

**The Islamic University of Gaza**

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**Faculty of Education**

**Department of Curricula and Methodology**



**The Impact of Lexical and Cohesive Devices  
Knowledge on 11<sup>th</sup> Graders' Reading  
Comprehension**

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بسم الله الرحمن الرحيم

(1) بِسْمِ اللّٰهِ الرَّحْمٰنِ الرَّحِیْمِ (2) عَلَّمَ الْقُرْاٰنَ (3) خَلَقَ الْاِنْسَانَ (4) عَلَّمَ اِلْمًا حَارِصًا

صدق الله العظيم

سورة الرحمن آية (1-4)

**In the name of Allah, the Beneficent, the Merciful  
the most Gracious: It is He Who has taught the quran. He has created  
man. He has taught him an intelligent speech.**

1660

# Dedication

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To my beloved wife who created the good atmosphere for me to finish this work.

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## **Abstract**

This Study aimed at recognizing the impact of vocabulary and cohesive devices knowledge, especially pronouns and conjunctions, on the literary 11<sup>th</sup> graders' reading comprehension. The researcher here applied pre and post tests on a random sample of two intact classes of sixty literary 11<sup>th</sup> male graders divided into control and experimental groups. These sixty learners represented nearly 38 % of the learners the researcher has been teaching English. The first part of the pre-test represented vocabulary test and the second one; pronouns and conjunctions test. This pre- test was applied on the learners' of both groups to diagnose their abilities and to know whether both groups were equal in their knowledge. After the researcher made sure that both groups were approximately equal regarding their previous knowledge in terms of vocabulary, pronouns and conjunctions, he subjected these graders to some treatment during eight lessons through three texts from the graders' syllabus in terms of vocabulary and the meant devices. After that, the researcher carried out a post-test to identify the effect of knowledge of vocabulary and cohesive devices on students' reading comprehension skill. Both tests were carried out during the second term of 2011. The researcher discovered that each independent variable, either vocabulary or pronouns, remarkably and positively affected reading comprehension. Moreover, each independent variable has the ability to predict reading comprehension. However, vocabulary affected reading comprehension more than pronouns and conjunctions did. In conclusion, the researcher recommended carrying out further studies to identify the effect of either increasing or decreasing pronouns in a text on reading comprehension and critical thinking.

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# **Chapter I**

## **Problem Statement and Background**

Introduction

Need for the Study

Statement of the Problem

Research Questions

Research Hypotheses

Purpose of the Study

Significance of the Study

Scope of the Study

Limitations of the Study

Definitions of Terminology

Summary

# Chapter I

## Problem Statement and Background

### Introduction

Reading is considered the road to self-improvement, civic competence, pleasure, and critical consciousness. Accordingly, the researcher is interested in reading comprehension skill and in looking for the factors that affect it in English. English has been taught to Palestinian learners for 12 years as a main school subject among other subjects. However, some learners who the researcher is currently teaching may be low-achievers in terms of some reading comprehension skills. This problem might be due to learners' poorness in terms of vocabulary and cohesive devices knowledge. Reading comprehension is a main skill besides the other three skills ( listening, speaking & writing), which are taught at the Palestinian schools .

Reading is one skill second or foreign language learners should acquire in their language learning process, if they are to become well-rounded users of the target language. The ability to read is seen as the most stable and durable of the second language skills. Language learners acquire most of their vocabulary through reading, particularly if they do not stay in a country where that language is spoken. Learners can lose their writing and speaking skills, but still be able to comprehend text with some degree of proficiency (Rivers, 1981 cited in Salah, 2008).

Reading comprehension is the process of constructing meaning from the text. The goal of reading instruction is ultimately targeted at helping a reader to comprehend a given text. Reading comprehension involves at least two people; the reader and the writer. "The process of comprehending involves decoding the writer's words and then using background knowledge to construct an approximate understanding of the writer's message" (Kirby, 2006:161).

When Learners read a text, their main goal is to comprehend its meaning. Traditionally, reading was seen as a receptive skill and the readers are passive recipients, but, in fact, reading is a process of interaction between the text and the reader. "The reader interacts with the text to create meaning as the reader's mental processes interact with each other at different levels (e.g. letter, lexical, syntactic, or semantic) to make the text meaningful" (Barnett, 1989: 29).

The reader is actually involved in an active and constructive process, building meaning from a text. "Meaning does not exist in a text but in readers and the representations they build" (Hass & Flower, 1988: 167).

Reading can be seen as an "interactive" process between a reader and a text which leads to reading fluency. In this process, the reader interacts dynamically with the text as he tries to elicit the meaning and where various kinds of knowledge are being used: linguistic or systematic knowledge (through bottom-up processing) as well as schematic knowledge (through top-down processing)( Alyousef, 2005:144).

Additionally, reading comprehension ability needs some important requirements that depend on the reader or the learner such as lexis and cohesive devices knowledge. With these two aspects and others, the learner can interact with reading comprehension texts effectively .

There has been much debate about the relative roles which lexis and cohesive devices play in reading comprehension. Some writers argue that vocabulary knowledge is the most important factor in successful reading. Adams believes that it is the knowledge of lexis rather than syntax that distinguishes a good reader from a less able one.( Adams, 1990; cited in Al-Yafaee, 2003) .

Stanovich (1999:28) says that vocabulary is " insufficient for good reading comprehension". Although good reading comprehension indicates a high level of lexical

knowledge, "it is possible for a person to have adequate word recognition skills yet still display poor reading comprehension" because of other supporting factors such as syntactic knowledge

Nuttall(1996:78) proves that syntax in terms of "long sentences and difficult [grammar] can block comprehension even when vocabulary is familiar". He warns that insufficient knowledge of cohesive devices such as referring pronouns, conjunctions, substitutions, and ellipsis can significantly decrease comprehension levels.

There is a strong relationship between elementary school children's understanding of specific cohesive items and general reading comprehension ability( Hadley,1987). In L2 research, results of a study show that the difficulties in processing reading text by ESL college students are not limited to lexical items but are related to connections between ideas in sentences and paragraph (Bensoussan,1984).

This thesis investigates the role linguistic factors , lexis and some of cohesive devices, pronouns and conjunctions, play in 11<sup>th</sup> graders' reading comprehension ability.

## **Need for the Study**

A few experimental studies showed the effect of cohesive devices and vocabulary knowledge together on EFL reading comprehension .Those few studies that did examine the effect of the previous independent variables on reading comprehension were conducted out of Gaza governorates. Moreover, they sometimes tested the role syntax, in general, plays in reading comprehension, but the researcher here will test the impact of cohesion by reference(anaphora and cataphora) and cohesion by conjunction(and, but, also, even though, etc) on reading comprehension. Since some of the 11th graders may not deal with reading comprehension effectively inside or outside the classroom, this motivates the researcher to carry out this study to collect some information about the role

vocabulary and those cohesive devices play in students' reading comprehension. Other cohesive devices such as cohesive devices by lexical, substitutions, or ellipsis are not dealt with because those 11<sup>th</sup> learners have not learned them.

## **Statement of the Problem**

Since the contribution of background knowledge to the reading comprehension process has been investigated in several studies in Foreign Language Acquisition, the precise contribution of linguistic knowledge to FL reading comprehension is yet to be determined especially in Gaza governorates and particularly after a complete negligence of the grammar-translation method to the advantage of communicative approach which does not consider the importance of vocabulary and syntax(Dwaik, 1997). The present study examines the impact of vocabulary and cohesive devices(pronouns and conjunctions )on reading comprehension.

The research also attempts to show whether the relationship between the independent variables, namely; pronouns, conjunctions and lexis, and dependent variable, reading comprehension is predictive; in other words does students' ability in terms of pronouns and conjunctions or lexis predict students' reading comprehension ? Or if students had a quantity of 3.000 words, for example, do these words assert the existence of 11<sup>th</sup> graders' good reading comprehension skill.

## **Research Questions**

To achieve the purpose of the study, the research addressed the following question:

What is the impact of lexical and cohesive devices Knowledge on 11<sup>th</sup> graders' reading comprehension?

This question is divided into the following four sub-questions:

1- Are there statistically significant differences between control and experimental groups in reading comprehension due to lexical knowledge?

2- Does students' lexical knowledge predict these students' reading comprehension?

3- Are there statistically significant differences between control and experimental groups in reading comprehension due to cohesive devices knowledge ?

4- Does students' cohesive devices knowledge predict these students' reading comprehension?

## **Research Hypotheses**

In order to address the research questions, four corresponding research hypotheses were tested:

1- There are no statistically significant differences between control and experimental groups in reading comprehension regarding to lexical knowledge.

2- Students' lexical knowledge does not predict these students' reading comprehension.

3- There are no statistically significant differences between control and experimental groups in reading comprehension regarding to cohesive devices knowledge.

4- Students' cohesive devices knowledge does not predict these students' reading comprehension.

## **Purpose of the Study**

The study aims to provide some insights into the role the linguistic factors, vocabulary and cohesive devices, play in reading comprehension in English as a Foreign Language(EFL) through two groups, control and experimental ones. The study also attempts to show whether the correlation between the linguistic factors and reading

comprehension is predictive. It addresses this issue by measuring individual readers' cohesive devices and lexical knowledge and assessing the correlation of these factors to overall comprehension. Correlations among these factors are determined with the objective of specifying the degree of association through Pearson correlation coefficient and linear regression.

### **Significance of the Study**

Since reading comprehension is important for students' in that it helps individuals predict, visualize, ask and answer questions, retell, summarize, decode, pronounce, understand unfamiliar words from the context, connect the present word to the previous learnt ones, use prior knowledge, skim, scan and infer by critical thinking, this should draw the stakeholders' attention to the importance of reading comprehension not only inside the classrooms and for exams but for daily life as well . And because some of Palestinian students may be low-achievers in the previous aspects, this called the writer for searching in the linguistic elements concerning reading comprehension skill to recognize which element has a positive effect on reading skill in order to encourage the stakeholders to pay much attention to this factor so that reading comprehension may be developed or at least taken into consideration.

### **It is hoped that this study may:**

- 1- help teachers pay much attention to linguistic factors, that may have a positive effect on reading comprehension, by placing more focus on them through different authentic activities .
- 2- draw the book designers' attention to the necessity of designing appropriate syllabuses that consist of suitable reading comprehension texts in terms of their length, vocabulary,

logical and organized cohesive devices(anaphora, cataphora & conjunction) and this syllabus is hoped to contain reasonable and proper activities which suit students' abilities despite the large number of students inside most classes.

## **Scope of Study**

### **\*The Academic Limit**

This paper examines the impact of vocabulary and cohesive devices( pronouns and conjunctions) knowledge on reading comprehension and if either vocabulary or these devices are predictive of reading comprehension.

### **\*The Human Limit**

The study is limited to Khanyouis secondary schools' 11<sup>th</sup> graders who have been studying English as a main subject for eleven years. Those graders are two intact classes of sixty learners divided into two groups, control and experimental.

### **\*The Time and Place Limit**

The thesis is carried out in 2011 at Abdulkader L-Husseini secondary school in Khanyounis. This school has been teaching EFL to 300 secondary literary 11<sup>th</sup> graders.

## **Limitations of the Study**

During carrying out the study, the researcher met some limitations such as:

- 1.Because of the limited time of implementing the experiment, the researcher had to exclude some conjunctions from his study and to use a few texts for the treatment.
- 2.Because the 11<sup>th</sup> graders have not been exposed to other cohesive devices yet, the researcher had to exclude some types of cohesive devices from his study.
- 3.Because of the limited time and place at the school, the researcher had to apply his experiment on just sixty students.

4. Because of the limited previous studies in terms of cohesive devices, the researcher had to use some old and some short previous studies.

## **Definition of Terms**

The following variables and terms are operationally defined for fulfilling the purpose of the thesis :

### **Linguistic factors**

Linguistic features pertaining to vocabulary and syntax .

### **Lexical Knowledge**

Information that the reader possesses regarding the meanings of words ( Dwaik,1997:26 ) . It refers to the words themselves and their meanings.

### **Grammatical competence**

Knowledge of morphology, syntax, vocabulary and mechanics (Gascoigne,2005:1 ).

### **Reading comprehension**

The ability to make sense of written texts (Tian,2006:67).The 11<sup>th</sup> graders' ability to deal effectively with the varied questions that follow the reading comprehension texts means that these graders achieved the comprehension of the meant texts.

### **Reading skill**

Research on L1 reading comprehension defines reading as an active constructive process that consists of associating incoming information with information already present in human mind (Anderson & Pearson, 1984; Bloom & Green, 1984; Graesser, 1881).

The researcher defines reading skill as the ability to deal with sounds and letters and turn them into meanings to understand the text ideas.

### **Syntactic knowledge**

Information that the reader possesses concerning the language system. This refers to the rules for forming and interpreting phrases and sentences ( Dwaik,1997: 27 ) .

### **Cohesive devices**

Cohesion is defined as the grammatical and/or lexical relationships between the different component parts of a texts. Cohesion might exist within or between sentences in a text (Richards & Platt,1978).

The researcher defines cohesive devices as the words that are used to bind sentences or clauses with each other to create a coherent text such as *conjunctions*, *pronouns*(anaphora and cataphora) which the researcher would like to identify their effect on reading comprehension.

### **Cataphora & Anaphora**

The referent of a pronoun *he* may be identified from the main sentence which follows the subordinate one. E.g., when *he* visits us, Bill always stays late. (when Bill visits us). This is described as cataphora = forward or downwards (Greek 'Kata'='down') as opposed to anaphora= upwards or backwards ('ana'= 'up').e.g., when Bill visits us, *he* always stays late. ( Bill always stays late). Here, the pronoun *he* may be identified from the former subordinate clause(Matthews,1992:221). Anaphora pronouns are divided into different types, but they will be mentioned throughout the theoretical framework.

## **Demonstratives**

The term demonstrative means 'showing' or 'pointing to' something. It refers to the four words *this, that, these, and those*. Their basic use is to point to something in the situation (Leech, et al, 2006:122).

## **Relative pronouns**

The Relative Pronouns are **who**(nominative), **whom**(objective), **whose**(possessive), **which, that, what, where** and **when**. They have the same forms for singular or plural, masculine or feminine. (C.E & J.M. Eckersley,1984:125).

The researcher defines them as the pronouns that are used to bind main clause to subordinate one such as : "*I met the teacher **who** taught my brother*" or "I saw the people **who** were visiting my teacher". The bolded pronouns in the former sentences are called relative pronouns. Some other pronouns are such as **that, which, whose**.

## **Conjunctions**

A conjunction is a 'joining word'. Its main role is to link together two parts of a sentence(Leech, et al, 2006: 98).Conjunctions include *and, but, also, eventhough*.

## **lexis**

The researcher defines the term lexis as a meaning which carries elements of language, the elements of semantic value and content or vocabulary and their meanings.

## **Background Knowledge**

The researcher defines background knowledge as linguistic knowledge; that is, it means the 11<sup>th</sup> graders' background related to cohesive devices and vocabulary.

## **Summary**

This chapter which is entitled as " problem Statement and Background", introduced an introduction about reading comprehension, vocabulary and cohesive devices and their importance in developing reading comprehension. Then, the writer explained why this study is needed, posed the problem, questions and the hypotheses of the study. Later, the researcher demonstrated the significance of this work. After that, the researcher reviewed the scope of the study. At the end of this chapter, the researcher defined some terms that appear throughout his research followed by a summary. The next chapter will touch the "Literature Review", the "Theoretical Framework" and an "Overview of Previous Studies"

## **Chapter II**

### **Literature Review**

#### **Section I**

#### **Theoretical Framework**

Introduction

Lexical Knowledge and Comprehension

Cohesive devices knowledge and Comprehension

Types of Cohesion

Summary

## **Chapter II**

### **Literature Review**

#### **Section I**

#### **Theoretical Framework**

##### **Introduction**

Definitions of L2 comprehension have been based on this definition mentioned previously in chapter one. "[comprehension] is a product of several cognitive subsystems working together in a harmonious way" ( Jarvella & Nelson, 1982:73).

Pedagogically, reading comprehension is a very important construct in both L2 and FL contexts. Reading is regarded as a vital component of L2 and FL curricula. This depends on several bases. First, proficiency in reading is essential for literature courses, and an important component in most language programs. Second, reading is an important skill which students usually keep after finishing their formal program. Third, research on reading is essential for the development of literacy skills (Barnett,1986).

Swaffer (1985) argues for the inclusion of more reading activities in the communicative curriculum to give students the chance to use their cognitive skills. This can be maintained when using authentic materials which demand cognitive activities that involve analysis and interaction between the reader and the text.

In a similar attempt to demonstrate the importance of reading, Lee (1988) points out that reading comprehension plays three roles in foreign language curriculum. First, reading comprehension provides the basis for the interactive conversation and oral activity. Second, it provides the context necessary for introducing grammatical structure and vocabulary

Somewhat similar to the former view, reading is considered as a thinking, linguistic, and cultural process that is interrelated with and supportive of the other communicative skills, namely; listening speaking and writing ( Hittleman, 1992).

Additionally, one should take into consideration that written texts are highly accessible and may be the cheapest resources to deal with. They may be considered the cheapest channel of contact with a foreign language and its speakers, especially with the availability of technological materials. "reading is the most effective skill of the second language skills taught throughout the world" (Bernhardt,1991:1).

From a cultural point of view, written texts in FL and L2 contexts serve as a major source of information about the target language culture. Omaggio(1993) believes that reading comprehension is valued in the communicative classroom because authentic materials which are often used in such classes, not only help in developing reading skill, but also foster cultural awareness

Comprehension is topic-dependent process. It involves making proper decisions from the beginning of the text. It also depends on the selection of critical features for processing and the rapid processing of a given text. Finally, it involves metacognitive awareness of the comprehension process itself. Accordingly, background and topic knowledge as well as the learners linguistic knowledge and cognitive strategies play a critical role in reading comprehension (Bernhardt & James,1987).

Moorman & Ram (1994:646)) state that although much of the research has been carried out on teaching reading, “yet no theories exist which sufficiently describe and explain how people accomplish the complete task of reading real-world texts”.

Although cohesion Knowledge is vital to understand a coherent text and for studying discourse processing, cohesion can not account fully for the coherence of the

text. Rather, underlying semantic relations and readers' perceptions of the text should be taken into consideration to build a complete picture of discourse processing.(Yeh, 2004)

When investigating a reader's linguistic knowledge, factors such as lexis and grammar particularly cohesive devices are viewed as being essential to language learning. Lexis and cohesive devices provide the basis for text comprehension (Carrell,1988; Eskey,1988;Stanovich,1980).

The contribution of background or topic knowledge to the comprehension process has been investigated in several studies in foreign language and second language acquisition (Bernhardt,1983; Carrell,1984; Hudson,1982; Johnson,1982; Lee,1986). However, very few studies have investigated the role of linguistic knowledge in comprehension especially lexical and cohesive aspects, therefore, the precise contribution of linguistic knowledge to L2 reading comprehension is yet to be determined. (McCarrty,1994) , particularly in Gaza governorates.

## **Lexical Knowledge and Comprehension**

The term lexis refers to the meaning carrying elements of language or the elements of semantic value or content. Berman(1984:142) stated that "in order to get the basic propositional content of a sentence, readers must be able to manipulate the following interrelated components of sentence structure". The previous sentence refers here to the element relating to a correct structure such as words and the relations between them and ties or devices used to maintain these relations.

Gabb(2000) poses a very important question why learners face difficulties in moving into fluency stage although they have had basic decoding skills. She identifies a number of “barriers” which is limited vocabulary and lack of background knowledge.

Spencer and Hay (1998:222) explain that :Word recognition is an essential component in the mastery of reading ....and considerable evidence suggests that the major difficulty confronting the beginning reader is the development of rapid, automatic word recognition skills.....Efficient readers use a variety of orthographic data to recognize word units, such as individual letters, letter clusters, morphemes, word stems, and word patterns. This will help them tackle the phoneme-grapheme irregularities found in English. Spencer & Hay (1998:224)) add: in particular, children with reading difficulties need to see the high frequency words in context if they are to better comprehend how written language works. Once children have mastery of even a few automatic words they should be exposed to more text that will support and utilize that group of known words.

The relationship between comprehension and lexical knowledge in L2 research shows two main trends. The first trend investigates how difficult or low frequency lexical items in a certain text influence comprehension (Freebody & Anderson, 1983a, 1983b) . The prevalent trend, however, has examined the effects of lexical instruction on subsequent reading comprehension. It has been argued that deliberate instructional intervention could improve lexical knowledge and, therefore, facilitate reading comprehension .

In the case of L2 reading research, one should distinguish between studies which treat lexical knowledge as a reader-based variable and those which look at as a text-based variable. Some studies looked at the issue from the reader perspective.

Koda (1989:537) declares that "transfer of vocabulary increases L2 reading comprehension and facilitates the acquisition of L2 linguistic knowledge as well as the mastery of verbal processing skills and thus enhances the overall development of L2 reading proficiency".

Yab (1979:58) assures that lexical knowledge and reading comprehension are related and that lexical knowledge is "likely to be the predominant casual factor" .

However, it should be noted that in correlation studies, mere association between former variables does not necessarily imply causation, therefore, the causal relationship between lexical knowledge and reading comprehension should not be assumed. The positive correlation between lexical knowledge and L1 reading comprehension has been theoretically explained by means of four hypotheses: the aptitude hypothesis, the knowledge hypothesis, the instrumentalist hypothesis, and the access one. The aptitude hypothesis stated that one's intelligence is the primary force behind vocabulary acquisition and reading skill. The knowledge hypothesis states that vocabulary knowledge is a function of general knowledge that indirectly affects one's reading ability. The instrumentalist hypothesis assures that the actual number of known words directly correlates with reading comprehension. The access hypothesis asserts the importance of automaticity. This hypothesis claims that knowledge of the various meanings of a certain word makes the learners' automaticity easier(Stanovich, 1986). Accordingly, reading is very important as a means to develop vocabulary In other words, reading and vocabulary are seen as mutually developing abilities.

These views are examined in L1 context and it is concluded that all these explanations are valid and they all play some role in vocabulary acquisition. Acquisition of lexical items is, therefore, the result of aptitude, background knowledge, instruction, multiple exposures, and opportunity for practice( Kramersch, 1987).

Likewise, current assumptions state that reading comprehension is influenced by linguistic factors such as lexical Knowledge, (Carrell,1983; Hawas,1990; Koda,1989) morphosyntactic features (Blau,1982; Conrad,1985) and grammar (Berry,1990;

Bialystok,1988). Krashen (1989 maintained that proficient readers must have sufficient lexical knowledge and that such knowledge is normally enhanced through reading

Orasanu (1986:32) states that “the knowledge a reader brings to a text is a principal determiner of how that text will be comprehended, and what may be learned and remembered”. The key aspect to reading fluency is the expansion of vocabulary through the use of word play, puzzles. One believes that beginning readers can expand their vocabulary through phonics or listened sounds in lab which will at the end help them to become fluent, skillful readers of English texts.

Drucker (2003:24) also explains that teaching vocabulary before reading a text “creates a cognitive load that splits the learner's attention” . Teachers can give students in advance a vocabulary list or puzzles (built through educational web sites) that contain the words in the unit. In this way, students can be prepared for the reading lesson. Drucker quotes statistics made by Zahar, Cobb, and Spada in 2001 which found that learners encounter new words 6-20 times before they are acquired, depending on the context in which exposure to the word occurs.

So, the researcher concludes that there must be a mutual relationship between vocabulary and reading comprehension.

## **Readability of Text**

Readability of text means that a text should read easily to be described a readable text. Some writers pose some standards and conditions for any text to be considered as a readable text.

Leykin and Tuceryan(2004) state that one of the conditions to regard any text as a readable one is that this text should contain of information that can be applied in the environment where the reader lives. Additionally, this text should be of an interest for

the reader to read it lovingly and interestingly and ,thus, the reader can understand what he is reading continuously.

Michael et al (2003) say that to consider this text as a readable one this text should contain of information that has some relation to the background information and previous knowledge in the reader's mind. This previous knowledge may refer to background social, political, economical, cultural knowledge and linguistic knowledge.

Hall and Hanna(2004) assert, in their article, that colors with greater contrast ratio generally lead to grater readability. Writing any text with black color on white background attracts readers to buy the book and to read it easily. Thus, printing should be with contrasted combination of desired colors such as yellow, blue, white and black.

### **Cohesive devices knowledge and comprehension**

Cohesion has been defined in a number of ways. Widdowson (1987: 52) defines cohesion in terms of the distinction that is made between the illocutionary act and the proposition. That is, propositions, when linked together, form a "text"; whereas illocutionary acts, when related to each other, create different kinds of "discourse

Irwin (1986) states that cohesion and register enable us to create a text. Register is concerned with what a text means. They define cohesion as the "set of semantic configuration that is typically associated with a particular class of context of situation. Cohesion, as contrasted with register, is not concerned with what a text means. Rather, it refers to a set of meaning relations that exist within the text. These relations are not of the kind that link the components of a sentence and they differ from sentential structure. The discovery of these meaning relations is crucial to its interpretation. Consider the following sentence:

Mary bought a new pencil. *She* put *it* in her drawer.

The interpretation of the elements *she* and *it* is dependent on the lexical items Mary and Pencil. So, cohesion is in the semantic relation that is setup between these elements.

Halliday and Hassan(1976) define cohesion also as the grammatical and lexical relationship within a text or sentence. Cohesion can be defined as the links that hold a text together and give it meaning. It is related to the broader concept of coherence. There are two main types of cohesion: grammatical, referring to the structural content, and lexical, referring to the language content of the piece. According to Halliday and Hasan, the function of cohesion is to relate one part of a text to another part of the same text. Consequently, it lends continuity to the text. By providing this kind of text continuity, cohesion enables the reader or listener to supply all the components of the picture to its interpretation. Halliday and Hasan hold that cohesion in its normal form, is the presupposition of something that has gone before in the discourse, whether in the immediately preceding sentence or not. This form of presupposition is referred to as anaphoric. The presupposing item may point forward to something following it. This type of presupposition is called cataphoric.

Language background knowledge is considered as an essential factor in comprehending a text. This importance is expressed as follows: Efficient comprehension requires the ability to relate the textual material to one's own knowledge. Comprehending words, sentences, and entire texts involve more than just relying on one's linguistic knowledge. Further, Carrel and Eisterhold(1983) in their article, talk of two types of background knowledge: formal and informal. Formal knowledge refers to the reader's knowledge of the rhetorical organizational structures of different types of texts; content knowledge refers to the content area of a text. They also believe that reader's failure to provide the proper formal and, particularly, content knowledge (schema) would result in various degrees of non-comprehension. Thus, both authors made the informal or content

knowledge background more important than the informal or linguistic knowledge background in comprehending a text. But at the same time , both types of knowledge background are important for assimilating a text.

Cohesion is also defined as the grammatical and/or lexical relationships between the different component parts of a text. Cohesion might exist within or between sentences in a text(Richards & Platt, 1978)..

Thus, cohesion can be defined as a part of text forming component in the linguistics system. It links together the elements that are structurally unrelated through the dependence of one on the other for its interpretation. Without cohesion the semantic system cannot be effectively activated at all(Richards & Platt, 1978). .

An interaction was found between the anaphor's surface (pronouns, demonstratives, relative pronouns) form and the antecedent's syntactic position (nouns), which influenced comprehension time (Ishida,1991).

The relationship between overall reading comprehension and comprehension of coreferential ties for ESL readers and native speaking students reflected a misunderstanding of the descriptive phrases to which the pronouns referred to (Demel, 1990).

The relationship between reading comprehension in L2 and the processing of specific cohesive ties, such as anaphora has been investigated by many researchers. Anaphoric expressions (pronouns) were found to interfere with the reading comprehension of eighth graders ( Gottsdanker-willekens, 1981).

Al-Yafae (2003 ) supports the argument that syntactic knowledge in terms of cohesive devices and word order is an essential part in reading comprehension. Most learners either misunderstood the referents of the two referring words or did not recognize them at all. This lack of understanding of the cohesive devices probably contributed to their overall lack of reading comprehension.

The current researcher believes that the previous writers' point of views are not contrasted; that is, they assert the importance of cohesive devices in successful reading comprehension. Additionally, they assure that without good previous knowledge of cohesive devices, these unknown cohesive devices will prevent effective reading comprehension.

In L2 research, a positive relationship was found between the ability to resolve anaphoric references and text comprehension for readers of German as second language ( Berkemeyer, 1994).

Moreover, positive and significant relationships were reported between total substitution scores and reading scores for L1 college junior, senior and graduate students. Dutka concluded that anaphoric resolution was a highly complex cognitive- language skill and a factor in reading comprehension, explaining approximately 59% of the variance in reading performance (Dutka, 1979).

## **Types of Cohesion**

Five sub-types of cohesion are identified by Halliday & Hasan (1976) and Irwin (1986) : reference, conjunction, substitution, lexical and ellipsis. Ability to understand those five types of cohesion relationships is necessary for processing a written text successfully.

## A-Cohesion by Reference

This category of cohesion includes the following types of pronouns:

1. Personal pronouns: I, my, you, he, she, he, it, they, we, our, ours, us.
2. Demonstratives: this, that, these, those.
3. Locative adverbs: here, there.
4. Temporal adverbs: now, then, before, after, later, earlier, sooner.
5. Other interrogative, indefinite, reciprocal, reflexive, or intensive pronouns such as: **who, what, which, whom, why, where, whose, whoever, some, any, none, someone, one, nobody, anyone, each other, one another's**. (Halliday & Hasan, 1976) and (Irwin, 1986).

### • Referencing

There are three referential devices that can create cohesion:

• **Anaphoric reference** occurs when the writer refers back to someone or something that has been previously identified to avoid repetition. Some examples: replacing "the taxi driver" with the pronoun "he" or "two girls" with "they". Another example can be found in formulas such as "as stated previously" or "the aforementioned."(Halliday & Hasan, 1976)

• **Cataphoric reference** is the opposite of anaphora: a reference forward as opposed to backward in the discourse. Something is introduced in the abstract before it is identified later. For example: "Here he comes, our award-winning host... it's John Doe!". (Halliday & Hasan, 1976)

• **Exophoric reference** is used to describe generics or abstracts without ever identifying them (in contrast to anaphora and cataphora, which do identify the entity and thus are forms of endophora): For example; rather than introduce a concept, the writer refers to it

by a generic word such as "everything". The prefix "exo" means "outside", and the persons or events referred to in this manner will never be identified by the writer. (Halliday & Hasan, 1976)

## **Pronouns (Anaphora, Cataphora & Exophora)**

A pronoun is a word used instead of a noun . Pronouns may be classified into the following Kinds:

(1) Personal (2) Possessive (3) Demonstrative (4) Reflexive (5) Interrogative (6) Indefinite (7) Relative (8) Distributive.

Pronouns may show number , person , gender and case ( Eckersley,1984:121).

### **Personal Pronouns**

It is a reference by means of function into a speech situation through the category of the person in the form of personal pronouns. The category of persons includes the three classes of personal pronouns. During the communication process the speech roles are assigned to the participants through the person system as :

i- Speaker . ii- Addressee. iii- *It/one* are used as a generalized form for other items (Gilany,2009).

Speech naturally presupposes two persons: a person who speaks (the First Person or the speaker) and a person spoken to (the Second Person or addressee) . So *I , we* , are pronouns of the First Person; *you* is pronoun of the Second Person . Beyond these two persons there are the whole world of people and things that may be spoken about. For all these we use the pronouns of the Third Person , *he , she , it , one, they* ( Eckersley, 1984:121).

## Demonstratives

The term demonstrative means 'showing' or 'pointing to' something.

It refers to the four words **this**, **that**, **these**, and **those**. Their basic use is to point to something in the situation.

meaning	singular	Plural
'near'	This	These
'far'	That	Those

*Table (2.1) Demonstratives, singular and plural*

Demonstratives are words we use to 'point' to the context- i.e., to the situation in which we speak and write . *This* and *these* are called 'near' because they indicate something near to the speaker as in table (2.1). *That* and *those* refer to something less near to the speaker both physically and psychologically.

All four demonstratives can act as (a) determiners (usually with a following noun), or as (b) pronouns (without a following noun).For example table (2.2):

Determiner	Pronoun
'that man is my father.'	'and who is that? Your mother?'
'this room is where I work.'	"oh, so this must be your desk.'
'Have one of these nuts.'	'no, thanks, I'd prefer one of these.'
'these trees in the corner are oak trees,	and those over there are apple trees.'

*Table (2.2) Demonstratives as determiner or pronoun*

The demonstratives are often used in writing, and less commonly in speech, to refer to something in the text-typically something which has been recently mentioned. E.g.; The party has not yet had a chance to discuss why it lost the election, and *this* is a good reason to delay the choice of a new leader (Leech,2006:122-123)

It is an essential form of verbal pointing. The speaker identifies or points out the referent by locating it on scale of proximity (Gilany,2009).

## **Interrogative Pronouns**

The Interrogative Pronouns are **who(whom , whose), which, what**. They are used in forming questions and they always precede the verb, e.g.,

Who broke the window?, Which do you prefer, dry sherry or sweet sherry?, What have you written?, Whose are these gloves?, Who(m) did you see? ( Eckersley,1984:125).

## **Indefinite Pronouns(Exophora)**

This group includes the following pronouns:

Some(-thing,-body,-one), any(-thing,-body,-one): all, one, none, no (- thing,-body,-one), every (-thing,-body,-one), other, another, much, less, (a) few, (a) little, enough, each, either, neither. ( Eckersley,1984:126).

## **Relative Pronouns**

The Relative Pronouns are **who(nominative), whom(objective), whose(possessive), which , that , what**. They have the same forms for singular or plural, masculine or feminine(Eckersley,1984:125).

## **Possessive pronouns**

Possessive adjectives can be used only before a noun . The possessive pronoun, however, may stand alone. Here is a list of the possessive adjectives and the corresponding possessive pronouns:

***Possessive adjectives:***

This is my, his, her, our, their, your, its food.

***Possessive pronouns:***

This is mine, his, hers, yours, ours, its, theirs. (Eckersley, 1984:126)

**Reciprocal pronouns**

Reciprocal pronouns are used to indicate mutual relationships as in table(2.3).

<b>Reciprocal</b>	<b>reciprocal possessive</b>
Each other	each other's
One another	one another's

*Table (2.3) Reciprocal and reciprocal possessive*

*They are always criticizing each other.*

*A: they both look like one another, don't they?*

*B: so they should, they're sisters.*

Both pronouns may be used with the s' possessive determiner construction:

*My neighbor and I are always borrowing one another's\each other's bikes.*

**These pronouns may be compared with reflexive pronouns:**

*We learned ourselves when the university was closed.*

(either everyone learns his colleague or each member of the group learns himself or herself)

*We taught each other when the teacher was absent.*

(each member teaches the other) (Carter & McCarthy, 2007: 315-316 ).

## **B-Cohesion by Conjunction**

Conjunction sets up a relationship between two clauses. The aim of conjunction is to create a logically articulated discourse. The most cohesive conjunctions are *therefore* and *so*, while the least cohesive one is *and*. (Halliday & Hasan, 1976)

This category of cohesion covers additive, adversative, causal and temporal conjunctions such as *and, but, or, however, yet, because, since, therefore, even though*.

Conjunctions express a variety of logical relations between phrases, clauses and sentences. Conjunctions can be divided into coordinating, correlating and subordinating conjunctions.

i- **Coordinating conjunction** is used to link elements of equal grammatical status. A coordinating conjunction can link elements of any size, from morphemes to sentences.

The main coordinating conjunctions are *and, or, but*: for example;

*He collects pre- **and** post-war cameras.*(linking prefixes)

*There are two **or** three houses nearby.*(linking words)

*The wind was really cold **and** absolutely biting.*(linking phrases)

*You can join now **or** you may prefer to wait **and** discuss things with your partner.*(linking clauses)

*If she had been in London, she would have walked out **and** taken a taxi home. **But** she was on Richard's territory now **and** she couldn't do that.* (linking sentences)

**Correlating conjunctions** consist of two items, each of which is attached to an element to be coordinated. The most common correlating are either...or.....,neither... nor.....,both .... and...: for example;

*The class can meet **either** on Friday **or** on Thursday. **Neither** I **nor** my family feel happy.*

ii- **Subordinating conjunctions** only relate clauses to one another. They make the clause they introduce a subordinate clause that is dependent on a main one. Common



The word(s) or sentence between the previous brackets can be omitted, then this case is called by grammarians as cohesion by ellipsis.

Like a pronoun , an ellipse typically relies either on the context on which a sentence is uttered or, within the sentence, on some word or words preceding. Compare, for example, the pronoun in He (someone the hearer must identify) is coming, or Bill says he (Bill) is coming, with the ellipses in Did it yesterday (someone the hearer must identify did *it*), or Bill collapsed while doing (while Bill was doing) it. (Matthews, 1992)

Ellipsis is another cohesive device. It happens when words are omitted.

A simple conversational example:

A) Where are you going?

B) To town..., "I am going to town." (Halliday & Hasan, 1976)

### **C-Cohesion by Substitution**

A word is not omitted, as in ellipsis, but is substituted for another, more general word. For example, "Which ice-cream would you like?" – "I would like the pink one. "*one*" is used instead of repeating "ice-cream." This works in a similar way to pronouns, which replace the noun. For example, 'Ice-cream' is a noun, and its pronoun could be 'It'. 'I dropped the ice-cream because it was dirty'. (Halliday & Hasan, 1976)

Substitution is replacement of one linguistic item by another. Ellipses is also a kind of Substitution where one linguistic item is replaced by nothing/ zero. When it is talked about replacement of one item by another, it is meant replacement of one word/phrase with another. Replacement is used to avoid repetition of a particular item. (Gilany,2009)

Cohesion by Substitution refers to the replacement of one word or phrase with another such as :

1.Synonym: lad (antecedent boy); cab (antecedent taxi) (Halliday & Hasan, 1976).

**Synonyms** are different words with almost identical or similar meanings. Words that are synonyms are said to be **synonymous**, and the state of being a synonym is called **synonymy**. The word comes from Ancient Greek *syn* (σύν) ("with") and *onoma* (ὄνομα) ("name"). The words *car* and *automobile* are synonyms. Similarly, if we talk about a *long time* or an *extended time*, *long* and *extended* become synonyms. In the figurative sense, two words are often said to be synonymous if they have the same connotation. Or the semantic relation that holds between two words that can (in a given context) express the same meaning. Synonyms can be any part of speech (e.g. nouns, verbs, adjectives, adverbs or prepositions), as long as both members of the pair are the same part of speech. More examples of English synonyms are: Noun ;"student" and "pupil" and "petty crime" and "misdemeanor". Verb; "buy" and "purchase".(Jasa, 2009)

2.Super-ordinate ( a thing from the same class; Oxford Dictionary): animal (antecedent lion), child (antecedent girl).

3.General term: thing (antecedent: toy); problem (antecedent: vandalism).

4.Arithmetic( a branch of mathematics concerned with properties and manipulation of numbers; Oxford Dictionary): **one, some, all, none, few.**

5. Verb substitutes: **do, does, do the same, do so, don't, so is, so has.**

6.Clausal substitutes: **so, not.**

Cohesion by substitution and ellipsis is also grammatically referred to as pro-form (Quirk and Greenbaum 1973).

## **D-Lexical Cohesion**

Lexical cohesion is basically created by repeating the same lexeme, or general nouns (super-ordinates, for example – public transport), or other lexemes sharing the

majority of semantic features (also called hyponyms): The bus ... – the subway... – the tram....

Lexical cohesion can form relational patterns in text in a way that links sentences to create an overall feature of coherence with the audience, sometimes overlapping with other cohesion features. Understanding how the content of sentences is linked helps to identify the central information in texts by means of a possible summary. This allows judgments on what the text is about. (Halliday & Hasan, 1976)

This category of cohesion includes the following:

1. Lexical sets: oil, natural gas, falling water, energy, power resources, generate.

2. Lexical reiteration: A canary is a bird. All birds have feathers.

Reiteration means to state or do over again or repeatedly sometimes with wearying effect. For example; *She avoided answering our questions directly, instead reiterating that the answers could be found in her book. Allow me to reiterate: if I am elected, I will not raise taxes.*

On the other hand reiteration is different of repetition because **Repetition** is the simple repeating of a word, within a sentence or a poetical line, with no particular placement of the words, in order to emphasize. This is such a common literary device that it is almost never even noted as a figure of speech. It also has connotations to listing for effect and is used commonly by famous poets such as Larkin. For example; *Today, as never before, the fates of men are so intimately linked to one another that a disaster for one is a disaster for everybody.* ( Ginzburg, 1962)

3. Lexical collocation (co-occurrence of words which regularly occur together): The pencil costs fifty cents. I had a dollar. (Halliday & Hasan, 1976) and (Irwin, 1986). **Or** Cohesion in the text can be obtained through the use of semantically related words of the same domain.(Jasa, 2009)

4. Antonym: The term **antonym**(and the related **antonymy**) has also been commonly used as a term that is synonymous with *opposite*; however, the term also has other more restricted meanings. One usage has *antonym* referring to both gradable opposites, such as *long : short*, and (non-gradable) complementary opposites, such as *male : female*, while opposites of the types *up : down* and *precede : follow* are excluded from the definition.(Curse,1992)

5. Hyponymy is a relation between two words in which the meaning of one of the words includes the meaning of the other word. The lexical relation corresponding to the inclusion of one class in another is hyponymy. A hyponym is a subordinate, specific term whose referent is included in the referent of super ordinate term. For example; Blue, Green are kinds of color. They are specific colors and color is a general term for them. Therefore, color is called the super ordinate term, and blue, red, green, yellow, etc are called hyponyms. A super ordinate can have many hyponyms. Hyponymy is the relationship between each lower term and the higher term (super ordinate). It is a sense relation. It is defined in terms of the inclusion of the sense of one item in the sense of another. For example; The sense of animal is included in the sense of lion. Hyponymy is not restricted to objects, abstract concepts, or nouns. It can be identified in many other areas of the lexicon. For example; the verb cook has many hyponyms. Word: Cook. Hyponyms: Roast, boil, fry, grill, bake. Word: color. Hyponyms: blue, red, yellow, green, black and purple. In a lexical field, hyponymy may exist at more than one level. A word may have both a hyponym and a super ordinate term. For example; Word: Living. Hyponym: bird, insects, animals. Now let's take the word bird from above hyponyms. Word: Bird. Hyponyms: sparrow, hawk, crow, fowl.

We ,thus, have sparrow, hawk, crow, fowl as hyponyms of bird and bird in turn is a hyponym of living beings. So there is a hierarchy of terms related to each other through hyponymic relations. Hyponymy involves the logical relationship of entailment. For example; ‘There is a horse’ entails that ‘There is an animal.’ Hyponymy often functions in discourse as a means of lexical cohesion by establishing referential equivalence to avoid repetition. .( Torisawa, 2008)

In linguistics, a **hyponym** is a word or phrase whose semantic field is included within that of another word, its **hypernym** (sometimes spelled hyperonym outside of the natural language processing community) In simpler terms, a hyponym shares a *type-of* relationship with its hypernym. For example; *scarlet, vermilion, carmine, and crimson* are all hyponyms of *red* (their hypernym), which is, in turn, a hyponym of *color*.

Computer science often terms this relationship an "is-a" relationship. For example; the phrase *Red is-a color* can be used to describe the hyponymic relationship between *red* and *color*

Similarly, jasa(2009) stated that hyponymy is a generic-specific lexical relation. “Hyponymy involves the association between a *hyponym*- a more semantically complex, specific lexical unit, and a superordinate- a less semantically complex, general lexical unit”. “In Hyponymy,one thing is a subtype of another.” Or the semantic relation of being subordinate or belonging to a lower rank or class.

6. A polyseme is a word or phrase with different, but related senses. For example the verb "to get" can mean "procure" (*I'll get the drinks*), "become" (*she got scared*), "have" (*I've got three dollars*), "understand" (*I get it*) .A closely related term is metonymy, in which a word with one original meaning is used to refer to something else connected to it.

The difference between homonyms and polysemes is subtle. Psycholinguistic experiments have shown that homonyms and polysemes are represented differently within people's mental lexicon: while the different meanings of homonyms (which are semantically unrelated) tend to interfere or compete with each other during comprehension, this does not usually occur for the polysemes that have semantically related meanings:

For polysemy means that, "each text is seen to generate a potentially infinite range of meanings," One group of polysemes are those in which a word meaning an activity, perhaps derived from a verb, acquires the meanings of those engaged in the activity, or perhaps the results of the activity, or the time or place in which the activity occurs or has occurred. Sometimes only one of those meanings is intended, depending on context, and sometimes multiple meanings are intended at the same time. Other types are derivations from one of the other meanings that leads to a verb or activity.

Mole : *a small burrowing mammal*. Consequently, there are several different entities called moles. Although these refer to *different* things, their names derive from : A Mole burrows for information hoping to go undetected.

Bank: 1.a financial institution, 2. the building where a financial institution offers services, 3. a synonym for 'rely upon' ("*I'm your friend, you can bank on me*"). It is different, but *related*, as it derives from the theme of security initiated by 1.

**However:** a river *bank* is a homonym to 1 and 2. It is a *completely different* meaning.

*River bed*, though, is polysemous with the *beds* on which people sleep.

## **Summary**

The chapter tested several issues. It touched other related items. The section of "Theoretical Framework" highlighted the relationship between vocabulary and reading comprehension from the first aspect, and cohesive devices and reading comprehension from the other aspect. Then, the researcher reviewed the types of cohesive devices especially the types of referent devices with which the experiment will deal later. The writer also defined some related terms such as anaphora, cataphora and explained how they are used inside an utterance. The second section of the chapter will review some related previous studies.

## **Section II**

### **Literature Review**

#### **An Overview of Previous Studies**

Introduction

Previous Studies Related to Vocabulary Knowledge

Commentary on the previous Studies

Previous Studies Related to Cohesive Devices Knowledge

Commentary on the previous Studies

Summary

## **Section II**

### **Literature Review**

#### **An Overview of Previous Studies**

##### **Introduction**

This section touches the actual and the potential contributions of the previous findings of the previous studies that dealt with the correlation between vocabulary and cohesive devices knowledge and students' reading comprehension skill . The first domain of this section reviews the related previous studies that discussed the impact of vocabulary on reading comprehension.

##### **Previous Studies Relating to Vocabulary Knowledge**

###### **Yesil-Dagli (2011)**

The purpose of this study, first, is to investigate the predictive role of English letter naming fluency, initial sound fluency, and vocabulary skills at the time of kindergarten entry for first grade English oral reading fluency. Second, this paper aims at examining the variability in language and literacy skills of native English-speaking students by their demographic characteristics. The data for this study comes from the progress monitoring and reporting Network, and are collected from Florida's "Reading First" schools. Letter Naming Fluency, Initial Sound Fluency, and Oral Reading Fluency components of Dynamic Indicators of Basic Early Literacy Skills and the Peabody Picture Vocabulary Tests are used as measures. Hierarchical Linear Modeling is used to analyze the curvilinear growth of students' first grade oral reading

fluency. The results of this study reveals that kindergarten English letter naming fluency is the best predictor, and vocabulary skills are the second best predictor of oral reading fluency in the first grade, followed by initial sound fluency.

### **Dalton & Grisham (2011)**

This article presents 10 eVoc strategies( word puzzle, lost word) that use free digital tools and Internet resources to evoke students' engaged vocabulary learning. The strategies are designed to support the teaching of words and word learning strategies, promote students' strategic use of on-demand web-based vocabulary tools, and increase students' volume of reading and incidental word learning. The strategies emphasize developing students' interest in words as they read, view, interact with, and create word meanings in digital and multimedia contexts. Teachers are invited to "go digital with word learning" and experiment with integrating technology to improve their students' vocabulary and reading comprehension. Vocabulary knowledge is key to comprehension and expression. For students in the intermediate grades, the need for breadth and depth of vocabulary is vital as learners encounter more challenging and varied academic texts .

### **Verhoeven, et al (2011)**

The associations between vocabulary increasing and reading Progress are examined longitudinally to recognize the impact of increasing vocabulary on reading comprehension. A representative sample of 111 Dutch children throughout the elementary school period is subjected to this study. Data on basic and advanced vocabulary, word decoding, and reading comprehension are collected across the

different grades. The results show significant progress on all of the measures over time. Beginning vocabulary was found to predict early word decoding and reading comprehension. From second grade, word decoding predicted later vocabulary development. Moreover, a mutual relationship between the children's advanced vocabulary and reading comprehension was detected. The data provide support for the hypothesis that knowledge of word forms and word meanings predicts the development of reading comprehension.

### **Shany & Biemiller (2010)**

This paper is conducted to examine the factors affecting gains in reading comprehension. 29 children are subjected to this study. The first 15-learner group has vocabulary less than the second 14-learner group. The findings show that there are no significant correlations between pre-program language and reading measures and reading comprehension gains. High comprehension gainers made significantly larger gains in vocabulary. In a previous report of this research, it was found that reading practice had large beneficial impact on reading comprehension. In this study, it is also found that children who gained significantly more vocabulary had also significantly higher gains in reading comprehension.

### **Kaivanpanah & Zandi (2009)**

This study attempts to shed light on the role of depth of vocabulary knowledge in reading comprehension ability and its relationship with grammatical knowledge. An English Language proficiency test (a TOEFL) consisting of 40 grammar items, 30 vocabulary items and 30 reading comprehension items and a depth of vocabulary

knowledge test developed by Qian and Schedl (2004) are administered to 57 EFL learners, 17=males and 40=females . They had studied English as apart of the national curriculum. Their age ranged from 13 to 28; they represented different proficiency groups as evidenced by their scores on the TOEFL test. The results show that (a) Language proficiency influences performance on depth of vocabulary knowledge tests (b) Although depth of vocabulary knowledge is significantly related to reading comprehension, grammatical knowledge explains the greatest amount of variance in tests takers performance on reading comprehension tests and (c) knowledge of collocation is related to grammatical knowledge . Having presented the findings of the study in detail, this type of study advises language teachers to increase the grammatical knowledge of language through diverse means such as focus on form and explicit grammar instruction.

### **Salah (2008)**

This paper investigates the relationship between vocabulary knowledge and reading comprehension of authentic Arabic texts in particular, it attempts to discover the percentage of vocabulary coverage [known words] readers need to ensure effective reading comprehension ability of two reading passages from online Arabic news source. Data are collected by using Questionnaire, Reading Comprehension Test and Lexical Coverage Test. The total number of subjects is twenty-three Arabic as –Foreign Language learners at Brigham Young University. Those learners range from Intermediate Low to Intermediate Mid in both productive and receptive skills . The 23 subjects were 18 males (78%) and 5 females (22%). The average age is 23.3 years, with an age range of 18 to 28 . The majority of subjects (74%) are between the ages of 23 and 28 . All participants are native English speakers, with almost all of them, i.e., 22 (96%), possessing a knowledge of at least one Foreign language, and 13 (57%) subjects having

knowledge of two besides Arabic . A linear regression of the data showed that there is a correlation coefficient of 0.7 and 0.6 between the percentage of known words and students' comprehension of the two reading texts. The results also indicated that the subjects needed to know approximately 90% of running words to adequately comprehend the first passage and around 86% to comprehend the second passage. Based on the findings, the study suggested that there is a lexical threshold for FL learners, below which adequate comprehension of authentic texts might not be possible .

### **Garrott (2008)**

This research tests the hypothesis that there is a differential distance between the two groups of intermediate and intermediate /advanced learners of French on a reading passage when presented with or without background knowledge of the topic and background syntactic and Lexical knowledge. This study also examines the hypothesis that intermediate and intermediate/advanced readers exhibit different levels of syntactic maturity. Data for the first hypothesis come from a subset of 30 of the total 43 learners in intermediate/advanced French at a south Atlantic University. The sample is randomly drawn from 43 Ss in 2 sections of intermediate/advanced French. The sample was then divided into 2 groups of 15 to represent prior knowledge and no prior knowledge groups . Data for the 2<sup>nd</sup> hypothesis come from a subset of 15 of the total 79 learners of intermediate French at this same south Atlantic university: one group of 15 Ss is randomly drawn from 3 sections of Intermediate French II. All Ss in Intermediate French II have completed the equivalent of elementary French I-II and Intermediate French I;15 Ss is randomly drawn from 2 sections of French composition . All have completed the equivalent of Intermediate French II. Both groups represent two different degrees of reading comprehension. All subjects are American, born native speakers of English. The

subjects in the intermediate\ advanced L2 French groups are given an identical passage . The final passage results from three instructors of French at the University who agree upon the validity of this passage. The instructors selected the passage as an exemplar of moderate Syntactic density. Subjects reading time was set at thirty minutes using 150-200 words per minute as a normal L2 reading rate. Results of the study show that (a) prior knowledge plus high cognate levels(previous linguistic knowledge) facilitate reading comprehension (b) syntactic maturity is cumulative and quantitative; (c) reading rates may be slower in L2 French readers to increase comprehension; and (d) automaticity is not fully realizable at the intermediate and intermediate\advanced level because of new emerging syntactic, morphological and lexical maturity .

### **Shiotsu and Weir (2007)**

This work examines the relative contribution of vocabulary and syntax knowledge to L2 reading in two pilot studies in different contexts.

This study contains three involved studies. The sample of the three studies consists of a heterogeneous population studying at the tertiary level in the United Kingdom, and a homogeneous undergraduate group in Japan. The first study uses Text Reading Comprehension, Knowledge of Vocabulary and Knowledge of Syntax Tools or Tests with 107 learners. The results of the first preliminary study have thus provided the researchers with empirical data to support both syntax and vocabulary knowledge as important predictors of the text reading comprehension performance. Between the two ,syntax appeared to contribute slightly more to the prediction of the text reading comprehension than did vocabulary. The second study uses Text Reading Comprehension, Vocabulary, and Syntactic Tests with 182 and 130 L1-Japanese EFL learners at three different universities. The sample of the third study comprises L1-

Japanese EFL learners from 5 universities in Japan with an initial total of 624 participants. The instruments for the measurement of the three ability areas were identical to the ones in study 2 above. The results of the first two studies support the relative superiority of syntactic knowledge over vocabulary knowledge in predicting performance on a Text Reading Comprehension Test. In addition, the two predictors; namely, vocabulary and syntax, correlate very strongly (0,84) with each other. The results of the third study show that the latent syntax and vocabulary variables are helpful for the prediction of latent text reading ability .

### **Golkar and Yamini (2007)**

This study is set out to empirically determine the reliability and validity of the vocabulary Levels Tests, both the passive and the active words. It attempts to investigate the nature of the learners active and passive words. Moreover, this paper attempts to check the relationship between these two types of vocabulary knowledge and the learners' reading comprehension ability; in specific, and the learners' proficiency level in general. Finally, the study investigates if there are any significant differences between the high and low proficient learners and also English majors and non-majors' passive and active vocabulary. Three tests; the Vocabulary Level Test, the Productive Version of the vocabulary Levels Test, and a TOEFL are administrated to group of 76 of 20-30s. Iranian undergraduate Ss' majoring in engineering are 46, and English language and Literature learners are 30. The number of subjects is reduced to 32+22, then in the 2<sup>nd</sup> session to 27,13. The results prove the Vocabulary Levels Tests to be reliable and valid tests of vocabulary size. The learners' passive and active vocabulary are also found to be highly correlated as a whole and at each separate word-frequency level. Passive vocabulary is always larger than active ones on at all levels. However, the gap between the two

increases at lower word-frequency levels. In addition, there is a high correlation between the learners' knowledge on the one hand and proficiency and reading comprehension ability on the other hand. It is also found that there is a statistically significant difference between the vocabulary knowledge of high proficient and low proficient groups and also between the English majors and non-majors. The high proficient group and the English majors had greater passive and active vocabulary knowledge than their corresponding low proficient group and the non-majors.

### **Tian (2006)**

This study investigates the passage dependency of selected reading comprehension items from the GEPT (General English Proficiency Test) and the TOEFL and examines learners' responses to items with extremely Low passage dependency . 37 reading comprehension items selected from 2 tests are administered to a group of 93 university students (Ss) in both passage-out and passage-in conditions. Those 93 Ss were enrolled in a university in Taiwan and they were all non-English majors in their second to fourth year in the university. Thirty-two English majors and forty-eight non-English majors other than the original group of participants took additional test in the later stages of the study. The test includes four passages from GEPT reading comprehension (15 items) and two passages from TOEFL reading comprehension (22 items). The results of reading comprehension tests are considered to reflect a combination of 2 kinds of knowledge, readers' previous linguistic knowledge and information gained from reading the tests. Results of passages reading comprehension prove that the knowledge that readers bring to written texts is crucial in comprehension process, as comprehension calls for interaction of previous knowledge with new information. This study also advises

researchers to use different vocabulary and syntactic knowledge in the two tests to ensure adequate results.

## **Gascoigne (2005)**

The purpose of this paper is to examine whether or not there is a negative correlation between success on form-focused grammar exercises, and reading comprehension ability in beginning L2 learners. Fifty-six native speakers of English enrolled in two introductory French courses at the University Of Nebraska at Omaha participated in this study. Personal data questionnaires reveal Ss' language learning backgrounds. All students with prior formal study of French are excluded from the data . The final number of true beginners involved in this investigation is 49. L2 strategy research has shown that poor readers tend to process language in a word –for-word fashion, directing attention to the words and structures of a passage, whereas more skilled readers focus on meaningful relations to and within the material. Given these tendencies, a comparison of performance on form-focused grammar activities and meaning-driven reading comprehension activities among beginning Ss of French was conducted. The results show that Ss' performance lacks a strong negative correlation between success on form-focused grammar activities and that on meaning driven reading comprehension tasks. The majority of participants (59%) do perform regularly, albeit slightly, better on either one or the other task. While the purpose of this investigation is simply to confirm or deny the existence of this type of negative correlation between performance on two divergent task types, additional studies would be strengthened by expanding the line of inquiry to include assessment of participants' general reading comprehension levels.

## **Chao(2005)**

This study aims at investigating the relationship between English-major students' vocabulary level and syntactic competence in reading comprehension in Taiwan. Further, this study investigates the predictability of vocabulary level and syntactic competence in reading comprehension. The subjects in this study are 132 English-major undergraduate students at National Cheng kung University. All the participants are asked to take three tests-vocabulary, grammar and reading comprehension. The vocabulary test is adapted from Nations (1983) Vocabulary Level Test. The Grammar Test uses the structure section of TOEFL. The reading comprehension test is taken from a part of the reading comprehension test in GEPT. The statistical measures of the study uses one-way ANOVA to test the effects of the Length of English learning to vocabulary, syntax, and reading comprehension. The Pearson correlation coefficients are used to measure the national degree between vocabulary and grammar to reading comprehension. Moreover, multiple regression analysis is used to predict the contributions between vocabulary and grammar to reading comprehension. The results of this study show that (a) There are no significant differences between EFL learners' length of English learning and their performance of vocabulary, syntax or reading comprehension. (b) There is a significant relationship between syntactic knowledge and reading comprehension; its correlation coefficient is 0.338. (c) There is a significant relationship between vocabulary and reading comprehension ; its correlation coefficient is 0.372. (d) There is a significant relationship between vocabulary and syntactic knowledge as its correlation coefficient is 0.531. (e) Syntactic knowledge is a significant predictor of reading comprehension; its predictability was 11.4 %. (f) Vocabulary was a significant predictor of reading comprehension; its predictability was 13.9 %. (g) Combining vocabulary with syntactic

knowledge was a significant predictor of reading comprehension and the predictability of both was 17 %.

### **Khaldieh (2001)**

This article aims at examining the role played by knowledge of both syntax and vocabulary in the reading comprehension of American learners of Arabic as a foreign language. Two groups of 46 participants of nonnative readers of Arabic read an expository text, wrote an immediate recall protocol in their first language to measure their overall reading comprehension, and complete a lexical task and a syntactic task. Whereas the analysis of the data reveals that vocabulary knowledge has a significant main effect on reading comprehension, syntactic knowledge is found not to play a significant role in reading comprehension. Although the issue of syntax needs further investigation, the results suggest that reading comprehension is independent of a knowledge of syntax and depends mainly on vocabulary or lexical knowledge .

### **McCarty (1994)**

McCarty (1994) investigates the contribution of grammatical and lexical knowledge to both reading and listening comprehension. A total of 154 subjects participated in the study. The researcher hypothesizes that the contribution of lexical and grammatical knowledge will be different for the different mediums of presentation, that is, reading and listening. She uses multiple choice tasks to assess the subjects' lexical and grammatical knowledge as well as their reading and listening comprehension. The texts used for reading and listening are edited for length, vocabulary difficulty and structural complexity in order to facilitate comprehension. The results show that while both

grammar and vocabulary correlate significantly with reading comprehension, only lexical knowledge can predict the students' performance in reading .

## **Laufer (1992)**

Laufer (1992) examines first, how L2 reading is influenced by L2 proficiency as a function of the learners' lexical knowledge, and by the students general academic ability; and second, to what extent L2 reading comprehension is influenced by general academic ability at different levels of lexical knowledge. Sixty-four students of Arabic and Hebrew linguistic backgrounds participated in the study. Subjects are sorted according to their lexical knowledge, general academic ability, and L2 comprehension. The subjects' level of lexical knowledge is determined by their scores on the Vocabulary Levels test as 2.000, 3.000, 5.000, and 10.000 word level . General academic ability and L2 reading comprehension are based on scores on a standardized entrance examination. Upon conducting correlational analyses between L2 reading level of lexical knowledge and general academic ability, it is found that there is a significant correlation between performance on the reading test and lexical knowledge( $r=.51$ ). Further, the correlation between performance on the reading test and general academic ability is also significant ( $r=.39$ ). English lexical knowledge together with general academic ability account for 16% of the variance. Lexical knowledge accounts for 26% of the variance while general academic ability accounts for 16 % of it . Post-hoc ANOVA was conducted to determine how general academic ability may contribute differently for different levels of lexical knowledge. Results show that three lexical knowledge indices prove to be significant in relation to L2 reading comprehension. These knowledge indices are: lower than or equal to 2.000 word level, at the 3.000-4.000 word level, and at the 5.000 word level. The correlation between L2 reading and general academic ability at the lower than or equal to

2000 level, is significant( $r=.56$ ). At the 3.000-4.000 level no correlations between L2 reading and general academic ability are found. At the 5.000 level, the correlation between L2 reading and general academic ability is also positive( $r=.54$ ). The author concludes that if the level of lexical knowledge is fewer than 3.000 words, reading comprehension will not be optimum regardless of the learners' general academic ability. This suggests that L2 lexical knowledge is a better predictor of L2 reading comprehension than general academic ability.

### **Hawas (1991)**

Hawas (1990) examines the influence that lexical knowledge has on general reading comprehension. The subjects of the study are eighty-eight Arab students of English as a second language in their first semester at a technical college. The subjects' comprehension of a modified scientific text is assessed by three types of comprehension questions: a) multiple-choice questions in which correct selection of a certain answer depends on subjects' knowledge of the lexical item contained in the passage, b) true/false questions in which the correct response depends on knowledge of a particular lexical item, and c) word-meaning in which words are chosen from the passage and choice of the correct response is dependent on its contextual meaning in the passage. Multiple choice and true-false scores are correlated with responses on word-meaning. For subjects who can identify contextual word-meaning and answer the corresponding comprehension questions, a correlation of (0.68) is obtained between these two measures. Subjects who do not know the meaning of certain words in the passage are not able to answer the corresponding reading comprehension questions. The researcher concluded that students have to be trained in predicting the meaning of words from context to improve their reading comprehension .

## **Koda (1990)**

Koda investigates the effects that the transfer of L1 lexical knowledge has on L2 reading comprehension. The researcher has three issues in mind: first, the effects of transferred lexical knowledge on L2 reading; second, the effects of this transferred knowledge on the acquisition of L2 specific lexical knowledge; and third, the effects of transferred lexical knowledge on verbal processing skills, that is, word recognition and letter identifications. The subjects of the study are twenty-four college students of various linguistic backgrounds learning Japanese as a foreign language. They are divided into two groups: a kanji group and a non-kanji group. The kanji group consists of ten subjects whose L1 orthographies are similar to the Chinese language. The fourteen subjects in the non-kanji group share an alphabetic orthographic system common to the English, Spanish, and Portuguese Languages. The subjects' language proficiency is tested by means of a grammatical knowledge test and a lexical knowledge test. Comprehension is assessed by means of a cloze paragraph and a paragraph comprehension task. Upon conducting correlations among the variables (linguistic knowledge, verbal processing skill, and reading comprehension), it is shown that lexical ( $r = .74$ ) and particle (cohesive devices) knowledge ( $r = .49$ ) are significantly correlated with reading comprehension. Significant correlations are also found between the cloze test and particle knowledge ( $r = .77$ ) and between lexical knowledge and paragraph comprehension ( $r = .74$ ). High significant correlations are found between paragraph comprehension and word recognition speed ( $r = .68$ ), and between lexical knowledge and word-recognition speed ( $r = .80$ ). Moderate significant correlations are found between letter identification and paragraph comprehension ( $r = .44$ ). Word formation knowledge neither correlates with paragraph comprehension nor with other language proficiency measures.

## **Commentary on the previous Studies:**

Yesil-Dagli (2011) states that vocabulary plays an important role in reading fluency. Moreover, the researcher adds that vocabulary is the second best predictor of reading fluency.

Dalton & Grisham (2011) also highlights that vocabulary plays a vital role in reading comprehension; in addition, vocabulary has a mutual relationship with reading comprehension. That is, reading has an essential role in expanding and increasing learners' vocabulary.

Verhoeven, et al (2011) maintains that there is a mutual relationship between vocabulary and reading comprehension. Further, the conductor points that there is also a mutual positive effect between decoding skill in reading comprehension and vocabulary meanings.

Shany & Biemiller (2010) prove that the correlation between vocabulary and reading comprehension is mutual. Moreover, oral reading itself has a positive effect on reading comprehension. That is, learners may gain new vocabulary from new repeated texts. These learners may also recall some vocabulary meanings contextually. Consequently, this vocabulary may benefit learners in their reading comprehension and its main and sub-skills which were mentioned in the theoretical framework..

The sixth study by Kaivanpanah and Zandi (2009) shows that there is a strong relationship between vocabulary and syntactic knowledge and reading comprehension; however, the results of this work explains that grammatical knowledge has more positive effect on reading comprehension ability than lexical knowledge. Accordingly, the researcher here called the stakeholders for giving more consideration to teaching grammar explicitly as it has more positive impact than vocabulary on reading comprehension ability.

The seventh study by Salah (2009) is interested in vocabulary, asserting that learners should know at least 88% of the running words to ensure adequate comprehension of reading passages. Although this paper was carried out to examine the role Arabic vocabulary knowledge plays in Arabic reading comprehension authentic texts by native foreign language learners, the current researcher has not to exclude this study from his current paper as there is some similarity between the two languages, Arabic and English.

Similar to the third, fourth and fifth studies, the eighth study by Garrott (2008) confirms the role not only of vocabulary but also syntax in developing reading comprehension. Further, it was stated that syntactic structures are a cumulative, i.e., the more vocabulary and syntactic knowledge, the more reading comprehension ability and vice versa.

Somewhat differently to the previous studies, the ninth study by Shiotsu and Weir (2007) proves that syntactic and lexical knowledge play a vital role in reading comprehension. In addition, it was asserted that they are predictive of reading comprehension ability. Further, the study assures the existence of a strong relationship between vocabulary and syntactic structures.

Similarly, the tenth study carried out by Golkar and Yamini (2007) asserts that there is an obvious correlation between not only vocabulary and reading comprehension ability but also between vocabulary and learners' EFL proficiency in general. As the learners are regarded as proficient, this asserts the fact that those learners must have much vocabulary.

Tian's paper (2006) is similar to the previous studies in its results; that is, it demonstrates that linguistic factors previous knowledge has a strong effect on making

reading comprehension of a text so simple that the learners can deal with all the questions following the reading comprehension passage.

Dissimilarly, Gascoigne (2005) argue that the relationship between syntactic knowledge and reading comprehension is somewhat weak, though the students deal with reading comprehension regularly.

In contrast to Gascoigne(2005), Chao (2005) states that there is a significant correlation between vocabulary and reading comprehension ability. In addition, he asserts that there is a significant correlation between syntactic knowledge and reading comprehension. Moreover , Chao assures that there is a significant correlation between the previous two independent variables. Further, Chao states that vocabulary or syntactic knowledge is a significant predictor of reading comprehension ability .

Khaldieh (2001) argues that syntactic knowledge does not play a significant role in reading comprehension ability, However, she regards that the significant role played basically in reading comprehension ability is the role played by vocabulary or lexical knowledge only.

McCarty (1994) explains that there is a strong positive relationship between grammatical knowledge and reading comprehension in the first hand, and other positive relationship between lexical knowledge and reading comprehension in the second hand. Moreover, the same relationship is explored between grammatical and lexical knowledge and listening comprehension. However, the strongest relationship is highlighted between lexical knowledge and either reading or listening comprehension.

Laufer (1992) shows that lexical knowledge correlates with reading comprehension. Lexical knowledge is measured independently of the text and it is correlated with performance on a standardized reading comprehension test. Lexical knowledge is a significant predictor of comprehension.

Hawas's study(1991) shows that lack of knowledge of the lexical items is an obstacle in reading comprehension. Hawas' assessment of lexical knowledge takes place in a post-reading context, and it is both reader-based and text-based.

Koda(1989) maintains that readers' lexical knowledge in a language is positively transferred and aids lexical knowledge in the second language when the two orthographic systems are similar. Although Arabic and English languages are different orthographically, lexical knowledge is assessed independent of the text in a multi-task format. Lexical knowledge and comprehension of paragraphs are positively related .

To sum up , some of those previous researchers assert that both linguistic factors play a significant role in reading comprehension. Some assure only the role of just vocabulary. Some other confirm just the role of syntactic knowledge .Others Assert that lexical and syntactic knowledge not only play a significant role in reading comprehension but they are significant predictors of reading comprehension as well .

## **Previous Studies related to Cohesive Devices Knowledge**

### **Ozuru, et al (2010)**

This study examines the impact of coherent text by some referent pronouns that explicitly link successive sentences on learners' comprehension and their ability in terms of self-explanation. The writer uses two scientific texts. The first text is highly coherent with a few referent pronouns and the other text is low coherence ;that is, this text includes several referent pronouns. Psychology undergraduates read and self-explain the two texts. After the self-explanation activity, participants answer open-ended comprehension questions about the texts. Participants in the high cohesion text produce higher quality explanations( Critical thinking) than those in the low cohesion text. However, these explanations, although higher in quality, do not improve comprehension much. Performance on text-based comprehension questions is better in the low cohesion text-based ones. Additionally, the correlation between self-explanation quality and comprehension performance is generally higher in the low cohesion text compared to the high cohesion one. These data suggest that the contribution of self-explanation or critical thinking to comprehension is larger when the text lacks referent pronouns that facilitate making connections between successive ideas in a text.

### **Balfakeh(2009)**

This paper tries to identify the Students' problems in answering reading comprehension questions. Two questionnaires and two reading tasks about the students' perceptions towards the areas under investigation are used. The research is conducted at three secondary schools at Aden, Yemen. The subjects of the study

consist of 120 students (70 boys and 50 girls) who are in the final year of the secondary school (scientific and literary sections) and 15 teachers who teach English to those students. They are all native speakers of Arabic, and English is taught as foreign language. The students have been studying English for seven years. The number of students performing the written tasks are 120 students while 15 teachers and 63 students fill the questionnaires. The teachers and students are randomly selected for this study. Some teachers have been teaching English for twenty years, others for ten years and some are fresh teachers who have taught the subject for about five years. The findings indicate that students have serious deficiencies in discourse-based reading skills such as recognizing text organization and identifying cohesive devices. They also show that students fall back on Arabic, interference with their mother tongue, when answering reading comprehension questions due to difficulties they face in comprehending a text.

### **Parvaz & Nodoushan(2009)**

The present study is an attempt to examine the effect of cohesive devices on language comprehension. 160 university students (80 English majors and 80 non-English majors) serve as the subjects of this study. The English majors, all taking "Advanced Translation" course in the Azad University of Meybod, are normally supposed to be of higher proficiency level than their non-English major counterparts in the same university. The non-English major subjects are all engineering students taking "General English II." The only criteria for the assignment of subjects to the two groups are their major fields and the above-mentioned courses they are taking. The results of the study explain that all subjects perform better on the cohesive devices format although the English-major subjects do the best.

### **MacMillan(2007)**

This study examines the role that lexical cohesion plays in reading comprehension by introducing a TOEFL for 114 learners. The findings of the lexical cohesive analysis of a group of 608 fixed-response TOEFL reading comprehension test items indicate that all question types on the test involve the identification of different instances of lexical repetition, or 'lexical links'. Items suggest that lexical links are in evidence across different versions of the test, even though these editions may test certain reading skills by means of different question types.

### **Abisamra(2007)**

This study investigates the effects of problem-solution rhetorical predicates, intersentential cohesive conjunctions, and reference (lexical cohesion) on reading rate and comprehension, as measured by written free recall test. A sample of 160 college freshmen read 1 of 16 versions of two scientific prose passages. ANOVA results indicated that various combinations of the text-forming structures had unpredictable effects on comprehension. This suggested that claims regarding the facilitating effects of such structures need to be subjected to further empirical examination .

### **AL-Yafae (2003)**

This paper is titled by the following two questions: (1) what role does lexical knowledge play in reading comprehension ? and (2) what role does syntactic knowledge , in terms of cohesive devices , play in reading comprehension ? . Data are collected from 23 learners in one of the writer's first preparatory classes . Three tests are designed and used in order to examine the learners' lexical and syntactic knowledge . The number of

the Ss who participated in the three tests was different; that is, in the first two tests, thirteen Ss participated in a reading comprehension tests. In the third test ,eight learners participated in other comprehension test . All participants scored below 70% or sometimes more. The results of the study suggested that lexical knowledge needs to be supported with syntactic knowledge of learners to understand elaborated texts. Without it , learners are likely to find it difficult to make sense of the sequence of sentences that contain cohesive devices . Therefore, cohesive devices and word order are an area that may merit some level of explicit teaching in the Omani ELT curriculum. Thus, This study seems to support the argument that syntactic knowledge is an essential part in reading comprehension .

### **Al-Jarf (2001)**

This study is carried out to recognize the type of cohesion learners face more drawbacks than the other type of cohesion. The participants of the study are 59 EFL college students who took a cohesion test in which they identify four types of cohesive devices in a reading text. Incorrect responses are analyzed. It is found that *substitution* is the most difficult to process followed by *reference* and *ellipsis*, whereas *conjunction* is the easiest. In resolving the cohesion relationships, the students use the following strategies: an anaphor(a pronoun) is associated with the closest noun . When preceded by two potential antecedents, an anaphor is associated with the farther antecedent if it is salient or more familiar; an anaphor is associated with a synonym.

## **Ehrlich(1999)**

This experiment investigates metacognitive monitoring in the processing of anaphors. The subjects of this paper are 66 learners. They are 10–years old. They vary from skilled to less skilled comprehenders. Two tasks are used with expository texts. The direct self-evaluation task is carried out with consistent texts in which target anaphors are either repeated noun phrases or pronouns. Subjects have to read and to evaluate their own comprehension on a 6–point scale. After reading, subjects answer multiple-choice questions designed to test the processing of anaphors. In the inconsistency detection task, target anaphors are either repeated noun phrases or inconsistent noun phrases. Subjects have to read and detect inconsistencies. After reading, they answer multiple-choice questions. In both tasks, on-line and off-line measures are collected in order to analyze indicators of implicit and explicit evaluation and revision activities. The results from the two tasks indicate that less skilled comprehenders show deficiencies in monitoring on measures of implicit and explicit evaluation and revision. Patterns of reading times reveal that less skilled comprehenders are sensitive to the difficulties in processing pronouns in the self-evaluation task and also sensitive to the lack of text cohesion in the inconsistency detection task.

## **Cox, et al (1991)**

This study is carried out on 67 third and fifth grade students. The article aims at recognizing the impact of language proficiency and reading comprehension on students' ability to process cohesive devices in a written text of L1 and L2. The results of the study refer that reading level is more related than grade level to the sophisticated use of cohesion, organization. Thus, reading level , grade level or language proficiency are fundamental factors in learners ability to deal with cohesive devices but reading

comprehension or level is more important in effecting students ability to work out cohesive devices and the organization of a text.

### **Ehrlich(1991)**

This study is carried out with two narratives presented in two versions: a high-cohesion version and a low-cohesion version derived from the high version with the use of several devices — two anaphoric markers, changes in the temporal connective and word order, omission of the thematic sentence - without modification of the text content. 60 subjects read and immediately recall a high-cohesion text and a low-cohesion text. The results show that lowering cohesion produces an insignificant increase (8%) in reading time, but a highly significant decrease (25%) in recall performance. It appears that the subjects do not execute the processing required by the cohesion devices.

### **Johnson(1985)**

This paper investigates the impact of proficiency in comprehending anaphoric relations in stories and the effect of grade level on the comprehension of anaphora. The participants of this study are 60 third and sixth grade students. Students in both grade levels are somewhat proficient but sixth-grade students achieve significantly higher comprehension than do third graders. Thus, learners' level is more important than proficiency in dealing with cohesive devices and comprehending them.

### **Keenan, et al (1984)**

In this study, Keenan, Baillet and Brown investigate the effects of causal cohesion on comprehension and memory. 74 learners subjected to the test. The researchers used four

versions of several paragraphs that had the same second sentence and were referentially coherent, but different in casual relatedness of the two sentences. It is found that recognition and recall memory for the causes is poorest for the most and least related causes and best for causes of intermediate relatedness.

### **Chapman (1982)**

This paper aimed at exploring the impact learners' perception on reading comprehension in L1 and L2. The subjects of the experiment were 1355 children, ages 8, 10, and 13. They are subjected to four paragraphs with various comprehension questions. The findings of the study explained that there is a strong relationship between cohesion, in general, and reading comprehension. That is, Chapman finds that children's perception of cohesion is a significant element in reading comprehension in L1 and L2.

### **Monson (1982)**

This paper aims to explore if learners suffer from difficulties in dealing with cohesive devices and which type of cohesive devices the learners suffer from more than the other.<sup>122</sup> 7-12-year old children were subjected to this study. The findings state that most of participants have some difficulties in comprehending three types of anaphoric structures: pronoun-referent, lexical cohesion, ellipsis in forward and backward positions. It is also found that ellipsis structures are most difficult for all age groups. Referent structures are easiest for all age groups except 7-year-old who find lexical structures easiest to comprehend.

## **Commentary on the previous Studies:**

If someone reads throughout Ozuru's (2010) article, he would think that this study was not related to cohesive devices. In contrast, it relates to the present study since it focuses on the reader's ability to read and comprehend effectively if the text is coherent or not. In other words, if the text consisted of suitable subsequent cohesive devices, would this help self-explanation in reading or not? The researcher here states that some anaphora can help comprehension and some others can make the comprehension difficult. Therefore, not having some devices may help comprehension. Further, when a text contains a few referent pronouns that link successive ideas, this shortage of pronouns forces the reader to deepen his self-explanation which also helps comprehension. However, he does not deny the importance of referent pronouns in helping effective comprehension but not self-explanation. The writer here, in fact, wants to encourage the designers of syllabi to verify between texts; texts with several referent pronouns and texts with a few referent ones. Thus, we build both skills, comprehension and self-explanation which may mean here critical thinking.

The study written by Zesiger(2010) aims at exploring the effect of comprehension of pronouns on the production of syntactic and morphological aspects of a text. The researcher may, here, mean by the word "production" writing, speaking and reading since one should consider reading as an active, an interactive or a productive process. The current researcher thinks that syntactic and morphological aspects are essential for production of all English skills. The author inferred that comprehension of pronouns is a vital factor in dealing with the four skills.

This article by Balfakeh (2009) assures that learners' difficulties in dealing with reading comprehension questions positively are because of learners' inability in terms of

identifying cohesive devices, and as a result they must be unable to recognize the text organization and then to comprehend it.

The study, designed by Parvaz & Nodoushan(2009), states that cohesive knowledge is a vital and an essential factor for dealing with reading comprehension effectively. Engineers who are less proficient in English language performed the test worse than English-majors. This is according to their knowledge in terms of cohesive devices. However both groups worked out the reading comprehension texts reasonably.

The study, designed by MacMillan(2007), argues that lexical cohesion plays a fundamental role in the concept of reading comprehension. The author added that previous knowledge is an essential element for identifying lexical links and consequently for effective reading comprehension.

Dissimilarly, the researcher of this article, Abisamra(2007), argues that cohesive devices sometimes may not help reading comprehension.

AL-Yafae 2003 says that without syntactic knowledge, students would find it difficult to deal with the sequence of reading comprehension passage that consists of cohesive devices. He considered syntactic knowledge, especially cohesive devices, as a vital part in reading comprehension ability.

With a different purpose and in a different way, Al-Jarf (2001), who carries out this study to explore the difficulties students suffer from in terms of cohesive devices, finds that cohesion difficulties are caused by poor linguistic competence, especially poor syntactic and semantic awareness, and poor or inaccurate knowledge of the cohesion rules. Although the researcher does not examine the effect of these cohesive devices on reading comprehension, he identifies the learners' suffering in different aspects of cohesive devices. Treating this issue by several researchers means that this cause is an essential factor in successful reading comprehension.

Shifting to Ehrlich (1999), his study proves that there is a reciprocal effect between effective reading comprehension and cohesive devices knowledge. That is, the skilled learners in terms of reading comprehension must be able to deal with and to identify cohesive devices appropriately and at the same time, skilled learners regarding cohesive devices must deal correctly with reading comprehension texts.

Cox (1991) assures the importance of reading comprehension level in learners' ability to deal effectively with cohesive devices and their organization in a text. Thus, since learners are able to work out the text and its devices or organization as a result of their reading level, this shows that reading level can not come from nothing; that is, reading comes from students' ability to deal with cohesive devices and vocabulary appropriately. Consequently, there is an effective mutual relationship between devices and reading comprehension.

It is explained from the article composed by Ehrlich (1991) that the cognitive operations involved in the processing of cohesion devices for the construction of a coherent mental representation is a major issue in text comprehension. Moreover, the text which consists of a few devices does not help in high reading comprehension but it helps in good recalling. It is known that recalling is one of the reading comprehension sub-skills. Consequently, processing cohesive devices effectively must stimulate effective reading comprehension.

Johnson (1985) says that learners' grade level perform better than proficient learners. But it is believed that since learners are able to reach the sixth level, this means that they have enough effective ability to deal with reading comprehension and cohesive devices. As a result, there is a reciprocal relationship between reading comprehension and effective processing of devices.

Keenan (1984) confirms the importance of logically and meaningfully subsequent and organized texts with a few, logical, subsequent and organized cohesive devices in comprehending a text fully. Thus, understanding a text fully may be achieved by learners if there are not only cohesive causal devices but also if those devices are organized in such a simple way that the relatedness between the devices and their antecedents was an intermediate one.

Similar to several of the previous articles, this study by Chapman(1982)proves that perception of cohesive devices affect effectively and positively on a successful reading comprehension.

Monson (1982) maintains that there are difficulties in dealing with the most types of cohesive devices, this may direct us that there must not be an effective reading comprehension. This inference come because of the most previous studies that prove that there is a strong relationship between cohesive devices knowledge background and reading comprehension. That is, organized logically and subsequently cohesive devices may easify reading comprehension.

To sum up, in general, there is a strong relationship between cohesive devices knowledge background and reading comprehension skill. However, these devices should be organized logically, subsequently, meaningfully and according to learners current knowledge to help in reading comprehension because if the learners understood cohesive devices and their significance, they could deal with reading comprehension effectively and successfully.

## **Summary**

Throughout this section ,which stems from the second chapter, the researcher reviewed the related previous studies that examined the impact of vocabulary on reading comprehension. Further, this section also reviewed the related studies that investigated the effect of cohesive devices on reading comprehension. Some of these studies proved that there is a remarkable positive effect of both independent variables on reading comprehension. Other studies proved that there is a mutual positive relationship among vocabulary, cohesive devices and reading comprehension. The next chapter will discuss the methodology of this thesis and the procedures the researcher used in his research.

# **Chapter III**

## **The Methodology**

Introduction

Type of Research Design

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Pilot Study

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## **Chapter III**

### **The Methodology**

#### **Introduction**

This chapter includes the procedures followed throughout the study. It introduces a complete description of the methodology of the study, the design of the study, the population, the sample, the instrumentation, a description of the pre and post tests used in the study, the validity and reliability of the two tests. Moreover, it introduces the statistical treatment of the study findings.

#### **Type of Research Design**

The researcher uses the experimental method of research to carry out the study. Mackey and Gass (2005:356) define the experimental research as " a research in which there is manipulation of (at least) one independent variable to determine the effect(s) on one (or more) dependent variables".

They add that " Groups are determined on the basis of random assignment". And this is the case in this research in which there is a manipulation of two variables, named vocabulary and cohesive devices, on one variable, namely reading comprehension. The two groups, control and experimental, are determined on the basis of random assignment.

#### **Procedures of the study**

In order to achieve the aim of the study , the researcher :

1- prepared the theoretical framework through searching in the literature.

2- collected and reviewed several previous studies to benefit from their procedures, tools, results and recommendations.

3- designed a valid and reliable pre-test on two texts ; that is, the first text was designed to recognize the impact of lexical knowledge on students' reading comprehension , and the second text was to realize the effect of pronouns(anaphora+cataphora) and conjunctions knowledge on students' reading comprehension.

4- gave the experimental group some treatments in terms of the weaknesses they would face during the pre-test. This treatment includes eight lessons. The first three lessons was for teaching pronouns whose meanings or references were not known by the 11<sup>th</sup> graders. The process of teaching was achieved through two texts from 11<sup>th</sup> graders' syllabus. The second two lessons was for teaching conjunctions through two one from 11<sup>th</sup> graders' curriculum. The third one lesson was for teaching vocabulary whose meanings were not known by the 11<sup>th</sup> graders. This process was accomplished through some sentences. The last two lessons was for revising pronouns, conjunctions and vocabulary.

5- designed a valid and reliable post-test to make a comparison between the 11<sup>th</sup> graders' scores in the two tests, pre and post ones, and then to make a comparison between control and experimental groups through both tests.

6-consulted experts on English and methodology to ensure the validity of the tools.

7- obtained permission from the Ministry of Education & Higher Education and Directorate of Education to apply the two tests on the 11<sup>th</sup> graders.

8- computed the collected data and statistically analyzed the results.

9- presented recommendations in the light of the findings of the study.

## **Sample Procedures**

The population of this work is 2307 eleventh male graders in khanyounis schools. The study is applied to a random sample of two intact classes of sixty 11<sup>th</sup> graders taken from 2307 eleventh male graders in khanyounis schools. These two classes are divided into two groups, control and experimental. The learners represented roughly 3% of the eleventh learners studying English in Khanyounis governorate schools , and nearly 21.4% of the 11<sup>th</sup> learners studying English in the school where the researcher is working, and approximately 37.5% of the learners the researcher teaching English Language as a Foreign Language. The writer applied his experiment during the second term of 2011.

## **The Instrumentation**

The researcher believes that the most suitable tool for achieving the purpose of the study is to conduct pre and post tests for collecting data related to the impact of vocabulary and cohesive devices on 11<sup>th</sup> graders reading comprehension skill. At the same time, the researcher has to provide students some treatment regarding lexis, pronouns and conjunctions after the researcher made sure that both groups are equal in their knowledge in term of the independent variables from their scores on the pre-test.

## **Pilot Study**

Two weeks prior to the actual study, the researcher made some interviews with some 11<sup>th</sup>, 3<sup>rd</sup> and 4<sup>th</sup> graders and some of their teachers. Sixty participants of those 11<sup>th</sup> graders shared in this study. The pilot study was conducted mainly for the following purposes:

- 1-to get a clearer idea about the time needed to conduct the actual study.
- 2-to identify any problem the teachers and/or the students suffer from.
- 3-to examine the graders' syllabi in terms of the number, difficulty and type of vocabulary used in each text throughout these syllabuses.
- 4-to recognize the type and the number of the referent cohesive devices used through the same texts.
- 5-to indicate any adjustments that may be needed.

According to the pilot study implemented on the 11th 3<sup>rd</sup> and 4<sup>th</sup> syllabuses and the interviews the researcher carried out with the teachers of 11<sup>th</sup>, 3<sup>rd</sup>, 4<sup>th</sup> and 5<sup>th</sup> levels, the writer found these points:

i-According to the pilot study, the researcher discovered that roughly every text in 11th syllabus consists more than 20 new words, bearing in mind that there are through the same text other unknown lexis which have not been learned previously. This number would be too high according to some studies. Successful comprehension involves much more than being able to decode the vocabulary in a text, but a lack of familiarity with more than 5% of the running words in a text can make reading a formidable task (Laufer, 1989). West (1926, in Chujo, 2004, P. 231 ) considered "one unknown word in every fifty words" to be the minimum threshold necessary for the adequate comprehension of a text". More specifically, 98% coverage is equivalent to roughly one unknown word for every five lines of text. Some researchers regard one unknown word in every twenty words (95% lexical coverage of a text) as the necessary level beneath which readers are not expected to read an authentic text successfully. (Read,2000; Schmitt & McCarthy,1997 in Hsu, 2009).

It is noteworthy to know that learners should learn more than one aspect for every new word. Cronbach (1942, in Bogaards,2001, p. 491), referred to five aspects of

vocabulary knowledge: "generalization (knowing the definition), application (knowledge about use), breadth of meaning (knowing different senses of a word), precision of meaning (knowing how to use the word in different situations), and availability (knowing how to use the word productively)." Nation (1990, in Laufer & Paribakht, 1998) proposes four aspects of vocabulary knowledge: form (spoken, written), position (grammatical, collocations), function (frequency, appropriateness), and meaning (conceptual, associative).

Accordingly, the number of new words in every text should be as far as possible limited (3 - 4 new words for every 100 word in a text) since learners have to control several aspects for each new word.

ii-If the 11<sup>th</sup> graders know the meanings of referent pronouns, they easily and simply can tell what/who the pronoun (s) refer(s) to. Consequently, they are able to assimilate most of the text even though they do not realize the meanings of much vocabulary in the same text.

iii-The students' syllabi use different pronouns especially subject, object, possessive ones but different pronouns in different and several lessons may create confusion for learners since they are still younger and deal with two languages .

iv- Some lessons include a few new words and others include many new words.

v-Each textbook contains at the end of it a list of the new learned lexis. However, these textbooks do not include a list of the learned pronouns.

## **The Pre-Test & Post-Test**

Mackey and Gass (2005:363) define pre-test as " A test to determine Knowledge before treatment". They also define post-test as " A test to determine knowledge after

treatment". Moreover, they define pretest/posttest design as " Comparing performance before treatment with performance following treatment".

Both the pre or the post tests of this study consisted of two tests, lexical and cohesive devices tests. First of all , both groups, control and experimental, are given a pre-test consisting of two reading comprehension passages to diagnose their vocabulary and cohesive devices knowledge and to make sure that they are equal in their knowledge . The first passage in the pre-test contains some words the experimental group is taught later, and the same passage contains pronouns and conjunctions that are not taught to students later to see the effect of just vocabulary knowledge on learners' reading comprehension through the posttest. The second passage in the pre-test contains some pronouns and conjunctions the 11<sup>th</sup> graders of the experimental group are learned later and some vocabulary that the same group's learners' are not learned later to see the impact of only these devices knowledge on 11<sup>th</sup> graders' reading comprehension and thus, avoid the effect of the intrusive variables through the experiment . In the pre and post tests, both groups have to circle the words whose meanings they did not know so that the researcher could compute the correlational coefficient, by using Pearson Correlation Coefficient and Linear Regression, between learners' vocabulary knowledge and 11<sup>th</sup> graders' reading comprehension, then students have to work out some comprehension questions concerning the first passage. Regarding the 2<sup>nd</sup> passage of both tests, learners have to read the passage ,then to answer some comprehension questions and have to write what the underlined devices refer to in order to discover the correlation between 11<sup>th</sup> graders' devices knowledge and learners' reading comprehension. Additionally, just the experimental group graders' weaknesses concerning the circled vocabulary on the 1<sup>st</sup> passage and the devices the students did not write what they refer to in the 2<sup>nd</sup> passage are treated. As soon as the writer ensured that the experimental group graders learned the

circled vocabulary in the 1<sup>st</sup> passage and the devices in the 2<sup>nd</sup> passage, he subjected the two groups to the post-test. After that, there is an analysis of both groups' scores in both tests and there is a comparison between both groups' scores in the two tests concerning the two passages in term of vocabulary and cohesive devices; each section in isolation. Finally, the researcher analyzed the relationship between both linguistic aspects in isolation and reading comprehension to see whether lexis or devices knowledge is predictive.

In fact, the researcher depends on different sources and specialists to construct the two tools.

- A. Previous studies in general.
- B. Asking open questions to his supervisors and other specialists.
- C. Asking open questions to his students and his colleagues about the difficulties 11<sup>th</sup> learners face during reading comprehension.
- D. Theoretical framework.
- E. Inviting some other specialists to referee the two tests' validity.

## **The Validity of lexical and cohesive devices Tests**

Al. Agha (1996:118). states that" valid test is the test that measures what it is designed to measure" To validate the two tests, the researcher applied the referee validity.

## **The Referee Validity Of lexical and devices tests**

Both tests are checked by twelve referees from the Islamic University of Gaza, Al-Aqsa University, Gaza University and Abdulkader Al- Hussein School to ensure their clarity and relevance. Ambiguous items are modified and clarified according to

these experts' suggestions. Consequently, one passage is exchanged, some questions are added, some others are deleted and others are modified.

## Internal Consistency Validity of Lexical Test

This type of validity can be got by finding the correlation between every item of the test and the total scores of all test, or finding correlation between domain and the total scores.

### a. Correlation Coefficient for each question and the total of 1st part "A" lexical test

Table (3.1) clarifies the correlation coefficient for each question and the total of the first part "A". The p-values (Sig.) are less than 0.05, so the correlation coefficients of this part are significant at  $\alpha = 0.05$ , so it can be said that the items of this part are consistent and valid to measure what they were.

*Table(3.1) Correlation coefficient of each item and the total of the first part"A"*

Question No.	Pearson Correlation	Sig.
1.	.924**	.000
2.	.932**	.000

### b. Correlation Coefficient for each question and the total of 2nd part 'B' of lexical test

Table (3.2) clarifies the correlation coefficient for each question and the total of the second part "B". The p-values (Sig.) are less than 0.05, so the correlation coefficients of this part are significant at  $\alpha = 0.05$ , so it can be said that the items of this part are consistent and valid to measure what they were.

*Table(3.2) Correlation coefficient of each item and the total of second part "B"*

<b>Question No.</b>	<b>Pearson Correlation</b>	<b>Sig.</b>
<b>1.</b>	<b>.904<sup>**</sup></b>	<b>.000</b>
<b>2.</b>	<b>.450<sup>*</sup></b>	<b>.013</b>
<b>3.</b>	<b>.978<sup>**</sup></b>	<b>.000</b>
<b>4.</b>	<b>.853<sup>**</sup></b>	<b>.000</b>
<b>5.</b>	<b>.989<sup>**</sup></b>	<b>.000</b>
<b>6.</b>	<b>.987<sup>**</sup></b>	<b>.000</b>
<b>7.</b>	<b>.989<sup>**</sup></b>	<b>.000</b>
<b>8.</b>	<b>.909<sup>**</sup></b>	<b>.000</b>
<b>9.</b>	<b>.978<sup>**</sup></b>	<b>.000</b>
<b>10.</b>	<b>.717<sup>**</sup></b>	<b>.000</b>

**c. Correlation Coefficient for each question and the total of 3rd part “c” of lexical test**

Table (3.3) clarifies the correlation coefficient for each question and the total of the third part "C". The p-values (Sig.) are less than 0.05, so the correlation coefficients of this part are significant at  $\alpha = 0.05$ , so it can be said that the items of this part are consistent and valid to measure what they were.

*Table(3.3) Correlation coefficient of each item and the total of third part "C"*

<b>Question No.</b>	<b>Pearson Correlation</b>	<b>Sig.</b>
<b>1.</b>	<b>.984<sup>**</sup></b>	<b>.000</b>
<b>2.</b>	<b>.983<sup>**</sup></b>	<b>.000</b>

**d. Correlation Coefficient for each question and the total of part “D” of lexical test**

Table (3.4) clarifies the correlation coefficient for each question and the total of the fourth part "D". The p-values (Sig.) are less than 0.05, so the correlation coefficients

of this part are significant at  $\alpha = 0.05$ , so it can be said that the items of this part are consistent and valid to measure what they were.

*Table(3.4) Correlation coefficient of each item and the total of fourth part "D"*

<b>Question No.</b>	<b>Pearson Correlation</b>	<b>Sig.</b>
<b>1.</b>	<b>.963**</b>	<b>.000</b>
<b>2.</b>	<b>.957**</b>	<b>.000</b>

**e. Correlation Coefficient of each question of the test and the total of part “E” of lexical test**

Table (3.5) clarifies the correlation coefficient for each question and the total of the fifth part "E". The p-values (Sig.) are less than 0.05, so the correlation coefficients of this part are significant at  $\alpha = 0.05$ , so it can be said that the items of this part are consistent and valid to measure what they were.

*Table(3.5) Correlation coefficient of each item and the total of fifth part "E"*

<b>Question No.</b>	<b>Pearson Correlation</b>	<b>Sig.</b>
<b>1.</b>	<b>.886**</b>	<b>.000</b>
<b>2.</b>	<b>.886**</b>	<b>.000</b>

**f. Internal Validity of Lexical Test**

Internal validity is the second statistical test that was used to test the validity of the test structure of each part of the test and the validity of the whole test itself. It measures the correlation coefficient between one part and all the parts of the test that have the same level of liker scale.

The researcher assesses the external validity of the parts of the test by calculating the correlation coefficients of each part of the test and the whole of test itself.

*Table(3.6) Correlation coefficient of each part of the test and the whole of test itself*

<b>No.</b>	<b>Part</b>	<b>Pearson Correlation</b>	<b>Sig.</b>
<b>1.</b>	<b>A</b>	<b>.917**</b>	<b>.000</b>
<b>2.</b>	<b>B</b>	<b>.931**</b>	<b>.000</b>
<b>3.</b>	<b>C</b>	<b>.746**</b>	<b>.000</b>
<b>4.</b>	<b>D</b>	<b>.783**</b>	<b>.000</b>
<b>5.</b>	<b>E</b>	<b>.757**</b>	<b>.000</b>

Table (3.9) clarifies the correlation coefficient for each part of the test and the whole test itself. The p-values (Sig.) are less than 0.05, so the correlation coefficients of all the parts are significant at  $\alpha = 0.05$ , so it can be said that the parts are valid to measure what they were to achieve the main aim of the study.

## **Internal Consistency Validity of Cohesive Devices Test**

### **a. Correlation Coefficient of each question and the total of part “A” of cohesive devices test**

Table (3.6) clarifies the correlation coefficient for each question and the total of the first part "A". The p-values (Sig.) are less than 0.05, so the correlation coefficients of this part are significant at  $\alpha = 0.05$ , so it can be said that the items of this part are consistent and valid to measure what they were.

*Table (3.7)Correlation coefficient of each item and the total of first part*

<b>Question No.</b>	<b>Pearson Correlation</b>	<b>Sig.</b>
<b>1.</b>	<b>.575**</b>	<b>.001</b>
<b>2.</b>	<b>.415*</b>	<b>.028</b>
<b>3.</b>	<b>.776**</b>	<b>.000</b>

**b. Correlation Coefficient of each question of the and the total of part “B” of cohesive devices test**

Table (3.7) clarifies the correlation coefficient for each question and the total of the second part "B". The p-values (Sig.) are less than 0.05, so the correlation coefficients of this part are significant at  $\alpha = 0.05$ , so it can be said that the items of this part are consistent and valid to measure what they were.

*Table(3.8) Correlation coefficient of each item and the total of second part*

<b>Question No.</b>	<b>Pearson Correlation</b>	<b>Sig.</b>
<b>1.</b>	<b>.928<sup>**</sup></b>	<b>.000</b>
<b>2.</b>	<b>.891<sup>**</sup></b>	<b>.000</b>
<b>3.</b>	<b>.700<sup>**</sup></b>	<b>.000</b>
<b>4.</b>	<b>.935<sup>**</sup></b>	<b>.000</b>
<b>5.</b>	<b>.764<sup>**</sup></b>	<b>.000</b>
<b>6.</b>	<b>.752<sup>**</sup></b>	<b>.000</b>
<b>7.</b>	<b>.786<sup>**</sup></b>	<b>.000</b>
<b>8.</b>	<b>.563<sup>**</sup></b>	<b>.002</b>
<b>9.</b>	<b>.636<sup>**</sup></b>	<b>.000</b>
<b>10.</b>	<b>.724<sup>**</sup></b>	<b>.000</b>
<b>11.</b>	<b>.937<sup>**</sup></b>	<b>.000</b>
<b>12.</b>	<b>.735<sup>**</sup></b>	<b>.000</b>
<b>13.</b>	<b>.807<sup>**</sup></b>	<b>.000</b>
<b>14.</b>	<b>.861<sup>**</sup></b>	<b>.000</b>
<b>15.</b>	<b>.861<sup>**</sup></b>	<b>.000</b>
<b>16.</b>	<b>.934<sup>**</sup></b>	<b>.000</b>
<b>17.</b>	<b>.928<sup>**</sup></b>	<b>.000</b>
<b>18.</b>	<b>.776<sup>**</sup></b>	<b>.000</b>
<b>19.</b>	<b>.735<sup>**</sup></b>	<b>.000</b>
<b>20.</b>	<b>.706<sup>**</sup></b>	<b>.000</b>

**C. Correlation Coefficient of each question of the and the total of part “C” of cohesive devices test**

Table (3.8) clarifies the correlation coefficient for each question the total of the third part "C". The p-values (Sig.) are less than 0.05, so the correlation coefficients of this

part are significant at  $\alpha = 0.05$ , so it can be said that the items of this part are consistent and valid to measure what they were.

*Table(3.9) Correlation coefficient of each item and the total of third part*

<b>Question No.</b>	<b>Pearson Correlation</b>	<b>Sig.</b>
<b>1.</b>	<b>.732<sup>**</sup></b>	<b>.000</b>
<b>2.</b>	<b>.829<sup>**</sup></b>	<b>.000</b>
<b>3.</b>	<b>.675<sup>**</sup></b>	<b>.000</b>
<b>4.</b>	<b>.808<sup>**</sup></b>	<b>.000</b>

#### **D. Internal Validity of Cohesion Devices Test**

The researcher assesses the internal validity of the parts of the test by calculating the correlation coefficients of each part of the test and the whole test itself.

*Table (3.10) Correlation coefficient of each part of the test and the whole test itself*

<b>No.</b>	<b>Part</b>	<b>Pearson Correlation</b>	<b>Sig.</b>
<b>1.</b>	<b>A</b>	<b>.745<sup>**</sup></b>	<b>.000</b>
<b>2.</b>	<b>B</b>	<b>.583<sup>**</sup></b>	<b>.001</b>
<b>3.</b>	<b>C</b>	<b>.437<sup>*</sup></b>	<b>.020</b>

Table (3.10) clarifies the correlation coefficient for each part of the test and the whole test itself. The p-values (Sig.) are less than 0.05, so the correlation coefficients of all the parts are significant at  $\alpha = 0.05$ , so it can be said that the parts are valid to measure what it was set for to achieve the main aim of the study

### **Reliability of the lexical and cohesive devices Tests**

Al-Agha states that "the test will be reliable when it gives the same results if it is reapplied in the same conditions[for the same group of students]" (1996:118).

The Kuder-Richardson Formula 20 (KR-20), first published in 1937, is a measure of internal consistency reliability for measures with dichotomous choices. It is analogous to Cronbach's  $\alpha$ , except Cronbach's  $\alpha$  is also used for non-dichotomous measures (Cortina, 1993:98).

To ensure the reliability of both tests, the pre and post tests, that belong to vocabulary and cohesive devices, the researcher takes from the experimental group 15 learners' post test answers and from the control one 15 learners' post test scores and uses (KR-20) .

$$\alpha = \frac{K}{K - 1} \left[ 1 - \frac{\sum_{i=1}^K p_i q_i}{\sigma_X^2} \right]$$

K: Number of sample items

p: the proportion of the responses to an item that are correct

q: the proportion of responses that are incorrect .

$\sigma^2$  : variance

The results explained that the reliability for lexical test was( 0.963) and the Reliability for the cohesive devices test was (0.706).

## **Controlling the Variables**

To ensure the accuracy of the results and to avoid any marginal interference, the researcher tries to control some variables, lexis and devices of the pre test for both groups, by using t-tests before conducting the study. T-test independent sample is used to make sure that there are no statistically significant differences between both groups in terms of vocabulary and devices knowledge before the treatment.

## 1. Pre-Treatment Lexical Test

The researcher uses T-Test independent sample to measure the statistical differences between the two groups due to their results of pre-lexical test. T. Test independent sample is used when a researcher has just 2 groups, control and experimental. One way ANOVA is used with more than 2 groups, so it can not be used here. The tests' scores are recorded and analyzed.

*Table (3.11) : T-Test results of controlling pre-lexical test*

Group	N	Mean	Std. Deviation	t-value	Sig
Experimental	30	5.000	2.9478	-.942	.350
Control	30	5.633	2.2047		

Since Sig. value is(.350), this means that there are no statistical differences at (.05) level of significance between control and experimental group in pre-test of vocabulary. Thus, these groups can be used as experimental and control groups to make a comparison between their scores after treatment .

## 2. Pre-Treatment Cohesive Devices Test

The researcher used T-Test independent sample to measure the statistical differences between the two groups' scores of pre-cohesive devices test. The subjects' results are recorded and analyzed.

*Table (3.12): T-Test results of controlling pre- cohesive devices test*

Group	N	Mean	Std. Deviation	t-value	Sig
Experimental	30	5.3000	2.23453	-1.216	.229
control	30	6.0500	2.53374		

Since Sig. value is .229, this meant that there are no statistical differences at (.05) level of significance between control and experimental groups in pre-test of cohesive

devices. Thus, these groups can be used as experimental and control group to make a comparison between their results after treatment .

### **3. Age variable**

The researcher made sure that most of the 11<sup>th</sup> graders of the study were in the same age; that is, they were approximately 17 years old.

### **4. Social and economic variables**

Most of the learners subjected to the experiment were proved that they were roughly in same social and economic situations in Khanyounis Camp. This information has been got from some teachers teaching those graders.

## **Statistical Analysis Procedures**

The pre and post treatment essay tests are collected, computed, and analyzed by using Statistical Package for Social Science (SPSS). The significance level used is 0.05. If Sig. value of the test is less than ( $\alpha=0.05$ ), the null hypothesis is rejected. The following statistical techniques are used:

1. Covariance : to control the intervening variables and to measure the statistical differences in means between the two groups due to the study variables. If Sig. value of the test is less than ( $\alpha=0.05$ ), there are statistical differences between the two groups.
2. T-Test paired sample was used to figure out any statistical differences within the experimental group respondents regarding their lexical and cohesive devices knowledge before and after the treatment. If Sig. value of the test is less than ( $\alpha=0.05$ ), there are statistical differences before and after treatment.
3. Pearson Correlation Coefficient is used to check the relationship between the following:

- a. The students' lexis knowledge and the students' reading comprehension.
  - b. The students' pronouns and conjunctions knowledge and the students' reading comprehension skill.
  - c. Also, to check tests internal and structure consistency.
4. Linear regression to check the ability of vocabulary and/or cohesive devices for predicting Ss' reading comprehension.
  5. The Kuder-Richardson Formula 20 (KR-20) is used to calculate the reliability of the test.
  6. Eta square is used to check the effect size of the evident significant differences between the two groups and within the experimental group and throughout its scores of the posttest. That is, the researcher found it was essential to recognize the true effect of both variables, vocabulary & devices, on reading comprehension, each variable in isolation. To calculate the effect size and quantify the strength and extent of the post-treatment scores of vocabulary and cohesive devices, the researcher used Effect Size Equation , Eta Squared, " $\eta^2$ " (Abu-Allam,2002:114). Due to the figures in Table (3.13) below, the effect size is determined by three levels: small, medium, and large. The greater the effect size is, the greater is the difference of the measured variables.

### **Eta Squared Equation**

$$\eta^2 = \frac{t^2}{t^2 + (df)}$$

Table (3.13):The reference table to determine the level of effect size according to( $\eta^2$ )

Equation

Test	Effect size		
	Small	Medium	Large
$H^2$	0.01	0.06	0.14

## Teaching Strategy

The researcher tried to differentiate among more than one teaching strategies while applying vocabulary and cohesive devices treatment to the 11<sup>th</sup> graders. Basically, the researcher used communicative method but in the same time he focused on teaching vocabulary and pronouns intensively until he ensured the 11<sup>th</sup> graders' excellence in this regard. The researcher introduced the 11<sup>th</sup> graders to many practices and exercises and he used repetition in his teaching until he ensured that the 11<sup>th</sup> graders answered any exercise easily and quickly. The researcher also gave the graders some homework in this term.

## Summary

This chapter described the design of this study, population, representative sample and the instrumentation. Then, it showed the pre and post tests and achieved the necessary types of validity namely, referee, internal and structure validity. Later, the researcher made sure of the reliability of both tests. After that, the researcher controlled the variables by using Kuder Richardson 20 to make sure that both groups' scores in the pre test are equal. At the end of this chapter, the researcher introduced statistical analysis. The next chapter will show the results of study by discussing the four hypotheses.

## **Chapter IV**

### **Results and Analysis of Data**

Examination the First Question and Hypothesis

Examination the Second Question and Hypothesis

Examination the Third Question and Hypothesis

Examination the Fourth Question and Hypothesis

Summary

## Chapter IV

### Results And Analysis of Data

#### Introduction

The purpose of this study is to examine the impact of 11<sup>th</sup> graders' vocabulary and cohesive devices, especially pronouns and conjunctions, knowledge on reading comprehension ability. This chapter aims at presenting the findings of the study by discussing the thesis hypotheses.

#### Examination of Questions

##### Examination the First question and Hypothesis

The first question was: "**Are there statistically significant differences between control and experimental groups in reading comprehension due to lexical knowledge?**"

The first hypothesis was: "**There are no statistically significant differences between control and experimental groups in reading comprehension referring to lexical knowledge.**"

To examine this question and this hypothesis, the researcher used T-test independent sample to show the difference between the students' scores in the pre and post treatment regarding both groups. Table (4.1) and (4.2) below display these differences.

Table (4.1): Lexical post test scores between both groups

Groups	N	Mean	Std. Deviation	t-value	Sig	$\eta^2$
Control	30	5.90	3.14	20.83	.000	.882
Experimental	30	19.03	1.42			

The scores of the pre vocabulary test of the control group in mean was (= 5.633), table (3.11) and in the posttest without treatment is (= 5.90), table (4.1). On the other hand, the scores of the pre vocabulary test of the experimental group in mean was (= 5.00), table (3.11) and the students' scores of the posttest regarding the same group with treatment or after providing vocabulary knowledge is (= 19.03), table (4.1).

Table (4.1) explains that Sig. value is less than (.05) level of significance (= .000). This means that there are statistical differences at (.05) level of significance between control and experimental groups in post-test of lexis.

The difference between the two groups' means in the post-tests in percentage equals 70.1%. This difference refers to the importance of vocabulary in effective reading comprehension.

Moreover, the effect size of the posttest scores of both groups was examined by using Eta Squared ( $\eta^2=.882$ ). This result proves that the difference in the development level between both groups in the posttest is large and true.

Tables (3.11) and (4.1) above show that there are statistically significant differences between control and experimental groups' scores, means or percentages in the post test due to vocabulary knowledge treatment. Additionally, the development level of the graders' reading comprehension regarding the experimental group, after injecting them with the necessary vocabulary and their meanings or significance, is (=70.1). Accordingly, the first hypothesis is rejected.

## Examination the Second Question and Hypothesis

The second question was: **"Does students' lexical knowledge predict these students' reading comprehension?"**

The second hypothesis is **"Students' lexical knowledge does not predict these Students' reading comprehension."**

To check this question and this hypothesis , the researcher has to identify the correlation coefficient and linear regression between the lexical knowledge test scores and the reading comprehension scores in the post-test of the experimental and control groups using Pearson correlation coefficient and linear regression.

### **a. For Control Group.**

#### **i. Correlation coefficient between lexical knowledge and reading comprehension**

The researcher finds the correlation between lexical knowledge and reading comprehension ( $R = .909$ ). Thus, there is a high positive correlation between lexis and reading comprehension.

#### **ii. Linear Regression of lexical knowledge on reading comprehension for post test scores of control group.**

*Model Statement (4.2): Reading comprehension = Lexical Knowledge*

Model	Sum of Squares	df	Mean Square	R <sup>2</sup>	R <sup>2</sup> adj	F	Sig.
Regression	698.64	1	698.64	.826	.819	132.5	.000
Residual	147.59	28	5.271				
Total	846.24	29					

The former table (4.2) shows the squared correlation coefficient or amount of variance in dependent variable explained by the independent variable is ( $R^2 = .826$ ) and  $R^2$  adjusted ( $= .819$ ). Further, The overall test of regression is ( $F = 132.5$ ) with Sig. value ( $= .000$ ) and it is less than ( $\alpha=.05$ ) . All previous indicators show that the regression model is accepted.

*Table(4.3) Results of Prediction equation depending on linear regression(Con.Lexis)*

Model	Unstandardized Coefficients		t-test	Sig.
	B	Std. Error		
(Constant)	<b>3.30</b>	<b>.903</b>	<b>3.66</b>	<b>.001</b>
<b>LKC</b>	<b>1.56</b>	<b>.136</b>	<b>11.51</b>	<b>.000</b>

Both of t-test and Sig. values, for constant and the independent variable LKC, are significant because Sig. value for them are less than ( $\alpha=.05$ ). This proves that the model is appropriate for prediction.

Prediction Equation for control group:

$$CK = 3.30 + 1.56 * (LKC) + e$$

CK : Comprehension knowledge

LKC : Lexical knowledge of Control group

e: Error

For example, if a student gets a grade 5 in the test of lexis regarding to control group, this student would get this mark 11.1 in reading comprehension as it shown in the following example:

$$Ck = 3.30 + 1.56 * (5)$$

$$CK = 11.1$$

## b. For Experimental Group

### i. Correlation coefficient between lexical knowledge and reading comprehension

The researcher finds the correlation between lexical knowledge and reading comprehension as (or output of regression) = ( $R = .579$ ), thus there is a moderate positive correlation between lexical knowledge and reading comprehension. Accordingly, lexical knowledge predicts the graders' reading comprehension skill.

### ii. Regression Equations of lexical knowledge on reading comprehension for post test scores of control group.

Table(4.4) Model Statement : Reading comprehension = Lexical Knowledge

Model	Sum of Squares	df	Mean Square	R <sup>2</sup>	R <sup>2</sup> adj	F	Sig.
Regression	79.304	1	79.304	.335	.311	14.09	.001
Residual	157.538	28	5.626				
Total	236.842	29					

The previous table (4.4) shows, for experimental group, squared correlation coefficient or amount of variance in dependent variable explained by the independent variable ( $R^2 = .335$ ) and  $R^2$  adjusted (= .311). The overall test of regression ( $F = 14.09$ ) with Sig. value (= .001) and this value is less than ( $\alpha = .05$ ). The previous indicators show that the overall regression model is accepted.

Table(4.5) Results of Prediction equation depending on linear regression (Exper.Lexis)

Model	Unstandardized Coefficients		t-test	Sig.
	B	Std. Error		
(Constant)	10.044	5.895	1.704	.100
LKE	1.160	.309	3.754	.001

T-test and Sig. values, for the independent variable LKE, are significant because Sig. value for them are less than ( $\alpha = .05$ ) but for constant they are not significant. However, this model is appropriate for prediction.

Prediction Equation for Experimental group:

$$CK = 10.04 + 1.16 * (LKE) + e$$

CK : Comprehension knowledge

LKE : Lexical knowledge of Experimental group

e: Error

For example, if a student gets a grade 17 in the test of lexis regarding to experimental group, this student would get this mark 36.56 in reading comprehension as it shown in the following example:

$$CK = 10.04 + 1.16 * (17)$$

$$CK = 29.76$$

Accordingly, the students' lexical knowledge does predict the students' reading comprehension skill. Thus, the second hypothesis is rejected.

### **Examination the Third question and Hypothesis**

The third question was: "**Are there statistically significant differences between control and experimental groups in reading comprehension due to cohesive devices knowledge**"

The third hypothesis is "**There are no statistically significant differences between control and experimental groups in reading comprehension referring to cohesive devices knowledge.**"

To examine the third hypothesis, the researcher uses Covariance to explain the difference between the students' scores in the pre and post treatment within both groups. Table (4.6) below displays these differences.

Table (4.6.): Devices post test between experimental and control group

Groups	N	Mean	Std. Deviation	t-value	Sig.	$\eta^2$
Control	30	6.61	2.86	9.57	.000	.612
Experimental	30	13.08	2.34			

The scores of the cohesive devices test of the control group in mean was (= 6.05) and in the post-test without treatment is (= 6.61). On the other hand, the scores of the pre cohesive devices test of the experimental group in mean was (= 5.30) and in the posttest after treatment is (= 13.08). The difference between both groups' means equals (39.1%). Further, the effect size of the post-test scores of the both groups namely control and experimental is examined by using Eta Squared and it is (.612). Further, the development level, which is due to injecting students with the necessary cohesive devices and their references or meanings in the treatment, between the pre and post-tests regarding the experimental group is (=39.1%). This proves that cohesive devices are such vital factors that they can ease reading comprehension notably.

Moreover, since Sig. value is less than (.05) level of significance (= .000), this means that there are statistical differences at (.05) level of significance between control and experimental groups in post-test of cohesive devices. Thus, the third hypothesis is rejected and cohesive devices do help effective reading comprehension.

### **Examination the Fourth question and Hypothesis**

The fourth question was: "**Does students' cohesive devices knowledge predict these students' reading comprehension?**"

The fourth hypothesis was: "**Students' cohesive devices knowledge does not predict these Students' reading comprehension.**"

To examine this hypothesis, the researcher has to identify the correlation coefficient and regression equation cohesive devices test scores and the reading comprehension scores in the post-test of the experimental and control groups using Pearson correlation coefficient and linear regression

**a. For Control Group**

**i. Correlation between cohesive devices knowledge and reading comprehension**

The researcher found the correlation between lexical knowledge and reading comprehension ( $R = .889$ ). Thus, there is high positive correlation between lexis and reading comprehension.

**ii. Linear Regression Equations of cohesive devices knowledge on reading comprehension for post test scores of control group.**

*Table(4.7) Model Statement: Reading comprehension = Lexical Knowledge*

<b>Model</b>	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>R<sup>2</sup></b>	<b>R<sup>2</sup> adj</b>	<b>F</b>	<b>Sig.</b>
<b>Regression</b>	<b>668.323</b>	<b>1</b>	<b>668.323</b>	<b>.790</b>	<b>.782</b>		
<b>Residual</b>	<b>177.919</b>	<b>28</b>	<b>6.354</b>			<b>105.1</b>	<b>.000</b>
<b>Total</b>	<b>846.242</b>	<b>29</b>					

The previous table (4.8) shows , the squared correlation coefficient or amount of variance in dependent variable explained by the independent variable as ( $R^2 = .790$ ) and  $R^2$  adjusted as ( $R^2 \text{ adj} = .782$ ) . the overall test of regression ( $F = 105.1$ ) with Sig. value (= .000). It is less than ( $\alpha = .05$ ) . All the previous indicators show that the regression model is accepted.

Table(4.8): Results of Prediction equation depending on linear regression(Con. Cohesive)

Model	Unstandardized Coefficients		t-test	Sig.
	B	Std. Error		
(Constant)	1.425	1.175	1.213	.235
CKC	1.676	.163	10.25	.000

T-Test and Sig. of the independent variable CKC are significant because Sig. value for them are less than ( $\alpha=.05$ ), and for constant they are not significant but it is included from the following equation that the model is appropriate for prediction.

Prediction Equation for control group :

$$CK = 1.42 + 1.67 (LKC) + e$$

CK : Comprehension knowledge

CKC : Cohesive devices knowledge of Control group

e: Error

For example, if a student gets a grade 5.6 in the test of cohesive devices regarding to control group, this student would get this mark 10.772 in reading comprehension as it shown in the following example:

$$CK = 1.42 + 1.67 (5.6)$$

$$CK = 10.772$$

## **b. For Experimental Group**

### **i. Correlation between cohesive devices knowledge and reading comprehension**

The researcher finds the correlation between cohesive devices knowledge and reading comprehension(output of regression) = ( $R = .868$ ). Thus, there is a high positive correlation between cohesive devices and reading comprehension for experimental group.

**ii. Linear Regression Equations of Cohesive devices knowledge on reading comprehension for post test scores of Experimental group.**

(4.9) Model Statement: Reading comprehension = cohesive devices Knowledge

Model	Sum of Squares	df	Mean Square	R <sup>2</sup>	R <sup>2</sup> adj	F	Sig.
Regression	178.433	1	178.433	.753	.745		
Residual	58.409	28	2.086			85.53	.000
Total	236.842	29					

The previous table (4.10) shows the squared correlation coefficient or amount of variance in dependent variable explained by the independent variable as ( $R^2 = .753$ ) and  $R^2$  adjusted as ( $R^2_{adj} = .745$ ). The overall test of regression ( $F = 85.53$ ) with Sig. value ( $= .000$ ). It is less than ( $\alpha = .05$ ). The previous indicators show that the overall regression model is accepted.

Table (4.10) Results of Prediction equation depending on linear regression (Eper. Cohesive)

Model	Unstandardized Coefficients		t-test	Sig.
	B	Std. Error		
(Constant)	18.259	1.521	12.00	.000
CKE	1.059	.115	9.24	.000

Both of t-test and Sig. values for constant and the independent variable CKE are significant, because Sig. value for them were less than ( $\alpha = .05$ ), this also proves that the model is appropriate for prediction.

Prediction Equation for Experimental group:

$$CK = 18.259 + 1.059 (CKE) + e$$

CK : Comprehension knowledge

CKE : Cohesive knowledge of experimental group

e: Error

For example, if a student gets a grade 13 in the test of cohesive devices regarding to experimental group, this student would get this mark 32.02 in reading comprehension as it shown in the following example:

$$CK = 18.259 + 1.059 (13)$$

$$CK = 32.02$$

Accordingly, the researcher proved that cohesive devices knowledge does predict reading comprehension skill. Thus, this hypothesis is rejected .

## Summary

In this chapter, the fourth one, the researcher reviewed the results of this study throughout investigating the four hypotheses in turn. The researcher attached some tables that explained the differences between:

- i- vocabulary and reading comprehension.
- ii-cohesive devices and reading comprehension.

Then, the researcher used Eta squared to get out the effect size of these differences. Later, the author got out the correlation coefficient and the linear regression to know whether vocabulary or/and cohesive devices may predict reading comprehension scores.

Based on the results of this paper, previous knowledge of vocabulary had the most important role in developing and simplifying reading comprehension since most of experimental group's graders got much scores in the post test and after treatment than in the pre test and before treatment, and as the experimental group regarding post-test of vocabulary achieved more scores than control group. In addition, the experimental group achieved more scores in the cohesive devices post-test than the control group in terms of cohesive devices post-test. However, Graders got less development in reading comprehension in cohesive devices pre and post tests than the development students

attained in terms of vocabulary pre and post tests. In a nut shell, vocabulary knowledge(= 70.1%) affected reading comprehension more than cohesive devices(= 39.1%) did. Accordingly, the four hypothesis are rejected.

The next chapter, the fifth and the last one, discusses the results of this study and poses conclusion and some recommendations according to the results of this paper and their analysis.

## **Chapter V**

### **Findings, Discussion, Conclusion and Recommendations**

Summary

Findings and Discussion

The discussion of the results of the 1<sup>st</sup> hypothesis and question

The discussion of the results of the 2<sup>nd</sup> hypothesis and question

The discussion of the results of the 3<sup>rd</sup> hypothesis and question

The discussion of the results of the 4<sup>th</sup> hypothesis and question

Conclusion

Recommendations

## **Chapter V**

### **Findings, Discussion, Conclusion and Recommendations**

#### **Summary**

The purpose of the study was to realize the impact of vocabulary and cohesive devices knowledge; particularly pronouns, on 11<sup>th</sup> graders' reading comprehension skill. Two tests, pre and post one, were applied on two groups, control and experimental one. 60 students from the 11<sup>th</sup> class were subjected to both tests. Every test included two passages. The first passage was followed by some comprehension questions to be answered by both groups' learners to collect data about the students' previous vocabulary knowledge. At the same time, students had to circle the words they do not know their meanings. The second passage in the same pre-test was to discover both groups' previous devices knowledge in order to compare both groups' scores to discover whether they are equal in their previous knowledge or to make sure whether there are statistical significant differences between both groups. The post-test was as the same as the pre-test. Then, the researcher collected data about the correlation coefficient between the unknown circled vocabulary and referent pronouns and reading comprehension. Other aims were to identify the differences between the students in both groups before and after treatment. Twelve referees examined both tests to ensure that they are valid. The reliability of both tests was attained by using Kuder Richardson 20.

In this thesis, this chapter aimed at discussing the findings in relation to some interpretations and analysis of these results. The researcher then came out with overall suggestions and recommendations depending on the study findings, interpretations and analysis.

## Findings and Discussion

**Based on the results of the study, the following findings were noticed:**

1. The control group students' vocabulary pre-test scores were in mean ( $=5.633$ ), and the post-test marks for the same group without treatment were in mean ( $=5.9$ ). That is, each learner of most of control group 30 students got approximately 6 out of 20 in the vocabulary pre-test. Additionally, the same graders got roughly 6 out of 20 in vocabulary post-test without treatment. Thus, The graders' scores nearly did not change through both tests. However, the experimental graders' vocabulary pre-test scores were in ( $=5.000$ ), and in the posttest were ( $=19.03$ ). That is, each grader of most of experimental group 30 students achieved roughly 5 out of 20 in the vocabulary pre-test and in the posttest after treatment each student approximately attained 19 out of 20. thus, the students' scores throughout both tests completely changed to a better level. Additionally, the difference between both groups' means in the post-test in percentage was 70.1% due to vocabularies knowledge and the treatment regarding them.

2. The correlation coefficient (R) between vocabulary and reading comprehension was ( $R=.909$ ). This proved that vocabulary was so vital that it can predict reading comprehension scores.

3. The control group students' cohesive devices pre-test scores were in mean ( $=6.05$ ), and the post-test marks for the same group without treatment were in mean ( $=6.61$ ). That is, each learner of most of control group 30 students got approximately 6 out of 20 in the cohesive devices pre-test. Additionally, the same graders got roughly 6.5 out of 20 in cohesive devices post-test without treatment. Thus, The graders' scores nearly did not change through both tests. However, the experimental graders' cohesive devices pre-test scores were in ( $=5.30$ ), and in the posttest were ( $=13.08$ ). That is, each grader of most of experimental group 30 students achieved roughly 5 out of 20 in the vocabulary pre-test

and in the post-test after treatment each student approximately attained 13 out of 20. Thus, the students' scores throughout both tests changed to somewhat better level. Additionally, the difference between both groups' means in the post-test in percentage was 39.1%. This refers to or is due to cohesive devices knowledge and the treatment regarding them.

4. The correlation coefficient (R) between the referent devices and reading comprehension was (R= .989 ). This asserted that cohesive pronouns were so important that they can also predict reading comprehension scores but less than vocabulary can.

Accordingly, both vocabulary and referent devices (pronouns and conjunctions) knowledge are essential for effective reading comprehension. However vocabulary, is more important for efficient reading comprehension than referent pronouns and conjunctions are. Additionally, both vocabulary and referent devices do predict reading comprehension. However, vocabulary knowledge does predict reading comprehension much than cohesive devices knowledge does.

### **The Discussion of the Results of the First Hypothesis and question**

**1. "There are no statistically significant differences between control and experimental groups in reading comprehension due to lexical knowledge."**

**1. Are there statistically significant differences between control and experimental groups in reading comprehension due to lexical knowledge?**

The researcher used Covariance sample to measure the statistical differences between the two groups due to lexical knowledge. Additionally, the researcher used mean, percentage and standard deviation to identify these differences and to know

whether these differences were significant . Moreover, the researcher used two equations to discover the real effect size of vocabulary knowledge on reading comprehension.

Tables (4.1) and (5.1) reveal that there are statistically significant differences through post-test between control and experimental groups due to vocabulary knowledge and the treatment the graders were injected with. Further, table (5.3) demonstrated that the real effect value was large ( $\eta^2 = .882$ ).

The graders gained the ability to deal with reading comprehension effectively and efficiently just after they had recognized the meanings of the used new vocabulary in the text. The development level in reading comprehension after the treatment in the post-test regarding the experimental group was(= 70.1%). One should know that the results of the 11<sup>th</sup> graders' pretest are equal for both groups. However, the results of the posttest for both groups are different from each other. Although both groups are equal in their political, social, economic situations, they differ in the treatment introduced to the experimental group. Thus, the researcher believes that these positive results are due to the treatment of vocabulary.

## **The Discussion of the Results of the Second Hypothesis and question**

**2. "Students' lexical knowledge does not predict these Students' reading comprehension."**

**2. Does students' lexical knowledge predict the students' reading comprehension?**

The researcher here used correlational coefficient factor and linear regression to recognize the real effect average of vocabulary on reading comprehension skill. According to the correlational coefficient level ( $R=.909$  ), vocabulary knowledge does predict reading comprehension ability.

Since there were statistically significant differences between the two groups in their results of the post-test after the 11th graders were learned the unknown circled vocabulary through the pre-test text, it would not be a strange inference to say vocabulary knowledge must predict reading comprehension ability.

### **The Discussion of the Results of the Third Hypothesis and Question**

**3. "There are no statistically significant differences between control and experimental groups in reading comprehension due to cohesive devices knowledge."**

**3. Are there statistically significant differences between control and experimental groups in reading comprehension due to cohesive devices knowledge ?**

The researcher used Covariance sample to measure the statistical differences between the two groups' scores of pre-cohesive devices test. Additionally, the researcher used mean, percentages, and standard deviation to show these differences in different ways and to know if these differences were significant. Further, the researcher used two equations especially Eta square to recognize the true effect of cohesive devices on reading comprehension.

Tables (4.2) and (5.2) identify that there are statistically significant differences through post-test between control and experimental groups due to cohesive devices knowledge and the treatment learners were given before. Table (5.3) explains that this impact level was a true effect according to the results of using Eta square equation . That is, the effect size was large ( $\eta^2=.612$ ).

As the researcher said before through analyzing the first question, according to the environment and circumstances through which the graders had subjected to the tests, that pronouns and conjunctions help reading comprehension with (39.1 % ) might be a real

result. So one must not neglect the importance of referent devices knowledge; especially pronouns, in simplifying and easifying reading comprehension. The circumstances through which both groups live are equal, therefore; their results are equal in the pretest. However, their results in the posttest differ from each other. Accordingly, the researcher believes that these positive results regarding the experimental group are due to the cohesive devices treatment or knowledge.

### **The Discussion of the Results of the Fourth Hypothesis and Question**

**4. "Students' cohesive devices knowledge does not predict these Students' reading comprehension."**

**4. Does students' cohesive devices knowledge predict the students reading comprehension?**

If it is known that there are statistically significant difference between groups in terms of referent devices post-test and if it is learned that referent devices knowledge does develop reading comprehension ability with 39.1%, It will be a logical inference to say that referent devices knowledge must predict reading comprehension ability. According to the correlation coefficient value ( $R=.868$ ), referent devices knowledge does predict reading comprehension skill.

## **Conclusion**

To achieve the purpose of this thesis, the researcher addressed four hypotheses and four questions. Then selected a random sample of sixty 11<sup>th</sup> graders divided into two groups, experimental and control one. Then the researcher subjected both groups to a pretest of two texts. The first text was for discovering the 11<sup>th</sup> graders' knowledge in terms of vocabulary and the second text was to know the 11<sup>th</sup> graders' knowledge regarding cohesive devices. After the researcher made sure that the 11<sup>th</sup> graders of both groups were equal in terms of vocabulary and cohesive devices knowledge, the researcher subjected the 11<sup>th</sup> graders of just the experimental group for treatment for eight lessons. The first three lessons was for teaching pronouns through three texts. The second two lessons was for teaching conjunctions through two texts. The third one lesson was for teaching vocabulary whose meanings the 11<sup>th</sup> graders did not assimilate. The last two lessons was for revising vocabulary, pronouns and conjunctions. After that, the researcher subjected both groups, control and experimental, to the post test to see the impact of lexical and cohesive devices knowledge on the 11<sup>th</sup> graders' reading comprehension.

The results of the study explained that previous knowledge of vocabulary has the most important role in developing and simplifying reading comprehension since most of experimental group got more scores in the post test of vocabulary and cohesive devices than the control group which was not subjected to the treatment. However, vocabulary knowledge contributed much development in reading comprehension than referent devices did. Thus, vocabulary affected positively on reading comprehension more than referent devices did.

## **Recommendations**

**The researcher recommends the following:**

1. Since vocabulary has an effective impact on the 11<sup>th</sup> graders reading comprehension, teachers should teach their learners such a fair amount of vocabulary that learners can deal with them easily and appropriately.
2. Teachers should be trained to differentiate easily between those types of vocabulary, passive and active.
3. Teachers should be trained to be able to enrich the syllabus regarding vocabulary and referent devices.
4. The stakeholders should feed the graders' syllabi with vocabulary gradually or step by step.
5. Designers of syllabi should vary between two types of texts; that is, they should use texts with a few cohesive devices to strengthen the graders' critical thinking or self-explanation skill, and texts with several cohesive devices to simplify reading comprehension directly.
6. Teachers should focus on daily dictation, writing sentences using the new words of every former lesson so as to ensure that the students recognized the new words before moving to the new lesson. This in fact might be so difficult to be achieved easily and suitably through the available limited time to the long syllabus. Accordingly, this issue needs cooperation from the ministry of education and trained teachers. That is, each lesson needs an additional lesson for just summative evaluation particularly concerning the primary stage as it is considered the most important stage of all next stages.
7. Teachers should use the list of the new learned vocabulary at the end of each textbook in their summative revision at the end of every unit or at least at the end of every schooling year. Teachers should stimulate students to write these words correctly by

heart(dictation) and to compose sentences using these lexis so as to ensure they recognize their meanings or at least tell their meanings.

8. Those students who are not able to write a certain number of learned lexis correctly by heart and tell their meanings acceptably at the end of the primary stage should not be moved to the next stage.

9. Students should be learned the referent pronouns and their direct meanings in the primary stage since much of text assimilation depends on the pronouns and their meanings. Pronouns should be given such enough time, especially in the primary level, that teachers can make sure of students' gaining of the pronouns and their meanings.

10. Teachers should make a list of the learned pronouns at the end of every unit or at the end of the schooling year differentiating among their types with examples in tables and encouraging graders to use these different referent pronouns in sentences to explain their meanings or at least motivate learners to say their meanings.

11. To achieve the former eight points, the ministry of education has to increase the lessons of the 11<sup>th</sup> graders' from a five-lesson week to a six-lesson week in order to help teacher evaluate students' progress continuously.

12. The researcher recommends implementing another study to know the impact of vocabulary teaching strategies such as word puzzle, crossing word and lost word on vocabulary assimilation.

13. The researcher suggests carrying out another study to know the impact of increasing or decreasing pronouns in a text on reading comprehension and critical thinking.

14. the researcher calls for implementing another study with larger numbers of participants who include both genders, males and females.

15. the researcher sees that further research is needed with more focus on the role of the students' processing style and first language literacy as additional factors related to reading comprehension.

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## **Appendices**

## Appendix 1

### The text for treating 11<sup>th</sup> graders' unknown pronouns

#### Unit:1 Two great travelers

#### Read the text then answer the questions below:

Marco Polo (1254-1324) and Ibn Batuta(13-4-1377) were two of the world's greatest travelers, and the books that **they** wrote are still famous today.

Marco Polo was born in the Italian city of Venice to travel to the East with **his** father and uncle. **That** was the start of 24 years of travel, and Marco polo did not return to Venice until 1295. During those years, **he** worked for the Emperor of China as a high official, saw many amazing things and also became very rich.

He told the story of his life in **his** book, called The Description of the World or The Travels of Marco polo. **This** describes his journeys through central Asia, China and other parts of the Far East. **It** also gives **us** a wonderful view of life in many parts of the known world in the thirteenth century.

#### A. Answer the following questions:4M

1.Mention two names of the greatest travelers?

.....

2. What is the name of Polo's book in which he told the story of his life?

.....

#### B. Mention what the colored pronouns in the former text refer to:8M

they ....., his....., that..., he....., his....., this., it.....,us.....

#### C- complete the following gaps:4M

1. Polo was born in ..... in..... .

2. Polo's period of travel was..... .

3. Polo's book of his life story is named.....

-----

## Appendix 2

### The text for treating 11<sup>th</sup> graders' unknown pronouns

#### Unit:3

#### Learning for a better future

#### Read the text then answer the questions below :

During recent years, Indian companies have been building up this knowledge-based industry **here**. Multinational IT(information technology) companies like Siemens have also been arriving and setting up.

The reason? The software engineers here are brilliant, thanks to high levels of education. Young Indians today are among the best educated and most skilled in the world. And today, **these** software experts are working closely with **their** new Siemens colleagues in Munich, Germany.

**They** are also ambitious and want to build a better life for **themselves** and their families than **their** parents have had. Thanks to their abilities and to cheap global telecommunications, **this** is now happening. **They** are entering the new global village, and this is giving **them** a fast rising standard of living.

**Others** are following the same route. Take Palestine, a country with a tragic past, little land and few natural resources and without large industries. The population is growing faster than almost anywhere else in the world and unemployment is high. These are all major problems, but the Palestinians have one special advantage, and that is education.

#### A. Answer the following questions:6M

1. Why is it possible for Palestine to do what India is already doing?

.....

2. What is the main reason of Indian's progress?

.....

3. What are the problems facing Palestinians' progress?

.....

#### B. Say what the former colored pronouns refer to:10M

Here....., these....., their....., they....., themselves....., their.....,

This....., they....., them....., others.....

#### C. Get out from the text the opposites of the next words: 4M

Leaving....., there....., low....., old....., expensive.....,local....,taking....., slow....., future.....,more.....

## Appendix 3

### The text for treating 11<sup>th</sup> graders' unknown conjunctions & pronouns

#### Unit:4

#### Palestine in the new world economy

#### Read the text the answer the questions below:

Regional trade developed across the Mediterranean Sea thousands of years ago. Traders used to buy **and** sell goods **whose** value varied around the region. **For example**, Phoenician jewelers and Greek pottery had lower values **where** they were made, **and** higher values in places **where** they were harder to get. Traders **therefore** bought cheaply in one place **and** sold for more in others. The dangers of sea travel were great, **but** so too were the chances of getting rich.

Those traders lived at a time when a voyage across the Mediterranean often took weeks. Today, **though**, a flight half-way round the world takes less than a day. Fast transport, together with modern telecommunications, have thrown the world's many regions into one great global economy.

The reasons why we trade are still the same. We still buy something from others **because** we cannot produce it ourselves or cannot produce it as well or as cheaply. The difference is that we now trade world-wide.

This is globalization. It means rising standards of living for poorer nations and cheaper products for everyone else. However, unequal production costs around the world create real problems.

#### A. Answer the following questions:4M

1. How did ancient traders make their money?

.....

2. What technological changes have helped globalization happen?

.....

#### B. write what the former colored pronouns or conjunctions refer to: 10M

And.....,Whose....., for example....., where....., and....., where....., therefore....., and....., but....., though....., because..... .

#### C. say who or what these words refer to:4M

1. line11: .... but so too were the chances of getting rich.

.....

2. line19.... The reasons why we trade are still the same.

.....

#### D. Get out from the text the opposites of the following words:2M

Higher....., easier.....,result....., richer..... .

## Appendix 4

### The Pre and Post Tests related to Vocabulary Effect on Control and Experimental Groups

#### *1<sup>st</sup> part of Pre- & Post Tests*

#### The 1<sup>st</sup> Passage Related to Vocabulary Effect

Time: One hour

Mark: 20

Read the following text and circle the word Whose meaning you do not know , then answer the questions below:

The Bermuda Triangle, which is a large area of the Atlantic, is a famous zone, because many ships and planes have mysteriously disappeared there (1). The worst disaster of all was in 1918 when the American ship Cyclops, with a crew of 300, sank without even a call for help(2). The most famous one was the 1945 disappearance of flight 19 (3). The five planes which shared in this flight left Florida at 2.00 pm for a simple training (4). Then, at 3.45 pm, they reported that their navigation equipment had stopped working, then they were lost(5). Their radio messages started fading (6). Moreover, stormy weather was developing badly and soon after dark, they must have run out of fuel and crashed far out in the Atlantic(7) .

The tragedy was made worse soon afterwards when a rescue plane that was searching for them exploded and crashed(8). Many people of previous several disasters have survived and they reported strange experiences in the Bermuda Triangle(9). They said that planes suddenly drop hundreds of meters for no reason. Ships half sink and then slowly rise again(10). Large areas of sea turn rough and its water becomes white with bubbles(11). In addition, They rise up to a meter above the water level(12).

**A. Answer the following questions:4 marks**

1- Why do scientists consider the Bermuda Triangle as a famous area?

.....

2- When were the five planes lost ?

.....

\*\*\*\*\*

**B. Say what the underlined bolded words in the text refer to: 10marks**

1- "**there**"(1) refers to.....

2- "**when**"(2)refers to .....

3- "**one**" (3) refers to .....

4- "**this**" (4) refers to .....

5- "**they**" (5) refers to.....

6- "**their**" (6) refers to .....

7- "**they**" (7) refers to .....

8- "**them**" (8) refers to .....

9- "**they**" (10) refers to .....

10- "**its**" (11) refers to.....

\*\*\*\*\*

**C- Put (T) or (F) :2marks**

1- There were no survivors from all previous disasters ( ).

2-Flight 19 tragedy was made worse because the rescue plane exploded( ).

\*\*\*\*\*

**D- Get Synonyms for the following words from the text:2 marks**

1- Catastrophe----- . 2- well-known-----

\*\*\*\*\*

**E- Get opposites for the following words from the text:2marks**

1- comedy-----,                    2- appeared----- .

\*\*\*\*\*

\*\*\*\*\*

1- Cohesion by reference: 29 devices.

2- Cohesion by conjunction: 11 ones.

**Total:** 40 cohesive devices.

## Appendix 5

### The Pre and Post Tests related to Cohesive Devices Effect on Control and Experimental Groups

#### *2nd part of Pre- & Post Tests*

#### The 2nd Passage Related to Cohesive Devices Effect

Time: One hour

Mark: 20

Read the following text, then answer the questions below:

(1) Pythagoras collected evidence to prove the Earth was round. (2) **But** Aristotle went one step further. (3) **He** weighed up the amount of land that was known in the northern hemisphere and decided that there must **also** be large areas of land in the southern hemisphere . (4) He thought **it** was likely that Earth was kept in balance by corresponding weights of land in the two hemispheres. (5) **That** made sense to many people. (6) Aristotle and other Greek scientists took **their** deductions further. (7) **They** worked out that the Earth had a very hot 'torrid zone' lying between the tropics. (8) North and south of this zone were 'temperate zone' . (9) Another scientist, Eratosthenes, calculated the curvature of the Earth. (10) From **this** he could work out how far it was around our planet, **and** exactly how far away the southern frigid zone was. (11) for people who'd never been there, the Greeks had a pretty good idea of **what** the southern hemisphere was like. (12) But **even though** they kept talking about land in the south, they could never pinpoint where **it** was. (13) For hundreds of years after **that**, people believed there was an unknown south land: Terra Australia; Incognita was **its** Latin name. (14) People dreamt of seeing this fabled continent. (15) But then the difficulties of getting **there** killed **their** enthusiasm. (16) There were no ships **which** could carry them safely there and back. (17) But even if there had been, there were nobody with the knowledge and skills to navigate **them** (18) **It** became

fashionable to believe that the Earth was flat. (19) **That** made sure that people stayed at home. (20)what! Sail over the horizon? (21) You must be joking! (22) if you do that, you'll fall off the edge, mate!

**A- Answer the following questions: 6 marks**

1- Why did the Greek scientists collect evidences?

-----

2- Could scientists sail to the fabled continent? Why?

-----

3- What did Eratosthenes calculate ?

-----

\*\*\*\*\*

**B- Write the sentences or the words that the underlined bolded words in the text**

**refer to :10 marks**

1- **'but'** (3) refers to -----

2- **'he'**(4) refers to-----

3- **'also'**(4) refers to-----

4- **'it'** (5) refers to-----

5- **'that'** (6) refers to-----

6- **'their'** (7) refers to -----

7- **'they'** (8) refer to -----

8- **'this'** (11) refers to-----

9- **'and'** (11) refers to -----

10- **'what'** (12) refers to -----

11- **'even though'** (13) refers to -----

12- **'it'** (13) refers to -----

- 13- **'that'** (14) refers to -----
- 14- **'its'** (14) refers to -----
- 15- **'there'** (16) refers to -----
- 16- **'their'** (16) refers to -----
- 17- **'which'** (17) refers to -----
- 18- **'them'** (18) refers to -----
- 19- **'it'** (19) refers to -----
- 20- **'that'** (21) refers to -----

\*\*\*\*\*

**C- Put (T) or (F): 4 marks**

- 1- If the Earth had been flat , people should have stayed at their homes( ).
- 2- The unknown south land the scientists were talking about is now called America ( ).
- 3- The Earth the scientists were talking about is the planet we live on today ( ).
- 4- The two hemispheres in this text means the globe ( ).

\*\*\*\*\*

\*\*\*\*\*

- 1- Cohesion by reference( anaphora and cataphora): 30 devices
  - 2- Cohesion by conjunction: 10 ones
- Total: 40 cohesive devices**

## Appendix 6

### The Answers of the Pre and Post Tests related to Vocabulary Effect on Control and Experimental Groups

*1<sup>st</sup> part of Pre- & Post Tests Answers*

#### 1<sup>st</sup> Passage Related to Vocabulary Effect

Time: One hour

Mark: 20

Read the following text and circle the word Whose meaning you do not know ,  
then answer the questions below:

The Bermuda Triangle, which is a large area of the Atlantic, is a famous zone, because many ships and planes have mysteriously disappeared there (1). The worst disaster of all was in 1918 when the American ship Cyclops, with a crew of 300, sank without even a call for help(2). The most famous one was the 1945 disappearance of flight 19 (3). The five planes which shared in this flight left Florida at 2.00 pm for a simple training (4). Then, at 3.45 pm, they reported that their navigation equipment had stopped working, then they were lost(5). Their radio messages started fading (6). Moreover, stormy weather was developing badly and soon after dark, they must have run out of fuel and crashed far out in the Atlantic(7) .

The tragedy was made worse soon afterwards when a rescue plane that was searching for them exploded and crashed(8). Many people of previous several disasters have survived and they reported strange experiences in the Bermuda Triangle(9). They said that planes suddenly drop hundreds of meters for no reason. Ships half sink and then slowly rise again(10). Large areas of sea turn rough and its water becomes white with bubbles(11). In addition, They rise up to a meter above the water level(12).

**A. Answer the following questions:4 marks**

1- Why do scientists consider the Bermuda Triangle as a famous area?

..... *Because many ships and planes have mysteriously disappeared in it* .....

2- When were the five planes lost ?

..... *After their navigation equipment had stopped working* .....

\*\*\*\*\*

**B. Say what the underlined bolded words in the text refer to: 10marks**

1- "**there**"(1) refers to..... *The Bermuda Triangle* ... .

2- "**when**"(2)refers to ..... *American ship Cyclops sank* .... .

3- "**one**" (3) refers to ..... *disaster* .....

4- "**this**" (4) refers to ..... *Flight 19* .....

5- "**they**" (5) refers to..... *The five planes* .....

6- "**their**" (6) refers to ..... *The five planes* .....

7- "**they**" (7) refers to ..... *The five planes* .....

8- "**them**" (8) refers to ..... *The five planes* .....

9- "**they**" (10) refers to ..... *Many people* .....

10- "**its**" (11) refers to..... *sea* .....

\*\*\*\*\*

**C- Put (/) or (x) :2marks**

1- There were no survivors from all previous disasters ( X ) .

2-Flight 19 tragedy was made worse because the rescue plane exploded( / ).

\*\*\*\*\*

**D- Get Synonyms for the following words from the text:2 marks**

1- Catastrophe = --- *disaster* ---- . 2- well-known = ---*famous* ---

\*\*\*\*\*

**E- Get opposites for the following words from the text:2marks**

1- comedy X -- *tragedy* --.                      2- appeared X -- *disappeared*--- .

\*\*\*\*\*

\*\*\*\*\*

## Appendix 7

### The Answers of the Pre and Post Tests related to Cohesive Devices Effect on Control and Experimental Groups

#### *2nd part of Pre & Post Tests Answers*

#### 2nd Passage Related to Cohesive Devices Effect

Time: One hour

Mark: 20

Read the following text, then answer the questions below:

(1) Pythagoras collected evidence to prove the Earth was round. (2) **But** Aristotle went one step further. (3) **He** weighed up the amount of land that was known in the northern hemisphere and decided that there must **also** be large areas of land in the southern hemisphere. (4) He thought **it** was likely that Earth was kept in balance by corresponding weights of land in the two hemispheres. (5) **That** made sense to many people. (6) Aristotle and other Greek scientists took **their** deductions further. (7) **They** worked out that the Earth had a very hot 'torrid zone' lying between the tropics. (8) North and south of this zone were 'temperate zone'. (9) Another scientist, Eratosthenes, calculated the curvature of the Earth. (10) From **this** he could work out how far it was around our planet, **and** exactly how far away the southern frigid zone was. (11) For people who'd never been there, the Greeks had a pretty good idea of **what** the southern hemisphere was like. (12) But **even though** they kept talking about land in the south, they could never pinpoint where **it** was. (13) For hundreds of years after **that**, people believed there was an unknown south land: Terra Australia; Incognita was **its** Latin name. (14) People dreamt of seeing this fabled continent. (15) But then the difficulties of getting **there** killed **their** enthusiasm. (16) There were no ships **which** could carry them safely there and back. (17) But even if there had been, there were nobody with the knowledge and skills to navigate **them**. (18) **It** became

fashionable to believe that the Earth was flat. (19) **That** made sure that people stayed at home. (20) what! Sail over the horizon? (21) You must be joking! (22) if you do that, you'll fall off the edge, mate!

**A- Answer the following questions: 6 marks**

1- Why did the Greek scientists collect evidences?

----- *To prove that the Earth was round* -----

2- Could scientists sail to the fabled continent? Why?

--*No, they couldn't, because there were no ships which could carry them safely there and back, and there were nobody with the knowledge and skills to navigate them* ---

3- What did Eratosthenes calculate ?

-- *He calculated the curvature of the Earth* ----

\*\*\*\*\*

**B- Write the sentences or the words that the underlined bolded words in the text refer to :10 marks**

1- '**but**' (3) refers to ---- *Aristotle went one step further* -----

2- '**he**', (4) refers to --- *Aristotle* ----

3- '**also**' (4) refers to --*be large areas of land* -----

4- '**it**' (5) refers to *that Earth was kept in balance by corresponding weights of land in the two hemispheres*-----

5- '**that**' (6) refers to--- *that Earth was kept in balance by corresponding weights of land in the two hemispheres* ----

6- '**their**' (7) refers to -- *Aristotle and other Greek scientists* -----

7- '**they**' (8) refers to-- *Aristotle and other Greek scientists* ----

8- '**this**' (11) refers to--- *calculated the curvature of the Earth*---

9- '**and**' (11) refers to ----*exactly how far away the southern frigid zone was* ----

- 10- **'what'** (12) refers to --*the southern hemisphere was like* -----
- 11- **'even though'**(13) refers to---*they kept talking about land in the south*---
- 12 **'it'** (13) refers to -- *land in the south* ----
- 13- **'that'**(14) refers to --- *they could never pinpoint where it was*---
- 14-**'its'** (14) refers to ----*an unknown south land: Terra Australia* -----
- 15- **'there'**(16) refers to --- *fabled continent*--
- 16- **'their'** (16) refers to-----*People* -----
- 17- **'which'** (17) refers to-- *ships* -----
- 18- **'them'** (18) refers to --*People* -----
- 19- **'it'** (19) refers to---- *to believe that the Earth was flat*-----
- 20- **'that'** (21) refers to----- *to believe that the Earth was flat* -----

\*\*\*\*\*

**C- Put (/) or (x): 4 marks**

- 1-If the Earth had been flat, people should have stayed at their homes( / ).
- 2- The unknown south land the scientists were talking about is now called America ( X ).
- 3- The Earth the scientists were talking about is the planet we live on today ( / ).
- 4- The two hemispheres in this text means the globe ( / ).

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## **Appendix 8**

### **List of Referees**

#### **The Name of Referees and Their Positions:**

1.Prof. Ezzo Afana

Professor of the Education Department in IUG.

2.Prof. Waleed Amer

Head of English Department in IUG.

3.Dr.Mahmoud Baroud

Lecturer in the English Department in IUG.

4.Dr.Kamal Mourtaja

Assistant Prof. in the English Department in IUG.

5.Dr.Nazmi Al-Masri

Head of Foreign Affairs &Assistant Prof. in Education Department in IUG.

6.Dr.Sami Breem

Lecturer in the English Department in IUG.

7.Dr.Awad Keshta

Associate of the Education Department in IUG.

8.Prof.Mohamed Hamdan

Prof in Gaza University.

9.Dr.Wail El. Hewity

Prof. in Al-Aqsa University English Department.

10.Dr.Mohamed Ateya abd AlRaheem

Lecturer in Al-Aqsa University, Education college.

11.Mr.Salah Abu Shamalah

Teacher in Abdulkader School.

12.Mr.Mohamed Al. Zayaan

Teacher in Abdulkader School.

## Appendix 9

### Consultation Form of the Pre & Post Tests Related to Vocabulary and Cohesive Devices Effect On Control & Experimental Groups 11<sup>th</sup> Graders' Reading Comprehension

Dear Mr. / Mrs. / Miss .....

The researcher carries out an *M.Ed thesis* entitled " **The Impact of Lexical and Cohesive Devices Knowledge on 11<sup>th</sup> Graders' Reading Comprehension**"

You are kindly invited to examine and check these pre and post tests which were designed to collect data about the impact of vocabulary and pronouns and conjunctions knowledge on literary 11<sup>th</sup> graders' reading comprehension.

I would be so grateful if you provided me with your comments related to relevance, sentence structure, number & type of items, texts themselves, and technique used in these tests. Any modifications, additions, or omissions will be taken into consideration when processing these tests.

Yours,

Raid Al. Farra

Referee's name

.....

Signature



## ملخص الدراسة

### تأثير معرفة طلاب الحادي عشر الأدبي بالمفردات والروابط في اللغة الانجليزية على مهارتهم في

#### القراءة الفاهمة في نفس اللغة

هدفت هذه الدراسة للتعرف على تأثير معرفة طلاب الحادي عشر الأدبي بالمفردات والروابط، خاصة الضمائر، في اللغة الانجليزية على مهارتهم في القراءة الفاهمة في نفس اللغة. ولقد طبق الباحث اختبارين، قبلي وبعدي، علي مجموعتين، ضابطة و تجريبية، من عينة عشوائية من ستين طالبا لجمع المعلومات المطلوبة، ولقد مثلت هذه العينة 38% من طلاب الحادي عشر الثانوي الذين يدرسه الباحث اللغة الانجليزية، ولقد تم تطبيق الاختبارين على الطلاب في الفترة ما بين شهري ابريل ومايو في الفصل الثاني لعام 2011 . ولقد احتوى كل اختبار منهما على جزأين: الجزء الأول احتوى على اختبار للمفردات، والثاني على اختبار للروابط. ولقد هدف الاختبار القبلي، الذي طبق على المجموعتين، إلي تشخيص قدرات الطلاب بخصوص المتغيرين المستقلين وهما المفردات والروابط ؛ ليقوم بعد ذلك، إذا تأكد من تساوي قدرات طلاب المجموعتين بخصوص متغيري التجربة، بتعريض المجموعة التجريبية فقط لعلاج في مجال المفردات والروابط ، ومن ثم يطبق الاختبار البعدي على المجموعتين لمعرفة تأثير المعرفة بالمفردات والروابط على مهارة طلاب المجموعة التجريبية في القراءة الفاهمة. ولقد توصل الباحث إلي أن المعرفة بالمفردات والروابط لها قدرة كبيرة على تطوير وتسهيل القراءة الفاهمة، إضافة إلى أن المفردات والروابط قادرة على التنبؤ بمستويات القراءة الفاهمة عند الطلاب، ورغم ذلك فإن المفردات لها قدرة اكبر من الروابط على تحسين وتسهيل القراءة الفاهمة. وفي الختام أوصى الباحث بإجراء المزيد من الدراسات لمعرفة اثر أنواع الروابط الأخرى مثل الحذف والتبديل والمرادفات على القراءة الفاهمة، وأبحاث أخرى لمعرفة تأثير زيادة أو تقليل عدد الضمائر كروابط في نص ما على القراءة الفاهمة والتفكير النقدي.