Enhancing Morphological Awareness of English Language on Developing Reading Comprehension of the Prep School Students

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Abstract

he current study was conducted to investigate the effect of enhancing Morphological Awareness on developing English reading comprehension skills of the prep school students. A pre- post experimental group design was used to achieve the study The researcher used the explicit teaching for aim. promoting morphological awareness of the English language with the students to develop their reading comprehension. Thirty students were randomly chosen from the first prep school students. The study used a morphological awareness checklist and a reading comprehension checklist to morphological awareness determine the required components and the reading comprehension skills that need to be developed by the first year prep school students. Pre/posttests in morphological awareness were also used. Some lessons were reformulated so that they could be explicitly instructed for enhancing morphological awareness to develop reading comprehension of the participants. Analysis of obtained data revealed that the students achieved higher progress on the post administration of the reading comprehension test as the difference in the mean scores of the pre and post administrations of the test were statistically significant in favor of the post administration. Discussion of the findings and recommendations were presented. Enhancing the morphological awareness to develop EFL

reading comprehension was suggested for the prep school students.

Key Terms : Metalinguistic Awareness, Reading Comprehension, prep school students

Introduction:

Reading is not merely a process of exact identification of letters, words, and ultimately sentences leading to comprehension built from letter to word to phrase to sentence. Readers make use of their existing background knowledge (schemata) to make predictions about what is coming next in the text and about how some new, unfamiliar piece of information relates to what is already known, (Yang, W., Dai, W.,&Gao, L. (2012);Adam, 2013). It is clear that basic decoding processes are important for comprehension and are used by readers in interaction with the more complex processes of meaning generation. However, it is equally clear that readers engage in reading in order to gain information. Ahmadi, (2012).

Reading comprehension is the process of constructing meaning by the interaction with the text. Learners use prior knowledge and clues to understand the text. Reading is individual activity .Students read in different levels according to difficulty of English. Readers can discuss meaning with writers of the text. Learning to read not only improves the quality of knowledge, but also achieves successful study of text and success in all academic subjects, (Fatma, A; Mona,S, and Shaimaa , Z.(2019) ; Ness, (2011).

Comprehension is an important factor in reading. Comprehension means understanding the meaning of the text. Comprehending a text leads to understanding it. So, Learners should know the purpose of their reading and have strategies for reading to understand the text, also have the strategies of problem solving. Understanding makes students able to paraphrase the passage in their words .Reading comprehension is the dynamic interaction in the text and content among readers. Reading comprehension depends on the reader, text and the activity. Learners interact with the text in different ways according to their ability to activate knowledge and experience. Text is constructed to include printed and electronic texts (Brown,2011; Okasha, .2020).

Reading comprehension is the essence of reading and an active process that reader can interact with the text. It means the process of extracting and constructing meaning through involvement and interaction with written language. Reading comprehension is a complex process .Learners cannot understand without knowledge of words and interaction with text. People use the words which they extract and construct to emphasize both the importance and the sufficiency of the text as a determinant of reading comprehension. Reading Comprehension includes three elements: the text which can be comprehended, the reader who is doing the comprehension, the activity in which comprehension is a part (Okasha, .2020; Helwa, 2010).

Reading comprehension is widely agreed to be not one, but many things. At the least, it is agreed to entail cognitive processes that operate on many different kinds of knowledge to achieve many different kinds of reading tasks. Emerging from the apparent complexity, however, is a central idea: Comprehension occurs as the reader builds one or more mental representations of a text message. Among these representations, an accurate model of the situation described by the text is the product of successful deep comprehension (e.g., Kintsch & Rawson, 2005)

Reading comprehension is a complex processing, and different components of metalinguistic awareness are useful for reading comprehension. A number of studies have provided evidence that reading comprehension can be predicted by metalinguistic awareness. Metalinguistic awareness is the ability to analyze, think about, or manipulate language as an object separate from its meaning out of context. Phonological awareness. in or morphological awareness and orthographical awareness have usually been observed as metalinguistic awareness which is regarded to have special importance for reading, Zhang J, McBride-Chang C, Tong X, Wong A, Shu H, et al. (2012)

Reading Comprehension as an Active Process and its definition:

Reading comprehension is a complex, purposeful, interactive, comprehending, and flexible activity that takes considerable time and resources to develop and consists of several processes, (Oakhill, Cain, Kate, Elbro& Carsten (2014). Silva and Cain (2015) summarized the reading comprehension process as readers decoding words and retrieving their meaning, applying their syntactic knowledge to combine these into larger units—such as clauses and sentences and integrating information across different parts of the text. They often draw on background knowledge to infer information that the author has left implicit. Reading comprehension can also play an important role in determining a student's academic performance (Dawkins, 2017), and can be a critical skill to

develop while learning languages, particularly in second and foreign language learning contexts (Ibrahim et al., 2016). To successfully comprehend a reading text, several sufficient language components such as vocabulary, grammar knowledge, and background knowledge play vital roles in enhancing reading comprehension, particularly in a foreign language (Cervetti, & Wright, 2020).

These multiple language comprehension skills can be into two types—lower and higher level divided comprehension skills. Lower level comprehension skills the foundational knowledge serve as for text comprehension. Such skills would include the ability to recognize words as whole units, the ability to determine the meaning of a word by accessing a sight vocabulary, and the ability to recognize basic features, such as grammar, that connects a word with those around it. These lower level comprehension skills are essential for the comprehension and production of more complex discourse. In contrast, higher level comprehension skills are involved in the process of constructing a mental model of a text's meaning. These higher level skills would include the ability to make inferences from the text, to monitor comprehension to avoid incorrect interpretations, and to acquire structure knowledge (Silva, & Cain, (2015).

Some students often have difficulty comprehending what they read and tend to lack confidence in their own reading ability (James & Cate, 2021; Chavangklang & Suppasetseree, 2018; Rungwaraphong, 2020; Akkakoson, 2011; Yimwilai, 2019). So an extensive number of recent studies in EFL contexts have focused on teaching reading methodologies and reading comprehension strategies to increase English reading proficiency (e.g., Rawengwan & Yawiloeng, 2020; Yotapan, 2020). For example, Wannathong, (2016) investigated cognitive reading strategies with a group of EFL undergraduate learners, and Rawengwan and Yawiloeng (2020) explored the reciprocal teaching method on undergraduate students. As to the relationship between comprehension skills and reading comprehension, there have been relatively some studies on single skills such as vocabulary (Astan, 2014; Chou, 2011; Ibrahim et al., 2016; Sidek & Rahim, 2015; Thavornpon, 2012) or grammatical knowledge such as (Akbari, 2014; Ibrahim et al., 2015). To better understand reading comprehension and other related skills would be beneficial for EFL teachers and learners (Hamza & Ismail, 2018).

Comprehension is an essential goal of reading activities. In English class

Context, it should be explicitly taught by teachers. They should keep it as one of the principles of teaching reading, because monitoring comprehension is essential to successful reading (Zargar, Adams, and Connor, (2020).

There are several definitions about reading comprehension.

Almasi& Fullerton, 2012, define reading comprehension as "the process of simultaneously extracting and constructing meaning through interaction and involvement with written language." In t0he discussion of the definition of reading itself, readers extract information from the printed texts to construct the meaning of the texts. Fitriyah, (2020), presents the definition of comprehension from the International Reading Association's dictionary. According to the dictionary definition, the term 'comprehension' is defined as "the process of getting meaning of a communication, as a personal letter, speech, sign language; the knowledge or understanding that is the result of such a process." In short, the term 'comprehension' in reading context, refers to the process of constructing meaning from any printed texts.

According to Almasi & Fullerton, (2012), comprehension consists of three major elements: the readers, the texts, and the activities. The readers are the elements that do the comprehending. They use their skills, the micros and the macros, to comprehend the texts. The texts are the elements that are to be comprehended. Reading activities definitely deal with all printed texts. Readers make comprehension through it. The activities of reading are the elements in which the interaction between readers and texts occurs.

Morphological awareness and Reading comprehension

Morphological awareness is "the ability to reflect on and manipulate the morphemic structure of a word" (Luo et al. 2014, p. 90) and to use word-formation rules to construct and comprehend morphologically complex words (Pasquarella et al., 2011). Thus, when learners have sufficient word-formation knowledge, they can better identify the morphemic structures of words and can also manipulate them to create new/unrelated words (Lin, 2019). This understanding of how words can be broken down into smaller units of meaning such as roots, prefixes, and suffixes, has emerged as an important contributor to word reading and comprehension skills (Tighe & Edwards,2019).

According to Plag, (2015), words are usually made up of smaller recognizable units called morphemes.

Understanding what a morpheme means contributes to one's understanding or guessing of the meaning of new words. Accordingly, metalinguistic awareness is related to reading comprehension via decoding and oral vocabulary knowledge. Specifically, morphological awareness helps to decode words, infer their meaning, and facilitate both reading and understanding words in texts. (Amirijalili & Jabbari, 2018). According to Karakoç, & Köse,(2017), word recognition is a critical part of reading, hence the faster one recognizes the words, the more fluent reader learners become (Yucel-Koc, 2015) and for this purpose derivational morphology is a suitable resource (Lin,M,20190). Likewise, Zhang, & Koda, (2013), stated that the role of morphological awareness in reading is to enable readers to read longer words more accurately and fluently. Levesque, Kiefferm, and Deacon (2018) argue that morphological awareness contributes to morphological decoding which can influence word reading and reading comprehension. On the contrary, weak morphological awareness may be a restrictive factor in the acquisition of new vocabulary (Lin,(2019). Likewise, according to Tighe et al. (2018), metalinguistic skills such as morphological awareness have direct and indirect relationships with the reading comprehension abilities of adult readers.

Some researchers have been conducted concerning morphological awareness relevance for vocabulary learning and reading comprehension. Previous studies have shown that word-formation knowledge can indirectly facilitate L1 reading comprehension (e.g Zhang, & Koda, 2013; Zhang 2015 & Shoeib, 2017, Akbulut,(2019), L2 reading comprehension (e.g. Jeon 2011; Farrag, & Badawi, 2019), and L2 word reading and spelling (e.g. Apel and Lawrence, 2011; Akbulut, 2019). Similarly, word-formation knowledge serves as a metalinguistic tool for word consciousness (Ramirez, 2013; Rajab, 2020) and helps to develop scaffolding cognition in vocabulary (Chen 2011; Lin 2019).

Kieffer and Lesaux (2012) found that English as a Second Language (ESL) learners' derivational awareness had a unique effect on reading comprehension besides oral vocabulary and word reading ability. Zhang and Koda's (2013) study points out the importance of word formation rules and morphological awareness in the EFL curriculum and pedagogy. Their findings suggest that L2 reader may benefit from morphological training. Increasing learners' awareness play an essential role in the language learning process and this is closely associated with form-focused instruction. According to Ellis (2015), form-focused instruction is any planned or incidental instructional activity that means to induce language learners to pay attention to linguistic form. Also, focus on form should not be overlooked in the learning process since it can cause better language gains (Yucel-Koc, 2015; Teng, 2018). Similarly, instruction to create morphological awareness is intentional instruction to help learners pay attention to morphological forms (Amirijalili & Jabbari, 2018).

The Context of the Problem:

In the light of the observation and experience of the researchers of the present study in the field of English language teaching, they observed that reading comprehension skill rarely received the due attention in learning English language in the Egyptian prep school classes. So, the researchers reviewed a number of studies in this field such as: Ahmadi, &PourhoseiinGilakjani, (2012),El Boray,(2013),conducted studies in EFL reading comprehension for using morphological awareness for developing English language reading comprehension.

Moreover, when reviewing the objectives of teaching English in the preparatory schools in Egypt, it was found that enhancing students' reading comprehension skills in the English language is of the ultimate aims recommended in the preparatory schools. But, the researches found that there is a great shortage in fulfilling such an aim , as mentioned by the studies of ;Abdelrahman, & Bsharah, (2014),Ahmadi,&Pourhoseiin,(2012),Abdallah,Nahla,(201 8),AbdElHamid,Ayman(2015), AbdEl Kader(2015).

To solve the above problem, the present study researchers suggested enhancing students' morphological awareness for developing the preparatory school students' EFL reading comprehension skills.

Statement of the Problem:

The problem of the study can be stated in the weakness of EFL reading comprehension skills for the prep school students and this may be a result of the weakness of morphological awareness of those students. So, the present study attempted to promote the morphological awareness of the English language of those students to solve this problem.

To solve the problem the current study tends to answer the following questions:

Questions of the Study:

"What is the effect of enhancing the required morphological components on developing the required

English language reading comprehension skills of the first year prep school students?"

From this main question, the following sub-questions emerged:

- What are the required morphological components to be enhanced for the first year prep school students?
- What are the required EFL reading comprehensions kills to be developed for the first year prep school students?
- How will the suggested treatment intervention enhance the morphological awareness and develop the first year prep school students?
- What is the effect size of the suggested morphological instruction treatment on enhancing the students required morphological awareness components?
- What is the effect size of enhancing the morphological awareness components on developing the students' required reading comprehension skills?
- What is the relationship between enhancing the required morphological awareness components and developing required EFL reading comprehension skills?

Hypotheses of the Study:

- There is a statistically significant difference between the mean score of the students in the pre and post administration of the morphological awareness test, in favor of the post administration.
- There is a statistically significant difference between the pre and post administration of the EFL reading comprehension skills test, in favor of post administration.

Delimitations' of the study:

This study is delimited to:

- A 1st year prep class of (30) students chosen randomly from El Ayat Educational directorate, in the first term of the school year (2022- 2023).
- Designing enhancement activities for reformulating some English lessons to enhance the students' required morphological components and the required reading comprehension skills as determined by the study two checklists that answered the study first and second subquestions as below is the required morphological awareness components were: derivational morphology, inflectional morphology and lexical morphology. The required reading comprehension skills were: literal comprehension, inferential comprehension and evaluative comprehension, thus the first and second subquestions of the study were answered.

Purpose of the Study:

The purpose of the study was to investigate the effect of enrichment activities for enhancing morphological awareness to develop English reading comprehension skills for the first prep school students.

Significance of the Study:

Theoretical importance of the study:

Establishing a theoretical framework for English language instruction to enhance morphological awareness for developing English reading comprehension skills of first prep school students. The significance of this study is gained from its importance for:

Teachers:

- It raises teachers 'awareness of the importance of enhancing morphological awareness in the EFL classroom.
- It provides EFL teachers with a practical model to overcome English reading problems they face in classroom.
- This study may attract the attention of curriculum designers to the value of enhancing morphological awareness in English language teaching textbooks.

Students:

• Learning through a range of enrichment activities which help them to enhance their morphological awareness and develop their reading comprehension skills.

Definitions of Terms:

Reading Comprehension:

Silva and Cain (2015) defined the reading comprehension process as readers decoding of words and retrieving their meaning, applying their syntactic knowledge to combine these into larger units—such as clauses and sentences—and integrating information across different parts of the text. They often draw on background knowledge to infer information that the author has left implicitly.

Purvis, C. (2014) defined it as "The ability to understand information presented in the written form is called reading Comprehension". The researchers defined it as "the process of interaction between the reader and the written text and interpreting the text and understanding the relationship between sentences and writer's ideas and is measured by the students' marks on the reading comprehension test.

Morphological Awareness (MA) According to Carlistic etal, 2000)it is explained as the ability to reflect on, analyze and manipulate morphemic elements in words. It can be considered as one form of students' developing linguistic awareness.

Yucel-Koc (2015) defined morphological awareness as metalinguistic skill that represents the ability to reflect on and manipulate the morphemic structure of words

The researchers defined it as first year prep students linguistic awareness of the morphemic structure of words that is developed through explicit teaching .So, the students of the first year prep will have the ability to manipulate the morphemic elements of words which develops and facilitate their reading comprehension of the English language accurately and fluently.

Design of the study

The one group (experimental group) pre-posttest quasiexperimental design was used in the present study. The participants were a sample of 30 students randomly selected from the first year prep school students. The experimental group used the explicit teaching for enhancing the morphological awareness to develop their reading comprehension skills.

Variables of the Study

• The independent variable: -Enrichment activities for enhancing morphological awareness in teaching.

• The dependent variable: Developing English Reading Comprehension skills.

Procedures of the study:

In order to accomplish the aim of the present study, the researchers went through the following procedures:

- Reviewing the literature and related previous studies in the field of morphological awareness and English reading comprehension skills.
- Developing a checklist for the required morphological awareness components and another one for reading comprehension skills that are most necessary for the first year preparatory students and submitting them to jury members to choose the suitable items and modify them according to their opinions.
- Preparing a pre- post morphological awareness test and submitting it to seven jury members to choose suitable items and modify the others to ensure the validity of the test and then ensure its reliability before using it.
- Preparing the pre-post reading comprehension skills test and submitting it to the jury members to choose the suitable items and modify the others to ensure their validity, reliability.
- Choosing 30 students as participants from first year preparatory school students randomly.
- Pre administration of the morphological awareness test and the reading comprehension test.
- Designing direct morphological instruction treatment intervention with enrichment activities for enhancing the morphological awareness components to develop the required English reading comprehension skills of first year prep school students.

- Post administering the morphological awareness and the reading comprehension skills tests after finishing the experiment.
- Analyzing the obtained data using the suitable statistical techniques.
- Discussing results and interpreting them, reaching conclusions, introducing recommendations, and presenting suggestions for further research.

Instruments and materials of the Study

Morphological awareness components and English reading comprehension Skills Checklists

Purpose of the Checklist:

The morphological awareness components checklist and reading comprehension skills checklist were designed by the researchers to determine and identify the required morphological components and the most important reading comprehension skills to be developed for the first year prep students.

Content of the Checklist:

The morphological awareness components and the English reading comprehension skills checklists in their primary forms included several categories. They were submitted to a panel of seven jury members to determine the degree of importance. So the checklists became valid after they had been modified according to the jury members who omitted some categories and modified others. These components were displayed before and are shown in Appendix (A&B).

The Aims of the morphological awareness and Reading comprehension skills tests:

The tests were designed to assess first year preparatory school pupils' morphological awareness and reading comprehension skills in English Language.

Validity of the tests

To ensure the validity of the tests, the researchers submitted them, in their initial forms, to seven specialized jury members. The tests became valid when they were modified according to the Jury members' suggestions to suit the students' level. The final forms of the tests are found in Appendix (A&B).

Reliability of the tests

To establish the reliability of the tests, they were administered to a sample of (30) first year preparatory school students other than the sample of the experiment of the study. Then, the same tests were administered to the same group under nearly similar conditions after two weeks.

The reliability coefficients of the tests were estimated using Cronbach Alpha Formula. The estimated value (0.86)was considered reliable for the morphological awareness test and the estimated value (0.88) was considered reliable for the reading comprehension skills test.

Timing of the tests:

The same (30) pupils other than the experimental sample were used to estimate the time required for the students to answer the tests questions. The times were estimated by calculating the summation of the time taken by all the students divided to the number of the students, so, the time allotted for the morphological awareness test was fifty (50) minutes and the allotted time to the reading comprehension skills test was sixty(60) minutes. The times were estimated in the following way:

The summation of the time taken by all the students

The number of the students

Test time for the morphological awareness= 1500 = 50 minutes

30

and the reading comprehension test = 1800 = 60 minutes

30

Scoring the test:

The students' responses in the morphological awareness test and the Reading Comprehension skill test were evaluated by the three researchers in the light of a designed scoring rubric for all questions. To assess the score for each skill, the mean score was calculated for each skill. To ensure objectivity of the scoring scheme, the analytical method of scoring was used to evaluate the students' success in both tests.

The suggested treatment for the participants of the experiment

During the experiment which lasted for about two months and a half. Students were taught through the suggested treatment of promoting the morphological awareness of the English language to develop their reading comprehension skills. This was done through the explicit teaching of the enrichment activities provided to the chosen reading lessons from their textbook after reformulating them for the experiment to promote their morphological awareness. This was done through the direct explanation of the morphemic structures of words. The third researcher made the students understand how words can be broken down into small units of meaning, such as roots, prefixes and suffixes. They can be divided into small parts called morphemes. This is called morphological awareness which is related to reading comprehension via decoding and oral vocabulary knowledge. So, it helped to decode words, infer their meaning and facilitate both words reading and understanding in texts. This word recognition caused a good part of reading and derivational morphology was a suitable resource of facilitating reading comprehension. Promoting the morphological awareness of the students developed their reading comprehension as it enabled them to read longer words accurately and fluently.

Thus, it had direct and indirect relationship with the development of the experimental students' reading comprehension. During the experiment derivational awareness was focused on to have more effect on the students reading comprehension besides word and text reading ability. So, much word formation rules and morphological awareness were done through the explicit teaching and increasing direct morphological instruction which played an essential role in the learning process which is closely related to form focused instruction. This was done through intentional and incidental instructional activity that meant to induce the experimental group students to pay attention to linguistic form. This was focused on, to cause better reading comprehension gains through its effect on reading fluency of decoding morphologically forms. instruction So. to create morphological awareness was mainly intentional during every enrichment activity provided in the reformulated lessons taught to the experimental group in the suggested treatment for developing the EFL reading comprehension. So, the third question of the study about the treatment intervention was answered.

The Results:

The results will be displayed through verifying the hypotheses and answering the questions of the study

Verifying the Hypotheses

The First Hypothesis

The first hypothesis in the present study stated that: There is a statistically significant difference between the mean score of the experiment group students in the pre and post administrations of the morphological awareness skills test, in favor of the post administration.

In order to verify this hypothesis, "t" test for paired participants were used to compare the mean scores of the experimental group students in the pre post administrations of the morphological awareness test. Table (1) shows t values of the experimental group students in the pre and post morphological awareness test.

Table (1)
t-test Results of the Students' on the Pre and post administration
of the morphological awareness test

Variable	Administration	No. Ss	Mean	SD	DF	"t"	Sig.	Effect size
Inflectional	post	-30	7.2000	.71438	29	27.569	0.01	0.929
Morphology	pre	30	1.8333	.79148	29			
Derivational	al post	- 30	5.2667	.69149	29	24.267	0.01	0.910
Morphology	pre		1.4667	.50742				
Lexical	post	30	5.4333	.62606	29	26.240	0.01	0.922
morphology	pre	30	1.6000	.49827	49			
Total	post	- 30	17.9000	1.29588	29	41.015	0.01	0.961
	pre	30	4.9000	1.15520	29			

Figure (1)

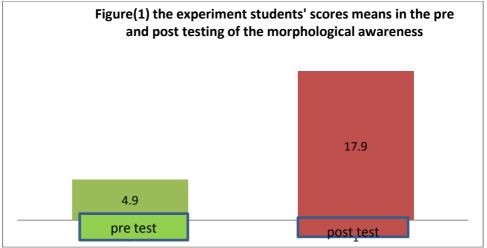


Table (1) showed

The mean score of the experimental group students on the post- administration of the morphological awareness test as a whole was higher than that of the pre-

administration where they got the mean score (17.9000) in the post- administration and got the mean score (4.9000) in the pre administration. The calculated "t" value for the difference between the mean score of the experimental group students in the pre and post morphological awareness test as a whole (41.015) was significant at (0.01) as it was higher than t tabulated "t" value.

In addition, each main skill of morphological awareness was measured and compared as follows:

- The mean score of the experimental group students on the post- administration of the test of the first morphological awareness component test (inflectional) was higher than that of the pre- administration where they got the mean score (1.8333) in the preadministration and got the mean score (7.2000) in the post administration. The calculated "t" value for the difference between the mean score of the experimental group students in the pre and post morphological awareness test as a whole which was (27.569) was significant at (0.01) as it was higher than t tabulated "t" value.
- The mean score of the experimental group students on the post- administration of the test of the second morphological awareness component (derivational) was higher than that of the pre- administration where they got the mean score (1.4667) in the pre- administration and got the mean score (5.2667) in the post administration. The calculated "t" value for the difference between the mean score of the students in the pre and post reading comprehension test as a whole

which was (24.267) was significant at (0.01) as it was higher than t tabulated "t" value.

• The mean score of the students on the postadministration of the test of the third morphological awareness component (lexical) was higher than that of the pre- administration where they got the mean score (1.6000) in the pre- administration and got the mean score (5.4333) in the post administration. The calculated "T" value for the difference between the mean score of the students in the pre and post administration of the morphological awareness test as a whole which was (26.240) was significant at (0.01) as it was higher than the tabulated "t" value.

Assessing the effect size of the enrichment activities of the treatment:

Promoting the morphological awareness components of the preparatory school students

Table (2) shows the effect size values of the suggested treatment enrichment activities of the morphological awareness components for the prep school students using the following formula (Mourad, 2000, p248) $\eta 2 = t2$

R+df

 Table (2): the referential framework to which the effect size valued are

Interpretation	Effect size d value
Small	From 0.2 till less than 0.5
Medium	From 0.5 to less than 0.8
Large	0.8 or more

As shown in table (2) the effect size value of the suggested activities on promoting the morphological awareness components was (0.96). Thus the morphological

awareness enhancement activities had a large effect on promoting the morphological awareness components. Thus the 4 sub-questions of the study were answered.

The second Hypothesis:

The second hypothesis of the present study stated that: There is a statistically significant difference between the mean scores of the students in the pre and post administration of the reading comprehension skills test, in favor of the post testing.

In order to verify this hypothesis, "t" tests for dependent participants were used to compare the mean score of the experimental group on the pre and post administrations of the reading comprehension test.

Table (3)'t" value of the difference between the mean scores of the experimental group participants on the pre and post administrations of the reading comprehension skills test.

of the reading comprehension skills test								
Variable	Administrati	No. Ss	Mean	SD	DF	"t"	Sig.	Effect
	on							size
Literal	pre	30	2.30	.95231	29	24.798	0.05	0.914
	post		7.466	.62881				
Inferential	pre	30	2.23	.72793		26.557	0.05	0.922
	post		7.367	.74971				
Evaluation	pre	30	1.8333	.79148		27.569	0.05	0.929
	post		7.2000	.71438				
Total reading	pre	30	6.3667	1.32570		43.108	0.05	0.970
test	post		21.9667	1.47352				

Table (3)

t-test Results of the Students' on the pre and post administration of the reading comprehension skills test

The Freedom degree is (29) and The Tabulated "t" value is (43.108).

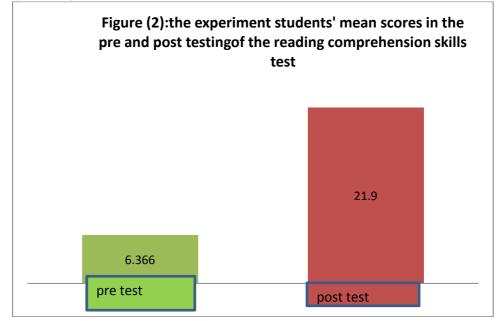


Table (3) showed that:

The mean score of the students was higher in the post testing (21.9667) than that in the pre- administration of the reading comprehension test as a Whole (6.3667), and so there was a statistically significant difference at (0.01) level.

In addition, each skill of reading comprehension skills was measured and compared as follows:

• The mean score of the experimental group students on the post- administration of the test of the first reading comprehension skill (literal) was higher than that of the pre- administration where they got the mean score (2.30) in the pre- administration and got the mean score (7.466) in the post administration. The calculated "t" value for the difference between the mean score of the experimental group students in the pre and post reading comprehension test as a whole which was (24.798) was significant at (0.01) as it was higher than t tabulated "t" value.

- The mean score of the experimental group students on the post- administration of the test of the second reading comprehension skill (inferential) was higher than that of the pre- administration where they got the mean score (2.23) in the pre- administration and got the mean score (7.367) in the post administration. The calculated "t" value for the difference between the mean score of the experimental group students in the pre and post reading comprehension test as a whole which was (26.557) was significant at (0.01) as it was higher than the tabulated "t" value.
- The mean score of the experimental group students on the post- administration of the test of the third reading comprehension skill (evaluation) was higher than that of the pre- administration where they got the mean score (1.8333) in the pre- administration and got the mean score (7.2000) in the post administration. The calculated "t" value for the difference between the mean score of the experimental group students in the pre-post reading comprehension test as a whole which was (27.569) was significant at (0.01) as it was higher than t tabulated "t" value.

Assessing the effect size of enhancing and promoting the morphological awareness on developing reading comprehension skills of the first year preparatory school students.

The researchers calculated the effect size of promoting the morphological awareness on developing the required reading comprehension skills of the first preparatory school students. The effect size was calculated using the effect size formula mentioned before. According to table (3) the effect size value of enhancing the morphological awareness on developing the students required reading comprehension skills was (0.97). Thus the fifth sub-question of the study was answered.

Answering the study questions:

The first, second, third, fourth and fifth sub-questions of the present study were answered before.

The sixth sub-question consequently could be answered as follows: The more the morphological awareness is, the higher the level of the students reading comprehension is. Thus, there is a positive relationship between the level of the morphological awareness and the level of the reading comprehension skills as the correlation co-efficient between them was (0.89), the significance level at (0.01).

Finally, it should be listed that the main question of the present study was in turn answered after answering the fourth and the fifth sub-questions of the study about the effect size of promoting the morphological awareness on developing the reading comprehension skills which was large.

Discussion of Results:

As shown in the displayed results of the study, the study hypotheses were verified and their questions were also answered. The main results were the students of the experiment whose reading comprehension in the English language was highly improved and its skills were highly affected due to the enhancement and promotion of the students' morphological awareness and their ability to manipulate the morphemic structure of words. This high progress and large effect on developing the reading comprehension skills of the first year prep school students were due to the following main factors:

- First: Enhancing the morphological awareness facilitated meaning influence of complex words during reading the vocabulary and led to better comprehension.
- Second: promoting the morphological awareness made learners use the syntactic signals provided by suffixes in derived words to help pass complex sentences which could help to improve comprehension.
- Finally: Morphological awareness could help to develop reading comprehension through its effect on fluency decoding morphologically complex words.

It is worth noting that the results of the present study go well with the results of some recent studies in the same field such as the studies of Zhankand (2013); Zhank and Shoieb(2017); Farg and Badawi (2019) and Rajab (2020), thus reinforcing the results of the present study.

The present study results are also consistent with the results obtained from the studies of Akbulu(2017); Akkakoson,(2011); Purvis, (2014); Rawengwan, & Yawiloeng, (2020), and Yucel-Koc, (2015). This ensures

the importance and the great effect of enhancing the morphological awareness to develop reading comprehension skills.

Conclusions of the Study:

Based on the results of the present study, the researchers came up with the following conclusions:

- The results of the study provided an evidence for long effect of Morphological Awareness on developing the first year prep school students' reading comprehension skills. This means that using Morphological Awareness highly improved the students' English reading comprehension skills.
- Morphological Awareness encouraged the students to be active learners in the experiment and increased learning opportunities through working together and exchanging the reading tasks and information with each other and giving self- feedback to each other. So, there was a kind of an 'interactive context'.
- The targeted reading comprehension skills were developed due to the Morphological Awareness treatment that was related to the students' real life.
- The change in the teacher's role from an authoritarian to an organizer, a facilitator and a language advisor allows pupils to share more responsibilities
- Using morphological awareness in the present study provided valuable instructional guidelines for creating an effective and positive learning environment in a more comprehensive approach, Morphological Awareness

provided additional guidelines on how to support learners and enhance their learning, consequently, the benefits were multiplied and learning was more deep rooted for the first year prep students.

Recommendations of the Study:

As the results of the present study are encouraging, the following recommendations seem pertinent:

- Explicit teaching to enhance and promote Morphological Awareness should be conducted at schools and teachers should be trained on using it in the EFL teaching /learning process.
- More emphasis should be placed on developing students' EFL reading comprehension skills in general and in preparatory schools in particular.
- Morphological Awareness should be taken into account while designing English language curriculum due to its great effect on motivating the students to get involved in the learning process and mastering it especially the basic education stage.
- Training in-service teachers on how to use Morphological Awareness in teaching reading skills at different stages.
- The teachers should guide and facilitate the learning process, allowing the students to take more responsibility about their own learning while acquiring new knowledge in order not to be passive recipients. So, the teachers should guide and support their students rather than control and spoon feed them.

Suggestions for Further Research:

Based on the present study, the researcher presents the following suggestions for further research:

- Investigating the effect of Morphological Awareness on developing other English Language skills (writing, speaking and listening) for prep school students.
- Investigating the effect of Morphological Awareness on developing English reading comprehension skills and other language skills for primary and secondary school students.
- Designing a training program for in-service teachers on using Morphological Awareness to develop English language teaching and learning process.

References

- Abdelrahman, M. & Bsharah, M. (2014). The Effect of Speed Reading Strategies on Developing Reading Comprehension among the 2nd Secondary Students in English Language. *English Language Teaching*, 7(6), 168-174.
- Abd El Haq;E Fatma,; Sayed,Mona,& Zahran,Shaimaa (2019). The Relationship between EFL Reading Comprehension Skills and Attitude towards Reading among Preparatory Stage Pupils. Journal of Faculty of Education, No (119) July, Part (2).
- Abd ElHamid, Ayman. (2015). the effect of direct learning strategy on developing some of reaing comprehension skills for the pupils with learning Difficulties. Specialized and rehabilitated Magazine, Education and rehabilitation organization, Egypt, 2(8).202-239.
- Abdallah, Nahla Negm ElDin. (2018). Metacognition Awareness of reading strategies and its relationship with memory procees for preparatory year school students. Arabic studies magazine in Education and psychology.(93), 173-207.

- Abd ElKader, M.(2015). Using the academic cognition approach for learning language in teaching reading and its effect on developing creative reading comprehension skillsand linguistic communication for the second prep year school students. Egyptian Educational Magazine, (39), 333-399
- Adam, D, Mwdawi, A. and Eldouma, S. (2013). The Impact of the use of reading strategies on developing (EFL) Learners' reading comprehension skills. The Journal of Humanities. v. 14 (2), pp. 144-150.
- Ahmadi, M, &PourhoseiinGilakjani, A. (2012). Reciprocal Teaching Strategies and Their Impacts on English Reading Comprehension. *Theory and Practice in Language Studies*,2(10), 2053-2060. http://dx.doi.org/10.4304/tpls.2.10.2053-2060
- Akbulut, F. (2019). Role of morphological and metalinguistic awareness on reading among Turkish EFL learners. International Journal of Contemporary Educational Research, 6, 261-277.
- Almasi, J & Fullerton, S (2012). Teaching Strategic Processes in Reading by Janice F. Almasi and Susan King Fullerton, 2012 Sample Chapter available at <u>http://www.guilford.com/</u> excerpts/ almasi.pdf.
- Atar, C. (2018). The effects of learning a second language on the first: The case of increased metalinguistic awareness. *Journal of Language and Linguistic Studies*, *14*(1), 242-260.
- Amirjalili, F., & Jabbari, A.(2018). The impact of morphological instruction on morphological awareness and reading comprehension of EFL learners. *Cogent Education*, 5(1), 1-30.
- Akbari, Z. (2014). The role of grammar in second language reading comprehension: Iranian ESP context. *Procedia-Social and Behavioral Sciences*, *98*, 122-126.
- Akkakoson, S. (2011). Raising the comprehension skills of Thai tertiary readers of English through strategies-based instruction. (Unpublished doctoral thesis), The University of Otago, Dunedin, New Zealand, Retrieved from http://hdl.handle.net/10523/1629
- Alsied, S. Ibrahim, N, & Pathan, M. (2018). The Use of grammar learning strategies by Libyan EFL learners at Sebha University.

ASIAN TEFL Journal of Language Teaching and Applied Linguistics, 3(1), 37-51

- Apel, K. & Lawrence, J. (2011). Contribution of morphological awareness skills to word-level reading and spelling in first grade children with and without speech sound disorder. Journal of Speech, Language, and Hearing Research, 54, 1312–1327.
- Astan, C. (2014). The correlation between vocabulary size and the three levels of reading comprehension. (Master's thesis), Widya Mandala Catholic University Surabaya, Surabaya, Indonesia
- Betti, M,(2021b). Applied Linguistics. <u>https://www.researchgate.</u> net/ publication/348627973_Applied_Linguistics.
- Brown, C. and Broemmel, A. (2011). Deep scaffolding: Enhancing the reading experiences of English language learners. New England Reading Association Journal. v. 46(2), pp. 34-39.
- Borai, Abdallah. (2013). the effect of computerized program for treating learning reading difficulties for the third primary year pupils, unpublished M.A , (Islamic university, Ghaza).
- Cain, K., & Oakhill, J. (2007). Children's comprehension problems in oral and written language: a cognitive perspective. Guilford Press.
- Cervetti, G. & Wright, T. (2020). The role of knowledge in understanding and learning from text. Handbook of Reading Research, 5, 237–260.
- Chavangklang, T., & Suppasetseree, S. (2018). Enhancing Thai EFL university students reading comprehension through a flipped cooperative classroom. PEOPLE: International Journal of Social Sciences, 4(3), 238-261.
- Chen, K. (2011). The impact of EFL students' vocabulary breadth of knowledgeon literal reading comprehension. Asian EFL Journal, 51, 30-40.
- Chou, P. (2011). The effects of vocabulary knowledge and background knowledge on reading comprehension of Taiwanese EFL students. Electronic Journal of Foreign Language Teaching, 8(1), 108-115.

- Dawkins, L. (2017). Factors influencing student achievement in reading. (Doctoral dissertation), Walden University, MN.
- Ellis, R. (2015). Understanding second language acquisition (2nd ed.). Oxford: OxfordUniversity Press.
- Farrag, M., & Badawi, A. (2019). The Effect of Explicit English Morphology Instruction on EFL Secondary School Students' Morphological Awareness and Reading Comprehension. English Language Teaching, 12(4), 166-178. doi: 10.5539/elt.v12n4p16
- Fitriyah, I, (2020). Students' Reading Comprehension: Between the Effectiveness of Interactive Approach, Reading Habit and Self-Actualization. 10.2991/assehr.k.200427.009.
- Hamza & Ismail, N (2018). Reading Comprehension Strategies among EFL Learners in Higher Learning Institutions. Journal, Arab & Al-Jarrah, 10.31235/osf.io/p7cde.
- Helwa, H. (2010a). The effectiveness of using Annotation Strategy in developing some reading comprehension skills among EFL college students. Unpublished Master thesis, Faculty of Education, Benha University, Egypt.
- Helwa, H. (2010b). Using KWL plus Strategy for developing some reading comprehension skills among EFL freshmen. Journal of Faculty of Education, Benha University. 21(82), 1-38.
- Ibrahim, E., Sarudin, I., & Muhamad, A. (2016). The relationship between vocabulary size and reading comprehension of ESL learners. English Language Teaching, 9(2), 116-123.
- Ismail & Ibrahim, S, (2015).Modeling the relationships between the reading strategies and objectives of learning and attitudes towards fields and resources reading. Faculty of Education magazine. Ain Shams university.39 (1), 173-207.
- James, E, Nicola K. Currie, Shelley X., and Kate C. (2021). The relations between morphological awareness and reading comprehension in beginner readers to young adolescents. Journal of Research in Reading 44: 110–30
- Jeon, E. (2011). Contribution of morphological awareness to second-language reading comprehension. The Modern Language Journal, 95, 217–235.

- Karakoç, D., & Köse, G.(2017). The Impact of Vocabulary Knowledge on Reading, Writing and Proficiency Scores of EFL Learners. Journal of Language and Linguistics Studies, 13(1), 352-378. Retrieved from <u>http://www.jlls.org/index.php/jlls/</u> article/ view/603/289
- Kieffer, M. & Lesaux, N. (2012). Direct and Indirect Roles of Morphological Awarenessin the English Reading Comprehension of Native English, Spanish, Filipino, and Vietnamese Speakers. Language Learning, 62(4), doi: 10.1111/j.1467-9922.2012.00722.x
- Kintsch, W., & Rawson, K. A. (2005). Comprehension. In M. J. Snowling & C. Hulme (Eds.), The science of reading: A handbook (pp. 209–26). Oxford: Blackwell.
- Kyjánek, Lukáš. (2018). Morphological Resources of Derivational Word-Formation Relations
- Levesque, K, Kieffer, M. & Deacon, S (2018). Inferring meaning from meaningful parts: The contribution of morphological skills to the development of children's reading comprehension. Reading Research Quarterly. doi:10.1002/rrq.219.
- Lin, M. (2019). Developing EFL learners' morphological awareness: Instructional effect, teachability of affixes, and learners' perception. International Review of Applied Linguistics in Language Teaching. 57(3), 289-325. doi: <u>https://doi.org/ 10.1515/iral-2015-0081</u>
- Ness, M. (2011). Explicit reading comprehension instruction in elementary classrooms: teacher use of reading comprehension strategies. Journal of Research in Childhood Education. v. 25 (1), pp. 98-117. DOI: 10.1080/02568543.2010.531076
- Oakhill, J& Cain, K & Elbro, C. (2014). Understanding and Teaching Reading Comprehension. 10.4324/9781315756042.
- Okasha, M. (2020). Using Strategic Reading Techniques for Improving EFL Reading Skills. Arab World English Journal. 11. 311-322. 10.24093/awej/vol11no2.22
- Pasquarella, A., Chen, X., Lam, K., Luo, Y. & Ramirez, G. (2011). Cross-language transfer of morphological awareness in

Chinese–English bilinguals. Journal of Research in Reading, 34(1), 23–42. doi:10.1111/j.1467-9817.2010.01484.x

- Plag, I (2015), The structure of words: morphology, Sabine Arndt-Lappe, Maria Braun, and Mareile Schramm, Berlin, Germany: De Gruyter, Inc., pp. 71–112
- Purvis, C. (2014). Determining and supporting the reading comprehension and metalinguistic abilities of undergraduate preservice teachers. (Unpublished doctoral thesis), University of Canterbury, Christchurch, New Zealand,
- Rajab, B. 2020. Assessing the Impact of Morphological Knowledge on Lexical Acquisition and Processing. Education Research International 20: 1–9.
- Ramirez G., Walton P., Roberts W. (2013). Morphological awareness and vocabulary development among kindergarteners with different ability levels. J. Learn. Disabil. 47(1), 54–64. 10.1177/0022219413509970
- Rawengwan, W., & Yawiloeng, R. (2020). Reciprocal teaching method for enhancing Thai EFL learners' reading comprehension ability. Sripatum Review of Humanities and Social Sciences, 20(1), 105-123.
- Rungwaraphong, P. (2020). Using glosses for vocabulary assistance in Thai EFL reading classes: An investigation of preferences, effective types and elements. Electronic Journal of Foreign Language Teaching, 17(1), 301-317
- Sidek, H., & Rahim, H. (2015). The role of vocabulary knowledge in reading comprehension: A cross-linguistic study. *Procedia-Social and Behavioral Sciences, 197*, 50-56.
- Shoeib, A. (2017). Morphological awareness and its association with reading comprehension of EFL Saudi university students. European Journal of English Language Teaching, 3(2), 52–77. doi:10.5281/zenodo.1117415
- Silva, M., & Cain, K. (2015). The relations between lower and higher level comprehension skills and their role in prediction of early reading comprehension. Journal of Educational Psychology, 107(2), 321-331. https://doi.org/10.1080/10888438.2010.529219

- Teng, M (2018). The effect of focus on form and focus on forms instruction on the acquisition of phrasal verbs by Chinese students. Asian EFL Journal. 20. 145-173.
- Thavornpon, S. (2012). *Relationships between vocabulary learning strategies and vocabulary knowledge and reading comprehension*. (Unpublished doctoral dissertation), Prince of Songkla University, Songkla, Thailland. Srisang & Everatt (2021), pp. 427-454
- Tighe, E, Little, C., Arrastia-Chisholm, M., Schatschneider, C., Diehm, E., Quinn, J, & Edwards, A. (2019). Assessing the direct and indirect effects of metalinguistic awareness to the reading comprehension skills of struggling adult readers. Reading and Writing, 32(3), 787-818.
- Triyogo, A. (2018). Teaching Reading Comprehension by Using 3H (Here, Hidden, in the Head) Strategy to the Eighth Grade Students of SMP Negeri O Mangunharjo. 10.13140/ RG.2.2.22807.01448.
- Wannathong, N. (2016). Cognitive reading strategies and EFL undergraduate learners. Journal of Graduate School Sakon Nakhon Rajabhat University, 13(61), 93-100.
- Yang, W., Dai, W.,&Gao, L. (2012). Intensive Reading and Necessity to Integrate LearningStrategies. English Language and Literature. 2(1), 55-63.http://dx.doi.org/10.5539/ells.v2n1p112
- Yimwilai, S. (2019). Increasing EFL students' English reading ability and engagement through multimodal learning environments. Humanities and Social Sciences Journal of Graduate School, Pibulsongkram Rajabhat University, 13(2), 368-382.
- Yotapan, I. (2020). Development ASQ3RS Program for enhancing reading achievement in undergraduate students Journal of Social Science and Buddhistic Anthropology, 5(7), 299-312.
- Yucel-Koc, M. (2015). The role of morphological awareness in academic vocabulary and reading comprehension skills of adult ESL learners. (Doctoral Dissertation). Available from ProQuest Dissertation and Theses database. (UMI No.3664492).

- Zargar, E., Adams, A, and Connor, M. (2020). The relations between children's comprehension monitoring and their reading comprehension and vocabulary knowledge: an eye-movement study. Read. Writ. 33, 511–545. doi: 10.1007/s11145-019-09966-3
- Zhang, D & Koda, K (2013). Morphological awareness and reading comprehension in a foreign language: A study of young Chinese EFL learners. System. 41, 901–913. 10.1016/j.system. 2013.09.009.
- Zhang J, McBride-Chang C, Tong XL, Wong A, Shu H, et al. (2012) Reading with Meaning: The Contributions of Meaningrelated Variables at the Word and Subword Levels to Early Chinese Reading Comprehension. Reading and Writing 25: 2183– 2203.

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