Developing Inferential Comprehension via Training on Morphological Awareness among High vs. Low Achievers of Palestine University EFL Learners

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Arabic Abstract
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تنمية الفهم الاستنتاجي باستخدام التدريب علي الوعي الصرفي لدي طلاب اللغة الانجليزية مرتفعي ومنخفضي التحصيل في جامعة فلسطين

هدفت الدراسة الي تقص اثر استراتيجية التحليل الصرفي للمفردات علي الفهم الاستنتاجي لطلبة اللغة الانجليزية في جامعة فلسطين مرتفعي ومنخفضي التحصيل، حيث تكونت عينة الدراسة من (٤٥) دارس من كلية التربية خلال الفصل الدراسي الاول ٢٠١٨/٢٠١٩م، قسم الباحث عينة الدراسة الي مجموعتين متكافئتين حيث اشتملت المجموعة التجريبية علي (٢٠) دارس موزعين الي (١٢) طالبة و (٨) طلاب، بينما اشتملت العينة الضابطة على (٢٥) دارس موزعين الى (١٣) طالبة و (١٢) طلاب، تم تدريس انشطة مقرر اللغة الانجليزية(٢) لأفراد العينة التجريبية باستخدام استراتيجية التوعية الصرفية للكلمات بينما تم تدريس نفس انشطة مقرر اللغة الانجليزية(٢) لأفراد العينة الضابطة باستخدام الطريقة الاعتيادية، استخدم الباحث اداة رئيس في هذه التجربة وهي: اختبار القراءة الاستنتاجية القبلي والبعدي، حيث تم تصحيح اجابة عينة الدراسة بواسطة مدرسين اثنين وتم اعتماد متوسط علامتي المصححين كعلامة صادقة لعينة الدراسة. اظهرت النتائج اثر ايجابي كبير لاستراتيجية التوعية الصرفية للكلمات علي القراءة الاستنتاجية لكل من طلبة اللغة الانجليزية مرتفعي و منخفضي التحصيل في جامعة فلسطين.
الكلمات المفتاحية:
التدريب علي التحليل الصرفي للمفردات، القراءة الاستنتاجي

English Abstract

This study aimed at investigating the effect of morphological awareness/analysis on Palestine university EFL high vs. low achievers' inferential comprehension. The researcher conducted an experiment on a sample of EFLLs during the first semester of the academic year 2018-2019. The participants of the study, who have been working as teachers at UNRWA schools and were enrolled in English 2 course, consisted of (45) male and female students divided into two groups. The experimental group included (20) students; (12) females and (8) males, while the control group included (25) students; (12) males and (13 females). The control group members were taught the activities of English (2) course using

the regular method while the experimental group members were taught the activities of the same course using the morphological awareness strategy. The researcher adopted and adapted an inferential comprehension pre/posttests and used it as a main tool in this study. The test was rated twice; by the researcher and another colleague from the university, and the mean of the two scores were granted as a final score of the participants of the study on the pre/posttests. Results revealed that morphological awareness training has a large positive effect on developing the inferential comprehension of Palestine University EFL high and low achievers.
Key Words: morphological awareness training , inferential comprehension

Introduction
Reading is understanding written texts and most educators around the globe agreed that readers should do their best to get the messages of the authors as "Reading is a kind of dialogue between the reader and the text, or even between the reader and the author. The reading process involves not only word recognition, but also interpretation of reading texts. This interpretation can be achieved through a higher-level thinking process called inferential comprehension. In inferential comprehension, readers tend to search deeper meaning by combining ideas, drawing conclusions and interpreting and evaluating information as authors do not explicitly state the whole necessary information. This helps learners to develop new knowledge through the process of interpreting new information in the light of past experiences while relinking of past knowledge to new one. The development of inferential understanding of texts requires explicit teaching.
There has been a widely increasingly trends which assume that there is a strong link between the range of vocabulary and reading comprehension of students. Mosaidis (2016) stated that the lack of understanding vocabulary was the most challenging factor in developing English language learners' skills as the majority of her

study sample expressed frustration in trying to remember new vocabulary, and they recorded that they lack the ability to know English words which are needed to accurately express their ideas. In this regard, Lee and Muncie (2006) indicated that increasing productive vocabulary acquisition which implies a much larger increase in vocabulary recognition positively affects English foreign language students' performance.

It seems that there is a crucial need to increase English foreign language learners' wealth of vocabulary which helps them use the targeted language effectively. Farghal & Jaber (2017) mentioned that knowing how words are formed helps students to derive many vocabulary items from the same words, and it helps them understand or at least guess the meaning of unfamiliar words. Farghal & Jaber added, "The study of word formation is the concern of morphology," (p.6).

Context of the Problem

A body of Palestinian research papers have shown that Palestinian English foreign language learners suffer weak level of English proficiency (Alhabbash, 2012; Firwana, 2010; Shaat, 2017). The lack of vocabulary knowledge stands as a serious problem which faces those learners, and it hinders their abilities to communicate using English language. This is one of the reasons behind language shift phenomenon which tertiary level students experience. Amtsen (2013) stated that his students shift to the native language while being engaged in communication using the target language, and they often rely on translators to help them with new vocabulary. This proves that the deficits in vocabulary knowledge may be the most widely shared problem among struggling EFLLs.

Several research papers have been conducted; in Arab and foreign countries, to equip English learners with techniques and methods that help them develop their wealth of vocabulary in an attempt to enhance their English proficiency. For example, Vela & Rushidi (2016) attempted to reveal the effect of keeping vocabulary notebooks on vocabulary acquisition and learner autonomy of

intermediate level students from the South East European University Language Center. Also, Khalifa (2015) tried to identify the effects of vocabulary learning strategies on academic achievement of Libyan English foreign language learners. In addition, Abdel Raheem (2015) conducted an experiment to find out the effectiveness of KWL strategy on Palestinian eleventh graders reading comprehension vocabulary and its retention and students' attitudes towards English. And Zahedi & Abdi (2012) explored the impact of imagery strategy on EFL learners' vocabulary learning. Moreover, Jeon (2011) investigated the contribution of morphological awareness to second language reading comprehension. And Bellomo (2009) tested the morphological analysis on the vocabulary acquisition of English learners. Furthermore, Hassan (2001) compared the effects of teaching words in isolation versus the teaching of words in context on the vocabulary recognition of Arab English foreign language learners. Moreover, Abdel Rahim (2000) investigated the effect of vocabulary strategy training on enhancing the overall English proficiency of English majors at Sultan Qaboos University.

Up to the best knowledge of the researcher, none of the previous studies which have been conducted in Gaza Strip investigates the effect of morphological awareness on EFLLs' inferential comprehension. This study is a try to reveal the effect of morphological awareness on Palestine university EFLLs' inferential comprehension.

Research Questions

This study attempts to answer the following major question:

What is the effect of morphological awareness on Palestine University EFLLs' inferential comprehension?

To achieve the aims of the study, the researcher addressed the following sub-questions:

1- What are the effects of morphological awareness on Palestine University EFL high achievers' inferential comprehension?

2- What are the effects of morphological awareness on Palestine University EFL low achievers' inferential comprehension?

Literature Review
Inferential Comprehension
Inferential comprehension is the ability to process written information and understand the underlying meaning of the text. Combining ideas, drawing conclusions, interpreting and evaluating information, being critical, forming opinions, and identifying the authors' messages are among the inferential skills that English foreign language learners should master. Cain, Oakhill, and Elbro (2003) stated that the ability to generate inferences is a very important skill that indicates the degree to which the message of a written text is comprehended, and Reed (2016) clarified that students' progress in reading comprehension depends on the inference skills they practice. Reed added that background knowledge of words and concepts in the text helps students make inferences.

Thus, inferential comprehension plays a crucial role in enhancing the overall reading ability of students. Valentine, Rosmalina and Hayati (2015) maintain that there is a significant correlation between learners' awareness of the structure of the minimal units of meaning involved in words of a text and learners' ability to infer the meaning intended. Hence, it is the role of teachers to facilitate their students' inference making tasks. Training students on skills that help them know the key words of reading texts may play a vital role in helping teachers to achieve this aim.

Morphological Awareness
A morpheme is the minimal meaningful speech unit. It is defined as "The smallest meaningful unit in the grammar of a language." ("Glossary of Linguistics Terms," n.d.). And morphology is a word which is made up of two morphemes: (1) 'morph' which means 'form' and (2) 'ology' which means 'study'. So morphology is the science which studies the internal structure of words (Fromkin, Rodman & Hymat, 2014, p. 41). In morphology, there are three main types of morphemes namely base, pound and free. Free morphemes can stand alone to convey a meaning but pound ones cannot convey

a meaning unless they are attached to other morphemes. For example, the word 'driver' includes two morphemes; 'drive' which is a free verbal morpheme and 'er' which is a agentive pound one. In contrast, a base morpheme includes the main meaning of a word. For instance, 'compute' is the base morpheme of 'computerization'. Training students on morphological analysis of complex words helps students know how words are formed. Folse (2004) stated that "There are too many words in the language" (p.89), and Fromkin, Rodman & Hymat (2014) illustrated that "Most speakers do not know all of the words of the language they use" (p.33). They added that "The demonstration of words into morphemes illustrates one of the fundamental properties of human language" (p. 42). So it is the role of teachers to design effective morphological analysis activities and motivate students to be engaged in those activities. Morphological analysis/awareness (MA), which is a vocabulary acquisition strategy, is the process of breaking down morphologically complex words into their constituent morphemes. McBride-Chang et. al. (2005) defined morphological awareness as, "Awareness of and access to the meaning and structure of morphemes in relation to words". It was found that teaching morphologically complex vocabulary along with providing a working knowledge of morphemes are beneficial for college students (Bellomo, 2009), and Apel & Diehm (2014) showed that teaching how affixes are added to a root or base to form a more complex derivation can be understood even by first graders. So teachers can train students to add derivational suffixes to already existed word to form new different grammatical word class.

Echoke & Koda (2017) found that the participants who were sensitive to the morphological analysis succeeded in guessing the meaning of new words. In addition, Law, Wouters & Ghesquiere (2015) revealed that morphological awareness skills have a positive contribution in literary achievement and compensation in word reading of adults with dyslexics. Also, Tighe & Binder (2015) revealed that morphological awareness was a significant unique

predictor of reading comprehension. Kieffer & Lesaux (2012) indicated that morphological awareness made a significant direct contribution to reading comprehension and word reading fluency of the participants of their study. And Jeon (2011) showed that morphological knowledge has a significant role in developing the second language reading comprehension of older readers.

To guarantee a successful morphological awareness strategy implementation, Bellomo (2009) suggested that teachers should consider three criteria. These criteria invite teachers to: (1) reiterate words parts to demonstrate stable form, (2) explain the semantic transparency; clear parts to the whole relationship with the basic meaning, of target words, and (3) ensure ubiquity; not just seeking derivations that only change the part of speech of words but illustrating morphemes in a minimum of five words from the same family.

Purpose of the Study

The study aims at:

1- exploring the effect of morphological awareness on Palestine University EFLLs' inferential comprehension, and

2- suggesting pedagogical steps which activate the use of morphological analysis as a method of knowing new English vocabulary.

Hypotheses of the Study

1-There is a statistically significant difference at ($\alpha \leq 0.05$) level between the mean scores of the experimental group which was trained on morphological awareness in the inferential comprehension pretest and their mean scores on posttests in favor of the posttest's mean scores.

2- There is a statistically significant difference at ($\alpha \leq 0.05$) level between the mean scores of the experimental group which was trained on morphological awareness and those of the control group which received instruction using the regular method in the inferential comprehension posttest in favor of the experimental group.

3- There is a statistically significant difference at ($\alpha \leq 0.05$) level between the mean scores of the high achievers of the experimental group who were trained on morphological awareness strategy and those of the control group who received instruction using the regular method in the post-inferential comprehension test in favor of the high achievers of the experimental group.

4- There is a statistically significant difference at ($\alpha \leq 0.05$) level between the mean scores of the low achievers of the experimental group who were trained on morphological awareness strategy and those of the control group who received instruction using the regular method in the post-inferential comprehension test in favor of the low achievers of the experimental group.

Significance of the Study

 This study could be significant since it:

1-highlights the importance of morphological awareness on enhancing the inferential skills of EFLLs,

2- provides language teachers and curricula designers with sequenced pedagogical steps that could train students on morphological analysis and help them to know new words they face,

3- reveals the effect of morphological awareness on Palestine University EFLLs' inferential comprehension, and

4- hands educationalists with a tool that could be used to assess EFLLs' inferential comprehension ability.

Delimitations of the Study

The present study was implemented during the first semester of the academic year 2018/2019 to measure the effect of morphological awareness on Palestine University EFLLs' inferential comprehension.

Methods & Procedures

Research Design

To achieve the aims of the study, the researcher used the quasi-experimental approach and selected two classes and assigned them at random to represent the two groups of the study; the experimental and control, and conducted pre-posttests experiment design.

The Participants of the Study

Two intact classes were chosen from the Faculty of Education-University of Palestine to represent the two groups of the study. The two classes included 70 students. They all had a diploma in Basic Education and have been working as teachers at UNRWA schools. However, 22 of them are specialized in English language, and the others are specialized in Arabic language, Math and Religion. Those students have joined in the University of Palestine to pursue their studies to get a B.A. in Basic Education. Also, they have been enrolled in 'English II' course. Twenty-five students were dropped from the groups because they did not do the pre/posttest and some did not attend most of the experiment sessions and some were intentionally dropped to guarantee the equal distribution of the two groups. The students who continued to the rest of the experiment represented the participants of the study which consisted of 45 students. Those students randomly represented the two groups, i.e. the experimental group and the control group. The experimental group included 20 students; 12 females and 8 males while the control group included 25 students; 12 males and 13 females.

At the early beginning of the experiment, the researcher ensured that both groups have high and low achievers through comparing their cumulative general points average (CGPA), and to guarantee the equal distribution of the subjects into two groups the researcher compared the participants' performance in the inferential comprehension pretests utilizing independent sample t-test. Table (1) presents the results of this comparison.

Table (1): Result of Independent Samples T- Test in Pre test for Experimental and Control Groups

Group	Mean	Std. Deviation	T-Test	P-value (Sig.)
Control	63.96	8.21	0.004	0.997
Experimental	63.95	8.43		

The above table shows that the mean scores of the participants of the study in the inferential comprehension pretest equals 63.96 and 63.95 for the control and experimental groups, respectively. The value of the T-test equals 0.004, with p-value equals 0.997, which is greater than 0.05. This implies that there is insufficient evidence to conclude that the mean is significantly different between the control and experimental groups. In other words, there is insignificant difference in the mean scores of the control and experimental groups in the pre inferential comprehension test. Hence, it can be concluded that the experimental and control groups' are equally distributed.

Instrumentation

The researcher reviewed the literature of inferential comprehension and navigated the internet and selected two reading text to construct the inferential comprehension test which was used as a mono tool in this study. This test includes ten questions which were designed to evaluate the skills of inferential comprehension namely: (1) combining ideas, (2) drawing conclusions, (3) interpreting and evaluating information, (4) guessing the meaning of new vocabulary, (5) forming opinions based on text read and (6) identifying the authors' messages.

Objectives of the Test

The test; the tool of the study, was designed to evaluate the ability of Palestine University EFLLs in:
- mastering the skills of English morphology analysis,
- guessing the meaning of new vocabulary,
- deriving words from a given word family,
- combining ideas of reading texts to draw conclusions,
- interpreting and evaluating information existed in reading texts,
- reading texts to identify the authors' messages,
- being critical and forming opinions about messages conveyed in reading texts.

Validity of the Test

To achieve the face validity, the initial version of the inferential comprehension test was distributed to a panel of faculty members from different universities in Gaza. These instructors have a plentiful experience in teaching reading, and they kindly reviewed the test and offered useful tips, which help the researcher to construct the final version of the test. Appendix (A) includes the final version of this test.

Reliability of the Tests

The reliability of the inferential comprehension test was determined using the test-retest reliability. This test was conducted on a small group of Palestinian English students as a pilot study. After two weeks the test was conducted on the same small group of students. The reliability of the coefficient of the inferential comprehension test was 0.87, which indicated acceptable reliability (George & Mallery, 2003. P.231).

The Morphological Awareness Training

Training Palestine University EFLLs on morphological awareness follows a systematic design of instruction which aims at widening Palestine University EFLLs' knowledge of English morphemes. The students were trained on analyzing   targeted words through breaking them down into their constituent morphemes; prefixes, roots and suffixes and use them as a vehicle for developing vocabulary to help learners infer implicit meaning involved either by combining two separate ideas in a text or linking prior knowledge to text read. This is a base rock which helps students to be able to imitate such a technique to form new words from already existed ones and to guess the meaning of unknown vocabulary in a hope to expand the vocabulary wealth of students which may enhance students inferential comprehension.

Description of the Training

Morphological awareness training includes the following:
- The teacher designs activities which focus on complex words and how to analyze them into prefixes, roots and suffixes

bearing in mind to begin with words which include recognizable bases and common affixes just to facilitate the initial students tasks and to motivate them to participate.

- Affixation and compounding are always highlighted and students are trained to form words of new grammatical class from already known ones.

- Morphological family words are also stressed to illustrate how some words are alike yet different in meaning.

- The teacher, also, explains the semantic transparency of words. In other words, he illustrates how sometimes morphemes explain the meaning of the words and sometimes do not e.g.: a blackboard versus a police station and blueberry versus strawberry and mushrooms which is not a kind of rooms.

- Utilizing deductive and inductive learning approach of teaching, the teacher always makes the morphological relationship clear to students.

- Gradually, the teacher releases the responsibilities for students to read texts and choose words to define their morphemes and guess their meaning aiming at enhancing the inference skills of students.

- The teacher always reinforces and reviews the tackled activities and provides useful feedback on students' responses.

Validity of the Activities

The researcher distributed the first version of the designed activities to three TEFL professors from two Palestinian universities in Gaza who reviewed it and ensured its validity.

Implementation

The steps of implementing this study include:

- The researcher informed Palestine university EFLLs about the aims of the experiment and administered the pre-test on the two groups; the experimental and control groups.
- The experimental group was trained on morphological analysis while conducting the various activities of English II Course, and the control group was taught the same course regularly for about seven weeks.
- The researcher administered the post-test on the two groups; the experimental and control groups.
- The test was scored by the researcher and another rater and dividing the two scores by two.
- The researcher computed the differences between students' performance in the pre and posttests.
- Results' discussion and conclusions were listed.

Statistical Techniques

The researcher tested the normality of the data of the experimental and control groups provided by the tool of the study to find out which statistical technique; parametric or non-parametric, should be used to perform the statistical data analysis. The results of Shapiro-Wilk test of normality, which was used to perform the aforementioned statistical technique, are stated in table (2).

Table (2): Results of Shapiro-Wilk Test of Normality

Group		Shapiro-Wilk	
		Statistic	Sig.
Experimental	Pre	0.944	0.306
	Post	0.947	0.355
Control	Pre	0.931	0.103
	Post	0.944	0.203

Table (2) shows that the p-value for each variable of the experimental and control groups is greater than 0.05 level of significance, then these variables are normally distributed.

Consequently, parametric tests should be used to perform the statistical data analysis. The following is a description of the statistical techniques used in this study.

1) Descriptive analysis (Mean and Std. Deviation).
2) Shapiro-Wilk test.
3) Independent Samples T-test.
4) Paired Samples T-Test.
5) Effect Size (ES) and ETA square "η2".

Findings

The researcher compared the mean scores of the experimental group members in the pre and post inferential comprehension tests utilizing paired sample T-test. The results of this comparison is stated in table (3).

Table (3): Result of Paired Samples T-Test for Pre and Posttests of the Experimental Group

	Mean	Std. Deviation	T-Test	P-Value	Eta Square	Effect size
Pre test	63.95	8.42	-11.774	0.000*	1.53	Very high
Post test	79.47	10.53				

* The mean difference is statistically significant at 0.01 level

Inspection of the above table revealed that the means equal 63.95 and 79.47 for pre and posttests, respectively. The value of the T-test equals -11.774, with p-value equals 0.000, which is smaller than 0.05. This implies that there is sufficient evidence to conclude that the mean is significantly different between the pre and posttests. Since the sign of the T-test is negative, then the mean in the post test is significantly greater than that for pretest. Accordingly, the experimental group members benefited from the morphological awareness strategy in enhancing their inferential comprehension.

In comparing the mean scores of the experimental group and those of the control group in the inferential comprehension posttest, the researcher used the independent sample T-test. Table (4) presents the results of this test.

Table (4): Result of Independent Samples T- Test for Control and Experimental Groups in Posttest

Group	Mean	Std. Deviation	T-Test	P-Value	Eta Square	Effect size
Control	67.83	9.60	-3.783	0.000*	0.257	Very high
Experimental	79.47	10.53				

* The mean difference is statistically significant at 0.01 level

The previous table illustrates that the mean score of the control group members equals 67.83 while that of the experimental group is 79.47. The value of the T-test equals -3.783, with p-value equals 0.000, which is smaller than 0.05. This implies that there is sufficient evidence to conclude that the mean is significantly different between the control and experimental groups in the inferential comprehension posttest. Since the sign of the T-test is negative, then the mean scores of the experimental group is significantly greater than that of the control groups.

To reveal the differences between the mean scores of the high achievers of the experimental group and that of the control group in the post-inferential comprehension test, the researcher utilized independent sample T-test. For the result of this test, see table (5).

Table (5): Result of Independent Samples T- Test for Control and Experimental Groups High Achievers Performance in Posttest

Group	Mean	Std. Deviation	T-Test	P-Value	Eta Square	Effect size
Control	73.53	5.80	-5.203	0.000*	0.531	Very high
Experimental	86.36	6.74				

* The mean difference is statistically significant at 0.01 level

Going through the above table enables readers to find out that the high achievers in the control group scored a mean of 73.53, and the mean scores of their counterparts in the experimental groups is 86.36 in the post inferential comprehension test. The value of the T-test equals -5.203 with 0.000 p-value, which is smaller than 0.05. This implies that there is sufficient evidence to conclude that the mean is significantly different between the control and experimental groups in the inferential comprehension posttest for high achievers. Since the sign of the T-test is negative, then the mean of the

experimental group is significantly greater than that of the control groups for high achievers.

Using independent sample T-test, the researcher compared the difference between the mean scores of the low achievers of the experimental group and that of their counterparts in the control group in the post-inferential comprehension test. The results of this test is stated below in table (6).

Table (6): Result of Independent Samples T- Test for Control and Experimental Groups Low Achievers Performance in the Posttest

Group	Mean	Std. Deviation	T-Test	P-Value	Eta Square	Effect size
Control	58.33	6.614	-3.647	0.002*	0.470	Very high
Experimental	70.00	6.55				

* The mean difference is statistically significant at 0.01 level

The above table shows that the mean score of the control group low achievers in the post inferential comprehension posttest is 58.33 in comparison with that of their counterparts in the experimental group is 70.00. The value of the T-test equals -3.647 with p-value equals 0.002, which is smaller than 0.05. This implies that there is significant difference in the means between the control and experimental groups for low achievers. Since the sign of the T-test is negative, then the mean of the experimental group is significantly greater than that of the control group low achievers.

Discussion

This study aimed at investigating the effects of morphological awareness on Palestine University EFLLs' inferential comprehension. Results showed that both of the high and low achievers of the participants of the study positively benefited from the morphological awareness training in developing their inferential comprehension. The benefits students gain from the study's activities may be due to: (1) the gradual steps that the teacher adopted in sequencing the activities of the course, (2) the morphological analysis activities which help learners know how words are formed, and (3) the well-designed activities of forming

and guessing the meaning of new words which help students to cover a large portion of the reading text.

The participants' knowledge of different types of morphemes to form new words and use them correctly was obvious from the words they use in answering the last question of the post inferential comprehension test. The participants' correct use of words such as: discover/discovery, explore/exploration, protect/protection was noticed, and students were able to form a good rate of morphological error free words. This helps increase the participants wealth of vocabulary and positively enhance their inferential comprehension. The benefits' low achievers gain from the study strategy, which is in agreement with Apel & Diehm (2014) who stated that even first graders benefited from morphological awareness activities, may be due to the gradual steps that the teacher adopted in sequencing the activities of the course. This helped enhance students' autonomy and provided them a sense of fulfillment, which encouraged them to participate and gain useful skills. Also, it seems that morphological awareness strategy bridges the gap between theory and practice of morphological knowledge.

The high achievers' benefit of morphological awareness training is consistent with those revealed by Bellomo, (2009); Jeon, (2011); Law, Wouters & Ghesquiere (2015); & Echoke & Koda,(2017) who all indicated a positive effect of morphological awareness on developing college and adult students English language skills. This result may be due to the fact that high achievers include English majoring students who have a diploma in English language teaching. Those students may admire and gain the skills of analyzing complex words and use them effectively while practicing inferential comprehension. The researcher, also, attributed this result to the fact that teaching how words are formed helped high and low achievers to construct a mental mechanism, which helps them to guess the meaning of unknown words. This enhanced the participants' wealth of vocabulary, which positively affected their inferential comprehension. This was mentioned by Fromkin, Rodman & Hymat

(2014) who indicated that without words people would not be able to convey their thoughts, nor they can comprehend messages conveyed to them. In addition, students' mastery of key words, which results from the study's morphological awareness training, helps them to comprehend the message of the reading text and effectively practice high order thinking skills of reading; inferential comprehension, as "A small number of high- frequency items will cover a large proportion of a text," (Nation & Macalister, 2010, p.41).

Conclusions

Based on the limitations of the present study and its results, the following conclusions have been revealed:

1- Morphological awareness training has a positive effect on developing Palestine University EFLLs' inferential comprehension.

2- High and low Palestine University EFL achievers benefited from morphological awareness training in developing their inferential comprehension. So this strategy suits heterogeneous classes which include a diverse group of students.

3- The gradual steps; from simple to more complex, of implementing the study strategy motivated the low achievers to participate in the teaching activities and enhanced their autonomy, which positively affected their inferential comprehension.

4- Morphological awareness helps students to be aware of how words are formed. This enables them to construct new words and guess the meaning of unknown ones, which enhance their overall English proficiency.

Recommendations

It is recommended that:

1- Morphological awareness training should be introduced to EFLLs during school and tertiary levels of education.

2- Intensive and practical extracurricular morphological training which aims at familiarizing students' with variety of words' structures and bridging the gap between theory and practice of morphological knowledge should be handed to EFLLs.

3- Farther research is needed to investigate the effectiveness of morphological awareness training in enhancing the overall English proficiency of EFLLs.

4- Teachers' attempts should be made to enhance EFLLs' autonomy through the effective use of gradual and well-designed teaching activities.

References

Abdel Raheem, A. (2015). *The effectiveness of KWL strategy on Palestinian eleventh graders reading comprehension vocabulary and its retention and students' attitudes towards English*. Unpublished M.A. Thesis, The Islamic University-Gaza, Palestine.

Abdel Rahim, A. (2000). The effect of vocabulary strategy training on enhancing overall English proficiency. *Education, AL-Azhar University-Cairo Journal*, 88, 1-31.

Alhabbash, M. (2012). *The effectiveness of online and classroom discussion on English speaking skills of 12th graders at Gaza*. Unpublished M.A. Thesis, The Islamic University-Gaza, Palestine.

Apel, K., & Diehm, E. (2014). Morphological awareness intervention with kindergarteners and first and second grade students from low SES homes: A small efficacy study. *Journal of Learning Disabilities*, 47, 65-75.

Bellomo, T (2009). Morphological analysis and vocabulary development: critical criteria. *The Reading Matrix*, 9 (1), 44-55.

Cain, K., Oakhill, J.V., & Elbro, C. (2003).The ability to learn new words meaning from context by school-age children with and without language comprehension difficulties. *Journal of Child Language*, 30 (3), 681-694.

Echoke, S. & Koda, K. (2017). Contribution of morphological awareness to adult L2 Chinese word meaning inferencing. *The Modern Language Journal*, 101(4), 742-755.

Farghal, M. & Jaber, A. (2017). *Vocabulary*. Amman, Jordan, AL-Quds Open   University Pub.

Firwana, S. (2010). *Impact of Palestinian EFL teachers' attitudes toward oral errors on their students' attitudes and choice of error treatment strategies*. Unpublished Ph. D. Dissertation, Bosten College.

Folse, K. S. (2004). *Vocabulary myths: applying second language research to classroom teaching*. Ann Arbor, MI: University of Michigan Press.

Fromkin, V., Rodman, R. & Hymat, N. (2014). *An introduction to language*. The Tenth Edition. Boston, U.S.A: Wadsworth.

George, D. & Mallery, P. (2003). *SPSS for windows step by step*. United States of America: Pearson Education, Inc.

Glossary of Linguistics Terms.(n.d). Morpheme. Retrieved from https://glossary.sil.org/term/morpheme

Hassan, A. (2001). The effect of word in isolation and word in context on vocabulary recognition of Arab learners of English as a foreign language. *Damascus University Journal*, 17 (2), 35-46.

Hedge, T. (2000). *Teaching and learning in the language classroom handbooks for language teachers*. Oxford: Oxford University Press.

Jeon, E. (2011). Contribution of morphological awareness to second language reading comprehension. *The Modern Language Journal*, 95 (2), 217-235.

Khalifa, S. (2015). *Effect of vocabulary learning strategies on academic achievements of pre-university 82ibyan EFL learners*. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2834460

Kieffer, M. & Lesaux, N. (2012). Direct and indirect morphological awareness in the English comprehension of native English, Spanish, Filipino, and Vietnamese speakers. *Language Learning*, 62 (4), 1170-1204.

Law, J., Wouters, J. & Ghesquiere, P. (2015). Morphological awareness and its role in compensation in adults with dyslexia. *Dyslexia*, 21(3), 254-272.

Lee, S. & Muncie, J. (2006). From receptive to productive: improving ESL learners' use of vocabulary in a post-reading composition task. *TESOL Quarterly*, 40 (2), 295-320.

McBride-Chang e, C., Wagner, R.K., Muse, A., Chow, B.W., & Shu, H. (2005). The role of morphological awareness in children's vocabulary acquisition in English. *Applied Psycholinguistics*, 26, 415-235.

Nation, I. S.& Macalister, J. (2010). *Language curriculum design*. Routlege, New York.

Reed, D. (2016). *Inference making: the key to advanced reading development*. Retrieved from: https://iowareadingresearch.org/blog/inference-making-the-key-to-advanced-reading-development.

Shaat, M. (2017). The oral proficiency of English majors at AL-Azhar university-Gaza. *Journal of the University of Palestine for Research and Studies*, 7(3), 1-27.

Tighe, E. & Binder, K (2015). An investigation of morphological awareness and processing in adult with low literacy. *Applied Psycholinguist*, 36 (2), 245-273.

Valentine, A., Rosmalina, I. & Hayati, R. (2015). Students' inferential comprehension and reading comprehension. *The Journal of English Literacy Education*, 2(1), 33-39.

Vela, V. & Rushidi, J. (2016). The effect of keeping vocabulary notebooks on vocabulary acquisition and learner autonomy. *Procedia-Social and Behavioral Sciences*, 232, 201-208. Retrieved from
https://www.sciencedirect.com/science/article/pii/S18770428163127 82

Zahedi, Y. & Abdi, M. (2012). The impact of imagery strategy on EFL learners' vocabulary learning. *Procedia - Social and Behavioral Sciences*, 69, 2264-2272. Retrieved from

https://www.sciencedirect.com/science/article/pii/S187704281 2056649

Appendix "A"
The Instrument of the Study; The Inferential Comprehension Test

Dear Students,

You are doing a referential comprehension test which is a mono tool of a study entitled: **Developing Inferential Comprehension via Training on Morphological Awareness among High vs. Low Achievers of Palestine University EFL Learners.** The test includes two reading texts and (10) questions; nine multiple choice questions and one open-ended question. Please, read the questions and write your answers clearly. Also, be informed that the result of this test will just be used for the scientific purposes of this research paper and won't affect your overall result.

Best Regards

The Researcher

Fill in the following form before starting doing the inferential comprehension test.

1- I am a student from the:

A- Experimental Group   B- Control Group

2- My Cumulative General Points Average(CGPA) is

……………………

Q. A- Read the following topic paragraph and answer the questions which follow. (10 m.)

During the first year of a child's life, parents and carers are concerned with **its** physical development; during the second year, they watch the baby's language development very carefully. It is interesting just how easily children learn language. Children who are just three or four years old, who cannot yet tie their shoelaces, are able to speak in full sentences without any specific language training.

A.1. From the above introductory paragraph, you can infer that it introduces an essay entitled: (5 m.)

a- How babies construct full sentences

b- How babies tie their shoelace
c- How babies acquire language
d- None of these

A.2. The underlined pronoun "its" refers to:
                        (5 m.)
a- The first year of a child's life
b- A child's life
c- The parents care of children
d- None of these

Q.B Read the following paragraph and answer its questions. (90 m.)

On August 3, 1492 , Christopher Columbus set sail from Palos , Spain , with less than a hundred crew members to discover a new route to Asia. After spending a difficult time at sea, the party sighted land early on the morning of October 12, 1492. They set foot on an island in the Bahamas, which they named Al Salvador. Columbus presumed that **the indigenous** people were Native Indians as he was under the mistaken belief that he had set foot on Indian soil. Probably some 10 million American Indians were natives to the land before the large-scale inhabitation by Europeans and subsequent annihilation of Native Americans started. However, it took more than a hundred years after Columbus discovered America for the Europeans to finally take the momentous decision to make the New World their home.

The Native Americans actually welcomed the pale-skinned visitors primarily out of curiosity than anything else. They were fascinated by the steel knives and swords, fire spewing cannons, brass and copper utensils, etc. that these visitors brought with them. Eventually, cultural differences erupted. The natives could not stomach the arrogance of the newcomers and the scant respect they paid to nature. The European settlers viewed every resource — plants, animals, and people as something to be commercially exploited.

The native Indians were vastly outnumbered in the wars that ensued. The resistance they put up never proved enough to stop the European settlers. The nomadic lifestyle of the Indians, the relatively unsophisticated weapons at their disposal, the unwillingness of some of their own people to defend themselves, and the diseases of the white men — all contributed to the virtual elimination of their race. Some of the diseases brought by Europeans from their overcrowded cities that decimated the natives were small pox, plague, measles, cholera, typhoid, and malaria. These deadly diseases, to which most natives had developed no resistance, devastated many tribes between 1775 and 1850.

America was named after an Italian navigator, Amerigo Vespucci, who explored the Northern parts of South America in 1499 and 1500 and later announced to the world about the discovery of a new continent.

B.1. The primary purpose of the passage is to: (10 m.)

    a- Disprove the notion that America was named after Columbus.

    b- Provide a snapshot of the discovery of America and the early years of settlements.

    c- Explain how the Europeans eliminated the native Americans in their own land.

    d- Discuss how the process of colonization of America started.

B.2. From the passage we can infer that in comparison to the Europeans, Native Americans were: (10 m.)

    a- Careless about their environment

    b- A very unhealthy lot

    c- More respectful of nature

    d- Ignorant about sanitation

B.3. What can be inferred from the third paragraph? (10 m.)

    a- The Native Americans did not have any weapons with which to defend themselves.

    b- The Native Americans probably attached a lot of importance to and respected nature.

    c- The Native Americans did not know how to use natural resources.

    d- The early settlers became arrogant as they could commercially exploit resources.

B.4. How can you describe the reaction of native Americans towards the early new settlers. (10 m.)

    a- They were happy to see them.

    b- They took a decision to force them leave their land.

    c- They were carless to take any decision.

    d- They were preoccupied with fatal and epidemics diseases to take any decisions.

B.5. The underlined word "indigenous" means: (10 m.)

    a- Primitive b- Civilized c- Native d- Cultivated

B.6. Based on the information in the passage which of the following cannot be inferred? (10 m.)

I- Alien diseases wiped out a large proportion of certain Native American tribes.

II- The early settlers totally eliminated the Native Americans.

III-To the early settlers, even people were resources to be exploited commercially.

a- Only I   b- Only II   c- I & II   d- Only III

B.7. From the passage we can infer that the author ………. (10 m.)

a- is supporting the critics who feel that the Native Americans faced unequal criminal war.

b- is careless about what happened to the Native Americans.

c- is supporting the whole actions of the new settlers.

d- thinks that the Native Americans did not have the right to live alone in America.

B.8 Analyze the following words into their constituent morphemes. (4 m.)

a- replay   b- impossibility   c- modernization   d- critical

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B.9.A. What do you think might have happened if Columbus did not discover the new land? (8 m.)

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B.9.B Summarize the…………………………………………………………………

passage using your own words. (8 m.)

Ends of the Questions
Good Luck