



Humanities and Educational
Sciences Journal

ISSN: 2617-5908 (print)



مجلة العلوم التربوية
والدراسات الإنسانية

ISSN: 2709-0302 (online)

The Effect of Explicit Morphological Instruction on Vocabulary Learning among Yemeni EFL University Students(*)

Fahmi Abdo Mohamed Al Mafalees

Assistant Professor, Department of English, College of
Education, University of Aden, Yemen.

Aisha Saleh Ali Mohdar

Assistant Professor, Department of English, Faculty of
Education, University of Abyan, Yemen

تاريخ قبوله للنشر 25/8/2021.

<http://hesj.org/ojs/index.php/hesj/index>

(*) تاريخ تسليم البحث 10/7/2021.

(*) موقع المجلة:



The Effect of Explicit Morphological Instruction on Vocabulary Learning among Yemeni EFL University Students

Fahmi Abdo Mohamed Al Mafalees

Assistant Professor, Department of English, College of
Education, University of Aden, Yemen.

Aisha Saleh Ali Mohdar

Assistant Professor, Department of English, Faculty of
Education, University of Abyan, Yemen

Abstract

The purpose of this study is to investigate the effect of explicit morphological instruction on vocabulary learning among Yemeni EFL students. To achieve the purpose of the study, three empirical research tools were used to collect the data: Nation's Vocabulary Levels Test (VLT) Version 1, Morphological Relatedness Test and Morphological Structure Test adapted from Curinga (2014). Experimental design was used in this study. The participants of the study were 40 students randomly selected from the fourth year of the English Department at the College of Education, University of Aden. They were randomly assigned to the experimental group (20) and control group (20). Treatment was given to the experimental group, whereas the control group did not receive such a treatment. At the end, the pre- and post-test scores of the experimental group were compared. Then, the experimental group scores were compared to the control group scores. The results showed that explicit morphological instruction improved students' morphological awareness and vocabulary knowledge. Furthermore, the results showed that there is a significant relationship between the students' overall morphological knowledge and their vocabulary knowledge. There was a statistically significant difference between the experimental group scores in the pre- and post-tests. There also was a statistically significant difference exists between the experimental group scores and the scores of the control group on the New Vocabulary level test and the Morphological Awareness test. The results also showed that the intervention (morphological instruction) had a significant impact on the participants' performance.

Keywords: Morphological awareness, Morphological instruction,
Vocabulary Knowledge.

Introduction

There is no doubt that English language has gained the status of a global language. Its significance is being noted in almost every sphere of everyday life and its knowledge is becoming more and more essential (Crystal 2003). In this way, English is considered as a Lingua Franca of the present time. Since capturing a language requires learning the words of that language, a very important part of learning English is the mastering of its vocabulary. Therefore, learning vocabulary is considered to be an important element in using a language as a means of communication. Many studies (O'Malley & Chamot, 1995; Schmitt, 200; Schmitt & McCarthy, 1997) have been conducted on the importance of vocabulary language learning. Vocabulary is one of the language components, which has to be primarily mastered by the students who are learning a new language. Vocabulary, then, should be mastered and learned along with the four language skills, mainly reading, writing, listening and speaking. One way in which vocabulary learning can be fostered is through the use of learning strategies. Also, students' vocabulary knowledge expands through a variety of strategies. One of the most practicable strategies in vocabulary learning supported by many researchers is using morphological knowledge.

There is an increasing interest in morphological awareness as a crucial dimension of vocabulary knowledge. Many researchers (e.g. (Bertram, Laine et al. 2000),) suggest the use of morphological knowledge as a potential strategy for vocabulary learning. Morphological awareness makes the learner more aware of the orthographical and phonological systems. With the morphological knowledge, learners can perceive spelling and phonological irregularities (e.g. *sign- signature*) (Kuo and Anderson, 2006). Anglin (1993) points out that the students could analyze the morphological structure of complex words which they have not actually learned before to figure out the meanings. Learners are found to be able to use their morphological knowledge to uncover the meaning of newly encountered words (Gordon, 1989; Carlisle and Stone, 2005). With morphological awareness, learners are able to learn morphemes and morphemic boundaries by disassembling complex words into meaningful parts (e.g. *childhoods*= child + -hood + -s), learning the meanings of roots, affixes (child= baby, -hood= the state of being, -s= to indicate plural nouns), and reassembling the

meaningful parts into new meanings (motherhood, fatherhood, brotherhood). The practice of disassembling-reassembling method is called morphological analysis (Kuo and Anderson, 2006; Yahya et al., 2012). Furthermore, Schreuder and Baayen (1995) state that morphological awareness improves students' automatic word recognition. Al Farsi (2008) indicates that "morphological awareness intervention can equip L1 children and L2 learners with some strategies for tackling the meaning of new words" (p.18). Researchers have begun to investigate the effects of explicit morphological instruction (e.g., Baumann et al., 2002, Baumann, Edwards, Boland, Olejnik, & Kame'enui, 2003; Carlisle, 2010). Nunes, Bryant, and Olson (2003) provided experimental evidence that morphological instruction improves word reading and spelling, but they also noted that this type of instruction is rare in schools.

Statement of the Problem

Throughout our careers as teachers of English we have noticed that Yemeni EFL learners experience poor vocabulary knowledge in English. Fauziati (2005) argues that having a limited vocabulary is also barrier that precludes learners from learning a foreign language. When learners do not know how to enrich their vocabulary, they will lose interest in learning. The development of the size of a vocabulary that would permit them to function adequately in many English language situations is considered a major challenge facing EFL learners like those in the Yemeni context (Nurweni and Read, 1999, as cited in Nur, 2004). Since capturing a language requires learning the words of that language, a very important part of learning English is the mastering of its vocabulary. Therefore, learning vocabulary is considered to be an important element in using a language as a means of communication. Most of Yemeni students have difficulties in English, because of the limited vocabulary knowledge they have. However, their already insufficient level of spoken and written English will be problematic, alongside other inherent problems such as morphological awareness and its relation to vocabulary knowledge and morphological complexity. For Chang et al. (2005) understanding how words are created is potentially a key component to being able to learn and understand new vocabulary words. Moreover, with increased vocabulary, learners should be able to gain insights into the morphological structures and processes prevalent in the

language(s) that they speak. Hence, Yemeni learners need more effective methods for learning new English words; the main one is the explicit morphological instruction.

Aims of the study

This study aims to:

- 1- investigate the effect of explicit morphology instruction on Yemeni EFL students' vocabulary knowledge at College of Education, Aden University.
- 2- investigate the effect of explicit morphology instruction on Yemeni EFL students' morphological awareness.

Research Questions

The study attempts to answer the following questions:

- 1- Is there any statistically significant difference in the English vocabulary learned by Yemeni EFL students at College of Education, University of Aden due to explicit morphology instruction?
- 2- Is there any statistically significant difference in the morphological awareness of Yemeni EFL students at College of Education, University of Aden due to explicit morphology instruction?

Significance of the Study

Despite the recognized potential of morphological awareness for vocabulary learning, little research to date has focused on this trend and its relationship to vocabulary size (Singson, Mahony, and Mann, 2000; Carlisle and Fleming, 2003). Research on morphological awareness in Yemeni context has received little attention and is relatively rare. Despite the importance of the topic, however, to the best knowledge of the researchers, there is no study that has been conducted so far on the relationship between morphological awareness and vocabulary knowledge among Yemeni EFL students. Therefore, more research is needed to provide a stronger empirical basis for our understanding of the issue. This study also aims at arriving at some conclusions, and pedagogical implications that may help instructors to understand and use morphological knowledge as a potential strategy for vocabulary learning.

Limitation of the Study

The present study is limited to 40 students randomly selected from the fourth year of the English Department at the College of Education, University of Aden. It is confided to investigate the effect of explicit morphological instruction on vocabulary learning among Yemeni EFL students, and therefore, caution should be taken in making generalizations from the results to other contexts.

Literature Review

Studies have explained that vocabulary plays a crucial role in learning or acquiring a language (Duin and Graves, 1987; Walker, Greenwood, Hart and Carta, 1994; Nation, 2001; Read, 2004; Tschirner, 2004; Zimmerman, 2005; Asgari & Mustapha, 2011; Letchumanan & Tan, 2011; Kitchakarn & Choocheepwattana, 2012). Letchumanan and Tan (2011) as well as Kitchakarn and & Choocheepwattana (2012) demonstrate that the delay in vocabulary acquisition imposes a handicap on learners' language development and their effective communication. Their research suggests that there is a strong relationship between vocabulary and students' ability to construct meaning; and without vocabulary, students cannot string together words to form sentences.

In addition, Nation (1993) explains that vocabulary knowledge is one of the skills crucial towards fluent language use, the knowledge of around 3,000 word families is the threshold needed for tapping skills related to other languages. Treiman and Casar (1996), Bear, et al. (2000) affirm that the size of one's vocabulary is an indicator of how well a second language (L2) learner can perform academic language skills, such as reading, listening, and writing. Furthermore, Ellis (1997) argues that vocabulary knowledge is a predicator of learners' discourse comprehension, which allows grammatical rules to be patterned in the learners' mind. It is also observed by Vermeer (2001) and Zimmerman (2005) that there is a strong relationship between the individual's vocabulary size and his/her general language proficiency. According to Tschirner (2004) students' academic language skills and proficiency can be determined through their vocabulary size. Additionally, August et al. (2005) indicated that vocabulary knowledge is considered as a significant source of variation in reading comprehension



according to some models of reading because it affects grammatical processes, construction of schemata, and text models.

Thus, without a good-sized vocabulary, one's means of expressing ideas will be limited. Fauziati (2005) remarks that having limited vocabulary is also barrier that precludes learners from learning a foreign language. Furthermore, students' lack of adequate vocabulary knowledge may hinder their understanding of a text.

Moreover, some studies found a relationship between students' vocabulary and their L2 writing ability (Laufer and Nation, 1995; Laufer 1998). As for how it is related to morphology, Angelin, Miller & Wakefield (1993) argue that expansion of vocabulary is achieved by the essential role that morphological knowledge plays, and this expansion impacts reading comprehension. Therefore, "without some knowledge of that vocabulary, neither language production nor language comprehension would be possible" (Angelin, Miller & Wakefield, 1993, p.2).

Morphological Awareness

One of the main ways of enriching one's vocabulary of the English language is through morphological awareness. In fact, it is one of the most productive strategies of word building in the English language. Its main function is to form one part of speech from another. Another function is to change the lexical meaning of the same part of speech.

Morphological awareness is defined as "the ability to reflect on, analyze, and manipulate the morphemic elements in words" (Carlisle, 2010, p. 466). "Morphological awareness is like declarative knowledge that can be explained, and thus it is an explicit knowledge" (Yü cel-Koç, 2015, P. 9). In other words, morphological awareness is learners' ability to explain the meaning and the function of the affixes and root words. For Chang et al. (2005) morphological awareness is the awareness of and access to the meaning and structure of morphemes (the smallest units of meaning in a language) in relation to words. Similarly, for Kuo and Anderson (2006) morphological awareness is the ability to use the knowledge of word formation rules and the pairings between sounds and meanings. They argue that morphological awareness is intertwined with other aspects of metalinguistic awareness and linguistic competence, especially phonological

awareness, syntactic awareness, and vocabulary knowledge. They also stated that a learner who comprehends how words are formed, by combining prefixes, suffixes, and roots, tends to have larger vocabulary store and better reading comprehension. Furthermore, Morin (2003) indicates a positive trend in the effectiveness of morphological knowledge as a tool for building vocabulary knowledge.

A morpheme is the smallest unit of meaning expressed in a language. It can refer to either a semantic concept, such as “ball” or “hit,” or to a syntactic function (e.g., “-s” added to a noun in English creates a plural such as “cars” and “-ing” added to a verb marks aspect: “hitting”). Five different morphological word types in English were introduced by Anglin (1993). The five types are root words (e.g., short, closet), inflected words (e.g., smoking, reports), derived words (e.g., shortish, treelet), literal compounds (e.g., sunburn, birthday), and opaque, idiomatic compounds or lexical idioms, which are then called simply ‘idioms’ (e.g., mouse tail, “a plant of the crowfoot family”; pink lady, “a cocktail”).

Inflectional morphemes are affixes added on to free morphemes to change tense, aspect, person, number, gender and case, resulting in inflected words. In English, they are generally added on as suffixes as in the following examples: plural noun inflectional morpheme *-s* added to *cake* to make *cakes*; past tense inflectional morpheme *-ed* added on to *kiss* to make *kissed*. Derivational morphemes are affixes added to stems or base words, usually resulting in a new syntactic category. For example, the adjectival base *happy*, with the nominal derivational suffix *-ness* becomes the noun *happiness*. Within derivational morphology, affixes may also be added on to free morphemes (such as in the example *happy*) or bound stems that are the root of a morphologically complex word, but cannot stand alone as free morphemes.

In English, strong associations have also been found between morphological awareness, or the ability to manipulate inflectional and derivational morphemes, and both vocabulary and reading development (Champion, 1997; Fowler & Liberman, 1995; Kuo & Anderson, 2006; Leong, 1989; Shankweiler, Crain, Katz, & Fowler, 1995).



English is a morphophonemic language (Chomsky & Halle, 1968, cited in Claravall, 2016) with approximately 70% of them containing Greek or Latin origins (Nagy & Anderson, 1984). Prefixes, suffixes and root are the common instances of morphology. Most roots are originated from Greek and Latin. In total, there are three components of morphology as stated by Templeton (1989), including compounding: joining separate words to form a single compound word, inflectional morphology: adding verb tense and number in the word such as *spacked/ ostriches*, and derivational morphology: adding suffixes in the word as in *national* and *nationality*.

Research Methodology

Participants

The participants of the study were 40 students randomly selected from the fourth year of the English Department at the College of Education, University of Aden. They were randomly assigned to the experimental group (20) and control group (20). Their age ranged from 22 to 29 years. The first language of all participants is Arabic and they used English as a foreign language. They were randomly chosen from fourth-year students. The participants were divided according to the results of the pre-test into two homogenous groups: experimental (n=20) and control (n=20). Most of the two groups (80%) were girls. All the students were from a nearly similar socioeconomic environment.

Instruments

The experimental design was used in this study. Three widely instruments were applied to achieve the purposes of the study. The first one was Nation's Vocabulary Levels Test (VLT) Version 1. Morphological Relatedness Test and Morphological Structure Test adapted from Curinga (2014) were also employed to measure the students' ability to reflect and manipulate morphologically complex derived words in English. It is worth noting that the post-test was identical to the pre-test. This would avoid partial evaluation and ensure the validity of comparing participants' answers.

Vocabulary Level Test (VLT) Version 1

This test was used to measure the students' receptive vocabulary. It was chosen because it is commonly used by other studies and it is easy to

administer and score. In the current study, the original test was modified by Al Farsi in 2008. It was administered to the subjects to measure their vocabulary knowledge. The receptive vocabulary levels test used to (examine) the participants' knowledge of vocabulary items from the 2000, 3000 and 5000 most frequently occurring words. These are seen as words that all learners need to know to read basic texts and that should be concentrated on in class (Nation, 2001). Each level had ten items containing six words and three meanings. The participants must choose the right word to go with each meaning.

This is a vocabulary test. You must choose the right word to go with each meaning. Write the number of the word next to its meaning.

- 1 business
- 2 clock ____ part of a house
- 3 horse ____ animal with four legs
- 4 pencil ____ something used for writing
- 5 show
- 6 wall

Morphological Relatedness Test

The Morphological Relatedness Test was employed to measure respondents' ability in guessing whether the derived word is morphologically related to the base word or not (for example, A: happy→happiness YES/ NO; B: bus →business YES/ NO). Curinga (2014) argues that this test is important because it can measure students' ability in doing morphological analysis. This test comprised of 24 items concerning derivational suffixes. The respondents were asked to circle YES, if the followed derived word was related to the base word; NO, if it was not related to the base word.

Morphological Structure Test

The Morphological Structure Test was employed to measure the respondents' ability in using derivational affixes to create new words. Curinga (2014) asserted that this test is important since it can measure students' manipulation ability in constructing new words. The respondents were asked to construct the word that best matched the sentence (for example, Help. In the sentence: My sister is very helpful). The test was composed of 24 items concerning derivational suffixes.

Validity of the Test

For estimating the validity of the test, the researcher submitted it, in its initial form to three experts in ELT at the English Department. So they confirm that the test measures what it is intended to measure. They agreed on the validity of the test with a few suggestions, which were taken into consideration. Then, the test was modified according to their comments and suggestions.

Reliability of the Test

To establish the reliability of the test, it was administered to a sample of 5 students other than the sample of the study. Then, the same test was administered to the same group under nearly similar conditions. The reliability coefficient of the test was estimated using Cronbach Alpha Formula. The estimated value was (0.81), which is considered reliable for the purpose of the current study.

Materials

The content and materials of the experimental group are developed to accomplish the objectives of the study. More specifically, the course of this group is designed to improve the students' vocabulary knowledge and morphological awareness. The content of textbook selected for the experimental group was adapted from Mc Caryhy, A. (2002) *An Introduction to English Morphology: Words and their Structure*. The course of the experimental group was taught twice a week in a two-hour session for one month from the 2nd of November 2019, to 11th of December, 2019. On the other hand, the control group did not receive such a treatment. It has been taught the rough conventional course.

Procedure

The experimental design was used in this study, where two intact groups from the fourth year students of the English Department at the College of Education, University of Aden, Yemen, were randomly assigned to the experimental and control groups. The experimental group received morphological lessons, in their English class, for four weeks. The test focused on the basic analytical and synthetic word formation rules to increase students' morphological awareness and help in improving their vocabulary knowledge. On the other hand, the control group received the

regular instruction. At the end of the instruction period, the pre- and post-test scores of the experimental group were compared. Then, the experimental group scores were compared to the control group scores. The study was conducted twice a week in a two-hour session for one month.

Data Analysis

This study used T-Test to measure the difference between the scores of the experimental and control groups on the pre-posttests. The researchers conducted T-test to analyze the impact of the morphological instruction treatment on students' morphological awareness and vocabulary knowledge.

The Results

In this section, the results of the study are analyzed and presented in accordance with the research questions as follows:

The First Research Question

To answer the first research question "Is there any statistically significant difference in the English vocabulary learned by Yemeni EFL students at Department of English, College of Education, University of Aden due to explicit morphology instruction?", the paired-samples T-test was used to find any possible significant difference between the mean scores of the experimental group on the New Vocabulary Level Test as follows:

Table (1) T-test Values in pre-post-test of the experimental group

Test Items	Pre-test			Post-test			D.F	T	Critical Value	95% Confidence Interval
	N	Mean	S. D.	N	Mean	S. D.				
Vocabulary Level Test	20	12.35	2.2775	20	17.25	1.4096	38	8.1816	2.0244	[3.184,6.6146]

Based on the above table (1), it is clear that there was statistically significant difference at 0.05 level between the mean scores of the experimental group on the pre-test and post-test in favor of the post-test scores. The T-test=8.1816, $p < .05$, performed on the vocabulary level test showed differences. Post-test is significantly different from pre-test, $t(20) = 8.1816$, $p < .05$ (See Table 1). This means that there is a statistically significant difference between the mean score of the pre-test and post-test in favor of the post-test as measured by the vocabulary level post-test. This also indicates that the morphological instruction has a positive effect on developing the vocabulary learning among Yemeni EFL learners. As the instruction concentrates on morphological awareness, the researchers

encouraged the students to use the knowledge of word formation rules appropriately.

Moreover, to find any possible significant difference between the mean(s) scores of the experimental and control groups on the New Vocabulary Level Test after the intervention, the independent samples t-test was conducted as follows:

Table (2) T-test Values of Post-test of the experimental group and the control group

Test Items	Exp. Group			Cont. Group			D. F	T	Critical Value	95% Confidence Interval
	N	Mean	S. D.	N	Mean	St. Dev.				
Vocabulary Level Test	20	17.25	1.4096	20	12.85	2.1831	38	7.5724	2.0244	[2.7365, 6.0635]

Based on the above table (table 2), it is clear that there was statistically significant difference at 0.05 level between the means scores of the experimental and control groups on the post-test in the vocabulary level test in favor of the experimental group. Experimental group is significantly different from the control group, $T(38) = 7.5724$, $p < .05$ (See Table 2). The experimental group's performance on the New Vocabulary Level Test after the intervention was substantially better than that of the control group. It is confidently concluded that the explicit morphology instruction was indeed effective and led to improve the students' vocabulary knowledge. It could be concluded that the morphological instruction, concentrates on prefixes, suffixes and root which are the common instances of morphology, had a positive effect on developing both the vocabulary knowledge and the morphological awareness of the experimental group students. It has developed their abilities to focus on the five different morphological word types in English which were introduced by Anglin (1993). The five types are root words (e.g., short, closet), inflected words (e.g., smoking, reports), derived words (e.g., shortish, treelet), literal compounds (e.g., sunburn, birthday), and opaque, idiomatic compounds or lexical idioms, which are then called simply 'idioms' (e.g., mouse tail, "a plant of the crowfoot family"; pink lady, "a cocktail"). The experimental group students successfully used the morphological awareness, though there were a small number of errors.

The Second Research Question

To answer the second research question "Is there any statistically significant difference in the morphological awareness of Yemeni EFL

students at (Department of English, College of Education), University of Aden due to explicit morphology instruction? The paired-samples t-test was used to find any possible significant difference between the mean scores of the experimental group on the Morphological Awareness test.

Table (3) T-test Values in pre-post-test of the experimental group

Test Items	Pre-test			Post-test			D.F	T	Critical Value
	No	Mean	S.D	No.	Mean	S.D			
Morphological Relatedness Test	20	11.3	2.5772	20	17.45	1.5381	38	9.1639	2.0244
Morphological Structure Test	20	11.7	2.2965	20	17.4	1.8468	38	8.6502	2.0244

Based on the above table (3), it is clear that there was statistically significant difference at 0.05 level between the means scores of the experimental group on the pre-test and post-test in favor of the post-test scores. The series of T-tests, $p < .05$, performed on the morphological relatedness test and morphological structure test showed differences. Post-test is significantly different from pre-test, $t(20) = 9.1639, 8.6502, p < .05$. This means that there is a statistically significant difference between the means score of the pre-test and post-test in favor of the post-test as measured by the morphological relatedness post-test and morphological structure post-test. This also indicates that the morphological instruction has a positive effect on developing the morphological awareness among Yemeni EFL learners.

Moreover, to find any possible significant difference between the means scores of the experimental and control groups on the Morphological Awareness test after the intervention, the independent samples t-test was conducted.

Table (4) T-test Values of Post-test of the experimental group and the control group

Test Items	Exp. Group			Cont. Group			D. F	T	Critical Value
	No.	Mean	S.D	No.	Mean	S.D			
Morphological Relatedness Test	20	17.45	1.5381	20	10.85	2.2542	38	10.8158	2.0244
Morphological Structure Test	20	17.4	1.8468	20	10.55	1.905	38	11.5461	2.0244

Based on the above table (table4), it is clear that there was statistically significant difference at 0.05 level between the means scores of the experimental and control groups on the post-test in the morphological relatedness test and the morphological structure test in favor of the

experimental group. Experimental group is significantly different from the control group, $T(38) = 10.8158$ and 11.5461 , $p < .05$. The experimental group's performance on the morphological relatedness test and the morphological structure test after the explicit morphology instruction was substantially better than that of the control group. It is confidently concluded that the morphological intervention was indeed effective and led to improve performance on the morphological awareness. Moreover, these results indicate that teaching Yemeni EFL learners morphology helps them in recognizing and manipulating new words, increasing their morphological awareness and assisting them in learning English language.

Conclusion

The results of this study showed that there is a positive relationship between the students' vocabulary knowledge and their morphological awareness. That is the students' vocabulary knowledge can be a predictor of their morphological awareness. The results also revealed that the experimental group students displayed a good overall morphological awareness of word formation rules: morpheme identification (the analytic aspects) and the morphological structure (the synthetic aspects). They performed better in the post-test than in the pre-test. In addition, morphological instruction can entail a profound impact to all Yemeni /EFL learners, in particular the striving learners who have been exhausted memorizing vocabulary in a meaningless way.

The role of morphology in vocabulary knowledge is well documented. Many studies showed the benefits of utilizing morphological information (i.e. morphological awareness) in determining the meaning of a word(s) (e.g. (Bertram, Laine et al. 2000).

The results of this study are consistent with Rasinski et al. (2008) who affirmed that exposing students to Greek and Latinate word elements could be an effective vocabulary learning strategy This study also is consistent with Bowers (2009), Tabatabaei & Yakhabi (2011), Goodwin, Gilbert and Cho (2013), and Paiman, Thai & Yuit (2015) studies that stated that learners who have morphological awareness were able to discriminate morphologically structured word from simple words.



Pedagogical Implications

The findings of the study showed a positive correlation between the vocabulary size of the Yemeni students and their morphological awareness. These outcomes imply a need for pedagogical implications to be implemented in Yemeni EFL classes. To improve the morphological awareness and vocabulary size of the students, explicit teaching of morphological awareness in the classes has to be put into practice and including morphological knowledge in the English language curriculum has to be used in classes. Language instructors can endorse diversity of morphological activities to help students to analyze and build the morphological structure of new lexical items. Carlisle and Stone (2003) indicate that morphological units can be used by language learners to know the meaning of words to improve their lexical knowledge. Moreover, teaching students affixes will increase their vocabulary size as stated by Baumann et al. (2002), and Kuo and Anderson (2006) and will improve their reading comprehension due to the increase in their vocabulary knowledge according to Fowler et al. (1995).

Recommendations

Based on the findings of this study, the following recommendations can be made:

- 1- First and foremost, ESL/EFL instructors should acknowledge the importance of explicit morphological instruction in improving students' morphological awareness and vocabulary knowledge.
- 2- The teachers should initiate discussion in the class about the relationship between morphological awareness and vocabulary knowledge.
- 3- The findings of this study led to the suggestions to improve Yemeni students' English learning in general and their vocabulary Knowledge in particular through using morphological instruction as a very useful vocabulary learning strategy.

Further Studies

The findings of the present study also suggested some future research directions. Future research may investigate some aspects that were not taken into consideration in this study. This study investigated the effect of explicit morphological instruction on vocabulary learning among Yemeni students,



while other language skills such as reading or writing can be examined in future research. It would be useful if other factors were considered in the study as age, gender, or learning motivations of the students It would be a good idea to survey a larger sample of Yemeni EFL students and to expand the scope of the study to other universities in Yemen. Furthermore, future studies should include the practical factors affecting morphological awareness and its relationship to the overall language proficiency.

References

- Al Farsi, B. (2008). *Morphological awareness and its relationship to vocabulary knowledge and morphological complexity among Omani EFL University students*. Unpublished Master's Thesis, University of Queensland, St Lucia, Australia.
- Anglin, J. M., Miller, G. A., & Wakefield, P. C. (1993). Vocabulary development: A morphological analysis. *Monographs of the Society for Research in Child Development, Vocabulary Development: A Morphological Analysis*, 58(10), 1-186
- Asgari, A & Mustapha, G. (2011). The type of vocabulary learning strategies used by ESL students in University Putra Malaysia. *English Language Teaching* 4 (2). ISSN 1916-4742 E-ISSN 1916-4750. www.ccsenet.org/elt
- August, D., & Shanahan, T. (Eds.). (2006). *Developing Literacy in Second-Language Learners: Report of the National Literacy Panel on Language-Minority Children and Youth*. Mahwah: Lawrence Erlbaum Associates.
- August, D, Carlo, M, Dressler, C, and Snow, C. (2005). The critical role of vocabulary development for English language learners. *Learning Disabilities Research and Practice*, 20(1), 50-57. DOI: 10.1111/j.1540-5826.2005.00120.x
- Baumann, J., Edwards, E., C., Font, G., Tereshinski, C., Kame'enui, & E. Olejnik, S. (2002). Teaching morphemic and contextual analysis to fifth grade students. *Reading Research Quarterly*, 37,150-176.
- Baumann, J. F., Edwards, E. C., Boland, E., Olejnik, S., & Kame'enui, E. J. (2003). Vocabulary tricks: Effects of instruction in morphology and



- context on fifth-grade students' ability to derive and infer word meaning. *American Educational Research Journal*, 40, 447-494
- Bear, D. R., et al. (2000). *Words their way: Word study for phonics, vocabulary, and spelling instruction*, Merrill Upper Saddle River, NJ.: Pearson Prentice Hall.
 - Baumann, J. F., Edwards, E. C., Font, G., Tereshinski, C. A., Kame'enui, E. J., & Olejnik, S. F. (2002). Teaching morphemic and contextual analysis to fifth-grade students. *Reading Research Quarterly*, 37, 150-176.
 - Bertram, R., et al. (2000). "The role of derivational morphology in vocabulary acquisition: Get by with a little help from my morpheme friends." *Scandinavian Journal of Psychology* 41(4): 287-296.
 - Bowers, P.N. (2009). Effects of morphological instruction on vocabulary acquisition. *Reading and Writing Journal*. 23, 515-537.
 - Carlisle, J. F. (2010). Effects of instruction in morphological awareness on literacy achievement: An integrative review. *Reading Research Quarterly*, 45(4), 464-487. doi:10.1598/RRQ.45.4.5
 - Carlisle, J. F., & Flemming, J. (2003). Lexical processing of morphologically complex words in the elementary years. *Scientific Studies in Reading*, 7, 239-274.
 - Carlisle, J. F., & Stone, C.A. (2005). Exploring the role of morphemes in word reading. *Reading Research Quarterly*, 40(4), 428-449.
 - Carlisle, J., Stone, C. A., & Katz, L. (2001). The Effects of Phonological Transparency on Reading Derived Words. *Annals of Dyslexia*, 51, 249-276.
 - Chang, C. M., Wagner, R. K., Muse, A., W. Y. B., & Chow, H. S. (2005). The role of morphological awareness in children's vocabulary acquisition in England. *Applied Psycholinguistics*, 26, 415-435
 - Claravall, E. B. (2016). Integrating Morphological Knowledge in Literacy Instruction. *Teaching Exceptional Children*, 48(4), 195-203.
 - Crystal, David. (2003). *English as a Global Language*. Cambridge: Cambridge University Press.



- Curinga, R. (2014). The Effect of morphological awareness on reading comprehension: a study with adolescent Spanish-English emergent bilinguals. *All Dissertations, Theses, and Capstone Projects* (2014-Present). Paper 30.
- Duin, A. H., & Graves, M. F. (1987). Intensive vocabulary instruction as a prewriting technique. *Reading Research Quarterly*, 22(3), 311-330.
- Ellis, N. (1997). Vocabulary acquisition: word structure, collocation, word-class and meaning. In N. Schmitt & M. McCarthy (Eds.), *Vocabulary: Description, acquisition and pedagogy* (122-139). Cambridge, UK: Cambridge University Press.
- Fauziati, Endang. (2005). *Teaching of English As A Foreign Language (TEFL)*. Surakarta: Muhammadiyah University Press.
- Fowler, A. E., & Liberman, I. Y. (1995). The Role of Phonology and Orthography in Morphological Awareness. In L. B. Feldman (Ed.), *Morphological Aspects of Language Processing*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Goodwin, A.P., Gilbert, J.K. & Cho, S.J. (2013). Morphological contributions to adolescent word reading: An item response approach. *Reading Research Quarterly*, 48(1), 39-60.
- Gordon, P. (1989). Levels of affixation in the acquisition of English morphology. *Journal of Memory and Language*, 28, 519- 530.
- Kitchakarn, O., & Choocheepwattana, M. (2012). Explicit teaching of vocabulary: It's still needed.
- http://www.bu.ac.th/knowledgecenter/executive_journal/april_june_12/pdf/aw021.pdf
- Kuo, L. J., & Anderson, R. C. (2006). Morphological awareness and learning to read: A cross-language perspective. *Educational Psychologist*, 41(3), 161-180. http://dx.doi.org/10.1207/s15326985ep4103_3
- Laufer, B. (1998). The development of passive and active vocabulary in a second language: Same or different? *Applied Linguistics*, 19(2), 255-271.



- Laufer, B., & Nation, P. (1995). Vocabulary size and use: Lexical richness in L2 written production, *Applied Linguistics*, 16(3), 307-322.
- Leong, C. K. (1989). Productive Knowledge of Derivational Rules in Poor Readers. *Annals of Dyslexia*, 39, 94-115.
- Letchumanan, K. & Tan B. H. (2011). Using Computer Games to Improve Secondary School Students' Vocabulary Acquisition in English. *Pertanika J. Soc. Sci. & Hum.* 20 (4): 1005 - 1018 (2012) ISSN: 0128-7702 © Universiti Putra Malaysia Press. <http://www.pertanika.upm.edu.my/>
- Mc Caryhy, A. (2002) *An Introduction to English Morphology: Words and their Structure* Edinburgh University Press Ltd, Edinburgh.
- Morin, R. (2003). Derivational morphological analysis as a strategy for vocabulary acquisition in Spanish. *The Modern Language Journal*, 87, 200-221
- Nagy, W. E., & Anderson, R. C. (1984). How many words are there in printed school English? *Reading Research Quarterly*, 19(3), 304-330
- Nation, I. S. P. (1993). Vocabulary size, growth and use. In R. Schreuder & B. - -- Weltens (Eds.), *The bilingual lexicon* (pp. 115-134), Philadelphia: John Benjamins Publishing Company. Retrieved from <http://www.ebrary.com>
- Nation, I. S. P. (2001). *Learning vocabulary in another language*. Cambridge; New York: Cambridge University Press.
- Nunes, T., Bryant, P., & Olsson, J. (2003). Learning morphological and phonological spelling rules: An intervention study. *Scientific Studies in Reading*, 7, 289-307.
- Nur, C. (2004). English Language Teaching in Indonesia: Changing Policies and Political Constrains. In H. W. Kam & R. Y. L. Wong. (Eds.), *English language teaching in East Asia today: changing policies and practices* (pp. 178-194). Singapore: Eastern Universities Press. O'Malley, M., M., & Chamot, A., U. (1995). *Learning strategies in second language acquisition*. UK: Cambridge University Press.



- Paiman, N., Thai, Y.N., & Yuit, G.M. (2015). Effectiveness of morphemic analysis of Graeco-Latin word parts as a vocabulary learning strategy among ESL learners. *3L: The Southeast Asian Journal of English Language Studies*, 21(2), 31-45.
- Rasinski, T., Padak, N., Newton, R. M. & Newton, E. (2008). *Greek and Latin roots: Keys to building vocabulary*. Shell Education.
- Read, J. (2000). *Assessing vocabulary*. Cambridge, UK: Cambridge University Press.
- Read, J. (2004). Research in Teaching Vocabulary. *Annual Review of Applied Linguistics*, 24, 146-161.
- Schmitt, N., & McCarty, M. (1997). *Vocabulary description, acquisition and pedagogy*. Cambridge: Cambridge University Press.
- Schmitt, N. (2000). *Vocabulary in language teaching*. Cambridge: Cambridge University Press.
- Schreuder, R., & Baayan, R. H. (1995). Modeling morphological processing. In L. Feldman (Ed.), *Morphological aspects of language processing* (pp. 131-154).
- Shankweiler, D., Crain, S., Katz, L., Fowler, A. E., Liberman, A. M., & Brady, S. A. (1995). Cognitive Profiles of Reading-Disabled Children: Comparison of Language Skills in Phonology, Morphology, and Syntax. *Psychological Science*, 6, 149-156.
- Singson, M., Mahony, D., & Mann, V. (2000). The relation between reading ability and morphological skills: evidence from derivational suffixes. *Reading and Writing: An Interdisciplinary Journal*, 21, 219-252. DOI: 10.1023/A:1008196330239
- Tabatabaei, O. & Yakhabi, M. (2011). The Relationship between Morphological Awareness and Vocabulary Size of EFL Learners. *English Language Teaching*, 4(4), 262-273.
- Templeton, S. (1989). Tacit and Explicit Knowledge of Derivational Morphology: Foundations for a Unified Approach to Spelling and Vocabulary Development in the Intermediate Grades and Beyond. *Reading Psychology*, 10, 233-253.



- Treiman, R., and Casar, M. (1996). Effects of morphology on children's spelling of final consonant clusters. *Journal of Experimental Child Psychology*, 63, 141- 170.
- Tschirner, E. (2004). Breadth of vocabulary and advanced English study: An empirical investigation. *Electronic Journal of Foreign Language Teaching*, 1 (1), 27-39. DOI: <http://e-flt.nus.edu.sg/>
- Vermeer, A. (2001). Breadth and depth of vocabulary in relation to L1/L2 acquisition and frequency of Input. *Applied Psycholinguistics*, 22(2), 217-234.
- Walker, D., Greenwood, C., Hart, B., & Carta, J. (1994). Prediction of school outcomes based on early language production and socioeconomic factors. *Child Development, Children and Poverty* 65(2), 606-621.
- Yahya, N.; Kamel, R. and Mousa, M. (2012). The Relationship Between Morphological Complexity and Vocabulary Knowledge among Iraqi EFL University Students. *Tikrit University Journal for Humanities*, 19 (2), 1-30.
- Yü cel-Koç, M. (2015). *The role of morphological awareness in academic vocabulary and reading comprehension skills of adult ESL learners* (Unpublished doctoral dissertation). Seattle Pacific University, Seattle.
- Zimmerman, K. (2005). Newly placed versus continuing students: comparing vocabulary size. *TESL Reporter*, 38(1), 52-60.