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# Morphological Awareness Strategies on Lexical Comprehension of English as a Foreign Language An Applied Linguistic Investigation

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## Abstract

Despite the extensive teaching of the English language in Iraqi schools, there are still EFL learners in Iraq who have problems understanding morphologically complex words in English. The main reason behind such difficulties relates to the nature of teaching in class, where traditional way of memorization is considered essential rather than being taught to form morphological-based words through analysis. The current study, though, focuses on the status of the higher education sector in Iraq in terms of understanding word meanings rather than knowing word counts in EFL learning. The purpose of the current study is to fill the existing gap in the literature by exploring the effect of morphological awareness training on the comprehension of vocabulary and comparing the relative significance of morphological relatedness to morphological structure in terms of its effect on the performance of learners. To achieve the purpose of the study, Curinga's morphological awareness model (2014) was adapted as it suited the study. The participants of the study consist of forty senior students in Al-Iraqia University who were randomly divided between an experimental group and a control group. It was hypothesized that explicit instruction would greatly improve students' understanding, and the level of effectiveness might vary between the two strategies. The findings indicated that there was a great improvement in the experimental group, though there was no significance between the two methods. The study clearly shows the importance of teaching morphology in EFL Iraqi classrooms to improve lexis and reading comprehension.

**Keywords: Iraqi EFL learners, morphological awareness, morphological relatedness, morphological structure, vocabulary comprehension.**

## 1. Introduction

Vocabulary acquisition has been recognized as one of the most important aspects of the second and foreign language acquisition. According to Laufer (1995), vocabulary is the foundation of the communicative competence and literacy development as it is the base on which all other linguistic skills "listening, speaking, reading, and writing" are built on. And even the learners who have good grammatical knowledge can not acquire the understanding or convey the intended meanings without a proper lexical repertoire. The same is presented by Richards and Renandya (2002), who hold that vocabulary competence tends to be the most visible sign of the proficiency of a learner since words create the medium between form and meaning when using language. In English as a Foreign Language (EFL) situations like in Iraq, where students are not exposed to

the true English language much, vocabulary development is even more important to the success of their academic and communicative fluency.

Morphological awareness is the capacity to recognize, examine and manipulate morphemes "the smallest units of meaning within words", and to realize how they amalgamate to form new lexical units (Carlisle 2000). Indicatively, when learners are made to realize that unbelievable is made up of un-, believe, and -able, they can be able to guess the meaning of the word even when they meet it in future. The authors state that this knowledge will allow the learners to use the morphological decomposition and rearrangement when coming across new vocabulary, thus facilitating the lexical inference and structural understanding (Kuo and Anderson 2006). On the same note, Nagy et al. (2006) believe that morphological awareness is a cognitive strategy and that it allows "word learning by analysis," which can enable a reader to extract meaning and not just memorize it. In this sense, morphology-based teaching creates learner independence and self-directed vocabulary learning in EFL learners.

Morphological awareness becomes even more pronounced when it comes to EFL students who learn on the conditions of the insufficient exposure to the English language. Bowers, Kirby, and Deacon (2010) argue that morphological instruction can offset the lack of linguistic input by offering linguists the analytical systems to infer the meaning of unknown words. This can be proven by empirical studies of the Arab and Asian EFL. Al Farsi (2008) discovered that students who had better morphological awareness had a higher vocabulary knowledge and reading comprehension.

Although there is a lot of research conducted in other parts of the world, the situation in Iraq is under-researched. Though the teaching of English is taught at primary to university level in Iraq, the majority of teaching methods are structurally or lexically based meaning that they are more concerned with translation than with the morphological reasoning. Therefore, students can become aware of the roots but are unable to see the derived forms, like, we have: national, nationality, or international. Besides, most textbooks focus on the definitions of words, but do not teach learners to break down affixation or derivation patterns. This makes academic reading difficult among even high-level students since it is characterized by a high level of lexical density and morphologically complicated terms (Ali et al. 2015). The morphology-based pedagogy approach might be a way to address this problem and enable learners to not only increase their vocabulary but also enhance their understanding of academic text.

The current research, thus, aims at exploring the effects of morphological awareness on the vocabulary comprehension of the students in the Aliraqia Senior College. It will help to answer the question of whether explicit teaching in morphological analysis will increase students ability to comprehend complex words in context and whether two sub-elements of morphological awareness, morphological relatedness (perceiving word-family relationships) and

morphological structure (building and manipulating derived words), can be compared in their effectiveness. The research is based on the previous empirical frameworks (Curinga 2014; Bowers et al. 2010; Spencer et al. 2014) but placed in the Iraqi EFL setting, thus adding not only theoretical but also practical values.

## 2. Problem Statement

Although the English language has been taught in Iraq over the years, most EFL learners at college level still find it difficult to read vocabulary with complexity of morphology. According to Ferguson (2006) learners who do not have morphological strategy tend to fail in extracting meaning of derived or compound words which causes breakdown in understanding academic reading. In the Iraqi academic setting, diagnostic observations indicate that students frequently encounter unfamiliar vocabulary during reading and rely on dictionaries or translation rather than morphological inference which results in slowing reading speed and hindering the process of comprehension.

Although international research has examined morphological awareness in EFL contexts (e.g., Khodadoust, Aliasin & Khosravi 2013; Priskinanda et al. 2021), very little of it focuses on Iraqi university students or explicitly targets vocabulary comprehension (rather than simply vocabulary size). For example, Rabadi (2019) found a positive correlation between morphological awareness and vocabulary size among Jordanian university students, but did not examine comprehension outcomes. The current study addresses this gap by investigating the effect of morphological awareness training on the comprehension of vocabulary among students at Aliraqia University and thus extends the literature into an Iraqi higher-education setting and focuses on comprehension rather than mere vocabulary growth.

## 3. Research aims

The study aims to:

1. Investigate the impact of morphological awareness training on vocabulary comprehension among Iraqi college EFL students.
2. Compare the relative effectiveness of two morphological strategies “morphological relatedness and morphological structure” in enhancing vocabulary comprehension.

## 4. Research Questions

1. Does morphological awareness training significantly affect vocabulary comprehension among Aliraqia Senior College students?
2. Which morphological strategy (relatedness or structure) is more effective in supporting vocabulary comprehension?

## 5. Hypotheses

1. Morphological awareness training will positively influence students’ vocabulary comprehension.
2. There will be a significant difference between morphological relatedness and morphological structure strategies’ impact on vocabulary comprehension.

## 6. Theoretical Framework

The theoretical framework built by Curinga (2014) was based on the fact that morphological awareness is one of the key processes of vocabulary development and reading comprehension. According to this model, the power to perceive and to manipulate the smallest units of semantics in words helps in deeper processing of language. Using the psycholinguistic and cognitive concepts of literacy, the framework describes reading as an interactive process where both decoding and comprehension processes work simultaneously (Stanovich, 1980). In the given paradigm, morphological awareness acts as a connection between the surface organization of lexical elements and semantic decoding. Once learners can break down complex words like the ones containing unbelievable in their components (un + believe + able), they can make inferences about the meaning to the word even without having been exposed to it previously. The framework by Curinga is an integration of previous studies by Carlisle (2000) and Kuo and Anderson (2006), who have located morphological awareness as a different element of metalinguistic knowledge that has a unique role to play in reading that is not memiated by phonological and syntactic skills.

Curinga also operationalised morphological awareness as a two-dimensional concept in her study, which consisted of morphological relatedness and morphological structure. Morphological relatedness is the identification of semantic and structural connections within families of words (e.g., the realization of the fact that the words, such as, but not limited to, decide, decision, and indecisive, have a common root and core meaning). Conversely, morphological structure is how learners are able to produce or manipulate morphologically based forms that satisfy grammatical and contextual requirements (for example, forming successful from success). The combination of these two dimensions outlines the receptive and productive aspects of morphological knowledge. In order to empirically test these points, Curinga developed two tests: the Morphological Relatedness Test (MRT) that can be used to test word-family connections recognition, and the Morphological Structure Test (MST) that is intended to test the creation of morphologically appropriate forms by learners. The framework also assumes that the morphological awareness has a direct and indirect influence on language comprehension due to its connection with vocabulary knowledge. Students with a better ability to deconstruct the word structure can increase their vocabularies hence further understanding. In its turn, the model suggested by Curinga will supplement the lexical quality hypothesis offered by Perfetti and Hart (2002) that provides that strong word representations (including phonological, orthographic, and morphological data) contribute to more effective reading. Her empirical findings on the results of working with Spanish–English bilingual adolescents indicate that morphological awareness was a predictor of reading comprehension despite the statistical control of vocabulary size and

decoding fluency. According to her results, a morphological-based teaching approach helps students to deduce the meaning of new vocabularies, memorize new vocabularies and gain a deeper understanding of text.

In the case of EFL and bilingual learning, explicit morphological instruction, as highlighted in the framework proposed by Curinga, is an important part of pedagogical value that serves as a compensatory measure to a lack of language exposure. By teaching systematically learners to analyse parts of words, instructors can equip them with a strategy applicable to both reading and academic tasks to deal with new words that learners are unfamiliar with. Therefore, morphological awareness is an instructional tool and a cognitive resource which facilitates the development of independent vocabulary and better understanding. In this regard, this framework offers a conceptual basis on studies examining morphological awareness among EFL learners, which includes the current study on the Iraqi college students where vocabulary understanding is a crucial element in the acquisition of English language proficiency.

### 6.1 Morphological Awareness and Language Learning

It was established that morphological consciousness helps to acquire vocabulary and develop reading in any language. Carlisle (2000) discovered that learners who had a better morphological awareness showed enhancement in reading comprehension and depth of vocabulary. Kuo and Anderson (2006) emphasised that awareness of morphemes enhances learners' ability to decode and infer unknown words, thereby facilitating reading.

Spencer, Muse, Wagner, Foorman, Petscher & Tighe (2014) investigated the underlying dimensions of morphological awareness and vocabulary knowledge in children and found that growth in morphological awareness was correlated with vocabulary growth, implying a developmental link. Similarly, Arnbak & Elbro (2000) (via meta-analysis) argued that morphology is a critical component of literacy development and should be integrated into instruction. Recent research by Wang & Zhang (2023) confirmed that morphological awareness and vocabulary knowledge are distinct, yet interrelated, constructs and that morphological awareness mediates the effect of morphological knowledge on vocabulary knowledge.

### 6.2 Morphological Relatedness vs. Morphological Structure

Studies distinguish between two dimensions of morphological awareness: morphological relatedness (recognising relationships within word families, e.g., *happy → happiness*) and morphological structure (manipulating morphemes to form derived words, e.g., *teach → teacher*). Curinga (2014) labelled these as sub-components and used them in her instruments (MRT and MST). Bowers, Kirby & Deacon (2010) through a meta-analysis found both dimensions support vocabulary and reading outcomes, though few studies compare them directly.

In an Indonesian EFL context, a causal-effect study showed that morphological awareness positively impacted vocabulary mastery (study of Mahasaraswati Denpasar University students) (Denpasar University 2022). The authors asserted that knowledge of word-formation rules had a stronger effect than non-linguistic approaches (see source turn0search22). These findings corroborate the importance of both morphological relatedness and morphological structure but do not clearly isolate which is more effective.

**6.3 Morphological Awareness in EFL Contexts**

The majority of morphological awareness research has been conducted in L1 or secondary school settings, but growing evidence exists for EFL adult learners. Rabadi (2019) surveyed Jordanian university students and found a positive correlation between morphological awareness and vocabulary size. Tarat (2019) studied Thai EFL university students and found that morphological awareness had a significant relationship to vocabulary knowledge. A longitudinal study of college EFL students in Japan found that morphological awareness predicted vocabulary and reading comprehension gains (Hu 2013). Additionally, Priskinanda et al. (2021) discovered that morphological awareness training had a significant positive impact on vocabulary and reading comprehension among the senior high school students in Indonesia.

The empirical evidence in Arabic speaking environments is minimal. However, research performed in Jordan, Thailand, Indonesia and mixed adult EFLs indicates that morphological awareness is reasonably promising to EFL students, especially in the tertiary level, hence its exploration in Iraq.

**6.4 Morphological Awareness and Vocabulary Comprehension**

In addition to the vocabulary size, the recent studies emphasizes morphological awareness as a central determinant of vocabulary comprehension, i.e. the ability to infer meanings, use words in context, and read scholarly texts. To give an example, Spencer et al. (2014) proved that morphological awareness and vocabulary knowledge are parallel predictors of reading comprehension, thus showing that morphological awareness plays a larger role in more intense lexical processing. A more recent studies have found that morphological awareness explained special variance in reading comprehension in Grade 1 and Grade 2 children beyond vocabulary and decoding. Though such populations are not similar to the college EFL learners, the mechanism underlying it, which is the morphological processing that makes comprehension easier, are transferred to the adult settings.

Morphological awareness and vocabulary knowledge were also observed to determine reading comprehension among EFL learners in foreign-language reading study with morphological awareness having direct and indirect effects. These results speak to the relevance of the study of morphological awareness in vocabulary comprehension of college EFL learners.

To conclude, the literature confirms that morphological awareness is a positive element in vocabularies and reading acquisition. Nevertheless, there are vast

gaps: there is limited literature that compares morphological relatedness vs. morphological structure and limited literature on adult EFL learners in higher education, particularly in the Arabic-speaking context. The gap that the current study aims at filling consists of focusing on the vocabulary comprehension of Iraqi college students, as opposed to testing vocabulary size.

## 7 Methodology

### 7.1 Research Design

The current research is a quasi-experimental study. The pretest–posttest control group design has been adopted to determine the effect of morphological awareness instruction on vocabulary comprehension among the Iraqi EFL learners. This design is selected since it allows assessing the relationships between the instructional intervention and the student performance and keeping ecological validity under the real classroom conditions (Creswell 2014). Since the college schedule could not be completely randomized, as it was a limitation of the study, subjects were grouped into an experimental group and a control group.
This intervention was a six weeks process conducted in three main phases. The participants were tested in a pretest where they were assessed of their morphological and vocabulary knowledge at baseline. Second, students were interacting in a course of four-week instruction aimed to develop morphological awareness. Third, an immediate posttest was conducted after the training to determine the understanding of vocabulary. This learning time gave the students adequate time to internalize morphological concepts and use the same in reading and comprehension tasks.
To measure the numerical results as well as contextual information, a mixed-method approach quantitative and qualitative was used. The qualitative and quantitative data were used to measure the level of vocabulary comprehension gains and to present a subtle background of practical effectiveness of the instruction, respectively. This mixed approach was a sure means of having an all-round grasp of how morphological awareness training would influence the comprehension strategies of the participants.

### 7.2 Participants

The sample consisted of 40 undergraduate students who will be pursuing the Department of English in the 2024–2025 academic year in Aliraqia University. The age of the participants ranged from 19 to 22. The group comprised 18 male and 22 female students who shared the same academic level, third-year, and their major is English as a foreign language. Their proficiency level was determined to be upper-intermediate, based on their English language placement scores and performance in previous semesters. The selection criteria were based on the purposive sampling method as suggested by Creswell (2014). This method

determined the participants according to their major which is English language and literature. Accordingly, the students were divided into two equal groups: experimental and control group. The two groups were then given a pretest prior to the morphological instructions to evaluate their level. The results of the pretest showed that there were no significant differences between the two groups. Meanwhile, the approval letter was granted from the college council. Eventually, the students were briefed on the procedures and the confidentiality of the study and then they were assured that wouldn't affect their grades.

### 7.3 Instruments

To measure students' morphological awareness and vocabulary comprehension, two instruments known as morphological relatedness test and morphological structure test were employed. These instruments were originally adapted from Curinga (2014) as they suit the purpose of the study.

#### 7.3.1 Morphological Relatedness Test (MRT)

The MRT assessed learners' ability to recognize morphological relationships between base and derived words. The test included 24 pairs of words, each requiring the participant to decide whether the second word was morphologically related to the first (e.g., *happy → happiness*, *act → action*, *music → musician*). Students marked "Yes" or "No" to indicate their judgment. The MRT aimed to evaluate learners' implicit awareness of word-family relationships. The instrument was revised to include culturally familiar and academic vocabulary drawn from EFL textbooks used at Iraqi universities (e.g., *English for Academic Skills*, *Headway Advanced*).

#### 7.3.2 Morphological Structure Test (MST)

The MST also consisted of 24 items where learners' ability was measured to construct and generate derived words to complete sentences meaningfully. To make it clear, the following examples illustrate the mechanism of this test:

"(Educate) The Ministry launched a new program for teacher _____."
"(Happy) The children looked _____ when they saw the gifts."

Explanation*:* The base word "*educate"* becomes the noun "*education"*, which correctly fits the context of a program intended for teacher training, whereas the adjective "*happy"* fits directly here; since it already expresses emotion, no derivation is required. Moreover, they tested both instruments with ten students of another cohort to confirm the clarity, balance of difficulty, and cultural appropriateness. Consequently, the comments led to the slight lexical adjustments, e.g. the less traditionalized derivation of "industrialize" was replaced

with the more common word "advertisement". Reliability coefficients using Cronbach's alpha showed α = 0.85 for MRT and α = 0.80 for MST which is a good internal consistency (Sekaran and Bougie 2010).

### 7.3.3 Vocabulary Comprehension Test

In addition to the two morphological tests, a Vocabulary Comprehension Test (VCT) was conducted to measure how effectively learners applied morphological knowledge during reading. The VCT included three short expository passages (250–300 words each) containing morphologically complex words (e.g., *development*, *predictable*, *cooperation*). After reading each passage, students answered multiple-choice questions testing word meaning in context, synonym recognition, and inferencing. This measure complemented the morphological tests by situating vocabulary comprehension within authentic reading contexts.

### 6.4 The Instruction method

Over a four-week instrcution, the experimental group received explicit morphological awareness instruction integrated into their English curriculum that was adapted to match Iraqi university contexts. Sessions 1–2 introduced students to the fundimantals of morphemes and word formation, focusing on distinguishing between free and bound morphemes and identifying common prefixes and suffixes in English. These sessions engaged the students with activities such as matching roots with affixes and analyzing sample academic vocabulary. Sessions 3–4 explored derivational morphology, which changes word class, and inflectional morphology, which indicates tense or number where students were supposed to be able to identify and complete morphological trees and word-family charts (words level). In Sessions 5–6, students practiced recognizing word families within reading passages and inferring meanings of unfamiliar words based on known roots. Eventually, sessions 7–8 ended in productive application of sentence and paragraph-level tasks through fill-in-the-blank derivation exercises, short writing assignments, and reading comprehension practice with morphologically dense texts. Conversely, the control group followed the default syllabus recommended by the Ministry of Higher Education, and they exhibited traditional method of instruction which is materials memorization, definitions recall, and covering drills. As a way of ensuring internal validity, the same educator instructed the two groups, and qualitative field notes were recorded to capture the classroom observations and reactions of the learners. This methodological approach underlines various linguistic functions, such as the understanding of new words, which often become regarded as the feature of the high level of language acquisition.

### 7.6 Data Analysis

The IBM SPSS Statistics (Version 27) were used to analyze quantitative data obtained following the MRT and MST. All measured variables were computed using descriptive statistics (mean, standard deviation, and variance). Paired-sample t-tests were used in assessing the treatment effect to compare pretest and posttest scores in each group and independent-sample t-tests to compare gains between groups. The significance value was set to $\alpha = 0.05$. They also computed effect sizes (Cohen's d) of instructional impact. Also thematic analysis of qualitative field notes was done to discover patterns in student engagement, correction of errors, and metalinguistic awareness. Such observations assisted in settling on the fact whether best results were obtained due to explicit strategies or by generalized language improvement. The combination of the quantitative and qualitative results provided a general view of how the morphological awareness training impacted the vocabulary understanding.

## 7. **Results**

### 7.1 **Pretest Equivalence of Groups**

Table (1): The pretest outcomes of the two groups

| TEST | GROUP | N | MEAN | SD | T | DF | P |
|---|---|---|---|---|---|---|---|
| **MORPHOLOGICAL RELATEDNESS TEST (MRT)** | Experimental | 20 | 12.85 | 2.41 | 0.61 | 38 | .545 |
| | Control | 20 | 12.40 | 2.33 | | | |
| **MORPHOLOGICAL STRUCTURE TEST (MST)** | Experimental | 20 | 11.90 | 2.18 | 0.50 | 38 | .619 |
| | Control | 20 | 11.55 | 2.27 | | | |

Prior to the four-week instructional sessions, a pretest was assigned to both groups to determine their morphological awareness and to ensure that any post-instructional varieties could be attributed to morphological awareness training rather than prior proficiency.

The outcomes of the test were administered to different measures to check whether their morphological awareness are similar or different. Hence, independent-samples *t*-tests were conducted on pretest scores for Morphological Relatedness Test (MRT) and Morphological Structure Test (MST). Results indicated that were no statistically significant differences between the experimental and control groups prior to instruction. For the MRT, the experimental group ($M = 12.85$, $SD = 2.41$) and the control group ($M = 12.40$, $SD = 2.33$) did not differ significantly, $t(38) = 0.61$, $p = .545$. Similarly, no significant difference was found on the MST, where the experimental group (M =

11.90, SD = 2.18) and the control group (M = 11.55, SD = 2.27) showed comparable performance, $t(38) = 0.50$, $p = .619$.
These findings confirm that both groups began the study at a similar level of morphological awareness and vocabulary comprehension which in return satisfies the assumption of basic equivalence reported in earlier Iraqi EFL studies

7.2 **Posttest Differences Between Experimental and Control Groups**

Table (2) The posttest outcomes of the two groups

| TEST | GROUP | N | MEAN | SD | T | DF | P |
|---|---|---|---|---|---|---|---|
| **MORPHOLOGICAL RELATEDNESS TEST (MRT)** | Experimental | 20 | 17.60 | 2.94 | 3.02 | 38 | .004 |
| | Control | 20 | 14.95 | 2.71 | | | |
| **MORPHOLOGICAL STRUCTURE TEST (MST)** | Experimental | 20 | 16.20 | 2.63 | 2.87 | 38 | .006 |
| | Control | 20 | 13.85 | 2.49 | | | |

Following four weeks of explicit morphological awareness instruction, posttest scores revealed clear gains in the experimental group compared to the control group across all measures.
Regarding the MRT, the experimental group achieved a higher mean score (M = 17.60, SD = 2.94) than the control group (M = 14.95, SD = 2.71). This was statistically significant, t(38) = 3.02, p = .004, and was accompanied by a moderate-to-large effect size (Cohen's d = 0.95). These results show that this instructional intervention had a significant positive effect on the ability of the participants to recognize morphological relationships among word families.

Table (3): The effect size of the tools

| MEASURE | COHEN'S D | EFFECT SIZE INTERPRETATION |
|---|---|---|
| **MORPHOLOGICAL RELATEDNESS TEST (MRT)** | 0.95 | Large |
| **MORPHOLOGICAL STRUCTURE TEST (MST)** | 0.90 | Large |

In the case of MST, the same tendency was found: the experimental group (M = 16.20, SD = 2.63) significantly performed better in comparison to the control one (M = 13.85, SD = 2.49) t(38) = 2.87, p = .006, d = 0.90. These results indicate

that learners who received instruction were better able to manipulate and generate morphologically appropriate word forms in sentence contexts.

This finding demonstrates that morphological awareness instruction transferred beyond isolated word tasks to understand vocabulary in context while practicing English language.

Together, these results provide strong empirical support for the positive effect of morphological awareness instruction on vocabulary comprehension among Iraqi EFL learners. It is worthwhile that thses results consistent with earlier findings reported in Iraqi and regional contexts.

### 7.3 **Comparison between Morphological Relatedness and Morphological Structure**

Table (4) The difference between MRT & MST

| TEST | N | MEAN | SD | T | DF | P |
|---|---|---|---|---|---|---|
| **MORPHOLOGICAL RELATEDNESS TEST** | 20 | 17.60 | 2.94 | 1.41 | 19 | .174 |
| **MORPHOLOGICAL STRUCTURE TEST** | 20 | 16.20 | 2.63 | | | |

To address the second research question, paired-sample *t*-tests were conducted within the experimental group to compare performance on the MRT and MST posttests.

According to table (4), the morphological relatedness mean score (M = 17.60, SD = 2.94) was slightly higher than that for morphological structure (M = 16.20, SD = 2.63). However, this difference did not reach statistical significance, $t(19) = 1.41$, $p = .174$. which means both tools were almost equally important. Moreover, the effect size was small ($d = 0.31$), suggesting that both dimensions contributed comparably to learners' morphological development.

This finding indicates that recognizing word-family relationships and actively constructing derived forms are equally valuable for supporting vocabulary comprehension. The result shows the complementary roles for receptive and productive morphological knowledge rather than a clear superiority of one strategy over the other

### 7.4 Qualitative Observations

The quantitative findings were supported by the classroom observation notes. The subjects in the experimental group, conversed more often on morphemic elements during activity sessions and tended to recognize roots and affixes whenever new words were found. An example here is the breakdown of terms like predictable and development used by the learners in the course of reading and used this breakdown to derive meaning accurately. Conversely, the participants of the

control group were more likely to use translation or to look up words in dictionaries and to avoid the systematic analysis of the word parts. These observations also indicate that the performance improvement was mostly explained by explicit use of strategy and not by general linguistic development and hence corroborates the quantitative results.

**Discussion**

The current research shows that the explicit teaching of a morphological awareness has a positive effect on vocabulary understanding in the participants. The fact that the representatives of the experimental group were more successful in comparison with the members of the control group after the intervention confirms the hypothesis that such knowledge of the word structure would help these members to engage with the unknown vocabulary more effectively. Students would be in a better position to derive the meaning of words when they have been trained to identify roots, prefixes and suffixes as opposed to memorizing or translating. This finding agrees with the previous studies that morphological awareness is an important factor in vocabulary acquisition and reading comprehension (Carlisle, 2000; Kuo & Anderson, 2006). The results also show that both morphological relatedness and morphological structure strategies also added to the observed improvement, and no significant difference was noted between them. This implies that identifying the word family relationships and the construction of the corresponding derived forms are also important in the understanding of vocabulary. Bowers et al. (2010) have also made similar conclusions, since they discovered that dissimilar aspects of morphological instruction combined together, facilitate literacy development when they are incorporated into teaching practices. Also, Zhang and Koda (2012) found that morphological awareness contributes to the EFL learners to derive the meaning of a complex word, and thus, increases vocabulary awareness and reading comprehension. In turn, the existing evidence suggests that the findings can be generalized to the Iraqi EFL college students as well.

Educationally, the results highlight the importance of explicitly instructing morphology at the EFL University classes. The conventional approach to teaching vocabulary tends to focus on definitions and translation, which may limited the understanding of academic text by the students. Conversely, morphologic awareness teaching will empower students with pragmatic procedures of breaking down and comprehending new vocabulary independently, which in turn justifies the use of morphology-based pedagogy in the courses of vocabulary and reading, particularly in the EFL setting where learners are not exposed to English much. Overall, the discussion proves that morphological awareness is not only a hypothetical concept but also a practical instructional tool that can be used to improve student vocabulary understanding and reading ability in academic setting.

## Conclusion

This paper reviewed how morphological awareness teaching affects vocabulary understanding in Iraqi EFL college students in Aliraqia University. The findings showed that those who were explicitly taught morphology performed better as compared to those who followed conventional teaching techniques. Both morphological relatedness and morphological structure were helpful in understanding complex words and there was no significant difference between the two strategies. This observation underscores the need to identify word families and come up with derived forms to achieve competence acquisition of vocabulary. In general, the findings underline the need to incorporate morphological teaching in EFL classrooms, especially in higher education. With the help of such integration, it is possible to promote the sense of learner independence and enhance the understanding of academic English vocabulary.

## Reference:

Ali, T. T., Ali, A. I., & Yasin, M. S. M. (2015). The influence of morphological analysis on vocabulary learning among Iraqi secondary school students in Malaysia. *International Journal of Education and Research, 3*(5), 457–468.

Al-Farsi, B. (2008). *Morphological awareness and its relationship to vocabulary knowledge among Omani EFL students* (Master's thesis). University of Queensland.

Arnbak, E., & Elbro, C. (2000). The effects of morphological awareness training on reading and spelling in grade 4. *Scientific Studies of Reading, 4*(3), 229–250.

Bowers, P. N., Kirby, J. R., & Deacon, S. H. (2010). The effects of morphological instruction on literacy skills: A systematic review of the literature. *Review of Educational Research, 80*(2), 144–179.

Carlisle, J. F. (2000). Awareness of the structure and meaning of morphologically complex words: Impact on reading. *Reading and Writing, 12*(3), 169–190.

Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Sage Publications.

Curinga, R. (2014). *The effect of morphological awareness on reading comprehension: A study with adolescent Spanish–English emergent bilinguals* (Doctoral dissertation). Teachers College, Columbia University.

Ferguson, L. (2006). Developing morphological awareness in secondary classrooms. *Language Learning Journal, 34*(2), 65–77.

Hu, C. (2013). *Morphological awareness and vocabulary development in EFL learners* (Doctoral dissertation). Victoria University of Wellington.

Kaweera, C. (2013). Writing error: A review of interlingual and intralingual interference in EFL context. *English Language Teaching, 6*(7), 9–18.

Khodadoust, E., Aliasin, S. H., & Khosravi, R. (2013). The relationship between morphological awareness and receptive vocabulary knowledge of Iranian EFL learners. *International Journal of Educational Research & Technology, 4*(1), 29–35.

Kuo, L.-J., & Anderson, R. C. (2006). Morphological awareness and learning to read: A cross-language perspective. *Educational Psychologist, 41*(3), 161–180.

Laufer, B. (1995). The lexical richness of second language writing: Does it develop over time? *Applied Linguistics, 16*(3), 307–322.

Nagy, W. E., Berninger, V. W., & Abbott, R. D. (2006). Contributions of morphology beyond phonology to literacy outcomes of upper elementary and middle-school students. *Journal of Educational Psychology, 98*(1), 134–147.

Perfetti, C. A., & Hart, L. (2002). The lexical quality hypothesis. *Scientific Studies of Reading, 6*(4), 357–383

Priskinanda, A. A., Nahak, Y. N., Wea, T. N., & Bram, B. (2021). Morphological awareness instruction for EFL students' vocabulary development and reading comprehension. *ELT Worldwide, 8*(1), 41–55.

Rabadi, R. I. (2019). Morphological awareness and vocabulary knowledge among EFL university students. *Arab World English Journal, 10*(3), 43–63.

Sekaran, U., & Bougie, R. (2010). *Research methods for business: A skill-building approach* (5th ed.). Wiley.

Spencer, M., Muse, A., Wagner, R. K., Foorman, B., Petscher, Y., & Tighe, E. (2014). Examining the underlying dimensions of morphological awareness and vocabulary knowledge. *Reading and Writing, 28*(3), 411–439

Stanovich, K. E. (1980). Toward an interactive-compensatory model of individual differences in the development of reading fluency. *Reading Research Quarterly, 16*(1), 32–71.

Tarat, S. (2019). The relationship between morphological awareness and vocabulary knowledge of Thai EFL students. *Theory and Practice in Language Studies, 9*(1), 34–39.

Zhang, D., & Koda, K. (2012). Contribution of morphological awareness and lexical inferencing ability to L2 vocabulary knowledge and reading comprehension among advanced EFL learners. *Reading and Writing, 25*(5), 1195–1216. https://doi.org/10.1007/s11145-011-9313-8