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Breadth and Depth of Vocabulary Knowledge: Factors Contributing to Reading Comprehension as Perceived by

University Teachers

A thesis submitted in partial fulfilment for the requirements of the MA degree in Applied Linguistics

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Dedication

To my lovely daughter, Hazar Krema. She has always been a great source of positive words and encouragement in times when I needed support. Without her help in thoroughly printing and editing my proposal and research work drafts, this thesis would not have completed. May Allah bless her and my son in law, Marwan and my lovely grandson, Mohammad.

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Abstract

This study aims to explore the approaches used by English as a foreign language (EFL) university teachers teaching reading comprehension. It was carried out at the Department of English of Zawia Faculty of Education. There were two major aspects of vocabulary knowledge, breadth of vocabulary (the number of words known) and depth of vocabulary (how well one knows a word), which were correlated to each other and strongly predictive to reading comprehension. Relying on one dimension of vocabulary word breadth might cause problems at the depth level of vocabulary knowledge. Therefore, one of the challenges facing Libyan university teachers was to decide the most suitable dimension of vocabulary knowledge. Furthermore, this research emphasized reading comprehension teaching techniques at the academic level. To investigate this study, a mixed research method was applied through a questionnaire and an interview. The target sample was 49 EFL university teachers, holding similar university degree in different disciplines of the language. The questionnaire consisted of 19 MCQ items. A semi-structured interview was also conducted to collect data from 8 fourth semester reading comprehension teachers. The collected data was analysed quantitatively and qualitatively. The findings demonstrate that there is a strong relationship between reading comprehension and vocabulary knowledge. The results further reveal that both breadth and depth of vocabulary knowledge are strongly correlated and contributed to reading comprehension. The results also show that the combination of breadth and depth is highly beneficial to improve reading comprehension. Moreover, the findings demonstrate that teachers mostly depend on the breadth/size dimension of vocabulary knowledge. The meaning of the new words is generally inferred from the context. Employing a combination of breadth and depth of vocabulary knowledge by teachers, will be beneficial to deepen and broaden the horizon of learners' vocabulary repertoire and to furnish a great deal of substitute, associate and collocate words throughout a sound vocabulary knowledge teaching in reading comprehension lessons.

Key words: vocabulary knowledge, word breadth, word depth, reading comprehension.

الخلاصة

هدفت هذه الدراسة لاستكشاف المنهاج المستعمل من قبل المدرسين الجامعيين للغة الانجليزية كلغة أجنبية لتدريس معرفة المفردات في مادة الاستيعاب. تم تطبيق هذه الدراسة في قسم اللغة الانجليزية بكلية التربية بالزاوية.

هناك جانبان رئيسيان لمعرفة المفردات: الاتساع (عدد الكلمات المعروفة) والعمق (مدى إجادة أحدهم للكلمة) حيث يرتبطان ببعضهما البعض وبقوة يتنبئان بالاستيعاب. قد يسبب الاعتماد على أحد أبعاد معرفة المفردات (أتساع الكلمة) مشكلة على مستوى العمق في معرفة المفردات. ولذلك أحد التحديات التي تواجه المدرس الجامعي الليبي، أن يقرر بعد معرفة المفردات الأكثر ملائمة. علاوة على ذلك، هذه الدراسة ركزت على تقنيات تدريس الاستيعاب.

للتحقيق في هذه الدراسة، تم تنفيذ طريقة البحث المختلط عبر المقابلة الشخصية والاستبيان. العينة المستهدفة كانت 49 مدرسا في اللغة الانجليزية كلغة أجنبية يحملون درجات علمية جامعية مشابهه في الاستيعاب. الاستبيان تكون من 19 سؤال الاختيار من المتعدد. وكذلك المقابلة الشخصية الشبه مركبة تم تنفيذها لتجميع البيانات من 8 مدرسين لمادة الاستيعاب للفصل الرابع.

وضحت النتائج بأن هناك علاقة قوية بين معرفة المفردات والاستيعاب. وكشفت النتائج كذلك بأن اتساع وعمق معرفة المفردات متصلان بقوة ومساهمان في الاستيعاب. وأظهرت النتائج أيضا بأن لكلا البعدين استفادة عالية لتحسين الاستيعاب. وعلاوة على ذلك، أشارت نتائج الدراسة باعتماد المدرسين بشكل كبير على بعد الاتساع لمعرفة المفردات. ويتم بصفة عامة استنباط معاني الكلمات الجديدة من سياقاتها.

بإستخدام مزيج من إتساع وعمق المعرفة بالمفردات عن طريق المدرسين، سيستفيد الطلبة بتعميق وتوسيع ذخيرتهم من المفردات. وستقدم قدر كبير من البدائل، الشركاء وجامعي الكلمات عبر تدريس معرفة المفردات في دروس الأستيعاب.

الكلمات الدالة: معرفة المفردات إتساع الكلمة عمق الكلمة الأستعاب.

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List of Abbreviations and Acronyms

BNC British National Corpus

DVK Depth of Vocabulary Knowledge

EFL English as a Foreign Language

ESL English as a Second Language

FL Foreign Language

FLA Foreign Language Acquisition

L1 Native Language / First Language / Mother Tongue

L2 Second Language

MCQ Multiple Choice Question

MK Morphological Knowledge

RCT Reading Comprehension Test

SLA Second Language Acquisition

TESOL Teaching of English to Speakers of Other Languages

TL Target Language

VLT Vocabulary Level Test

VS Vocabulary Size

WAT Word Association Test

Chapter one

Introduction

1.0 Introduction

This introductory chapter introduces the theoretical background of the study, states the research problem. It also presents the aims of the study, the research questions. It highlights the significance and scope of the study. Organization of the study and methodology are also covered.

1.1 Background of the study

Without sufficient knowledge of vocabulary both language production and language comprehension are impossible (Mukorol, 2011, p.8). (Nagy, 1988, p.1) stated that "Vocabulary knowledge is fundamental to reading comprehension; one cannot understand a text without knowing what most of the words mean". According to (Pringprom, 2012, p.1100) almost all researchers and theorists have perceived that vocabulary knowledge and reading comprehension are closely related, and a considerable number of studies have revealed a strong relationship between the two (Baker, et al. 1995; Laufer, 1992; Nagy, 1988; Nelson- Herber, 1986; Qian, 1999, 2002; Qian & Schedl, 2004). Since there is a very close relationship between reading comprehension and vocabulary knowledge, this study might be a valuable contribution. It focused on the ways of employing breadth as well as depth vocabulary knowledge in teaching so as to achieve a well-balanced vocabulary knowledge and successful reading comprehension. Additionally, this research work stressed the role of vocabulary knowledge (breadth & depth) as predictors and contributors to reading comprehension skills.

Moreover, Schmitt (2008) argued that the scope of the tasks of teaching vocabulary to English language learners recommends a balance between breadth and depth. Schmitt (1990) proposed that as language is enormous and it is not possible for teachers to teach all words learners need, it will be largely suitable to raise the students' awareness of the significance of alertness to promoting their breadth and depth of vocabulary knowledge when studying English as a foreign language (Moinzadeh &

Moslehpour, 2012, p.1021). Webb (2013) argued that since it possibly increases understanding and using words, the ability to connect form to meaning is essential. However, this ability does not ensure that the words will be comprehended and used properly, and because of this fact, there is a need as well to promote depth of vocabulary knowledge (Ebrahimi, 2017, p.22). Both dimensions (i.e breadth and depth of vocabulary) play significant roles in reading comprehension and that combining vocabulary breadth and depth together has an enormous effect on reading comprehension (Huang, 2006, p.63).

Reading is the construction of the meaning of text. Shellings, et al. (2006, p.550) defined reading as "It is an active and strategic process, in which the reader's abilities and knowledge interact with the characteristics of the text such as genre, the wording and the structure of the text" additionally, comprehension is defined as "intentional thinking during which meaning is constructed through interactions between text and reader" (Hariss & Hodges, 1995,p.207). Rashidi & Khosravi, (2010, p.82) Reading is seen as an important factor by the students since it helps them to encounter lots of new words. Thus, the impact of expanding vocabulary knowledge of the reader is obvious. It is believed that by improving the learner's vocabulary knowledge reading comprehension will also be improved. However, one of the main hindrances for students in reading comprehension is how to enlarge and enrich their vocabulary knowledge.

Schmitt (2007, p.754) claimed that since a large number of academic words are made up of Latin -and Greek-derived affixes and words stems, the explicit teaching of such knowledge would be valuable. In order to increase the number of known words which in turn facilitates recalling of the text message, EFL university teacher's role is to focus more on the paradigmatic relationship between words (synonymy & antonymy) and syntagmatic relationship (collocation). For example, the word appealing is synonymous with attractive, likeable and pleasing. In contrast, it is antonymous with unappealing, unattractive and unlikable. It also collocate with city and food. Webb (2007b) found that the more larger vocabulary size of learners, the more synonyms of unknown words. Knowledge of synonymy might be the facilitator of learning target words of vocabulary aspects such as grammatical functions and syntactic association (Sasao, 2013, p.6). according to Beck, et al. 1982 knowing the meanings of words and their various collocations is in strong relationship with reading comprehension and

therefore vocabulary, indicates an important factor to increasing reading performance. Mohammadi & Afshar, (2016).

In most of these cases, students complain of not understanding a text, and as a result, they are incapable of answering the comprehension questions. This difficulty in reading comprehension occurs frequently for many reasons. The most important ones are as follows: lack of vocabulary, working memory, absence of extensive readings, types of texts.

Therefore, it can be concluded that relying on breadth vocabulary teaching may not be sufficient on the part of the teacher as a causal factor. For the students in a foreign language context, the teacher is seen as a major source of information and a guide. Therefore, students' struggle with unfamiliar words require teachers to close the gap by supporting deeper meanings of new words. According to Allen (1993, p.3) Abdulah (2009, p.5) found out that "many teachers assume that vocabulary can be developed in teaching learning process". According to Stahl and Fairbanks (1986), explicit vocabulary teaching has obvious consequences on vocabulary learning and comprehension. In contrast, they suggest that vocabulary instruction should involve much more than definitions so as to develop reading comprehension. Dictionary definitions offer insufficient details on word meanings (McKeown, 1993) Butler (2007, p.29).

It is important to clarify some of the terminologies that might cause confusion. a-Vocabulary knowledge refers to words or multi-word units (like idioms and phrasal verbs) that have a common meaning (Qing, 2009, p.28). The complexity of the term vocabulary is highlighted through some examples that are used by Schmitt (2000, p.1) (Longhurst, 2013, p.13) demonstrates that single words phrasal verbs and idioms can all carry the same meaning for example "die" (single word) "pass away" (phrasal verb) and "kick the bucket" (idiom). The meaning of all these is to die. b-Vocabulary breadth or vocabulary size is defined as "the number of words that a language learners knows" (Nation, 2006, p.60). c-Vocabulary depth is defined as "a learner's level of knowledge of various aspects of a given word" (Qian, 1999, p.1). d-Reading comprehension is defined as "a complex process that requires lower-level process (i.e. phonological and lexical) to decode print, and higher-level process (i.e. semantic and inference making) to comprehend the meaning" (Gottardo, et al. 1996; leather &

Henry, 1994; Liberman & Shankweiler, 1991; Shankweiler, 1989; Shankweiler et al.1999) (Gillispie, 2008, pp.1-2)

The significant role of vocabulary knowledge in teaching is reflected in the English curriculum in some non-English speaking countries. For example, the prerequisite for vocabulary knowledge of learning English as a foreign language is obviously on a list in the Chinese curriculum for upper secondary school: "students have to learn 1,200 words more except those words they learn from the English education from junior high school; gaining the knowledge of 750 phrases is also required" (Chinese National Agency for Education, 1996) as translated by (Qin, 2012, p.1). Vocabulary knowledge has significantly been realized in reading comprehension not only in L1 (First Language) but also has found out to be true in L2 (Second Language) reading context. (Alderson, 2000; Anderson & Freebody, 1981; Mezynski, 1983; QIAN, 2002; Read, 2000) (Pringprom, 2012, p.1099). Vocabulary knowledge, "is no longer treated as a single component; instead, vocabulary knowledge is considered comprising at least two primary dimensions, one is breadth and the other is depth" (Qian 1998; Read 1988, 1989; Wesche & Paribakht, 1996) Qin (2012, p.5). Most of the previous studies revealed that both vocabulary size and depth are important predictors of reading comprehension (Qian, et al. 1999; Rashidi & Khosravi, 2010; Vermeer, 2001; Schmitt & Meara, 1997). Some researchers think that EFL learners of reading comprehension become better by giving them with instruction in synonymy and polysemy of words, and not simply the direct meanings of these words (Mehrpour, et al. 2011) Qin, (2012, p.11).

Additionally, it is necessary for university teachers to be aware of the amount of vocabulary knowledge their students know and their ability to use it, through the measurement of both dimensions. Read, (200,1 p.320) indicates out that it is important to assess lexical knowledge of vocabulary; however, it is also essential to test how well learners understand a word in multiple contexts. This is important because knowing syntactic knowledge of a word and how to use this word in different contexts is more beneficial and practical for learners than just knowing the basic meaning of this word. Qin, (2012, pp.4-5).

Since English is taught as a foreign language in the Libyan schooling context, much of what students learn takes place inside the English classroom, therefore they only have limited exposure related to classroom only. As a result, the majority of Libyan students struggle with the problem of how to enlarge and enrich their vocabulary. To make this happen, start teaching words which they had trouble with before reading to enhance their comprehension and to help them develop and form the habit of unlocking new words on their own. "Concrete words are the easiest to learn. Neither younger nor older students have trouble in learning numbers, days of the week, colours, names of objects and the like" (Allen & Valette, 1977, p.149). However, some English words are overlapping in meaning, which cause a lot of confusion to Libyan students. For example, "many special expressions, in English as well as in other languages are unpredictable and patternless because they are derived from cultural factors other than language, from folklore", from famous proverbs and current events. Expressions such as "sitting duck" (an easy target), "pull someone's leg" (tease or fool someone)", have similarly picturesque counterparts in other languages. Phrases such as these are probably best learned one by one as separate vocabulary items." (Brockman & Jones, 1964, p.1).

Libyan students need to have sufficient and deep word knowledge instruction to understand what they read. It is therefore, of great importance to focus more on the complex nature of word knowledge when teaching vocabulary, as this should encompass in-depth understanding of words, including multiple meanings morphological / syntactical awareness, and semantic relations.

For a successful word acquisition, at the university level, teachers need to provide rich instructions for learners to command larger and deeper vocabulary at the same time to achieve the desired comprehension of the texts they read.

1.2 Statement of the problem

Some university teachers rely on word breadth dimension to teach new vocabulary because it is faster for students to acquire as many words as possible, when they include only simple dictionary meanings. As a result, the deeper side (other facets of target words) of word knowledge, is not taken into account. Words are known as carriers of meaning. Therefore, the message is conveyed depending on the meaning of the single word within the sentence. EFL learners generally know a limited amount about a given new word from the initial exposure to its form and meaning (Breadth / size of vocabulary knowledge). However, the other aspects of word knowledge (depth

of vocabulary knowledge), including synonyms, antonyms, and collocations are not completely emphasized and lagging behind. Students' inability to handle difficult words in reading comprehension, is considered a challenge for EFL teachers. However, knowing larger vocabulary doesn't necessarily guarantee that they have very good mastery of deeper knowledge which in turn leads to shallow understanding.

1.3 Aims of the study

This study aims at:

- Investigating if using breadth and depth dimensions of vocabulary knowledge helps increase and deepen vocabulary knowledge in reading comprehension or not.
- 2. Exploring university teacher's perceptions and knowledge on the effect of breadth and depth dimensions of vocabulary knowledge on reading comprehension.
- 3. Focusing on the suitable techniques to achieve better reading comprehension and help accumulate the learner's vocabulary.

1.4 Research questions

This study conducted to answer the following questions:

- 1. Does using breadth and depth dimensions of vocabulary knowledge help increase and deepen vocabulary knowledge in reading comprehension?
- 2. What are the university teachers' perceptions and knowledge on the effect of breadth and depth dimensions of vocabulary knowledge on reading comprehension?
- 3. What are the suitable techniques to achieve better reading comprehension and help accumulate the learner's vocabulary?

1.5 Significance of the study

 This study emphasized the necessity and importance of using word breadth as well as word depth so as to broaden the horizon of the learners' vocabulary in academic settings.

- 2. The teachers would be more acquainted with the most suitable techniques to vocabulary teaching, to ensure broad and deep knowledge and understanding of words.
- 3. The present study contributed something of value to the already existing research literature by raising the awareness of employing both dimensions in vocabulary instruction.
- 4. It increased learners' exposure to a large number of new words by offering new learning opportunities through a variety of word aspects.
- 5. This study enhanced using idioms and proverbs in order to refresh memory and help deepen vocabulary as well.
- 6. This study deepened the explicit knowledge through diverse means such as synonymy, antonomy, and collocation of the unfamiliar concepts.
- 7. This study integrated sub-knowledges such as affixation, word parts, and parts of speech.
- 8. This study encouraged participation and active learning through the interaction with students. The target word is used in different activities and contexts.

1.6 Scope of the study

The researcher conducted this study during the academic year 2018. The sample was random included all the university teachers of reading comprehension for the fourth semester. The study covered only seven faculties and centers in the western part of Libya. The study was carried out to explore teacher's perceptions on the vocabulary knowledge relationship with reading comprehension to fourth semester. This study was restricted to vocabulary knowledge teaching of two dimensions breadth vocabulary and depth vocabulary knowledge. It included the relationship between them. Moreover, it included comprehension teaching techniques and explicit vocabulary teaching.

1.7 Methodology

The study aims at exploring the relationship between vocabulary knowledge (breadth and depth) and reading comprehension. In order to answer the research questions, the study is carried out at the Department of English at Zawia Faculty of Education. It is addressed to EFL university reading comprehension teachers of fourth semester. To carry out this study, a mixed research method is applied. Adopting the qualitative approach to employ the semi-structured interview, and a quantitative approach to employ the structured questionnaire. The questionnaire consists of nineteen MCQ closed-ended items. It is applied to find out forty nine teachers' perceptions on the

combination of breadth and depth of vocabulary knowledge in teaching reading comprehension. The semi-structured interview is conducted to obtain in-depth information about employing the combination of breadth and depth in teaching vocabulary knowledge and its impact on reading comprehension. The interview consists of seven open-ended questions. They are addressed to eight fourth semester reading comprehension teachers.

1.8 Organization of the study

The study includes five chapters. As for chapter one, it is an introductory chapter which consists of background of the study, the statement of the problem, aims of the study, the research questions. It also contains the significance of the study followed by scope, methodology, and organization of the study.

Chapter two is literature review. It begins with miscellaneous vocabulary knowledge definitions followed by conceptual frameworks. It also presents reading comprehension definitions with factors affecting it. Reading comprehension and vocabulary knowledge connection is reviewed from both L1 and L2 perspectives. Then techniques for teaching vocabulary are also covered followed by implicit vs. explicit teaching vocabulary approaches. Finally, some common problems and previous studies are also discussed.

Chapter three is methodology. It presents the research design coupled with data collection. It includes a philosophical background which divides into three branches: ontological, epistemological and research methodology perspectives. It also presents the exploratory research design, pilot study, the sample of the study and research instruments. Finally, it covers data collection procedures for both the questionnaire and interview.

Chapter four is data analysis and discussion. It presents the discussion of the results obtained from the research.

Finally, chapter five contains the conclusion, pedagogical implications and some recommendations for further studies.

The following chapter will be mainly addressed to related research literature.

Chapter two

Literature Review

2.0 Introduction

This chapter is the theoretical background of the study. It reviews the relevant literature. It explores literature on vocabulary knowledge miscellaneous definitions and conceptual frameworks. Reading comprehension miscellaneous definitions and factors affecting it are also presented. Vocabulary knowledge - reading connection is reviewed from L1 and L2 perspectives. Then, both breadth and depth of vocabulary knowledge are discussed along with their well-known tests. Vocabulary teaching techniques are highlighted as well as explicit vs. implicit teaching approaches. Finally, previous empirical studies on the relationship between vocabulary knowledge (breadth and depth) and reading comprehension are also reviewed.

2.1 What is vocabulary knowledge?

Vocabulary knowledge has long been a crucial component of learning any foreign language. As Read (2000,p.1) (Sasao,2013, p.1) puts it, "words are the basic building blocks, the unit of meaning from which larger structures such as sentences, paragraphs and whole texts are formed". Vocabulary knowledge is the most important factor contributing to reading comprehension Laflamme, (1997) Weiser, (2013). Vocabulary knowledge refers to words units (like idioms and phrasal verbs) that have a common meaning (Qing, 2009 p.28). A widely-known psycholinguist George A. Miller (1995, p.5) claimed that for a word to be known, a learner has to know "its own sound, its own spelling, its own meaning, its own role, its one use, its own history" Kulikova, (2015, p.5). Irfan Tosuncuoğlu, (2015, p.5) as Scrivener indicates, "vocabulary is a powerful carrier of meaning. A learner recognizing the communicative power of vocabulary he continues to explain might reasonably aim to acquire a working knowledge of a large number of words. The more words I have, the more precisely I can express the exact meanings I want to. But... getting to be on familiar terms with vocabulary is quite difficult". Vermeer, (2001, p.230) words are the basic conveyors of meaning and therefore carry the key information load in communication.

Over the years, lexical researchers have attempted to explain what it means to know a word. L2 lexical researchers have presented different definitions of knowing a word as they have different concepts of what learner' word knowledge involves, and of statistical counts of their vocabulary size Daller, et al. (2007) Elmasry, (2012, p.11).

An early definition of vocabulary knowledge introduced by Cronbach (1942) Choi, (2013, p.421) he presented five components of vocabulary knowledge, and classified them into two categories: one is knowledge of word meaning (generalization, breadth of meaning, and precision of meaning) and the other is accessibility to this knowledge (availability and application). This pioneering explanation focused mainly on the meaning aspect of a word. It was criticized by Qian (2002) as it neglected other aspects of word knowledge, such as spelling, pronunciation, morpho-syntactic properties, and collocation.

Subsequently, Richards (1976) Elmasry, (2012, p.11) offered more components to what it meant by knowing a lexical item such as associations, morpho-syntactic properties, register and frequency level. It has been considered as a general framework for defining vocabulary knowledge since it spotlighted the multifaceted nature of word knowledge. Nation (1990) Elmasry, (2012, p.12) integrated a number of constituents such as collocation and pronunciation and Richard's framework. Nation also emphasized the fact that receptive vs. Productive distinction is needed to truly know a word.

Nation (2001) took a further step by dividing vocabulary knowledge into three categories: form, meaning and use. Form involves spoken and written forms as well as word parts; meaning include form and meaning, concept and referent as well as associations; and use entails grammatical functions, collocations and constraints on use (register and frequency). Vermeer (2001). Choi, (2013, p.421) proposed that words are consisted of a network of interconnected nodes; thematical, phonological, morphological conceptual, or sociolinguistical.

This complex nature of vocabulary knowledge has been defined differently by different researchers, however; there is a general agreement that knowing a word includes more than knowing the relationship between its form and meaning. (Aitchison,1994; Laufor,1997; Mc Carthy,1990; Miller,1999; Nation, 1990, 2001; Richards 1996). Sasao, (2013, p.1).

2.1.1 Conceptual frameworks

In an attempt to define the complex and multifaceted nature of vocabulary knowledge, various but complementary theoretical frameworks have been proposed by L2 vocabulary researchers. It is important to have an overview of the different conceptual frameworks of vocabulary knowledge. An early framework was created by Cronbach (1942). Choi, (2013, p.421). for presenting five components of vocabulary knowledge.

- generalization
- breadth of meaning
- precision of meaning
- availability
- application

Cronbach's components can be divided into two main categories: knowledge of word meaning (generalization, breadth of meaning, and precision of meaning) and levels of accessibility to this knowledge (availability and application)

The obvious short coming of this framework is the lack of other aspects of lexical knowledge, such as spelling, pronunciation, and morpho-syntactic properties.

Richards (1976) offered eight assumptions in response to the weakness of Cronbach's framework. The assumptions emphasize that to know a word, one should consider:

- its relative frequency in the language;
- its register features, including social, temporal and geographic variations, and field and mode of discourse;
- its syntactic properties relevant to the word;
- its base form along with derivational and inflectional suffixes;
- the associative network between that word and other words in a language, including antonomy, synonymy, and subordinate, coordinate, and super ordinate classifications;
- its semantic features and connotations; and
- the different meanings associated with the word (pp.78-84).

The obvious missing aspects in Richards' framework are: pronunciation, spelling and collocation.

Richards (1976) and Nation (2001). McCarten, (2007, p.18) list the different aspects learners have to know about a word before saying that they have learned it. These include:

- The meaning(s) of the word
- Its spoken and written forms

- What "word parts" it has (e.g., any prefix, suffix, and "root" form)
- Its grammatical behavior (e.g., its word class, typical grammatical patterns it occurs in)
- Its collocations
- Its register
- What associations it has (e.g., words that are similar or opposite in meaning)
- What connotations it has
- Its frequency.

Nation added missing elements from Richards' framework such as spoken form, written form and collocations

Nation (2001) presents vocabulary knowledge framework to involve nine aspects of knowing a word. Nation emphasized that receptive and productive knowledge of words are required to fully know a word

Table 2.1 What Is Involved in Knowing a Word

Aspect	Component	Receptive knowledge	Productive knowledge
Form	Spoken	What does the word sound like?	How is the word pronounced?
	Written	What does the word look like?	How is the word written and spelled?
	word parts	What parts are recognizable in	What word parts are needed
		this word?	to express the meaning?
Meaning	form and	What meaning does this word	What word form can be used
	meaning	form signal?	to express this meaning?
	aonaanta and	What is included in this concept?	What items can the concept refer to?
	concepts and referents	What is included in this concept?	Telef to?
	Toronto		What other words could
	associations	What other words does this make people think of?	people use instead of this one?
Use	grammatical functions	In what patterns does the word occur?	In what patterns must people use this word?
			dis word
	collocations	What words or types of words	What words or types of
		occur with this one?	words must people use with
		W/L	this one?
	constraints on	Where, when, and how often	Where when and how often
	use (register, frequency)	would people expect to meet this word?	Where, when, and how often can people use this word?
	requeriey)	WOIG.	can people use this word.

Source: Adapted from Nation (2001, p. 27).

Schmitt (2010, p.16) in commenting on Nation's (2001) list of word knowledge argues that "he (Nation) presented a revised and expanded version in 2001, which is the best specification of the range of word knowledge aspects to date". It's undeniable fact that Nation's framework has a significant role in specifying foreign language words. Qian (2002). Agdam & Sadeghi, (2014, pp.1-2) developed a new conceptual framework. It consists of four linked aspects of vocabulary knowledge:

- 1. Vocabulary size, which refers to the number of words of which a learner has at least some shallow knowledge of meaning;
- 2. depth of vocabulary which involves all lexical attributes, such as phonemic, graphemic, morphemic, syntactic, semantic, collectional, and phraseological properties, as well as frequency and register;
- 3. lexical organization, which points out the storage, connection, and representation of words in the cognitive lexicon of a learner;
- 4. automaticity of receptive productive knowledge, which denotes to all the underling processes through which access to word knowledge is accomplished for both receptive and productive purposes.

Apparently the four dimensions are linked with one another. The above theoretical frameworks of vocabulary knowledge contribute to explore the relationship between this construct (vocabulary knowledge) and reading comprehension.

2.2 What is reading comprehension?

The literature reveals the following definitions of reading comprehension:

Comprehension is defined as "intentional thinking during which meaning is constructed through interactions between text and reader". Hariss & Hodges, (1995, p.207). Rashidi & Khosravi, (2010, p.82).

Reading comprehension is defined as "a complex process that requires lower-level process (i.e. phonological and lexical) to decode print, and higher-level process (i.e. semantic and inference making) to comprehend the meaning" (Gottardo, et al. 1996; leather & Henry, 1994; Liberman & Shankweiler, 1991; Shankweiler, 1989; Shankweiler etal.1999). Gillispie, (2008, p.1-2).

Reading comprehension entails some skills and knowledge resources i.e., the ability to decode written forms for successful word recognition. It takes the first place among twelve skills summarized by William Grabe, (2009) (Berrabah, 2014, p.123)

Reading comprehension lessons are generally based on passages and texts followed by questions to evaluate the learners' understanding and help them understand what they read. Due to the complex nature of vocabulary knowledge, there are so many things about each individual item that must be known (spoken and written forms, meaning, morphology, syntax, semantics and many others), which make the students struggle with this problem.

In most of these cases, students complain of not understanding a text, and as a result, they are incapable of answering the comprehension questions. This difficulty in reading comprehension occurs frequently for many reasons, the most important ones are as follows: lack of vocabulary (unknown words are viewed by students as a hindrance to understand a text. It's important for a students to fully comprehend the words of a written passage so as to be able to decipher the message, hence comprehend a written text). Working memory (the students biggest complaint is actually there in ability to retrieve information they just read. They have to keep the information longer in working memory to be processed more extensively). Absence of extensive readings (a big barrier in understanding a written text by students is to read a little or nothing outside the classroom which results in failure in reading comprehension). Types of texts (another factor that impacts reading comprehension a lot is text type. It is regarded as a fundamental hindrance. Not all the texts are easy to be recognized as some are very troublesome) Shehu, (2015, p.93). Nation,(1990) Budiwahyunigsih, (2008, p.13). "The learners will master the vocabulary more through reading and speaking skills, but it is possible to get vocabulary through the other skills, such as listening and writing". Jordan (1997) states, "the most effective way for students to increase their active vocabulary store is for them to be centrally involved in the learning process (p.162). Reading may be the single largest source of vocabulary growth". Nagy, (1988, p.30). "Reading is one of the most important skills to be learned in any language. It is used not only as a source of information and pleasure but also as a means of consolidating and extending knowledge of the language" Rashidi & Khosravi, (2010, p. 82). Allen & Vallette, (1977, p. 151) "Once students know the meaning of a new word, they must use it often and correctly in the target language in order to master the word and make it part of their personal vocabulary". Berrabah, (2014, p. 111) "To select texts that we can control linguistically and lexically. At the linguistic level, we may alter from simple to

complex structures and at the level of lexis, we can easily move from more frequent to less frequent words". Some researchers who think that EFL learners of reading comprehension become better by giving them with instruction in synonymy and polysemy of words, and not simply the direct meanings of these words Mehrpour, et al. (2011). Qin, (2012, p.11).

2.3 Factors that influence reading comprehension

2.3.1 Vocabulary

Vocabulary is considered as a big challenge facing learners of English as a foreign language. According to Bromley (2007, pp.528-531) English has three times as many words as Germany, and six times as many as French. Furthermore, seventy percent (70%) of the words we use most frequently have more than one meaning. Meanings of 60% of multisyllabic words can be inferred by analyzing word parts. Students also need a mindset to be careful to this. Nagy & Scott, (2000, p. 528) Bromley, (2007, p.533) said, "Many teachers know they need to do a better job teaching vocabulary to students who find reading difficult". However, choosing the most convenient method of vocabulary instruction is a difficult job. Lubliner and Smetana (2005, p.189) explain this difficulty in their work, "The ultimate challenge of a vocabulary intervention is not merely to teach a set of words or skills, but to positively affect reading comprehension" Hansem, (2009, p.6). Stanovich (1986) Butler, (2007, p.7). Surveyed the growing influence of poor reading and vocabulary skills .Children who were poor readers did not have adequate vocabulary. When young children struggled with reading, they read less than their peer students and were exposed to fewer new words. This shortage on their vocabulary development made progress in reading very difficult. The impact of these insufficiency made learning more difficult and the gap between skilled and less skilled readers was increased. Berrabah (2014, p.345) "Having a limited vocabulary is a banner that prevents learners from learning a foreign language". Limited vocabulary volume could hinder students to reach the desired level of comprehension Madani, (2016,p.48). Weiser, (2013) stated that teaching and refreshing the largely used prefixes and suffixes helps in vocabulary learning For example, the prefixes un, in, im, il, ir, re, dis, and super account for 97% of all printed words in English. Furthermore, the suffixes (ed, ing, ly, and s/es) make up 97% of all suffixed words in English. Teaching content specific Latin and Greek assists vocabulary growth. For example, teaching the word "bio", meaning life,

facilitates understanding words, such as biography, biology, and bio geographer when reading

2.3.2 Working memory

One of the factors that impacts learners' reading comprehension skill is the working memory. It is defined as a cognitive processing store with limited capacity. It provides resources to process information Swanson, et al. (2009) Sanford, (2015, p.26).

Successful learning is connected to the learner's ability to remember words. Therefor they prefer some form of mechanical repetition so as to achieve long-term memory. Their failure in written and spoken language comprehension and production is the major reason behind inability to retrieve known words Hyso, (2011,p.55). Grace (2000). Hyso, (2011,p.55) stated that employing translation in the native language is much more helpful to the students with both short-term and long-term memory of words.

The larger the working memory capacity of a reader, the more he or she will be able to draw optional elaborations that go behind the straightforward text representations. Borella, (2006, p.74).

2.3.3 Text type

The type of the text has significantly different effects on reader's comprehension. (Pearson & Raphael, 1990) (Woolley, 2011, p.25) proposed that readers who have a clear comprehension of story and other types of genre structure are more successful in the understanding of text. Usually different types of text genres move with them anticipated text structures and readers have to be familiar with each type of text Whaley, (1980a). They may have predictions of what they are reading as they link to structural elements and the sequencing of those elements in the text, for example, understanding the genre of an adventure novel, a travel story or play. (Alderson, 2000) (Hailu, et al. 2017, p.62) argued that "it is easier to understand a text describing real things than abstract texts. This is because abstract texts need more skillful explanations from the writer in order to make the concepts concrete and imaginable in the reader's world. However, if the writer fails to create a visual image in the reader's

mind, it will not be easily or entirely understandable. As a result, researchers have claimed that expository texts are harder to process than narrative texts".

2.4 Vocabulary knowledge relationship with reading comprehension

For the last three decades, vocabulary knowledge and its role in reading comprehension, has been an interesting topic of discussion in L2 research. There is a very close relationship between vocabulary knowledge and reading comprehension. Researchers such as Call, 1987; Nation, 2001; Stahl, 1990) (Salah, 2008, p.4) stated that both vocabulary knowledge and reading comprehension are closely related, and this relationship is not one dimensional, since vocabulary knowledge can help the learner to comprehend written texts and reading can contribute to vocabulary growth. There is a general agreement that vocabulary knowledge is the most important factor in reading comprehension. Mukoroli, (2011, p.7) Stated that "Academic comprehension improves when students know the meaning of words. Words are the building blocks of communication. When students have a great vocabulary, the latter can improve all areas of communication, namely speaking, listening, reading and writing." These are active processes that go on as vocabulary learning goes on and learner's lexicon matures. Laufer, (1997, p.20) Salah, (2008, p.4) argued that "no text comprehension is possible, either in one's native language or in a foreign language, without understanding the text's vocabulary". In 1989, Koda investigated the correlation between a vocabulary test and two reading tests. Her study's results revealed that vocabulary knowledge contributes to students' reading comprehension in Japanese as a foreign language and that there was a correlation coefficient of 0.74 between the vocabulary test scores and the comprehension test scores (Qian, 1989, p.17). Stahl (2003, p.241) described the relationship between vocabulary knowledge and reading comprehension with "robust" and confirmed that vocabulary knowledge has consistently been the foremost predictor of text difficulty. In reading research, there is a close relationship between vocabulary knowledge (breadth and depth) and reading comprehension.

2.4.1 Four L1 perspectives on the vocabulary reading connection

The role of vocabulary knowledge and reading comprehension was considered by researches and studies in L1 research (e.g, Anderson & Freebody, 1981,1983; Beck, Perfetti, & McKeown, 1982; Kameenui, Carnine, & Freschi, 1982; Mezynski, 1983;

Stahl,1983,1985,1986). Qian, (1989, p.7). Anderson and Freebody (1981) offered three hypotheses, which were the most prominent of these researches. The three hypotheses labeled instrumentalist, aptitude and knowledge.

2.4.1.1 Instrumentalist hypothesis

Stahl, (1983, p.34) "The instrumentalist hypothesis suggests that knowledge of word meanings enables one to comprehend a text". Students who know more word meanings will be able to comprehend more difficult texts. It sees vocabulary as a prerequisite and causative factor in comprehension. Good vocabulary enables good comprehension Shen, (2008, p.135). It sees vocabulary as a priority to understand texts.

2.4.1.2 Aptitude hypothesis

The aptitude hypothesis sees vocabulary as an outcome of having a good brain (Shen, 2008, p.135). It suggests that both vocabulary and comprehension reflect general aptitude, or more able students know more word meanings and comprehend text better (Stahl, 1983, p.34). According to Hunt,(1978). Qian, (1989, p.8) the central factor of this hypothesis is the learner's mental capabilities rather than his/her large vocabulary which results in a learners better reading comprehension. The mental abilities of the learners directly contributes to reading comprehension.

2.4.1.3 The knowledge hypothesis

Shen, (2008, p.135) The knowledge hypothesis sees vocabulary as a signal of good background knowledge. The main idea of this hypothesis is that it is this background knowledge that supports reading comprehension Based on the context, comprehension can be triggered either by prior knowledge or by printed symbols. Better reading comprehension is a reflection of deeper and broader world knowledge or background knowledge.

2.4.1.4 The access hypothesis

Mezynski, (1983) Qian, (1989, p.12) proposed a fourth "access" hypothesis. This hypothesis sees vocabulary as a causal relationship with comprehension conditioned that vocabulary can be easily accessed. The central claim of this hypothesis is "the need for automaticity of access to vocabulary knowledge as a prerequisite for reading

comprehension Access to word meaning is through practice and training to improve reading comprehension.

2.5 Aspects of vocabulary knowledge in L2 research (Breadth and Depth) relationship between vocabulary the knowledge and comprehension in L2, attracts the attention of the researchers as an interesting topic of discussion. Second language acquisition (SLA) research establishes the significance of vocabulary knowledge for reading comprehension (e.g., Nation & Coady, 1988; Laufer, 1992, 1996; Wallace, 2007) Pietila, (2016, p.1079). A clear trend and general agreement in the field of L2 vocabulary study, is that "vocabulary knowledge is no longer seen as a single construct; rather, vocabulary knowledge is considered including at least two main dimensions, one is breadth and the other is depth" (Qian1998; Read1988, 1989; Wesche & Paribakht, 1996) Qin, (2012, p.5). Furthermore, earlier research undeniably reveals that the connection between reading comprehension and vocabulary knowledge is stronger than the one between reading comprehension and other subknowledges of reading, such as grammar knowledge or background knowledge (Meherpour & Rahimi, 2010; Alderson et al. 2015) Pietila, (2016, p.1080) As (Li & Kirby 2015, p.613) put it, "depth contributes to breadth and vice versa". Many researchers have pointed out that there is a strong relationship between the two variables breadth and depth (e.g. Qian, 1998, 1999, 2002; Rashidi & Khosravi, 2010; Li, 2015; Harkio & Pietilä, 2016) (Harkio & Pietilä, 2016 p.1079) Few studies (Read,1993 & Qian,1999) conducted on the relationship between depth and breadth of vocabulary knowledge. They pointed that ESL learners aspects of breadth and depth of vocabulary knowledge are strongly correlated. Schmitt (2008) argued that the scope of the tasks of teaching vocabulary to English language learners recommends a balance between breadth and depth. (Henriksen, 1990) (Mukoroli, 2011, pp.16-17) indicates that, a learner has to acquire the covering of vocabulary items (i.e., the range of meaning or the appropriate references) and a learner has to learn to develop appropriate networks (i.e., which words are related to other words, and how, including antonyms and synonyms, semantic intensity, etc.

Schmitt, (2007, p.757) stated that "Even advanced learners with large vocabularies can contribute to fill out their lexical knowledge, as many (or most) of the words in their mental lexicons will only be partially mastered. After all, even native speakers

continue to learn new words throughout their lifetimes". Schmitt (2008) who argued that the scope of the tasks of teaching vocabulary to English language learners recommends a balance between breadth and depth. (Huang, 2006, p.63) argued that both dimensions (i.e. breadth and depth of vocabulary) play significant roles in reading comprehension and that combining vocabulary reading breadth and depth together has an enormous effect on reading comprehension.

2.5.1 Breadth of vocabulary knowledge and reading comprehension

Vocabulary breadth, or size, is usually understood to refer to the estimated number of words that a language learner knows. Qian (1998, p.13) makes a definition of vocabulary breadth as vocabulary size, i.e. "the number of words for which a learner has at least some minimum knowledge of meaning". Li and Kirby (2015, p.612). Proposed that breadth of vocabulary could be viewed as "knowing the oral and written forms of the words, the surface meanings, and basic uses of the words". Many researchers have shed light on the relationship between vocabulary size and different texts. Meara (1996) Choi, (2013, p.423) Learners provided with large vocabulary own skillfulness in using the language than ones with smaller vocabulary. Laufer (1992) proposes that knowing around 3000 word families is adequate to guarantee a threshold for L2 reading comprehension. Webb, (2013), Ebrahimi, (2017, p.22) Since it possibly increases understanding and using words, the ability to connect form to meaning is essential. However, this ability does not ensure that the words will be comprehended and used properly, and because of this fact, there is a need as well to promote depth of vocabulary knowledge. Webb, (2007b) Sasao, (2013, p.6) The more larger vocabulary size of learners, the more synonyms of unknown words. Knowledge of synonymy might be the facilitator of learning target words of vocabulary aspects such as grammatical functions and syntagmatic associations. (Vermeer, 2001, p.230) indicated that "a deeper knowledge of words is the consequence of knowing more words, or that, conversely, the more words someone knows, the finer the networks and the deeper the word knowledge". Berrabah, (2014, p.345) stated that "If learners do not know how to expand their vocabulary, they gradually lose interest in learning". Knowing a word entails more than just to be familiar with its meaning and form" Schmitt & McCarthy, (1997).

2.5.1.1 Threshold vocabulary for reading comprehension

English language probably contains the greatest number of words. In the flood of one to two million English words, included the amount of vocabulary required to comprehend unsimplified texts. The biggest challenges that EFL learners face is a large vocabulary needed to function in English. Nation & Waring, (1997) suggest that the lexical starting point for reading comprehension is roughly between 3000 and 5000 word families. Approximation of text covering required for effective L2 reading differ highly for the majority, it is almost between 95% and 99%. Mehrpour & Rahim, (2010) Harkio & Pietila, (2016, p.1080) Nation (2006) proposed that a 98% text coverage is required for satisfactory, unaided reading comprehension. That is to say a learner has to know between 8000 and 9000 word families. A well-educated native speaker of English is approximated to have knowledge of about 20000 word families. With respect to text coverage and reading comprehension, Hu and Nation (2000), Alkaboody, (2019, p.4) investigated the effect of four different text coverage levels (80%, 90%, 95%, and 100%) on unassisted reading comprehension of a fiction text and reached a conclusion that comprehension increased whenever the amount of known words increased. Hirsch (2003, p.16) Al-Darayseh, (2014, p. 1109) said that "vocabulary experts agree that adequate reading comprehension depends on a person already knowing between 90 and 95 percent of the words in a text.

2.5.1.2 Tests for measuring breadth of vocabulary knowledge

Vocabulary is considered a priority in language teaching. It needs to be assessed in some way and test formats are needed to monitor learners' progress in vocabulary learning. The Vocabulary Level Test is widely applied to determine the vocabulary size of students of very different levels: "an instrument... designed to measure learners vocabulary size as a trait without reference to any particular context of use" (Read & Chapel, 2001) cited in (Perez, 2005, p.551) Olmos, (2009, p.89). Nation's Vocabulary Level Test is a very well-known way to measure vocabulary size. Students in this test are required to match isolated words from its context with of a similar meaning. Words from different frequency levels are ordered as well as the inclusion of distracters. The supposition behind this test according to Read (2000, p.120) Olmos, (2009, p.82) is that "words that occur more frequently in the language are more likely to be known by learners than less frequent words". The Vocabulary Size Test is designed to measure both first language and second language learners'

written receptive vocabulary size in English...The test uses frequency levels based on the British National Corpus (BNC) word family for the sampling but the tests do not reliably measure how well each level is known, because there are not enough items at each level. We expect scores to decrease for the levels. The total score for the test is what matters". (Nation, 2012, pp.1-2). The vocabulary level test (VLT) requires learners to match meaning to its form (Beglar & Hunt, 1999; Nation, 1983, 1990; Schmit, et al, 2001) (Sasao, 2013, p.17) Here is an example:

1. business

2. clock 6__part of a house

3. horse 3_animal with four legs

4. pencil 4_something used for writing

5. shoe

6. wall

2.5.2 Depth of vocabulary knowledge and reading comprehension

Depth of vocabulary knowledge was understood as "the quality of the learner's vocabulary knowledge" (Read,1993, p.357). With respect to how well a learner know a given word Read (2004, p.153) Chen, (2016, p.17). states that, "Depth of knowledge focuses on the idea that for useful higher-frequency words learners need to have more than just a superficial understanding of the meaning; they should develop a rich and specific meaning representation as well as knowledge of word's formal features, syntactic functioning, collocational possibilities, register characteristics and so on". Haatrup and Henriksen (2000, p.222) Chen, (2016, p.17) defined depth of vocabulary knowledge as learner's knowledge of "a word's different sense relations to other words in the lexicon, which included paradigmatic relations such as antonymy, synonymy, hyponymy, and gradation and syntagmatic relations such as collocational restrictions". There have been fewer studies investigating the relationship between depth of vocabulary knowledge and L2 learner's performance in reading comprehension, compared to attention paid to the relationship between vocabulary size and reading comprehension. With regard to the association between depth of vocabulary knowledge and reading comprehension, little concentration devoted to the role of depth (Qian, 2002; Read, 2007) Kaivanpanah & Zandi, (2009).

Qian's study (1998, 1999) revealed that scores on vocabulary size, depth and reading comprehension were highly correlated and scores on vocabulary depth had the ability to make an exclusive contribution to predicting academic reading comprehension. (Vermeer, 2001, p.230) indicated that "a deeper knowledge of words is the consequence of knowing more words, or that, conversely, the more words someone knows, the finer the networks and the deeper the word knowledge". (Webb, 2007b) (Sasao, 2013, p.6) the more larger vocabulary size of learners, the more synonyms of unknown words. Knowledge of synonymy might be the facilitator of learning target words of vocabulary aspects such as grammatical functions and syntactic association. Knowing the meanings of words and their various collocations is in strong relationship with reading comprehension and therefore vocabulary indicates an important factor to increasing reading performance (Beck, et al. 1982) Mohammadi & Afshar, (2016). Dolch & Leeds, (1992, p.189) Mukoroli, (2011, p.18) who emphasize that to know the word meaning is "growth". They claim that present vocabulary tests are limited and need to include a part on testing word meaning and synonyms.

2.5.2.1 Stages of knowing a word

Vocabulary acquisition is important for foreign language learners. They need to grow and support their vocabulary to move forward in their language studies. Vocabulary is known to be gradually acquired over a period of time through multiple exposures. There is an agreement among researchers that knowing a word is not all or nothing phenomenon, rather words can be learned at different levels Shen, (2008, p.136). McKeon & Beck (1991) proposed that vocabulary knowledge should be examined in terms of stages that range along a continuum from no knowledge to complete knowledge Agdam & Sadeghi, (2014, p.1) Nearly 50 years ago, Dale (1965). (McKeon, et al) cited in Qian,(1998, p.21) presented a description of the range of word knowledge in terms of four stages. A four - level continuum of word knowledge to fifth grade students in the U.S:

Stage 1: "I never saw it before."

Stage 2: "I've heard of it, but I don't know what it means ".

Stage 3: "I recognize it in context it has something to do with "

Stage 4: "I know it"

2.5.2.2 Tests for measuring depth of vocabulary knowledge

Two assessments used to measure depth of vocabulary knowledge are the Vocabulary knowledge Scale and the Word Associates Test. The vocabulary knowledge scale designed by Sima Paribakht and Mari Wesche (1997), can be used to assess any vocabulary items.

Table 2.2 The vocabulary knowledge scale

Self-report categories

- i. I don't remember having seen this word before
- ii. I have seen this word before, but I don't know what it means
- iii. I have seen this word before, and I think it means (Synonym or translation)
- iv. I know this word. It means...... (Synonym or translation)
- v. I can use this word in a sentence....... (Write a sentence)

Paribakht & Wesche (1997) Choi, (2013, p.426)

learners are provided five categories with a number of words, then they are required to mark the category that really describes the knowledge about the word. Choi, (2013, p.426).

The Word Associates Test (WAT) is developed by Read (1993,2000), for measuring depth of vocabulary knowledge of how well learners know a word. Two groups of four associates are included in this test format with the first of two standing for paradigmatic relationships with the stimulus word, and the later representing syntagmatic relationships.

Here is an example Read, (2000, p.184). Chen, (2016, p.33) Sudden

peautiful quick surprising thirsty C	Change doctor	noise school
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Learners were asked to select four associates out of the two boxes, with the combination of correct associates.

Read (2001, p.320). indicates out that it is important to assess lexical knowledge of vocabulary; however, it is also essential to test how well learners understand a word in multiple contexts. This is important because knowing syntactic knowledge of a

word and how to use this word in different contexts is more beneficial and practical for learners than just knowing the basic meaning of this word. (Qin, 2012, p.45).

Syntagmatic and paradigmatic relations are presented by Saussure (1974) to differentiate two types of signifiers: one regards positioning (syntagmatic) and the other regards substitutions (paradigmatic) Shafiee, (2018, p.22). Paradigmatic relations have more semantic attraction while syntagmatic relations include nearness of words in language. From time to time, paradigmatic pairs can have close synonyms (blossom-flower) and at times they show different types of sense relations (e.g. blackwhite, table-furniture). Schmitt (2000). Hasan & Shabdin, (2016, p.245). Cronbach, (1992), Mukoroli, (2011, p.18) for students, knowing word associations in general is not enough, they need to know various sense relations such as antonyms, synonyms, hyponyms, and collocations. "Even advanced learners with large vocabularies can contribute to fill out their lexical knowledge, as many (or most) of the words in their mental lexicons will only be partially mastered. After all, even native speakers continue to learn new words throughout their lifetimes". Schmitt, (2007, p.757). (Firth,1957) "Know a word by the company it keeps". Miller and Fellbaum (1991) (Mukoroli, 2011, p.20) indicate that knowing of how verbs, adjectives and nouns work in reference to another is significant in learning / acquiring word meaning

Table: 2.3 paradigmatic and syntagmatic relationship

SYNTAGMATIC

Ali	Is	Playing	Football	Today
They	Are	Eating	Mangoes	Slowly
Birds	Are	Singing	Songs	Sweetly
I	Was	Beating	Him	Mercilessly

(Sharma & Al-Ashab, 2013, p.36)

2.6 Vocabulary teaching techniques

If the teaching of vocabulary is related to reading comprehension, then the teacher's job is to help the students learn and retain the meaning of words. To prevent students from forgetting lexical items, vocabulary needs to be learnt, practiced and revised. In finding out the meaning of unfamiliar words and expressions, there are three common techniques: (Abdulah, 2009, pp.5-6)

1. Visual techniques

According to (Gairns & Redman1980) (Marla, et al. 1999, p.12) "there are three form visual techniques;" relia, pictures, and mime or gestures. Relia means using a variety of real objects brought by the students in the classroom. It can be applied to remember written materials" (Abdulah, 2009, pp.6-7).

2. Verbal techniques

Marla, et al (1990, p.3) Abdulah, (2009, pp.7-8) divide verbal techniques into four parts, among those are:

- a. Synonyms and antonyms; they are especially important in building new vocabulary because learners are able to know vocabulary. Synonyms are words that have the same meaning as the unknown in a given sentence. The reader could identify the presence of synonyms through these signals: or, and, colons, commas and dashes. Antonyms are words that have the opposite meaning of the unknown word in a given sentence. Signals which identify the presence of the antonyms for readers are instead, although, but, yet, and however.
- b. Definition and illustration this technique, teachers of English are expected to introduce a word in English through the use of other words in the same language.
- c. Scale; this technique is the presentation of related words in scales that include the combination of both verbal and visual techniques, for example, in term 32°C Celsius, the degree sign is the visual.
- d. Explanation; this technique explains the meaning and the use of a foreign word in the foreign language itself.

3. The use of dictionary

To find out the meaning of unknown words and expressions, students can use this technique, through a variety of dictionaries, such as bilingual, monolingual, pictorial,

and thesaurus. Readence (1995, p.35) (Abdulahi, 2009, p.9) states that "the dictionary definition is shared with a discussion when the words are presented both in isolated form and in the context".

2.6.1 What to teach

All word knowledge ranges on a continuum than being known vs. unknown. "learning is a gradual process that it takes place in small, manageable increments over time". (McCarten, 2007, p.26). There are so many things to learn about each piece of vocabulary. Paul Nation's list 1990 provides a concise account of the most important types of word knowledge:

- meaning
- written from
- spoken form
- grammatical characteristics
- collocation
- register constraints
- frequency
- associations

(Nation, 1990, p.31) (Schmitt, 2010, p.5).

The above mentioned first three of these word knowledge types associate to the meaning and form connection as the initial and minimal specification for knowing a word. The other five types of word knowledge are completely different in that they are totally guided by context. All of the word knowledge types are necessary to use a word well in a variety of contexts, and so need to be acquired by learners (Schmitt, 2010, pp.5-6). The question of what it means to know a word is essential to the teaching of what vocabulary is. There would be a general acceptance that lexical knowledge is best conceptualized as a continuum between being able to recognize the meaning of a word and being able to use it productively. Richards, (1979) Amiryousefi & Dastjerdi, (2010, p.91).

2.6.2 How to teach

The majority of EFL students struggle with the problem of how to enlarge their vocabulary. Teachers should face this challenge, and provide their students with

plenty of vocabulary to learn and use. For this to happen, EFL teachers must make use of effective approaches to achieve the desired objectives.

2.6.2.1 Explicit vs. implicit vocabulary teaching

There are, however, various methods of teaching and introducing words through reading texts. The first method is called incidental learning (Evelyn Hath et al.1995). Incidental learning suggests that "there is actually no need of even justification for direct vocabulary instruction" (Coady,1997, p.275). This, he thought, is guided by Krashen's idea (1989) that if students can understand the text effectively, they can learn all the words they need from the context. Coady,(1997) (Amiryousefi & Dastjerdi, 2010, p.92). According to Schmitt (2010, p.17) incidental learning approach:

- can target words which can't be intentionally taught for time justifications
- complete the kinds of contextual word knowledge which can't easily be intentionally taught
- offers utilization for words already taught explicitly
- vocabulary learning takes place while improving other language skill areas, e.g. reading

In contrast, many researchers do not consider in the skillfulness of context alone and demand the second method-reading in addition vocabulary improvement activities or explicit teaching of vocabulary teaching (Coady & Huckin, 1997; Schmitt, 2002b) (Amiryousefi & Dastjerdi, 2010, p.92). Nation and Coady indicate that "the very redundancy or richness of information in a given context which enables a reader to guess an unknown word successfully could also predict that the same reader is less likely to learn the word because he or she was able to comprehend the text without knowing the word" (Coady and Nation, 1988, p.101). Elley's (1989) study, highly proposes that vocabulary expansion was much larger when teachers presented, even if shortly, the meanings of words (Madani, 2016, p.21). Stahl and Fairbanks (1986), explicit vocabulary teaching has obvious consequences on vocabulary learning and comprehension. In contrast, they suggest that vocabulary instruction should involve much more than definitions so as to develop reading comprehension. Dictionary definitions offer insufficient details on word meanings (McKeown, 1993) Butler, (2007, p.29). Regarding intentional vocabulary teaching, (Graves, 2006) Alkaboody, (2019, p.8) claims that explicit vocabulary instruction should present information

about the context and the meaning of the word, involve learners and devote time for word processing, allow frequent exposure to the words and give them chance to revise and practice newly learned words, and create a dialogue around the words.

The explicit approach yields these benefits:

- mostly guides to more rich and faster learning
- generally includes deeper involvement leading to better memory
- can concentrate on crucial vocabulary chosen by the teacher (high frequency, technical, targeted) (Schmitt, 2010, p.17).

In the light of teaching and introducing words through reading texts, "Vocabulary instruction researchers propose a multi-component approach to promote vocabulary knowledge. For example, Graves (2000) has recommended a four -part approach that involves wide reading, teaching sole words, training learners on word learning strategies, and developing word consciousness" (Alkaboody, 2019, p.9).

Regarding intentional vocabulary teaching, Graves (2006). Alkaboody, (2019, p.8) claims that explicit vocabulary instruction should present information about the context and the meaning of the word, involve learners and devote time for word processing, allow frequent exposure to the words and give them chance to revise and practice newly learned words, and create a dialogue around the words. (Day & Brumfit, 1987) Berrabah, (2014, p. 351) suggested that "the teacher is a role model for students, i.e., an active member of the classroom reading community who demonstrates what it means to be a reader and the rewards of being an FL reader". (Albukbak, 2008, p.65). "most students want and appreciate a lot of direct teacher support when they are beginning something new, e.g. a subject, a lesson, or a verb form". (Nunan, 189) Albukbak, (2008, p.65) teacher talk is probably the major source of comprehensible TL input the learner is likely to receive.

It's crystal clear that, the best prize and reward to offer to the EFL teacher is to see how his/her students get excited and enjoyed FL learning gains. They can access and experience successful reading comprehension. That is to say, authentic development is being made. More importantly, there is no greater happiness than seeing their ability to add a considerable number of new TL words. This means, their vocabulary repertoire has been enlargened and enriched. Undoubtedly, broadening and deepening the learners' vocabulary horizon explicitly is a step forward in the right direction.

2.6.3 Some common problems

Many EFL words are overlapping. "words with similar forms, for example, are particularly confusing for students, especially words that are alike except for the suffixes (comprehensive / comprehensible) or the vowels (adopt/adapt). This problem is particularly acute if there are many other words that have a similar form in the L2". Schmitt (2008, p.50).

Another problem arises from Greek and Latin words. According to (Bromley, 2007, p.533), "this is especially true in science because it contains many multisyllabic terms. He continues by giving examples like neophyte (little plant-neo means new and phyte means plant). Arctic comes from the Greek arktos which means bear, and Antarctica means the converse or opposite, no bears". The same word with more than one meaning is another difficulty arises among EFL students, i.e. the word "bank" could be a financial institution or a river bank. Some idioms and phrasal verbs are overlapping, i.e. "he kicked the bucket" and "he passed away" both of them means to "die". (Grabe & Stoller, 2002) Teng, (2014, p.31), when EFL students are confronted with an unfamiliar text, the biggest challenge in recalling the established meaning of the passages is the unknown vocabulary. Murtaga (2006, p.5) indicates that, "when an Arab EFL student is asked why s/he finds English a complicated language to read, the common answer is that most of the words in the text are new and she does not know what they mean".

2.7 Previous studies

It should be mentioned that this particular topic has not been covered in the currently existing and available literature. All the empirical related studies were conducted to target EFL university students not teachers.

As a matter of fact, the researcher was inspired by Qian's and Nation's research on vocabulary-reading comprehension connection. Therefore, based on recommendations for further studies by many researchers to place more equal attention to breadth and depth in teaching vocabulary in reading comprehension. This study is a modest attempt to fill this gap by engaging teachers to this vital issue. (these two dimensions deserve equal attention in exploring the role of vocabulary knowledge in reading comprehension. This model defines vocabulary knowledge as a combination of vocabulary size and depth of vocabulary knowledge). (Qian 1998,p.29).

"One of the most important perceptions taken from the present study is that vocabulary superficial teaching and learning do not mean just concentrating on the meaning and form of an individual word. Requirements and strategies should be made in teaching syllabus to guide EFL learners vocabulary development from two dimension of breadth and depth." (Li Kezhen, 2015)

A series of empirical studies have been conducted to explore the relationship between vocabulary knowledge (breadth and depth) and reading comprehension. In this part the researcher presented a brief description of each study.

In 2006, Hsing-Fei Huang from Canada McGill University, wrote" Breadth and depth of English vocabulary knowledge: Which really matters in academic reading performance of Chinese university students. This study explored the relationship between vocabulary size (i.e, breadth of knowledge), depth of vocabulary knowledge and reading comprehension of Chinese - speaking EFL university students in Canada. The researcher used three language tests the GRE (Graduate Record Examinations) for reading comprehension, Nation's (1990) Vocabulary Levels Test, and Read's (1998) Word Association Test, and verbal reports. The main focus of this study was to compare the relative importance of the two aspects of vocabulary knowledge, breadth and depth, in reading comprehension performance for these learners. Participants in this study were 24 university students. Instruments used in the study include three language tests, verbal reports, and a background questionnaire. The results demonstrate that test scores on vocabulary size was a stronger predictor of reading comprehension than depth of vocabulary knowledge, and breadth, depth of vocabulary knowledge and reading comprehension were positively correlated, it also demonstrated that breadth and depth of vocabulary knowledge were closely interrelated and mutually facilitative.

In 2015, Li Kezhen from China University of Northeast Petroleum published a study on "A study of vocabulary knowledge and reading comprehension in EFL Chinese learners". It aimed at assessing the relationships between size and depth of vocabulary knowledge and reading comprehension of non-English majors in the environment of English as a foreign language (EFL). The results empirically showed positive correlation between vocabulary size, depth of vocabulary knowledge with reading comprehension of the study's participants. And depth of vocabulary knowledge

proved to be an important factor in prediction of reading comprehension. The participants were 30 first year college students. The instruments used by the author in data collocation were vocabulary levels Test, Test for depth of vocabulary knowledge and Reading Comprehension Test.

In 2012, Hamdy Ibrahim Elmasry from Dubai Faculty of Education, the British University, conducted a study entitled" Depth and breadth of vocabulary knowledge: Assessing their roles in reading comprehension of high school EFL learners in the UAE. The study's purpose was to investigate the association between vocabulary knowledge and reading comprehension of high school EFL learners. The participants were 93 high learners included in three language tests: vocabulary size, depth of vocabulary knowledge and reading comprehension. The qualitative data obtained from semi-structured interviews. four subjects were involved to explore how they use their vocabulary depth to infer the meaning of unfamiliar words in a written text. Furthermore, it investigated whether breadth or depth was a stronger predictor of learners' reading comprehension. The study revealed that moderate positive inter correlations among the scores on the three language tests were obtained .Breadth proved to be a more powerful predictor of reading comprehension than depth. A positive association was found between students' vocabulary depth and lexical /'inferencing ability.

In 2013, Choi,Hye-Yeon from Seoul National University published a study about "Effects of depth and breadth of vocabulary knowledge on English reading comprehension among Korean high school students. The purpose for conducting the study was to investigate roles of both breadth and depth of word knowledge in reading comprehension. It focused on the semantic properties of vocabulary depth (i.e, synonymy, polysemy, and collocations). The participants were 98 Korean high school students in the 11th grade. Three main tests were administered: a vocabulary level Test (VLT), a Word Associates Test (WAT), and a Reading Comprehension Test (RC). A supplementary test designed by the researcher, was represented as WAT+VK. The results revealed that a significant association existed between breadth and depth of vocabulary knowledge and reading comprehension. The alteration from WAT to WAT+VKS for a depth measure rendered a stronger correlation between

vocabulary depth and reading comprehension. It was also found that vocabulary depth and breadth each contributed significantly to the prediction of reading comprehension.

In another study, David D.Qian (1998) conducted a PhD thesis research from Toronto University entitled "Depth of vocabulary knowledge: Assessing its role in adults' reading comprehension in English as a second language". This study aimed at exploring the relationship among vocabulary size, depth of vocabulary knowledge, and reading comprehension in English as a second language (ESL). Participants in this study were41Korean, 33 Chinese and 8 Canadian native speakers. The data collected through four tests, namely, the (RC) reading comprehension test, (VS) vocabulary size test, (DVK) depth of vocabulary knowledge test, (MK) morphological knowledge test. As well as a survey questionnaire, individual interviews, and a pilot study. The research produced empirical evidence that: scores on vocabulary size, depth of vocabulary knowledge, and reading comprehension were positively, and closely, related in the range of .78-.82.

In (2011), Saeed Mehrpour, Seyyed Ayatollah Razmjoo and Parvanch Kian from Shiraz University wrote "The relationship between depth and breadth of vocabulary knowledge and reading comprehension among Iranian EFL Learners". This study aimed at exploring the relationship between breadth and depth of vocabulary knowledge and reading comprehension of Iranian EFL learners, and to investigate whether there is a relationship between breadth and depth of vocabulary knowledge dimensions. Furthermore, it tried to find out whether gender, as a variable has any relationship with students' vocabulary knowledge. The participants of the study were 60 (30 male and 30 female). To collect data, two tests measuring breadth and depth of vocabulary knowledge were administered to all participants. They also received a reading comprehension test. The results obtained from the analysis of the data indicated that while both depth and breadth of vocabulary knowledge are positively correlated, that is, those learners who had large vocabulary size had a deeper knowledge of the words, too. It was also found that gender had no significant impact on learners' reading comprehension performance and vocabulary knowledge.

2.8 Summary of the chapter

The relevant literature is reviewed, shedding light on the complex nature of vocabulary knowledge. Based on many researchers' views, different but

complementary definitions with conceptual frameworks are also focused. Reading comprehension definitions are presented coupled with factors affecting it. Vocabulary knowledge reading connection was reviewed from both L1 and L2 perspectives. The significant role of breadth and depth of vocabulary knowledge in reading comprehension is also discussed along with their well-known tests. Vocabulary teaching techniques are highlighted as well as explicit vs. implicit teaching approaches. Finally, previous empirical studies on the vocabulary- reading connection are also reviewed. In order to enlarge and enrich the Libyan students' vocabulary knowledge, the next chapter will approach the research methodology. EFL university teachers will be engaged to answer the study's research questions through mixed research design.

Chapter three

Methodology

3.0 Introduction

This chapter deals with the practical part of the study. It begins with a philosophical background including ontological, epistemological, and methodological perspectives. It includes the research design for the present study stating the research questions. A mixed-method quantitative and qualitative-approach are applied to explore the research questions. A questionnaire and a semi-structured interview are instruments used by the researcher for collecting data in order to carry this research out. This study is presented by a pilot study then introducing the targeted participants, instruments and procedures for data collection.

3.1 Philosophical background

It is important for every researcher has a topic in mind to study and s/he must consider how to investigate it (Kawulich, 2015, p.1). Social research or enquiry is based on some philosophical assumptions about the nature of reality and human knowledge. These views act as a guide towards a valid research and appropriate research methods. According to Crotty,(1998) Alahrahrish, (2014, p.16) every piece of social research or enquiry is guided by a set of beliefs, which is known as a paradigm. The research process according to Terre Blanche and Durrheim (1999). Py Thomas,(2010, p.292) has three major dimensions: ontology, epistemology, and methodology. According to them a research paradigm is an all-embracing system of interconnected employment and thought that define the nature of question along these three dimensions. "the choice of the right methodologies needs to be informed by a good understanding of the different aspects of research paradigms" (Kivunja & Kuyini, 2017, p.39. Saunders *et al.*, 2009 Alahrish, (2014, p.119) identify that the philosophical sections that every researcher needs to consider are related to ontological, epistemological, and methodological assumptions.

3.1.1 Ontological Perspectives

The term Ontology refers to a subdivision of philosophy concerned with expressing the nature and structure of the world (Wand and Weber, 1993, p. 220). It defines the form and nature of reality and what can be known about it. Py Thomas, (2010, p.292).

Ontology denotes views of reality. It is a branch of philosophy, which deals with the study of being, that is to say, whether there is fact to be discovered (Alahrish, 2014, p.116) (Crotty,1998). Ontology is defined by (Crotty, 2003, p.10). Ahmed, (2008, p.2) as "the study if being There are two different ontological perspectives: objectivism (positivism) and constructionism (interpretivism). Objectivism "is an ontological position that asserts that social phenomena and their meanings have an existence that is independent of social actors" (Bryman, 2004, p.16). However, Constructivism (interpretivism) is a position "that asserts that social phenomena and their meanings are continually being accomplished by social actors" (Bryman, 2004, p.17) Alahrish, (2014, p.116).

3.1.2 Epistemological perspectives

Epistemology refers to the nature of the relationship between the researcher (the knower) and it refers to (Hirschheim, Klein, and Lyytinen, 1995, p.20). "the nature of human knowledge and understanding that can possibly be acquired through different types of inquiry and alternative methods of investigation". Py Thomas, 2010, p.292)

Epistemology is the study of knowledge (Crotty,1998) Alahrish, (2014, p.117) It is "a way of understanding and explaining how we know what we know" (Crotty, 2003, p.3) Ahmed, (2008, p.3) There are two widespread epistemological perspectives: objectivism and constructivism (Crotty,1998). Objectivists hold the view that knowledge is objective, and independent of the observer. (Wellington, 2002). In contract, Constructivists, believe that reality subjective and socially constructed (Crotty, 1998; Wellington, 2000) Alahrish, (2014, p.117).

3.1.3 Research methodology

Methodology denotes how the researcher approach about practically discovering whatever he or she thinks can be known (Py Thomas, 2010,p. 292). According to Hartas,(2010), methodology refers to the "theory of getting knowledge". Deductive and inductive are two approaches to research. According to the positivist methodology, the researcher deductively proves hypotheses to test theory from presently existing knowledge, by using quantitative methods, on the other hand, Constructivist methodology needs the researcher to inductively create a theory, which develops from the data, through carrying out the qualitative methods (Duffy,1985) Alahrish, (2014, p.118).

3.2 Exploratory research design

The research design adopted in this study is exploratory research. It is guided by Grotjahn's (1987) (Alahrish, 2014, p.120) taxonomy of research paradigm. This study combined mixed methodology, as proposed by Grotjahn's (1987) seventh paradigm (exploratory-quantitative-interpretive). With respect to this paradigm, research is conducted using both exploratory methods, which require qualitative data collection and its interpretation, and quantitative data and statistical analysis. According to Burns and Bush (2006), exploratory research design is defined as collecting data in a not formal and unorganized way. The exploratory research design is appropriate when the researcher knows little about the problem or issue. Exploratory research design is unlimited to one particular paradigm but may use either qualitative or quantitative approaches. "The standard exploratory study (type 1) the goal is to explore a topic that is little known, and to produce a publishable work. A multi-method approach is helpful". (Swedberg, 2018, p.30). "Exploratory research seeks to provide new explanations that have been previously overlooked and it can do so through the active involvement of the researcher in the process of amplifying his or her conceptual tools to allow him or her to raised new questions and provide new explanations of a given reality from a new angle". (Reiter, 2017, p.144).

3.3 Research questions

This study designed to answer these questions:

- 1) Does using breadth and depth dimensions of vocabulary knowledge help increase and deepen vocabulary knowledge in reading comprehension?
- 2) What are the university teachers' perceptions and knowledge on the effect of breadth and depth dimensions of vocabulary knowledge on reading comprehension?
- 3) What are the suitable techniques to achieve better reading comprehension and help accumulate the learner's vocabulary?

Regarding the research questions, Cohen et al. (2007, p.37) state that "the kinds of research questions that researchers address are controlled by their different ontological and epistemological positions".

Therefore, the research questions related to this study, are influenced by both objective/positivist and subjective/interpretive knowledge of social reality.

3.4 Pilot study

A pilot study was carried out at the Department of English of Zawia Faculty of Education, before conducting the main study. In order to reach an acceptable level of reliability and validity, all the materials, procedures, and instrumentations were refined and tested. Furthermore, undertaking of pilot study aimed at revealing any ambiguity related to wordings or the linguistic structure before implementation in a formal research setting. Henk (1987) argued that the feasibility of a pilot study lies in testing and confirming validity and reliability of any test instruments through standard verification techniques.

3.4.1 Pilot participants

The participants selected for the pilot study were EFL university teachers, three females and one male. Two of them were holding MA degree and the others were colleagues holding MA Diploma. Those who shared MA degree were actually chosen as participants for the main study. Pilot-study participants were previously informed that their feedback and comments would be of great help in refining the main study procedures, materials, and instruments. To reach an acceptable representation of the whole population in the main study, four university teachers were randomly selected.

3.4.2 Piloting procedures

Prior to conducting the study, the researcher obtained the permission from the head of English Language Department, and the pilot-participants willingness to volunteer. Once the pilot-participants agreed to assist, the researcher provided them with a brief explanation of the topic in Arabic language, so as to help clarify any confused aspects. Piloting was taken place in two different places: Faculty of Education and Zawia Language Centre. Since the participants were selected randomly, one of them unwilling to take part in the interview. Similarly, the other unwilling to participate in the questionnaire. To ensure that the data collected is reliable and valid, the discussions of the interview were recorded to enable the researcher to keep the conversation moving and focus on the process rather than taking down notes. Regarding, the questionnaire, the participants were requested to write the duration of time taken in answering the questions.

3.4.3 Teachers' questionnaire modifications

Mock questionnaires with colleagues and reading comprehension teachers, led the researcher to change some words, phrases, expressions and the order of some questions. They were as follows;

Some major modifications had been done to its introduction. The time it took was added. Some other information was also added.

Regarding its content, some other important modifications had been occurred. From a mixed approach into just quantitative by omitting the phrase (if others please specify).

Another replacement to question one which became question three and substituted by question sixteen.

Question two was replaced by question seventeen to be question four.

Some double questions had been divided into two parts. For example, question one (broaden and deepen) was asked once with broaden, the other with deepen and became question three and four.

The same procedures had been done with the option items. For example, instead of three options became four as to question twelve, and became five to question eighteen.

Thus, most of the questionnaire items were exposed to change, and extended based on the jury's perspectives.

3.4.4 Teachers' interview modifications

Mock interviews with colleagues and reading comprehension teachers, led the researcher to change some words, phrases, expressions and the order of some questions. They were as follows;

Teachers' Interview had been modified for almost three times. It was supported by the introduction which was not there before the last version. Some phrases were added, such as (could you please tell me...)

Considering question one, the phrase (build students' knowledge) was replaced by a subsidiary question six (how might you explain or discuss new words with the class?).

Regarding question two, the phrase (From your point of view) was added at the beginning. The word (barriers) was substituted by the word (obstacles). The subsidiary question (if so, what kind of problems?) was completely omitted.

With respect to question three, the phrase (if i asked you) was added at the beginning. The phrase (and do you think...) was also followed. The last sentence was substituted by (what do you think the aspects should we focus on?). In terms of question four, the phrase (could you please tell me) was added at the beginning.

As for question five, the phrase (do you think) was added at the beginning plus replacing the preposition or by alternatively. Respecting, question six, the phrase (could you please tell me) was added at the beginning. It should be mentioned that this question was completely changed twice. From (what aspects of English vocabulary currently interest you? How might you explain or discuss new words and phrases with the class?, to (could you please tell me about aspects of interest when it comes to usefulness and practicality? How might you explain or discuss new words and phrases with the class?). The last version of this question was (could you please tell me about English vocabulary aspects which usually interest you? How are they useful and practical?).

With relation to the last question seven, is mostly reduced from (is there anything else you would like to tell me? What comments or questions do you have during this interview?) to be like this (is there anything else you would like to tell me?)

Therefore, all the interview items were modified according to the jury's perspectives.

3.5 The sample of the study

The involved number of participants in the process of data collection, were forty nine Libyan EFL university teachers. They participated in the questionnaire. Eight reading comprehension teachers were involved in a semi-structured interview. Their ages were between twenty eight to sixty five years old. They shared similar experience and background in teaching reading comprehension module. They were also holding similar university degree of teaching different disciplines of English language. Their teaching experience was ranged from one year to forty five years old. The sampling technique involved was Simple Random Sampling. The study was carried out at the Department of English of Zawia Faculty of Education. To support reliability, the target sample was extended to include Faculty of Arts in Zawia, Zawia Language Center, Sabratha Faculty of Arts, AbuEssa Faculty of Education, Janzur Faculty of Education, and finally Faculty of Languages in Tripoli.

Table 3.1 The distribution of the participants

Faculty	Male	Female	Total number
Tripoli Faculty of Languages	5	7	12
Zawiya Faculty of Arts	2	5	7
Zawiya Faculty of Education	4	8	12
Sabratha Faculty of Arts	2	4	6
AbuEssa Faculty of Education	2	6	8
Janzour Faculty of Education		1	1
Zawia Language Center	1	2	3
	16	33	49

The research was mainly addressed to reading comprehension teachers of fourth-semester. The reason behind this selection was that the teachers would no longer be assigned to teaching in reading comprehension in the next four semesters. Moreover, the students with their teachers will be available for the researcher and not involved in pre-service teacher education training. In addition, the students' vocabulary knowledge had gradually been developed and progressed.

3.6 Research instruments

The current study utilized two instruments. These instruments are the questionnaire which is the quantitative instrument and the interview which is the qualitative one. The questionnaire was meant to collect the data while the semi-structured interview was to enrich the study with qualitative data.

3.6.1 Questionnaire

A questionnaire is a data collection tool consists of a set of questions and other prompts aims at gathering information from participants. The questionnaire was invented by Sir Francis Galton. The questionnaire consisted of nineteen multiple choice questions (MCQ). All of the items were closed-ended type. It had been selected as a research tool because it is the preferable way to gather data in which the participants feel more comfortable, expressing their ideas at ease, it also takes short time for answering (Medjahid, 2015, p.21) Dornyei (2007, p.101) states that "the popularity of questionnaires is due to the fact that they are relatively easy to construct,

extremely versatile and uniquely capable of gathering a large amount of information quickly in a form that is readily accessible".

3.6.2 Interview

In order to carry out the exploratory research, a semi-structured interview contained seven open-ended questions were addressed to eight university teachers. A semi-structured interview is a method of research used frequently in the social sciences whereas a structured interview has a fixed set of questions which does not enable one to divert, a semi-structured interview is open, allowing new ideas to be discussed during the interview as an outcome of what the interviewee says. The interviewing in a semi-structured interview generally has a model of subjects to be explored.

Interviewing as a data collection method, is employed when one uses the qualitative methodology to carry out a research. (Byrne, undated as cited in Hofisi et al, 2014, p.60). It consists of the interviewer, who asks the questions and the interviewee who answers to the questions. However, it should be mentioned that "there is no single interview style that fits every occasion or all respondents" (Denzin et al.1974) (Hofisi et al. 2014, p.60)

Since semi-structured interview's strength lies in that they are flexible "face to face interview offer possibility to modify responses and investigate underlying responses" (Robson, 2002) (Hofisi et al. 2014, p.62). Therefore, this non-standardized one -to-one interview was selected to gather information and becoming part of the "interviewing picture".

3.7 Data collection procedures

It should be mentioned that, the researcher had gone through a very tough journey in order to collect a reliable and valid data. The researcher adopted a combined mixed methodology to conduct the research. Adopting the qualitative approach to employ the semi-structured interview, and a quantitative approach to employ the questionnaire.

3.7.1 Questionnaire procedures

The researcher adopted the quantitative approach to conduct the questionnaire. Starting with Tripoli Faculty of Languages, the researcher distributed fifteen copies, targeting reading comprehension teachers. After taking the questionnaire items back, three of them unwilling to participate. With respect to Zawia Faculty of Education, the researcher delivered fifteen items. Twelve of them participated, while the other three didn't assist. Four out of twelve were males. With regard to Janzour Faculty of Education, unfortunately, only one volunteer out of ten copies. Another ten copies distributed to Zawia Faculty of Arts. Unfortunately, three of them refused to participate, the other seven actually participated. Two out of seven participants were males. The last but one station in looking for questionnaire volunteers, was Sabratha Faculty of Arts. Ten copies were delivered to the targeted respondents. Six of them actually participated. The other four unwilling to participate. Therefore, the total was six participants. Two of them were males. Finally, AbuEssa Faculty of Education, was as the last resort for the researcher to fill the gap and cover the desired number which was forty nine participants. Luckily, this time, the participants showed their willingness to take part in data collection process. The researcher delivered eight copies to be answered by two males and six females. It should be noted that, most of the participants made it harder for the researcher to accomplish the research. If they weren't absent, they claimed that they "hadn't taught reading comprehension before". It took me at least three weeks to collect data from each faculty.

3.7.2 Semi-structured interview procedures

The researcher conducted the interview, to allow her dig deeper into the interviewees' perspectives and beliefs. It also conducted to elicit data and obtain in-depth information about the issue. Moreover, it can be taken place in different places and situations covering various subjects in natural settings. In this regard, (Blaxer et al., 2006, p.172) (Alshanqeeti, 2014, p.42) argued that "just is not merely a data collection instrument, it is instead a natural way of interaction that can take place in different setting". (Dornyei, 2007) Alshanqeeti, (2014, p.40) claimed that, interviewing is "a natural and socially acceptable" method of collecting data as it can be applied in different situations covering a variety of topics".

Interviewing was taken place in different places (Faculties), after making a decision to extend the targeted sample. The whole population required forty nine participants, which Zawia college of Education could not afford to conduct a questionnaire. In addition, eight interviewees were not available in the same Faculty. Another challenge, was the unwillingness on the part of some participants to take part in

interviewing process. They were either absent at the day of the interview, or just ignoring the request claiming they were so busy. This research based on Simple Random Sampling Technique, as a result, the participation is voluntary. Therefore unintended to assist was expected. Starting with Tripoli college of Languages. Two interviewees were involved after taking permission of my supervisor to include reading comprehension teachers for this academic year 2018. They were assigned to teaching third and fourth semester. In order to break the ice, the interviewees were provided with a brief description of the research, including its title and objectives. As it was totally a new issue to discuss, they were given the chance to have a quick look at the content of the questions. Furthermore, they were kindly informed that the time limit was fifteen minutes. The researcher's role was to listen and try to elicit extra information related to the topic. Actually, both of them were generously provided detailed answers. At the end of interviewing, they were asked whether they had any comments or extra ideas to add. The same procedures were applied to the other two from Sabratha, and two Faculties from Zawia. Finally, the last two interviewees were from AbuEssa Faculty of Education. It should be mentioned that all the interviews were tape recorded except one, by note-taking, and the other by telephoneinterviewing, due to her circumstances during the month of Ramadan. They participated from AbuEssa Faculty of Education.

3.8 Summary of the chapter

In this practical chapter, the data collection is directed by a combined mixed methodology to conduct the exploratory research design. Adopting the qualitative approach to employ the semi-structured interview, and a quantitative approach to employ the questionnaire. In order to test the validity and reliability of the research instruments, a pilot study carried out at the Department of English at Zawia Faculty of Education. The sample of the study also described as well as the instruments used in carrying out this exploratory research. Data collection procedures also presented. The following chapter deals with the results obtained to be analysed with discussions.

Chapter four

Data analysis and discussion

4.0 introduction

The main aim of collecting data from the questionnaire is to answer the research questions. All data collected are analyzed according to mathematical equation which is the number obtained (the variable) divided by the total number (the constant) multiplied by a hundred percent. The equation enables the researcher to obtain the results in percentages. Then a comparison between those percentages to obtain the mean score is conducted.

As for the interviews, all data are interpreted according to the interviewees' replies to the question of the interview. This enabled the researcher to have an in depth results to assist in answering the research questions.

4.1 Teachers questionnaire analysis and discussion

Question (1) from your own perspective, what is the aim of vocabulary teaching lesson?

The results are represented in the table below:-

Table 4.1: The aim of vocabulary teaching lesson

Response	Absolute	Relative	Mean score
Options	frequency	frequency	
A	34	69.4%	0.7
В	6	12.24%	0.1
С	6	12.24%	0.1
Blank	3	6.12%	0.1
Total number	49	100%	1

Regarding q1, 69.4% (with a mean score = 0.7) of the participants believe that the aim of vocabulary teaching lesson is to increase the number of vocabulary items, whereas 12.24% (with a mean score = 0.1) of them think that the aim of the lesson is to promote depth of processing. Another 12.24% (with a mean score = 0.1) of the participants consider the aim of the lesson is to offer new learning opportunities. 6.12% (with a mean score = 0.1) of the participants with blank answers. According to the researcher, if the aim is to increase the number of vocabulary items then, the teacher's focus is on vocabulary size more than depth, which is an evidence to the study. This finding is in line with Li & Kirby (2015, p.612) who proposed that breadth

of vocabulary could be viewed as" knowing the oral and written forms of the words, the surface meanings, and basic uses of the words". It is also in line with (Irfan Tosuncuoğlu, 2015, p.5) As Scrivener indicates, "vocabulary is a powerful carrier of meaning. A learner recognizing the communicative power of vocabulary". he continues to explain "might reasonably aim to acquire a working knowledge of a large number of words. The more words I have, the more precisely I can express the exact meanings I want to. But... getting to be on familiar terms with vocabulary is quite difficult. It is also in harmony with (Vermeer, 2001, p.230) indicated that "a deeper knowledge of words is the consequence of knowing more words, or that, conversely, the more words someone knows, the finer the networks and the deeper the word knowledge." (Vermeer, 2001) words are the basic conveyors of meaning and therefore carry the key information load in communication. With respect to text coverage and reading comprehension, (Hu & Nation, 2000) Alkaboody, (2019, p.4) investigated the effect of four different text coverage levels (80%, 90%, 95%, and 100%) on unassisted reading comprehension of a fiction text and reached a conclusion that comprehension increased whenever the amount of known words increase.

Question (2) according to your experience, which is more helpful to students? The table below summarizes the results

Table 4.2: More helpful teaching approaches for students

Response Options	Absolute frequency	Relative frequency	Mean score
A	6	12.24%	0.1
В	9	18.40%	0.2
С	33	67.36%	0.7
Blank	1	2%	0.0
Total number	49	100%	1

With respect to q2, 67.36% (with a mean score = 0.7) of the participants think that mixed dimensions (aspects) of word knowledge is more helpful to students according to their experience, whereas 18.40% (with a mean score = 0.2) of them believe that explicit instruction to target words is more helpful to students. 12.24% (with a mean score = 0.1) of them said that independent engagement with complex texts is more helpful. Only 2% (with a mean score = 0.0) of them are blank answers. According to the researcher, mixed dimensions (aspects) of word knowledge is more helpful to students to ensure a well-balanced vocabulary components (breadth & depth). This

finding is in line with (Qian,1999) has emphasized that in reading comprehension both breadth and depth of vocabulary knowledge play significant roles, and that the aspects of depth of knowledge, synonymy, polysemy and collocation are important variables. (Henriksen, 1990) Mukoroli, (2011, p.16-17) indicates that, a learner has to acquire the covering of vocabulary items (i.e, the range of meaning or the appropriate references) and a learner has to learn to develop appropriate networks (i.e, which words are related to other words, and how, including antonyms and synonyms, semantic intensity, etc.

Question (3) which of the following aspects help broaden vocabulary knowledge? The following table represents the results:

Table 4.3: Teaching aspects that help broaden vocabulary knowledge

Response Options	Absolute frequency	Relative frequency	Mean score
A	15	30.61%	0.3
В	6	12.24%	0.1
С	28	57.15%	0.6
Total number	49	100%	1

In terms of q3, the majority of the participants which is 57.15% (with a mean score = 0.6) consider that synonymy, antonomy and collocations help broaden vocabulary knowledge, whereas 30.61% (with a mean score = 0.3) said that the spoken and the written form help broaden vocabulary knowledge. Only 12.24% (with a mean score = 0.1) think that the meaning and the form, help broaden it. According to the researcher, the meaning and the form help broaden vocabulary knowledge based on Nation's frame work 2001. This finding is in line with (Webb, 2013) Ebrahimi, (2017, p.22). Since it possibly increases understanding and using words, the ability to connect form to meaning is essential. However, this ability does not ensure that the words will be comprehended and used properly, and because of this fact, there is a need as well to promote depth of vocabulary knowledge.

Question (4) which of the following aspects help deepen vocabulary knowledge? The results are shown in the table below:

Table 4.4: Teaching aspects that help deepen vocabulary knowledge

Response Options	Absolute frequency	Relative frequency	Mean score
A	14	28.6%	0.3
В	14	28.6%	0.3
С	20	40.8%	0.4
Blank	1	2%	0.0
Total number	49	100%	1

With relation to q4, 40.8% (with a mean score = 0.4) of the participants agree that synonymy, antonomy and collocations help deepen vocabulary knowledge, while 28.6% (with a mean score = 0.3) of them think that deepening vocabulary by the aspects the meaning and the form. Similarly, 28.6 with a mean score = 0.3 guess that the spoken and written form help deepen vocabulary, whilst 2% (with a mean score = 0.0) of them are blank. The researcher thinks that synonymy, antonomy and collocations are the heart of the study. They could make vocabulary knowledge deeper. This finding is in line with (Cronbach, 1992) Mukoroli, (2011, p.18) for students, knowing word associations in general is not enough, they need to know various sense relations such as antonyms, synonyms, hyponyms, and collocations. "Even advanced learners with large vocabularies can contribute to fill out their lexical knowledge, as many (or most) of the words in their mental lexicons will only be partially mastered. After all, even native speakers continue to learn new words throughout their lifetimes". (Schmitt, 2007, p.757)

Question (5) how are new words developed?

The following table represents the results:

Table 4.5: Ways of developing new words

Response Options	Absolute frequency	Relative frequency	Mean score
A	39	79.6%	0.8
В	8	16.3%	0.2
С	2	4.1%	0.0
Total number	49	100%	1

With respect to q5, on how new words developed, the majority of the participants 79.6% (with a mean score = 0.8) agree that vocabulary items are developed through reading, while 16% (with a mean score = 0.2) of them suppose that they are developed through the formal repetition of definitions. Only 4.1% (with a mean score

= 0.0) go with option C through using a bilingual dictionary. The researcher believes that reading is the major source of developing new words which in turn supports the relationship between reading comprehension and vocabulary knowledge. This finding is in line with (Nation,1990, Budiwahyunigsih,(2008, p.13). "The learners will master the vocabulary more through reading and speaking skills, but it is possible to get vocabulary through the other skills, such as listening and writing". It is also in line with Jordan (1997, p.162) "the most effective way for students to increase their active vocabulary store is for them to be centrally involved in the learning process. Reading may be the single largest source of vocabulary growth". (Nagy,1988,p.30) "Reading is one of the most important skills to be learned in any language. It is used not only as a source of information and pleasure but also as a means of consolidating and extending knowledge of the language". (Rashidi & Khosravi, 2010, p. 82).

Question (6) how can we help the Libyan student to acquire a great deal of vocabulary?

The table below summarizes the results obtained above:

Table 4.6: Teachers' assistance for students to acquire more vocabulary

Response Options	Absolute frequency	Relative frequency	Mean score
A	10	20.41%	0.2
В	13	26.53%	0.2
С	25	51.02%	0.5
Blank	1	2.04%	0.0
Total number	49	100%	1

With regard to q6, 51.02% (with a mean score = 0.5) of the participants guess that the Libyan students can be assisted to acquire a great deal of vocabulary through a well-balanced approach, whilst 26.53% (with a mean score = 0.2) of them think they can be helped through an independent vocabulary learning, whereas 20.41% (with a mean score = 0.2) of them go with through a collection of high frequency words. Only 2.04% (with a mean score = 0.0) are blank. The researcher believes that the Libyan student can be helped through a well-balanced approach to involve the different components of vocabulary knowledge both deep and broad aspects. This finding is in line with Schmitt (2008) who argued that the scope of the tasks of teaching

vocabulary to English language learners recommends a balance between breadth and depth.

Question (7) most of reading comprehension teachers find the breadth (the number of words known) of vocabulary knowledge...

The results are shown in the table that follows:

Table 4.7: Breadth as a predictor of word knowledge

Response Options	Absolute frequency	Relative frequency	Mean score
A	41	83.6%	0.8
В	-	-	-
С	4	8.2%	0.1
Blank	4	8.2%	0.1
Total number	49	100%	1

With respect to Q7, the majority of the participants 83.6% (with a mean score = 0.8) think that the breadth of vocabulary knowledge is a strong predictor of word knowledge, whereas 8.2% (with a mean score = 0.1) said that it is not an adequate predictor, whilst 8.2% (with a mean score = 0.1) are blank answers. it is noticed that none of the participants have chosen option (B). The researcher believes that it is a strong predictor of word knowledge. This finding is in line with (Webb, 2007b) Sasao, (2013, p.6). The more larger vocabulary size of learners, the more synonyms of unknown words. Knowledge of synonymy might be the facilitator of learning target words of vocabulary aspects such as grammatical functions and syntagmatic associations. It is in harmony with (Vermeer, 2001, p.230). indicated that "a deeper knowledge of words is the consequence of knowing more words, or that, conversely, the more words someone knows, the finer the networks and the deeper the word knowledge".

Question (8) the ability to comprehend a text depends on the ...

The table below demonstrates the obtained results:

Table 4.8: The ability to comprehend a text

Response Options	Absolute frequency	Relative frequency	Mean score
A	32	65.3%	0.7
В	16	32.7%	0.3
С	1	2%	0.0
Total number	49	100%	1

Regarding q8, 65.3% of the participants (with a mean score = 0.7) believe that it depends on the word recognition skill, while 32.7% (with a mean score = 0.3) said it depends on vocabulary acquisitions. Just 2% (with a mean score = 0.0) of the participants think that it depends on memorizing. The researcher believes that the ability to comprehend a text depends on the word recognition skill, that is to say, the word is first attacked by seeing or hearing and to be broken down into letters so as to be understood. This finding is in line with Berrabah, (2014, p.123) reading comprehension entails some skills and knowledge resources i.e., the ability to decode written forms for successful word recognition. It takes the first place among twelve skills summarized by William Grabe, 2009.

Question (9) in order to succeed at the university level, teachers need to...

The results are represented in the table that follows:

Table 4.9: Successful university teachers

Response Options	Absolute frequency	Relative frequency	Mean score
A	8	16.3%	0.2
В	9	18.4%	0.2
С	31	63.3%	0.6
Blank	1	2%	0.0
Total number	49	100%	1

Regarding q9, what do the teachers need to succeed at the university level, 63.3% (with a mean score = 0.6) of the participants go with satisfying learners' needs, whereas 18.4% (with a mean score = 0.2) said that they need to depend on vocabulary content, while 16.3% (with a mean score = 0.2) think that they need to direct vocabulary instructions. Only 2% (with a mean score = 0.0) are blank. The researcher thinks that in order to succeed at the university level, teachers need to direct vocabulary instructions, since English is a foreign language and the teacher is a guide and facilitator. So, it is better to teach them explicitly. This finding is in line with Elley's (1989) study, highly proposes that vocabulary expansion was much larger when teachers presented, even if shortly, the meanings of words (Madani, 2016, p.21).

Question (10) English words are growing and changing. In your opinion, what are the challenges?

The obtained results above are shown in the table below:

Table 4.10: English words growth and change, challenges faced by teachers

Response Options	Absolute frequency	Relative frequency	Mean score
A	24	49%	0.5
В	10	20.4%	0.2
С	14	28.6%	0.3
Blank	1	2%	0.0
Total number	49	100%	1

Considering q10, the challenges as English words are growing and changing. A considerable number of the participants 49% (with a mean score = 0.5) believe that the big challenge is the students` lexical level, whereas 28.6% (with a mean score = 0.3) guess that the limited time, while 20.4% (with a mean score = 0.2) of them think that the subject matter is the challenge. Only 2% (with a mean score = 0.0) of them are blank. The researcher believes that the biggest challenge for the teachers is the students lexical levels as limited number of vocabulary hinder students from understanding texts. This finding is in line with (Berrabah, 2014, p.345). "If learners do not know how to expand their vocabulary, they gradually lose interest in learning".

Question (11) new vocabulary are seen by students as a great obstacle to comprehend a text. Is it because of...

The table below represents the obtained results:

Table 4.11: New vocabulary as an obstacle encountered by students

Response Options	Absolute frequency	Relative frequency	Mean score
A	24	49%	0.5
В	17	34.7%	0.3
С	7	14.3%	0.1
Blank	1	2%	0.0
Total number	49	100%	1

Regarding q11, new vocabulary are seen by students as a great obstacle to comprehend a text. It is because of insufficient number of vocabulary according to 49% (with a mean score = 0.5) of the participants, while 34.7% (with a mean score = 0.3) of them go with the teachers approach, whilst 14.3% (with a mean score = 0.1) thinks that it is because of subject material. Only 2% (with a mean score = 0.0) are blank. The researcher believes insufficient number of vocabulary which hinder their

understanding a given text. This finding is in line with (Grabe & Stoller, 2002) Teng, (2014, p.31). When EFL students are confronted with an unfamiliar text, the biggest challenge in recalling the established meaning of the passages is the unknown vocabulary. Murtaga (2006, p.5).) indicates that, "when an Arab EFL student is asked why s/he finds English a complicated language to read, the common answer is that most of the words in the text are new and she does not know what they mean".

Question (12) what are the factors that affect the knowledge of words? The obtained results are shown in the following table:

Table 4.12: Factors affecting word knowledge

Response Options	Absolute frequency	Relative frequency	Mean score
A	6	12.25%	0.1
В	34	69.39%	0.7
С	3	6.12%	0.1
D	3	6.12%	0.1
Blank	3	6.12%	0.1
Total number	49	100%	1

With relation to Q12, the factors that affect the knowledge of words, 69.39% (with a mean score = 0.7) of the participants think that background knowledge, while 12% (with a mean score = 0.1) said that the direction of instruction does, whereas 6.12%(with a mean score = 0.1) with broad knowledge, 6.12% (with a mean score = 0.1) also with deep knowledge, and finally another 6.12% (with a mean score = 0.1) are blank. The researcher believes that the direction of instruction affects the knowledge of words, since the teacher is the guide and leading the learning process to the right direction in the EFL contexts. This finding is in line with Stahl and Fairbanks (1986), explicit vocabulary teaching has obvious consequences on vocabulary learning and comprehension. In contrast, they suggest that vocabulary instruction should involve much more than definitions so as to develop reading comprehension. Dictionary definitions offer insufficient details on word meanings (McKeown, 1993) Butler, (2007, p.29). Regarding intentional vocabulary teaching, (Graves, 2006) Alkaboody, (2019, p.8) claims that explicit vocabulary instruction should present information about the context and the meaning of the word, involve learners and devote time for word processing, allow frequent exposure to the words and give them chance to revise and practice newly learned words, and create a dialogue around the words.

Question (13) to understand the words to complete an activity, do you recommend to...

The results below are demonstrated in the table below:

Table 4.13: Teachers' recommendations to students to understand words in an activity

Response Options	Absolute frequency	Relative frequency	Mean score
A	4	8.16%	0.1
В	19	38.78%	0.4
С	25	51.02%	0.5
Blank	1	2.04%	0.0
Total number	49	100%	1

Regarding q13, what the teachers recommend to understand the words to complete an activity, the majority of the participants 51.02% (with a mean score = 0.5) think that to show the relationship with other words, while 38.78% (with a mean score = 0.4) recommend to search either in the context or in a dictionary, whereas 8.16% (with a mean score = 0.1) with skipping the unknown words. Only 2.04% (with a mean score = 0.0) are blank. The researcher believes that showing the relationship with other words is the best way to understand the words in an activity. This finding is in line with (Firth,1957) "Know a word by the company it keeps". And in line with Miller and Fellbaum (1991) Mukoroli, (2011, p.20) indicate that knowing of how verbs, adjectives and nouns work in reference to another is significant in learning / acquiring word meaning.

Question (14) how to enable the students to acquire an adequate vocabulary? The obtained results are shown below:

Table 4.14: Assistance for adequate vocabulary acquisitions

Response Options	Absolute frequency	Relative frequency	Mean score
A	5	10.20%	0.1
В	31	63.27%	0.6
С	12	24.49%	0.2
Blank	1	2.04%	0.0
Total number	49	100%	1

With respect to q14, on how to enable the students to acquire an adequate vocabulary, 63.27% (with a mean score = 0.6) of the participants think that new words should be studied in context, whereas 24.49% (with a mean score = 0.2) said that to focus more on synonymy and antonyms of new words. 10.20% (with a mean score = 0.1) go with more attention should be given to isolated new words. Only 2.04% (with a mean score = 0.0) are blank. The researcher thinks to focus more on synonyms and antonyms of new words to enable the students to acquire an adequate vocabulary. She thinks instead of knowing single words, the student would acquire two words and more at the same time and help our human brain to acquire language as clusters. This finding is in line with (Berrabah, 2014, pp. 23-24) "Teaching words in semantic clusters is particularly effective since vocabulary expansion involves not just the acquisition of the meaning of individual words but also learning the relationships among words and how these words relate to each other".

It is in line with (Idol,1988) Woolley (2011, p.23). "Many less able readers tend to separate units rather than clustering them into larger meaningful wholes". "Words are not acquired in an isolated way, they come out in chunks and in learning and memorizing a list of words in the FL does not lead to the acquisition of the language". (Hyso & Tabaku, 2011, p.55).

Question (15) which of the following aspects help memorize the new words? The table below demonstrates the below results:

Table 4.15: Helpful aspects for memorizing new words

Response Options	Absolute frequency	Relative frequency	Mean score
A	11	22.45%	0.2
BFR	7	14.29%	0.1
С	30	61.22%	0.6
Blank	1	2.04%	0.0
Total number	49	100%	1

Considering q15, the aspects that help memorize the new words 61.22% (with a mean score = 0.6) of the participants believe using them in sentences, while 22.45% (with a mean score = 0.2) think varieties of texts, whereas 14.29% (with a mean score = 0.1) said home assignment would help memorizing the new words. Only 2.04% (with a mean score = 0.0) are blank. The researcher believes that using them in sentences help

storing new words in memory and manipulating them. This is in line with (Allen & Vallette, 1977, p.151) Once students know the meaning of a new word, they must use it often and correctly in the target language in order to master the word and make it part of their personal vocabulary.

Question (16) what kind of materials do you best prefer?

The obtained results are presented in the table that follows:

Table 4.16: The materials that teachers best prefer

Response Options	Absolute frequency	Relative frequency	Mean score
A	22	44.90%	0.4
В	16	32.65%	0.3
С	6	12.24%	0.1
D	3	6.13%	0.1
Blank	2	4.08%	0.0
Total number	49	100%	1

With regard to q16, what kind of materials do teachers prefer, 44.9% (with a mean score = 0.4) of the participants prefer texts, while 32.65% (with a mean score = 0.3) of them prefer textbooks, whereas 12.24% (with a mean score = 0.1) of them said picture and finally writing on the board takes only 6.13% (with a mean score = 0.1), are blank answers 4.08%. (with a mean score = 0.0) The researcher believes that texts are preferable than other materials for university teachers. This finding is in line with (Berrabah, 2014, p.111) "Texts in reading comprehension collections usually cover a variety of function and language".

Question (17) in the contexts of reading comprehension, who has the power to impact students vocabulary knowledge?

The following table shows the below results:

Table 4.17: The power which impacts students vocabulary knowledge

Response Options	Absolute frequency	Relative frequency	Mean score
A	6	12.24%	0.1
В	2	4.09%	0.0
С	38	77.55%	0.8
Blank	3	6.12%	0.1
Total number	49	100%	1

Concerning q17, who has the power to impact students vocabulary knowledge, the majority of the participants 77.55% (with a mean score = 0.8) believe that teacher's approach has, while 12.24% (with a mean score = 0.1) think that educators who have power, whilst 6.12% (with a mean score = 0.1) are blank. Only 4.09% (with a mean score = 0.0) said students. The researcher believes that the teacher's approach has the power to impact students vocabulary knowledge, since English is taught as a foreign language and the only opportunity is available in the classroom, moreover, the teacher is a guide, reference and facilitator in the eyes of his students. It is another evidence to support the study to make the teacher the center of conveying the learning message. This finding is in line with (Day & Brumfit, 1987) Berrabah, (2014, p.351) who suggested that "the teacher is a role model for students, i.e., an active member of the classroom reading community who demonstrates what it means to be a reader and the rewards of being an FL reader". It also in harmony with (Albukbak, 2008, p.65) "most students want and appreciate a lot of direct teacher support when they are beginning something new, e.g. a subject, a lesson, or a verb form".

Question (18) in your opinion, selecting proper texts depends mainly on ...

The results are summarized in the following table:

Table 4.18: Proper texts selection

Response Options	Absolute frequency	Relative frequency	Mean score
A	11	22.45%	0.2
В	20	40.82%	0.4
С	2	4.08%	0.0
D	4	8.16%	0.1
Е	9	18.37%	0.2
Blank	3	6.12%	0.1
Total number	49	100%	1

Concerning Q18, the participants opinion on selecting proper texts what does it mainly depend on? it depends on learner's needs takes a higher percentage of all options 40.82% (with a mean score = 0.4), while learner's lexical level takes 22.45% (with a mean score = 0.2), whereas 18.37% (with a mean score = 0.2) with well-balanced components of vocabulary, whilst 8.16% (with a mean score = 0.1) with teacher's experience, while 6.12% (with a mean score = 0.1) with blank answers, only

4.08% (with a mean score = 0.0) go with teacher's back ground. The researcher believes that well-balanced components of vocabulary is the base of selecting proper texts, including word parts, the meaning and the form and the relationship with other words, that is to say, taking into consideration both dimensions (breadth and depth) of vocabulary knowledge while designing the syllabus. This finding is in line with (Berrabah, 2014, p.111). "To select texts that we can control linguistically and lexically. At the linguistic level, we may alter from simple to complex structures and at the level of lexis, we can easily move from more frequent to less frequent words."

Question (19) are students with limited vocabulary size considered ...

The following table represents the results obtained:

Table 4.19: Vocabulary size insufficiency

Response Options	Absolute frequency	Relative frequency	Mean score
A	10	20.41%	0.2
В	18	36.73%	0.4
С	21	42.86%	0.4
Total number	49	100%	1

With relation to the last question 19 which is about the students with limited vocabulary size. 42.86% (with a mean score = 0.4) of the participants consider them struggled readers, while 36.73% (with a mean score = 0.4) believed that they are average readers, whilst 20.41% (with a mean score = 0.2) of them with non-struggled readers. The researcher believes that limited vocabulary size is considered a big challenge and a major hindrance for EFL students. It impacts their understanding with a large number of unknown words. Therefore, they are struggled readers. This finding is in line with (Berrabah, 2014, p.345) "Having a limited vocabulary is a banner that prevents learners from learning a foreign language". Limited vocabulary volume could hinder students to reach the desired level of comprehension (Madani, 2016, p.48).

Note: After analyzing data, it was observed that, there is not any difference in teachers' answers due to years of experience. Whether it is a minimum experience (1) year or maximum (45) years, the participants answers to the questionnaire are similar to one another.

Note: see appendix three

4.2 Teachers' interview analysis and discussion

Discussing new words in the class. The consideration of broad and deep aspects

The data analysis has revealed that almost all of the participants have similar perceptions as to discussing the new words along with the aspects (broad and deep) to consider. Their answers has shown a general agreement on the new word to be dealt with in a sentence and guessed from the context, except for one teacher who focuses on the word as single as to parts of speech. More attention was placed on the written and spoken form and use, with little emphasis on the other aspects, such as synonymy, antonomy and collocation. That means, they do rely on the broad side of the word, which is represented in form, meaning, and use.

The participants' perspective is not in harmony with (Henriksen, 1990,as cited in Mukoroli, 2011,p.16-17) indicates that, a learner has to acquire the covering of vocabulary items (i.e., the range of meaning or the appropriate references) and a learner has to develop appropriate networks (i.e., which words are related to other words, and how, including antonyms and synonyms, semantic intensity, etc. "Even advanced learners with large vocabularies can contribute to fill out their lexical knowledge, as many (or most) of the words in their mental lexicons will only be partially mastered. After all, even native speakers continue to learn new words guess the meaning of the new words, throughout their lifetimes" (Schmitt, 2007, p.757).

The participants' perceptions are guided by Krashen's idea (1989) that if students can understand the text effectively, they can learn all the words they need from the context. Coady,(1997). (Amiryousefi & Dastjerdi, 2010, p.92). In contrast, many researchers do not consider in the skillfulness of context alone and demand the second method-reading in addition vocabulary improvement activities or explicit teaching of vocabulary teaching (Coady & Huckin, 1997; Schmitt, 2002b) (Amiryousefi & Dastjerdi, 2010, p.92).

Nation and Coady indicate that "the very redundancy or richness of information in a given context which enables a reader to guess an unknown word successfully could also predict that the same reader is less likely to learn the word because he or she was

able to comprehend the text without knowing the word". (Coady and Nation, 1988, p.101). The researcher believes that all the components of vocabulary knowledge should be equally considered (breadth and depth) in order to develop new words of the EFL students and guarantee the expansion of vocabulary knowledge. It is also in line with (Read, 2004, p.153) who states that, "depth of knowledge focuses on the idea that for useful higher-frequency words learners need to have more than just a superficial understanding of the meaning; they should develop a rich and specific meaning representation as well as knowledge of word's formal features, syntactic functioning, collocational possibilities, register characteristics and so on. knowing a word entails more than just to be familiar with its meaning and form" (Schmitt & McCarthy, 1997). The researcher's perspective is in harmony with (Huang, 2006, p.63) Both dimensions (i.e. breadth and depth of vocabulary) play significant roles in reading comprehension and that combining vocabulary reading breadth and depth together has an enormous effect on reading comprehension.

This indicates that there is a gap to be filled. Much more emphasis is placed on the breadth / size of vocabulary knowledge which leads to superficial understanding of the meaning of words. Therefore, all the concerned whether experts or academic teachers of English language are required to think highly of combining breadth and depth in reading comprehension teaching lessons.

 Teachers' difficulties and facilitators during teaching with the causes behind them..

As it is shown from data analysis, most of the participants agree that their difficulty is the students' lexical level. The reason behind that is lack of extensive reading. They don't read a lot but only for passing exams and not for pleasure. However, one of the interviewees disagrees by saying "all students think in Arabic. They transfer their ideas from Arabic to English, because of L1 interference behind their conveying ideas". The teachers' perceptions are in agreement with Alahrish experience as an EFL university lecturer in Libya "many language learners seem to be well aware that their lack of vocabulary knowledge is their major problem in learning. Students frequently suffered not only from communicating in English, but also struggled to read and comprehend some of the materials offered by their teachers". In terms of teachers' facilitators, the participants have different points of view. Preparing the lesson in

advance, making use of technology and making the students explain for their colleagues. The participants' perspectives are not in line with (Weiser, 2013) who stated that teaching and refreshing the largely used prefixes and suffixes helps in vocabulary learning For example, the prefixes un, in, im, il, ir, re, dis, and super account for 97% of all printed words in English. Furthermore, the suffixes (ed, ing, ly, and s/es) make up 97% of all suffixed words in English. Teaching content specific Latin and Greek assists vocabulary growth. For example, teaching the word "bio", meaning life, facilitates understanding words, such as biography, biology, and bio geographer when reading. (Weiser, 2013). The researcher believes that the best facilitator is to emphasize explicitly the paradigmatic relationship between words (synonymy and antonymy) and syntagmatic relationship (collocations) for their crucial role in expanding vocabulary knowledge. Another facilitator lies in explicitly presenting word parts. As for the difficulties, the researcher believes that the lexical level of the students is the most prominent hindrance caused by the limited size of vocabulary knowledge and lack of depth knowledge.

It is an evidence that the lexical level of the students is the most prominent hindrance caused by the limited size of vocabulary knowledge and lack of depth knowledge. Therefore, more attention should be placed on the combination of breadth and depth of vocabulary knowledge in teaching lessons.

 Vocabulary knowledge definition. Its relationship with reading comprehension and aspects to be focused on.

The data analysis has shown that most of the teachers agree that vocabulary knowledge can be briefly defined as knowing everything about that word as single and among other words. The amount of lexical items that the students use in multiple contexts except for one of them who defines it as "in short and brief definition is to read a lot". Almost all of them strongly agree that there is a deep relationship between vocabulary knowledge and reading comprehension, except one said that there is some relation between the two. The aspects to be focused on are the written and spoken form, meaning and use, other aspects according to their experience are helpful and useful and makes it easier to understand. Some said it depends on the level of the students. However, the majority of the participants focus on meaning as an important aspect.

The participant's perceptions are in harmony with, vocabulary knowledge is the most important factor contributing to reading comprehension (Laflamme, 1997), Weiser, (2013). Vocabulary knowledge refers to words units (like idioms and phrasal verbs) that have a common meaning (Qing, 2009 p.28). A widely-known psycholinguist George A. Miller (1995, p.5) claimed that for a word to be known, a learner has to know " its own sound, its own spelling, its own meaning, its own role, its one use, its own history" (Kulikova, 2015, p.5) As for reading comprehension connection, teachers' perspectives are in line with (Droop and Verhoeve 2003) (Madani, 2014, p. 117) who reported a strong relationship between vocabulary knowledge and improvement in reading comprehension. Qian (2002, p. 518) (Alkaboody, 2019, p.9) states that, "having a larger vocabulary gives the learner a larger database from which to guess the meaning of unknown words or behavior of newly learned words, having deeper vocabulary knowledge will very likely improve the results of the guessing work". The researcher believes that vocabulary knowledge is defined as overall understanding and comprehensive knowledge of a given target word to include everything about it and how it is related to other words she also believes that there is a strong relationship between vocabulary knowledge and reading comprehension and both dimensions breadth and depth are positively correlated. The aspects that should be focused on are synonymy antonomy and collocations. The researcher's perspective is in harmony with (Qian, 1999, 2002) asserts that both breadth and depth of vocabulary knowledge play essential roles and that the polysemy, synonymy and collocations, which are vital elements in depth of vocabulary, are significant variables. And in harmony with (Qing, 2009, p.28). Vocabulary knowledge refers to words or multi-word units (like idioms and phrasal verbs) that have a common meaning.

This indicates that vocabulary knowledge plays a significant role in reading comprehension. Since there is a strong relationship between vocabulary knowledge and vocabulary comprehension, these ignored aspects (synonymy, antonomy and collocations) should be focused on by teachers.

• Students' strengths and weaknesses while assessment. How many words and how well should a language learner know a given word.

As it is demonstrated from data analysis, the teachers agree that points of strength and weakness are discovered by reading and using the new words in speaking and writing. Most of the teachers believe that memorization is the students' point of weakness, they forget easily, besides spelling and pronunciation. The point of strength is their ability to speak and write using just simple words, along with punctuation. As for their opinions on the number of words that should be known, some of them give it in numbers, more than 2000 words to speak or write. Some others give it in percentage, above (80%) to be able to understand. The more the better. Some of them can't limit. As for how well, most of them agree that well enough how to use it in multiple contexts and the student should be aware of its different aspects. Teachers' perceptions are not in harmony with (Nation & Waring, 1997) who suggest that the lexical starting point for reading comprehension is roughly between 3000 and 5000 word families. Approximation of text covering required for effective L2 reading differ highly for the majority, it is almost between 95% and 99% (Mehrpour & Rahim, 2010) (Harkio & Pietila, 2016, p.1080). It is not also in line with (Hirsch 2003, p.16) (Al-Darayseh, 2014, p.1109) said that "vocabulary experts agree that adequate reading comprehension depends on a person already knowing between 90 and 95 percent of the words in a text. With respect to text coverage and reading comprehension, (Hu & Nation, 2000, as cited in Alkaboody, 2019, p.4) investigated the effect of four different text coverage levels (80%, 90%, 95%, and 100%) on unassisted reading comprehension of a fiction text and reached a conclusion that comprehension increased whenever the amount of known words increase. The researcher believes that the point of strength is their ability to speak using limited simple words. The point of weakness is spelling mistakes and limited vocabulary knowledge. As for how many, at least 3000 words in order to use the target language. How well, through knowing a great deal of sub knowledge's related to the target word. It is in line with the above mentioned researchers.

There is an evidence that students' point of weakness is caused by limited vocabulary knowledge. As it is known at least 3000 words are required in order to use the target language. English language experts need to think highly of this vital issue.

• Vocabulary knowledge expansion, teacher or student responsibility.

The data analysis has revealed that most of the participants agree that there is a balance between the two sides. Both are responsible and complete each other. However, two of them don't agree. One of them said 'it's the teacher who has done all the job. The heavy thing comes by the teacher. It depends on the learner as well. The students have a good role to keep the words". The other participant said "yes, it's the responsibility of the teacher. The teacher is a guide who lead the students to read magazines and newspapers. The students role is to interact in a given piece of writing". The participants' perspectives are not in harmony with (Nunan, 189) Albukbak, 2008, p.65) "teacher talk is probably the major source of comprehensible TL input the learner is likely to receive" and is not in harmony with (Stahl cited in Taylor, 1990) who revealed that explicit vocabulary instruction improves understanding. He indicates that, the more unknown words in the text, the less comprehension of the text (Mukoroli, 2011, p.5). Their perceptions are in agreement with "Reading is one of the most important skills to be learned in any language. It is used not only as a source of information and pleasure but also as a means of consolidating and extending knowledge of the language" (Rashidi & khosrsvi, 2010, p.82). The researcher believes that expansion of vocabulary knowledge is the responsibility of the teacher since he is the source of input in EFL context. It is also in harmony with (Nunan, 189) Albukbak, (2008, p.65) "teacher talk is probably the major source of comprehensible TL input the learner is likely to receive".

This EFL context indicates that the teacher is responsible of vocabulary knowledge expansion. He is the source of the comprehensible input, a guide and facilitator. The combination of breadth and depth is the suitable solution to be considered by the concerned experts of English language teaching.

• Teachers' aspects of interest when it comes to usefulness and practicality.

The data analysis has revealed different points of view. Most of the teachers are interested in the meaning of new words. Some of them said they are interested in grammar and the phonology side. Others on pronunciation stress and parts of speech. All of them agree that they are useful and practical when the students know how to use them in speaking and writing. However, their perceptions are in harmony with (McCarten, 2007, p.26) who states that all word knowledge ranges on a continuum

than being known vs. unknown. "learning is a gradual process that it takes place in small, manageable increments over time". And it is in line with there would be a general acceptance that lexical knowledge is best conceptualized as a continuum between being able to recognize the meaning of a word and being able to use it productively (Richards, 1979) (Amiryousefi & Dastjerdi, 2010, p.92). and not in harmony with some researchers who think that EFL learners of reading comprehension become better by giving them with instruction in synonymy and polysemy of words, and not simply the direct meanings of these words (Mehrpour, et al. 2011) Qin, (2012, p.11). The researcher is interested in synonymy, antonomy and collocations for their crucial role in expanding vocabulary knowledge. They are useful and practical when the students reach the stage of using a larger vocabulary in the productive skills such as speaking and writing. The researcher's perspective is in line with (Webb, 2007b) (Sasao, 2013, p.6) the more larger vocabulary size of learners, the more synonyms of unknown words. Knowledge of synonymy might be the facilitator of learning target words of vocabulary aspects such as grammatical functions and syntactic association. Knowing the meanings of words and their various collocations is in strong relationship with reading comprehension and therefore vocabulary indicates an important factor to increasing reading performance (Beck, et al. 1982) (Mohammadi & Afshar, 2016).

This indicates the ignorance of synonymy, antonomy and collocations. They are not largely employed by teachers. Therefore, approaches in teaching vocabulary need to be modified for the benefit of the students and teachers alike.

 Suggestions and additions on vocabulary knowledge and reading comprehension connection.

The data analysis has revealed that a considerable number of the teachers don't add anything. One of them said "there must be a variety of texts with different titles, literary and scientific. The other says that I like the topic you brought here. Teaching is changing day by day, therefore teachers should catch up and be updated with the latest ways of teaching vocabulary and to move away from the traditional ones". Some other said "reading is important. It should be given a lot of attention. It's hardly ever find students read for pleasure". Finally, one of them said "my advice is to read a lot. The vocabulary knowledge will be improved by reading along with speaking and

writing". The participants' perceptions are not in line with (Dolch & Leeds, 1992, p.189) (Mukoroli, 2011, p.18) who emphasized that to know the word meaning is "growth". They claim that present vocabulary tests are limited and need to include a part on testing word meaning and synonyms. Their perceptions are in line with "Reading is the construction of the meaning of text. It is an active and strategic process, in which the reader's abilities and knowledge interact with the characteristics of the text such as genre, the wording and the structure of the text" (Shellings, et al. 2006, p.550) Rashidi & Khosravi, (2010, p.82). The researcher suggests that relying on the breadth dimension of vocabulary might cause problems at the depth level of vocabulary knowledge. Therefore applying a combination of approaches (breadth & depth) will support the expansion of vocabulary knowledge. Moreover, applying them in tests to fully measure the students' abilities. Therefore, overcoming the problem of insufficient vocabulary knowledge. The researcher's perspective is in line with (Dolch & Leeds, 1992, p.189) Mukoroli, (2011, p.18) who emphasized that to know the word meaning is "growth". They claim that present vocabulary tests are limited and need to include a part on testing word meaning and synonyms. It also in line with Read (2001) indicates out that it is important to assess lexical knowledge of vocabulary; however, it is also essential to test how well learners understand a word in multiple contexts. This is important because knowing syntactic knowledge of a word and how to use this word in different contexts is more beneficial and practical for learners than just knowing the basic meaning of this word (p.320) (Qin, 2012,p.45).

It is an evidence that this problem is still existed in Libya. It hasn't been tackled previously. Much more emphasis is placed by teachers on the breadth / size of vocabulary knowledge. It leads to superficial and negative effect on understanding of the meaning of words. Mention the standard of the concerned students, e.g. students at the English departments and even the graduates of them. Some students don't even know what breadth is. Therefore, this research is the modest attempt to shed some light on breadth and depth of vocabulary impact on reading comprehension. Knowing a word involves not only knowing it's form and use, but also knowing other related words. Thus, more ability to express himself / herself and the more confidence to be built. It is a wakeup call to all the concerned whether experts or academic of English language teaching to undertake their responsibilities and think highly of this vital issue

Note: see appendix four

4.3 Data interpretation of teachers' questionnaire

The results deduced from the answers of the first question, demonstrate that most of the teachers (69.4%) believe that the aim of vocabulary teaching lesson is to increase the number of the vocabulary items and only a smaller percentage of them (12.24%) think that the aim of the lesson is to promote depth of processing.

Furthermore, the majority of the teachers (67.36%) think that mixed dimensions (aspects) of word knowledge is more helpful to students according to their experience, whereas only (12.24%) of them said that independent engagement with complex texts is more helpful. These findings are deduced from the second question.

Moreover, the results obtained from the third question revealed that the majority of teachers (57.15%) consider that synonymy, antonomy, and collocations help broaden vocabulary knowledge, while (12.24) believe that the meaning and the form help broaden vocabulary knowledge.

Then from question four, the findings show that (40.8%) of the teachers agree that synonymy, antonymy and collocations help deepen vocabulary knowledge, whereas, (28.6%) guess that the spoken and written form help deepen vocabulary knowledge.

In addition to that, the majority of the teachers (79.6%) agree that vocabulary items are developed through reading, while only (4.1%) go with using a bilingual dictionary. This is shown in the findings of the fifth question.

Moreover, from the results obtained from the sixth question, it can be observed that most of the teachers (51.02%) believe that the Libyan students can be assisted to acquire a great deal of vocabulary through a well-balanced approach, whereas (20.41%) of them suppose that through a collection of high frequency words.

As for the findings obtained from the seventh question, it can be noticed that the majority of the teachers (83.6%) think that the breadth of vocabulary knowledge is a strong predictor of word knowledge, while (8.2%) think that it is a weak predictor.

The results obtained from question eight demonstrate that the higher percentage of the participants (65.3%) believe that the ability to comprehend a text depends on the word recognition skill, whereas (2%) of them believe that it depends on memorization.

From the answers of the ninth question, it can be observed that most of the teachers (63.3%) believe that satisfying learners' needs is what the teachers need to do to succeed at the university level, whereas (16.3%) think that they need to direct vocabulary instructions.

The findings of question number ten show that the majority of the teachers (49%) agree that the biggest challenge is the students' lexical level, while (20.4%) of them think that the subject matter is the biggest one.

(49%) of the teachers in the findings obtained from question eleven suppose that it is because of insufficient number of vocabulary, that's why new vocabulary are seen as a great obstacle, while (14.3%) believe that it is because of subject material.

The results of question twelve reveal that the majority of the teachers (69.39%) agree that background knowledge is the factor that affect the knowledge of words, while (6.12%) said that it is the broad and deep knowledge of words.

As far as the answers of question number thirteen, it is observed that a considerable number of teachers (51.02%) agree that what the teachers recommend to understand the words to complete an activity is to show the relationship with other words, whereas (8.16%) with skipping the unknown words.

Moreover, the majority of the teachers (63.27%) think that to enable the students to acquire an adequate vocabulary, new words should be studied in context, while (10.20%) go with more attention should be given to isolated new words; this is revealed in the results of question number fourteen.

Results of question number fifteen demonstrate that most of the teachers (61.22%) agree that the aspect that help memorize the new words is using them in sentences, whereas (14.29%) suppose that home assignment would help memorize the new words.

It is noticed that a higher percentage of the teachers (44.90%) prefer texts as a kind of material, whilst (6.13%) of them said writing on the board; this is revealed in the question number sixteen.

In addition to that, results of question seventeen show that the majority of the teachers (77.55) agree that the teacher's approach has the power to impact students vocabulary knowledge, while only (4.09%) said students.

In terms of the results deduced from the answers of question number eighteen, the majority of the teachers (40.82%) believe that selecting proper texts depends mainly on learners' needs, whereas only (4.08%) go with teacher's background.

Finally, the results of the last question number nineteen demonstrate that the majority of the teachers (42.86) agree that students with limited vocabulary size are considered struggled readers, whereas (20.41%) of them believe that they are non-struggled.

4.4 Data interpretation of teachers' interview

As it is revealed from the results of the teachers' interview, they have almost similar perceptions as to discussing the new words along with the aspects (broad and deep) to consider. Their answers has shown a general agreement on the new word to be dealt with in a sentence and guessed from the context, except for one teacher who focuses on the word as single as to parts of speech. More attention was placed on the written and spoken form and use, with little emphasis on the other aspects, such as synonymy, antonomy and collocations. That means, they do rely on the broad side of the word, which is represented in form, meaning, and use. The findings were deduced from question one answers.

The results obtained from teachers' answers to question number two has revealed that the teachers have different points of view, in terms of facilitators and obstacles during teaching vocabulary with their reasons. However, most of them agree that the level of the students is not that good, they don't like reading. Some others say students transfer their ideas from Arabic to English, they forget easily, wrong pronunciation and wrong spelling, some words don't have any equivalent, some loan words (French) and the time is somehow challenging. The reasons behind these difficulties are reading for exams just pass, lack of reading, lack of motivation, L1 interference, depending on

translation, lack of peer correction and the approach used is wrong. Regarding the facilitators, most of the teachers agree that using technology such as PowerPoint and YouTube make teaching vocabulary much easier. Using different techniques and tools (pictures), explaining the new words by the students to their colleagues, using a dictionary when necessary, preparation of the text in advance by the students, giving them homework, using unknown words in another sentence.

The results obtained from teachers' answers to question three demonstrate that most of the teachers agree that vocabulary knowledge can be briefly defined as knowing everything about that word as single and among other words. The amount of lexical items that the students use in multiple contexts. Almost all of them strongly agree that there is a deep relationship between vocabulary knowledge and reading comprehension, except one said that there is some relation between the two. The aspects to be focused on are the written and spoken form, meaning and use, other aspects according to their experience are helpful and useful and makes it easier to understand. Some said it depends on the level of the students. However, the majority focus on meaning as an important aspect.

The results obtained from teachers' answers to question four revealed that the points of strength and weakness are discovered by reading and using the new words in speaking and writing. Most of the teachers believe that memorization is the students' point of weakness, they forget easily, besides spelling and pronunciation. The point of strength is their ability to speak and write using just simple words, along with punctuation. As for their opinions on the number of words that should be known, some of them give it in numbers, more than 2000 words to speak or write. Some others give it in percentage, above (80%) to be able to understand. The more the better. Some of them can't limit. As for how well, most of them agree that well enough how to use it in multiple contexts and the student should be aware of its different aspects.

The findings deduced from teachers' answers to question number five. It is on teacher or student responsibility to expand vocabulary. It is observed that most of the teachers believe that there is a balance between the two sides. Both are responsible and complete each other. Some of them said it's the teacher who has done all the job. However, the student must have a role.

As for the findings obtained from question six on aspects of interest when it comes to usefulness and practicality. It is observed that there are different points of view. Most of the teachers are interested in the meaning of new words. Some of them said they are interested in grammar and the phonology side. Others on pronunciation stress and parts of speech. All of them agree that they are useful and practical when the students know how to use them in speaking and writing.

Considering the results obtained from the teacher answers to the last question seven. It is observed that a considerable number of the teachers don't add anything. One of them said there must be a variety of texts with different titles, literary and scientific. The other says that "I like the topic you brought here. Teaching is changing day by day, therefore teachers should catch up and be updated with the latest ways of teaching vocabulary and to move away from the traditional ones". Some other said "reading is important. It should be given a lot of attention. It's hardly ever find students read for pleasure". Finally, one of them said "my advice is to read a lot. The vocabulary knowledge will be improved by reading along with speaking and writing".

4.5 Summary of the chapter

In this chapter, the findings obtained from the data collection process are analysed then discussed. Collecting data from the questionnaire aims at answering the research questions. According to the mathematical equation all data collected are answered. It is the number obtained (the variable) divided by the total number (the constant) multiplied by a hundred percent. The results are obtained in percentages. Then a mean score is obtained by comparing those percentages. All data collected from the interview are interpreted according to the interviewees' replies to the question of the interview. The results reveal that there is a close relationship between vocabulary knowledge and reading comprehension. Breadth and depth are closely related and contributed to reading comprehension. More attention is placed on breadth more than depth in teaching vocabulary and meaning is largely inferred from the context.

Chapter five

Conclusion

5.0 introduction

This chapter has provided conclusions and pedagogical implications based on the findings of the current study. It has presented a general overview followed by the results obtained. As a means to an end, some recommendations are proposed for further studies.

5.1 Conclusion

This research study has shed light on a vital issue in English reading comprehension; it is the breadth and depth of vocabulary knowledge impact on reading comprehension. Since there is a strong relationship between reading comprehension and vocabulary knowledge, these factors play an important role in teaching vocabulary as they influence the students' understanding of the new words as well as their comprehension of the whole texts. Furthermore, the study has tried to explore the barriers and the problems that encounter the teachers as well as the students because of the insufficient and partial vocabulary knowledge. It also has tried to find applicable solutions. The combination of broad and deep aspects is the major and specific purpose of this study. Therefore, the study provided some recommendations based on the study results for reaching this goal. That's to say enrich and enlarge the students vocabulary knowledge throughout a well-balanced vocabulary teaching approach.

In addition, the results of this research study reveal that there is a strong relationship between reading comprehension and vocabulary knowledge. Furthermore, the teachers' vocabulary instruction largely depend on the vocabulary size (VS) of vocabulary knowledge. The aspects to be focused on are the spoken, written form and use, with little emphasis on the other deep aspects such as, synonymy, antonomy and collocations. These aspects (written and spoken form and use) represent the breadth dimension of vocabulary knowledge. In addition to that, the teachers largely place more attention to the meaning of the new words. It is generally inferred from the context. They strongly agree that students with limited vocabulary size are considered struggled readers. The most reported complaints by the teachers as

obtained from the results on the students are: the poor lexical level, lack of reading, lack of motivation, poor memorization of new words, wrong spelling, wrong pronunciation and the most important limited vocabulary knowledge. The results obtained from this study is in harmony with the researcher's perspectives that ensures all students' lexical problems are due to the teacher's relying on the breadth dimension of vocabulary knowledge as a means of vocabulary knowledge instruction.

5.1.1 Some final words

The significant role of the teacher is to support bridging the gaps between the partial aspects and deeper ones. There is an agreement among most researchers and linguists that knowing a word involves more than knowing its form and meaning. This desired goal will be achieved by combining both dimensions breadth and depth of vocabulary knowledge. To simply make it happen, through a lot of exposure to a variety of different aspects of a given new word in multiple contexts intentionally and before reading.

More specifically, the important role of paradigmatic relationship (synonymy and antonymy) and syntagmatic relationship (collocations) is summarized through this question what is the meaning of a given word and how it is related to other words in meaning? Of course, it's impossible for the teacher to teach every single word covering all the required aspects of its meaning, or ask students to memorize a long list of words so as to acquire a great deal of vocabulary, but at least emphasize the most confused and problematic ones for understanding before reading and during the warming up stage. Teachers need to raise their students awareness of the knowledge involved in knowing a new lexical item. Knowing some aspects of the meaning makes the learner needs some support from the teacher to make it understandable and deeper. Therefore, the valuable time and effort spent intentionally on teaching the unfamiliar words, will actually lead to its valuable reflection in more vocabulary and more comprehension gains afterwards. That's to say, valuable time will be spend on valuable words. The ultimate goal is then to ensure the value of enhancing learners breadth and depth of vocabulary knowledge. As a result, the researcher tried to find out whether both dimensions are strongly correlated and contributed positively in reading comprehension.

Considering the multiple components of vocabulary knowledge and involving them in teaching, this modest research study hopefully accomplish its goals to extend and broaden the horizon of learners' vocabulary repertoire and to furnish a great deal of substitute, associate and collocate words throughout a sound vocabulary knowledge teaching in reading comprehension lessons.

5.2 Some pedagogical implications

According to the results obtained from this study, a relationship between vocabulary knowledge and reading comprehension is really strong and existing. Moreover, broadening and deepening vocabulary knowledge of the students is largely beneficial. Therefore, vocabulary needs to be taught explicitly and placing more attention on the paradigmatic relationship (synonymy and antonomy) between words and the syntagmatic relationship (collocations). Based on the results from this study, the surrounding of the new word and making use of contextual clues, new vocabulary items' meaning is conveyed and built by most of the reading comprehension teachers.

Moreover, form-meaning relationship is more emphasized than other aspects (the deeper ones). In short, the time devoted to unfamiliar items is not spent directly before decoding the text. However, depending on the context alone may not always help to give the right guessing or the predictions may not always come true. It may also mislead the reader as the given word has more than one meaning in different contexts. Relying on the form- meaning relationship may also lead to superficial understanding. According to almost all the teachers' complaints, the students lack of extensive reading. They do not like reading. They read by force just to pass examinations and not for pleasure. It is crystal clear that, whenever confronted with an unfamiliar word, it is the job of the teacher to determine its significance in the context. Whether it affects understanding or it is problematic to teach.

Furthermore, to decide what students already know about that word, dealing with the new item requires considering it from all aspects. To make sure that the word is truly known, this process involves the primary subknowledges: The spoken form (phonology), the written form (orthography). In addition to word parts or forms (morphology), the grammatical use (syntax), finally the meaning and the relationship with other words (semantics). In teaching, success breeds success. And success is stemming from the appropriate input and tasks. A larger and deeper vocabulary, in

turn, leads to better comprehension which is often the desirable result. Even though, the big burden is on the shoulders of the teacher or the heavy part comes by the teacher. The teacher and the student alike, will hopefully get the benefit of using a combination of these approaches.

5.3 Recommendations

This section presents some of the following recommendations reached by the findings obtained from the current study.

- Teachers should consider both dimensions (breadth and depth) as significant aspects of EFL syllabus design. For more extra information see appendix (1).
- EFL material developers should select appropriate tasks which focus on paradigmatic relationship (synonymy & antonomy) and syntagmatic relationship (collocation). They have a role in vocabulary expansion. For more extra information see appendix (2).
- Integrating the breadth tests, Vocabulary Level Test (VLT) and depth tests, Word Association Test (WAT) for vocabulary knowledge assessment.
- Furthermore, research should be conducted to study the relationship between vocabulary knowledge (breadth and depth) and reading comprehension from the perspective of both teachers and students.
- Further research should be conducted to decide the most suitable teaching approaches that help enlarge and enrich vocabulary knowledge of the Libyan students.
- Enhancing the reading comprehension syllabus with a variety of text types and different titles; expository and narratives.

5.4 Summary of the chapter

This last chapter has summarized the main points related to the current study. It has provided a general overview on the aims of the study, shedding some light on the benefits of combining breadth and depth of vocabulary knowledge in reading comprehension. The paradigmatic relationship (synonymy and antonymy) and the syntagmatic relationship (collocations) are also emphasized. In the light of the results obtained, some pedagogical implications and recommendations are reached.

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Appendix 1

The presentation of the challenging word

Obviously, English in Libya is taught as a foreign language. Therefore the teacher is regarded as the main source of input, a guide, and facilitator. Moreover, the production and the exposure to the target language is only limited to the language classroom. Accordingly, during the presentation and before reading, the teacher should start teaching a given new word which students have trouble with. That is to say, determine the difficult vocabulary item to be directly taught. Let's say the challenging one as shown below:

- To write it on the board. (effect)
- Introduce its spoken form and written form(spelling and pronunciation).
 Misspelled with affect. Pronounced as / Ifekt/
- Introduce its dictionary definitions(meaning). It means a change in sb/sth that is caused by sb/sth else.
- Give its synonyms (paradigmatic relationship).
- o Result
- consequence
- o outcome
- +repercussion
- Give its antonyms (paradigmatic relationship).
- o reason
- o cause
- Give its collocations (syntagmatic relationship).
- o to achieve/get/obtain a (n) effect/ result/ outcome.
- o to have an effect/a result/consequences/repercussions
- o the end result
- o the final result/outcome
- Give its prefixes and suffixes (word parts).
- Inflectional parts (effects effected- effecting)
- o Derivational parts (effectuate effectively effective effectual)
- Give its grammatical function (parts of speech)
- effect + effector (noun)

- o effectuate + effect (verb)
- o effective (adjective)
- o effectively (adverb)
- Use it in a sentence. Her criticisms has the effect of discouraging him completely.
- Show any idioms, phrasal verbs or proverbs related to the target word. •idiom bring/put sth into effect to cause sth to come into use: The recommendations will soon be put into effect. Come into use; to being to apply: New controls come into effect next month. Source: Oxford Advanced learner's Dictionary. 7th EDITION

Appendix 2

Task design

For the sake of broadening and deepening students' knowledge of words, much emphasis should be placed on the paradigmatic relationship between words (synonymy and antonomy) and syntagmatic relationship (collocation). Here is an example:

The target word (sound) is followed by eight given options: (a) solid, (b) logical, (c) healthy, (d) bold, (e) snow, (f) temperature, (g) sleep, (h) dance.

The learner is required to choose four options out of eight.

The key answer to this item is as follows: the first four options on the left side are paradigmatically related adjectives, that's to say (sound) is synonymous with solid, logical and healthy, whereas bold is a distractor. As for the other four options on the left are syntagmatically related adjectives. Then, (sound) is collocated with sleep. The other three options are distractors.

The correct options were, (a), (b), (c) and (g).

As usual, for scoring, one point to each correct answer.

Appendix 3

Teachers' questionnaire

First, thank you for your valuable time and effort. The questionnaire takes approximately 8 minutes. As a part of my MA Dissertation in TESOL I am conducting a research regarding the relationship between vocabulary knowledge (breadth and depth) and reading comprehension teaching to the undergraduates. By vocabulary knowledge, I mean the overall understanding of words. Breadth / size refers to the number of words a language learner knows. Depth of vocabulary knowledge refers to how well a language learner knows a given word.

- This questionnaire is both anonymous and confidential. I will not ask for personal details other than your teaching experience.
- Participation is voluntary therefore you do not have to participate; I would greatly appreciate your participation in my research.
- There is no right or wrong answer; the questionnaire is an attempt to explore your opinions on the relationship between vocabulary knowledge and reading comprehension teaching, so please answer the questions according to your own experience.
- Please return a completed questionnaire by
- (Please put a tick next to the answer of your choice

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Teaching experience:

Vocabulary knowledge (overall understanding of a word) has two major dimensions breadth (number of words known) and depth (how well a given word is known).

1. From your own perspective, what is the aim of vocabulary teaching lesson?

a) To increase the number of vocabulary i	items ()
b) To promote depth of processing	()
c) To offer new learning opportunities	()

۷.	According to your experience, which is more helpful to students?	
	a) Independent engagement with complex texts ()	
	b) Explicit instruction to target words ()	
	c) Mixed dimensions (aspects) of word knowledge. ()	
3.	Which of the following aspects help broaden vocabulary knowledge?	
	a) The spoken and written form ()	
	b) The meaning and the form ()	
	c) Synonymy, antonomy and collocations ()	
4.	Which of the following aspects help deepen vocabulary knowledge?	
	a) The spoken and written form ()	
	b) The meaning and the form ()	
	c) Synonymy, antonomy and collocations ()	
5.	How are new words developed?	
	a) Through reading ()	
	b) Through the formal repetition of definitions ()	
	c) Through the use of a bilingual dictionary ()	

	6. How can we help the Libyan student to acquire a great deal of vocabulary?		
	a)	Through a collection of high frequency words	()
	b)	Through an independent vocabulary learning	()
	c)	Through a well-balanced approach	()
6.		of reading comprehension teachers find the breadt known) of vocabulary knowledge	h (the number of
	a)	a strong predictor of word knowledge ()	
	b)	a weak predictor of word knowledge ()	
	c)	not an adequate predictor ()	
7.	The at	pility to comprehend a text depends on the	
	a)	word recognition skill ()	
	b)	vocabulary acquisition ()	
	c)	memorising ()	
8.	In ord	er to succeed at the university level, teachers need to	
	a)	direct vocabulary instructions ()	
	b)	depend on vocabulary content ()	
	c)	Satisfy learners' needs ()	

9.	Englis	h words are growing and nges?	changing. In your	opinion, what are the
	a)	The student's lexical level	()	
	b)	The subject matter	()	
	c)	The limited time	()	
10		ocabulary are seen by studer	nts as a great obstac	cle to comprehend a text.
	a)	insufficient number of voca	abulary ()	
	b)	teacher's approach	()	
	c)	subject material	()	
11	. What a	are the factors that affect the The direction of instruction		ds?
	,	Background knowledge	()	
		Broad knowledge	()	
	d)	Deep knowledge	()	
12	2. To und	derstand the words to comple	ete an activity, do y	ou recommend to
	a)	skip the unknown words		()
	b)	search either in the context	or in a dictionary	()
	c)	show the relationship with	other words	()

13. How to enable the students to acquire an adequate vocabulary?	
a) More attention should be given to isolated new words ()	
b) New words should be studied in context ()	
c) To focus more on synonyms and antonyms of new words ()	
14. Which of the following aspects help memorize the new words?	
14. Which of the following aspects help memorize the new words:	
a) Varieties of texts ()	
b) Home assignments ()	
c) Using them in sentences ()	
15. What kind of materials do you best prefer?	
a) Texts ()	
b) Textbooks ()	
c) Pictures ()	
d) Writing on the board ()	
16. In the contexts of reading comprehension, who has the power to import students vocabulary knowledge?	pact
a) Educators ()	
b) Students ()	
c) Teacher's approach ()	

	a)	learner's lexical level		()		
	b)	learner's needs		()		
	c)	Teacher's background		()		
	d)	Teacher's experience		()		
	e)	Well-balanced components	of vocabulary	()		
18	18. Are students with limited vocabulary size considered					
	a)	non-struggled readers?	()			
	b)	average readers?	()			
	c)	struggled readers?	()			

17. In your opinion, selecting proper texts depends mainly on ...

Thank you for your help and cooperation in completing this questionnaire. It has been greatly appreciated.

Awasha Elgadi

Appendix 4:

Teachers' Interview

Thank you for taking your time to assist me with my dissertation study. I am researching perspectives of teachers on the relationship between vocabulary knowledge (breadth and depth) and reading comprehension teaching to the undergraduates. As a part of the method in this study, I am seeking input from experienced teachers in Libya, and kindly request your assistance by answering these interview questions. Your answers to these questions will be anonymous and will not be shared with anyone.

- 1) Based on your opinion as a reading comprehension teacher, could you please tell me how might you explain or discuss new words and phrases with the class? do you consider some primary aspects such as form and meaning? if so, what about other facets of the target word?
- 2) From your point of view, what do you think are the obstacles and facilitators during teaching new vocabulary? Can you tell me any situation in which you perceive any difficulty? do you have any idea why do they occur?
- 3) If I asked you to define vocabulary knowledge, how do you define it? Do you think there is a relationship between it and reading comprehension? What do you think the aspects should we focus on?
- 4) Could you please tell me your students' strengths and weaknesses when measuring their ability to use new vocabulary? Approximately, how many words should a language learner know? How well should a language learner know a given word?
- 5) There are different ways to expand vocabulary knowledge. Do you think is it the teacher's responsibility to focus on different aspects of a given word? Alternatively, do the students need to be in the habit of learning vocabulary?
- 6) Could you please tell me about English vocabulary aspects which usually interest you? How are they useful and practical?
- 7) Is there anything else you would like to tell me?

Thank you for your help and cooperation