### II. THEORETICAL FOUNDATION

This chapter provides review of previous research and review of related literature relates to the research problems. Considering that, sufficient amount of relevant topics review here are morphological awareness, reading and reading comprehension, morphological awareness and reading relationship, theoretical assumption, and hypothesis.

### 2.1 Review of Previous Research

There had been several correlated studies dealing with morphological awareness. First, Morphological Awareness and Its Relationship to Vocabulary Knowledge and Morphological Complexity among Omani EFL University Students, conducted by Badriya Al-Farsy from The University of Queensland (2008). This study examined the relationship between morphological awareness and vocabulary size in Omani EFL learners. Participants in the study were 54 Omani EFL learners enrolled in an English Intensive Program at the *Ibri College of Applied Sciences*, Oman. All the participants completed both tests. Morphological awareness was measured using the Morphological Awareness Test adapted from McBride- Chang *et al.* (2005); the test assessed both analytic and synthetic aspects of morphological knowledge. Analytic refers to breaking down complex words into smaller meanings and synthetic involves reassembling smaller meanings to make up new words. Vocabulary size was measured using a modified

version of the Vocabulary Levels Test (Nation, 2001). The test was modified so that there were complex words and simple words, the complex versus simplex contrast allowing a means to assess the effect of morphological knowledge on vocabulary development. The results indicate that, the students' overall morphological awareness and vocabulary size were limited, and that a relationship between the two constructs could not be established, owing to the appearance of floor effect in test scores and task difficulty. Although no statistical relationship was established between morphological awareness and vocabulary in this study, it is premature to discount the potential importance of morphological awareness in the L2 vocabulary development, particularly for the type of learner examined in this study.

The second previous study was dealing with morphological awareness in tapping the lexical compounding awareness in Chinese third graders by Phil D. Liu (2010) from Chinese University of Hong Kong. In this research, one hundred twenty-one third-grade Chinese children were assessed with a new morphological awareness task involving open-ended lexical compounding, in addition to completing other measures. With children's age, nonverbal intelligence, phonological awareness, and previously established measures of morphological awareness statistically controlled, this compounding production task significantly explained unique variance in both Chinese character reading and vocabulary knowledge. Within this new task, subordinate and coordinative structures were significantly easier to compound than were subject— predicate and verb— object structures. Moreover, novel compounds that made use of verb morphemes were more difficult to manipulate than were those that did not contain verbs. This

newly developed task of compounding production may be optimal for tapping older children's morphological awareness in the form of lexical compounding, in both Chinese and possibly other languages. In addition, these results demonstrate that linguistic manipulations within tasks of morphological awareness can influence their difficulty levels.

After that, the third previous related research was a research from Kirby, Deacon, Bowers, Izenberg, Wade-Woolley, and Parrila (2011) of Queens University which concern on children's morphological awareness and reading ability. They investigated the effects of morphological awareness on five measures of reading in 103 children from Grades 1 to 3. Morphological awareness was assessed with a word analogy task that included a wide range of morphological altransf ormations. Results indicated that the new measure had satisfactory reliability, and that morphological awareness was a significant predictor of word reading accuracy and speed, pseudo word reading accuracy, text reading speed, and reading comprehension, after controlling the effects of verbal and nonverbal ability and phonological awa reness. Morphological awareness also explained variance in reading comprehension after further controlling word reading. We conclude that morphological awareness has important roles in word reading and reading comprehension, and we suggest that it should be included more frequently in assessments and instruction.

Kieffer and Lesaux (2008) found that Spanish English as a Second Language (ESL) learners'derivational awareness had a unique effect on reading comprehension over and above oral vocabulary and wordreading ability. Similar findings surfaced in studies on Korean learners of English as a foreign or second

language (e.g. Wang et al., 2006). On the other hand, Qian's (1999) study on Chinese and Korean ESL readers in Canadian universities failed to reveal a unique contribution of derivational knowledge to reading comprehension aftercontrolling for vocabulary knowledge. In Zhang and Koda (2012), advanced Chinese EFL learners' derivational wareness was found to contribute to reading comprehension indirectly through the mediation of lexical inferencingability and vocabulary knowledge, instead of having a direct contribution.

Another previous study came from Lisa Kay Maag's dissertation that is concern on measuring morphological awareness in adult readers with the implications of vocabulary development. Morphological awareness is considered a prime force in children's vocabulary growth, but this skill has scarcely been measured in adults. This study tested a method for assessing morphological awareness using complex (multimorphemic) words and a two-stage process designed to elicit the explicit morphological knowledge. Participants, 106 college students, indicated which of the complex words they knew and were tested on morphological analysis and on definitions of the words. A standardized test, the Nelson-Denny Reading Test (ND), was also administered. Two metalinguistic scores were derived: MA was calculated for known words for which the morphological base word was identified, and Accuracy was based on known words for which the correct definition was selected. Participants with better ND Vocabulary and Comprehension scores also had higher MA scores and greater metacognitive awareness of their own lexicons. An inadequate vocabulary is one cause of reading problems, and a method that extends MA research to an older age group allows further research into vocabulary development with implications for remedial strategies.

Related research also came from Seftia Rosalina of Lampung University that found the positive relationship between students' morphological awareness and English vocabulary size. Research from Rosalina was one of the most appropriate guidance in this research remembering this research also held in senior high school level students in Lampung, Indonesia.

In sum, all of those researches showed the positive relationship of morphological awareness and some of aspects in learning English in some country like China and across the age from children until adults. However, there were still some issues which had not been investigated, that is, the relationship of morphological awareness and reading comprehension in high school age level. The researcher chooses reading comprehension with the intention to show positive relationship with morphological awareness in study case second grade students of SMAN 15 Bandar Lampung.

#### 2.2. Review of Related Literature

In this sub chapter, the researcher provided some literature relates to the research.

## 2.2.1. Morphology

Morphology refers to the study of forms. Linguistics morphology refers to the study of words, their internal structure and the mental process that are involves in word formation (Arnoff and Fudgeman, 2005). It is '... the study of the hierarchical and relational aspects of words and the operation on lexical items according to the word formation rules to produce other lexical items' (Leong and

Parkinson, 1995: 237). One of the parts of morphology is morpheme and will be discussed in the following sections.

# A. Morphemes

A morpheme may be defined as the minimal linguistic sign, a grammatical unit in which there is an arbitrary union of the sound and a meaning and could not be further analyzed. Traditionally, words can be divided into minimal linguistic units that bear meanings or grammatical functions (i.e. *morphemes*). In the line with the traditional definition, Coates (1999: 17) identifies for criteria of what it takes to be a morpheme. A morpheme should have meaning or function (e.g. morpheme *pre* which has meaning "before" in sentence: *He gives some preview before present the presentation*), recur in other words with a related meaning (e.g. prefix *un* in the sentences: *He is unbelievable stingy* and *It was unhappy married*), be involved in a pattern of interchange (e.g. suffix *est* in word *longest*) and can be substituted with another morpheme such as suffix *er* in the sentences: *Mississippi river is the longest river in the world* and *Mississippi river is longer than Missouri river*.

If we add a morpheme to an utterance, or take one way, by definition we alter the meaning of that utterance, for example, the word "*child*" can be formed by adding suffixes *en*, *ish* and *hood* in the sentences below:

### 1. She is beautiful child.

In the sentences above, the word *child* serves as a noun, which means young human being.

## 2. Those children are playing in the yard.

In the sentences above *children* serves as a noun which has meaning as child, but in the form of plural by adding suffix *en*.

## 3. Don't be childish.

In the sentences above, *childish* serves as an adjective which means behaving like child because suffix *ish* modify the word *child* into adjective.

## 4. He spent his childhood in the village.

In the sentences above *childhood* serves as a noun which means state or time of being a child because suffix *hood* modify the word *child*.

# **B.** Types of Morpheme

Morpheme can be classified as:

# a. Free morphemes

This kind of morpheme cannot be syntactically split up further, and exists only as a part of single units. Free morphemes are those that can exist in their own (e.g. *book* in *notebooks*), whereas bound morphemes cannot (e.g. morpheme *s* in *notebooks*).

# **b.** Bound morphemes

Bound morphemes must be attached to another word, and no upper limit to the number per word. Those prefix and suffix morphemes have traditionally been called bound morpheme. The morphemes such as suffix *s*, as in *students*, and suffix *ed* as in *carried*, which must be attached to another, are bound morphemes (Coates, 1999).

Morphemes are further categorized into lexical morphemes (e.g. –full, –ness, etc.) or grammatical morphemes (e.g. –ed, –s). Grammatical morphemes are part of inflectional morphology that underlies the process involved in building grammatical word forms. Lexical morphemes are part of derivational morphology

that is concerned with the processes involved in building lexical form (Coates, 1999).

## C. Inflectional Morphology

Inflectional morphemes are morphemes that never change the syntactic category of the words or morphemes to which they are attached (Fromkin, 2000). Knowledge of inflectional morphology focuses primarily on indicating grammatical change in words (e.g. *He was attacked by a dog* and *He was attacked by tree dogs*. The suffix *s* in *dogs* indicates the plural form of the base word). They define inflectional morpheme as changes in the form of a word according to its grammatical function, for example in sentences:

- 1) They talk with me in the living room.
- 2) They talked with me yesterday.

In the sentences above, talk becomes talked to indicate activity in the past time.

### D. Derivational Morphology

In this research, researcher focused on morphological awareness and tried to identify the students' ability to use the knowledge of word formation rules. Word formation rule is according to which and affix can be attached to another morpheme in order to form new word. There are several processes of word formation, namely: derivational, compounding, blending, conversion, back formation and clipping (Fromkin, 2000). In this research, the researcher focused on derivation and compounding since they are closely related to morphological

awareness of students in senior high school, because derivation and compounding based on Fromkin is the basic process of word formation.

Derivational process changes the category, or grammatical class of words, when a prefix or suffix is joined to other morphemes (or words) a new word is derived, or formed (Fromkin, 2000). Derivational process concerns change of a word to give additional meaning to the original word (e.g. the word *sufficient* becomes *insufficient*). The morpheme "in" adds meaning "not" to word "sufficient" which means not enough.

Derivational morpheme also changes grammatical class from underived word as well (e.g. *beauty* as noun, becomes *beautiful* as an adjective). The word *beauty* changes into *beautiful* by adding suffix *ful* make it change from noun into adjective. Derivational morphemes typically occur by the addition of an affix. The derived word is often from the different word class from the original.

### E. Affixation

Affix is a bound morpheme that is joined before, after, or within a root or stem. There are two kinds of affixes in English, those that go before and those after the roots (Coates, 1999).

#### a. Prefixes

A prefix is an affix which is placed before the root of a word. In the other hand, prefixes add before the word to change or to modify meaning. Some prefixes have more than one meaning; therefore the students should always consider the context of the word when determining the meaning. Here are the most common prefixes used in English (Coates, 1999):

- a. Prefix *a*(*n*) which has meaning "not" or "without" (e.g. *anonymous* which means without name, *asexuality* means without sex organs).
- b. Prefix *co* which has meaning "together" (e.g. *cooperative* which means join together, and *coordinated* which means making action of work together).
- c. Prefix dis which has meaning "apart", "separation", "reverse" or "opposite" (e.g. disadvantage, this word means unfavorable condition and discredit which means caused people think badly about someone or something).
- d. Prefix *ex* which has meaning "former" (e.g. *ex-president* and *ex-boyfriend*, which mean former of president and former of boyfriend).
- e. Prefix *extra* which has meaning "outside", "beyond" or "additional" (e.g. *extracurricular* which means course which is taken outside the regular course of work at school, and *extraordinary* which means having power beyond what is usual or ordinary.
- f. Prefix *i(n)* which has meaning "not" (e.g. *irrelevant* which means not relevant, *illogical* which means not logical).
- g. Prefix *kilo* which has meaning "thousand" (e.g. *kilogram* and *kilometer* which mean thousand grams and thousand meters).
- h. Prefix *mis* which has meaning "bad" or "wrong" (e.g. *misunderstanding* which means failure to understand correctly).
- Prefix *multi* which has meaning "many" (e.g. *multiculturalism* which means has many cultures).

- j. Prefix *post* which has meaning "after" (e.g. *post-graduated* which means after the graduation).
- k. Prefix *pre* which has meaning "before" (e.g. *pre-election* which means before the election, and *pre-intermediate* which means before the intermediate level).
- 1. Prefix *re* which has meaning "again" (e.g. *replay* which means play again and *regeneration* which means give new life to something).
- m. Prefix *super* which has meaning "extremely" or "more than" (e.g. *supersonic* which means faster than the speed of sound and *superlatives* which means the highest quality).
- n. Prefix *un* which has meaning "not" or "opposite" (e.g. *unhappy* which means not happy, *unacceptable* which means not acceptable).

## b. Suffixes

A suffix is an affix which placed after the root word. Common examples are case endings, which indicate the grammatical case of nouns or adjectives, and verb endings, which form the conjugation of verbs. It is also defined that a suffix is a word part added at the end of a word and/or change the part of speech or the word (Hancock, 1987). For example, one meaning of 'to breathe' is 'to inhale or exhale air' and is a verb. Adding the suffix *er* to 'breathe' modifies meaning to one that breathes, and the result in the word 'breather', is a noun.

This is list of common suffixes in English (Coates, 1999):

a. Suffix *able* which has meaning "capable" or "can do" (e.g. *valuable* which means useful or worth).

- b. Suffix *dom* which has meaning "state of condition of" (e.g. *freedom* which means state of being free).
- c. Suffix *er/or* which changes verb into noun (e.g. *writer* which means person who write, change verb *write* into *writer* as noun).
- d. Suffix *ful* which has meaning "having some or much" (e.g. *useful* which means having some uses).
- e. Suffix *hood* which has meaning "state/condition of" or "a group of sharing characteristics" (e.g. *childhood* means state of being child).
- f. Suffix *ism* which has meaning "doctrine", "act", "practice" or "condition" (e.g. *plagiarism* which means take somebody else and use them as if they were one's own).
- g. Suffix *ist* which has meaning "person" (e.g. *novelist* which means person who writes novel).
- h. Suffix *ive* which make the noun to adjective (e.g. *act* to *active*, suffix *ive* changes the word *act* as verb into *active* as adjective).
- i. Suffix *ize* or *ise* which means "to cause", "to be", or "to become" (e.g. *idolize* means worship somebody as idol).
- j. Suffix ly means "like" or "having the attributes of". Suffix ly changes the adjective quick into quickly as adverb, and also changes state as noun into stately as adjective.
- k. Suffix *man* which has meaning "person" (e.g. *fireman* which means person whose job is to put out fires).
- 1. Suffix *ship* which means "circle" or "state of being" (e.g. *friendship* which means relation of friend).

- m. Suffix *where* which means "location" (e.g. *everywhere* means every place and *somewhere* means unknown location).
- n. Suffix *y* means "having the quality of" or "inclined to" (e.g. *sunny* which means having much sunlight).

In addition, prefix and suffix can be use both together with the same root word (e.g. *unacceptable*, *multiculturalism*, etc.)

# F. Compounding

Based on Coates (1999) some discussion about compounding terms explained in this part. It states that compounding is the combining of two or more independent words. Thus two words joined to make a new and usually more specific word applicable to the circumstances. In a compound several free morphemes are combined, resulting in a word that often derives its meaning from the combination of its components. For example:

- a. Word *classroom* is combination of the word *class* and *room*.
- b. Word *skyscraper* is combination of the word *sky* and *scraper*.

In English, compound are often not written as single word but separated or combined by a hyphen (e.g. *dry-cleaner* and *on-line*). Compound words combination examples:

- a. Verb combined with noun becomes noun (e.g. talk show)
- b. Adjective combined with noun becomes noun (e.g. beautiful girl)
- c. Preposition combines with noun becomes verb (e.g. overshadowed)

Many compounds exhibit also called modifier-head structure, with one part specifying the other in the terms of meaning. Thus a *blackboard* is a kind of board not kind of black and *talk show* is kind of show not kind of talk. The modifier may function in different ways, e.g. a *raincoat* is not a coat for but against rain.

While the abovementioned examples are **endocentric** (i.e. the meaning of the compound is derived from the meaning of the parts) there are some compounds where this is not the case. On the other hands, a *redhead* is not a type of head but a person with red hair. Such compounds are called **exocentric**, because their meaning is not strictly contained in the components.

### 2.2.2. Morphological Awareness

By 10 years of age, knowledge about the structure of words is a better predictor of decoding ability than is phonological awareness (Mann & Singson, 2003). Morphological awareness is the recognition, understanding, and use of word parts that carry significance. For example, root words, prefixes, suffixes, and grammatical inflections (e.g., -s or –es for plurals) are all morphemes which can be added or taken away from a word to alter its meaning.

Morphological awareness refers to the learners' knowledge of morphemes and morphemic structure, allowing them to reflect and manipulate morphological structure of words (Carlisle, 1995; Carlisle & Stone, 2003). Morphological awareness is defined as the ability to use the knowledge of word formation rules and the pairings between sounds and meanings (Kuo & Anderson, 2006). With morphological awareness, learners are able to learn morphemes and morphemic

boundaries by disassembling complex words into meaningful parts (e.g. childhoods = child + -hood + -s), learning the meanings of roots, affixes (child= baby, -hood= the state of being, -s= to indicate plural nouns), and reassembling the meaningful parts into new meanings (motherhood, fatherhood, brotherhood).

Anglin (1993: 58) found that the students could analyze the morphological structure of complex words which they have not actually learned before to figure out the meanings. Morin (2003: 87) proposed the strategy of using morphological knowledge to infer word meanings, and with it, the need to develop morphological awareness in the L2. She characterized morphological awareness as the ability to reflect on and manipulate morphemes and word formation rules in a language. The concept of morphological awareness implies learners' strategies of reflecting and manipulating word formation rules to derive the meaning of new words in the absence of communication context. Morphological awareness delineated in this study leads upon learners' knowledge of morphemes that enables them to recover the meaning of new complex words by means of morphemes identification or decomposition and to recombine morphemes to construct new meaning by means of morphological structure.

### 2.2.3. Measuring English Morphological Awareness

Anglin (1993) identified five different morphological word types in English. The five types are: root words (e.g. *short*, *closet*), inflected words (e.g. *smoking*, *reports*), derived words (e.g. *shortish*, *treelet*), literal compounds (e.g. *sunburn*, *birthday*), and opaque (idiomatic compounds or lexical idioms, e.g. *mouse tail*, "a plant of crowfoot family"; *pink lady*, "a cocktail").

In this study, four of them were used to investigate students' morphological awareness (root words, inflected words, derived words and literal compound). Further discussion on the measuring morphological awareness is provided in the next section.

### 2.2.4 Reading

Nuttal (1989) defines reading as the meaningful interpretation of printed or written verbal symbols. It means that reading is a result of the interaction between the perception of graphic symbols that represent language and the reader's language skills, cognitive skills and the knowledge of the world. In this process the reader tries to recreate the meanings intended by the writer.

Furthermore, Simanjuntak (1988: 15) defines reading as an active process of interacting with print and an instantaneous association of those symbols with the reader's existing knowledge. Reading can be defined as the ability to make sense of written or printed symbols to guide the recovery of information from his or her memory and subsequently use this information to construct a plausible interpretation of the written message. Rohani Ariffin (1992:1) in her book entitled Anthropology of Poetry for Young People defines reading as a highly personal activity that is mainly done silently, alone. There is a clear understanding that reading is something related to the activity of acquiring information and it is done either silently or aloud. In order for a person to be able to read, there is in need of other skill to support the reader while reading. Reading is a mental process as mentioned earlier so it needs other skills to be integrated with such as listening, speaking and writing. According to Chitravelu et. al (1995), reading is not a single

skill that we use all the time in the same way but it is multiple skill that used differently with kind of test and fulfilling different purpose.

In reading also known reading comprehension. Comprehension is the complex cognitive process involving the intentional interaction between reader and text to extract meaning. The main purpose for reading is to comprehend the ideas in the material. Schumm (2006:223) says that comprehension process involves an understanding of words and how these words are used to create meaning.

Reading comprehension is a term that represents the process of reading in which readers relate new information from the text being read to his previous knowledge stored their mind in order to gain the meaning and messages of the text. Thompson (2001) adds that in comprehension process, readers bring background knowledge and certain a set of a reading strategies to read a reading task at hand, while the text, on the other hand, provides the reader with factors involved in comprehending and storing information contained in a text ability to use background knowledge, ability to recognize and use rhetorical structure, and ability to use reading strategies. It shows that beside background knowledge, the readers need some capability in inviting and bringing the knowledge toward the text called recognizing and reading strategies. Comprehension can be regarded as a condition where no uncertainty exists. The learners comprehend when they have all questions answered because they have no doubt about alternative interpretations or decisions in their mind. As one reads, he/she constantly asking questions; and and as long as these questions are answered, and his/her uncertainty is reduced, then he/she comprehends.

Furthermore, in the 2006 curriculum, known as School-Based Curriculum (KTSP), the focus of language teaching learning process is a text. There are many kinds of texts that are introduced to the students; one of them is narrative text. The text is applied in four language skills namely listening, speaking, reading and writing. In this case the research would focus only in reading comprehension because it is not as easy as we heard. According to Goodman (1988) reading is a receptive process. It creates an interaction between a writer and a reader. It is a difficult thing since a writer and a reader cannot contact each other, they only communicate through the text. So a reader should try some hard effort to do this language skill.

On reading comprehension, a reader should have knowledge about understanding the reading passage. The common questions on the passages are primly about the main ideas, details, and an inference that can be drawn from passages. According to Nuttal (1982) five aspects of reading which the students should understand to comprehend a text well, they are determining main idea, finding specific information, reference, inference, and vocabulary. The reader tries to interpret word per word, sentence per sentence based on its context and clues (i.e. punctuation) given by the writer on the text. They were explained as follow:

# 1. Main Idea

Segretto (2002:12) states that main idea of a reading selection is what the passage is mostly about. The example of finding main idea was illustrated into a question as follow: *What is main idea of the text about?* 

## 2. Supporting Details

Supporting details are the facts and ideas that explain or prove the topic sentence or main idea. Furthermore, Sagretto states that supporting details provide the reader with more information about the main idea or subject of a passage. The question of finding supporting detail was as follow: *Who is the character of the text?* 

# 3. Inference Meaning

By definition, inference requires that each reader construct a meaning that makes the text a reflection of her experience (Moreillon, 2007:77). An inference is a statement about the unknown on the basis of the known. In other words, an inference is an educated guess. The question containing inference meaning was: *It is implied in the passage that.*?

## 4. Vocabulary

Linan (2007) states that the role of vocabulary in reading is clearly understood: vocabulary knowledge, the understanding of word meanings and their use, contributes to reading comprehension and knowledge building.

The question consisting vocabulary aspect can be drawn as follow: "The house is huge." The bold word is the synonym of...

## 5. Reference

One of sub process in sentence comprehension is referential representation; this process identifies the references that words in a sentence make to external word. The following question is the example: "...it has big eyes. The bold word refers to...

Furthermore Brassell and Rasinski (2008:18) state that comprehension occurs when a reader is able to act on, respond to, or transform the information that is presented in written text in ways that demonstrate understanding. In the case of autonomous learning the students are expected to find out the main ides, supporting details interfere, vocabulary, and reference by themselves. Before the class begins the students are expected to have preparation about the reading class like dictionary or have study about the text. During the class the students try to analyze, to solve the problem from the text and find out the aspect in reading by themselves. And before the class is over the students have to reflect what they have learnt about the text.

From all the theories mentioned above, it can be concluded that reading is an active process to gain the meaning of current information by relating readers' background knowledge to the information provided on printed text.

## 2.2.5. The Role of Morphological Awareness in Reading

Morphological awareness depends on experience with printed words for refinement, but itself is also functional in the development of reading comprehension ability. Because it entails the ability to perform morphological analysis, morphological awareness has often been found to be contributor to word learning and vocabulary development in that learners can decompose unknown morphologically complex words into their constituent morphemes and apply

morphological rules to derive meanings of unknown words (Wysocki and Jenkins, 1987).

Morphology is one of the often-overlooked building blocks for reading fluency, reading comprehension, and spelling. Research is now demonstrating the importance of strong morphological teaching as early as first and second grade (Apel & Lauraence, 2011), where traditionally it has been the focus in middle and high school years. In addition, there is evidence that students learn orthography (phonics), phonology, and morphology in concert rather than in stages, when learning how to read and write. Students with strong morphological skills possess a distinct advantage over students who use a "whole word approach" to decode words. With strong morphological skills, students can approach a novel multisyllabic word and break it into parts in order to predict the meaning. This skill helps in all areas of literacy: decoding, spelling, comprehension, and oral language. Many times struggling readers are unable to identify a word they encounter in the text, even though they know it in their oral language.

As a result, their expressive vocabulary remains quite limited compared with proficient readers who incorporate novel vocabulary from their reading into their oral language. Strong readers accomplish this because they recognize the word, infer its meaning, and are able to pronounce it. They efficiently map the vocabulary from their reading with previously known oral vocabulary as well.

More recent research has revealed that, in addition to being important to vocabulary development, morphological awareness is also a significant contributor to reading comprehension (e.g., Carlisle, 2000; Deacon and Kirby, 2004; Ku and Anderson, 2003; Nagy et al., 2006). Because of the inter-relations

between morphological awareness and vocabulary knowledge on one hand, and vocabulary knowledge and reading compre-hension on the other hand, researchers often controlled for vocabulary knowledge when the unique contribution of morphological awareness to reading comprehension was examined (Ku and Anderson, 2003; Nagy et al., 2006).

Kieffer and Lesaux (2008) found that Spanish English as a Second Language (ESL) learners'derivational awareness had a unique effect on reading comprehension over and above oral vocabulary and wordreading ability. Similar findings surfaced in studies on Korean learners of English as a foreign or second language(e.g.,Jeon, 2011; Wang et al., 2006).

On the other hand, Qian's (1999) study on Chinese and Korean ESL readers in Canadian universities failed to reveal a unique contribution of derivational knowledge to reading comprehension aftercontrolling for vocabulary knowledge. In Zhang and Koda (2012), advanced Chinese EFL learners' derivational awareness was found to contribute to reading comprehension indirectly through the mediation of lexical inferencingability and vocabulary knowledge, instead of having a direct contribution.

### 2.3. Theoretical Assumption

Morphological awareness is the recognition, understanding, and use of word parts that carry significance. For example, root words, prefixes, suffixes, and grammatical inflections (e.g., -s or -es for plurals) are all morphemes which can be added or taken away from a word to alter its meaning. More recent research has revealed that, in addition to being important to vocabulary development,

morphological awareness is also a significant contributor to reading comprehension. Because of the inter-relations between morphological awareness and vocabulary knowledge on one hand, and vocabulary knowledge and reading comprehension on the other hand, researchers often controlled for vocabulary knowledge when the unique contribution of morphological awareness to reading comprehension was examined.

Reading is the process of looking at a series of written symbols and getting meaning from them. When we read, we use our eyes to receive written symbols (letters, punctuation marks and spaces) and we use our brain to convert them into words, sentences and paragraphs that communicate something to us. Reading can be silent (in our head) or aloud (so that other people can hear). In addition, reading is a receptive skill - through it we receive information. But the complex process of reading also requires the skill of speaking, so that we can pronounce the words that we read. In this sense, reading is also a productive skill in that we are both receiving information and transmitting it (even if only to ourselves).

Morphology is one of the often-overlooked building blocks for reading fluency, reading comprehension, and spelling. Students with strong morphological skills possess a distinct advantage over students who use a "whole word approach" to decode words. With strong morphological skills, students can approach a novel multisyllabic word and break it into parts in order to predict the meaning. This skill helps in all areas of literacy: decoding, spelling, comprehension, and oral language. Many times struggling readers are unable to identify a word they encounter in the text, even though they know it in their oral language.

# 2.4. Hypothesis

In order to answer the mentioned research questions and keeping the safe side at the same time, the following null hypotheses are proposed:

 There is relationship between students' morphological awareness and their reading comprehension.

Those are the review of previous research and review of related literature relates to the research problems. It was including the explanations about morphological awareness, reading, reading comprehension, morphological awareness and reading relationship, theoretical assumption, and hypothesis. The next chapter will deal with methodology of this research.