning. In contrast to the research done on morphological awareness in the L1, there have been only a few studies that have focused on the morphological awareness in the L2. Very few studies have involved training for morphological awareness, and most of them have examined the question of whether the development of morphological awareness would be beneficial to reading. In particular, Nunes et al., (2006) evidenced a positive impact of

morphological training on reading. However, this impact was not specific, since it could not be differentiated from possible effects of phonological training, because the authors used a standard reading score as well as a score that specifically assessed the use of morphological rules in reading (as measured by the reading of derived words or pseudo words). Finally, the impact of morphology training was both stronger and more specific on the spelling tests than on the reading tests.

Investigating instructional approaches to the use of morpheme or root word families in teaching vocabulary for ESL learners shows that the learners can develop their vocabulary better when vocabulary is taught by morphological analyses rather than through more traditional class instruction methods (Long & Rule, 2004), but these findings are not clear about EFL learners and need for deeper investigation. This study builds on this body of research by examining the relationship between the English vocabulary stock and morphophonemic awareness of EFL students at the College of Arts, at Zawia University in Libya and their morphological awareness. The study attempts to evaluate and possibly extend findings from the previous studies to the context of EFL/ESL learning in Libya.

1.4. The Research Problem

Some researchers (e.g., Morin, 2003; Chang, et al., 2005; and Schiff & Calif, 2007) have paid considerable attention to the value of teaching roots, prefixes, and suffixes for the purpose of vocabulary development. The most regular strategies in the countries where Arabic is spoken are using dictionaries, to find the equivalent translation, synonyms and antonyms, and repeating, and memorizing words. If the learners do not

practice the language for a long time, they will forget everything. Hence, the learners need a more effective method for learning new words. Although, morphological and morphophonemic awareness can play an important role in EFL/ESL learners' competence, English learners of the Arabic speaking countries mostly try to find the meaning of unknown words through the context. Moreover, few studies have investigated the morphological aspects of language learning. Longitudinal and correlational studies, however, have suggested that morphological awareness-can be defined as the ability to consciously manipulate morphemic units- that may also be an important aspect of learning language. Hence, it seems crucial to conduct more studies examining the importance of morphological and morphophonemic awareness in vocabulary learning.

The researcher feels that apart from learning other aspects like grammar and structure of English language, learning vocabulary is also a very important aspect. A person, who has a large stock of vocabulary, can communicate either orally or in writing better than those who have limited stock of the same. The knowledge of vocabulary and the use of words in different forms and contexts make communication easier and more effective. Perhaps this is why Morin (date), a great linguist, considers vocabulary to be the key of all language skills. Hence raising awareness to this aspect is considered vital to the learners and teachers.

1.5. Objectives of the Study

This researcher feels as Paulson and Bruder (date), have also felt, that the study' of learning techniques of vocabulary has not been paid adequate attention and remained a neglected area for a long time. This study aims to investigate the role of morphological and morphophonemic awareness in enhancing the vocabulary knowledge in the context of teaching English as a second language. It also considers the theoretical and practical aspects of morphological awareness measurements and how they relate to the learner's vocabulary knowledge. It also seeks how to improve vocabulary teaching methods with a focus on possible implications that this relationship might have for incorporating morphological awareness as a part of vocabulary instruction in the L2 classroom.

The traditional way of learning vocabulary was that the teachers advised the students to memorize the meaning at least ten words by hearts per day. By this technique, the students could know the meaning of English wards in their own L1 language but without using them in proper contexts. Thus, they forgot them very soon. It is seen that in most of the schools and colleges where English is taught as L2, students pay a lot of attention to the learning of grammatical rules and other aspects of language. Only a few students pay adequate attention to the vocabulary, and therefore, they have only a limited stock of words and that, too, they do not use them correctly. Keeping this problem in mind, the researcher intends to undertake a doctoral research work in which he would investigate how the morphological and morphophonemic awareness influences the L2 students in learning English vocabulary more effectively.

1. 6. Research questions

To achieve the above aims the following research questions will be answered:

1-Do morphological awareness and morphophonemic awareness affect vocabulary learning? If yes, to what extent do they affect vocabulary learning?

2-What is the impact of morphophonemic awareness of Libyan university students on English vocabulary learning?

1.7. Significance of the Study

The results obtained from this study can be advantageous to the following groups of people: Course designers can include some exercises relating to the morphological awareness in the text book where learners can practice vocabulary learning strategy more and consequently can have a better performance on their tests and have more educated guesses when encountering new texts. Publishers can publish dictionaries of roots, suffixes and prefixes to enable the students have an easy access to the different possible parts of words and increase their morphological knowledge and vocabulary domain. Teachers can provide/create some extra activities in the classroom such as unseen reading texts which are full of new words containing suffixes and prefixes in order to improve the students' morphological awareness.

In this study the researcher would make an attempt to design a method that would overcome certain weaknesses of earlier studies in the field of morphological and

morphophonemic awareness of words, in terms of their orthographic, phonological, morphological, and semantic requirements.

1.8. The Thesis outline

Chapter 2 the Literature Review discusses a historical overview of the status that vocabulary has occupied till date, followed by a discussion debate of what it means to know a word. How words become meaningful when they are attached to other words is the core subject. It defines the notion of vocabulary from the perspectives of the lexical composition trend, the semantic trend and the structural trend, as well as the current various definitions of juxtaposition of words proposed by linguistic studies. This is followed by a distinction between collocations, idioms and word combinations. This study includes the common classification of words, the importance of meaning, and context based meaning in the field of second language acquisition. Finally, the chapter concludes with a review of selected empirical studies on the knowledge of vocabulary for ESL/EFL learners.

This chapter makes an attempt to present a critical account of what has been done in the field of vocabulary teaching, specifically in the area of raising awareness about the morphological and morphophonemic aspects of words in the context of vocabulary teaching. It is not possible to include all the studies conducted and published in the field, but the major works which have had significant bearing on the teaching and learning of language were presented highlighting their contribution to language pedagogy. The ideas, experiments and methodological innovations found in the

literature which are of some relevance to this study were singled out as special and identified for use in the subsequent chapters of the thesis.

CHAPTER 3-The Methodology

This chapter outlines the methodology of the research including a background about the research design and approach with the justification of choices. It also identifies the context and participants of the study. The instruments used for collecting the data and explanation of the data generation procedures are tackled in details. It also deals with motivations for the use of formal and functional approaches to the analysis of the data.

CHAPTER 4: Data Analysis contains the procedure of the try-out of the new materials on the experimental group and the analysis of data based on it. A comparative study of the control and experimental groups was made to determine whether the original hypothesis was vindicated or falsified. Before the start of the try-out, entry level tests were conducted to determine the pre try-out proficiency of the learners relating to the knowledge of vocabulary. After the try-out, terminal tests were conducted and their results were compared with the results of the entry level tests to find out whether there had been any noticeable improvement in learners' knowledge of vocabulary. This also served as an additional test for the study hypothesis. Usual statistical approaches and procedures were followed to analyze the data, find the result and determine significant trends if any. Comparisons were also made between the two groups based on the analysis.

CHAPTER 5: Discussion and Conclusion

This chapter presents the major findings of the study in concrete terms. First, the suitability, effectiveness, deficiencies and inadequacies of the materials based on their use during the try-out were pointed out and suggestions for further improvements if any were offered. Second, the pedagogic implication of the study based on the findings was discussed keeping in view the target instructional setting. Third, helpful hints and tips were given on how to incorporate the relevant and new ideas of the findings in the L2 syllabus for the target learners. Finally, like any other research, the short comings, limitations and problems of the proposed study were identified and clearly articulated with suggestions for further research to arrive at better solutions.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter presents a historical overview of the status that vocabulary has occupied up to date, followed by a discussion of what does it mean to know a word? How words become meaningful when they collocate with or associate with other words is the core subject. It defines the notion of vocabulary from the perspectives of the lexical composition trend, the semantic trend and the structural trend, as well as the current various definitions of juxtaposition of words proposed by linguistic studies. This is followed by a distinction between vocabulary, idioms and word combinations. This study includes the common classification of words, the importance of meaning, and context based meaning in the field of second language acquisition. This chapter also discusses the awareness different levels of language learning starting with sound production (phonetics) passing through combining sounds together (phonology) ending with word forming to convey meaning (morphology). Finally, the chapter concludes with a review of selected empirical.

2.2 The Importance of Vocabulary

Vocabulary is very important because it improves all areas of communication; one cannot express his/her feelings without it. Vocabulary is the key to learning language because, without sufficient Vocabulary, students cannot express their ideas or understand others.

During the last two decades, the importance and value of vocabulary has been underscored by a number of linguists who identified the benefits of learning vocabulary, including improving language performance (Brown, 1974; Nattinger, 1980; 1988); the development of L2 vocabulary (Laufer, 1988, Aghbar, 1990); improving communicative competence (Yorio, 1980; Channell, 1981; Cowie, 1988; Lewis, 2000); and enhancing language fluency towards the level of a native speaker (Fillmore, 1979; Howarth, 1998; Nation, 2001).

For instance, Brown (1974), who was one of the first advocates to emphasize the importance of vocabulary in L2 learning and their incorporation in the EFL/ESL classroom, pointed out that increasing students' knowledge of vocabulary helps improve oral proficiency, listening comprehension, and reading speed. Moreover, he argues that learning vocabulary enables learners to observe language chunks in the speech and writing of native speakers and consequently use these word combinations in their own speech. According to Brown (1974), vocabulary, along with the context and concept, should be incorporated when introducing new words to advanced learners because of their vital importance in language learning. Furthermore, Nattinger (1988) asserted that vocabulary is helpful in improving comprehension for the word combinations that aid learners in committing words to memory, as well as allowing learners to predict what kind of lexical items could occur together.

As to the development of L2 vocabulary, Laufer (1988) noted that the evident "rule lessness" of vocabulary is one issue that obstructs or hinders L2 vocabulary learning.

She maintained that vocabulary represents a crucial aspect in the knowledge of learners. Despite the fact that L2 learners encounter difficulties in the use of word combinations, vocabulary, as suggested by (ibid), can aid in many levels of vocabulary development. Vocabulary can also aid the development of self-learning strategies, such as guessing. For instance, when hearing the word *intense*, speakers are aware that it is combined with either *pressure*, *heat*, *light*, or *feeling*. They are also aware that the word *convenient* is not usually combined with people. Thus, a sentence like *I'm not feeling convenient today* is considered unacceptable. Such a guessing strategy can be developed through learning vocabulary and the technique of how words are properly arranged.

Moreover, Aghbar (1990) pointed out in his study that the reason ESL learners perform poorly in the test of formulaic expressions is not due to a lack of vocabulary knowledge, but rather to insufficient learning of language chunks. Aghbar (1990) considered the role of over learning as an important aspect in the acquisition and learning of formulaic expressions, in which idioms, proverbs, sayings, and vocabulary are included. He (ibid, p.3) notes that “although the construction of such chunks by and large follows the lexical and grammatical rules of English, we recognize them as formulaic only because we have a previous memory of them”. The important role of vocabulary is to develop EFL / L2 learners’ “communicative competence” (Hymes, 1972). Channell (1981) asserted that increasing learners’ awareness and knowledge of vocabulary is a very effective way of enhancing their communicative competence. Additionally, Cowie (1988) maintained that lexical phrases and vocabulary serve communicative needs and allow learners to reuse and produce the institutionalized

units. Lewis (2000) affirmed that learning chunks or strings of words aids language learners' communicative competence.

As far as enhancing language fluency is concerned, Fillmore (1979) considered fluency as a generic term that encompasses all characteristics of a speaker's competence and performance in a language. As maintained by Fillmore (1979), one main constituent of fluency is knowledge of fixed expressions of which vocabulary is a part. Furthermore, Howarth (1998) suggested that vocabulary plays an essential role in learning of L2 and assists ESL/EFL / L2 students to speak more like native speakers. Similarly, Nation (2001, p. 318) asserted that vocabulary knowledge enhances fluency in which "all fluent and appropriate language use requires vocabulary knowledge".

In light of the aforementioned studies, many researchers have studied the importance of vocabulary from different perspectives. Some linguists such as (e.g., Brown, 1974; Nattinger, 1980; 1988) have addressed vocabulary in relation to the development of language performance in general. Others e.g., Laufer, (1988), Aghbar, (1990); Yorio, (1980); Channell, (1981); Cowie, (1988); Lewis, (2000); Fillmore, (1979); Howarth, (1998) and Nation, (2001) have focused on particular benefits, such as the development of L2 vocabulary, improving communicative competence, and developing language fluency similar to that of native speakers. These factors are all related to the importance of vocabulary to second/foreign language learning and teaching. Thus, without the knowledge of vocabulary, ESL/EFL learners' expressions can be seen as unidiomatic, unnatural, or foreign, despite the fact that learners' speech would be grammatically

correct. These unidiomatic interactions can cause misunderstandings, and, at worst, unkind smiles and other signs of disrespect.

A number of studies have reported the poor performance of second/foreign language learners on vocabulary tests (e.g., Channel, 1981; Aghbar, 1990; Biskup, 1992; Bahns and Eldaw, 1993; Zhang, 1993). Moreover, learners' vocabulary errors occur more frequently than other errors (Ellis, 2001). Accordingly, learners' difficulties in dealing with vocabulary are a crucial fact that has been affirmed by a quite number of studies in both ESL and EFL settings.

Vocabulary is clearly important for language learning as it underpins all other language skills, can be a stepping stone to high level language use and can help the student to achieve fluency faster. However, this is not the whole story. There are numerous other factors which influence language ability which will be addressed next. Keeping this in mind, it is important for the ESL teacher and student to dedicate a significant amount of time to develop this core language skill.

2.2.1 Words

Words are not isolated components of any given language, but are parts of many joint systems and levels. Consequently, there are many aspects and degrees of word knowledge required for learners to be able to use words properly and effectively (Nation, 2001). Therefore, what is meant by *knowing* must be explicit.

A common principle is the classification of word knowledge into *receptive* or *passive* and *productive* or active knowledge. Receptive knowledge refers to words that can be identified when heard or read (listening and reading skills), whereas, productive knowledge is the ability to use and have access to words in speech and writing (speaking and writing skills). Since it is, to a certain degree, a useful convention, some educational institutions and material designers have adapted this aspect of word knowledge into word lists that are divided into words that can be learned passively and words that can be learned actively. Nonetheless, this division of words as passive and active may not be clearly or sharply defined in the mind (Milton, 2009, p.13) “since good passive skills often require the reader or listener to actively anticipate the words that will occur”.

Anderson and Freebody (1981, cited in Milton, 2009) proposed another convention that vocabulary learning researchers find helpful. This is the differentiation between *breadth* of knowledge and *depth* of knowledge. Breadth of knowledge is defined as the number of words a person knows, while depth of knowledge refers to a learner’s knowledge of various aspects of a given word. The concept of depth of vocabulary knowledge may refer to the links between words, and it involves knowledge of word association, vocabulary, or colligation.

The complexity of word knowledge cannot be really understood by simple two-fold divisions such as receptive and productive, or breadth and depth. A more complete and

balanced framework of word knowledge is proposed by Nation (2001). Nation classified word knowledge into three main categories: knowledge of *form*, knowledge of *meaning*, and knowledge of *use*. Each category, with both productive and receptive aspects, is further subdivided. Knowledge of form involves the spoken and written forms as well as word parts. Knowledge of meaning is divided into form and meaning, concepts and referents, and associations. Knowledge of use includes grammatical functions and constraints on use (ibid).

Along with aforementioned aspects of word knowledge, there are other aspects of great importance to EFL/ ESL which are learning to use common idioms and expressions in actual communicative activities in various contexts which will be explained next.

If word combinations can form a continuum with idioms at one end and free word combinations at the other end, words are most likely to be placed in the middle in order to collocate properly (Gitsaki, 1999 ; Hsu, 2002). Idioms are described as relatively frozen expressions; they are fixed in structure, their meanings cannot be derived compositionally or retained from the meaning of their component words, and the lexical components cannot be substituted with synonyms (Bentivogli & Pianta, 2003). For example, one can say *kick the bucket* (to die) but not *kick the pail* or *boot the bucket*. Also, in the previous example, there is no actual bucket to kick. Free word combinations, on the other hand, are a combination of lexical items that abide by the general rules of syntax, and the lexical components are not bound to each other; they

can be freely replaced with other words (Benson et al., 1986). The verb *write*, for instance, can freely collocate with *a letter*, *a book*, *an essay*, and so on.

As previously mentioned, properly collocated words appear somewhere in the middle between the two boundaries because they as stated by (Hsu, 2002, p. 18) “combine together the syntactic restrictions of idioms and the semantic transparency of free combinations”. Collocative words are a sequence of lexical items that habitually combine with one another and whose meanings can be built compositionally. They usually allow a limited degree of substitution of their lexical components (e.g., *do your best* and *try your best* but not *perform your best*) (Bentivogli & Pianta, 2003). The view of placing words in the middle part of the scale has been largely accepted by many scholars of lexical units (Nattinger and DeCarrio, 1992; Howarth, 1996; Gitsaki, 1999; Lewis, 2000). Nattinger and DeCarrio (1992), for instance, view the development of collocative words akin to a lifecycle: a word starts as a free combination and once is used habitually, becomes more fixed until it is called an idiom.

Supporting the same point of view and presenting a clear illustration for the continuum of word combinations, Cowie and Howarth (1995, cited in Schmitt, 2000) proposed a four-level scale of vocabulary complexity (see Table 2.2). At level one, idioms (e.g., *bite the dust* or *shoot the breeze*) are considered as frozen vocabulary allowing no variation or insertion of words, and hence, are the least complex. As the scale moves down, the variation and complexity increase. For example, invariable vocabulary such

as *break a journey* or *from head to foot* are at level two while vocabulary with limited choice at one point (e.g., *give/allow/permit* access to) and vocabulary with limited choice at two point (e.g., *dark/black as night/coal/ink*) are at level three and four respectively. Overall, many researchers have pointed out that it is not a simple matter to differentiate between idioms and vocabulary as they overlap with each other. In spite of this, they agreed that separating idioms from vocabulary produce less useful results (Hsu, 2002).

As stated earlier, there is a wide variety in the criteria utilized by researchers to define vocabulary. However, it is necessary to make reference to the most common classification of combination words. The simplest and most adapted classification of words among researchers is the categorization of words into two major groups: lexical words and grammatical words. Lexical words consist of merely content words such as nouns, verbs, adjectives, and adverbs with an inclusion of prepositions, infinitives, or clauses (see Table 2.3). Grammatical vocabulary, on the other hand, comprises the main word: a noun, an adjective, or a verb plus a preposition (e.g., *reason for*, *pick on*, *afraid of*, so on) (Benson et al., 1986). The present study focuses on both lexical and grammatical words that collocate properly; particularly on verb-noun, adjective-noun (lexical words), and verb-preposition (grammatical words).

Types of Lexical words	Examples
Verb + noun	compose music/dispel fear
Adjective + noun	reckless abandon/warmest regards
Verb + adverb	appreciate sincerely/affect deeply
Noun + verb	alarms go off/blood circulates
Noun + noun	a herd of buffalo/an act of violence
Adverb + adjective	strictly accurate /keenly aware

Table 2.3: Lexical collocative vocabulary types

Considering the previous current views on the definition of vocabulary, the distinction between vocabulary and idioms, as well as the classification of vocabulary into grammatical and lexical vocabulary in this study includes the following features:

1. Collocative words that consist of two or more words that more or less frequently co-occur (Zhang, 1993).
2. Words that are a combination of two or more words that fall in the middle between idioms (e.g., *spill the beans*) and free word combinations (e.g., *beautiful girl*) which allow a limited degree of substitution of their lexical components (e.g., *do your best* and *try your best* but not *perform your best*) (Bentivogli & Pianta, 2003).

3. Words that are less grammatically fixed, allowing changes in their word order or part of speech (e.g., *inflict a wound, the wound was inflicted*) (Nation, 2001).
4. Words whose components are close or adjacent to each other (e.g., *right-handed*) (Killgariff, 1992; cited in Hsu, 2002).
5. Words that are semantically transparent and whose meanings can be comprehended based on the literal meanings of their components (e.g., *spend money*), unlike idioms (e.g., *kick the bucket*) (Gitsaki, 1999; Nation, 2001; Hsu, 2002).
6. Words that are less lexically fixed, allowing substitution in at least one of their constituent components (e.g., *take place/action, make difference/ mistake*) (Al-Zahrani, 1998; Gitsaki, 1999; Hsu, 2002).
7. Words that are not restricted just to pairs, but occur between two or more words and phrases as well (e.g., *take the necessary actions, talked him out of it*) (Nattinger and DeCarrico, 1992; Gitsaki, 1999; Schmitt, 2000).

In this section, word combinations and idioms are discussed. Next, Collocation as one type of word knowledge will be elaborated.

2.2.3. Words and Collocation

Collocation is defined in different ways by researchers. It refers to “items whose meaning is not obvious from their parts”(Palm, 1933 in Firth, 1957, cited in Nation, 2001). e.g., blonde hair, shrug his shoulders, fizzy drink, bite the dust. According to (Schmitt 2000) collocation is described as ‘the tendency of two or more words to co-occur in discourse’. Here co-occurrence is the main characteristic of collocation.

Similar to Schmitt, Lewis (2000) described it in another way as ‘collocation is the way in which words co-occur in natural text in statistically significant ways’. In this definition, the way words naturally co-occur is emphasized. It implies that people cannot put two or more words together arbitrarily, because words co-occur naturally. In fact, it is very common that some learners in foreign and second language context tend to put two or more words together arbitrarily because of the first language interference such as , (do a decision) instead of (make a decision), (big rain) instead of (heavy rain). Nation (2001) defined collocation as any generally accepted grouping of words into phrases or clauses. This definition reflects the two criteria of collocation which ‘frequency occur together and have some degree of semantic unpredictability The above definitions indicate that words co-occur naturally, it is not easy for learners to get the meaning of a collocation from its components, and as a result, it may cause problems to the learners to acquire the knowledge of collocations. It requires more than just knowing a set of isolated words or knowing their basic meaning. Within the realm of lexis, the area of vocabulary is of prime importance to second language learning in general and collocative knowledge in particular. Kim commented that, “truly knowing a word means not only knowing the meaning of the word but also knowing the words with which it frequently co-occurs”.

The term vocabulary has been generally used to refer to a phenomenon in which certain words have the tendency to co-occur regularly within a language so that it can collocate with others otherwise they would be seen odd. Hence, the word *lean* can exclusively collocate with *meat*, while the word *heavy* has *rain*, *meal*, *traffic*, and *smoker* as

possible collocates (Bahumaid, 2006). Since the 1950s, a number of studies have attempted to describe and investigate the English vocabulary and their collocative phenomena. These studies (e.g., McIntosh, 1961; Halliday, 1966; Sinclair, 1966; Fodor, 1963; Cruse, 1986; Mitchell, 1971; Greenbaum, 1970) have focused on three distinctive trends: the lexical composition trend, the semantic trend, and the structural pattern trend. The lexical composition trend views vocabulary as a means of describing word meanings at different levels. The semantic trend relies on semantic features to predict lexical item collocates. The structural pattern trend uses grammatical patterns to examine vocabulary (Gitsaki, 1999). The three trends are discussed in more detail in the following sections.

2.2.4. The lexical Composition Trend

The lexical composition trend is centered on the notion that words obtain their meanings from the words with which they co-occur and collocate. Firth (1957) is known as both the father of this trend, and was the first scholar to introduce the term, vocabulary and collocation into lexical studies. He looks at vocabulary as a component separated from grammar. Vocabulary, according to Firth, is a “mode of meaning” (p. 192). He maintained that the lexical meaning should be analyzed on four levels: the orthographic level, the phonological level, the grammatical level, and the vocabulary level. The word *peer* is used by Firth as an example to illustrate this; at the orthographic level, its meaning is distinguished from the group of *pier*. Next, at the phonological level, the pronunciation of *peer* is stated; then, at the grammatical level, the word *peer*

can be used either as a noun or a verb, thus adding a further component of meaning. Finally, at the vocabulary level, another meaning of the word *peer* can be obtained when it collocates with the word *group*, (as in *peer group*) (Gitsaki, 1999). Furthermore, Firth's theory of lexical meaning views word associations as *paradigmatic* and *syntagmatic* relations of lexical units. These lexical units are depicted by two axes: a horizontal (syntagmatic) and a vertical (paradigmatic) one. The paradigmatic axis consists of lexical items that belong to the same class and can be replaced with one another in a particular context. The syntagmatic axis refers to the words' ability to collocate with one another. For instance, *water* in *Tom drank some water* stands in paradigmatic relation with *juice*, *beer*, or *wine* and in a syntagmatic relation with the words *Tom* and *drank*. The novelty of Firth's theory comes from the fact that he looked at the meanings of lexical relations from the syntagmatic relations, rather than from the paradigmatic relations (e.g., synonyms and antonyms) (Gitsaki, 1999).

Subsequently, Firth's concept of lexical meaning has been adopted and developed by his followers, known as the Neo-Firthians; the most prominent of these are McIntosh (1961), Halliday (1966), and Sinclair (1966). McIntosh (1961) viewed vocabulary patterns as independent of grammatical considerations, and as equally important as grammatical patterns. They took Firth's theory into further discussion and added the novel notion of *range* (which refers to the particular lexical items that frequently co-occur with other collocates) and *range-extension* (for example, when a word is

combined to another partner). For example, *putrid* and *rancid*: though they are synonyms, they have various ranges; *putrid* collocates with *fish* while *rancid* collocates with *butter* (Lien, 2003). Additionally, some lexical items have range-extension tendencies. To provide an instance for that, McIntosh (1961) explained that some people use the word *smashing* in a strange way as in; *we had a smashing time yesterday evening*. He (ibid) comments:

This implies that we are aware of having begun to hear the word *smashing* in environments (situational as well as linguistic) which hitherto we should certainly have considered inappropriate not only because of their being out of our previous experience but also because of being beyond what our range-sense would regard as even marginally tolerable (p. 336).

Halliday (1966, cited in Al-Zahrani, 1998) regarded lexical patterns as a complementary component to grammatical theory. He introduced the notion of *set* as another dimension to the collocability of words, one which he differentiated from vocabularies. A vocabulary, to Halliday (1966,p. 153) is a linear co-occurrence relationship among lexical units which collocate interchangeably, while the set is “the grounding of members with like privilege of co-occurrence in vocabulary” (1966, p.153). For example, the words *bright*, *hot*, *shine*, *light*, and *come out* are all members of the similar lexical set, as they are frequent collocates of the word *sun*. Additionally, Halliday (ibid) argued that the criterion for a lexical unit to be a member of a certain lexical set is its syntagmatic relation to a particular lexical unit rather than its paradigmatic relation to that lexical unit. For instance, the words *strong* and *powerful* belong to the same lexical set since they collocate with the lexical item *argument*. However, when there are collocates such as, *car* and *tea*, the lexical items

strong and *powerful* will enter different lexical sets, for example, *strong tea* and *powerful car*. Halliday (ibid) was also concerned with the vocabulary patterns that the lexical items belong to. For example, *a strong argument* has the same vocabulary patterns as the *strength of his argument* and *he argued strongly*. The reason is that *strong*, *strength*, and *strongly* are all parts of the same vocabulary pattern and therefore regarded as word-forms of the same lexical unit (Gitsaki, 1999).

Like Halliday, Sinclair (1966, cited in Al-Zahrani, 1998) also considered grammar and vocabulary as two different facets. He explained that in grammar, language structure is organized by a system of choices (for example, choosing between active and passive choices), whereas vocabulary deals with individual lexical units and their tendencies to co-occur. In other words, it is a matter of likeness of occurrence rather than a matter of choice. Sinclair (1966, cited in Al-Zahrani, 1998) defined vocabulary, in a wider sense, as any two words that occur together in an adjacent textual environment. Along the same lines, he wrote: “there are virtually no impossible vocabulary, but some are much more likely than others” (p. 411, cited in Hsu, 2002). Later, he refined his definition of vocabulary by stating that words do not take place arbitrarily in a text. As a result, Sinclair (ibid) introduced the *open-choice* and *idioms* principles for language organization. He maintained that “the open-choice principle does not provide for substantial enough restrains on consecutive choices” Sinclair also introduced a new set of linguistics terms such as *node*, *span*, and *collocates* as his major contribution to the study of vocabulary. He defined node as the lexical item being examined, while span refers to the lexical units on either side of the node, and collocates refers to those items within the span. For example, when the

vocabulary patterns of the word *tea* is examined that means *tea* is the node. If we want to have a span of three, then we should examine the three words before and after *tea*. All the words that are within the span of *tea* are labeled as its collocates (Gitsaki, 1999).

The advocates of the lexical composition trend consider vocabulary as a separated and an independent entity from grammar. They propose that vocabulary patterns are best examined and analyzed through lexical analysis that is concentrated on the syntagmatic co-occurrence of lexical units. However, they do admit that assistance from grammar is still required. Many vocabulary studies, conducted by different researchers, indicate that lexical vocabularies pose difficulties to L2 learners (e.g., Newman, 1988; Aghbar, 1990; Bahns and Eldaw, 1993; Al-Zahrani, 1998). Thus, the present study has included lexical patterns of vocabularies in the investigation of ESL/EFL (L2) learners' receptive and productive knowledge of vocabularies.

2.2.5 The Semantic Trend

The scholarly studies on vocabulary and juxtaposition of word for proper collocation as the focus of linguistic studies, can be traced back as early as 300 B. C. Greek Stoic philosophers, as Robins (1967) maintained, had acknowledged vocabularies in the studies of lexical semantics. They opposed the notion of "one word, one meaning," and highlighted the significant aspect of the study of the semantic structure of language: "word meanings do not exist in isolation, and they may differ according to the vocabulary in which they are used" (p. 21).

In parallel to the lexical composition trend, the semantic trend explores vocabularies from the semantic point of view separately from the grammatical one. The approach is an attempt to describe why words are combined with certain other words (Lehrer, 1974) in order to make the ideas quite legible and unambiguous.

The supporters of the semantic trend described the Neo-Firthians' approach to the study of vocabularies as inadequate as it failed to justify the arbitrariness of collocability. In other words, the lexical composition trend categorizes lexical units into sets based on their vocabularies; however, there is no justification as to why some lexical words collocate only with certain other lexical words (Lehrer 1974). For instance, it is correct to say *blond hair* but not *blond car*. The semanticists regard the semantic properties of the lexical word as the key or basis for deciding what words are combined with other words. For example, *rancid* collocates with *butter*, *lard*, *oil*, and *salad dressing* since they all have the same semantic feature of “oily” in common (Decarrico, 2001).

Nevertheless, this interpretation of the semantic approach (the view that lexical items collocate due to their semantic properties) created criticisms for the semanticists since there are a number of words that are arbitrarily restricted. For instance, there is nothing in the meaning of *drinker* to explain why it is juxtaposed with *heavy* but not with *strong* or *powerful* (Shehata, 2008). Within the semantic trend, Katz and Fodor (1963), just like the Neo-Firthians, introduced a semantic theory that is also different from, but complementary

to grammar. The theory provides organized and generalized facts about the knowledge of meaning. As mentioned by Katz and Fodor (1963, p. 173), “semantics takes over the explanation of the speaker's ability to produce and understand new sentences at the point where grammar leaves off”. They acknowledged that a dictionary is one component of a semantic theory of a natural language. Using an English dictionary as a model, they present the semantic markers of some lexical entries. Each entry of a word, based on the theory, has to meet with a condition, referred to by the authors as “selection restriction,” to allow the juxtaposition of a set of words. For example, one selectional restriction of the lexical item *kill* would require an object of the semantic feature [+Animate] (Kim, 2009).

Nonetheless, one weakness of the semantic theory is that it does not explain arbitrary words. To deal with this limitation, Cruse (1986) presented “vocabulary / collocation restrictions”. Three types of vocabulary restrictions (systematic, semi-systematic, and idiosyncratic) were described and distinguished based on whether, and to what extent, the semantic properties of a certain word predict a particular collocate. The lexical items *grill* and *toast* exemplify the systematic vocabulary restrictions. From the perspective of the agent, both verbs signify the same actions, yet, they are different from the patient viewpoint, as *grill* is used for raw items whereas *toast* is normally reserved for cooked items. Semi-systematic vocabulary restrictions refer to a lexical item’s collocates that show certain semantic properties to predict a particular type of collocate, yet there are “exceptions to the general tendency” (Cruse, 1989, p. 281). For example, the word *customer* means that you receive something or material in exchange for money, while

client indicates that you obtain a technical service. Thus, *bakers* and *newsagents* have customers, but *solicitors* and *advertising agencies*, on the other hand, have clients. However, banks call the people using their services customers, not clients. Finally, idiosyncratic vocabulary restrictions denote the vocabulary ranges of some words that can only be described by listing their allowed collocants. For example, one can say *flawless/immaculate performance* but not *unblemished or spotless performance* (Cruse, 1989). Despite Cruse's (ibid) effort to provide an explanation for the vocabulary restrictions, there are a great number of idiosyncratic vocabularies that are arbitrarily restricted. Such arbitrarily restricted vocabularies and their collocations have created problems to semanticists as many have been left marginal or unexplained (Gitsaki, 1999). To sum up, semanticists argue that the syntagmatic lexical relations should be examined under the area of semantics; nevertheless, they did not progress in the study of vocabularies, nor have they made the concept of vocabulary any more explicit (Gitsaki, ibid).

2.2.6 The structural trend

The structural trend consists of studies that are centered on the belief that vocabulary is affected by structure and hence vocabulary knowledge should be examined by taking into account their syntactic features (Hsu, 2002). For instance, Mitchell (1971, p.43), one of the advocates and the leading figure in this approach, criticized the Neo-Firthians for their separation of lexical study from grammar. In his claim for the "one-ness of grammar, lexis and meaning" (p. 43), he contended that in order to determine the nature of vocabulary, linguists should consider grammar and lexis as one entity. Therefore, he proposed the

notion of *root* to the study of vocabularies. According to Mitchell (1971), the abstraction of a word form is called *root*, while *word* is the attachment of inflectional markings to the root. He claimed that vocabularies are of roots rather than of words and “are to be studied within grammatical matrices” (p. 65). For instance, Mitchell (1971) considered *drink* as the root of the word *drinker* and the conjunction of the roots *heavy-* and *drink* in the example *heavy drinker* or *drink heavily* as words with proper collocations.

Nonetheless, Mitchell’s (1971) argument that vocabularies are roots rather than made of words cannot be generalized on every co-occurrence of roots. For instance, the vocabulary of the roots *faint* and *praise* is acceptable in *she was damned by faint praise* but not in *he praised her faintly* (Gitsaki, 1999). Furthermore, Greenbaum (1970, p.11) also emphasized the influence of structural patterns on vocabulary, as some examples of vocabularies demand grammatical information. He maintained that “a serious disadvantage of a purely item-oriented approach to the study of vocabularies is that it obscures syntactic restrictions on vocabularies”. To exemplify this, he used the word *much*, which collocates with the word *like* in a negative sentence (e.g., *I don’t like him much*), but not in an affirmative sentence (e.g., *I like him much*). Greenbaum (1974) believed that without tying vocabulary to syntax, any two lexical items can collocate at a certain arbitrary distance. Thus, one can say: *his sincerity frightens us*, but not that *we frighten his sincerity*. This is because the acceptability of the vocabulary of the lexical items *sincerity* and *frighten* can only be determined by syntax. Subsequently, the main achievement of the structural trend is the compiling of the BBI

Combinatory Dictionary of English is regarded as the first attempt to organize English words as they collocate (Benson, Benson and Ilson, 1986a). The dictionary includes both lexical words (e.g., verb-noun, adjective-noun) and grammatical words (e.g., lexical item + preposition) as they collocate properly (Gitsaki, 1999).

Briefly, the structural trend underlines the significance of both lexis and grammar in the examination of vocabularies. Moreover, it pointed out that advocates of both the lexical and the semantic trends, examined a small set of lexical items due to their separation of grammar. Thus, their results were limited. Conversely, the structural researchers examined more patterns of vocabularies providing a well-developed, feasible, and systematic framework of the studies of vocabularies with a richer body of empirical studies. Hence, in this study, the author included both lexical and grammatical patterns of vocabularies to thoroughly study vocabulary and justify its nature. In the next part, various definitions of vocabulary will be presented.

2.3. Recent Views of the Definition of Vocabulary

Since the introduction of Firth's concept of vocabulary, which explains meaning at the syntagmatic level, many researchers have encountered difficulties in providing a more rigorous way of defining vocabulary. Up until now, the definitions of vocabulary presented in various studies still lacked clarity and precision about the relation between lexical items' co-occurrence. Meanwhile, the criteria utilized by researchers, to determine vocabularies in a language, are various and manifest different views.

Among the many, varied perspectives and interest in defining the term “vocabulary,” two major views can be identified. In one view, vocabulary is defined as the combination of lexical items at a certain distance that differentiate between frequent and non-frequent vocabularies. This view is referred to as the “statistically oriented approach” or “frequency-based approach” (e.g., Sinclair, 1991; Stubbs, 1995; Moon, 1998).

In the other view, vocabulary is considered as a kind of word combination that is fixed to a certain degree, but not entirely. This view is called the “significance-oriented approach” or the “phraseological approach” (e.g., Cowie, 1993; Melcuk, 1998; Hausmann, 1989). The advocates of the first view (frequency-based approach), are often concerned with the “computational analysis of syntagmatic relations” (Nesselhauf, 2005, p.12). However, researchers of the second view, usually work in the areas of lexicography or pedagogy.

Benson et al., (1986) were influenced by corpus-based research they provided a general definition of vocabularies. “In English, as in other languages, there are many fixed, identifiable, non-idiomatic phrases and constructions. Such groups of words are called recurrent combinations, fixed combinations or vocabularies”. Nattinger and DeCarrico (1992, p.36) declared that vocabularies are strings of particular words “that co-occur with a mutual expectancy greater than chance”, such as *rancid butter* and *curry favor*, which are arbitrary vocabularies. They considered phrases such as *for example* and *how do you do* as vocabularies with pragmatic functions. Howarth (1998), on the other hand, viewed

vocabularies as the co-occurrence of lexical items with a grammatical function as components of sentences (e.g., noun or prepositional phrases). Furthermore, Lewis (2000) defined vocabulary as naturally co-occurring lexical items in statistically important ways. Nation (2001) claimed that it is insufficient to define vocabulary as a group of lexical items that frequently co-occur. According to Nation (ibid) stated that, “vocabularies are closely structured groups whose parts frequently or uniquely occur together. We would also expect vocabularies to contain some element of grammatical or lexical unpredictability or inflexibility”.

However, in spite of the confusion and inconsistency in defining the notion of vocabulary, a general consensus exists among scholars of the main characteristics of words; that is, the strong tendency of two or more lexical items to co-occur in a particular context.

Nevertheless, the above definition of vocabulary does not provide a reliable criterion of what constitutes a vocabulary. For instance, it most likely includes idioms as a part of vocabulary. Consequently, the issue of whether vocabulary should be separated from idioms has been argued among researchers. Thus, in an attempt to provide a clear picture on the definition of vocabulary that will be used in the current study, The researcher believes that it is necessary to shed more light on the distinction between vocabulary, idioms, and free word combinations. Vocabulary knowledge not only implies a definition, but also implies how that word fits into the world. People continue to develop vocabulary throughout learning along their lives.

2.3. Learning Vocabulary

Learning vocabulary is an important aspect of language learning. It is important to remember that vocabulary studies not just about single words and their meanings in L1 rather than learning all about it such as phonetical components, phonological components and morphological components, as these aspects help the learner to gain more accuracy and fluency and be able to manipulate words and use them in a proper way. This study discusses the role of these aspects on vocabulary learning.

2.4. History of Vocabulary in Language Learning

Up to the present day, vocabulary has been undervalued throughout its different stages, despite its crucial and important to language learners (Zimmerman, 1997). Unlike issues such as grammatical competence, contrastive analysis, reading, or writing, which received great attention and interest from scholars and teachers, the teaching and learning of vocabulary was overlooked in research and methodology (Richards, 1976). This evident neglect could be attributed to the idea that second language (L2) vocabulary acquisition would take care of itself or be absorbed naturally like the native language (L1) vocabulary (Schmitt, 2000). In addition, linguists at that time prioritized syntax and phonology as Zimmerman (1997, p. 5) pointed out that “more central to linguistics theory and more critical to language pedagogy”. Such a restricted view of vocabulary has resulted in a lexical deficiency for learners and, hence, inability to construct natural speech and writing (Zughoul & Abdul-Fattah, 2003). To provide a better understanding of historical trends in vocabulary instruction, it would be pertinent to have an overview of the different approaches to English language teaching to the learners of English as L2. This is because the Grammar Translation Method was the main language-teaching method at the beginning of

the nineteenth century. It placed a heavy emphasis on explicit grammar and accuracy as the method became controlled in nature, while little attention was given to vocabulary. Reading and translating literary materials was the focus of the content (Zimmerman, 1997). Vocabulary choice was based solely on the reading texts, and the necessary vocabulary was provided to students in the form of bilingual word lists (Schmitt, 2000).

Because the Grammar Translation Method focused on analyzing the target language (rather than gaining the ability to use it) was seen as a shortcoming, led to emergence of the Direct Method by the end of the nineteenth century. This method emphasized oral exposure to the target language with listening as the main skill, then speaking. It was thought that through interaction during the classes, students would acquire vocabulary naturally. Simple and familiar everyday vocabulary and sentences were taught either through demonstration or by association of ideas.

When the Reading Method emerged, vocabulary was seen, for the first time, as one of the most important aspects of second-language learning. In this method, emphasis was on developing criteria for selecting vocabulary content. It is aiming primarily at facilitating reading skills by improving vocabulary knowledge. Intensive oral drills were seen as a means of reinforcing the learning of a target language, rather than analyzing it.

Hymes (1972) introduced the concept of *communicative competence* which underscored the sociolinguistic and pragmatic aspects. This helped to shift the focus from language „accuracy“ into “appropriateness“. In other words, the emphasis was on using the language for meaningful communication rather than grammatical accuracy. This gave birth to

Communicative Language Teaching (CLT) or The Communicative Approach. Though it was a meaning-based approach, vocabulary was given a “secondary status” that served as a support for issues of “functional language,” such as how to make a request. Similar to the previous approaches, few instructions were given about how to handle vocabulary in CLT under the assumption that L2 vocabulary would take care of itself, like L1 vocabulary (Schmitt, 2000).

Similar to Communicative Language Teaching and other approaches being developed, the Natural Approach appeared in 1977. It placed an emphasis on exposure, or comprehensible input, without reference to grammatical analysis, or resorting to the native language (Richards & Rodgers, 2001). Since vocabulary is considered to be the source of meaning, it was deemed by the approach to be central to the language learning process (Zimmerman, 1997).

The mentioned above language teaching methods have shown that teaching practices have moved between “language analysis” and “language use”. Similarly, vocabulary has had varied positions. Yet, most approaches did not tackle how to deal with vocabulary and their reliance was on either word lists or the assumption that vocabulary would be acquired naturally (Schmitt, 2000).

Over time, language instruction has improved as linguists have started to recognize the complexity of the language learning processes. Techniques have been developed, as teachers and practitioners have obtained knowledge of what would expedite language acquisition. However, the most remarkable and significant change at the end of the twentieth century was the shift of focus from grammar, as the central role of language

teaching, to vocabulary (Ma, 2009). This change was summarized by David Wilkins (1972 p. 111) as follows: “without grammar very little can be conveyed; without vocabulary nothing can be conveyed”.

In the last two decades, vocabulary has become an essential aspect of language learning and its importance has been imposed on all parties (learners, teachers, language specialists, and programme designers). Similarly, language specialists have emphasized the need for curriculum designers, teachers and learners to create a systematic and principled approach to vocabulary. This increased interest in vocabulary has produced an expanding body of experimental studies, pedagogical materials and computer-aided research, most of which addresses questions of crucial importance for both teachers and learners, such as, *what does it mean to know a word?* (Decarrico, 2001).

2.5 Types and Strategies of Vocabulary Learning

There are two major types of vocabulary learning: deliberate and incidental. Thornbury (2002) described these types by stating that "some of the words will be learned actively", while others "will be picked up incidentally". Gu (2003) used the terms “explicit and implicit learning mechanisms”. Whatever terminology is used in the literature by different authors, the two major types of vocabulary learning are discussed as the same.

In both types of vocabulary learning or their combination, the efficiency of learning is achieved by following one or more of the vocabulary learning strategies. Different researchers look into the nature of this concept from various perspectives. Given that vocabulary learning strategies are very diverse, Schmitt (2000) suggested a summary of

major vocabulary learning strategies and classified them into five groups: determination, social, memory, cognitive and meta-cognitive. Building on this classification, Xu and Hsu (2017) suggested two major categories of vocabulary learning strategies – direct and indirect. The first category includes four types of strategies: memory, cognitive and compensation strategies; the second category contains the meta-cognitive, effective and social strategies. Based on their research, Lawson and Hogben (1996) distinguished repetition as the major strategy of vocabulary learning, while Mokhtar et al. (2009) explained that ESL students prefer vocabulary strategies such as guessing and using a dictionary.

2.5.1 Deliberate Vocabulary Learning

One of the major types of vocabulary learning in language acquisition is deliberate vocabulary learning. The advocates of deliberate vocabulary learning agreed that the context is the main source for vocabulary acquisition. However, they also believed that in order to be able to build up sufficient vocabulary and acquire the necessary strategies to handle the context when reading, learners need support. Thus, extensive reading may be sufficient for developing advanced students' vocabulary, but it has to be supplemented with deliberate vocabulary learning at lower proficiency levels. Kennedy (2003) argued that deliberate learning is more appropriate for students with up to an intermediate level of proficiency. The limited classroom time should be spent on the deliberate teaching of vocabulary. Nation (2005) demonstrated that, deliberate vocabulary learning is one of the least efficient ways to improve students' vocabulary knowledge. Therefore, explicit attention should also be given to vocabulary, especially when the aim is language-focused

learning. The meaning of a word requires “conscious processing” and is learned deliberately, the articulation of its form is learned incidentally because of frequent exposure. Ma and Kelly (2006) mentioned the necessity of establishing a link between the meaning and form of a word by various strategies, e.g., “direct memorization,” which is a strategy of deliberate vocabulary teaching. Frequency of the words is also a considerable aspect in vocabulary teaching as Kennedy (2003) argued that, high-frequency words deserve to be taught explicitly and sometimes even low-frequency words can be taught and learned deliberately. However, when measuring the difficulty, deliberate vocabulary learning is easier than incidental learning, yet it needs more focused effort. Therefore, directing deliberate attention to the particular aspect can lighten the learning burden. To sum up, deliberate vocabulary learning is essential to reach a *threshold* of the vocabulary size and it is a *prerequisite* to incidental learning.

2.5.2 Incidental Vocabulary Learning

Another type of vocabulary learning is called incidental vocabulary learning. By its nature, incidental vocabulary learning is one of the key aspects of language acquisition. This concept is also referred to as passive learning or implicit learning. Paribakht & Wesche (1999) argued that this is the process of acquiring vocabulary without placing the focus on specific words to be learned. It is deemed that, this type of learning should occur with low-frequency words as the first few thousand words are better learned through deliberate learning approach. However, this may be hampered by the fact that several encounters with a word are needed before it is committed to memory, which may not be possible with low-frequency words. Aelmi and Tayebi (2011) as well linked incidental vocabulary learning

with the communicative context. The formers stressed that incidental vocabulary learning occurs by "picking up structures and lexicon of a language, through getting engaged in a variety of communicative activities" while the latter indicates that producing language for communicational purposes results in incidental learning.

There are a number of factors which affect the occurrence of incidental vocabulary learning. Most of the scholars agreed that the best way is through extensive reading. Nation (2009) indicated that, 98% of the words must be familiar to the reader to understand a text. Huckin & Coady (1999), on the other hand, argued that extensive reading for meaning does not automatically lead to the acquisition of vocabulary. Much depends on the context surrounding each word, and the nature of the learner's attention. While Dodigovic (2015) found that it is the approach that matters, i.e., the bottom-up processing of readings is better than the top-down. Thus, to develop incidental vocabulary learning, the learners should be exposed to the words in different informative contexts, following the bottom-up processing of the readings.

2.6. Vocabulary in First-and Second-language Acquisition

The existence of the use of words as they collocate has been acknowledged by the majority of linguists in the field of first-and second-language acquisition. According to Bloom (1973, cited in Miyakoshi, 2009), young children acquire their first language and produce unanalyzed chunks that an adult would recognize as multi-morphemic, such as *lemme-see*, *i-wanna- do-it*. This phenomenon questions the validity of the general assumption that most children start producing only one word at a time. The importance of vocabulary in the

process of first-language acquisition was highlighted by Wray (2002). He described several essential roles of vocabulary in learning a first language. By using vocabulary, young children supplement gestures and other nonlinguistic behaviors when conveying salient messages prior to the development of their rule-governed language. Thus, children store and use complex strings before developing their grammatical knowledge. For example, a child may produce the string *what's-that?* before knowing the internal makeup of wh-questions. Another role that their use of vocabulary can play is to “reduce the child's processing load once novel construction is possible” (ibid, p. 128). This allows the child to maintain fluency while obtaining control of processing.

The significant role of vocabulary in the acquisition and use of a first language was also underlined by Peters (1983). In her study, Peters revealed that young children adopt both a gestalt (holistic) and an analytic (inferential) approach to acquiring a language. Children begin by extracting speech formulas from adults and then store and later reuse them creatively as both analyzed or segmented units and unanalyzed or whole chunks.

In the field of second language acquisition, children seem to have many advantages over adults with regard to the acquisition of vocabulary. Leaving aside the biological factor, children interact with other children who are very lenient to incomprehension. They are also involved with various types of “ritualized play” that presents them with highly anticipated, constant, and contextualized language. Additionally, an adult, unlike a child, avoids the shock of being a non-speaker of the new language by choosing not to communicate with other peers (Wray, 2002). Such advantages facilitate the second

language acquisition process in general, and assist children to sound native and idiomatic in their use of formulaic expressions in particular.

To maintain the above view, Fillmore (1979, cited in Al-Zahrani, 1998), for example, examined the acquisition of formulaic speech of five Spanish-speaking learners of English paired with their counterparts (English-speaking children) for one year. The findings of her study revealed striking similarities in the use of formulaic sequences between the two groups. She explained that her subjects began by learning the formulaic expressions as unanalyzed or whole chunks, and later, after gaining confidence in their use, they start segmenting them into individual units. She (ibid,) comments:

Once in the learner's speech repertory, they become familiar, and therefore could be compared with other utterances in the repertory as well as those produced by the speaker. Their function in language learning process is not only social, but cognitive too, since they provide the data on which the children were to perform their analytical activities in figuring out the structure of the language (p. 29).

Post-childhood second language acquisition, on the other hand, is viewed from a different perspective. According to Wray (2002), adult second language learners reveal themselves by not knowing the grammatically possible ways of conveying a message that sounds idiomatic for native speakers. The reason, he maintained, is that an adult language learner starts with individual units and then builds them up, whereas a first language learner begins with large and complex units and never segments them unless it is necessary. He (ibid,206) stated that "Phrases and clauses may be what learners encounter in their input material, but what they notice and deal with are words and how they can be glued together". Consequently, a classroom learner aims for individual

words and disregards what other words they may be combined with. For instance, when native speakers encounter the use of such words as *major catastrophe*, it would be stored as a sequence without the need to analyze or segment its units. Thus, native speakers would know that the right way to express a big or terrible disaster is to say *major catastrophe*. In contrast, adult second-language learners would segment the string *major catastrophe* into two words meaning *big* and *disaster* and then store them individually, without realizing that this combination goes together. Therefore, when the time comes to talk about the same idea again, they will start looking for any pairing that conveys the same meaning as *major* (e.g., *big, large, important*) and *catastrophe* (e.g., *disaster, calamity, mishap*), which may or may not sound like native speech (Wray, 2002).

Nevertheless, formulaic language still plays a crucial role in the field of second-language acquisition. Ellis (1984c, cited in Al-Zahrani, 1998) indicated that wholes or chunks can form an entire script of L2 performance such as with the greeting sequences. In his study, Ellis pointed out that three ESL learners employed some sort of formula as a communication strategy (e.g., *how do you do? I wanna, I can't speak English*). He determined that formulas are common in both classroom and naturalistic settings and are utilized by L2 learners to decrease the learning burden, while increasing the communicative demands. Although vocabulary were not the focus of this study, but rather were included under the umbrella of formulas, this does not undervalue the importance of vocabulary.

To sum up, findings in the area of both first-and second-language acquisition have not valued the role of vocabulary in language acquisition. While the amounts of vocabulary are important building blocks in children's language acquisition, they also play a significant role in adult second-language learning. The relevance of these findings to the current study lies in the need for developing ESL/EFL learners' vocabulary knowledge, which results from the process of learning and storing the vocabulary they encounter.

2.7. Knowing a Word

The most important question to be asked in learning vocabulary is: "what it is meant by to know a word" Words are not isolated units of language, but they fit into many interlocking systems and levels. From that point of view, one should explore the relationship and boundaries between learning individual items and learning systems of knowledge. A second important idea to be explored is the receptive / productive scale of knowledge and how it applies to each aspect of vocabulary knowledge.

In view of what precedes, and if one says a word is part of someone's receptive vocabulary, one is making a very general statement that includes many aspects of knowledge and use, and he/she is combining the skills of reading and listening. In general it seems that receptive learning and use is easier than productive learning and use, but it is not clear why receptive use should be less difficult than productive use. There are in the literature several explanations which are probably complementary rather than competing. Ellis and Beaton (1993) provided three different explanations:

1- The ‘amount of knowledge’ explanation: Productive learning is more difficult because it requires extra learning of new spoken or written output patterns. This will particularly be noticeable for languages which use different writing systems from the first language and which use some different sounds or sound combinations. For receptive use, learners may only need to know a few distinctive features of the form of an item. For productive purposes their knowledge of the word has to be more precise.

2- The ‘practice’ explanation: In normal language learning conditions, receptive use generally gets more practice than productive use, and this may be an important factor in accounting for differences in receptive and productive vocabulary size. There is some evidence that both receptive learning and productive learning require particular practice to be properly learned.

3- The ‘access’ explanation: A new foreign language word in the early stages of learning has only one simple link to its first language (L1) translation (the receptive direction).

2.7. 1. The Receptive Direction

Foreign word ----- L1 translation

The L1 word, however, has many competing associations (the productive direction) and thus productive recall is more difficult than receptive because there are many competing paths to choose from, and the ones within L1 lexical system are likely to be stronger.

2.7.2. The productive direction

L1 word ----- Foreign word

(inside the L1 lexical system)

----- collocates of a word

-----synonyms of a word

----- opposites of a word

4- The ‘motivation’ explanation: Learners are not motivated, for varieties of reasons including socio-cultural background, to use certain kinds of knowledge productively. Although some vocabulary may be well known and could be used productively, it is not used and remains in the learners’ passive vocabulary.

In view of that, they state that , it seems important, if the receptive / productive distinction is seen as a knowledge scale, that there is one scale for oral use (listening and speaking) and one for written use (reading and writing).

Koda (2005) stated that “word knowledge is multifaceted. Although central to this knowledge is a word’s meaning information, syntactic and grammatical properties are also important in conceptualizing what it means to know a word”. He explained that what Nation (2001) meant that the grammar, morphology and phonology of the

intended message are determined by the particular words chosen. Therefore, knowledge of a word's morpho-syntactic properties is thus equally important to its semantic information in language production, and, by logical extension, comprehension. The properties stated by Koda are important for word knowledge. Students' problems with vocabulary may closely be related to them. The negligence of aspects like word class and perception of textual relationship may make it difficult to students to grasp the meaning of a given word. These are going to be tested with students of this study to check their importance in determining the meaning of a word.

2.7. 2. Aspects of Knowing a Word

Learning a foreign language draws on research in experimental psychology and language acquisition. Ellis (1994) distinguished the form learning aspect of vocabulary which he calls 'Input / Output aspects' and the meaning aspects of vocabulary. He argued for "dissociation between explicit and implicit learning where formal recognition and production rely on implicit learning but the meaning and linking aspects rely on explicit conscious processes". According to him, implicit learning involves attention to the stimulus, but does not involve other conscious operations and it is strongly affected by repetition. However, explicit learning is more conscious. He stated that the learner makes and tests hypotheses in a search for structure (ibid). This learning can involve a search for rules, or applying given rules which is strongly affected by the quality of the mental processing. Ellis (1994) stressed the fact that, especially for high-frequency words, teachers should explain the meaning of words, and learners should do exercises, look up in dictionaries, and think about the meanings

(ibid). Then, after brief attention to spelling and pronunciation experience in meeting and producing the word form should be left to encounters in meaning focused use.

Aitchison (1994) who worked on children acquiring their first language vocabulary considered that “the learners perform three connected but different tasks: a labeling task, a packaging task and a network building task”.

Ellis and Sinclair (1996), on the other hand pointed out that “the grammar and collocation aspects of use involve pattern recognition and production and thus are more effectively the goal of implicit learning. The constraints on vocabulary use are more closely related to meaning and would benefit more from explicit learning”. In a view of what has been stated above, one may say that teachers should emphasize both implicit and explicit learning depending on the aspects to be learned if they want learning to occur.

Phonetics, Phonology and Morphology, as the core of this study, has a great effect on vocabulary learning in helping the learners to be morphologically and morphonemically aware to such extent that they would easily grasp the meaning of the words.

2.8. Phonetics

Phonetics is the study of the production of speech sounds by the speaker and how they are perceived by the listener. It involves the production, transmission, and reception of the sound. The term phonology is often used interchangeably; however, phonology is the branch of linguistics where phonetics is a part of it.

The use of phonetics in English learning can be considered a recent trend. Both for young learners and ESL learning phonetics is a must-have in the curriculum. Learning phonetics helps in recognizing both familiar and unfamiliar sounds, improves pronunciation skills, and develops autonomy in words and sound recognition. Roach (2009).

2.8. 1. Phonetics and Pronunciation

Over the years, teachers of English have found that mere teaching of pronunciation is not sufficient for the students to produce appropriate sounds for letters and their combination in different words. While it is integral to teach the pronunciation for effective communication, students need to know the reason why sounds are important and how they can impact while they communicate. Both reception and production of the sound are equally important. To simplify it, applying phonetics for language learning can help eliminate the confusion in pronunciation and it can also facilitate to grasp stress and intonation of sound which are major components of pronunciation.

2.8.2. Types of Phonetics

- . Articulatory is the study of how speech sounds are made, or 'articulated'.
- . Auditory (or perceptual) **phonetics** which deals with the perception, via the ear, of speech sounds.
- . Acoustics which deals with the physical properties of speech as sound waves 'in the air',

The transmission of the speech is dissected in these three parts.

Articulatory phonetics (Production) studies how the movement of the air stream and the speech organs coordinate in the production of the sound. Such as when one pronounces words like read, write, pen, and paper it belongs to articulatory phonetics. On the other hand, auditory phonetics (Perception) is a vast area, the ability to distinguish sounds, length, pitch, and loudness influences one's reaction. It simply means the ability to decode what is heard and what has been perceived. And Acoustic phonetics (Transmission) deals with how the sound travels through the medium of air between the mouth of the speaker and the ear of the listener. Meaning, how the sound waves travel from the speaker to the listener.

2.8.3. Articulatory phonetics

Articulatory phonetics describes speech sounds genetically, with respect to the ways by which the vocal organs modify the air stream in the mouth, nose, and throat in order to produce a sound. The selection of vocal activities involved in a sound need not be described according to the place and manner of articulation. Phonetic symbols and their articulatory definitions are abbreviated descriptions of these selected activities. The symbols most commonly used are those adopted by the International Phonetic Association (IPA) and are written in brackets.

2.8.3.1. *Airstream mechanisms*

The production of any speech sound (or any sound at all) involves the movement of an airstream. Most speech sounds are produced by pushing lung air out of the body through the mouth and sometimes also through the nose. Since lung air is used, these sounds are called pulmonic sounds; since the air is pushed out, they are called egressive. The majority of sounds used in languages of the world are produced by a pulmonic egressive air-stream mechanism. All the sounds in English are produced in this manner.

2.8. 3.2. Voiced and voiceless sounds

The state of the vocal cords during speech permits the listener to classify speech sounds into two large classes: voiced and voiceless. He/she can specify each voiced sound as [+ voiced] and each voiceless sound as [- voiced], because [- voiced] is a descriptive term that is equivalent to voiceless. But how this may happen?

When the airstream moves up from the lungs through the trachea, or windpipe, and through the opening, between the vocal cords, which is called the glottis, and if the vocal cords are apart, the airstream is not obstructed at the glottis and it passes freely. The sounds produced in this way are called voiceless sounds. The sounds represented by /p/, /t/, /k/, and /s/. If the vocal cords are together, the airstream forces its way through and causes them to vibrate. Such sounds are called voiced sounds and are illustrated by the sounds spelled /b/, /d/, /g/, and /z/. The voiced/voiceless distinction is a very important one in English. It is this phonetic feature or property that distinguishes

between word pairs like pig/big, fine/vine, tin/din, seal/zeal. The first word of each pair starts with a voiceless sound and the second word with a voiced sound.

2.8. 3.3. Nasal vs. Oral Sounds

If someone pronounces the sound, /b/, and /m/ he/she will notice that the sounds are very similar. The /b/ and /m/ sounds are both produced by closing the lips and both are voiced because the vocal cords are together and vibrating. What, then, distinguishes the /m/ from the /b/sounds /m/ is a nasal sound. When one produces /m/, the air escapes not only through the mouth (when one opens his/her lips), but also through the nose. When the velum is lowered, air escapes through the nose as well as the mouth. Sounds produced this way are called nasal sounds, /m/, is the nasal consonant of English. When the velum is raised all the way to touch the back of the throat, and the nasal passage is blocked in this way, the air can escape only through the mouth. Sounds produced this way are called oral sounds, /b/ is oral sound. The difference between /b/ and /m/, is due only to the position of the velum. In /b/ the velum is raised, preventing the air from entering the nasal cavity, therefore /b/ is oral sound. In /m/ the velum is lowered and air travels through the nose as well as the mouth, /m/ is therefore nasal sounds.

2.8. 7.The English Phonemic System

In every language of the world, speech sounds can be divided into two major classes: consonants and vowels. In the production of consonants, the flow of air is obstructed as it travels through the mouth. Vowels are produced with no oral obstruction whatsoever.

Speakers usually know which sounds are vowels and which are consonants. Some sounds do not fall easily into one of these two classes. Glides, for example, are like vowels in that there is little oral obstruction, but they are also like consonants in that their duration is very short; they always occur either before or after a vowel. Liquids are like consonants in some ways and vowels in others. Because they are produced with obstructions in the oral cavity, they are like consonants. But acoustically they have "resonances" like vowels.

2.8. 8. Symbols and Transcription

You have seen a number of symbols in (table 2) representing the English consonants. The following tables show both English consonants and vowels as they are presented by (IPA). The phonemic system described for (RP) 'received pronunciation', contains 44 sounds (phonemes). Vowels and diphthongs are presented in one chart (table 1), and consonants are displayed in other one chart (table 2).

Vowels and diphthongs

i:	see	/si:/	ʌ	cup	/kʌp/
i	happy	/'hæpi/	ɜ:	bird	/bɜ:d/
ɪ	sit	/sɪt/	ə	about	/ə'baʊt/
e	ten	/ten/	eɪ	say	/seɪ/
æ	cat	/kæt/	əʊ	go	/gəʊ/
ɑ:	father	/'fɑ:ðə(r)/	aɪ	five	/faɪv/
ɒ	got	/gɒt/	aʊ	now	/naʊ/
ɔ:	saw	/sɔ:/	ɔɪ	boy	/bɔɪ/
ʊ	put	/pʊt/	ɪə	near	/nɪə(r)/
u	actual	/'æktʃuəl/	eə	hair	/heə(r)/
u:	too	/tu:/	ʊə	pure	/pjʊə(r)/

(Table 2.1 English vowels and diphthongs)

Consonants

p	pen	/pen/	s	so	/səʊ/
b	bad	/bæd/	z	zoo	/zuː/
t	tea	/tiː/	ʃ	shoe	/ʃuː/
d	did	/dɪd/	ʒ	vision	/'vɪʒn/
k	cat	/kæt/	h	hat	/hæt/
g	got	/gɒt/	m	man	/mæn/
tʃ	chain	/tʃeɪn/	n	no	/nəʊ/
dʒ	jam	/dʒæm/	ŋ	sing	/sɪŋ/
f	fall	/fɔːl/	l	leg	/leg/
v	van	/væn/	r	red	/red/
θ	thin	/θɪn/	j	yes	/jes/
ð	this	/ðɪs/	w	wet	/wet/

(Table 2.2 English consonants)

2.8.9 Why it is crucial to learn Phonetics!

2.8.9.1. Builds Confidence

When learners by themselves can decode sounds and their relation to the pronunciation of letters and their combination in words, communication becomes a natural process for them. Even when the words seem unfamiliar to them, instead of getting overwhelmed, they will be able to associate words with clear conceptualization.

2.8.9.2. Helps in Recognition and Interpretation

Young learners or adults, once they know how to use phonetics in everyday life, they can easily recognize the sound associated with each letter the way they are pronounced when they are in combination with each other. One of the core objectives of learning

phonetics is to make learners capable of interpreting the words even when they listen from a person having a different accent.

2.8.9.3. Helps to Spell Words Correctly

Phonetics not only guides the learners in decoding the sound, it also helps them to know how a word must be spelt out while writing. When you spell a word with a phoneme, it is called Grapheme. Graphemes are the symbols that are used to identify a single phoneme – a letter or group of letters that represent the sound. And effective communication can only be completed when learners can use the language appropriately in both reading and writing.

2.8.9.4. Improves Fluency

When it comes to the fluency of a speaker, two things matter the most:

- How fast can a person recognize words!
- How accurate the pronunciation is!

Phonetics does take care of both. Fluency indicates the ‘ease’ with which one can read text. Moreover, when learners can decode words they build a memory dictionary in their minds and with times this helps to build up the comprehension skill within oneself.

2.9. Phonology

Phonology is a branch of linguistics which studies the sound systems of languages. It is concerned with the range and function of sounds in specific languages (and often therefore referred to as ‘functional phonetics’), and with the rules which can be written to show the types of phonetic relationships that relate and contrast words and other linguistic units. Roach (2009), argues that **phonology**, studies the abstract side of the sounds of a language; how phonemes function in language and the relationship among the different phonemes.

2.9.1. Phoneme

The phonemes of a particular language are those minimal distinct units of sound that can distinguish meaning in that language. How can a phoneme then be defined? A reasonable definition would be to say that a phoneme is the minimal contrastive unit in a language or the minimal meaning-distinguishing unit in a language. Each language has its own particular set of contrastive or meaning-distinguishing units and, therefore, its own phonological system, different from all others.

2.9.2. Phonemes and allophones

Using the examples above, it can be seen that /p/, /ʌ/, /k/ and /s/ are all meaningfully different segments, in other words they are all phonemes. In English word 'cup', the final sound /p/, being a plosive, could be released in different ways. It can be released in an unmodified way as in [kʌp], with a little aspiration [kʌp^h], with a large amount of aspiration [kʌp^h], or it can even be released inaudibly [kʌp̚]. It is obvious to see

that there are four different final sounds [p], [p^h] [p^h] and [p̚]. However, in all four cases a native English speaker, although recognizing the pronunciations as strange, would nevertheless understand the word 'cup'. Therefore, if one substitutes one of these four sounds with another, the meaning does not change. Despite they are all different but they are not meaningfully different and as a result the meaning does not change. Thus, it can be said that, although these sounds are phonetically different, they all have the same function; that is, they do not distinguish one word from another. To complete the picture one can say [p], [p^h] [p^h] and [p̚] are all ALLOPHONES, of the /p/ **PHONEME**.

To distinguish between a phoneme and its allophones, slashes are used / / to enclose phonemes and continue to use square brackets [] for allophones. For example, [i:] and [ĩ:] are allophones of the phoneme /i:/. Thus *bead* and *bean* will be represented phonemically as /bi:d/ and /bi:n/. These are referred to as *phonemic* transcriptions of the two words. The rule for the distribution of oral and nasal vowels in English shows that phonetically these words will be pronounced as [bi:d] and [bĩ:n]. Consonants, too, have allophones whose distribution is rule-governed. For /t/ the following examples illustrate the point.

tick [t^hɪk] stick [stɪk] hits [hɪts] attic [æɾɪk] butler [bʌʔləɾ]

In the word *tick* normally find an aspirated [t^h] is found, whereas in *stick* and *hits* an unaspirated [t] exists, and in *attic* we find the flap [P], a glottal stop [ʔ] may be used in

words such as butler [bʌʔləɹ]. Therefore, [ʔ] is another allophone of /t/. Swapping these sounds around will not change word meaning. If stick is pronounced with a [t^h], it will not change the word; it will simply sound unnatural (to the English native speakers).

2.9.3. The syllable

The syllable is a very important unit. Most people seem to believe that, even if they cannot define what a syllable is, but it can be described as consisting of a centre which has little or no obstruction to airflow (vowel) and which sounds loud; before and after this centre (that is, at the beginning and end of the syllable), there will be greater obstruction to airflow (consonant) and/or less loud sound. More details will be given on syllable structure.

2.9.4. Types of syllables

There are four main types of syllables:

- 1- A syllable which begins in a consonant is called covered
- 2- A syllable which begins in a vowel is called uncovered.
- 3- A syllable which ends in a consonant is called closed
- 4- A syllable which ends in a vowel is called open
- V. Uncovered open. e.g. I [aɪ]. zero onset.....zero coda

VC. Uncovered closed. e.g. it [It].

CV. Covered open. e.g. see [si:].

CVC. Covered closed. e.g. catch [kæʃ].

2.9.5. Syllable structure

A syllable must contain a vowel (or vowel-like) sound represented as **(V)**. The syllable may also have a consonant (s) before and/or after the vowel, represented as **(C)**. The basic elements of the syllable are known as:

1- The onset (one or more consonants)

2- The rime (also written as 'rhyme') consists of the vowel, which is treated as the peak, plus any following consonant(s), treated as the coda.

Thus, syllable structure may be represented in figure.1

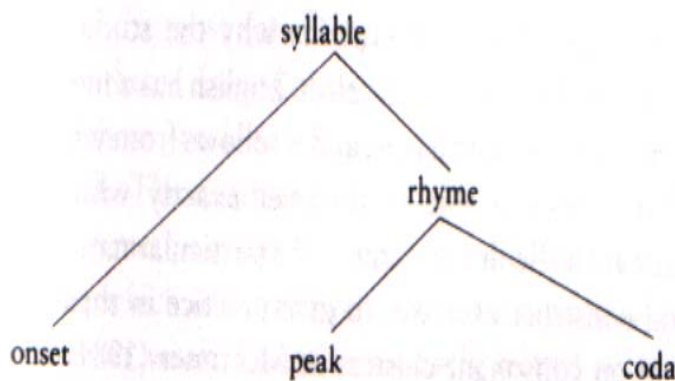


Figure (2.1) English syllable structure

2.10. Morphology

McCarthy. (2007) says that Morphology is that part of linguistics, which deals with the study of the internal structure of words. It is the systematic study of how morphemes combine to form words. The branch of linguistics dealing with the relation between morphemes and phonemes is called morphophonology or morphophonemics.

2.10.1 Morpheme

Morpheme is the minimal meaningful unit in the structure of a language. The word *nation* consists of one morpheme; *national* consists of two morphemes: *nation* and —*al*; *nationalize* consists of three morphemes: *nation*,—*al*, and—*ize*; *nationalization* consists of four morphemes: *nation* ,—*al-iz-* and —*ation*; *denationalization* consists of five morphemes: *de-*, *nation* ,— *al* , —*iz-* and —*cition*. The word *denationalization*, in other words, is composed of five meaningful units or morphemes. As Hocken says, "morphemes are the smallest individually meaningful elements in the utterances of a language". Morphemes combine to form words.

Some linguists have described morphemes in terms of phonemes. They describe a morpheme as a meaningful phoneme or a series of phonemes, which cannot be further divided without destruction or change of meaning in a particular language. A morpheme may consist of only a single phoneme, but it must have some meaning. For example, the /z/ in *sings* /sɪŋz/ is a morpheme. But the /z/ in *zeal* /i/ is not a morpheme.

In /sɪŋz/ the /z/ phoneme is also a morpheme, because it denotes the singular verb in the present tense. Here /z/ carries meaning and hence a morpheme. A morpheme is the unit of meaning in the grammatical system of a language. Again it is the minimal unit of form and meaning. It is the smallest unit required for grammatical and lexical analysis. Phoneme is the minimal unit in the sound system of language while morpheme is the minimal meaningful unit in the grammatical system of the language.

There are two types of morphemes: free morphemes and bound morphemes. Free morphemes are those morphemes, which can occur independently as words in a sentence, e.g., work, happy, logic. Bound morphemes are those morphemes which cannot occur independently, e.g., -ed, -ing, -s, -de -l, -al, um-, -ment, -ly, pre-. They are always attached to other morphemes,

eg, work + -ed = worked,

boy + -s = boys ,

un + happy = unhappy,

Here -ed, -s and un- are bound morphemes. They combine with free morphemes *-work*, *boy* and *happy* to make *worked*, *boys* and *unhappy*. Bound morphemes are also known as affixes.

2.10.2 Allomorph

Some morphemes have always a single form only in all contexts, e.g., -ing. But some other morphemes are realised in variant forms. For example, the plural morpheme realised as -s or -es in spelling has three different phonetic realizations: /s /, /z / and /iz/. Examples are given below:

Singular		Plural	
Post	/ paust /	posts	/ pausts /
Dog	/ dug /	dogs	/ dugz /
Boss	/ bus /	bosses	/ bpsiz /

Table (2.2)

These variant forms of morphemes are called allomorphs. Another, example of allomorphic variation is the past tense morpheme represented in spelling by -d or -ed which too has three different phonetic realizations: / d /, /t / and / id /. Examples are given below:

Present		Past	
Save	/ sew /	saved	/ seivd /
Pick	/ pik /	picked	/ pikt /
Want	/ waunt /	wanted	/ wuntid /

Table (2.3)

The relationship between allomorph and morpheme is similar to the relationship between allophone and phoneme.

2.10.3. Conditioning of Allomorphs

According to Gleason any phenomenon is said to be conditioned if it occurs whenever certain conditions occur. It means that a phenomenon can be predicted if certain conditions are fulfilled.

2.10.3.1. Phonological Conditioning

An allomorph is said to be phonologically conditioned when its form is dependent on adjacent phonemes. The English plural morphemes are excellent examples of phonologically conditioned allomorphs. The allomorphs of the regular plurals of nouns are determined by the sound that precedes the plural inflections. /s /, z / and /iz / are all phonologically conditioned allomorphs of the English plural morpheme as follows,

1. / s / appears if the noun ends with / p, t, k, f, or o / (i.e. voiceless sounds other than / s, l, tʃ)
2. The sound / z / appears with nouns ending in /b, d, g, v, o, m, n, l, j, r, w / (i.e. voiced sounds other than z, ʒ, dʒ, l)
3. /iz / appears with nouns ending in / s, z, l, ʒ, tʃ, dʒ. These allomorphs occur in definable (predictable) phonological environments. Examples are given below.

Allomorph	Singular	Plural
/ s /	cup / kʌp/	/ cups / kʌps /
/ z /	bag / bæɡ /	bags / bæɡz /
/ɪz /	class / kla:s /	classes / kla:sɪz /

Table (2,4)

Thus a linguist can state the conditions or explain the factors responsible for the particular form of plural allomorph. Since the factors are responsible for the plural forms in these cases are the preceding sound segments (phonemes), the English plural morpheme (-s or -es) are said to be phonologically conditioned.

Another example of phonological conditioning is the past tense morpheme ---d or -ed. Three phonologically conditioned allomorphs / d / /t / and / / make the past tense.

1. / id / appears if the verb ends in / t / or / d /

2. / d / appears after verbs ending in voiced phonemes except / d /

3. / t / appears after verbs ending in voiceless phonemes except / t/. Examples are given below.

Allomorph	Present	Past
/ id /	lift / lift /	lifted / liftid /
/ d /	love / l□v /	loved / l□vd /
/ t /	help / help /	helped / helpt /

Table (2.5)

2.10.3.2. Morphological Conditioning

Allomorphs are sometimes morphologically conditioned. Morphological conditioning is the phenomenon where a specific morpheme determines the choice of the allomorph. For example, the plural of ox / ɔ:ks / is oxen / ɔ:kсен / and not / ɔ:kсiz / as in the case of the plurals of phonologically similar words like box, fox and axe whose plurals are boxes, foxes and axes respectively. This difference in the case of ox rests not in the phonetic environment but in some morphological peculiarity of the morpheme ox. Here the allomorph —en is said to be morphologically conditioned. Children, ren, brethren are also examples of morphological conditioning.

2.10.3.3. Zero Morph

Some linguists recognize a zero morph where a morpheme is expected in the grammatical system, but it is not represented there. The absence of a relative pronoun in the utterance a letter I wrote is an example for zero morph. We expect in the utterance a letter that I wrote, hut that is not expressed, though it is implied. Zero morphs can be

found in countable nouns that have the same form for singular and plural and verbs that have the same form for the past and the present tenses. The plural of sheep is identical with the singular sheep, though the plural of cow is cows. Other examples are cod, and deer. Here, in fact, these words undergo a zero plural modification. In the case of verbs like cut, hit and shut the present tense and the past tense have the same form. These words also undergo a zero past-tense modification.

2.11. AFFIXES

Morphemes are classified into roots and affixes. The root constitutes the core of the word. An affix is a bound morpheme, which is attached to another morpheme. The form to which an affix is attached is called a stem. In the word unhappy, happy is the stem and *-un-* is the affix.

Based on their position with regard to the stem, affixes may be classified into three types: **prefixes**, **suffixes** and **infixes**. An affix that is attached at the beginning of a stem is called a prefix, e.g., in the word unkind, *-un-* is the prefix. The affix that is attached at the end of a stem is called a suffix, e.g., in the word beautiful, *-ful* is the suffix. Infix is the affix inserted within a stem. Infixes are very rare in English. Affixes can be classified as Inflectional Affixes and Derivational Affixes.

2.11.1. Inflectional Affixes

Inflectional affixes are those affixes used to express the grammatical relations of the words in sentences. They change only the form of the word; they do not change its class (part of speech). They do not create new words. For example, with the addition of the suffixes *-big* and *-e* the root walk, becomes walks, walking, and walked. These

additions do not alter the class of the root. Inflectional affixes serve to indicate grammatical relations such as number, gender, tense etc. There are no inflectional prefixes in English.

2.11.2. Derivational Affixes

Derivational Affixes are affixes that are used to derive words. Derivation is the process by which new words are formed from the existing words, e.g., from the stem *boy*, a new word can be derived, *boyhood*, by adding the suffix —*hood*. Derivational are of two types:

1. Class Changing Derivational Affixes
2. Class Maintaining Derivational Affixes.

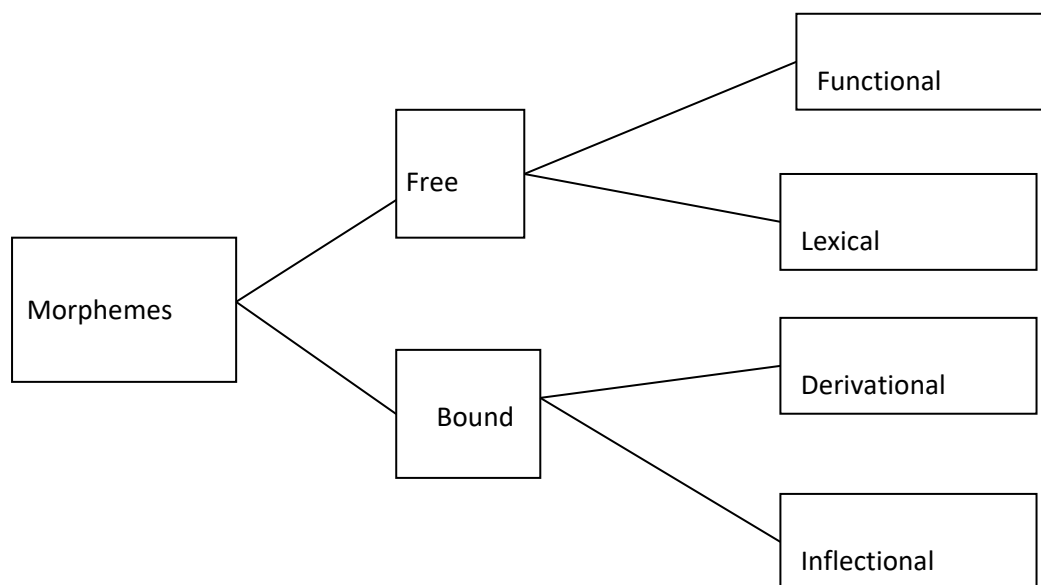
2.11.2.1. Class Changing Derivational Affixes change the class of the word. For example, when—*ness* is added to *good* (an adjective) it becomes *goodness* (a noun). So here, by adding the affix (—*ness*) the adjective becomes a noun. Similarly, *centralise* is a verb; but when the Class Changing Derivational Affix —*ation* is attached to it, it becomes a noun — *centralization*. Some derivational affixes do not change the class of the stem. They are known as Class.

2.11.2.2 Maintaining Derivational Affixes

When adding the derivational affix, —*un* to the stem *happy* a new word is made, *unhappy*. Here *happy* and *unhappy* are both adjectives. No change of class takes place. The class of the stem is retained in the newly derived word. Hence —*un* in this case is a

Class Maintaining Derivational Affix. —hood (child + -hood childhood) and il- (il- + logical - illogical) are other examples of Class Maintaining Derivational Affixes.

What has been discussing so far about affixes can be represented by the following tree diagram.



2.12. The morphophonemics

Morphophonemics, a branch of morphology, deals with the variation in the forms of morphemes as a result of phonetic factor which smallest units of concern are morphemes. The concern has been with the ways in which morphemes are put together into utterances; now it is with the phonemic shapes which represent the morphemes.

Here is the list of several English words given as an example: *brought*, *went*, *sold*, and *sang*, each consists of two morphemes: one is asserted to be the verb stem *bring*, *go*,

sell, and *sing*, while the other, common to all four, is asserted to be the past tense morpheme. The elements mentioned are the obvious differences between the phonemic shapes representing these various morphemes in the different words.

There are some morphemes which are represented in all occurrences by a single phonemic shape: for example, *pay*, represented by /peɪ/ in *pays*, *paid*, *paying*, *payer*, *payee*, *payment*, and so on, as well as in the whole word "*pay*". If all the morphemes of English were like this, then the morphophonemics of the language would be trivial. But there are complications in the English language. Thus, in English, the past tense morpheme is represented by a suffixed /d/ in *paid*, but by a combination of infixes /ou/ and suffixed /d/ in *sold*, and in various other ways in *brought*, *went*, *sang*. "*Sell*" is represented by /seɪl/ in most contexts, but by /s..ù..l-/ when accompanied by the past-tense morpheme /s..ù..l-/ + /...ou...-d/ = /soùuld/; *sing* is usually /sɪŋ/, but is also represented by /s..ù..ŋ/, into which fit in fixed representations of certain inflectional morphemes, to yield *sang*, *sung*.

When a morpheme is represented sometimes by one phonemic shape and sometimes by another or others, it is said that the shapes stand in *alternation* with each other. Each representation is a *morph*; all the morphs that represent some given morpheme are called *allomorphs* of that morpheme.

/seɪl/ and /s...l/ are both allomorphs of the morpheme {*sell*}.

{pay} manifests invariant alternation—being represented, in all environments, by a single allomorph /peɪ/.

Two morphs are distinct if they differ in phonemic shape, as /seɪl/ and the /s...l/ of “sold”. They are also distinct if they are allomorphs of different morphemes, even if they are identical in shape: /seɪl/ representing {sell} and /seɪl/ representing {cell} thus as two different morphs.

There are some common types of morphophonemic changes in English:

(a) Loss of phonemes

- The phoneme /n/ of the negative prefix {in-} is lost before the morphemes beginning with sonorant sounds /m/; /r/; /l/ and /n/.

e.g. immobile ; irregular, illimitable

- The phoneme /t/ is lost when changing the word class (adjective to a noun)

e.g. different → difference; democrat → democracy

(b) Addition of phonemes

e.g. solemn / soləm / → solemnize / soləmnaɪz /

(phoneme /n/ is added)

long / lɒŋ / → longer / lɒŋgə /

(phoneme /g/ is added)

sword → swordsman; sale → salesgirl; craft → craftsman

(The phoneme /s/ is added)

(c) Simple change of phonemes

The phoneme /θ/ is changed to /ð/ when pluralized.

e.g. path /pæθ/ → paths/ pæðz /; mouth → mouths.

(d) Assimilation - Dissimilation

- Assimilation is the process of replacing a sound by another sound under the influence of a third sound which is near to it in the word or sentence.

e.g. resist /riːzɪst/; consist /kənˈsɪst/

The change of /z/ to /s/ under the influence of /n/.

* There is another change due to assimilation of /n/ to /m/ before /b/, /p/, /m/

e.g. impossible, imperfect, immoral,

Prefix /in/ has the allomorph [ɪm] before /p/, /b/, /m/

- Dissimilation is the opposite of assimilation. It takes place when the combining of two morphemes bring together two identical phonemes, resulting in the change of one of them to a phoneme less like its neighbour.

e.g. The Prefix /in/ has the allomorph /ig/ as in *ignoble*

(e) Synthesis

There is the fusion of the two phonemes brought together by morpheme combination into a single new phoneme.

e.g. □moist□ □-ure□ : / moist/ + /juð/ → / ùmois_ð/

(f) Stress shift, gradation

In many cases the addition of an affix to a word is accompanied by a shift in stress called *stress shift*. e.g. linguist → linguistics ;

The process of derivation including stress shift involves vowel change. This kind of change is called *gradation*. e.g. symbol → symbolic

(g) Suppletion

This type of morphophonemic change is the occurrence of the allomorph completely different in phonemic structure from the normal form.

The essential here is semantic similarity and complementary distribution. Different allomorphs are suppletive forms.

e.g. The verb: go= went, sell= sold

The adjective; er= more

Certain kinds of alternation are systematic and predictable, and require to be described in any treatment. There is another sort, however, which is harder to handle. The best approach to sporadic alternation is to point out a couple of the mechanisms by which an instance may arise. Suppose the speakers of a language are neatly divided into two groups geographically: those on one side pronounce a certain word in one way, while those on the other side pronounce it in another way.

For example, the English word “*root*”; the two pronunciations are /ru:t/ and /rʊt/. Now so long as the difference is correlated with dialects, they are spoken of as sporadic alternation. But situations of this kind are not stable. Some people, in due time, hear both /ru:t/ and /rʊt/, and sooner or later some speakers acquire both habits of pronunciation, using now the one and now the other in a quite random and unpredictable way. When this has happened, it is called sporadic alternation.

The difficulty is to be sure that a pair of forms constitutes a genuine example.

For example, many speakers of English use both “*hoist*”/hoist/ and a more colloquial form “*heist*” /haist/; this pair has the same origin as that described above for /ru:t/ and /rʊt/.

But in this case there has been a semantic differentiation: “*hoist*” and

“*heist*” are not two shapes of a single morpheme, but different morphemes, with similar but distinguishable meanings.

There are a few principles which are almost universally accepted:

(I) Two morphs cannot be allomorphs of a single morpheme if they contrast.

For instance, *stricken* and *struck* both appear to be past participles of the verb “*strike*”. They cannot be morphemically identical; so if they are based on the same stem, the inflectional affixes are different morphemes.

(II) Two morphs cannot be allomorphs of a single morpheme unless they have the same meaning.

For example: the /s/ of *ants*, the /z/ of *tigers*, and the /en/ of *oxen* are all similar enough in meaning that we do not hesitate to consider them as a single morpheme if the other criteria are satisfied. In fact, it is possible that the /en/ of *oxen* is not the same morpheme as the /z/ of *tigers*.

(III) Even if other criteria are satisfactorily met, two morphs are not considered a single morpheme unless the resulting morpheme fits into the emerging grammatical picture of the language in a sensible way.

e.g. *-dom* in *Kingdom* and *-y* in *monarchy*

The ways in which the morphemes of a language are variously represented by phonemic shapes can be regarded as a kind of code. This code is the *morphophonemic system* of the language. The morphophonemics of English is never so simple. There are always many instances of two or more morphemes represented by the same phonemic shape, and there are always cases in which a single morpheme is represented now by

one phonemic shape, now by another. Therefore, the morphophonemics of English is never trivial.

2.13. Research in Morphological and Morphophonemic Awareness on learning vocabulary ESL/EFL

Numerous studies have been conducted concerning morphological and morphophonemic awareness among the speakers of English. In the field of Psycholinguistics, many of these studies aim at countering the claims made by Chomsky and Halle in *The Sound Pattern of English* (1968). That the historical changes in the English language reflected in the vowel shift rules are part of the linguistic (phonological competence of contemporary native speakers of the language

In contrast to the number of studies conducted on all levels of language awareness among native-speakers of English (phonemic, syllabic, morphological, and morphophonemic), studies relating to ESL inter-language morphology and morphophonemics have been very restricted. It would be pertinent if attention is paid to the importance of morphological and morphophonemic awareness as it is very important for the learners of L1.

Erdmann's (1973) studied native-speakers of German at university and high school (with four years of English). The study examined the pronunciation of English derived words with the suffixes – al, -able, -ative and –atory. The primary stress placement of such English words varies from the penultimate to the antepenultimate syllables. Cognate equivalents of these words in German, bearing the corresponding suffixes –

'al, -'abel, -a'tive, and -a'torisch were examined for their pronunciation by subjects. The German suffixes are stress-fixed so that in multisyllabic words to which these suffixes are attached, the main stress is on the syllables in the suffixes.

The contrastive analysis of the sounds of English and German has pointed to many areas of phonological interference, which a native Speaker of German has to master in learning English and vice versa. The problems encountered range from inferences drawn from, the graphemic representation of sounds through problems of phonetics and phonemics to questions of phonotactics, and are problems, which apply to both the paradigmatic and syntagmatic axis of language. To give a few examples: Whereas in German the grapheme < w > represents the phoneme /v/, it stands for the /w/ phoneme in English. The grapheme < v > on the other hand stands for the phoneme /f/ in German in many cases, while it represents the /v/-sound in English. Striking evidence for the phonological inferences drawn from the graphemic representation can, for example, be found in the pronunciation of < Volkswagen > by native Speakers of English. On the phonetic level there are difficulties regarding certain allophones and free variants of English, e. g. the distinction between a dark and a clear /l/ to be learned by German Speakers or the pronunciation of /r/ as an alveolar flap in British English or as a retroflex trill in American English. On the phonemic level there is a clash of inventories; phonemes missing in one language, which have to be learned, e.g. the German velar fricative [x] by native Speakers of English.

Mairs (1989) tested the pronunciation of adult Spanish ESL learners of 80 multisyllabic words (monomorphemic, derived, and inflected words). Pronunciation was elicited in

casual conversation and reading of sentences, paragraphs, and short stories. Mairs concluded that there was negative transfer of L1 stress rules only at the level of phrases and compounds. Stress errors in TL words were neither negative L1 transfer nor adaptations of L1 stress rules. The main sources of errors was the internal structure of the syllable in TL words, viz. the series of segments of a rim which violated L1 syllable structure, confirming the Marked Rim Hypothesis. The subjects tended to assign primary stress to syllables containing the VGC (i.e. Vowel-Glide-Consonant) rime not permissible word-finally in Spanish. Errors in word stress were found in all words ending in –VGC # and –VGC + stress-neutral suffix (e.g. “organize” and “realize” for –VGC#, and “complicated” and “advertising” for –VGC+ stress-neutral suffix). Mairs used the periphality condition relating to rime extra metricality to explain the subjects’ difficulty with words containing –VGC + stress-neutral suffix such as –or –er and –ing.

This study of Portuguese-speaking university students of English in Brazil examined their stress problems in multisyllabic words, including monomorphemic words and English-Portuguese cognate and non-cognate derivatives. It was found that English words with different stress patterns from their Portuguese cognates actually caused less difficulty than words with the same stress patterns. As well, where derivatives were verbs (such as with –ate and –ize), most errors occurred in final syllables with primary stress. (Where final syllables of verbs required primary stress, scores for correct responses are much higher.) Unlike Matros and Cintra (1966, in Baptista, 1989) who cited negative transfer in the pronunciation of Portuguese cognates, Baptista attributed these errors to the subjects’ interlanguage rules regarding the TL. The tense vowels of the final syllables of these words in English also explained errors in the pronunciation

of words like “contributors” where subjects placed primary stress on the tense penultimate syllable. Another tendency among subjects was to indiscriminately maintain the stress of the root word in the pronunciation of derivatives. The rate of error caused by root word stress was four times higher than errors where subjects placed stress on other syllables (p.13). This showed that the majority of stress errors were caused by the subjects’ maintaining the base-word stress in derivatives. Where derivatives did not require stress shifts from the root words, as in those with weak suffixes (-ly or -er, except after Greek elements), correct pronunciation score was 90% in general, Baptista (ibid) appeared to account for her subjects’ errors in pronunciation as overgeneralization of English stress rules rather than the negative transfer of Portuguese stress rules.

This study involved five native speakers of five different L1’s, viz. Farsi, Japanese, Spanish Hausa, and Chinese. The subjects were tested for their pronunciation of words in isolation and in a sentence context. The test words consisted of two-syllable words (e.g. “confess” and “conclude”) as well as three-syllables. It was found that none of the subjects pronounced these words with the same durational relationships (between stressed and unstressed vowels) as the American native-speaking controls. For the non-native subjects, unstressed vowels were longer while stressed vowels were shorter.

Moreover, nonnative-speaker subjects had the greatest difficulty in producing the appropriate stressed and unstressed vowels in four-syllable words. A variety of vowels were produced for stressed vowels and unstressed vowels were not reduced. Moreover, the subjects’ difficulties in pronunciation were associated with types of words (that is,

number of syllables) rather than with producing these words in isolation or in a sentence context. The authors attributed their pronunciation difficulties to the fact that their L1's were syllable-timed languages rather than stress-timed as English is.

This study examined the suffix-learning strategies of Dutch university students and secondary school students of different ages, in the acquisition of complex words in English. The strategies examined were those of applying rules and analogies, or learning by heart. The test items were categorized as follows: words of which the base forms and the derived forms had been studied, words of which just the base-forms had been studied, and words of which neither the base forms nor the derived forms had been studied. Suffixes included in the test items were both native English suffixes (-er, -ish, -ness, -ment, -able, and -ed) and Latinate suffixes (-or, -ent, -ify, and -ible). The subjects were required to "make a noun from a verb," "make an adjective from a noun or a verb", or "make a verb from a noun" etc. Answers had to be in written form and spelling had to be correct.

It was concluded that either strategy (whole-word learning or the application of word formation rules) could have been at work. However, there were other findings of significance. Overall scores in all words of all categories increased with educational level, thus confirming the importance of exposure. Scores for regular words (native English suffixes) were always higher than for irregular words (Latinate suffixes), Scores were the lowest for unlearned base words and unlearned derived words. Frequency of suffixes was an important factor in the scores, even for university

students. However, the authors conceded that the errors made by the subject were due to the lack of knowledge of English word formation rules and spelling rules.

This study examined the application of word formation rules in English by native speakers of English and ESL learners. The subjects used the suffix-ity to form nouns and -ity nouns to form adjectives, with the application of vowel shift and velar softening. Test items consisted of nonsense words. The subjects were Polish and Austrian university students. The Austrian subjects were all students of linguistics. The controls were American speakers of English, one of whom was an English philologist.

The results showed that for both types of tasks, the Austrian speakers scored higher than the English speakers. This was attributed to their linguistic education. Among the English and Polish speakers, scores were perfect for the linguistically educated and lower for those educated in other areas. It was concluded that the process of velar softening and vowel shift were not natural phonological processes and had to be learned as morphological rules by native speakers as well as non-native speakers of English. This explained why both native speakers and ESL learners manifested the same difficulties in the application of these processes in words with -ity. Linguistic education also influenced the application of these rules (cf, Jaeger 1984, 1986; McCawley, 1986, p.5). A native speaker might, however, become aware of these processes through observation and analogy. Analogy was employed as a strategy when consciously manipulating morphological material. (ibid, p. 419).

The morphological and morphophonemic awareness of ESL learners at the level of derived words have not been well investigated. The investigation of learners' performance on derivatives has been restricted mostly to pronunciation while the relation between phonological performance and formal representations of derivatives and base words has not been examined. Moreover, an integrated perspective of ESL learners' lexica concerning derivatives has not been presented in research as studies have so far restricted their scope of investigation to one aspect of derivatives, phonology or morphology. In addition, semantic representations of morphologically related words in the lexica of learners have not been examined. As explained in Chapter 1, this study was an attempt to examine morphological and morphophonemic awareness of the subjects as part of their L2 competence, that is, lexical competence, in terms of their perception, production, and decoding of derivatives and their recognition of the semantic association of morphologically related words. In addition, the researcher attempted to overcome the limitations of error analysis in inter language theory. Besides the description of the subjects' TL "constraints," the researcher attempted to provide a psycholinguistic explanation for their errors.

In summary, this chapter provided a discussion of the status of vocabulary learning, word knowledge, and the core subject vocabulary. In particular, it explored the various definitions of vocabulary proposed by linguists and suggested a workable definition with the purpose of distinguishing vocabulary from other multi-word units. Moreover, the chapter reviewed the acquisition of vocabulary in first- and second- languages as well as the significance of vocabulary in L2 learning and teaching. It concluded with an

investigation of some empirical studies on the knowledge of vocabulary relevant to the current study.

2.14. Empirical Studies of Arabic-Speaking Learners of English

A careful review of the literature shows that the majority of vocabulary and collocation studies were conducted on Arab learners studying English in EFL settings (e.g., Hussein, 1990; Farghal & Obiedant, 1995; Al-Zahrani, 1998; Zughoul & Abdul-Fattah, 2003; Mahmoud, 2005; Al-Amro, 2006). To the best of my knowledge, Shehata (2008) conducted the only available study that has particularly examined Arab ESL learners' collocational knowledge. Another study that dealt with Arabic-speaking ESL learners was Elkhatib's (1984); however, it examined general lexical problems, one of which was the error of "word collocations." Detailed discussion of some of these studies is presented below. Elkhatib (ibid) conducted one of the early studies that investigated the lexical errors of Arab ESL learners. Elkhatib analyzed the writing samples of four undergraduate Egyptian ESL students with the objective of classifying lexical problems, identifying the causes of the problems, and verifying whether learners were attuned to the substance or the form of the language. The analysis showed eight major lexical errors, including an unfamiliarity of collocations. Elkhatib (ibid) observed that despite knowing the basic meaning of words, the subjects could not produce acceptable collocations. This lack of collocational knowledge caused the subjects to compose erroneous collocations such as *shooting stones*, *the aircrafts can remove us to many countries*, *beautiful noise*, and *do progress*. At the end of his study, Elkhatib (ibid) suggested that in order to help overcome collocational problems, teachers should

present new words along with their most typical collocations in the form of collocational grids (such as those utilized by Channell, 1981) or of sample sentences

In another study, Hussein (1990) employed a 40-item multiple-choice test for the aim of assessing and evaluating the subjects' receptive collocational knowledge. The sample consisted of 200 third and fourth-year undergraduate students majoring in English at Yarmouk University in Jordan. Each item in the test included four choices. The majority of the collocations used in the test were verb-noun, adjective-noun, and noun-noun. The findings revealed that the subjects' overall level of performance on the receptive test were unsatisfactory. Only 48.4% of the collocations were answered correctly, which was far below the initial set rate (60%). Hussein (1990) maintained that the students' low achievement on the test can be traced to some general factors such as: negligence of the lexicon, including collocations, in the teaching of English as a foreign language, insufficient reading habits, and reduction and simplification, which seem to be characteristics of the teaching components of a foreign language. Other factors related directly to the test were: L1 negative transfer (e.g., *death number* in place of *death toll*), overgeneralization (i.e. the use of generic terms rather than specific, e.g., *pipe water* in place of *tap water*), and the unfamiliarity with idiom structure (e.g. *primary voyage* in place of *maiden voyage*).

In a later investigation, the issue of collocations as a neglected variable in EFL classroom was addressed by Farghal and Obiedant (1995). In their study, they examined the lexical collocational knowledge of 57 Jordanian advanced EFL learners.

Two test instruments were used in the study: a fill-in-the-blank test and an Arabic-English translation task. A total of 22 common English collocations (adjective-noun collocations) related to topics such as clothes, weather, and food were used in both tests. The blank-filling test included 11 sentences testing collocation pairs; moreover, the translation task, which is an Arabic version of the blank-filling test, consisted of translating the given collocations from Arabic to English. The blank-filling test was administered to 34 English majors at Yarmouk University, and the translation task was administered to 23 English majors at the Higher College for the Certification of Teachers. The overall data analysis showed that both groups were unaware of the fundamental existence of collocations as multi-word units because they were taught vocabulary as single-word units. This teaching method resulted in both groups being unable to produce acceptable collocations on the two tests. In the absence of collocational knowledge, the subjects resorted to four different strategies of lexical simplification. These are as follows:

1. Synonyms: This particular strategy was used most frequently by the subjects. The author attributed the heavy use of this strategy to the subjects' lack of knowledge of the collocational restrictions of some lexical items as well as the direct application of the open choice principle. For example, the target collocation *rich food* was substituted with *oily/greasy food*.

2. Avoidance: By adopting this strategy, the subjects avoided using the target collocations in favor of other lexical items. Thus, they chose a related natural

collocation that failed to reflect the intended meaning. For example, the elicited collocation *soft/little food* was substituted for the target collocation *light food*.

3. Transfer: This strategy yielded both positive and negative transfer. Positive transfer occurs when there is convergence between the Arabic language and the English language allowing the subjects to do well on predicting the target collocations (e.g., *striped shirt*). Negative transfer, on the other hand, occurs when there is divergence between the two languages in which the target collocations become unpredictable; for example, *heavy tea* instead of *strong tea*.

4. Paraphrasing: This strategy was the last resort that the subjects adopted (more apparent in the translation task group) in order to define the target collocations. The fact that the subjects used such a strategy indicates their deficiency in the acquisition of L2 collocations; for instance, *does not change* for the target collocation *fast color*.

Realizing the difficulties that EFL learners encounter when dealing with collocations, the authors proposed some valuable implications: first, the open choice principle or word-for-word combinations should be presented early, alongside the pre-constructed multi-word combinations or the idiom principle in foreign language classrooms. Second, not only should the inclusion of collocations in the foreign language curricula be singled out, but pedagogic dictionaries of collocations should be compiled as well. Third, foreign language instructors should be qualified in teaching prefabricated speech in general and collocations in particular.

In a recent study, Al-Amro (2006) assessed the lexical and grammatical collocations of Saudi EFL learners as well as their productive and receptive collocational knowledge. The data was drawn from 51 Saudi advanced English learners at the Institute of Public Administration in Riyadh, Saudi Arabia. The subjects' collocational knowledge was measured by a C-test, a multiple choice test, and an essay writing task. The C-test consisted of 34 productive items (verb-noun and verb-preposition collocations) in which the initial letter of the target collocations is provided to reduce the possibility of guessing, whereas the multiple choice test included 16 receptive items (figurative-use of verb phrases) where the subjects had to select from four alternatives for the underlined verb that sounds strange or mis-collocated. The collocation test is a modified version of Bonk's (2000) test that has a high level of reliability ($r=.83$). The results showed that there was a lack of collocational knowledge among the subjects as manifested by their poor performance on the collocational test. The data also revealed that there is a relationship between the EFL learners' receptive and productive knowledge of collocations. However, the subjects performed better on the productive test ($M = 32.88$) than on the receptive test ($M = 24.64$), a finding that is paradoxical considering the evidence that receptive knowledge is typically much broader than productive knowledge. However, the author attributed this to the fact that the target collocations in the receptive test were of lower frequency than those in the productive test. The least expected result, reported by Al-Amro (2006), was that there was no significant correlation between the subjects' overall knowledge of collocations and their actual collocational usage. In other words, the collocational knowledge from the collocational test did not correlate to the use of collocations in the essay writing task.

Al-Amro concluded that the EFL learners' lack of collocational use is the direct result of the neglect of the lexical approach in the foreign language teaching and learning environment. When the teaching of collocations is overlooked learners focus mainly on single-word units while disregarding all the important associations of the word or its partners. Moreover, the overemphasis of using synonyms in dictionaries to find a particular meaning of a word had resulted in the misconception among learners that conceptual equivalence involves distributional equivalence.

In a more recent study, Shehata (2008) examined the L1 influence on the productive and receptive knowledge of collocations by advanced Arabic-speaking English students. The author recruited 97 participants who were divided into two groups, ESL and EFL. The participants in the ESL group included 35 Arabic-speaking English students at Ohio University who had TOEFL scores ranging from 567 to 620; whereas, the EFL group consisted of 62 Egyptian participants majoring in English at an Egyptian university whose English proficiency levels were advanced. The probe of the study consisted of five instruments: a self-report questionnaire, two fill-in-the-blank productive tests, an appropriateness judgment receptive test, and a vocabulary recognition test. Thirty-two target collocations were included in the productive collocation tests (16 each adjective-noun and verb-noun collocations). The receptive test consisted of 50 items that included the 32 target collocations in the productive tests plus 18 mismatched collocations that served as distracters. The participants' familiarity with collocational components was checked using the vocabulary recognition test which consisted of individual words. The findings yielded significant differences between ESL and EFL participants on both productive and receptive collocational

knowledge. The author reported that ESL participants outstripped the EFL participants in both productive (ESL $M = 20.71$ /EFL $M = 9.31$) and receptive (ESL $M = 38.80$ /EFL $M = 36.24$) tests. According to Shehata (2008), this indicated that the ESL learning context enriched the learner's knowledge of collocations while the EFL context did not. Additionally, both groups performed better on the receptive test than the productive test, a finding that contradicts Al-amro's research (2006). The results also showed that L1 interference had a strong effect on the participants' collocational knowledge. Another interesting finding was that all participants did better on the verb-noun collocation test than on the adjective-noun collocation. This indicates that verb-noun collocations are easier to acquire than adjective-noun collocations. Overall, Shehata's study corroborated with the previously mentioned studies that Arabic-speaking EFL learners have poor knowledge of collocations. This could be attributed to the influence of the learning environment. To help improve EFL learners' collocational knowledge, the author called for the use of authentic materials in teaching collocations, which in turns provided them with the opportunity to be exposed to natural language that can assist in the development of their language proficiency. Moreover, EFL teachers should pay more attention to the teaching of non-congruent collocations that is collocations that do not have a translation equivalent in L1. She concluded that English textbooks should include a bilingual glossary of collocations to help learners to become more familiar with the similarities and differences between L1 and L2.

In conclusion, the previously mentioned studies have yielded evidence of the poor collocational knowledge of Arab EFL students and have shown that EFL classrooms

need an approach that considers lexis and its components as important avenues in language learning.

The last two aforementioned studies are highly relevant to the current study because it examined the productive and receptive collocational knowledge of L2 learners. It is in line with the studies that acknowledge the deficiency of ESL/EFL learners in the area of collocations. While the collocation studies that investigated Arabic-speaking learners of English are scarce, almost all of them were conducted in an EFL environment, and only one study has examined Arab learners of English in both ESL and EFL settings. Thus, the present study attempted to add to the existing research by exploring whether learning English in an ESL context has an impact on students' collocational knowledge in comparison with learning English in an EFL / L2 context.

This study involved Jordanian undergraduate learners of English and examined their pronunciation of multisyllabic English words. Anani (1989) attributed pronunciation errors to negative transfer from L1, Arabic. The fixed stress patterns of Arabic multisyllabic words that have syllable structure corresponding to English multisyllabic words were transferred to these English words. For example, Arabic trisyllabic words with long final syllable (eg. 'maga'diir,' 'Tayya'raat') corresponded with English trisyllabic words with final syllables containing tense vowels. This led to errors in the pronunciation of words like 'subma'rine', 'moder'nize' 'engineer' 'photo'graph' 'edu'cate,' 'appe'tite', 'sepa'rate,' 'para'chute' and 'hesi'tate,' Moreover, where Arabic words had the syllable structure of CV-CVC-CV. (as in 'ka'milli,' 'Was'silni,') their stress pattern was transferred to English words with similar syllable structure, thus

producing 'certainly'. While test items consisted mostly of derivatives as well as compounds. Anani examined their pronunciation from their syllable structure rather than morphological structure.

In his research about Pronunciation Problems Faced by Saudi EFL Learners at Secondary Schools, Hago (2015) concluded that there is an error concerning consonants and consonant clusters where some of them appeared most frequently. Namely, they are the substitution of /p/ by /b/ in all word positions, the substitution of /ŋ/ sometimes by /n-k/ and sometimes by /n-g/, the substitution of final /ʒ/ by /dʒ/, /v/ replaced by /f/ and the confusion of /t/, the dark with /l/ the light. Interference from the mother tongue seems to be the major factor contributing to pronunciation problems. In fact, not all the pronunciation errors listed probably matched all the errors that were made by the Arabic learners of English in Saudi Arabia. This study has also illustrated the common characteristics of pronunciation errors of Arabic Saudi learners of English by analyzing their native linguistic background, which illustrated how one's native language influences one's English pronunciation. And he recommended that as these errors are due to inappropriate knowledge of the English phonemes, Therefore, the awareness of English pronunciation within English language learning programs could be the first step of learning English. English teachers could integrate pronunciation practice into lessons so that students could have more opportunities to practice pronunciation in some meaningful context. Some drilling exercises related to errors with high frequency could be given to students so that they could be more aware of their mouth, lips and teeth positions and shape. Moreover, teachers could also help students to develop strategies

that are more independent: such as learning the phonetic alphabets and using computer software in learning pronunciation.

A study conducted by Na'ama (2011) about errors made by Yemeni university students in the English consonant- clusters system. He found that these types of errors showed that the most serious errors made by Yemeni university students occurred in three and four-final-consonant clusters. These two types are usually nil in Arabic segmental features. It is the major cause of interlingual phonological errors of Yemeni university students in the English consonant clusters. Accordingly, they shift to use the common system in their mother tongue to the target language, i.e., English. Another cause beyond making such errors in English consonant clusters was the lack of using teaching aids. The frequent use of various listening aids was very important in improving the students' standard of pronunciation learning English as a foreign language. Due to the difficulties in English consonant-clusters, students had to listen to cassettes more and more to realize and distinguish the nature of English consonant- clusters.

In addition, incompetent instructors affected their students' pronunciation. No doubt, many instructors in Yemeni universities need to pay attention to their own pronunciation and do their best to uproot their students' phonological competence in discriminating this aspect of English phonology; the consonant clusters in all their types. Accordingly, these serious difficulties may result in the mispronunciation of the Yemeni university students in English consonant clusters. Na'ama (2011) recommended in teaching English as a foreign language, the tutors always describe

pronunciation as the Cinderella of language teaching. This is considered as a very important language skill. Both productive and receptive skills constitute the learner's tendency to learn a language, but Yemeni university students lack the basic knowledge of articulatory phonetics (especially the segmental features). It is important to place a heavy emphasis on listening (reception) as a way into releasing appropriate pronunciation (production) of English sounds in general and consonant-clusters in particular.

In his book titled (*Errors in English Pronunciation among Arabic Speakers: Analysis and Remedies*) Khalifa (2020) stated that Forty-five Arab participants, all of whom speak English as a foreign language, took part in this study: fifteen Saudi Arabians, fifteen Egyptians and fifteen Libyans. The educational setting for this research was the Saudi School in Sheffield, England where he worked as a teacher of English to Arab students. This research was based on analyzing recorded data collected through elicitation: 'reading aloud' and 'guided composition'. The subjects were asked to record their reading of lists of English words and description of a picture. All the recordings were transcribed and tables showing correct and incorrect pronunciation were drawn up. The subjects found difficulty in pronouncing some English consonants such as /p/, /v/, /ŋ/, dark /ɫ/, 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. Regarding 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).

Al-Yami's study was conducted to investigate the pronunciation of English onset and coda clusters by Saudi EFL learners. She found out that Saudi female EFL learners had trouble pronouncing English CCs in the onset (CC-, CCC-) and coda (-CC, -CCC, -CCCC) positions. This conclusion agreed with other Arab studies (Elsaghayer, 2014; Na'ama, 2011). However, the difficulty hierarchy varied, that was to say, Saudi EFL learners encountered more problems in pronouncing CCs in the coda position more than in the onset position. Not only that, but another interesting result was also uncovered; the difficulties were not equal, even within the same position. The CC-structure was the least difficult type (M=3.46, SD= 3.9) (e.g. /pr-/ mispronounced as /br-/ in 'private') compared to the CCC- structure, (M=11.6, SD=3.04) (e.g. /skw-/ was reduced to /sk-/ in 'square') in the onset position. The same also held true for coda clusters. It appeared that the most difficult pattern was the -CCCC structure (M= 23.2, SD=2.04) (e.g. /-ksθs/ was mispronounced as /-ksθ/ and /-ksis/ in 'sixths'). The difficulty hierarchy can be summarized as follows: CC- < CCC- < -CC < -CCC < -CCCC.

Students used different strategies to pronounce CCs. For example, epenthesis strategy was the most preferable simplification strategy in pronouncing CC-, CCC-, -CC and -CCC. For instance, the clusters /gl-/ as in 'glamorous', /str-/ as in 'street', /-bd/ as in 'robbed', /-sks/ as in 'masks' were mispronounced as /gəl-/ , /sitr-/ , /-bid/ and /kist/, respectively. Nevertheless, this result is in contrast with Al-Sammer (2014), and

Jayaraman (2010), all of whom argued that the commonly used repair strategy to produce the -CCC structure was segmental deletion rather than an epenthesis strategy. However, deletion was the most dominant strategy in pronouncing -CCCC, for example, the cluster /-mpts/ in ‘attempts’ was mispronounced as /-mpits/. Other strategies such substitution (e.g. /pr/ was mispronounced as /br/ in ‘private’) and some combination thereof, like insertion and deletion (e.g./spl-/ mispronounced as /isp-/ as in ‘split’) were also used but they were less common.

2.15. Metalinguistic Awareness

Metalinguistic awareness is a set of multiple skills that are related to the formal aspects of language: phonological, morphological, syntactic and lexical awareness. Bialystok et al., (2014)

2.15.1. Role of Consciousness in L2 Learning

In recent years, issues related to the role of consciousness in L2 learning have become a matter of practical concern in Applied Linguistics. The role of consciousness about language learning has been analyzed by scholars and psychologists in different ways. If language awareness facilitates language learning, then consciousness about the nature of language is a part of the development of language awareness. Contrary to Krashen’s (1981, 1993) claimed that acquisition is largely an unconscious process and that the contribution of conscious learning is limited and secondary, there is a growing recognition that explicit instruction (where some sort of rules are being thought about in the learning process facilitates learning, and that explicit knowledge facilitates the acquisition of implicit knowledge (Hulstijn & Schmidt, 1994). Instruction provides a

cognitive focusing device for learner attention (Van Patten; Harley; N.C., Ellis; Hulstijn & deGraaff; in Hulstijn & Schmidt, 1994).

According to, (ibid) ‘consciousness’ for the learner must mean receiving instruction in and the acquisition of explicit skills necessary for the processing of the semantic and conceptual representations of language (1994). Schmidt’s redefinition of “consciousness” in language learning which includes paying attention to what is being learned, and awareness of rules or generalizations, is particularly useful (Schmidt, 1990, 1993a, 1994). Paying focal attention to what is being learned, or noticing, converts input into intake. Learners are made to form conscious hypotheses about the TL rules concerned (R. Ellis, 1993, in Hulstijn & Schmidt, 1994). Robinson (1995) complements Schmidt’s model of consciousness and noticing by proposing that attentional and processing demands of pedagogical tasks, including detection and rehearsal in short-term memory, prior to encoding in long-term memory, are significant factors affecting the extent of noticing. (Also Jacoby, 1993) retrieval from long-term memory can result from conceptually driven top-down processing and automatic activation of previously attended information encoded in long-term memory, determined by the interaction of data-driven, bottom-up processing of the specific tasks concerned. In Robinson’s model, grammatical knowledge is aided by familiarity with the basic metalinguistic principles for describing structural patterns. Structural analogies help hypothesis testing by directing the learner’s attention to the relevant features of the input to be noticed. According to O’Malley and Chamot (1990), explicit training in areas of metalinguistic knowledge is possible. Winser (1991) emphasized the

role of awareness of learning strategies and explicit instruction in developing literacy skills in adults.

2.15.2. Awareness of Grammatical Form and Function

An important aspect of language awareness, literacy, and language development is metalinguistic awareness. This comprises attention to two related aspects of language, form or structure, and function (Downing & Leong, 1982; Bialystok, 1991). Word knowledge, which constitutes the foundation of literacy, comprises awareness of phonemes, syllables, morphemes, and words, and how to map the mental representations of these linguistic units to and from the oral and aural language and their graphemic representations (Henderson, 1992; Templeton, 1992). Word knowledge also includes the awareness of the internal structure of words for the purpose of developing word recognition strategies (Fischer et al., 1985), it is probable that ‘literacy and language awareness exist in a state of mutual facilitation.’”

2.15.3. Morphological Awareness

Morphological awareness, is an understanding of how words can be broken down into smaller units of meaning such as roots, prefixes, and suffixes, has emerged as an important contributor to word learning in L2. Mattingly (1987) and Leong (1991) refer to morphological awareness as awareness of the “compositional analysis” of words. Carlisle (1995) defines morphological awareness as the ability to reflect on and recognize the presence of morphemes in words. It can also be referred to as the

capability to unlock a word's meaning by analyzing its morphemes. Talerico (2007), on the other hand, asserts that morphological awareness enables learners to manipulate and explicitly understand the word parts. Moreover, Kuo and Anderson (2003) argued that morphological awareness comprises the essential mastery in matching sounds and morphemes and the rules of word formation, which assist an individual in the feasible understanding of morphemes. Therefore, morphological awareness plays an essential role in recognizing the meanings of words and forming new words based on them. Chen and Pasquarella (2013) emphasized that morphological awareness is necessary to understand words because similar words in different sentences carry different meanings due to the changes in affixes, which change the syntactic relationship of a word. Learners who have gained morphological awareness can better comprehend the morphemic structure of words and later replicate this word structure in order to have an understanding of the whole meaning of the words. Carlisle (2010), pointed out that this gradual development of morphological awareness takes place when students can perceive the multifaceted connection between the form and meaning of words, because English is a morphophonemic language. Therefore, morphological awareness plays a fundamental role in language acquisition and vocabulary growth. Karimi (2012) argues that morphological awareness is an essential factor in linguistic knowledge because to clearly express the role of a specific word in a linguistic context, morpheme properties, semantics, phonology and syntactic elements must be present.

Green et al., (2003), argued that morphological awareness moderately to strongly correlates with reading abilities and Verhoeven (2003) may be the only published L2

studies that have assessed the importance of morphology-related variables to passage-level reading comprehension relative to other variables (e.g., vocabulary knowledge, phonological awareness). The more popular research topic in L2 morphology has been the cross-linguistic transfer of morphological awareness on word-level reading (e.g., Bind-man, 2004; Deacon, Wade-Woolley, & Kirby, 2007; Saiegh-Haddad & Geva, 2008). Although word-level reading ability often highly correlates with passage-level reading comprehension, the two are clearly distinct constructs because the latter entails many more cognitive processes (e.g., syntactic parsing, inference, proposition formation). If the ultimate goal of L2 reading instruction is to help students achieve efficient passage-level reading comprehension, it is necessary that relevant L2 research also includes passage-level reading comprehension as its dependent variable. The present study addresses this gap in research by assessing the unique contribution of morphological awareness to word-level L2 spelling abilities of elementary students.

In literacy, morphological awareness involves the recognition of meaning units or morphemes within morphologically complex words in the language. In literacy, morphological awareness involves:

- a) The recognition of the morphological structure or form of complex or multi-morphemic words, that is, base words and affixes or compounds,
- b) The awareness of the grammatical function multi-morphemic words. This entails the awareness of the semantic compositionality of derived words as well as their semantic idiosyncrasy where applicable, so that 'productivity' is the state of being

“productive,” but the “transmission” of a car does not refer to the act of “transmitting” but to the parts which carry power from the engine to the wheels;

c) The awareness of morphological rules of the TL so that complex multimorphemic words can be generated from mono-morphemic words of the lexicon, and their meanings and use understood from their internal structure; and

d) The awareness of the grammatical function of derivatives so that their sub-categorization as determined by their syntactic categories and thematic roles in sentences, are understood.

e) The awareness that some morphemes may not have a consistent meaning in different words (such as (re) in “receive” and “reduce”, or (mit) in “commit” and “remit”). In such words, the semantics of a complex word cannot be derived by compositional analysis. (This is at least true for the average speaker of English, and the average ESL learner).

2.15.4. Phonological awareness

In this section we look into the concept of L2 phonological awareness, the nature of L2 phonological awareness is discussed taking into account the specific nature of L2 speech acquisition in comparison to L1 interference, how L2 phonological awareness has been studied to the date. Finally, the theoretical motifs for the main hypothesis of this dissertation, and its relation with this section will be presented.

Terms such as phonemic awareness and phonics often are used interchangeably with phonological awareness. A considerable terminological confusion exists in the field of phonological awareness, and several terms have been employed rather interchangeably to refer to L2 phonological awareness: *pronunciation awareness* (Kennedy et al., 2014), *phonological metacompetence* (Wrembel, 2006), *metaphonetic awareness* (Wrembel, 2011) and *phonetic/phonological sensitivity* (Piske, 2008).

Henbest & Apel, (2017), defined Phonological awareness as the ability to think about the sounds in words, and to identify and manipulate individual sounds, or phonemes and it is the conscious awareness of the phonological structure of words, syllables, onsets, rimes and phonemes.

Schuele & Boudreau, (2008) stated that, Phonological awareness, in its purest form, involves the sounds of words when spoken; it does not involve the use of letters. In fact, letter knowledge and how letters correspond with sounds in the language are not required to develop basic phonological awareness skills. Morris, (2015) however, stated that, for many children, continued growth in phonological awareness is enhanced once a child recognizes that letters are used to represent the sounds in words.

Alternative definitions vary in generality from highly exclusive to highly inclusive of different phonological awareness skills. Phonological awareness skills are distinguished by the task performed and size of the unit of sound that is the focus of the task. Examples of different phonological awareness skills that are distinguished by the type of task performed include blending sounds together, separating (segmenting) words into

their constituent sounds, recombining sounds of words, and judging whether two words have some sounds in common. Distinctions among phonological awareness skills based on unit of word structure include whether syllables are the focus of the task or whether smaller intrasyllabic units, like onsets, rimes, or phonemes, are the focus. The onset is the initial consonant or consonant cluster present in many, but not all, English syllables; the rime is the remaining vowel and consonants. (For example, in the word spin, sp is the onset; in is the rime; and /s/, /p/, /I/, and /n/ are the phonemes. Debate over which phonological skills belong to the construct of interest has directly influenced literacy curriculum and instruction, with some curricula emphasizing phoneme awareness and reading by sound-letter correspondences and other curricula emphasizing onset-rime awareness and reading by rime analogies (e.g., reading a new word, like string, by analogizing from familiar words that have the same rime unit, like sing and wing).

Since there is considerable evidence that some level of phonemic awareness is a necessary condition for learning to read, an important question is: Can phonemic awareness be taught, or is it strictly a result of maturation? If the latter is the case, then teachers have little control over their students' levels of phonemic awareness.

Several studies have demonstrated that children can indeed be successfully trained in phonemic awareness (Ball & Blachman, 1991; Hohn & Ehri, 1983; Marsh & Mineo, 1977; Williams, 1980; Yopp & Troyer, 1992). These studies have included young children, and the findings have indicated that training results in significant increases in phonemic awareness. How that training affected participants' subsequent reading

performance was examined by Lundberg, Frost, and Petersen (1988) and Bradley and Bryant (1983). Both studies demonstrated that specific language experiences could be offered to young children that will significantly affect their progress in phonemic awareness and their subsequent reading and spelling acquisition. The authors concluded that awareness of phonemes had a powerful influence on eventual success in learning to read and spell.

Phonological awareness is seen to consist of multiple levels: syllable awareness, rime-onset awareness and phonemic awareness. *Syllable awareness* refers to the ability to perceive and manipulate language at the level of syllables (McBride-Chang, Bialystok, Chong, & Yanping, 2004). *Onset-rime awareness* entails the ability to divide syllables further into onsets and rimes and to recognize which words alliterate or rhyme.

Phonemic awareness refers to “the insight that a spoken word can be viewed as consisting of successive speech sounds and the skill in manipulating these sounds” (van Bon & van Leeuwe, 2003, p.195). These levels have been shown to follow a clear developmental order so that children first become aware of larger units (words, syllables, rimes and onsets) and then proceed to smaller and more abstract units (phonemes). Syllable awareness is usually found to develop before onset-rime awareness (Anthony & Francis, 2005; Chien, Kao, & Wei, 2008; McBride-Chang et al., 2004) and rime awareness develops before onset awareness (Cisero & Royer, 1995). However, not all studies have found syllable awareness to develop before onset-rime awareness, instead a simultaneous developmental pattern has been observed (Carroll, Snowling, Hulme, & Stevenson, 2003). Independently of the order of these two

abilities, it is well established that phonological awareness develops from larger units to smaller units and phonemic awareness is the last to develop. Kennedy et al., (2014) found out that there is a relation between L2 phonological awareness and L2 pronunciation. The Study of Kennedy et al., concluded that L2 phonological awareness is the reason behind more native-like or improved L2 pronunciation. In other words, L2 phonological awareness increases L2 pronunciation.

2.15.5. Morphophonemic Awareness

English orthography primarily represents phonemes with overlapping morphophonemic representation where orthography does not reflect the phonetic alternations of vowels or consonants in the event of affixation. Thus, the orthographic form “magic” is phonemic/phonetic, but the orthographic form “magician” is morphophonemic. The morpheme “magic” is preserved orthographically in “magician,” but the phonological representation or phonetic form of “magic” is modified with the final [k] – [s] before the suffix –ian. Morphophonemic awareness may be best explained in terms of reading and orthography, and listening and pronunciation.

a) In reading, it involves the awareness that in English orthography, morphemes are represented to varying degrees of consistency. Any changes to the phonetic forms of these morphemes in the event of affixation may not result in a corresponding change to their orthographic forms. For example, in “photograph” and “photographer,” the base word is preserved completely in orthography. In “permit” and “permission,” the base word is only partially preserved in orthographic form. Recognition of the base word of

“photographer” would be much easier than that of “permission” due to the absence of orthographic modifications in “photographer.” “Magic” and “magician,” on the other hand, involves awareness of the preservation of morpheme identity in the spelling of the derived word in the absence of phoneme-grapheme correspondence.

b) In oral language, morphophonemic awareness involves the ability to associate a derived word with a base word whose phonological representation within the derived word has been modified from its phonological representation as a base word. This means that despite a different phonological representation of the base word “minor” in the derived word “and connect them semantically. In oral language, recognition of the association between the words in the “photograph – photographer” pair and the “magic – magician” pair would be more difficult than in written language. The recognition of “receive – reception” would be more difficult than the above two pairs in both oral and written language. Thus, morphophonemic awareness necessarily presumes morphological awareness necessarily presumes morphological awareness.

2.15.5.1. Morphophonemic Awareness, and English Orthography

Morphophonemic awareness involves the awareness of English orthography as a multi-code system. This is summarized by Albrow (1972) as recognition of the following:

1. Word pairs whose spellings reflect their phonemic forms, morphemic relatedness, and semantic link, such as “sin – sinful”,
2. Word pairs which are semantically and morphemically related, but whose spellings partly conceal their relatedness, as in “decide – decision”, and

3. Word pairs which are semantically or morphemically related and have spellings reflecting the phonemic changes, such as “beast, bestial,” thus sacrificing their semantic or morphemic link in writing.

These three word pairs represent the increasing order of opaqueness of English orthography in base word-derived word pairs. This “differential orthographic complexity” accounts for the increasing order of difficulty in the acquisition of morphologically (and usually semantically as well) related word pairs by learners (Luelsdorff, 1987). A full understanding of English orthography involves the discovery and learning of the phonemic as well as the systematic morphophonemic code.

In this chapter we deal with the importance of vocabulary in learning foreign languages. Much research has been carried out on other aspects whereas the word has been relatively neglected. However, teachers and learners recognize the fact that to effectively use a language, knowledge of vocabulary is necessary. Around the 1980's, researchers started to claim the importance of vocabulary in foreign language learning. These studies confirmed that learners feel the lexical deficit as the major problem during their reading and that the need to understand can explain their fascination towards Lexis.

To the Arabs who are learning English, words like (cough, caught] {listen, written] (cat, city) (shark, action) and (church, school) among many other examples, are very problematic. The difference between Arabic orthography and English orthography causes some errors in spelling and pronunciation. Swan and Smith (1988) stated that,

the Arab learners, in their early stages of learning, tend to apply their knowledge of Arabic orthography to English which resulting in some pronunciation errors. Kharma & Hajjaj (1989) stated that, In contrast to the Arabic orthography, English orthography is an irregular and rather a complicated system where the relation between sounds and letters is not consistent. In other words, in English one letter can be represented by different sounds i.e. the letter *C* is pronounced /s/ in *city*, /k/ in *cat*, and /tʃ / in *church*. Furthermore, one sound can be represented by more than one letter as /f/ in *cough*, /k/ in *school* and /ʃ/ in *action*.

On the contrary, the Arabic orthography is regular and simple in terms of consonants and long vowels representation, where every sound is represented with a letter in one to one relation. Except of some occasions of assimilation of definite (ال -the) with the adjacent letter. Otherwise unlike English, every letter must represent one sound only and there is no existence of silent letters. Therefore, Arab learners suffer of this direct opposition to English orthographic system, when they try to take English orthography as reliable guide to pronunciation resulting in some errors in pronunciation.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1. Introduction

This chapter presents a description of the settings in which the study took place, the subjects participated in the study, the method used the data scoring procedures, and the research questions. The study was conducted in the settings of EFL which was the Dept. of English, the College of Arts at Zawia, University. The aim of the Department is to (qualify) train the Libyan youth to meet the modern requirements of life sectors with the help of English language. Upon entering the Dept., students must successfully pass a four-years intensive English programme in order to enter the world of business administration, banking, office management, teaching and others similar fields. Students in the Department of English are required to attend four consecutive sessions: each session of one year. A number of topics are taught to them. The Computer-assisted Language Learning (*CALL*) program is also used. Classrooms are equipped with modern technology, such as overhead projectors and computers with Internet access. They have a capacity for more than forty students.

3.2. Instruments

Quantitative research establishes procedures that allow the researcher to systematically and scientifically study causal relationships among variables. All experimental quantitative research studies include three basic steps. First, the researcher measures the variables. Next, the researcher influences or intervenes with the variables in some way. Finally, the researcher measures the variables again to ascertain how the intervention affected the variables.

An experimental quantitative study has the following characteristics:

- The nature and relationship of the variables
- A specific hypothesis that can be tested
- Subjects assigned to groups based on pre-determined criteria
- Experimental treatments that change the independent variable
- Measurements of the dependent variable before and after the independent variable changes.

There are various ways of teaching language, especially vocabulary that are used in various courses. The reason for this variety is that English is learned for many various reasons mentioned above. With respect to that variety, there is a wide range of teaching methods (concrete techniques) that can be used for the various purposes. Some of them would work with beginners; some with advanced students; and some for students with specific needs. Teaching is done according to those methods in the Department. The researcher himself experienced only a very few of them therefore his knowledge is both theoretical and practical by employing various techniques in the language laboratory to enable the students to understand English language. Although there are certain constraints related to the main principles, most of them have been found useful.

3. 2. The Participants

The participants in this study were third-year students at the Department of English at Zawia University-Libya. They were 10 male and female students of varied age from twenty to twenty-three years old coming from similar background and majoring in English. It was assumed that they had enough proficiency and the ability to answer the Vocabulary Level Test (VLT) (see 3.3.2) (Nation,2001), because they had learned English as a foreign language for about 6 years and English is also considered as a requirement for university entry.

A convenience sampling is used because the participants were conveniently available to the researcher. The researcher chose this sample just because the students were easy to recruit, and the researcher did not consider selecting a sample that represents the entire students.

3. 3. The Instruments

3. 3.1.Nelson Test

This test was used to identify the learners' proficiency level. It consisted of 30 questions related to morphology, morphophonemics and vocabulary. Then in a tabular chart their performance was put and on the basis of marks awarded to them, certain conclusions were drawn.

3. 3.2.VLT (Nation, 2001)

It was used to measure the students' receptive vocabulary size. This test was chosen because it is a commonly used test with easy administration and scoring. Since the

participants were university students, the receptive vocabulary levels test was used to test the participants' knowledge of vocabulary items from most frequently occurring words. These words are seen as that all learners need to know to be able to read basic texts and that should be concentrated on the class. There were five items related to identification of different components in compound words. It is used in this study to help the researcher to answer the research questions whether the morphological and the morphophonemic awareness help the learner to master vocabulary.

3.4. Tools for data collection

The researcher intended to use both qualitative and quantitative approaches in conducting the research work and to explain the data collected from the students. Students were divided into two groups which were chosen randomly. The first group was the experimental group and the second was the control group. The following instruments and procedures were used in ascertaining the practical impact of imparting morphological and morphophonemic knowledge to the students.

3.4.1. The per-test

The test was designed to examine the students' knowledge of the meaning and word-class- discrimination. Phonological and phonetic aspects also were examined. Six sets of questions, each contains five questions, were conducted on both the groups.

3.4.2. The Instruction

An intervention was designed for the experimental group who received certain information about morphology, phonology and phonetics to make them aware of certain parts of this aspects However, the control group will learn vocabulary in the usual way which no attention was paid to either phonological or morphological aspects. Intervention studies provide the most reliable evidence in experimental research. The intervention used here by the investigator (researcher) to the experimental group in a form of intensive information about the morphological and phonological aspects in the language.

3.4.3. The Post-test

A second test was conducted to the experimental group at the end of the intervention to find out whether there was any difference between the two groups' achievement.

3.4.4. The Oral test

To provide an extra support to the result of the written test and categorically settle down on the result, the students who took part in the experiment were individually and orally tested after the post-test. An oral refers to that test where participants were asked questions orally and they had to answer those questions orally. As individual oral tests had higher response rates than other options, follow-up questions were asked to gain additional insights.

Using more than one tool for data collection is called triangulation. Cohen and Mannion (1994) defined triangulation as the use of more than one method of data collection in the study of human behaviour. This definition is confirmed by Bell (1999) who pointed out that triangulation is the use of different research methods to investigate the same problem. Using triangulation allows the researcher to look at the data from different sources and to confirm the findings and make them more reliable and valid. As Miller and Fredericks (1996) indicated using triangulation strengthens the reliability and validity of the collected data.

3.5. Validity

Validity here means that the research should measure what it is designed to and obtain unbiased results. To increase validity, the researcher used various sources of evidence. Thus, different sources of evidence were used to validate the information in this research.

3.6. Reliability

If the study was replicated by another researcher using the same methods and techniques, the same results would be obtained. This can indicate that the study is reliable. To achieve reliability, the researcher provided details that might help other researchers to replicate the study. Data were collected via more than one instrument through triangulation to achieve reliability. Statistics was used to analyze the data. All these steps contributed to enhance the validity and reliability of the research.

3.7. The intervention

A typical definition of an intervention is the process of planning and executing a service or event that is particularly intended to affect the desired change. The desired change may be in one's mindset, knowledge, or conduct. Interventions should target abilities that need to be learned or used more frequently in order to produce good outcomes. In education, they address the functional skills and the academic, cognitive, behavioral, and social abilities that have a direct impact on students' capacity to learn the skills being taught by the educational system. Through educational interventions, teachers can fill up any gaps in a student's development or achievement.

After needs have been recognized, interventions can be employed to ease learning obstacles. Torgesen (2000) concluded that a considerable proportion of young children at risk of acquiring reading impairments although through interventions they can catch up their peers who are already doing well in reading.

According to Bus and IJzendoorn (1999), an early start with phonological awareness training appears to facilitate the process of learning to read. After studying 187, EL students, August et al. (2018) reported that although both extended and embedded instruction developed EL students' vocabulary, the students benefited more from the extended instruction. This demonstrates the necessity and intensifies the value of interventions for vocabulary learning. Prior to choosing an intervention, it is crucial to determine the needs of the learners.

In academic research, intervention studies, also known as experimental research, allow researchers to draw conclusions regarding the cause and effect correlations between an intervention and an outcome. A real experiment must have three components: an intervention or treatment, a comparison or control group, and pre- and post-testing of participants, who received intervention (experimental) and those who did not (control groups).

3.8. Learner's needs

Students have different requirements that affect their foreign language learning. These needs are personal, educational and future professional. A teacher must be able to identify him/herself to meet these requirements of a good teacher. The researcher also believes that as a teacher need to know his/her students, but how well does she/she know the young people in class? Taking the time and effort to get to know them individually can make a teacher more effective and efficient. In addition to knowing the students' names, ages, friendship groups, and family backgrounds, is important to dig a little deeper and discover their strengths and weaknesses. A second easy way to learn about the students' needs is through diagnostic assessments that aim to identify the students' strengths and weaknesses in order to take the necessary actions to improve learning.

In the current study which the researcher considers, it as an experimental study; intervention was used for the experimental group. As the research is about the impact

of morphological and morphophonemic awareness on learning L2 vocabulary, the three levels of language are targeted: phonetics, phonology, and morphology.

3.9. Intervention setting

A technology-based environment for instruction and intervention was made possible for the participants. The classroom was equipped with a smart board where videos and power point slides were shown. All the participants were supplied with pronunciation applications and programs to carry in their cell phones and laptops to practice sounds. Handouts were distributed to them also full of drills and exercises. In order to make the intervention fun and keep the participant motivated, two short videos were showed at break time in each lecture. The intervention was set in different way from the classical way of teaching, as the strategy of scaffolding was used to present the aspect of phonetics, phonology, and morphology, instead of presenting them as isolated subjects as in traditional way. Exercises and repetition were also adopted in this intervention.

3.10. Intervention Description

The intervention was designed to increase morphological and morphophonemic awareness for the participants. The intervention occurred over 12 weeks (three months) with two lectures per week. The lectures were divided into three parts: phonetics, phonology, and morphology. Each part had got four lectures. The researcher, himself, took a role of the intervention teacher to provide the participants with direct instructional support using the following Intervention framework:

	First month (Phonetics)	Second month (Phonology)	Third month (morphology)
First Week	<ul style="list-style-type: none"> • An introduction to articulatory phonetics • The speech apparatus 	<ul style="list-style-type: none"> • Phonemes and allophones • Minimal pairs and minimal set 	<ul style="list-style-type: none"> • Definition of Morphology, • Morpheme vs allomorph • Types of morphemes • Dividing the affixes according to place of attachment • Dividing affixes according to their function
Second Week	<ul style="list-style-type: none"> • Places of Articulation • Manner of articulation 	<ul style="list-style-type: none"> • Types of syllables • Syllable structure 	<ul style="list-style-type: none"> • Derivational versus inflectional • Morphological description of the English sentence elements
Third Week	<ul style="list-style-type: none"> • English phonemic system • Symbols and transcription vs letters 	<ul style="list-style-type: none"> • Analysis of English syllables 	<ul style="list-style-type: none"> • Definition of Word • Types of words (simple, complex, and compound) • Processes of Word Formation (Clipping, Blending, Acronymy)
Fourth Week	<ul style="list-style-type: none"> • English consonants • English vowels 	<ul style="list-style-type: none"> • Syllable boundaries and phonotactics • Co-articulation effects 	<ul style="list-style-type: none"> • Processes of Word Formation (derivation and compounding)

Table () this table illustrates/shows

3.11. Intervention stages

The intervention passed through three stages, each stage lasted for one month and focused on one aspect. In the first stage of the intervention focused on phonetics. In the next stage the focus was on phonology, and the last stage focused on morphology.

3.11. 1. First stage

The first intervention stage was provided with a program produced in BBC under the name of (BBC Learning English Pronunciation Tips) figure (1). Another application was produced by British council under the name of (phonemic chart) figure (2), was also provided to the participants to help them recognize the English sounds and practice them. The teacher used the PowerPoint to introduce the contents of the stage starting with phonetics introduction then sound production mechanism, also the notions of voiced vs voiceless, nasal vs oral, and aspiration were also presented. The speech organs were introduced with illustrations, then the teacher moved to the place and manner of sounds making. Every English sound was given with exercises. Consonants and vowels of English were introduced as English phonemic system with the help of the program and application given to the students. Finally sounds vs letters were given with examples and exercises.

These are the symbols for the sounds of English. These Videos have been downloaded from the [BBC website](#). To access a video, you can either click on the symbols below or browse to the folder 'Videos'.

The videos are presented by **Alex Bellem**.



- | | | | | | | |
|---|---|---|---|---|---|---|
| ɪ | ʊ | ʌ | ɒ | ə | e | æ |
|---|---|---|---|---|---|---|
- **Long vowels**

i:	u:	a:	ɔ:	ɜ:
----	----	----	----	----
- **Diphthongs (double vowel sounds)**

ɪə	ʊə	aɪ	ɔɪ	əʊ	eə	aʊ	eɪ
----	----	----	----	----	----	----	----
- **Voiceless consonants**

p	t	ç	k	f	θ	s	ʃ
---	---	---	---	---	---	---	---
- **Voiced consonants**

b	d	dʒ	g	v	ð	z	ʒ
---	---	----	---	---	---	---	---
- **Other consonants**

m	n	ŋ	h	l	r	w	j
---	---	---	---	---	---	---	---

Figure (5.1) BBC Learning English Pronunciation Tips

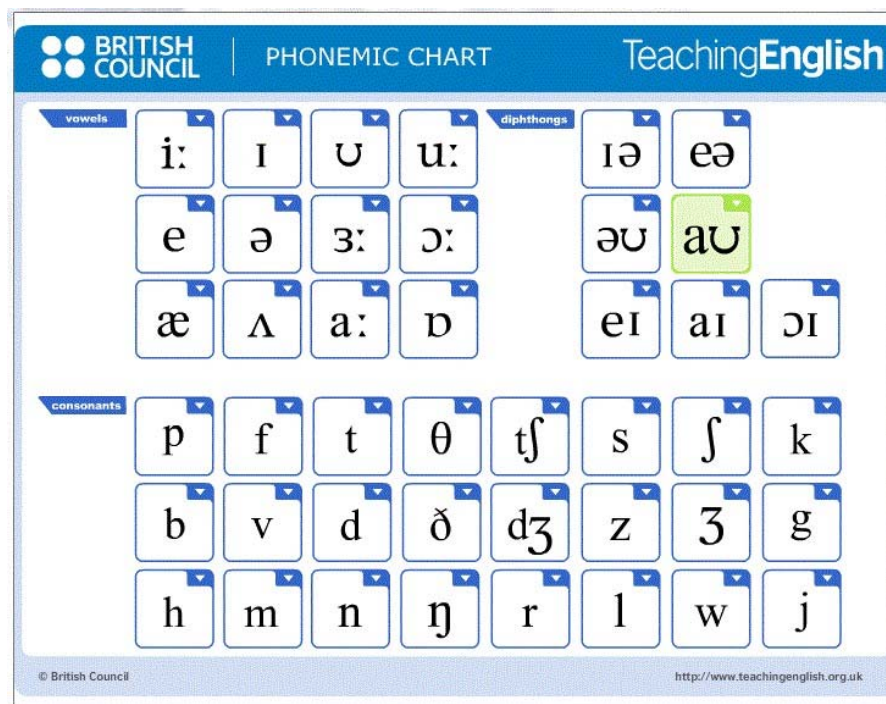
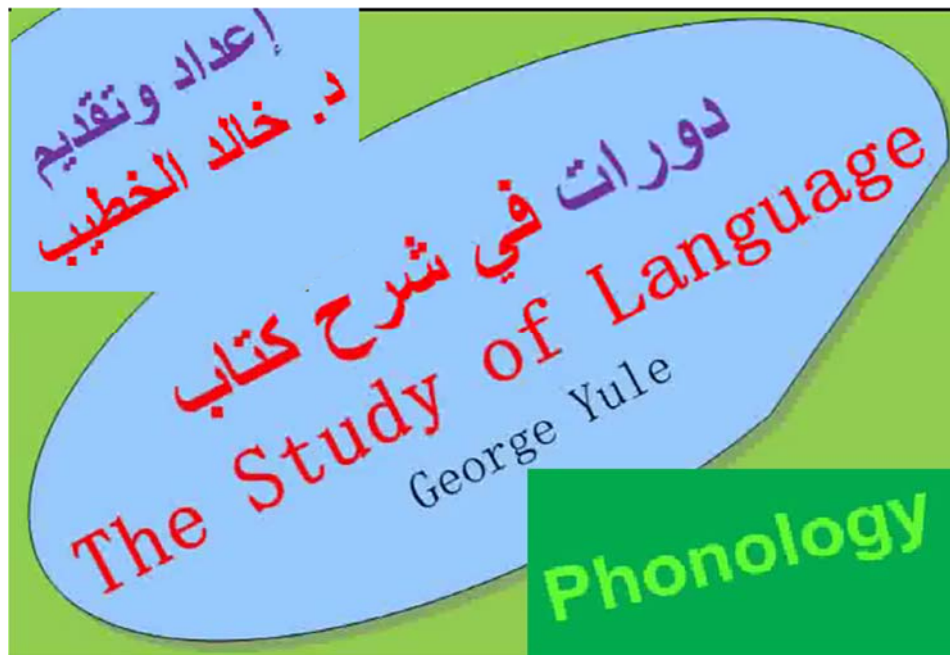


Figure (5. 2) phonemic chart application

3.11. 2.Second stage

In this stage, the teacher used the power point to present phonology with the help of extra materials presented in a form of videos designed by Dr. Khalid Alkhateeb, figure 3, to explain more phonology in both Arabic and English. Such materials were used for the struggling students. This stage started with an introduction to phonology, followed by defining the phoneme, then the relation between phoneme and allophone. Minimal pairs and minimal sets were explained thoroughly along with exercises to help students recognize phonemes. Then the researcher came to segmenting word to syllables. The syllables were defined and the syllable was divided into four types and also divided into components (onset, peak and coda). The students were also showed how to analyze the

syllable. Finally, students were taught the boundaries between syllables and what is happening in syllables' components during a continuous speech.



3.11.3. Third stage

The third and final stage of the intervention was designed to explain morphology and to raise the morphological awareness. Videos of Dr. Khalid Alkhatib about morphology (figure 4) were used and given to the student to carry along with handouts about morphology supported with exercises.



The researcher started with morphology definition as a scientific study of internal structure of a word, then the definition of morpheme as the smallest meaningful unit in a language. The researcher moved then to distinguishing between morph, morpheme, and allomorph. Kinds of morphemes were presented as free and bound ones. Then free morphemes were divided into lexical and functional. Bound morpheme were divided according to place of attachment into prefixes, infixes, and suffixes, and according to their function, while bound morpheme were divided into inflectional and derivational morphemes. The word was defined the word and the processes of word formation were explained. Among these processes were derivation, compounding, clipping, blending, and acronyms.

CHAPTER FOUR: DATA ANALYSIS

4.1. Introduction

In order to ascertain the impact of Phonology, Morphology and Morphophonemic awareness in learning English language as L2, the researcher conducted two tests on the students of the Department of English, the Arts College, Zawia University, Zawia, Libya. They were twenty students of the third year, ten as a control group and other ten were as an experimental group.

4.2. Data Scoring Procedures

The set data of the four tests were scored as correct or incorrect because all items allowed for only one possible answer. The total score for each instrument was 48 for the productive test and 48 for the receptive test. Items unanswered were counted as incorrect. Morphological errors, such as the incorrect use of the verb tenses (e.g. *Governments should takes*) and spelling errors (e.g. *cought fire*), were not considered. The mismatched collocations that acted as distracters in the receptive test were not counted.

4.2.1. Pre-test

A pre-test was conducted on the twenty students of the third year at Department of English; ten students as a control group and other ten as an experimental group. Thirty questions were asked, five words were given and students were asked to break them

into the structural parts of morphemes. Five words were given to which they were to add suffixes and make new words. Five words were given in which the students were asked to form words by adding prefixes. Phonemically, six words were given to identify plural forms and to identify morphs and allomorphs and some sounds were given to test whether they are aware of the place of articulation or not.

The purpose of the pre-test was to understand whether students are morphologically aware or not because prefixes, suffixes and other kinds of word formation are not taught to them at the entry level of graduation even then unconsciously they guess some meaning with the help of suffixes and prefixes. Out of twenty students, three students wrote three correct answers of the structural parts of morphemes. None of them wrote the correct spelling of 'compare', rather they wrote 'compar'. Five students wrote five correct answers, one student wrote only one correct answer and rest of them i.e. eight could not answer even one correct answer. In the question related to the phonemic transcription of words, one student got four marks, six students got three marks each, five students got two marks each and three students got one mark, five students got zero.

So far as word formation by adding suffixes was concerned, only one student answered three questions correctly while five students wrote two correct answers, one student one answer and rest of them i.e. thirteen students could not write even one correct answer. For word formation by adding prefixes was concerned two students scored four marks

each, five students three got marks each, four students got two marks each, five students got one marks and four students got zero.

In terms of phonemic transcription of words along with the identification of morph and allomorph was concerned, one student got five marks three students got four marks each, six students scored three marks each, five students scored two marks, two students got one mark and four students scored zero marks each. However, most of them had made mistakes in the use of plural marker 'S'. Perhaps no one knew that if the last sound of a word is voiceless then the plural marker 'S' is pronounced 'S' and if the last sound is voiced the plural marker 'S' is pronounced as 'Z' as in cats (s) and dogs (z).

So far as place of articulation of sounds was concerned, four students got three marks each, two students got two marks, three students got one mark each and eleven student got zero marks each. This shows that only a few students knew the place of articulation of sounds.

Table (5.1) shows that the two groups did not differ significantly in any of the pre-test measure. Both groups have had the same score that were estimated to be at the same level which falls below the expectations.

Pre-Test for the control group

(Before Phonological and Morphophonemic Awareness)

N0	Structural Parts of Morpheme 05	Phonemic tr. 05	Add Suffixes 05	Add prefix 05	Morph Allomorph 06	Place of Articulation 04	Total
1	04	03	00	00	00	00	07
2	00	00	00	01	03	00	04
3	00	01	00	02	01	00	04
4	04	03	00	04	02	00	13
5	04	04	00	03	05	03	19
6	00	02	03	01	04	01	11
7	03	02	00	00	00	00	05
8	03	02	00	03	00	00	08
9	01	02	01	00	02	00	06
10	03	00	00	02	04	03	12

Table (5.1.) shows the results of the control group in pre-test.

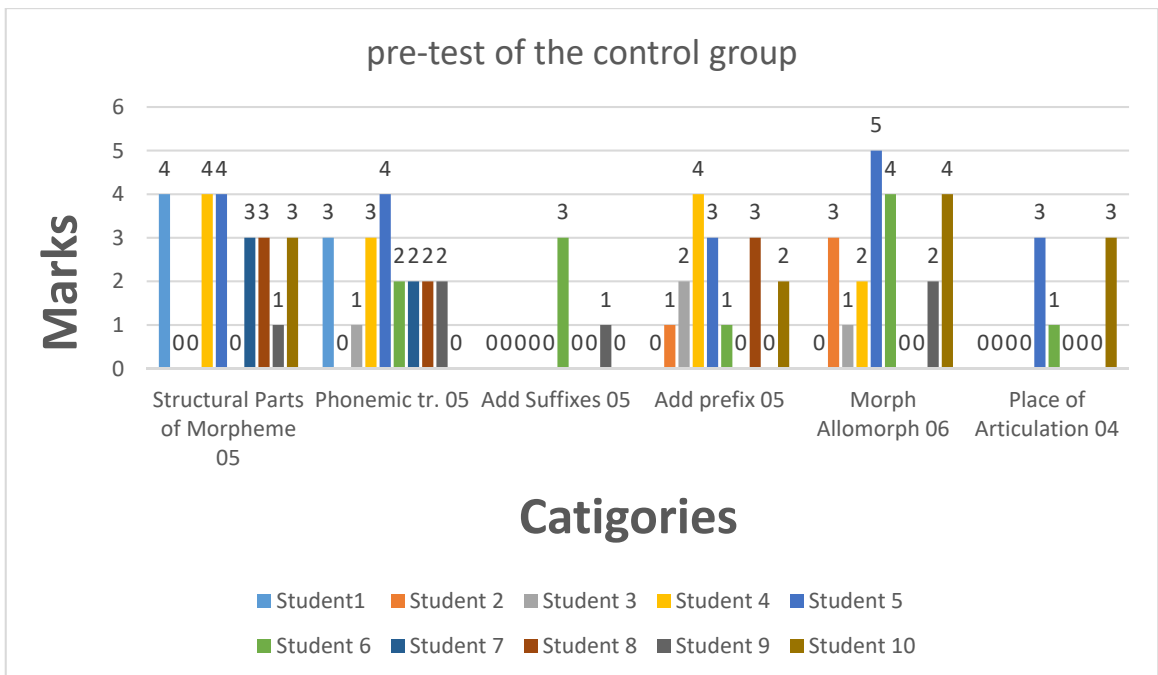


Chart 5.1 shows the results of control group in the pre-test

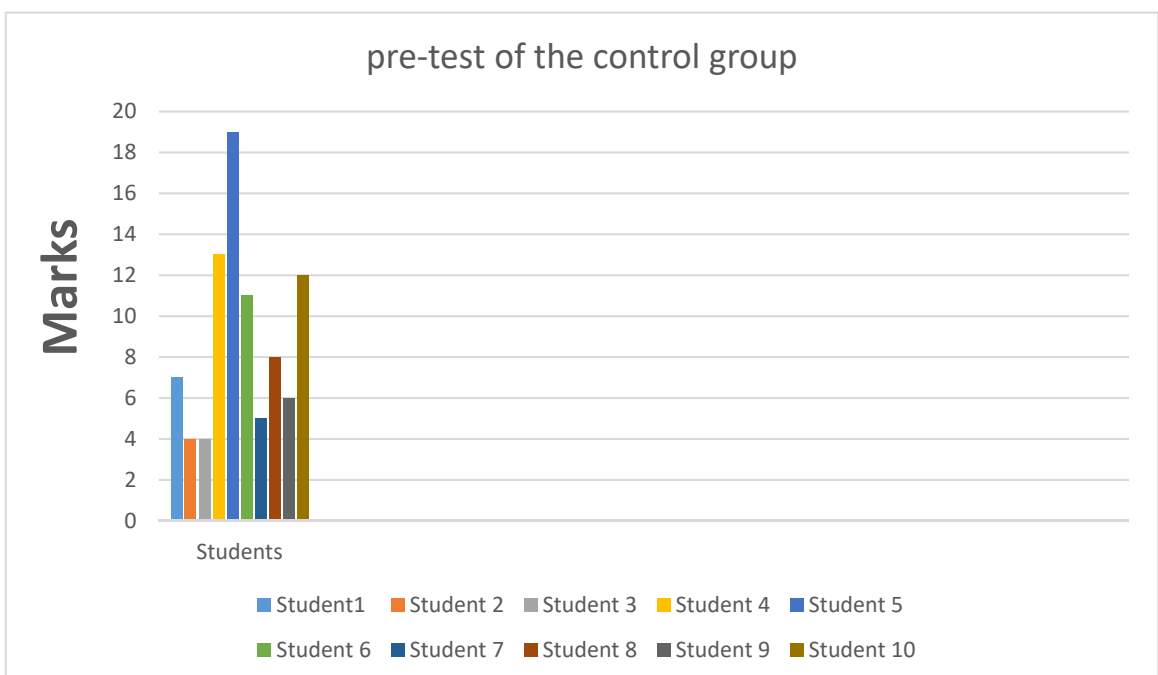


Chart 5.2 shows the total of marks of the students participated in the pre-test as control group

Pre-Test for the experimental group

(Before Phonological and Morphophonemic Awareness)

N0	Structural Parts of Morpheme 05	Phonemic tr. 05	Add Suffixes 05	Add prefix 05	Morph Allomorph 06	Place of Articulation 04	Total
1	03	01	00	03	03	01	11
2	03	03	02	02	04	01	15
3	02	03	02	00	02	03	12
4	00	00	00	01	03	00	04
5	00	00	00	01	02	00	03
6	00	02	00	02	03	00	07
7	00	00	02	01	01	00	04
8	00	03	02	04	03	02	14
9	02	03	02	03	02	03	15
10	04	01	00	03	00	02	10

Table (5.2.) shows the results of the experimental group in pre-test.

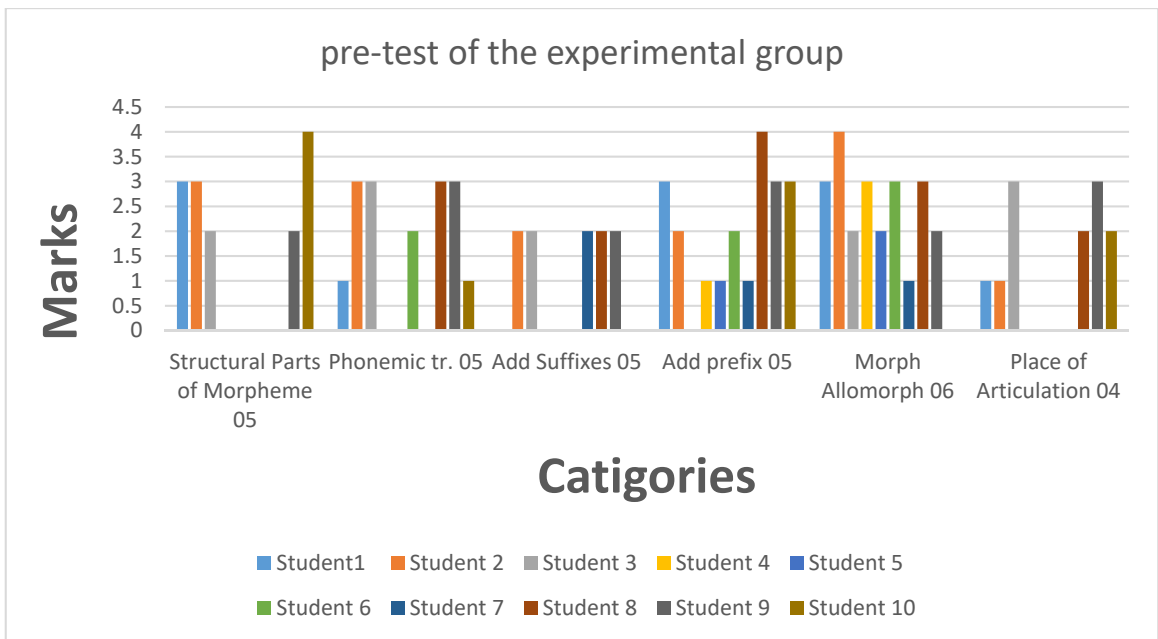


Chart 5.3 shows the results of experimental group in the pre-test

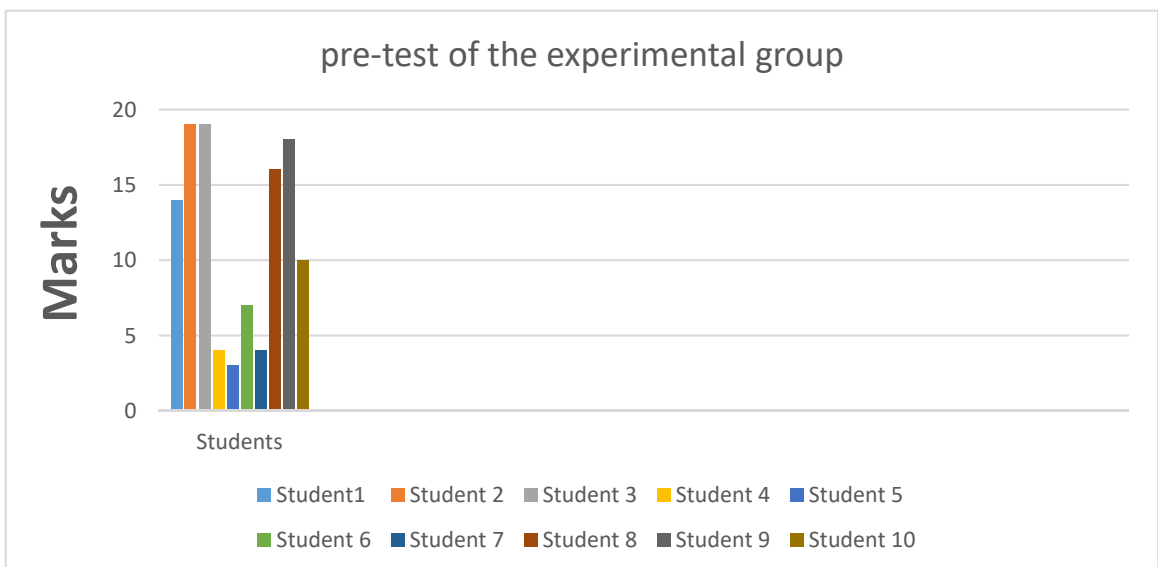


Chart 5.4 shows the total of marks of the students participated in the pre-test as experimental group

4.2.2. Post-Test

A Post -test was conducted on the same twenty students of third year. Ten of them studied phonetics, phonology, Morphology and Morphophonemics in some greater details. In fact, they were supplied with the reading materials and taught for about three months. The question pattern was the same. Only some of the words were changed.

The ten students of the control group answered in the same rate as in pre-test so there was no great change or development. But in the experimental group, there was a great development which indicated that the use of the intervention made a great positive effect.

Seven students got five marks each out of five marks for structural parts of morphemes, two students got four marks each, one student got three marks and one student got two marks. This shows that more than fifty per cent students were exposed to the rules of how to break words into their morphological parts. So far as phonemic transcription of word was concerned three students got five out of five, two students got four each, one student got one mark each & four students scored zero marks.

Two students wrote three correct answers and added suffixes to the root of words and formed new words, five students got two marks each, two students got one mark each and one student could not answer even one question correctly. Four students added

prefixes and formed new words. They scored five out of five, four students got four marks each, one student got two marks and one student got zero mark.

So far as the phonemic transcription of words along with the identification of morphs and allomorphs was concerned only two students could get three marks each and three students got two marks while five students could score only zero marks. So far as place of articulation of sounds was concerned four students gave the correct answer of all four questions, two students got three marks each, one student got two marks, two students got one mark each.

Table (5.2) shows the significant differences between the groups. Those who received instructions about phonological and morphophonemic aspects made much larger gains than those who did not receive.

The students paid attention to the use and identification of morphemes, phonemes, allomorphs and allophones, prefixes, suffixes in the class. But the problem with them was that outside the class, they used Arabic in their everyday life. The researcher suggested that when the students of the English department meet outside the class, they should discuss those things among themselves so that they could have a better understanding. Understanding of course, becomes better by continuous practice. Gradually the situations started changing and some of the students enjoyed finding the vocabulary and morphemes used within the context of literature. Some of the students

were so over-enjoyed with success that they narrated to the researcher about what they felt when they explained to their junior students what morpheme 'a', 'in', 'un' meant. The researcher noticed that some students were beginning to transfer their knowledge to other situations, thus making their learning useful in real life. This is the ultimate aim of teaching morphology.

The researcher also realized that students, along with morpheme and vocabulary word definitions, should also receive the origin of their vocabulary terms. Some students, of course, disappointed the researcher as they did not learn whatever it was taught.

Post Test for the control group

No	Structural Parts of Morpheme 05	Phonemic tr. 05	Add Suffixes 05	Add prefix 05	Morph Allomorph 06	Place of Articulation 04	Total
1	01	02	01	00	02	00	06
2	05	04	02	04	05	01	19
3	04	01	00	03	00	02	10
4	03	00	00	02	04	03	12
5	03	02	00	00	00	00	05
6	03	02	00	03	00	00	08
7	00	00	00	01	02	00	03
8	03	04	00	03	03	01	14
9	00	01	00	02	01	00	04
10	04	03	00	00	00	00	07

Table (5.3) the results of the control group in post-test

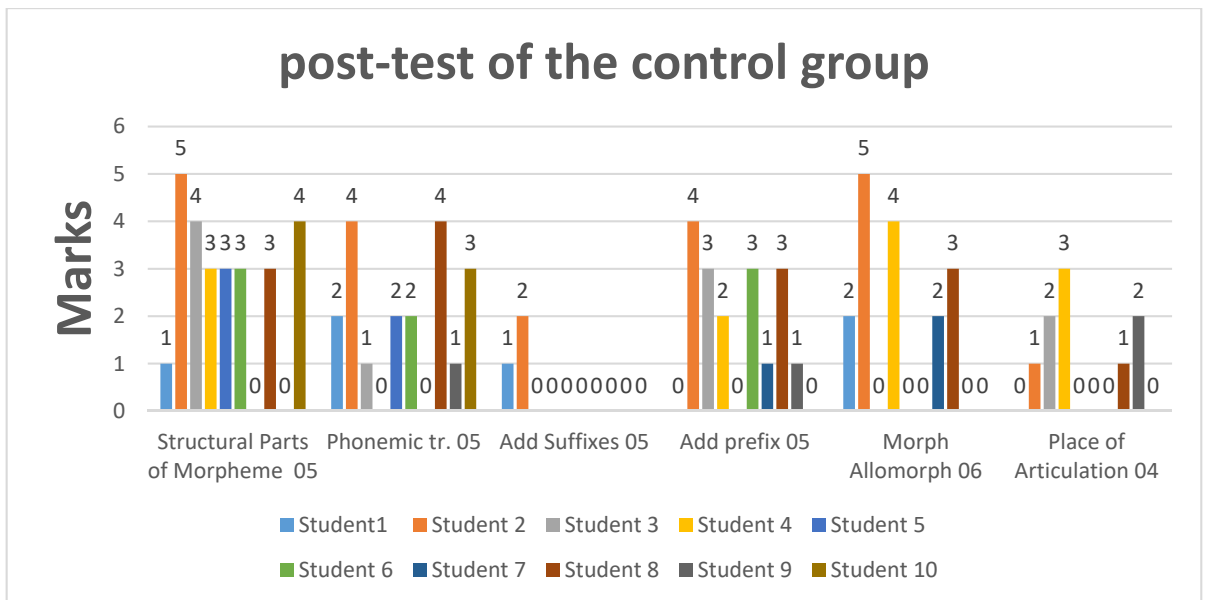


Chart 5.5 shows the results of control group in the post-test

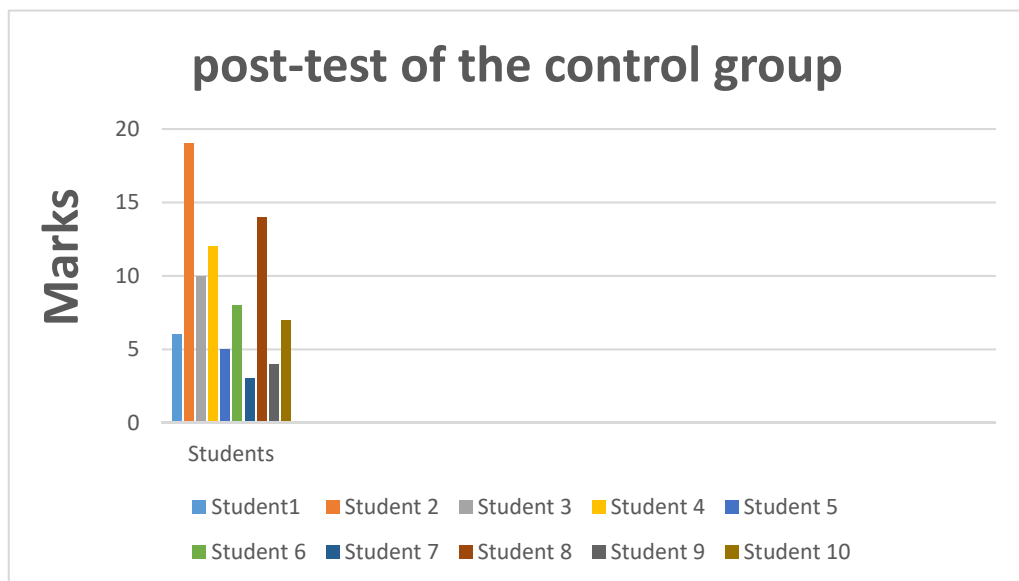


Chart 5.6 shows the total of marks of the students participated in the post-test as control group

Post Test for the experimental group

(After Phonological and Morphophonemic Awareness)

No	Structural Parts of Morpheme 05	Phonemic tr. 05	Add Suffixes 05	Add prefix 05	Morph Allomorph 06	Place of Articulation 04	Total
1	03	05	02	04	04	02	20
2	05	04	01	04	04	03	21
3	04	05	00	00	00	04	09
4	05	04	02	05	06	02	22
5	05	05	02	04	02	03	23
6	05	00	01	02	00	04	10
7	05	00	02	04	00	01	11
8	05	00	03	05	00	01	13
9	02	00	03	05	04	04	14
10	05	03	02	05	04	04	19

Table (5.4) the results of the experimental group in post-test

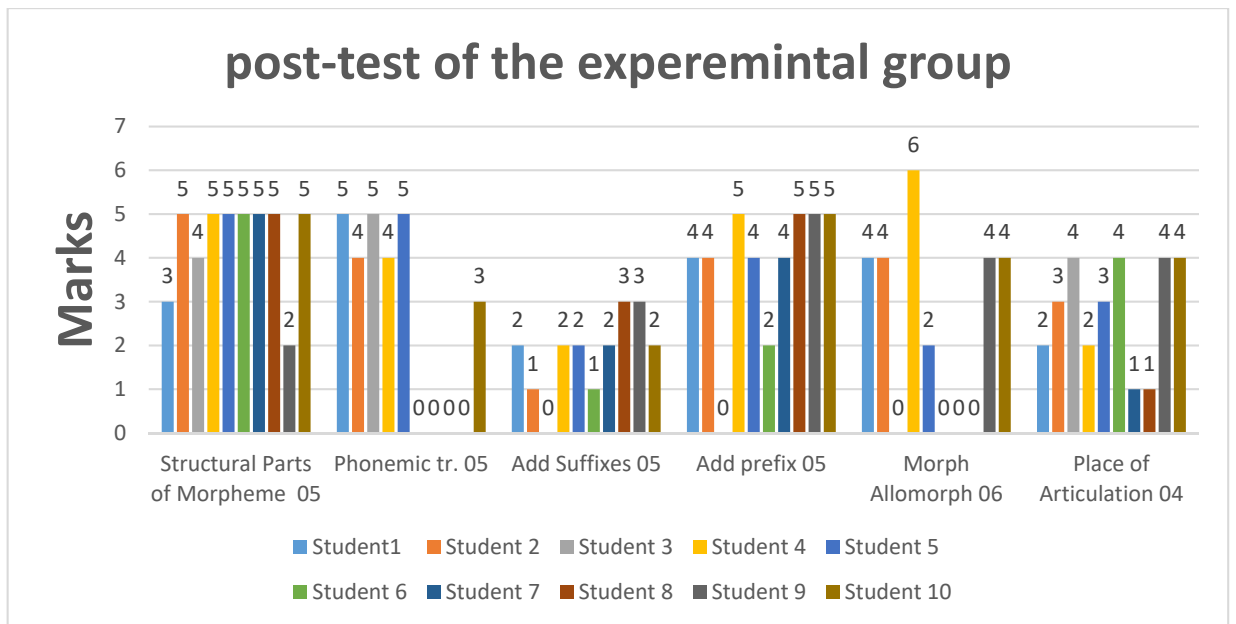


Chart 5.7 shows the results of experimental group in the post-test

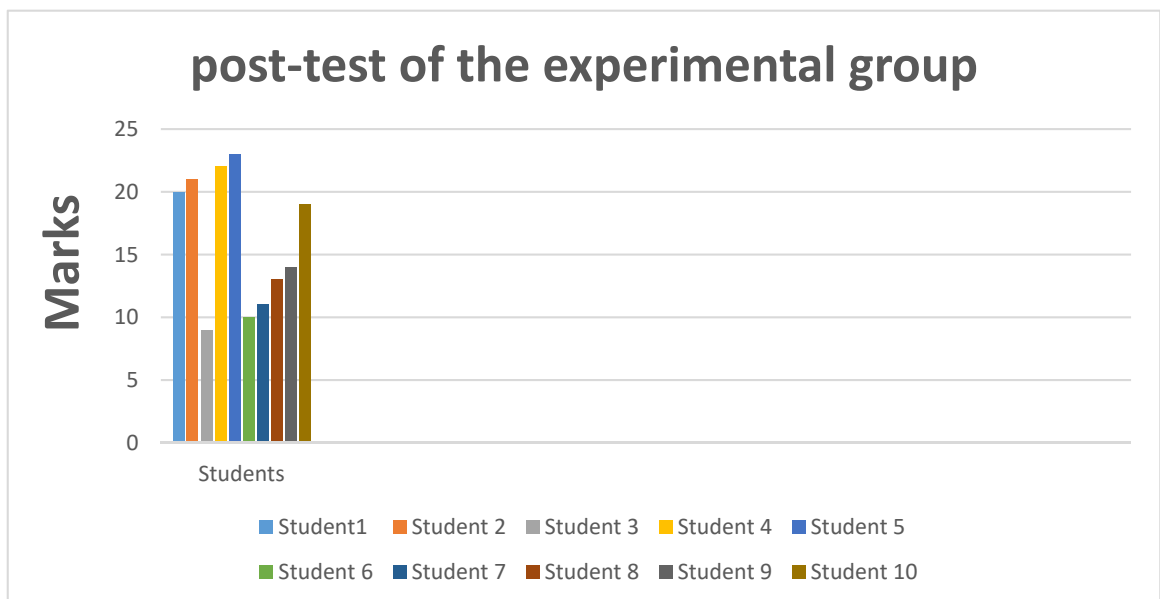


Chart 5.8 shows the total of marks of the students participated in the post-test as experimental group

4.2.3. Oral test

To gain additional information, and support the results obtained from the tests, an oral test was administered on ten students, five from each group. The students were tested in a quiet room within their department. All the tasks were administered individually. The same question was given to the two groups, to determine whether performance differed between the control and experimental group. The participants were asked questions designed to assess their morphological and phonological awareness. In word recognition, students of experimental group recognized and spelled more words by listening. They also recognized syllables and gave accurate pronunciation to the words given to them and they answered the questions about dividing words into morphemes. They also recognized derivation and inflectional bound morphemes. However, the students of the control group had poor performance in the above mentioned tasks. The results supported the research hypothesis that when the learners of English are exposed to morphological and phonological awareness that will help them mastering vocabulary more than teaching them without awareness.

CHAPTER FIVE: DISCUSSION AND CONCLUSION

5.1. Introduction

The goal of this study was to examine the impact of morphological and morphophonemic awareness on learning vocabulary. The results of the data analyses of this study were interpreted to answer the questions. Then, the limitations of the study and the implications for further studies are discussed. The outset is the research questions.

5.2. Research Question 1

To answer the first research question “what is the impact of morphological awareness of Libyan university students on English vocabulary acquisition? A test was used to find any possible significant difference between the scores of the experimental group and control group after the intervention. According to the findings of this study, morphology instruction had a significant impact on students’ vocabulary knowledge. There was also a clear relationship between students’ morphological knowledge and vocabulary learning. The findings proved a potential importance of different aspects of morphological knowledge for vocabulary learning which was in line with a number of other studies, as Alking-Brandenburg et al., (1990). These studies, ascertain that that the errors made by the participants were due to the lack of knowledge of English word formation rules and spelling rules. The results of the current study, also agree with Talerico (2007), who asserts that morphological awareness enables learners to manipulate and explicitly understand the word parts, and with Carlisle (2010) who

concluded that morphological awareness plays a fundamental role in language acquisition and vocabulary growth.

The relatively poor performance of the students of control group compared with experimental group suggests that there is a crucial need for explicit teaching of morphological knowledge and the teaching of morphological units. This is supported by many studies which concluded that morphological knowledge contributes to language learning and skills such as reading comprehension (Doehring et al., 1981), to vocabulary development (Lewis & Windsor, 1996), to vocabulary and comprehension (Carlisle, 2000; Kieffer & Lesaux, 2008), to understanding the writing system and to accuracy in spelling (Bryant, Nunes, & Bindman, 1997; Henry, 1989).

Results can clearly show that Libyan university students are not familiar with aspects of English morphology such as derivational and inflectional affixes. In addition, those students who failed to answer focused more on meaning and showed lack of explicit morphological knowledge. Students' inability to work on morphemes highlights shortage of morphological knowledge rather than just a semantic problem. At least for these students, this kind of performance implies that their shortage of explicit knowledge of morphemic structure should cause the most concern. This is in line with the results of a study by Windsor, Scott, & Street (2000) in which individual differences related to inflectional morphology do exist; poor knowledge of inflection, in particular, manifests in the inflectional suffixes *-s, -ed, -ing, -er, and -est.*

In fact, the findings of the present study showed that Libyan university students have severe problems with this aspect of morphological knowledge namely knowledge of derivational prefixes and suffixes and it poses the greatest challenge to them. Morphology generally presents the biggest challenge.

5.3. Research Question 2

To answer the second research question “what is the impact of morphophonemic awareness of Libyan university students on English vocabulary acquisition? One should first know that morphophonemic awareness refers to the aspect of phonetics, phonology and morphology in certain structures. In morphophonemic awareness spoken language is dealt with. This study answered the questions that supported the hypothesis that was formulated at the start of the study, which is there is a positive impact of phonological awareness on vocabulary learning.

From the analysis and findings, there was a major difference in vocabulary mastery between students who were trained to trigger their Morphophonemic Awareness Instruction and those who were not. In the experimental group, a student’s grades were higher than another student’s scores in the control group. This outcome is comparable to several types of research that found major variations in the growth of student vocabulary, in terms of pronunciation, spelling and sound production, when they were taught through Morphophonemic Awareness Instruction. The results of the oral test, showed that students who received intervention were aware of the plural allomorphs /s/, /z/, /iz/. Regarding the past tense morpheme, students of the experimental group,

who were exposed to instruction, relied on their awareness and scored highly in recognizing the differences between the allomorphs, (-t), (-d), and (ɪd).

The findings of the current study support the line of research suggesting that morphophonemic awareness plays a role in the proficiency level of Arab EFL learners. In the sense that the more the students are aware of the morphophonemic changes, the more they are able to speak English fluently. Phonemic awareness, which is about treating words as isolated sounds, requires that learners shift their attention away from the **content** of speech to the **form** of speech. Phonemic awareness tasks demand that learners analyze and manipulate the units of speech rather than focus on meaning. Additionally, alphabetic orthography, such as English, encodes speech at the level of the phoneme. The learner's task is to understand the relationship of the letters in the writing system with the phonemes in the language. Schuele & Boudreau, (2008) state that, Phonological awareness, in its purest form, involves the sounds of words when spoken; it does not involve the use of letters. This requires that the learner recognizes that speech can be segmented into smaller units, that is syllables and sounds, that the reader becomes phonemically aware

The present study was conducted to investigate the impact of morphological and morphophonemic awareness on learning English vocabulary. This section discussed the results of this study regarding morphophonemic awareness in respect of a sound and syllable recognition to learn English words. The results showed that the students of the

control group were not aware of the onset and coda clusters which results in confusion at the level of pronunciation and writing.

The factor that may have affected the students' knowledge of English vocabulary is that Arabic syllables students' (L1) follow a (CV) (CVV) pattern, meaning that could confuse them in syllable recognition. The result of the experimental group showed that students succeeded in recognizing syllable structure in written words, but separating consonants cluster by adding vowels when producing words. This conclusion agrees with other Arab studies (Na'ama, 2011) who concluded, that, Arab EFL learners encountered more problems in pronouncing CCs in the onset and coda position. That is the sounds which do not exist in the learners' L1 made a barrier to accurate pronunciation and spelling errors. For the students who were exposed to intervention and gained phonemic awareness in this aspect, the errors are reduced in spelling, but there was no significant difference in pronunciation respect.

5.4. Conclusion

To sum up, the results of this study showed that the participants in the control group made a variety of errors in both pre-test and post-test, regarding morphological and morphophonemic aspects. The outcomes which were emerged from this study, showed that in order to produce quality L2 learning, learners required vocabulary knowledge, the basic morphological and phonological skills that are also important in the process of vocabulary learning. Furthermore, it has been noticed that a number of the written and

spoken words produced by the students of the control group contained errors in spelling and pronunciation that could be attributed to the lack of vocabulary and word knowledge. The findings of this study also proved that participants who were given phonetics, phonology, and morphology instruction scored higher marks on the post-test. Thus, it was confidently concluded that that phonetics, phonology, and morphology instruction helped the participants to raise their morphological and morphophonemic awareness and improved their vocabulary knowledge.

Phonological awareness is critical for learning to read the alphabetic writing system as English uses an alphabetic writing system in which the letters, singly and in combination, represent single speech sounds. Without phoneme awareness, students may be mystified by the print system and how it represents the spoken word.

After comparing the results of the control group and experimental group in the pre-test and post-test and oral test, the researcher came up with this conclusion that the morphological and morphophonemic awareness, were significantly correlated with vocabulary learning, and that the relationship between them was linear and positive. Therefore, this research suggests the following recommendations.

5.5. Recommendation

On the basis of above findings, the researcher recommends certain measures to be adopted in the universities of Libya especially in the Departments of English, so that the students may have a better knowledge and understanding of English language as L2. In the process of language learning, reading and vocabulary are of major importance. It is obvious that no language acquisition can take place without knowledge of vocabulary of the language in question. Using of morphological and morphophonemic instructions as an explicit teaching method in EFL classrooms should be adopted. This illuminates the importance of teaching, and learning common affixes in university classes in the Libyan context. Also, students should be taught how to apply the meaning of the affix to a root or base in order to help them to become explicitly aware of the structure of words. This can aid them understand the internal structure of the new words that they are required to read and write. Some important aspects of vocabulary acquisition should be considered. One aspect is concerned with the strategies adopted by students while learning and the next relates to the areas of difficulty students face while reading and comprehending. Other aspects are related to their keenness in understanding Morphology and Morphophonemics and applying their rules in learning vocabulary. Some other important aspects of vocabulary acquisition should be considered. In addition to that, the different aspects of vocabulary revealed should be taken into consideration and introduced in the syllabus. This may help students overcome the different problems they encounter when learning. Such aspects call for more attention in the current English language teaching (ELT) programmes in Libyan higher education. As previously stated, the need for a vocabulary instruction is necessary to

help students cope with the difficulties they may face when reading and writing. The researcher believes that this instruction is very important in that it could contribute to help students tackle and comprehend texts. Indeed, the mastery of lexical and grammatical patterns, text organization and vocabulary mastering will certainly result in the improvement of comprehension. Then students should be made phonologically, morphologically and morphophonemically aware. If this is taken into account, it will obviously contribute to the improvement of students' level, and the learning / teaching situation prevailing.

Through this work, the researcher tried to contribute to the improvement of the L2 vocabulary learning in the department. This research remains open to any further development(s) that would deal with other areas of difficulty that has not been investigated. The reading speed is a crucial aspect of comprehensive. There is some controversy in research; certain researchers attribute students' reading problems to the fact that these students cannot read adequately in their native language. On the other hand, others attribute that to the fact that students do not have a large vocabulary and no automaticity in recognizing common combinations of words. The question is still open to discussion. One of the other skills closely related to reading comprehension is listening comprehension. Investigating this skill will surely contribute to improve the learning situation. Good phonics skills are, for example, prerequisite to reading comprehension. Students' training to become faster and more automatic at recognizing letter-sound correspondences and the sounding of words will end up with the acquisition of fluency which is important for comprehension and still under

investigation regarding age and the notion of fossilization. Another important skill to be investigated is writing. Written language instruction improves with reading comprehension because it helps students understand the structure of the text. This can only be of great importance in improving the level of students, and at the same time helping the teachers in their task which is not always of any rest.

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