



Universidad de Cuenca

Facultad de Filosofía, Letras y Ciencias de la Educación

Carrera de Pedagogía de los Idiomas Nacionales y Extranjeros

Metalinguistic Awareness in EFL Classrooms

Trabajo de titulación previo a la
obtención del título de Licenciado
en Pedagogía del Idioma Inglés


Autores:

Kevin David Ramón Armijos

Pamela Giselle Ríos Guzmán

Director:

Cynthia Soledad Hidalgo Camacho

ORCID:  0000-0002-2848-3687

Cuenca, Ecuador

2024-09-04

Resumen

Esta síntesis de investigación analiza los beneficios e inconvenientes de desarrollar la conciencia metalingüística en relación con las destrezas de lectura, expresión oral y adquisición de vocabulario en la enseñanza del inglés como lengua extranjera (EFL). Esta investigación exploratoria examinó 20 estudios empíricos realizados en entornos EFL y publicados en los últimos 15 años. Los resultados revelaron el complejo impacto del desarrollo de la conciencia metalingüística en la adquisición de habilidades lingüísticas de EFL, estando la naturaleza de este impacto sujeta a diversos factores, como el método de enseñanza empleado y la edad de los estudiantes. Se puso de manifiesto que la instrucción explícita y las técnicas de explicación metalingüística eran los métodos más eficaces para instruir a los alumnos sobre los diversos aspectos de la conciencia metalingüística y su utilización efectiva en los procesos de aprendizaje/enseñanza de lenguas. En la misma línea, el desarrollo de la conciencia metalingüística impulsó a los alumnos a aplicar la descodificación léxica para mejorar sus destrezas lectoras, a utilizar el conocimiento fonológico para incentivar la producción oral en inglés y a asociar unidades léxicas para ampliar su vocabulario.

Palabras clave del autor: conciencia fonológica, conciencia morfológica, conciencia ortográfica, competencias lingüísticas



El contenido de esta obra corresponde al derecho de expresión de los autores y no compromete el pensamiento institucional de la Universidad de Cuenca ni desata su responsabilidad frente a terceros. Los autores asumen la responsabilidad por la propiedad intelectual y los derechos de autor.

Repositorio Institucional: <https://dspace.ucuenca.edu.ec/>

Abstract

This research synthesis analyzes the benefits and drawbacks of developing metalinguistic awareness concerning reading skills, speaking skills, and vocabulary acquisition in teaching English as a foreign language (EFL). This exploratory research examined 20 empirical studies conducted in EFL environments and published within the last 15 years. The results revealed the complex impact of the development of metalinguistic awareness on the acquisition of EFL language skills, with the nature of this impact being subject to various factors such as the teaching method employed and the age of the students. It was evidenced that explicit instruction and metalinguistic explanation techniques were the most efficacious methods for instructing students on the various aspects of metalinguistic awareness and its effective utilization for language learning/teaching processes. Along the same line, the development of metalinguistic awareness prompted learners to apply lexical decoding to enhance their reading skills, to utilize phonological knowledge to encourage oral production in English, and to associate lexical units to expand their vocabulary.

Author Keywords: phonological awareness, morphological awareness, orthographic awareness, language skills



The content of this work corresponds to the right of expression of the authors and does not compromise the institutional thinking of the University of Cuenca, nor does it release its responsibility before third parties. The authors assume responsibility for the intellectual property and copyrights.

Institutional Repository: <https://dspace.ucuenca.edu.ec/>

Table of Contents

Introduction	11
Chapter I	12
Description of the Research	12
Background	12
Statement of the problem	13
Rationale	14
Research Questions	14
Objectives	15
General Objective	15
Specific Objectives	15
Chapter II	16
Theoretical Framework	16
Definitions	16
Metalinguistic Awareness	16
Types of Metalinguistic Awareness	16
Phonological Awareness	16
Orthographic Awareness	17
Morphological Awareness	17
Relationship Between the Types of Metalinguistic Awareness and the Development of EFL Reading, Speaking Skills, and the Acquisition of Vocabulary	18
Relationship Between Morphological Awareness and the Development of EFL Reading Skills	18
Relationship Between Phonological Awareness and the Development of EFL Speaking Skills	18
Relationship Between Orthographic Awareness and the and the Acquisition of EFL Vocabulary	18
Chapter III	20
Literature Review	20
Advantages and Disadvantages of the Use of Morphological Awareness on the Development of EFL Reading Skills	20
Strengths and Weaknesses of the Use of Phonological Awareness on the Development of EFL Speaking Skills	21

	5
Benefits and Drawbacks of the Use of Orthographic Awareness on EFL Vocabulary Acquisition.....	23
Chapter IV.....	25
Methodology	25
Chapter V.....	26
Analysis	26
Foci of Studies.....	26
Education Level of Participants of the Study of the Effects of Morphological Awareness on EFL Reading Skills, Phonological Awareness on EFL Speaking Skills, and Orthographic Awareness on EFL Vocabulary Acquisition.....	27
Effects of Morphological Awareness.....	29
Effects of Phonological Awareness.....	30
Effects of Orthographic Awareness.....	32
Chapter VI.....	33
Conclusions.....	33
Recommendations	36
References	37

List of Tables

Table 1: Foci of Studies.....	26
Table2: Education Level of Participants on the Studies of the Effects of Morphological... Awareness on EFL Reading Skills, Phonological Awareness on EFL Speaking Skills, and Orthographic Awareness on EFL Vocabulary Acquisition	27
Table 3 Table 3: Effects of Morphological Awareness on EFL Reading Skills.....	29
Table 4: Effects of Phonological Awareness on EFL Speaking Skills.....	31
Table 5 Effects of Orthographic Awareness on EFL Vocabulary Acquisition.....	32

Acknowledgements

I want to express my most sincere gratitude to my thesis director Mgtr. Cynthia Hidalgo for her expertise, knowledge, and patience during the development of our research synthesis. I also extend my eternal appreciation to Mgtr. Erin Cox and Mgtr. Verónica León for their wise insights and encouraging words. A special thanks to all the professors who have contributed to my professional training and motivated me to reach for the stars and to aspire for greatness. To my dear colleagues who have become my second family. I would also like to thank my thesis partner Kevin Ramón for all his hard work and utter help from beginning to end of this project. Thanks to my lovely parents who have been my biggest cheerleaders from day one, to my siblings for being the light of my life, to my best friend for her everlasting friendship, to my boyfriend for his wholehearted support and to my grandparents for their constant guidance.

Pamela Ríos

I want to express special gratitude to my thesis director Mgtr. Cynthia Hidalgo for having helped us throughout the development of this research synthesis. Her knowledge and guidance have been a crucial factor in finishing this research paper. I am also thankful to Mgtr. Erin Cox and Mgtr. Verónica León for their encouraging words and for sharing their knowledge with us for this research. I would like to thank all the professors who have guided, taught, and motivated me to become an English teacher. I am also thankful to my thesis partner Pamela Ríos for all her hard work and her friendship ever since we met the first day of university. Thanks a lot, to my parents who have been supporting me to complete this goal. They have always been there to help me overcome any obstacle.

Kevin Ramón

Dedication

I dedicate this thesis to my beloved family, especially to my mom and dad for believing in me, and my dear siblings who have filled my days with glee and wonder. Without your love and support, this project would not have been made possible.

Pamela Ríos

I would like to dedicate this thesis to my lovely family. To my mom, my dad, and my brothers for supporting me during hard moments, for all their unconditional support and their words of encouragement during this major. Without them, I could not have finished this project.

Kevin Ramón

Introduction

Metalinguistic awareness is a core element of teacher preparation and the development of pupils' communicative EFL abilities (Mousa & Yayha, 2022). Bae (2015) established that there are three types of metalinguistic awareness that should be analyzed: phonological awareness, morphological awareness, and orthographic awareness. Phonological awareness plays an essential in manipulating the sounds of a target language (Susanto & Nanda, 2023). Additionally, morphological awareness is a conscious process that helps dividing a word into its morphemes to decode its meaning (Bellomo, 2009). Finally, orthographic awareness allows learners to identify patterns in letter sequences of a language to enlarge their lexicon (Abu-Rabia & Siegel, 2002).

When learning a new language, it is required to explore the main features of the two languages involved, L1 and L2, according to Reder *et al.* (2013). Accordingly, this present study displays the effects of implementing metalinguistic awareness in the EFL classroom with a focus on the development of reading skills, speaking skills, and vocabulary acquisition. It reveals the essential role this cognitive process plays in language learning by providing insights into efficient methods and activities for teaching and learning English as a foreign language.

This research synthesis is organized into six chapters. The first chapter presents the background information, the statement of the problem, the rationale, the research questions, and the objectives of the research topic. The second chapter introduces the theoretical framework with the prominent concepts of the significant keywords of the research. In the third chapter, the literature provides an overview of empirical studies relevant to the topic of study. Chapter four encompasses the methodology which poses the criteria used for the selection of the studies. The fifth chapter covers the analysis of the studies to draw conclusions that answer the proposed research questions. Lastly, chapter six presents the conclusions and recommendations of the study.

Chapter I

Description of the Research

Background

The procedure of developing awareness of the use of language is known as metalinguistic awareness (Al-Ahdal & Almarshedi, 2022) which can be seen as the “ability to recognize, analyze, and manipulate language form” (Gombert, 1992; Koda, 2005; Tunmer *et al.*, 1988 as cited in Bae, 2015, p.5). Furthermore, Duncan *et al.* (2009) established that speakers could acquire and develop metalinguistic knowledge in further stages of language acquisition between the ages of five and six years old by concentrating on the structure and form of the language and constructing prior linguistic knowledge.

Several authors have determined that there are at least three types of metalinguistic awareness. Bae (2015) presented a study pertaining to the three types of metalinguistic awareness that should be analyzed: phonological awareness, morphological awareness, and orthographic awareness. Nonetheless, Nagy (2007) uncovered the emergence of another type of metalinguistic awareness called phonemic awareness. However, there is a limited amount of research concerning the last type of metalinguistic awareness.

It is crucial to determine the meaning of the different types of awareness to understand metalinguistic awareness holistically. Gillon (2004) and Schuele and Boudreau (2008) mentioned “phonological awareness is described as the ability to attend to, identify and utilize a range of sounds within the speech stream” (as cited in Hismanoglu, 2012, p. 639). Morphological awareness is a conscious process that allows children to consider and manipulate morphemes while having an awareness of the morphological structure of words (Carlisle, 2000). Moreover, Cassar and Treiman (1997) stated that orthographic awareness refers to a person’s understanding of word spelling regularities and acceptable letter progression within a word.

Metalinguistic awareness has been shown as an important cognitive process to take into account when teaching English as a Foreign Language (EFL). This can be evidenced in the experimental study conducted by Akbulut (2019) which revealed that EFL students who received morphological instruction improved in morphological awareness and reading comprehension. With similar findings, Jafari and Rad (2016) discovered that phonological and grammatical awareness played a key role in the reading performance of EFL learners. In the same vein, Peñuela (2018) found out that

the use of metalinguistic awareness could help learners modify their pronunciation in order to be better understood by native speakers.

Bae (2015) pointed out the importance of metalinguistic awareness in EFL classrooms by stating that several empirical studies have supported the idea of metalinguistic awareness being a fundamental factor in the development of learners' reading and writing skills in the English as a Second Language (ESL) and EFL classrooms. In addition, research has manifested the key role metalinguistic awareness and its types play in vocabulary acquisition (Aljafen, 2022; Altman, *et al.*, 2018; Bae, 2015) and their help in improving reading comprehension skills among EFL learners (Almarshedi, 2022; Amirjalili & Jabbari, 2018; Jafari & Rad, 2016).

Statement of the problem

Developing metalinguistic awareness is considered a pivotal process in EFL classrooms. According to Mousa and Yahya (2022), "In a learning situation, learners will undoubtedly benefit from being made aware of the unpredictable nature of language by being made aware of the possibility that words and phrases may have several interpretations" (p.8). In regards to vocabulary acquisition, Altman *et al.* (2018) discovered that lexical metalinguistic awareness affected receptive and expressive vocabulary size. Additionally, Mousa and Yahya (2022) have declared that metalinguistic awareness helps students improve their communicative oral and writing skills.

On the matter of oral productive skills, Sastrawati *et al.* (2023) highlighted that phonological knowledge is essential when talking about speaking skills because it is interconnected to the production and the particular features of sound systems of each language. According to Dong *et al.* (2020), metalinguistic awareness acts as an essential cognitive process that predicts reading comprehension performance through decoding and word recognition.

Although there is existing research that informs us about the role of metalinguistic awareness and its types concerning a specific language skill, there is not enough research results that show compiled effects of morphological awareness towards reading, phonological awareness regarding speaking, and orthographic awareness concerning vocabulary acquisition together; hereby one of the purposes of the present study. Moreover, there are several studies that focus on the effects of metalinguistic awareness when EFL teaching in Indonesia, Iran, and Saudi Arabia (Almarshedi, 2022; Amirjalili & Jabbari, 2018; Sulistyawati *et al.*, 2021). Nonetheless, there are few studies concerning the topic mentioned above in the Latin-American context (Méndez *et al.*,

2015) and even a more limited amount of research has been conducted in Ecuador (Chireac *et al.*, 2019), which reveals a need for the analysis of the effects of metalinguistic awareness to open up the conversation in the Ecuadorian context and motivate further research.

Rationale

In the EFL educational context, students' vocabulary acquisition, speaking skills, and reading skills development can be fostered through a great variety of cognitive processes like developing metalinguistic awareness and its types. Li and Chen (2016) declared that "training in L2 morphological and phonological awareness was beneficial to help improve L2 English word reading in the view of the challenges resulting from cross-linguistic variations in orthography and processing style" (p.95). On a similar note, Hidayatullah and Haerazi (2021) have expressed that phonological awareness is fundamental when communicating in classes because it helps students to articulate in a precise manner.

The reason behind the use of metalinguistic awareness in EFL classrooms lies on the multiple benefits that this cognitive process could offer for language learning. Almarshedi (2022) conveyed that metalinguistic awareness helped Arabian EFL university students improve their reading comprehension skills. This evidence is corroborated by a study done by Zhao *et al.* (2017) which concluded that morphological awareness contributed in a positive way to English word spelling.

Several studies of eastern countries concerning the effects of metalinguistic awareness on a specific language skill or sub-skill can be found (Akbulut, 2019; Aljafen, 2022; Almarshedi, 2022; Bae, 2015). Nevertheless, a research synthesis that focuses on the role of morphological awareness, orthographic awareness, and phonological awareness towards the development of speaking skills, reading skills, and the acquisition of vocabulary in the Ecuadorian EFL classroom has not been found in published literature. Therefore, this research synthesis aims to display the effects of using metalinguistic awareness in the EFL classroom in the way of incorporating previously reported findings and data to fill in gaps related to the topic presented. It is essential to understand the positive and negative effects of this cognitive process within the acquisition of the language skills and subskills mentioned above, to have a broad view of the role that metalinguistic awareness plays when teaching EFL as a foreign language.

Research Questions

After prior research, the following questions have emerged:

What are the reported effects of morphological awareness on the development of EFL reading skills?

What are the reported effects of phonological awareness regarding the development of EFL speaking skills?

What are the reported effects of orthographic awareness on EFL vocabulary acquisition?

Objectives

General Objective

To analyze the reported effects of the three types of metalinguistic awareness on the development of EFL reading skills, speaking skills, and vocabulary acquisition.

Specific Objectives

To examine the advantages and disadvantages of implementing morphological awareness on the development of EFL reading skills.

To evaluate the advantages and disadvantages of integrating phonological awareness on the development of EFL speaking skills.

To determine the advantages and disadvantages of employing orthographic awareness regarding EFL vocabulary acquisition.

Chapter II

Theoretical Framework

It is necessary to review essential concepts and definitions that will offer a supporting background to the research, in order to have a deeper understanding of the topic. Information concerning metalinguistic awareness such as the types, how it influences the development of EFL reading skills, speaking skills, and the acquisition of vocabulary is presented in this chapter.

Definitions

Metalinguistic Awareness

Many studies have supported the positive effects of using metalinguistic awareness in EFL classrooms (Tellier & Roehr-Brackin, 2013; Al-Tamimi, 2016). Tunmer *et al.* (1988) defined metalinguistic awareness as an ability to “reflect on and manipulate the structural features of spoken language” (p.136). Additionally, when learning EFL, learners should master this ability due to its multiple benefits in particular EFL skills, which will be discussed throughout this section.

Types of Metalinguistic Awareness

There are different types of metalinguistic awareness that are defined according to the target linguistic units that are processed (Bae, 2015). In this study, three types of metalinguistic awareness will be described, which are phonological awareness, morphological awareness, and orthographic awareness.

Phonological Awareness

Several authors have given various definitions of phonological awareness. Bae (2015) determined phonological awareness as the conscious knowledge of the phonological elements of the spoken language. Additionally, Schuele and Boudreau (2008) have defined it as the capacity to attend to and identify the general sound structure of a target language. For the purpose of this study, concept provided by Susanto and Nanda (2023) will be taken into account. It states that “Phonological awareness is the ability to understand and manipulate the sounds of a particular language” (p.433).

Certain factors must be considered when talking about phonological awareness. According to Schuele and Boudreau (2008), this type of awareness involves only spoken stimuli and not print. Thus, an infant that shows phonological awareness possesses the capacity to analyze the sound structure of the oral language in the way

of analyzing, evaluating, or manipulating sounds orally. In this sense, phonological awareness differs from phonics, as the latter implies the use of print symbols that represent the sounds of the target language.

The importance of phonological awareness stems from the help it provides to students in order “to understand the structure of sounds in the language and develop the ability to speak, listen, read, and write better” (Susanto & Nanda, 2023, p.433). Furthermore, Fajar *et al.* (2023) emphasized “In use, phonological awareness becomes a tool for EFL students to absorb the words they hear and at the same time rephrase them with proper pronunciation” (p.103).

Orthographic Awareness

Orthographic awareness is defined by Cassar and Treiman (1997) as the knowledge of possible letter patterns and the positions of certain graphemes in the target language. In the same vein, Abu-Rabia and Siegel (2002) claimed that this type of awareness conveys an ability that infants possess, which allows them to identify common visual patterns such as possible letter sequences of a language.

EFL students have shown improvements in certain skills due to the help of orthographic awareness. According to Kim *et al.* (2013), it is pivotal for word reading and spelling since both imply knowledge and representation of letters and letter patterns. The assessment of orthographic awareness can be done through performance tasks, as Berninger *et al.* (2010) remarked in their study “an individual is asked to remember a briefly displayed written word and then decide if it matched another word exactly or contains a designated letter or letters” (p.142).

Morphological Awareness

Morphological awareness has a profound meaning according to several authors. Bellomo (2009) defined morphological awareness as a conscious and analytical process of dividing a complete word into its existing morphemes (word meaning parts). In the same vein, Badawi (2019) determined morphological awareness as an ability to understand the essential morphological concepts to create and examine English words using different morphological skills. For the purpose of this research, the definition provided by Carlisle will be followed (2000) who stated that “morphological awareness reflects a learner’s ability to identify and manipulate the intramural structure of morphemes, the smallest meaningful parts in a language” (p.170).

Relationship Between the Types of Metalinguistic Awareness and the Development of EFL Reading, Speaking Skills, and the Acquisition of Vocabulary

It is necessary to foster metalinguistic awareness as it helps EFL learners enhance and have better control over their oral and writing communication abilities (Mousa & Yahya, 2022). Therefore, it is fundamental to analyze the type of association these linguistic elements share.

Relationship Between Morphological Awareness and the Development of EFL Reading Skills

Morphological awareness has helped to improve learners' reading comprehension and vocabulary. Carlisle (2010) stated that "Morphological awareness has been found to contribute to school-age students' performance reading and spelling words or pseudowords in English" (p.465).

Similarly, Sandra (1994) suggested, "morphology could be a powerful device for facilitating the acquisition of polymorphemic vocabulary items and improving the retention of such items" (p. 261). Moreover, Kieffer and Lesaux (2008) recently showed that knowledge of derivational morphology makes a unique contribution to reading comprehension because morphological awareness tasks contribute to English reading comprehension among upper elementary Spanish-speaking English language learners.

Relationship Between Phonological Awareness and the Development of EFL Speaking Skills

Speaking skills are abilities that require students to produce language. It is related to communicative performance dealing with phonetics, fluency, accuracy, pronunciation, grammatical competence, intonation, and vocabulary mastery. According to Hidayatullah (2021), "students' phonology knowledge is crucial in understanding speakers' utterances in speaking activities. Therefore, students' phonology awareness in speaking classes determines whether the students are successful or not in having speaking skills" (p.93). As a result, the development of L2 phonological awareness is an important factor to take into consideration when developing speaking skills.

Relationship Between Orthographic Awareness and the Acquisition of EFL Vocabulary

Vocabulary acquisition is directly linked with the development of the four EFL skills: listening, reading, writing, and speaking (Alhazmi & Milton, 2015). This is because learners require a well-established lexicon as a basis to start enhancing the macro skills of EFL. Therefore, by expanding their vocabulary, they will improve greatly with their overall language proficiency. Alhazmi and Milton (2015) pointed out that “If a speaker can neither read nor write, and there are millions of such people, then the orthographic side of the lexicon will be absent” (p.27). According to Kim (2019), orthographic awareness plays a huge role when acquiring vocabulary. This type of metalinguistic awareness and phonological awareness have been considered the two most important cognitive processes regarding L1 and L2 reading and writing skills.

Chapter III

Literature Review

When learning a language, metalinguistic awareness fosters cognitive skills to consciously analyze and study the language with the aim of facilitating the learning process. Hence, it is of the utmost importance to provide a background analysis of the research on the use of metalinguistic awareness in the context of EFL classrooms. Therefore, this chapter is divided into three parts: advantages and disadvantages of the use of morphological awareness on the development of EFL reading skills, of the use of phonological awareness on the development of EFL speaking skills, and of the use of orthographic awareness on the EFL acquisition of vocabulary.

Advantages and Disadvantages of the Use of Morphological Awareness on the Development of EFL Reading Skills

Reading comprehension shares a relationship with morphological awareness in which the expansion of vocabulary holds a central role (Nagy *et al.*, 2006 as cited in Akbulut, 2019). Kern (1989) asserts that “unlike native speakers, second language learners are less likely to acquire word recognition automatically; hence, they have to give conscious attention to morphology” (as cited in Ghasemi & Vaez-Dalili, 2019, p.624).

Researchers such as Tabatabaei and Yakhabi have discovered in their studies that awareness of morphological knowledge involving word structure and morphemes has led to the facilitation of learners reading complex words, morphologically speaking, by examining them and figuring out their meanings. Tabatabaei and Yakhabi (2011) carried out an investigation in which the instruments involved the Nelson Test, Nation's Vocabulary Level Test (VLT), and Morphological Awareness Test; the participants were Iranian high school students. The findings revealed the need for explicit instruction of morphology from the teacher so students can apply it when new vocabulary words arise.

Some authors explored this topic deeper and found a certain type of morphological awareness, known as derivational morphology awareness, which has left a footprint in EFL reading comprehension. In their paper, Zhang and Koda (2013) discovered that the consciousness of suffixes, derivational structures, and morphemes could assist learners with sentence parsing, leading to the development of reading comprehension. Along the same line, Ghasemi and Vaez-Dalili (2019) found that teachers should raise

students' awareness about less common affixes so they can be able to comprehend a great variety of readings of different levels of difficulty. Furthermore, Amirjalili and Jabbari (2018) uncovered in their research that the learners who underwent morphological instruction performed better when analyzing derived words than those who were in the control group.

The results from the study by Badawi (2019) discovered that explicit instruction in prefixes and suffixes improved students' morphological knowledge, which led to better reading comprehension skills. Jiang and Kuo (2019) conducted their longitudinal study with 523 college freshmen in Taiwan that were divided into three groups based on their English scores on one of their two National Entrance College Exams. The participants received vocabulary, morphological awareness, and morphosyntactic instruction through the course of an academic year. The results showed that the participants did not improve in the development of low- and high- frequency words. Nonetheless, they did show major improvements in morphologically complex words during the period of the instruction. Thus, it was concluded that explicit teaching of morphological structures to adult EFL students would help them become independent learners of English vocabulary.

On the other hand, Li and Chen (2016) carried out an experimental study in which 60 Taiwanese EFL children were divided into three groups. The results indicated that the phonological and morphological training program helped the students obtain higher scores in their posttest of L2 word reading than those who received regular instruction, regardless of word type and word structure. The morphological training program helped learners score higher in their posttest L2 word reading, meaning that the difference was not as significant as that of the phonological training program. Despite the controversy of the effects of this type of metalinguistic awareness, Al-Haydan (2020) found that during the processes of reading and spelling, the explicit knowledge of morphological structures exerted an impact on the students' performances that belonged to the experimental group, as opposed to those who were part of the control group.

Advantages and Disadvantages of the Use of Phonological Awareness on the Development of Speaking Skills

It has been demonstrated in several research studies that there is a notable correlation between phonological awareness and speaking skills. (Bryant *et al.*, 1990; Caravolas *et al.*, 2001; Silva & Alves-Martins, 2002; Gillon, 2004 as cited in Sun *et al.*, 2013).

Wardana *et al.* (2022) have concluded in their research that phonological awareness helps to improve students' speech accuracy when pronouncing words. Furthermore, this type of metalinguistic awareness helped to motivate learners to be more confident when they have a conversation; as a result, after using phonological awareness, researchers have seen positive outcomes in EFL classrooms. With similar results, Hentasmaka *et al.* (2022) conducted a study in which they analyzed the effects of embedding phonological awareness training in adults learning English as a foreign language. This research included 63 participants, and the results showed that after applying phonological awareness, EFL learners' skills such as rhyming, pronunciation, and others were enhanced.

Authors have also found the strengths of the use of phonological awareness in an EFL class when developing speaking skills. Nushi Kochaksaraie and Makiabadi (2018) carried out a study in which they analyzed how phonological awareness may refine learners' elocution and even produce a higher comprehensibility of L2 learners. Some tasks were taken in order to elicit students' phonological awareness (rhyming, alliteration, blending, and segmenting). After performing these tasks, researchers showed that phonological awareness improved learners' pronunciation because they could analyze and recognize different sounds (phonemes) and patterns existing in the English language. Furthermore, they showed that by recognizing particular sounds and patterns, students possess higher comprehensibility because learners tend to pronounce words as native speakers, provoking a significant improvement. In addition, Ansar (2019) scrutinized how phonological awareness can encourage students at the moment of conversing. In this study, some activities that involve phonological awareness (syllable deletion and phoneme deletion) were applied to master learners' pronunciation, fluency, and comprehension. After implementing these activities, it could be observed how participation and enthusiasm increased in pupils when talking.

Researchers such as Akca and Atmaca and Al Tamimi have conveyed significant results on why it is important that learners know how phonological awareness polishes their articulation. Akca and Atmaca (2022) inquired how they might enhance the pronunciation of young learners. Some phonological tests (rhyming discrimination, rhyming production, sentence segmentation, etc.) were applied to participants to check if there were any significant changes on the learners' pronunciation. After running these tests, researchers concluded that these types of activities helped students develop a better pronunciation. In the same line, Al Tamimi (2016) showed the relevance of implementing phonological awareness in EFL classrooms, as learners are able to

speak clearly and correctly in a specific context given by teachers. Furthermore, Hidayatullah (2021) pointed out that phonological awareness activities that covered phonetics, fluency, accuracy, pronunciation, grammatical competence, and intonation matters increased the motivation of learners when speaking, and phonological awareness led to a better understanding of utterances in English.

However, Alhumsia and Awwad (2020) wanted to analyze the EFL teachers' perception of lecturers at a primary stage. They concluded that even when teachers showed a full knowledge of PA, they kept showing a misunderstanding of the concepts and phonics. Due to this misinterpretation of definitions, EFL teachers could not teach the theoretical foundations in an effective way.

Advantages and Disadvantages of the Use of Orthographic Awareness on EFL Vocabulary Acquisition

Orthographic awareness has been proven to help with vocabulary acquisition when learning English as a foreign language. Zhao *et al.* (2017) conducted a research study in which the participants were 339 eighth-grade Chinese students who were learning English as a foreign language. Various tests, centered on reading, were applied with a reading focus in order to determine if there was an improvement in the students' orthography. The results showed that students who used to learn reading or spelling try to associate the lexical units from a word with a specific word that they already stored in memory. Therefore, learners can have a better understanding because they tend to group words with similar meaning enhancing and storing new vocabulary in their memory. As a result, this type of awareness helped these students with English spelling and vocabulary acquisition.

With similar results, Kim (2019) carried out a research synthesis in which the author analyzed how orthography expands the vocabulary of Korean EFL students. Some orthographic and phonological tests (including 100 non-word items) demonstrated why orthographic awareness is an important cognitive process for a better performance on L1 and L2 reading. The results showed that after applying those tests, orthographic awareness contributed favorably in enlarging vocabulary and enhancing reading comprehension. Additionally, Alhazmi and Milton (2015) concluded that orthographic awareness helped learners recognize more English words when reading, and students were capable of having a better understanding of a great variety of texts. In addition, Krepel *et al.* (2021) wanted to analyze if orthographic awareness affected students' vocabulary when reading. After all the activities that were used to measure vocabulary,

they came to the conclusion that this type of metalinguistic awareness guided learners to predict irregular words since they are exposed to a myriad of unfamiliar words in readings.

Chapter IV

Methodology

The approach chosen to carry out this study was a research synthesis since it helps readers to be better informed of current findings and supports the future works of educational stakeholders (Weng *et al.*, 2019). To obtain data about the effects of using metalinguistic awareness in EFL classrooms, a meticulous analysis of published literature was carried out. The quest for articles that contained theoretical foundations and data that has helped develop this study was conducted using relevant databases such as Scholar Google, Redalyc, Scopus, and ScienceDirect. In addition, the keywords that were used in the research process were the following: Metalinguistic Awareness, Effects of Morphological Awareness, Advantages and Disadvantages of Phonological Awareness, Role of Orthographic Awareness, and EFL classroom.

The proposed criteria to select the articles that were analyzed for this research was as follows. First, studies and academic articles considered were those in which the effects of metalinguistic awareness and its types in the EFL classroom were evidenced. Second, the articles were empirical in the way that they presented a previous investigation that has been carried out on the chosen topic including participants and methodology, in order to obtain exact findings that support this study. Third, the empirical studies included EFL students, which was the population of focus. Fourth, studies published since the year 2009 were taken into account since these contain current findings that helped develop the present research. Fifth, all the studies were written in English, since the focal point of this research synthesis lies on the learning of English as a foreign language. Finally, the students' level of English was not taken into account, as to have a broader view of the topic.

The potential academic journals that were reviewed for the research process were the following: International Journal of Contemporary Educational Research, Journal of Language and Linguistic Studies, Linguistics and Culture Review, Primary English Education, Journal of Language Teaching and Research, which provided reliable information that contributed to this research synthesis. Lastly, an analysis procedure was executed to focus on categorizing the reported effects of metalinguistic awareness in EFL classrooms according to improvements and drawbacks of students' development in their language skills.

Chapter V

Analysis

This chapter aims to provide comprehensive insights that address the research questions and accomplish the objectives of this research synthesis through the analysis of 20 studies. For the presentation of the results, these studies have been allocated into different categories: Effects of morphological awareness on EFL reading skills, Effects of phonological awareness on EFL speaking skills, Effects of orthographic awareness on EFL vocabulary acquisition. In addition, Table 1 presents the analyzed studies by providing an outline of the main topics and categories found in each research paper to guide the readers. On the other hand, Table 2 shows the different educational levels to which the selected studies belong.

Foci of Studies

This category showcases the twenty studies that were analyzed according to the focal point of this research synthesis.

Table 1

Foci of studies

Focal Point	Author/Year	Percentages
Effects of Morphological Awareness on EFL Reading Skills	Al-Haydan (2020); Amirjalili & Jabbari (2018); Badawi (2019); Ghasemi & Vaez-Dalili (2019); Jiang & Kuo (2019); Li & Chen (2016); Tabatabaei & Yakhabi (2011); Zhang & Koda (2013).	40% of the 20 analyzed studies
Effects of Phonological Awareness on EFL Speaking Skills	Akca & Atmaca (2022); Alhumsia & Awwad (2020); Al Tamimi (2016); Ansar (2019); Hentasmaka <i>et al.</i> (2022); Nushi Kochaksaraie & Makiabadi (2018); Hidayatulla & Haerazi (2021); Wardana <i>et al.</i> (2022).	40% of the 20 analyzed studies
Effects of Orthographic Awareness on EFL Vocabulary Acquisition	Alhazmi & Milton (2015); Kim (2019); Krepel <i>et al.</i> (2021); Zhao <i>et al.</i> (2017).	20% of the 20 analyzed studies

Table I is the starting point of this research synthesis and it introduces the analyzed studies based on their focus. It is simple to observe that the categories that contain the most studies

are the effects of morphological awareness on EFL reading skills and the effects of phonological awareness on EFL speaking skills. In contrast, studies centered on the effects of orthographic awareness on EFL vocabulary acquisition are not abundant in number as the previous categories.

Education Level of Participants of the Studies of the Effects of Morphological Awareness on EFL Reading Skills, Phonological Awareness on EFL Speaking Skills, and Orthographic Awareness on EFL Vocabulary Acquisition

Table 2

Education Level of Participants on the Studies of the Effects of Morphological Awareness on EFL Reading Skills, Phonological Awareness on EFL Speaking Skills, and Orthographic Awareness on EFL Vocabulary Acquisition

Studies of the Effects on Morphological Awareness on EFL Reading Skills				
Author/Year	Education Level			
	Elementary School	High School	University	Adults
Li & Chen (2016); Zhang & Koda (2013);	X			
Al-Haydan (2020); Badawi (2019); Tabatabaei & Yakhabi (2011);		X		
Amirjalili & Jabbari (2018); Ghasemi & Vaez-Dalili (2019); Jiang & Kuo (2019)			X	
Studies of the Effects on Phonological Awareness on EFL Speaking Skills				

Author/Year	Education Level			
	Elementary School	High School	University	Adults
Akca & Atmaca (2022);		X		
Alhumsia & Awwad (2020); Al Tamimi (2016); Ansar (2019); Hentasmaka <i>et al.</i> (2022);	X			
Hidayatulla & Haerazi (2021); Nushi Kochaksaraie & Makiabadi (2018); Wardana <i>et al.</i> (2022)			X	

Studies of the Effects on Orthographic Awareness on EFL Vocabulary Acquisition

Author/Year	Education Level			
	Elementary School	High School	University	Adults
Alhazmi & Milton (2015);			X	
Kim (2019); Krepel <i>et al.</i> (2021); Zhao <i>et al.</i> (2017)		X		

Table 2 presents the education level of the participants that were involved in the analyzed studies concerning the effects of morphological awareness on EFL reading skills, phonological awareness on EFL speaking skills, and orthographic awareness regarding EFL vocabulary acquisition. The education levels of the participants range from elementary school to university. It is plain to see that the majority of studies associated with morphological awareness were conducted in high schools and colleges, which suggests that this is possible as students from those educational institutions have developed L1 cognitive skills and cognitive maturity, which carves the path for the development of L2 metalinguistic awareness. On the other hand, one study on the subject of phonological awareness was carried out at a secondary school. On the topic of orthographic awareness, the vast number of studies were conducted in middle schools. However, Zhao *et al.* (2017) carried out their research in a middle school and an elementary school in order to compare and contrast findings. Overall, this category provides an insight on the variety of education levels to which the outcomes of the use of the different types of metalinguistic awareness were analyzed. Evidently, the majority of studies were conducted in secondary schools and universities, leading to the conclusion that EFL students from those educational institutions have acquired metalinguistic awareness and knowledge in their native tongue that can be applied in the development of their L2 cognitive skills.

Effects of Morphological Awareness

This category is in itself divided into two categories regarding advantages and disadvantages to provide a holistic overview of the common effects of this type of metalinguistic awareness.

Table 3

Effects of Morphological Awareness on EFL Reading Skills

Author, year	Advantages					Disadvantages		
	Inflectional and derivational analysis of words	Facilitation of reading complex words	Inferences of meanings of unknown words	Knowledge of different morphemes	Lexical decoding	Sentence parsing	Underdeveloped L2 reading	Deficient capacity to analyze and infer complex words
Al-Haydan (2020)			X	X	X			
Amirjalili & Jabbari (2018)	X		X	X	X			
Badawi (2019)	X			X				
Ghasemi & Vaez-Dalili (2019)				X			X	

Jiang & Kuo (2019)		X	X		X
Li & Chen (2016)					X
Tabatabaei & Yakhabi (2011)		X	X		
Zhang & Koda (2013)	X		X		X

Table 3 indicates the benefits and drawbacks of morphological awareness on EFL reading skills reported in the analyzed studies, the most frequent ones being knowledge of morphemes, inferences of meanings of unknown words, and inflectional and derivational analysis of words. Zhang and Koda (2013) declared that EFL students could deduce meanings of unfamiliar derived words through the means of morphological analysis, which helped learners enormously since derived words often involve phonological and orthographic alterations leading to struggles when reading and writing. Along the same line, Badawi (2019) and Ghasemi and Vaez-Dalili (2019) conveyed through their research that the explicit instruction of morphological awareness including the knowledge of prefixes, suffixes, and affixes offered aid to EFL students in the context of the comprehension of texts of different forms and diverse levels of difficulty. Therefore, learners gave a better performance while analyzing derived and inflected words. However, Ghasemi and Vaez-Dalili (2019) shed light on the effects of three methods of morphological awareness (Textual Enhancement, Metalinguistic Explanation, and Morpheme Recognition Task) where the metalinguistic explanation proved to be more effective as it is an explicit method that provided information about common parts of a morpheme.

In the studies of Amirjalili and Jabbari (2018) and Al-Haydan (2020) about the impact of morphological awareness with regards to EFL learners' reading comprehension, the authors concluded that by decoding words, students are able to find the meanings of words while increasing their lexical quality. In contrast, Jiang and Kuo (2019) revealed in their study that EFL learners had not developed a full ability to analyze and unlock the meanings of morphologically complex words despite their efforts during the morphological awareness training programs. Nevertheless, the majority of authors arrived at a conclusion similar to the one established by Tabatabaei and Yakhabi (2011), EFL students' reading skills were enhanced and vocabulary was increased by working out the meaning of morphologically complex words.

Effects of Phonological Awareness

This category is classified concerning strengths and weaknesses in order to present an outlook of the recurrent effects of phonological awareness found in published works related to the topic.

Table 4

Effects of Phonological Awareness on EFL Speaking Skills

Author, year	Advantages						Disadvantages	
	Improved rhyming productio n	Increase d motivati onto speak	Higher speech compre hensibili ty	Refined fluency	Accurate articulati onof speech sounds	Clearer pronunciation	Misunderstanding of the concepts of phonological awareness	Slight improvement with students' pronunciation
Akca & Atmaca (2022)	X				X	X		
Alhumsia & Awwad (2020)							X	
Al Tamimi (2016)	X				X	X		X
Ansar (2019)		X						
Hentasmak a et al. (2022)	X				X			
Hidayatulla & Haerazi (2021)		X						
Nushi Kochaksarai e & Makiabadi (2018)	X		X		X			
Wardana et al. (2022)	X	X			X	X		

Table 4 indicates the main effects of phonological awareness on EFL speaking skills reported in the previous studies that were analyzed. Wardana *et al.* (2022) showed that after learning about phoneme articulation, word stress, and sentence intonation, students tend to improve their pronunciation and feel more confident speaking in English. Similarly, Akca and Atmaca (2022) discovered another advantage after implementing phonological awareness (rhyming, production); learners were able to speak more clearly than before using it.

On the other hand, Alhumsia and Awwad (2020) analyzed that most English teachers do not have enough knowledge about phonological awareness, so they cannot pretend to teach something that they do not know. As a result, there is a misunderstanding about certain concepts that involve phonological awareness. In addition, Al Tamimi (2016) showed that

when implementing phonological awareness, there was only a slight improvement in students' pronunciation.

Effects of Orthographic Awareness

Table 5

Effects of Orthographic Awareness on EFL Vocabulary Acquisition

Author, year		Advantages				Disadvantages
	Association of lexical Units	Clustering of words with similar meanings	Vocabulary accuracy	Facilitation of inferencing the meaning of irregular words	Increased vocabulary size	Slight improvement regarding definitions of words
Alhazmi & Milton (2015)						X
Kim (2019)					X	
Krepel <i>et al.</i> (2021)			X	X		X
Zhao <i>et al.</i> (2017)	X	X				

To examine the effects of orthographic awareness, Table 5 is divided into two categories related to the benefits and drawbacks of this type of metalinguistic awareness. According to Krepel *et al.* (2021), orthographic knowledge proved to be beneficial as it helped EFL learners develop a wider range of irregular words rather than regular words in their vocabulary, which led to a better performance in reading accuracy and word reading fluency. Moreover, Zhao *et al.* (2017) alluded to the fact that EFL students make associations with lexical units from a specific word that is already stored in their memory. Afterwards, they tend to group words with similar meaning in order to have a better understanding of their definitions.

On the contrary, Alhazmi and Milton (2015) highlighted that EFL Arabic speakers regularly made use of phonological decoding *in lieu* of orthographic awareness seeing that they already acquired a specific phonological lexicon that leads to reading difficulties due to their native language. As opposed to EFL European and Asian learners that can understand a word out of sight, Arabic speakers encounter troubles as they work out the meaning of a word by sound since their L1 is phonologically confusing their English reading and vocabulary acquisition. However, Kim (2019) concluded that the participants in the study who were Korean EFL learners in middle school had a superior vocabulary knowledge in an orthographic mode whereas their phonological vocabulary knowledge was decreased.

Chapter VI

Conclusions

This research synthesis analyzes the data acquired from published studies dealing with the effects of morphological awareness, phonological awareness and orthographic awareness on EFL reading, speaking, and vocabulary acquisition. 20 studies were examined and classified in categories according to the benefits and drawbacks found in the application of each type of metalinguistic awareness on particular EFL skills, as detailed above.

For the purpose of this study, three research questions have arisen. Regarding the first question, it was found that morphological awareness contributed positively to the development of EFL students' reading skills. Evidence that supports this claim revealed that morphological awareness enhanced the identification of morphemes, inflectional and derivational analysis of words, and inferences of the meanings of new words. In turn, Tabatabaei and Yakhabi (2011) established morphological awareness as a gateway to improve reading comprehension skills since EFL students analyzed unknown words through their knowledge of morphemes, which led to the process of inferring the correct meaning of each new word. Nevertheless, Jiang and Kuo (2019) argued that EFL learners do not attain the capacity of deducing the definition of unknown complex words in spite of their efforts. This finding can be debated as Amirjalili and Jabbari (2018) and Al-Haydan (2020) discovered that students are competent enough to expand their lexical quantity and quality through the means of decoding words with the objective of comprehending new words that lead to the understanding of a peculiar reading. Despite the debated statements, it was seen in the majority of analyzed studies that there was a favorable impact on reading skills by implementing morphological awareness in EFL classes with university learners aged between 18 and 24. For this reason, it is worth applying the awareness of this cognitive process to enhance the development of language skills.

Apropos of the second research question, the analyzed studies displayed that phonological awareness helped increase EFL learners' motivation when speaking by improving their rhyming production, and providing accurate articulation of speech sounds. Akca and Atmaca (2022) highlighted that by applying some phonological tests, learners tend to improve their pronunciation since they know the correct articulation of English sounds. In addition, Al Tamimi (2016) established that by implementing phonological awareness in EFL classrooms, students are able to articulate clearer because it enhanced their rhyming production; therefore, resulting in better pronunciation when speaking. On the contrary, Alhumsia and Awwad (2020) stated that although teachers possess a certain amount of essential knowledge about phonological awareness, there is a misunderstanding of the fundamental concepts. As a result, students

showed a scarce improvement in their pronunciation when this type of metalinguistic awareness was implemented. However, Nushi Kochaksaraie and Makiabadi (2018) concluded that tasks that measured EFL learners' phonological awareness in the areas of rhyming, alliteration, segmenting, blending, and manipulation of phonemes produced a higher comprehensibility of L2 learners' production. Moreover, when applying these types of tasks that elicit phonological awareness and knowledge, learners acquire a better pronunciation since they can analyze and recognize different sounds and existing English patterns. Therefore, the present research synthesis reveals supporting evidence resulting from previous published literature of how phonological awareness helped to have a positive development on speaking skills in learners who are studying in elementary and high schools. Therefore, it can be deduced that this type of metalinguistic awareness helped to improve the speaking skills of EFL learners.

For the third research question, research articles displayed the beneficial effect orthographic awareness held on EFL vocabulary acquisition in terms of lexis growth, lexical associations, and memory retention skills. Krepel *et al.* (2021) claimed the expansion of irregular words in students' lexicon was due to orthographic knowledge encouraging the improvement of learners' reading accuracy and word reading fluency skills. In the same vein, Zhao *et al.* (2017) asserted the role orthographic awareness played on lexical unit associations in the form of clustering words with similar definitions. This process offered EFL learners a wider grasp of words with akin meanings, while facilitating the retention of word families. However, in a study conducted by Alhazmi and Milton (2015) Arabic EFL students did not utilize orthographic awareness considering the phonological nature of their mother tongue, which led to confusion between L1 and L2 when acquiring vocabulary. By relying on the outcomes of the data analysis, orthographic awareness proved to be of great significance with the development of EFL vocabulary acquisition with middle school EFL learners.

Based on the facts above, it can be concluded that metalinguistic awareness, the alertness of the use of language, plays a significant role when teaching EFL (Al-Ahdal and Almarshedi, 2022). Research shows that if students develop their metalinguistic awareness when learning English, they will have better performances when reading, speaking, and acquiring vocabulary. Evidently, metalinguistic awareness is a powerful learning tool worth implementing in EFL classrooms to enhance language development skills through cognitive processes.

Regarding the use of these techniques with children, there is no evidence of effectivity since there has to be a transition from implicit to explicit metalinguistic awareness. As infants get

older, they acquire an understanding of how morphemes, phonemes and letters construct meaning in their L1; this leads to L2 metalinguistic awareness and knowledge development, as (Tellier & Roehr-Brackin, 2013) remarked.

Recommendations

After scrutinizing a myriad of academic articles regarding our topic, areas for further research were found. At the initial stages of gathering studies, most of the research were conducted in eastern hemisphere educational settings. Furthermore, the number of analyzed articles carried out in Latin America were limited and none took place in Ecuador. Thus, it is vital to conduct future research on the effects of the different types of metalinguistic awareness regarding EFL skills to ensure reliable and realistic information of the context.

Secondly, the vast majority of examined studies fixated on a specific type of metalinguistic awareness and a particular EFL skill. This analysis makes it possible for researchers and educators to access invaluable information to understand the significant impact of metalinguistic awareness, concerning EFL skills and vocabulary acquisition in EFL classrooms.

Lastly, the integration of metalinguistic awareness is strongly recommended for instruction in EFL classrooms through specific methods and tasks such as metalinguistic explanation and textual enhancement for morphological awareness; sound oddity, segmentation, isolation, and substitution tasks for phonological awareness. Additionally, it was found that dictation tasks and permissible letter strings proved effective for the development of orthographic awareness. In the same vein, it is suggested for EFL teachers to incorporate direct instruction on morphological, phonological and orthographic awareness concerning a specific skill with students from high schools and universities. This, due to the necessity of cognitive maturity in individuals to effectively understand and apply this type of knowledge.

References

- Abu-Rabia, S., & Siegel, L. S. (2002). Reading, syntactic, orthographic, and working memory skills of bilingual Arabic-English speaking Canadian children. *Journal of psycholinguistic research*, 31(6), 661-678.
<https://doi.org/10.1023/A:1021221206119>
- Akca, I. A., & Atmaca, Ç. (2022). Improving Phonological Awareness Skills of Young Learners of English in an EFL Context. *Pamukkale Üniversitesi Eğitim Fakültesi Dergisi*, (56), 314-335. <https://doi.org/10.9779/pauefd.1033281>
- Akbulut, F. D. (2019). Role of Morphological and Metalinguistic Awareness on Reading among Turkish EFL Learners. *International Journal of Contemporary Educational Research*, 6(2), 261-277. <https://doi.org/10.33200/ijcer.564134>
- Al-Ahdal, A. A. M. H., & Almarshedi, R. M. (2022). Metalinguistic awareness and academic achievement: Finding correlations among high-achieving EFL learners. *Journal of Language and Linguistic Studies*, 17(4), 2274-2285.
<http://jlls.org/index.php/jlls/article/view/3829>
- Al-Haydan, D. Y. A. (2020). The Effects of Morphological Awareness on EFL Secondary School Students' Reading Comprehension Skills. *International Journal of Education and Literacy Studies*, 8(3), 48-58.
<https://files.eric.ed.gov/fulltext/EJ1264599.pdf>
- Alhazmi, K., & Milton, J. (2015). Phonological vocabulary size, orthographic vocabulary size, and EFL reading ability among native Arabic speakers. *Journal of Applied Linguistics*, (30), 26-43. <https://doi.org/10.26262/jal.v0i30.8297>
- Alhumsia, M. H., & Awwad, A. A. (2020). Teacher's knowledge of phonological awareness levels: a case of Jordanian EFL teachers' perception. *International*

Aljafen, B. S. (2022). Linguistic phenomena at play in the Saudi EFL classroom: A study of metalinguistic awareness, language dominance, and vocabulary size of learners. *Linguistics and Culture Review*, 6(S2), 680-692.
<https://doi.org/10.21744/lingcure.v6nS2.2253>

Almarshedi, R. M. (2022). Role of metalinguistic awareness in training for reading: a quasi-experimental study with Saudi EFL learners. *F1000Research*, 11(412), 1- 13.
<https://doi.org/10.12688/f1000research.109456.1>

Al Tamimi, Y. (2016). Relevance of phonological awareness intervention to a Jordanian EFL classroom. *The Buckingham Journal of Language and Linguistics*, 9, 1-20.
<https://doi.org/10.5750/bjll.v9i0.44>

Altman, C., Goldstein, T., & Armon-Lotem, S. (2018). Vocabulary, Metalinguistic Awareness and Language Dominance Among Bilingual Preschool Children. *Frontiers in psychology*, 9(1953), 1-16.
<https://doi.org/10.3389/fpsyg.2018.01953>

Amirjalili, F., & Jabbari, A. A. (2018). The impact of morphological instruction on morphological awareness and reading comprehension of EFL learners. *Cogent Education*, 5(1), 1-30. <https://doi.org/10.1080/2331186X.2018.1523975>

Ansar, F. A. (2019). The effectiveness of phonological awareness as the action research in speaking. *Seltics Journal: Scope of English Language Teaching Literature and Linguistics*, 2(1), 1-13.
<http://www.ejournals.umma.ac.id/index.php/seltics/article/view/181>

Badawi, M. F. A. (2019). The Effect of Explicit English Morphology Instruction on EFL Secondary School Students' Morphological Awareness and Reading Comprehension. *English Language Teaching*, 12(4), 166-178.

<https://pdfs.semanticscholar.org/683b/cebb0f4c9e9a33114375c8362a15fe9adbda.pdf>

Bae, H. S. (2015). Metalinguistic awareness in vocabulary acquisition: Evidence from grade six Korean EFL learners. *Primary English Education*, 21(3), 5-22.

<https://shorturl.at/osyP9>

Bellomo, T. S. (2009). Morphological Analysis as a Vocabulary Strategy for L1 and L2 College Preparatory Students. *TESL-EJ*, 13(3), 1-27.

<https://eric.ed.gov/?id=EJ898200>

Berninger, V. W., Abbott, R. D., Nagy, W., & Carlisle, J. (2010). Growth in phonological, orthographic, and morphological awareness in grades 1 to 6. *Journal of psycholinguistic research*, 39(2), 141-163. [https://doi.org/10.1007/s10936-009-](https://doi.org/10.1007/s10936-009-9130-6)

[9130-6](https://doi.org/10.1007/s10936-009-9130-6)

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

<https://link.springer.com/article/10.1023/A:1008131926604>

Carlisle, J. F. (2010). Effects of instruction in morphological awareness on literacy achievement: An integrative review. *Reading research quarterly*, 45(4), 464- 487.

<https://doi.org/10.1598/RRQ.45.4.5>

Cassar, M., & Treiman, R. (1997). The beginnings of orthographic knowledge: Children's knowledge of double letters in words. *Journal of educational psychology*, 89(4), 631-

644. <https://doi.org/10.1037/0022-0663.89.4.631>

- Chireac, S. M., Francis, N., & McClure, J. (2019). Awareness of Form and Pattern in Literacy Assessment: Classroom Applications for First and Second Language. *The Reading Matrix: An International Online Journal*, 19(1), 20-34.
<https://readingmatrix.com/files/20-05bhd069.pdf>
- Dong, Y., Peng, S. N., Sun, Y. K., Wu, S. X. Y., & Wang, W. S. (2020). Reading comprehension and metalinguistic knowledge in Chinese readers: A meta- analysis. *Frontiers in Psychology*, 10(3037), 1-15.
<https://doi.org/10.3389/fpsyg.2019.03037>
- Duncan, L. G., Casalis, S., & Colé, P. (2009). Early metalinguistic awareness of derivational morphology: Observations from a comparison of English and French. *Applied Psycholinguistics*, 30(3), 405-440.
<https://doi.org/10.1017/S0142716409090213>
- Fajar, M., Aprilianto, M. H., & Sulistyowati, H. (2023). The Proficiency Of Oral Language And Phonological Awareness In Adult EFL Students. *JET (Journal of English Teaching) Adi Buana*, 8(02), 103-111.
<https://doi.org/10.36456/jet.v8.n02.2023.8118>
- Ghasemi, B., & Vaez-Dalili, M. (2019). Effect of Three Methods of Morphological Awareness on Iranian Intermediate EFL Learners' Reading Comprehension. *International Journal of Instruction*, 12(2), 623-638.
<https://files.eric.ed.gov/fulltext/EJ1211010.pdf>
- Hentasmaka, D., Cahyono, B. Y., Basthomi, Y., & Puspitasari, Y. (2022). The Effect of Embedding Phonological Awareness Training on Adult EFL Learners' Phonological Awareness Skill. *European Journal of Educational Research*, 11(4), 2023-2030.
<https://doi.org/10.12973/eu-jer.11.4.2023>

- Hidayatullah, H., & Haerazi, H. (2021). Exploring the Use of Various Board Games to Enhance Speaking Skills Viewed from Students' Phonology Awareness: Speaking Skills; Phonology Awareness; Games. *Journal of Language and Literature Studies*, 1(2), 93-102. <https://journal-center.litpam.com/index.php/jolls/article/view/614/391>
- Hismanoglu, M. (2012). An investigation of phonological awareness of prospective EFL teachers. *Procedia-Social and Behavioral Sciences*, 31, 639-645. <https://doi.org/10.1016/j.sbspro.2011.12.117>
- Jafari, A. M., & Rad, N. F. (2016). The influence of phonological and grammatical awareness on EFL students' reading performance. *Journal of Language Teaching and Research*, 7(6), 1164-1173. <http://dx.doi.org/10.17507/jltr.0706.14>
- Jiang, Y. L. B., & Kuo, L. J. (2019). The development of vocabulary and morphological awareness: A longitudinal study with college EFL students. *Applied Psycholinguistics*, 40(4), 877-903. <https://doi.org/10.1017/S014271641900002X>
- Kieffer, M. J., & Lesaux, N. K. (2008). The role of derivational morphology in the reading comprehension of Spanish-speaking English language learners. *Reading and writing*, 21, 783-804. <https://link.springer.com/article/10.1007/s11145-007-9092-8>
- Kim, M. (2019). Vocabulary Size Tests of Different Modality and Their Relationships with L2 Reading and Listening Comprehension by Korean EFL Learners in Middle School. *어학연구 (Language Research)*, 55(1), 203-227. <https://doi.org/10.30961/lr.2019.55.1.203>

- Kim, Y.-S., Apel, K., & Al Otaiba, S. (2013). The Relation of Linguistic Awareness and Vocabulary to Word Reading and Spelling for First-Grade Students Participating in Response to Intervention. *Language Speech and Hearing Services in Schools*, 44(4), 337-347. [https://doi.org/10.1044/0161-1461\(2013/12-0013\)](https://doi.org/10.1044/0161-1461(2013/12-0013))
- Krepel, A., de Bree, E. H., Mulder, E., van de Ven, M., Segers, E., Verhoeven, L., & deJong, P. F. (2021). The unique contribution of vocabulary in the reading development of English as a foreign language. *Journal of Research in Reading*, 44(3), 453-474. <https://doi.org/10.1111/1467-9817.12350>
- Li, Y. S., & Chen, S. H. (2016). Relative effectiveness of phonological and morphological awareness training on L2 word reading in EFL children. *System*, 60, 93-104. <https://doi.org/10.1016/j.system.2016.06.005>
- Méndez, E. H., Cruz, M. D. R. R., & Escudero, M. D. P. (2015). The impact of a linguistic intervention on rhetorical inferential comprehension and metacognition in EFL academic reading: A quasi-experimental, mixed-methods study. *Revista Signos*, 48(89), 332-354. <https://www.redalyc.org/pdf/1570/157043352003.pdf>
- Mousa, M. O., & Yahya, N. Q. (2022). "Metalinguistic Awareness is an Important Factor for Developing EFL Students' Performance in Learning English Language". *Journal of STEPS for Humanities and Social Sciences*, 1(3), 1-14. <https://shorturl.at/bE168>
- Nagy, W. (2007). *Metalinguistic awareness and the vocabulary-comprehension connection*. In R. K. Wagner, A. E. Muse, & K. R. Tannenbaum (Eds.), *Vocabulary acquisition: Implications for reading comprehension* (pp. 52-77). The Guilford Press. <https://shorturl.at/jGHM6>
- Nushi Kochaksaraie, M., & Makiabadi, H. (2018). Second language learners' phonological awareness and perception of foreign accentedness and

comprehensibility by native and non-native English speaking EFL teachers.

Teaching English as a Second Language Quarterly (Formerly Journal of Teaching Language Skills), 36(4), 103-140.

https://tesl.shirazu.ac.ir/article_4929_2fa45354e8d20c0051dff5315c2a1fcb.pdf

Peñuela, D. (2018). Using metacognitive strategies to raise awareness of stress and intonation in EFL. *Colombian Applied Linguistics Journal*, 20(1), 91-104.

<https://doi.org/10.14483/22487085.12383>

Reder, F., Marec-Breton, N., Gombert, J. E., & Demont, E. (2013). Second-language learners' advantage in metalinguistic awareness: A question of languages' characteristics. *British Journal of Educational Psychology*, 83(4), 686-702.

<https://doi.org/10.1111/bjep.12003>

Sandra, D. (1994). The morphology of the mental lexicon: Internal word structure viewed from a psycholinguistic perspective. *Language and cognitive processes*, 9(3), 227-269. <https://doi.org/10.1080/01690969408402119>

Sastrawati, I., Haslinda, H., Salma, S., Fadillah, N., & Ibrahim, R. (2023). An Investigation of Students Phonological Awareness in Speaking. *BATARA DIDI: English Language Journal*, 2(2), 59-68. <https://doi.org/10.56209/badi.v2i2.86>

Schuele, C. M., & Boudreau, D. (2008). Phonological Awareness Intervention: Beyond the Basics. *Language Speech and Hearing Services in Schools*, 39(1), 3-20. [https://doi.org/10.1044/0161-1461\(2008/002\)](https://doi.org/10.1044/0161-1461(2008/002))

Sulistyawati, E., Nugroho, A., & Bram, B. (2021). Morphological Teaching Strategies to Enhance Students' Vocabulary Knowledge and Reading Comprehension. *Journal of English Teaching*, 7(2), 179-190. <https://doi.org/10.33541/jet.v7i2.2472>

- Sun, B., Zhou, H., & Zhu, B. (2013). Effects of English phonological awareness training on Chinese child EFL learners' literacy development. *Canadian Social Science*, 9(1), 56-64. <https://shorturl.at/czAKW>
- Susanto, S., & Nanda, D. S. (2023). Analyzing the Student's Phonological Awareness and its Relation to the Reading Skill in EFL Classroom. *Jurnal Ilmiah Peuradeun*, 11(2), 425-440. <https://doi.org/10.26811/peuradeun.v11i2.793>
- Tabatabaei, O., & Yakhabi, M. (2011). The Relationship between Morphological Awareness and Vocabulary Size of EFL Learners. *English Language Teaching*, 4(4), 262-273. <https://pdfs.semanticscholar.org/5541/0b28252875fff24c961db3952b039fa97a74.pdf>
- Tellier, A., & Roehr-Brackin, K. (2013). Metalinguistic awareness in children with differing language learning experience. *EuroSLA Yearbook*, 13(1), 81-108. <https://doi.org/10.1075/eurosla.13.06tel>
- Tunmer, W. E., Herriman, M. L., & Nesdale, A. R. (1988). Metalinguistic abilities and beginning reading. *Reading research quarterly*, 21(2) 134-158. <https://doi.org/10.2307/747799>
- Wardana, I. K., Astuti, P. T., & Sukanadi, N. L. (2022). Examining the effect of phonological awareness instruction on EFL learners' pronunciation and motivation. *Erudita: Journal of English Language Teaching*, 2(2), 129-147. <https://ejournal.uingusdur.ac.id/erudita/article/view/796>
- Weng, Z., Zhu, J., & Kim, G. J. (2019). English Language Teacher Agency in Classroom-Based Empirical Studies: A Research Synthesis. *TESOL International Journal*, 14(1), 37-61. <https://eric.ed.gov/?id=EJ1244103>

Zhang, D., & Koda, K. (2013). Morphological awareness and reading comprehension in a foreign language: A study of young Chinese EFL learners. *System*, 41(4), 901-913.

<https://doi.org/10.1016/j.system.2013.09.009>

Zhao, J., Joshi, R. M., Dixon, L. Q., & Chen, S. (2017). Contribution of phonological, morphological and orthographic awareness to English word spelling: A comparison of EL1 and EFL models. *Contemporary Educational Psychology*, 49, 185-194.

<https://doi.org/10.1016/j.cedpsych.2017.01.007>