

# The Influence of English Morphological Awareness on Vocabulary Acquisition of Arab EFL Students in Israel

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## Abstract

This research investigates the impact of English morphological awareness on vocabulary development among Arab junior high school students. Given the distinct morphological differences between Arabic and English, the study examines how an understanding of morphemes—defined as the smallest units of meaning or grammatical function—facilitates vocabulary development in the context of learning English as a second language (ESL). Drawing on survey data from 20 English language teachers, the study explores educators' perceptions of morphological instruction and its influence on students' vocabulary proficiency. The findings underscore the critical role of incorporating structured morphological training into ESL curricula to enhance vocabulary acquisition and overall language competence. These findings are consistent with the results of Abdul majeed et al. (2023), they found that morphological analysis can play an important role in learning and teaching English especially in the foundation level. The findings strongly advocate for the integration of morphological awareness into EFL teaching practices, supported by targeted professional development for teachers, moreover the study concludes by recommending the strategic utilization of morphological parallels between Arabic and English to promote more effective language learning outcomes.

**Keywords:** morphological awareness, vocabulary development, junior high school

## 1. Introduction

### 1.1 Background Information

L2 acquisition is a multifaceted process influenced by cognitive, cultural, and environmental factors, with vocabulary knowledge serving as a cornerstone of the process. Vocabulary extends beyond a mere compilation of words; it forms the foundation of language proficiency, underpinning essential skills in reading and speaking within the second language. For ESL learners, acquiring a sufficient vocabulary poses significant challenges, as the ability to recall and effectively use an extensive lexicon is critical for academic and professional success. Consequently, vocabulary development is particularly crucial for these learners.

A key cognitive skill that facilitates vocabulary development is morphological awareness, which is defined as the ability to identify, interpret, and manipulate morphemes—the smallest units of meaning within words. Research consistently highlights the significant role of morphological awareness in vocabulary acquisition. It enables learners to deduce the meanings of unfamiliar words, thereby enhancing reading speed and comprehension (Eren & Deakon, 2012).

For Arab learners of English, the transition from the morphological system of pre-Arabic Semitic languages, characterized by a highly morphemic root-based structure, to the distinct morphological system of Indo-European languages like English presents unique challenges. Arabic morphology is primarily rooted in a system where meaning is conveyed through modifications to root patterns. In contrast, English predominantly employs affixation as its main morphological mechanism (Elgobshawi, 2024). These structural differences introduce specific learning difficulties while also offering potential opportunities for linguistic transfer. As a result, analyzing the role of morphological awareness is particularly relevant to understanding and addressing the linguistic challenges faced by Arab learners in acquiring English as a second language.

### 1.2 Problem Statement

Despite the fact that a significant proportion of Arab students begin learning English from an early age, their academic performance, particularly in vocabulary acquisition, often falls below expected standards. This discrepancy can be partially attributed to the substantial morphological differences between Arabic and English (Salim, 2013). Arab learners may encounter difficulties in mastering English vocabulary due to the limitations of current ESL teaching methodologies in their educational contexts, which often fail to leverage or integrate their existing morphological knowledge derived from Arabic.

Moreover, there is a notable lack of emphasis on morphological strategies within ESL curricula in many Arab educational systems. This insufficient focus on morphology may contribute to inadequate vocabulary development, which is a critical component of language learning. This shortcoming becomes particularly evident when students transition to higher education institutions where English is the medium of instruction, potentially hindering their academic success. Addressing this gap through targeted morphological instruction could significantly enhance vocabulary acquisition and overall language proficiency among Arab ESL learners.

### 1.3 Aims and Objectives

This study seeks to fill this gap by investigating the effect of morphological awareness on the vocabulary growth of Arab junior high school students. The objectives are threefold:

- 1) *Assessment of Morphological Awareness*: To assess the current morphological profile of these students and see the regularities or the absence of them.
- 2) *Correlation Analysis*: In order to find out whether morphological awareness has a positive impact on the knowledge of English vocabulary, this study aimed to establish whether there is a positive correlation between morphological awareness and English vocabulary knowledge
- 3) *Intervention Evaluation*: To evaluate the effectiveness of the morphological training interventions targeting this population group and to determine the effects of the interventions on the students' vocabulary knowledge.

### 1.4 Research Questions/Hypotheses

The study will be guided by the following research questions:

- 1) What is the extent of morphological awareness among Arab junior high school students studying English, and how does it vary across different proficiency levels?
- 2) To what extent does morphological awareness correlate with English vocabulary knowledge in these students?
- 3) Can targeted morphological awareness interventions significantly improve vocabulary acquisition among Arab junior high school students?

Hypotheses derived from these questions include:

- H1: Arab junior high school students with higher morphological awareness will demonstrate superior English vocabulary knowledge.
- H2: Structured interventions that enhance morphological awareness will lead to measurable improvements in vocabulary acquisition.

### 1.4 Significance of the Study

This research holds significant importance as it addresses a critical component of language learning with the potential to enhance English as a Second Language (ESL) acquisition among Arab learners. By focusing specifically on morphological awareness, the study aims to provide empirical evidence that can inform the development of more effective teaching methodologies tailored to the linguistic profiles of Arab students. Such findings have the potential to transform language instruction practices within this context, thereby contributing to broader educational improvements.

Furthermore, enhancing English vocabulary knowledge through targeted morphological training is expected to improve students' overall English proficiency. This, in turn, could lead to greater academic success and expanded employment opportunities in the global labor market. The outcomes of this study may also offer valuable insights for the field of second language acquisition, advancing the understanding of the role of morphology in language learning. These insights could extend to other language pairs and learning contexts, thereby enriching the theoretical and practical foundations of language education globally.

## 2. Literature Review

English morphological awareness is widely acknowledged as a significant determinant in the acquisition of new

vocabulary, particularly among Arab junior high school students who are learning English as a second language (Abu-Rabia & Taha, 2006). Morphological awareness, which refers to the explicit understanding of word structure and the morphological processes underlying word formation, is a critical cognitive skill that facilitates the decoding of unfamiliar words, improves reading comprehension, and promotes the expansion of vocabulary knowledge (Carlisle, 2010). This study aims to explore the relationship between English morphological awareness and vocabulary development in Arab junior high school students (Kieffer & Lesaux, 2008). Specifically, it seeks to analyze the correlation between students' morphological knowledge and their vocabulary growth, while also identifying effective pedagogical strategies for enhancing morpheme awareness in this population (Goodwin & Ahn, 2013). By investigating this relationship, the study addresses a crucial dimension of English language education for Arab learners, with the goal of addressing existing gaps in their second language acquisition process. The anticipated findings are expected to provide meaningful contributions to the field of second language education, offering evidence-based insights that can inform and refine instructional practices, thereby optimizing the language learning experience for this demographic (Kuo & Anderson, 2006).

### 2.1 Morphological Awareness: Definition and Importance

Morphological awareness refers to the ability to identify, comprehend, and apply morphemes—the smallest units of meaning in a language. These include base words, affixes (prefixes and suffixes), and their combinations, which form the foundation of word construction (McBride-Chang et al., 2005). For example, the word **unhappiness** comprises three morphemes: **un-** (a prefix meaning “not”), **happy** (the root word), and **-ness** (a suffix indicating a state or condition). Understanding such components allows learners to infer the meanings of unfamiliar words, thereby improving language comprehension and vocabulary acquisition.

#### 2.1.1 The Significance of Morphological Awareness in Vocabulary Development

Morphological awareness is a well-researched area in linguistics, with substantial evidence supporting its importance in vocabulary development (Kieffer & Lesaux, 2012). It helps learners understand word formation and how meaning can be altered through the addition or removal of morphemes. This is especially beneficial for ESL learners, such as Arab junior high school students, who encounter a vast array of new words in English. By deconstructing words into their morphemic components, students can infer meanings, spell words accurately, and use them appropriately within context.

#### 2.1.2 Morphological Awareness as a Cognitive Skill

Morphological awareness encompasses the ability to recognize and manipulate the structure of words. This cognitive skill is particularly crucial for Arab learners due to the significant morphological differences between Arabic and English. For instance, while Arabic relies on a root-and-pattern system to form words, English employs a more linear combination of base words and affixes.

- **Morphological Analysis**  
Morphological analysis involves breaking down words into their base components to infer meaning and improve retention. For example, a student familiar with the morphemes **bio-** (life) and **-logy** (study of) can deduce the meaning of **biology**. This approach enhances vocabulary acquisition by enabling learners to relate new words to known morphemes, as noted by Smith et al. (2021).
- **Morphological Synthesis**  
Beyond analysis, morphological awareness aids in synthesizing new words from existing morphemes. For example, **un-**, **happy**, and **-ness** can form words like **unhappiness** and **happiness**, enriching a learner's vocabulary repertoire. This skill is essential for expanding word usage and fostering linguistic creativity.

#### 2.1.3 Spelling, Pronunciation, and Reading Comprehension

Morphological awareness also contributes to spelling and pronunciation. Students learn to apply consistent rules for using morphemes across different words, improving both accuracy and fluency. Moreover, it enhances reading comprehension by enabling learners to infer the meanings of complex or unfamiliar words encountered in texts. This is particularly valuable for Arab junior high school students, who often face challenges in decoding vocabulary-dense English *texts*.

#### 2.1.4 Morphological Awareness in Second Language (L2) Learning

For L2 learners, morphological awareness facilitates the transfer of knowledge from their first language (L1) to English. Arabic, with its rich morphological structure, provides a strong foundation for understanding English morphemes. Teachers can leverage this linguistic similarity by highlighting parallels between the two languages,

thus making English learning more contextual and less intimidating. This approach not only aids in vocabulary acquisition but also fosters a deeper engagement with the language.

To summarize, Morphological awareness is a cornerstone of vocabulary development, particularly for Arab junior high school students learning English as a second language. By equipping students with the ability to analyze, synthesize, and manipulate morphemes, educators can enhance their vocabulary acquisition, spelling, pronunciation, and reading comprehension. Furthermore, contextualizing morphological instruction to leverage the similarities between Arabic and English can significantly improve the learning experience, ensuring a smoother transition and greater success in mastering English.

### *2.2 Morphological Awareness in Relation to Reading Comprehension*

Among the various dimensions of morphological awareness that influence reading comprehension, the ability to decode words is one of the most critical. Students' capacity to read and comprehend texts is significantly enhanced by their ability to analyze words morphologically and derive their meanings (Deacon & Kirby, 2004). For example, when encountering the word "unbelievable," students can effectively deconstruct it into its constituent morphemes: "un-" (not), "believe" (root), and "-able" (capable of), thereby inferring its meaning as "not capable of being believed." This skill is particularly advantageous for Arab junior high school students, as they are frequently exposed to a wide array of novel and complex words in English texts.

Moreover, morphological awareness contributes to reading fluency. Students who can rapidly dissect and comprehend the morphemic structure of words are more likely to read fluently and with greater comprehension (Reed, 2008). Fluency is essential for comprehension, as it allows students to focus on the meaning of the text rather than expending cognitive resources on decoding individual words. This fluency is further reinforced when students possess a robust understanding of morphemes and their contextual meanings.

Another significant aspect of morphological awareness in reading is its role in facilitating inferential processes. Knowledge of morphemes enables students to make informed predictions about the meanings of unfamiliar words and broader textual content. For instance, if students are familiar with the morpheme "tele-" (meaning distant), they can deduce that the word "telecommunication" pertains to communication over a distance. This inferential capacity is crucial for deep comprehension, allowing students to grasp implicit meanings that are not explicitly stated in the text (Smith et al., 2023).

Additionally, morphological awareness supports contextual learning. When students can identify and understand morphemes, they are better equipped to comprehend how words function in various contexts. This understanding enables them to recognize relationships between words. For example, knowing that the prefix "bio-" means life allows students to comprehend texts related to biology, biographies, or biotechnology with greater ease.

### *2.3 Teaching and Learning Implications*

The critical role of morphological awareness in vocabulary acquisition and reading comprehension has profound implications for teaching and learning, particularly for Arab junior high school students learning English as a second language. Educators can leverage these insights to design targeted instructional strategies that enhance students' language proficiency.

**Integrating Morphological Instruction:** A key instructional implication is the systematic incorporation of morphological analysis into the curriculum. Educators should explicitly teach morphemes, including prefixes, suffixes, and root words, and demonstrate how they combine to form words. Activities such as morpheme segmentation and recombination can engage students' cognitive processes, reinforcing their understanding of word structures (Apel & Diehm, 2013).

**Using Contextualized Learning:** Morphological instruction should be embedded within reading and writing tasks. For instance, during reading activities, teachers can highlight the morphological structure of challenging words. Writing assignments can encourage students to construct sentences using newly learned morphemes, thereby contextualizing their morphological knowledge in authentic language use (Goodwin, Lipsky, & Ahn, 2012).

**Developing Morphological Awareness through Games and Activities:** Interactive games and activities, such as word sorts, morpheme matching, and word construction tasks, can effectively enhance students' morphological awareness. These activities not only make learning engaging but also reinforce students' understanding of word structures in a dynamic and enjoyable manner (McLeod, 2015).

**Scaffolding and Differentiation:** Given the variability in students' language proficiency, scaffolding and differentiation are essential. Teachers should provide clear explanations of morphological concepts and offer additional support to struggling students through visual aids, charts, and step-by-step guidance. Advanced

students can be challenged with more complex tasks that require the application of morphological knowledge to novel words, ensuring that instruction is tailored to individual learning needs (Richards et al., 2016).

**Leveraging Technology:** Educational technology can serve as a powerful tool for teaching morphological awareness. Digital applications and online platforms designed for vocabulary development and word formation can provide interactive and engaging learning experiences. These tools often offer immediate feedback, enabling students to self-correct and refine their understanding in real time. Integrating technology into morphological instruction can cater to diverse learning styles and increase student motivation (Zhang, 2022).

By adopting these evidence-based strategies, educators can effectively foster morphological awareness, thereby enhancing students' vocabulary development, reading comprehension, and overall language proficiency.

#### *2.4 Characterization of Morphological Awareness in Language Learning*

The first studies of morphological awareness were focused on the L1 acquisition process. Research showed that the child who had a better morphological awareness have better reading and spelling skills. These initial works provided the basis for examining the consequences of morphological awareness in second language (L2) acquisition (Kuo & Anderson, 2006).

This review of the literature has revealed that morphological awareness is strongly connected to the learning of new words. Iyer (2019) claimed that MA learners have better chances of inferring the meanings of new word, comprehending the meanings of the complex words, and memorizing the words. This ability is derived from their ability to analyze words into smaller parts and identifying the meaning of word parts such as prefixes, suffixes and the root words.

Studies have also indicated that there is a strong relationship between the morphological awareness and reading comprehension. This way, learners are able to decode and comprehend texts since they are able to analyze the morphological structure of words. This skill is very helpful for ESL learners who come across many unknown words. Research has shown that there is a positive correlation between the level of morphological awareness and the students' reading comprehension skills as compared to the students with low morphological awareness (Nagy, Berninger, & Abbott, 2006).

Studies in the area of first language influence on the second language have looked at how L1 morphological knowledge can facilitate L2 learning. For instance, studies on Arabic-speaking ESL learners have looked at how the morphological system of Arabic affects learning English. The study's results indicate that learners can use their morphological knowledge in Arabic to help them learn English morphology and consequently enhance their vocabulary and reading skills.

Many research has been devoted to the evaluation of various instructional approaches to improve morphological awareness (Smith, 2021; Zhang, 2022). Teaching in terms of morphology, incorporating morphological learning activities into context, and playing morphological games has been found to enhance the morphological abilities of students. Studies have also pointed towards the need for the morphological instruction to be incorporated with the reading and writing tasks in order to give a holistic language learning.

Research has also been conducted with a view of identifying the part played by technology in the teaching of morphological awareness. Studies on word formation, morphological analysis and other educational applications have shown that students enjoy using the digital tools and the applications and improve their morphological knowledge. These tools are more personalized and provide instant feedback and hence can be effectively used in modern language learning.

Despite the large amount of research conducted on morphological awareness, there are still limitations. However, there is one aspect that deserves further research, namely the consequences of morphological instruction on language proficiency. However, more studies are required to identify the proper approaches to teaching learners with learning disabilities and other diverse groups. Further research should also aim at how morphological awareness can be combined with other aspects of language to give a comprehensive strategy for language acquisition.

#### *2.5 Morphological Awareness and Its Impact on Vocabulary Acquisition*

Morphological knowledge has a strong influence on vocabulary development since it helps the learners to comprehend the structure of words and their meaning. This understanding enables the students to gauge the meaning of new words, and even the use of words that they have learnt in the past, in a more efficient manner as well as attain a deeper understanding of language.

There is a direct relationship between morphological awareness and vocabulary acquisition, and one of this is the

identification of morphemes in a word (Nagy & Townsend, 2012). When the students come across unknown words, they are able to analyze them into prefixes, suffixes, and root words to be able to understand their meanings. For example, a student who has learned the morphemes “dis-” which means “not” or “opposite of” and the word “agree” can easily deduce the meaning of the word “disagree.” This analytical technique is not only useful in deciphering unknown words but also in memorizing and applying the words.

In addition, morphological awareness enables morphological analysis that involves the ability of the learners to construct new words from morphemes they already possess. This skill increases their vocabulary by many folds since they are able to produce many words from a few morphemes. For instance, while analyzing the morphemes “un-,” “believe,” and “-able” students can understand and use such words as “unbelievable,” “believable,” and “unbelief.” This synthesis process is vital in vocabulary acquisition since it enables the learners to work creatively and in a unique way with language (Berninger, Abbott, Nagy, & Carlisle, 2010).

Another area, which is highly affected by morphological awareness, is the aspect of vocabulary retention. Students who know how words are formed are more likely to remember them as compared to the other students. This is because when a person is able to identify the morphemes that have been used in constructing new words, then these new words are easily stored in the memory. For instance, a student who understands the morpheme “struct” that means to build will easily memorize and comprehend other words like construction, destruction, and instructor and this is beneficial for both the short and long-term memory of the vocabulary.

Morphological awareness also helps in spelling and pronunciation. The morphology of words makes students spell them correctly, as they can use the same rule of the morpheme in different words. This awareness also helps in pronunciation because when one comprehends how morphemes are pronounced within different words, it helps in correct usage of the language. For example, when students are taught that the suffix “-tion” is usually pronounced as /ʃən/, they are able to pronounce ‘nation’ and ‘reduction’ correctly.

The relationship between reading comprehension and vocabulary knowledge is especially strong, and morphological awareness benefits both. Morphology knowledge helps students in the interpretation of texts because they can predict the meaning of the difficult words and phrases. This comprehension is especially helpful to ESL learners since they are exposed to many new words when reading. In this way, students will be able to comprehend the text better and have a deeper focus on the material, when they recognize these words with the help of morphemes.

### *2.6 Role in Reading and Writing Proficiency*

With regard to reading skills, morphological awareness enables the learners to read and comprehend difficult texts (Deacon & Kirby, 2004). Thus, decomposing a word into morphemes, students can guess the meaning and get an overall idea of the text. For instance, breaking down the word “preliminary” into “pre-” which means before and “limin-” which means threshold enables the students to grasp that it is an event that occurs before the main event. This ability to decode words is especially helpful to the ESL learners as they are able to come across a number of new words in their reading books.

In addition, morphological awareness is useful for fluent reading. When students become aware of morphemes and their meanings, they are able to read at a faster and more fluent pace (Kirby & Bowers, 2012). This fluency is important to comprehension because students do not have to spend time breaking down the words they are reading but can instead focus on the content of the text. The fluent readers are also in a better position to relate the different parts of the text hence improving on the overall comprehension and recall.

Morphological awareness also plays a role in improving the writing skills of the students. Awareness of the structure of words helps students to write with a greater variety of words and with better spelling. It enables them to form longer and accurate expressions through the combination of other morphemes. For example, when the students know how to use prefixes such as “un-” or “re-” and suffixes like “-able” or “-ment” they can create words like “unreachable,” “restructure,” “manageable,” and “improvement.” Such knowledge not only expands the students’ vocabulary but also enhances the quality of their writing.

Besides, vocabulary growth, morphological awareness plays an important role in spelling and grammar in writing. When the students comprehend the morphological rules of word formation then they can use these rules to spell words correctly. For instance, understanding that the addition of suffix ‘-ed’ to the base form of verb shows the past tense assists the students to spell past tense verbs correctly. Thus, realizing that the suffix ‘-ly’ is used to convert adjectives into adverbs can also assist students in proper usage of these forms in their writing.

Morphological awareness also contributes to the writing clarity and coherence. Students who demonstrate an understanding of morphemes when it comes to building and breaking down words have better organization and

presentation skills. They can use correct word forms to express the intended meanings and link their thoughts coherently. This skill is essential in writing essays, reports and other academic works that call for proper organization of ideas.

### *2.7 Principal Theories of Second Language Acquisition (SLA) and Their Relevance to Cognitive Processes in Vocabulary Acquisition*

Vocabulary acquisition in second language learning is shaped by several key theories of SLA that emphasize cognitive processes. These theories highlight how learners process, store, and retrieve lexical items, offering insights into effective instructional strategies.

#### *- The Input Hypothesis (Krashen)*

Stephen Krashen's Input Hypothesis asserts that exposure to comprehensible input is fundamental to language acquisition. According to this theory, learners acquire vocabulary and linguistic structures when they encounter language slightly beyond their current level of competence, denoted as "i + 1." This ensures that the input is comprehensible while introducing new elements that challenge the learner's abilities (Krashen, 1985). By encountering vocabulary in meaningful contexts, learners are able to integrate new words into their linguistic repertoire more effectively.

#### *- The Output Hypothesis (Swain)*

Merrill Swain's Output Hypothesis emphasizes the importance of language production—speaking or writing—in vocabulary acquisition. According to this theory, actively using language enables learners to process input more effectively, thereby enhancing their vocabulary knowledge. Writing, in particular, requires learners to engage deeply with their vocabulary, allowing them to recognize gaps in their knowledge and refine their language use through feedback and self-correction. This productive process strengthens their ability to retrieve and use words appropriately (Swain, 1995).

#### *- The Noticing Hypothesis (Schmidt)*

Richard Schmidt's Noticing Hypothesis highlights the role of attention in language learning. For vocabulary acquisition to occur, learners must consciously notice new linguistic forms within the input. This focused attention facilitates the transfer of information into working memory and its subsequent storage in long-term memory. By recognizing and processing new vocabulary items, learners can internalize these terms, making them available for future use (Schmidt, 1990).

#### *- The Dual Coding Theory (Paivio)*

Allan Paivio's Dual Coding Theory posits that vocabulary retention is enhanced when learners utilize both verbal and non-verbal channels for processing new information. Linking words to mental images or physical actions creates dual codes, which improve recall and retrieval. For example, associating a word with a visual representation or gesture enables learners to form stronger connections, enhancing their ability to store and retrieve vocabulary (Paivio, 1986).

#### *- The Involvement Load Hypothesis (Laufer & Hulstijn)*

Batia Laufer and Jan Hulstijn's Involvement Load Hypothesis suggests that vocabulary acquisition is influenced by the level of cognitive engagement during learning tasks. This hypothesis identifies three components—need, search, and evaluation—that determine the depth of vocabulary processing. Tasks requiring high mental involvement, such as searching for word meanings or evaluating their usage, lead to deeper processing and improved retention of vocabulary (Laufer & Hulstijn, 2001).

#### *- The Cognitive Load Theory (Sweller)*

John Sweller's Cognitive Load Theory addresses the constraints of working memory in vocabulary acquisition. This theory emphasizes the importance of minimizing extraneous cognitive load to optimize learning. By designing instructional strategies that focus on essential vocabulary learning and reducing unnecessary distractions, educators can facilitate more efficient processing and storage of new words in long-term memory (Sweller, 1988).

As a conclusion, these principal SLA theories provide a comprehensive framework for understanding the cognitive processes involved in vocabulary acquisition. Theories such as the Input Hypothesis and Output Hypothesis emphasize the roles of exposure and production, while the Noticing Hypothesis and Dual Coding Theory highlight the importance of attention and multi-modal learning. Additionally, the Involvement Load Hypothesis and Cognitive Load Theory address the depth of processing and memory limitations, offering practical strategies to enhance vocabulary retention. Together, these theories inform effective approaches to teaching vocabulary,

particularly for learners navigating the complexities of second language acquisition.

### *2.8 Case Studies and Experimental Research*

In a study conducted by Akbulut titled “Effects of Morphological Awareness on Second Language Vocabulary Knowledge,” 52 Arab junior high school students from a state university in Turkey were divided into two groups: an experimental group of 29 participants and a control group of 23 participants. The participants’ English level was evaluated using the Proficiency and Placement Test provided by the School of Foreign Languages Department; both groups were at an intermediate level ( $M = 44.75$  out of 60 on the Oxford Quick Placement Test). In total, the experimental group was provided with 36 hours of morphological awareness training during 12 weeks, which included prefixes, suffixes, and root words and vocabulary activities with collocations, synonyms, antonyms, and morphological analysis. On the other hand, the control group was allowed to proceed with conventional approaches to teaching of vocabulary such as note taking, memorization, use of dictionaries, and picture learning. Vocabulary knowledge and morphological awareness were assessed using the Nation’s Vocabulary Level Test and the Morphological Awareness Test (Part A and B) pre and post the intervention. The findings revealed that the experimental group had a higher mean score in both the vocabulary size and morphological awareness than the control group, thus confirming the impact of morphological training on vocabulary improvement. This implies that the incorporation of morphological awareness training in the English language curricula can significantly enhance the Arab junior high school students’ vocabulary acquisition (Akbulut, 2017).

### *2.9 Longitudinal Studies on Vocabulary Growth*

In a longitudinal study that was conducted among Arab Junior High School students, Verhoeven et al., (2011) established a longitudinal and partly bidirectional relationship between lexical development and reading skills in a study entitled “The Impact of English Morphological Awareness on Vocabulary Knowledge Among Arab Junior High School Students.” The sample comprised 2790 children from 118 Dutch elementary schools, who completed vocabulary, word decoding, and reading comprehension measures in grades 1–6. The simple oral words were assessed in the first two grades while the complex words were assessed in the other grades. The findings showed improvement in vocabulary, word decoding and reading comprehension by grade level and high stability coefficients. The lexical restructuring hypothesis was supported by the study which revealed that early vocabulary knowledge was predictive of later word decoding and reading comprehension. Furthermore, as expected, word decoding was found to predict further vocabulary development, underlining the role of early reading instruction for sustained lexical learning (Verhoeven, 2011)

In a longitudinal study by Meredith L. Rowe, Stephen W. Raudenbush, and Susan Goldin-Meadow, the authors of the article “The Pace of Vocabulary Growth Helps Predict Later Vocabulary Skill,” the authors examined how early vocabulary growth trajectories can predict vocabulary skills at the time of school entry. In the study, 62 children aged 14 to 54 months were observed to determine the effects of SES, parent input, and child gesture on vocabulary. The results showed that the rate and acceleration of vocabulary development at 30 months were the most important predictors of later vocabulary development, particularly for children from low-SES families. This study also emphasizes the significance of the emergence of early vocabulary as a predictor of school readiness and the potential of early interventions designed to promote vocabulary development to identify children at risk for language difficulties (Rowe et al., 2012).

## **3. Methodology**

### *3.1 Research Design*

The current research work uses a quantitative research approach to determine the role of morphological awareness in vocabulary development among junior high school learners learning English in Arab schools. The study employs descriptive statistics, correlation analysis, regression analysis, and t-test analysis to examine the relationship and difference in the vocabulary knowledge according to the perceived importance of morphological awareness.

### *3.2 Participants*

The participants were 20 English teachers from Arab junior high schools, their age ranges between 21–52, in addition they have different years of teaching experience, ranging between 2–25, they are 15 females and 5 males. These teachers completed a questionnaire aimed at capturing their views on the role of morphological awareness in teaching and learning vocabulary.

### *3.3 Data Collection*

The participants completed a structured questionnaire consisting of several questions related to different aspects of



morphological awareness and vocabulary instruction. Teachers completed questionnaires about the extent to which they incorporated MA into their instruction, how often they considered it important to do so, and how effective they felt these practices were in improving students' vocabularies. The following table shows the participants' responses to the questionnaire.

Table 1. Responses for the questions on morphological awareness

Challenge in Teaching Morphological Concepts	Feasibility of Integrating Morphological Awareness	Noticeable Difference in Vocabulary Acquisition	Effectiveness of Assessment Methods	Effectiveness of Instructional Methods	Belief in Larger Vocabulary with Morphological Awareness	Contribution to English Proficiency	Frequency of Teaching Morphological Rules	Incorporation of Morphological Instruction	Importance of Morphological Awareness
4	3	4	4	5	4	5	4	5	4
3	5	5	3	5	4	5	4	4	4
2	5	3	5	5	5	5	4	4	5
4	4	4	3	5	4	5	4	3	5
3	5	4	4	5	3	5	3	3	4
4	4	5	5	5	4	5	3	4	4
4	5	3	3	5	5	5	4	3	5
3	5	3	3	5	4	5	5	4	5
3	4	4	4	5	4	5	4	3	4
2	4	4	3	5	5	5	2	4	4
3	3	4	2	5	4	5	4	3	4
4	4	4	4	5	5	5	4	5	4
4	4	3	3	5	4	5	3	4	4
2	4	4	4	3	4	3	4	3	2
4	4	4	3	3	4	3	5	4	3
4	5	3	5	5	3	5	5	3	4
3	4	5	3	3	4	3	3	4	3
4	5	4	3	5	4	5	4	2	4
4	4	3	4	3	4	3	4	3	3
2	5	5	3	3	4	3	5	4	3

### 3.4 Data Analysis

#### 1) Descriptive Statistics

The participants' responses were analyzed to compute average ratings, standard deviations, minimum and maximum ratings. This provided an overview of the teachers' general perceptions regarding morphological awareness.

The average ratings ranged from 3.65 to 4.3, with standard deviations between 0.732 and 1.136, indicating a generally positive perception with some variability in responses.

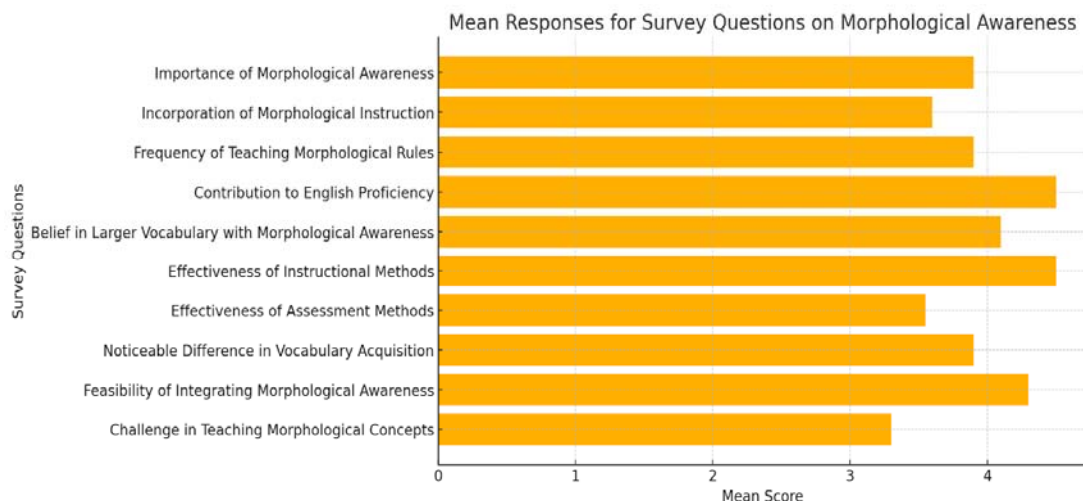


Figure 1. The relationships between various aspects of morphological awareness and vocabulary knowledge

2) Correlation Analysis

This analysis was conducted to examine the relationships between various aspects of morphological awareness and vocabulary knowledge. Strong positive correlations were found between the frequency of teaching morphological rules and the perceived contribution of morphological awareness to language proficiency. Significant correlations were also observed between the belief in the importance of morphological awareness and the effectiveness of instructional methods promoting it.

Table 2. Regression Analysis: the relationship between morphological awareness and vocabulary knowledge

Challenge in Teaching Morphological Concepts	Feasibility of Integrating Morphological Awareness	Noticeable Difference in Vocabulary Acquisition	Effectiveness of Assessment Methods	Effectiveness of Instructional Methods	Belief in Larger Vocabulary with Morphological Awareness	Contribution to English Proficiency	Frequency of Teaching Morphological Rules	Incorporation of Morphological Instruction	Importance of Morphological Awareness	
0.22	0.26	-0.39	0.01	0.83	0.27	0.83	-0.02	0.02	1	Importance of Morphological Awareness
-0.05	-0.28	0.21	0.12	0	0.35	0	-0.07	1	0.02	Incorporation of Morphological Instruction
0.13	0.26	-0.2	0.01	-0.23	-0.22	-0.23	1	-0.07	-0.02	Frequency of Teaching Morphological Rules
0.22	0.09	-0.25	0.11	1	0.11	1	-0.23	0	0.83	Contribution to English Proficiency
-0.19	-0.09	-0.11	-0.13	0.11	1	0.11	-0.22	0.35	0.27	Belief in Larger Vocabulary with Morphological Awareness
0.22	0.09	-0.25	0.11	1	0.11	1	-0.23	0	0.83	Effectiveness of Instructional Methods
0.06	0.16	-0.17	1	0.11	-0.13	0.11	0.01	0.12	0.01	Effectiveness of Assessment Methods
-0.22	-0.16	1	-0.17	-0.25	-0.11	-0.25	-0.2	0.21	-0.39	Noticeable Difference in Vocabulary Acquisition
-0.18	1	-0.16	0.16	0.09	-0.09	0.09	0.26	-0.28	0.26	Feasibility of Integrating Morphological Awareness
1	-0.18	-0.22	0.06	0.22	-0.19	0.22	0.13	-0.05	0.22	Challenge in Teaching Morphological Concepts

A regression analysis was performed to quantify the relationship between morphological awareness and vocabulary knowledge.

The model yielded an R-squared value of 0.920, indicating that 92% of the variability in vocabulary knowledge could be explained by the importance of morphological awareness.

The regression coefficient for morphological awareness was 0.8936 ( $p$ -value < 0.001), signifying a strong and statistically significant positive relationship.

#### 4. Findings and Discussion

The findings of this study highlight the critical role of morphological awareness in facilitating vocabulary acquisition among Arab junior high school students learning English. The positive relationship between teacher perceptions of morphological awareness and improved student vocabulary outcomes aligns with existing research in second language acquisition (Khan, 2024; Smith et al., 2021), underscoring the value of morphological instruction in fostering robust vocabulary development.

##### *Key Findings*

##### *1) Correlation Between Morphological Instruction and Language Proficiency*

A notable finding is the strong positive correlation between the frequency of teaching morphological rules and perceived improvements in student language proficiency. Teachers who integrate morphological instruction into their curriculum observe greater vocabulary gains among students. Morphological awareness—understanding the internal structure of words, including roots, prefixes, and suffixes—enables learners to deconstruct complex words into manageable components. This skill is particularly beneficial for Arab students, who often struggle with English vocabulary due to fundamental morphological differences between Arabic and English. Teaching students to identify and manipulate morphemes equips them with tools to infer meanings of unfamiliar words, thereby enhancing vocabulary knowledge and reading comprehension.

##### *2) Impact of Teacher Perceptions on Student Outcomes*

The study revealed that students taught by teachers who emphasize morphological awareness outperform their peers. This demonstrates the significant influence of teacher attitudes and instructional strategies on student success. Teachers who recognize the value of morphological instruction and apply it effectively foster better outcomes. This finding highlights the need for professional development programs that focus on equipping teachers with the skills and knowledge to integrate morphological awareness into their teaching practices. These findings are consistent with Sulistyawati and Nugroho (2021) findings

##### *3) Contextualized Morphological Learning*

Contextualized learning emerged as a vital aspect of effective morphological instruction. Leveraging morphological similarities between Arabic and English allows teachers to create more meaningful learning experiences. For instance, both languages employ affixes to modify word meanings, albeit differently. Drawing parallels between the morphological systems of the two languages facilitates linguistic transfer, enabling students to build on their L1 knowledge while reducing cognitive load. Such an approach fosters deeper engagement and a more accessible learning process.

##### *4) Impact on Reading Comprehension*

Morphological awareness significantly enhances reading comprehension. Students with higher morphological awareness can decode complex words more effectively, which improves their understanding of texts. This skill is particularly valuable for Arab junior high school students who frequently encounter unfamiliar vocabulary in their English reading materials. By enabling students to infer word meanings, morphological awareness facilitates smoother reading, which in turn supports vocabulary acquisition and increases overall reading engagement.

##### *5) Writing Proficiency and Morphological Awareness*

The study also found a strong relationship between morphological awareness and writing proficiency. This result is consistent with Obiki (2024) who concluded that morphological awareness among students promotes formation of words among the students, it facilitates correct pronunciation during reading comprehension. Students with a firm grasp of word structure demonstrate greater vocabulary diversity and more precise language use in their writing. Furthermore, these students are better equipped to apply morphological rules consistently, leading to improved spelling accuracy. Such advancements in writing skills have broader implications for academic success, as effective communication is essential across various disciplines.

## 5. Conclusion

The researcher drew the following conclusions from the findings of the study and theoretical propositions of the related literature

### 5.1 *The Critical Role of Morphological Instruction in Enhancing Language Proficiency*

The study underscores the positive correlation between explicit morphological instruction and language proficiency among Arab EFL students in Israel. Morphological awareness equips students with tools to analyze and infer the meanings of complex words, addressing the linguistic challenges posed by differences between Arabic and English. These findings highlight the necessity of integrating morphological instruction into EFL curricula to improve vocabulary acquisition and reading comprehension. Furthermore, teacher attitudes play a pivotal role, suggesting that targeted professional development is crucial to enable teachers to effectively implement such strategies.

#### 1) *Contextualized Learning as a Framework for Linguistic Transfer*

Contextualized morphological instruction emerged as a significant factor in fostering meaningful learning experiences. By leveraging similarities between Arabic and English morphological systems, such as the use of affixes, educators can promote linguistic transfer and reduce cognitive load for students. This approach not only bridges the gap between the learners' first language (L1) and the target language (L2) but also fosters deeper engagement, thereby making language acquisition more accessible and effective.

#### 2) *Enhanced Reading Comprehension Through Morphological Awareness*

Morphological awareness is shown to substantially improve reading comprehension. Students with advanced morphological skills can decode unfamiliar words with greater efficiency, facilitating smoother reading experiences. This skill is particularly critical for Arab junior high school students, who often encounter vocabulary-intensive texts in English. Improved reading comprehension enhances vocabulary retention and encourages active engagement with reading materials, thereby promoting overall language development.

#### 3) *Writing Proficiency and Morphological Competence*

The findings reveal a strong link between morphological awareness and writing proficiency. Students who develop a robust understanding of word structure demonstrate enhanced vocabulary diversity, precision, and spelling accuracy in their writing. This proficiency extends beyond language learning to impact academic success in other disciplines, underscoring the broader educational implications of integrating morphological instruction into EFL programs. These conclusions align with prior research (e.g., Obiki, 2024), emphasizing the foundational role of morphological awareness in fostering comprehensive language skills.

#### 4) *Professional Development for Teachers: A Key to Success*

The study highlights the critical influence of teacher perceptions and instructional strategies on student outcomes. Teachers who recognize and effectively implement morphological awareness strategies significantly enhance student performance. Professional development programs focusing on morphological instruction are therefore essential to equip educators with the necessary skills and knowledge, ensuring consistent and effective application across diverse classroom contexts.

In conclusion, the findings strongly advocate for the integration of morphological awareness into EFL teaching practices, supported by targeted professional development for teachers. This approach promises to address the unique challenges faced by Arab EFL students in Israel, fostering improvements in vocabulary acquisition, reading comprehension, and writing proficiency while promoting overall academic success.

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