Morphological Teaching Strategies to Enhance Students' Vocabulary Knowledge and Reading Comprehension

Elizabeth Emmanuela Sulistyawati

queeneliza111@gmail.com Sanata Dharma University, Yogyakarta

Alvian Adhi Nugroho

alvianadhinugroho@gmail.com Sanata Dharma University, Yogyakarta

Barli Bram

barli@usd.ac.id Sanata Dharma University, Yogyakarta

Several studies have shown that morphological awareness contributes to the improvement of the comprehension of student reading and vocabulary learning, interest in the importance of language acquisition, and instruction of morphological awareness is increasing. This research emphasizes the use of morphological techniques used in reading comprehension to enhance the vocabulary awareness of prefixes and suffixes of students and to contribute to the development of vocabulary acquisition. This literature review was conducted to incorporate research results to assess whether such training led to increased understanding of reading and the development of vocabulary. First, researchers need to collect relevant information related to morphological and teaching strategies in the teaching and learning process of English. Second, researchers can analyze data regarding the advantages and disadvantages of morphological strategies and instructions in the English teaching and learning process. Third, researchers identified the important role of morphological awareness that has been applied by students and the need to implement morphological strategies to help second language learners to acquire English language skills. Finally, learners can conclude some important things related to the application of morphology learning strategies to engage the teaching and learning process so that learners can achieve learning objectives regularly.

Keywords:

morphological awareness, learning strategy, reading, suffix, vocabulary

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INTRODUCTION

Today, teaching-learning activities need to implement various strategies to encourage students to learn. In the second language learning process, the kinds of strategies implemented might help students to develop all the language skills in English namely speaking, writing, listening, and reading skills. Students might struggle the most with reading skills when they act as second language learners. According to the result of the National Assessment of Educational Progress (NAEP) (2004), reading activities and examinations are the hardest things that make students in US schools struggling the most. Bulgren and Scanion (1998) share the agreement of this recent result that students might face several problems and difficulties in regular comprehension and those might be the reasons why students are not interested enough to learn or read the school textbooks. Students' laziness and their weaknesses in understanding and comprehending the reading materials construct them to be the students who dislike reading activities and put off all reading assignments. Then, the teachers and lecturers play a significant role in the teaching-learning process, especially in generating students to improve their reading skills. Guatello, Beasley, and Sinarta (2000) find that teachers' instruction in the teachinglearning process can motivate students to learn and improve students' comprehension of several texts. In the classroom environment, teachers somehow do not give more attention to each student in improving their skills. Little attention is given to the students when students need to share their opinion, make a decision, solve a particular problem, interact and work collectively one to each other (Hall, 2006). Teachers also state that students struggle the most as the readers and they are likely to avoid reading activities and behave helplessly with the reading texts (Brozo, 1991; Johnston & Winograd, 1985). Then, Hall (2005) investigates that the teachers need to focus on the content area that is related to the students' issue. Teachers might provide clear and systematic reading instruction and are concerned with the students' needs in reading activities.

If this kind of issue might not be solved in the right way, in the future students will not meet the benefits of reading activities and they will lack vocabulary knowledge, whereas vocabulary knowledge holds a big impact on students' life and it is the crucial and fundamental thing in daily conversation orally or written. According to Amiljalili and Jabbari (2018), vocabulary knowledge or which is well-known as knowledge of word meanings has a close relation to morphological awareness that plays an essential action in the students' reading comprehension. According to Nation (2001), vocabulary is in accordance with reading comprehension and both elements can help students in vocabulary growth and reading skills. Proctor, Carlo, August, and Snow (2005) get into line with the previous notion that both vocabulary growth and reading skills influence EFL and ESL learners to get involved in a reading process. To promote students' knowledge of vocabulary and comprehension in reading, they must contribute to the important aspect, namely, morphological awareness Zhang and Koda (2012). This morphological awareness can be applied by students in their second language learning process to establish their level of vocabulary knowledge directly or indirectly through the mediation of students' lexical interpretation ability (Zhang & Koda, 2012). Furthermore,

the limited vocabulary knowledge mastered by students might be the source of reading comprehension difficulties (August & Shanahan, 2006).

As stated previously, teachers teaching instruction and strategies might help students to overcome their issue of reading comprehension and lack of vocabularies. Crosson, McKeown, Moore, and Ye (2018) investigate that instruction and strategy in teaching-learning activities are commonly called morphological strategies. The morphological strategy is in line with the complex structure of morphological analysis that aims to enhance the vocabulary of English language students. Then, after teachers implement the morphological strategies in the teaching-learning process, students need to possess morphological awareness in their self-regulation system. According to Adam (1990), as cited in Amirjalili and Jabbari (2018), students' morphological awareness helps them to interpret the particular word, make an assumption of the meaning, read the word, and facilitate understanding of the particular word in a text. This morphological awareness supports students to recognize the words easily and quickly. According to Nagy, Beminger, Abbott, and Vaughan (2003), this kind of awareness in reading activity allows students to read the longer text and analyze the words accurately. It can help students recognizing the words, develop reading comprehension, and then enhance their vocabulary. Morphological awareness is following reading comprehension and both influence students' process of decoding the words from the reading text (Levesque, Kieffer, & Deacon, 2017).

Moreover, it is important for restating here that there are several current studies of morphological strategies to improve students' reading comprehension and vocabulary knowledge that are conducted around the world. The first study was conducted by Stowe (2019). She investigated that awareness of morphology might be a strong and positive indicator in enhancing students reading comprehension. Besides, this awareness is a critical element that can develop students' vocabulary and decode the particular word accurately. The result showed that the morphological teaching strategies that had been implemented in the classroom can promote students to infer the important words from the reading text and narrow the gap for students' backgrounds. Then, a second study was conducted by Brandes and McMaster (2017) about morphological analysis on students' vocabulary. This research aimed to examine the teaching nature instruction for those students with the risk of reading disabilities. Then, the research result showed that the review of morphological analysis can promote students to read and enhance their vocabulary knowledge. Moreover, Anastasiou and Griva (2012) also researched morphological strategies for spelling difficulties. The researchers employed the 6th-grade students of an English primary school in this research. The result showed that the morphological strategies provide the knowledge of the spelling system and help students to overcome their difficulties in recognizing and analyzing the alphabetical level of phoneme letters. Further, Sarfraz, Tariq, and Abbas (2018) found that morphological awareness can help students in composing English writing production. They explored that students' morphological knowledge is limited in the writing process. Then, the morphological awareness was given to students in the term of word-formation to

construct a piece of paper. The research result showed that morphological awareness is effective and efficient to enhance students' writing skills.

These previous studies' results indicate that morphological awareness is important to be implemented in the teaching-learning process. However, none of the studies above has investigated morphological strategies that can be implemented by teachers to enhance students' knowledge of vocabulary in the terms of prefixes and suffixes in the reading activities. To fill this gap, this study was conducted to explore the students' reason for reading procrastination or binge-reading and how morphological strategies help students in overcoming those issues and improve students' vocabulary. One research problem was formulated in this study, namely: "What are morphological teaching strategies used to improve students' vocabulary knowledge of prefixes and suffixes in the reading activities?"

LITERATURE REVIEW

English proficiency is frequently identified by speaking skills alone, apart from other skills, especially grammar skills. Many teachers are unaware of the linguistic awareness of students in learning English (Badawi, 2019; Wolter & Gibson, 2015; Yurtbaşı, 2015). Whereas, linguistic abilities remarkably affect the development of students' language skills in learning English. Language knowledge which is included in the branch of linguistics is important knowledge for university students and school students who often use English in academic and non-academic fields (Roaini & Ansar, 2019). With extensive knowledge of linguistics, students are not only equipped with their language skills but also perform better in language analysis skills.

Language acquisition in morphology, especially in English morphology is also very necessary for college and school students (Domínguez, 1991). In high school English, morphology learners get a small portion compared to other materials. The English learning curriculum in Indonesia emphasizes a text-genre approach and seeks to underline text mastery and exclude learning English in terms of morphology. Morphology is only given when learning the text genre and does not allocate a certain time to study morphology. Having good morphological knowledge, students are expected to get the results obtained in determining the meaning of words and can see the process of analysis and synthesis in the preparation of English words. This is expected to help students to communicate well and smoothly with attention to fluency and accuracy (Badawi, 2019; Wolter & Gibson, 2015).

According to (Hammarström & Borin, 2011) mastering English skills can be assessed directly through student performance, but mastery of knowledge or components of English can only be seen as being mastered by students which are implied when combined with language skills. Thus, in written and spoken communication, the language component is integrated with language skills. This is in line with (Audring et al., 2018) stated that language components involved in communicating including vocabulary, grammar, pronunciation, and listening.

When using the English dictionary to look up different meanings of the verb find, it's not surprising that there aren't separate entries for find, found, and found.

Consequently, it won't be disappointing if the dictionary doesn't contain separate entries to find. In many dictionaries, find, finds, and found are not even mentioned in the entry to find. Also, it is assumed that language users do not need this information. The reason for the absence of this information is because these different English words are considered to be examples of the same word, where find is the form of the citation. Moreover, we have to make a distinction between the meaning of 'find' in the abstract meaning (lexeme) and the meaning of 'find' in the meaning of 'the concrete word as used in the sentence'. It means that the concrete words find, find, finding, and found can qualify as the tenses of the lexeme FIND. The English dictionary assumes that language users will be able to construct these various forms of FIND lexeme by applying the relevant rules. This rule for calculating the various forms of lexemes is called the inflection rule (Booij, 2005).

Accordingly, the example shows that the dictionary presupposes knowledge of the relationships between words. It is the task of the linguist to characterize the kind of knowledge that forms the basis of awareness of the relationships between the tenses to find, finds, finding, and found. The knowledge of language includes knowledge of the systematic relationship between the form and meaning of words. The word find, finds, found, and finding shows a relationship in form and meaning that is systematic because a similar pattern occurs for thousands of other English verbs. The sub-disciplinary science of linguistics that deals with such patterns are called morphology (Booij, 2005).

Morphology is a branch of linguistics and defines morphology as a linguistic subdiscipline that is related to the relationship between form and meaning of a systematic nature (Aronoff & Fudeman, 2011). Furthermore, Aronoff & Fudeman (2011) described morphology as a mental system that is involved in word formation or the linguistic branch associated with words, their internal structure, and how they are formed. Furthermore, teaching students about the meanings of common affixes and steps to infer the meanings of associated words will enhance students' word learning and foster their interest and attention in words (Manyak et al., 2018). Morphology learning is similar to learning other grammar components. As a starting point, we have to internalize the lexical entries, then contact with the language creation that the learner understands that some words have a transparent internal structure generated by language rules, which allow the speaker to create their derivatives and compound words (Domínguez, 1991). Moreover, morphology involves the study of the internal structure of words and how new words are created from existing words through the use of various morphological processes, namely: affixing, compounding, word formation, word conversion, word truncation, word repetition, and others (Anita et al., 2014). Therefore, it can be concluded that morphology is the study of the form and meaning of words, especially the formation and decomposition of words in a language.

Whereas, Carlisle (2010) emphasized again that studying morphology has contributed significant success for students to master literacy development. Mastery of broad morphological knowledge not only enriches the information on word formation and decomposition but also indirectly helps language skills become better and more meaningful in communicating both spoken and written. There are many rules in English, so students, especially EFL students have a lot of convenience in learning English.

Unfortunately, apart from these rules, English also has many exceptions in the structure of the language itself. The process of forming English words also contains certain rules and exceptions. Also, knowledge of word-formation rules will greatly affect a student's ability to recognize the meaning of words (word recognition). Consequently, morphology analysis instruction in research interventions usually addresses one or more of four different goals, such as awareness of the morphological structure of words, the meaning of certain affixes and roots understanding, analysis of how word morphemes contribute to their meaning, grammatical function, or spelling; and strategies for using morphology analysis to infer word meanings (Carlisle, 2010).

METHOD

This study is a literature review. Data were collected from relevant documents, including articles, journals, and books on morphological teaching. Then, the data were analyzed by using content analysis. Nilamsari (2014) suggested, there are several possible ways to analyze data obtained from several relevant documents. In this study, four ways were implemented. First, the researchers collected the relevant information related to morphological strategies and instruction in the English teaching-learning process. Second, the researchers analyzed the data concerning the advantages and disadvantages of morphological strategies and instruction in the teaching-learning English process. Third, the researchers identified the crucial role of morphological awareness that had been implemented by students and the necessities of implementing morphological strategies to help second language learners in mastering English skills. Last, inferring how students implemented morphological strategies and instruction in the teaching-learning process to meet the learning objective.

FINDINGS AND DISCUSSION

Teaching English as a foreign language or second language is not easy. In Indonesia teachers and lecturers might struggle the most to teach students and help them to grasp a better understanding of English structures and vocabularies. To enrich students' vocabularies, teachers need to understand students' needs in the teaching-learning process and classroom context. According to Anwar and Rosa (2020) teachers in the classroom environment play a significant role by making students realize that vocabulary holds an essential role to develop their English skills. To enrich the vocabulary students need to understand the linguistics elements in English. Morphology is one of several branches of linguistics that can help students highlight particular words and decode them. Anwar and Rosa (2020) state that teachers or lecturers might implement and develop a variety of strategies and instruction to promote students' morphological awareness so that students comprehend the importance of morphological roles in teaching-learning English. Morphological awareness that has been applied by students in the English learning process enables the students and the teachers to collaborate and work together in the classroom. The teachers can help students to understand a word as a part of linguistic and how words are formed in the language process by combining the prefixes, suffixes, roots, and so on (Oz, 2014). According to Kieffer and Lesaux (2012), students who implement

morphological awareness in the classroom context tend to possess larger vocabulary knowledge and better reading comprehension of English passages. Besides both advantages, students who possessed morphological awareness in the English learning process commonly hold better writing skills (Templeton, 2012). The term morphology can be used as an instructional tool for students to develop their vocabulary knowledge. Students' sufficient vocabulary knowledge might allow them to get involved in the particular conversation in written and oral.

Teachers can help students to develop their awareness of English morphological aspects. Afterward, teachers can teach students about the existence and the importance of morphology in classroom learning. According to Coutu-Fleury (2015), when students learn morphology, they need to understand what is called a procedure. Coutu-Fleury (2015) investigate three possible ways students can implement in learning morphology, namely, no correlation between sound and spelling in English, inflectional and derivational morphemes in English, and phonological process and rules in English. In the English phonological process, several words show a similar letter combination but both of them are pronounced distinctly. However, this rule is not arbitrary because in many cases this rule of spelling and word pairs are in line morphologically, for example, present (V) and present (N). According to Casalis, Cole, and Sopo (2004), morphological awareness is always defined as a conscious knowledge that can help students to form several words based on the correct pattern in a language process. This morphological knowledge is in accordance with the morphemes including prefixes, derivational and inflectional suffixes. Then, the knowledge of several morphemes such as prefixes, derivational and inflectional suffixes are explained as follows.

a) Prefixes

A prefix is a group of letters placed before the root of a word. For instance, the word *untidy* consists of the prefix *un*- that means not, and then it is combined with the root *tidy*. Finally, the new word is constructed namely untidy which means not tidy.

Dis- Discover = dis + cover

In- Incorrect = in + correct

Un- Unhappy = un + happy

b) Inflectional suffixes

A suffix is a group of letters placed at the final of a word and then the new word is constructed. Inflectional suffixes do not change the meaning **of the existing word**.

Plural $-s$ Boys = boy + s	Grammatical change	Suffixes	Suffix words
T-1 11 1	Plural	-S	Boys = boy + s
Plural irregular -en $Ox = ox + en$	Plural irregular	-en	Ox = ox + en
3rd person singular present $-s$ Loves = love + s	3rd person singular present	-S	Loves = love + s
past tense (regular) -ed She decided	past tense (regular)	-ed	She decided
past participle -ed She has decided	past participle	-ed	She has decided
past participle (irregular) -en She has eaten	past participle (irregular)	-en	She has eaten
progressive -ing I am walking	progressive	-ing	I am walking
Comparative -er $Higher = high + er$	Comparative	-er	Higher = high + er
Superlative $-\text{est}$ Greatest = great + est	Superlative	-est	Greatest = great + est

c) Derivational suffixes

A derivational suffix changes the meaning and part of speech of the new words. However, the new meaning of the new words is in line with the meaning of the existing words because the meaning is derived from the old one. Humans can add more than one suffix to a particular word.

Suffix	Making	Suffix words
-ation	Noun	Ruination = ruin + nation
-er		Reporter = report + er
-al	Adjective	Personal = person + al
-able		Readable = $read + able$
-ly	Adverb	Perfectly = perfect + ly
-ize	Verb	Conceptualize = conceptual + ize
-ate		Validate = valid + ate

The previous explanation provides examples of the types of morphemes and those can be understood through the morphological awareness that allows students to create a new word by changing the meaning and part of speech. Moreover, the variety of morphemes allows students to understand and comprehend the consistency of regular plurals such as books, bottles, and so on. Students need to understand the fundamental plural noun so that they would not make any errors in English oral and written communication. Then, according to Rosa (2013), inflection forms are more common than derivational forms and those are consistent in the semantic process. While the derivational forms are considered difficult to analyze because of the complex semantics and those kinds of suffixes prompt the complex and inconsistent phonological changes (Coutu-Fleury, 2015).

Then, to examine the importance of morphological awareness contribution in English language teaching and learning, the researchers provided several studies that researched the morphological teaching strategies in a classroom environment. Khoshkhoonejad, Khalifelu, and Abdipour (2016) investigated the effect of morphological awareness on vocabulary learning among Iranian students. Those researchers implemented the proficiency test, morphological relatedness test, and morphological structure test. The research result showed that this study was important to be implemented in a classroom context to promote students in learning English as a second language. This study of morphological awareness indicated that it is a crucial tool that can help students to improve the English vocabulary mastery of Iranian secondary school students. The second study was conducted by Hidayat (2016). He found that several games can be implemented in the teaching-learning process to promote students' vocabulary mastery. This study was conducted by students of grade seven in junior high school by applying word game. Then it aimed to solve the students' issue of lacking vocabulary knowledge and help them comprehend the reading text. Thgamesthe result of this study showed that the implementation of a word game is effective and it can help students to memorize the vocabulary items from the reading passage easily and then motivate them to be interested in learning vocabulary. Moreover, Aswandi (2020)

investigate another game, namely the matching game to improve students' vocabulary knowledge. He conducted this study to help the teachers overcome students' weaknesses in mastering vocabulary. Students feel difficult to understand and memorize similar words and unfamiliar with them. Then, the learning media is considered effective to be implemented in this learning process. Then, the researcher implemented the matching game as the alternative learning medium to promote students' vocabulary mastery through the classroom action research method. Then, the finding showed that the matching game could improve students' vocabulary mastery.

The application of linguistic elements can be carried out in the teaching-learning process. Thus, it is worth considering the several linguistics theories in teaching English to school students, especially theories related to morphology. Then, the morphological strategies in the learning process can be implemented by students to construct a basic comprehension and allow them to use English vocabulary. Oz (2014) states that morphology can be utilized by students to construct an internal structure of words and understand the rules of the formation of words in a particular language.

CONCLUSION

This study has attempted to address a research aim for morphological teaching methods used in reading comprehension to enhance the vocabulary awareness of prefixes and suffixes. This paper addressed clinical applications and strategies that can be undertaken by teachers to build morphological knowledge and encourage phonological, vocabulary, and reading comprehension performance in learners with language and literacy deficits. Second, the advantages of morphological literature studies that play a significant role in enhancing vocabulary mastery and understanding of reading have been discussed. In addition, a lot of findings on the morphological understanding that lead to language acquisition have been developed by several experts. This is accompanied by a discussion with students who have deficiencies in morphological learning of certain theory-based, strategy-based approaches, and methods that language teachers can use in their interventions. Finally, the understanding of certain morphemes, such as prefixes, derivational and inflectional suffixes, has also been discussed. Morphological awareness is often characterized, according to Casalis, Cole, and Sopo (2004), as conscious information that can enable students to shape several words in a language process based on the correct patterns. This morphological interpretation is consistent with morphemes that include prefixes, derivative suffixes, and inflectional suffixes.

Analysis of the literature on the teaching of morphological knowledge and the methods that can be used in language learning puts one in a strong position to recognize significant problems that can be discussed in future studies. While a suggested list of morphological instructions may have been established by some researchers, we give the following suggestions. First, it seems clear that current guidelines for the design, implementation and reporting of realistic learning studies of morphology should be used by researchers. This will require the use of a research design that enables causal inference so that we have a strong base to maintain and assess which morphological knowledge instruction features are most likely to contribute to substantial improvements in the

understanding of vocabulary learning and reading. Moreover, a more complete description of the execution and method of interpretation of the results of the study will also necessary to be addressed.

REFERENCES

- Adams, M. J. (1990). *Beginning to read: Thinking and learning about print*. Cambridge, MA: Massachusetts Institute of Technology Press.
- Amirjalili, F. & Jabbari, A. A. (2018). The impact of morphological instruction on morphological awareness and reading comprehension of EFL learners. *Teacher Education and Development*, 5, 1-30.
- Anita, F., Ramadhiyanti, Y., & Kurniawati, T. (2014). Pengetahuan Morfologi (Morphological Awareness) Dalam Proses Pengenalan Kata Bahasa Inggris. *Jurnal Pendidikan Bahasa*, *3*(1), 103–118.
- Anwar, I. & Rosa, R. N. (2020). The role of morphological awareness and explicit morphological instructions in elt. Journal of Linguistics, Literature, and Language Teaching, 4 (1), 28-37.
- Aronoff, M., & Fudeman, K. (2011). What is morphology? In *Wiley-Blackwell* (2nd ed.). John Wiley & Sons. https://doi.org/10.1038/018255a0.
- Aswandi (2020). The application of matching game to improve students' English vocabulary mastery. *INOVISH Journal*, *5*(1), 58-65.
- Audring, J., Masini, F., Audring, J., & Masini, F. (2018). Introduction: Theory and Theories in Morphology. *The Oxford Handbook of Morphological Theory*, *January* 2020, xxii–16. https://doi.org/10.1093/oxfordhb/9780199668984.013.1
- August, D. & Shanahan, T. (2006). Developing literacy in second-language learners: Report of the national literacy panel on language-minority children and youth. New Jersey: Lawrence Erlbaum Associates.
- 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. https://doi.org/10.5539/elt.v12n4p166.
- Booij, G. (2005). The Grammar of Words: An Introduction to Linguistic Morphology. In *The Grammar of Words: An Introduction to Linguistic Morphology* (1st ed.). Oxford University Press Inc. https://doi.org/10.1093/acprof:oso/9780199226245.001.0001
- Brandes, D. R. & McMaster, K. L. (2017). A Review of Morphological Analysis Strategies on Vocabulary Outcomes with ELLs. *Insight into Learning Disabilities*, 14 (1), 53-72.
- Brozo, W. (1991). Hiding out in content classrooms: Coping strategies of unsuccessful readers. *Journal of Reading*, *33*, 324–328.

- 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
- Casalis, S., Colé, P., & Sopo, D. (2004) Morphological awareness in developmental dyslexia. *Annals of Dyslexia*, 54(1), 114-138.
- Coutu-Fleury, C. (2015). The effects of morphological awareness training on the reading and spelling performance of young dyslexics. *Langues et Linguistique*, *35*, 72-79.
- Crosson, A. C., McKeown, M. G., Moore, D. W. & Ye, F. (2018). Extending the bounds of morphology instruction: Teaching Latin roots facilitates academic word learning for English learner adolescents. *Reading and Writing*, 1–39.
- Domínguez, J. A. (1991). The Role of Morphology in the Process of Language Acquisition and Learning. *Revista Alicantina de Estudios Ingleses*, *4*, 37–47.
- Griva, E., & Anastasiou, D. (2009). Morphological strategies training: The effectiveness and feasibility of morphological strategies training for students of English as a foreign language with and without spelling difficulties. *Journal of Writing Research*, 1(3), 199-223.
- Guastello, F., Beasley, M. & Sinatra, R. (2000). Concept mapping effects on science content comprehension of low-achieving inner-city seventh graders. *Remedial and Special Education*, 21, 356–365.
- Hall, L. (2005). Teachers and content area reading: Attitudes, beliefs, and change. *Teaching and Teacher Education*, *21*, 403–414.
- Hall, L. A. (2006). Anything but lazy: New understandings about struggling readers, teaching, and text. *Reading Research Quarterly*, 41 (4), 1-4.
- Hammarström, H., & Borin, L. (2011). Unsupervised learning of morphology. *Computational Linguistics*, *37*(2), 309–350.
- Hidayat, N. (2016). Improving students' vocabulary achievement through word game. *Journal of Educators Society*, 1(2), 95-104.
- Kieffer, M. J., & Lesaux, N. K. (2012). Development of morphological awareness and vocabulary knowledge in Spanish-speaking language minority learners: A parallel process latent growth curve model. *Applied Psycholinguistics*, *33*, 23–54.
- Khoshkhoonejad, A., Khalifelu, S. F., & Abdipour, S. (2016). Exploring the Effect of Morphological Instruction on Vocabulary Learning among Iranian EFL Learners. *Journal of Education and Learning*. *10*(2), 151-158.
- Levesque, K. C., Kieffer, M. J. & Deacon, S. H. (2018). Inferring meaning from meaningful parts: The contributions of morphological skills to the development of children's reading comprehension. *Reading Research Quarterly*.
- Manyak, P. C., Baumann, J. F., & Manyak, A. M. (2018). Morphological Analysis Instruction in the Elementary Grades: Which Morphemes to Teach and How to Teach Them. *Reading Teacher*, 72(3), 289–300. https://doi.org/10.1002/trtr.1713
- Nagy, W. E., Beminger, V., Abbott, R. & Vaughan, K. (2003). Relationship of morphology and other language skills to literacy skills in at-risk second-grade

- readers and at-risk fourth-grade writers. *Journal of Educational Psychology*, 95(4), 730–742.
- National Assessment of Educational Progress. (2004). long trend assessment results in reading. Retrieved February 6, 2006, from http://nces.ed.gov/nationsreportcard/ltt
- Nilamsari, N. (2014). Memahami studi dokumen dalam penelitian kualitatif. *Wacana*, *XIII*(2), 177-81.
- Oz, H. (2014). Morphology and implications for English language teaching. In A. Saricoban (Ed.), *Linguistics for English language teaching studies* (pp. 83-120). Ankara: Ani Publishing.
- Proctor, C. P., Carlo, M., August, D. & Snow, C. E. (2005). Native Spanish-speaking children reading in English: Toward a model of comprehension. *Journal of Educational Psychology*, 97, 246–256.
- Roaini, R., & Ansar, F. A. (2019). Prefix And Suffix Analysis In Relation With Students English Ability. *English Education: Jurnal Tadris Bahasa Inggris*, 12(1), 49–62. https://doi.org/10.24042/ee-jtbi.v12i1.4430
- Rosa, R. N. (2013). *Introduction to linguistics*. Padang: Sukabina Press.
- Sarfras, S., Tariq, U. & Abbas, A. (2018). Effectiveness of Morphological Awareness in English Writing Composition of Pakistani Students at the Undergraduate Level-Case Study. *Journal of Education and Practices*, 9(19), 78-84.
- Stowe, M. (2019). *Teaching Morphology: Enhancing Vocabulary Development and Reading Comprehension*. Retrieved December 20, 2020, from https://education.wm.edu/centers/ttac/resources/articles/teachtechnique/teachingmorphology/index.php
- Templeton, S. (2012). Teaching and learning morphology: A reflection on generative vocabulary instruction. *Journal of Education*, 192(2/3), 101-107.
- Wolter, J. A., & Gibson, F. E. (2015). Morphological awareness assessment and intervention to improve language and literacy. *Seminars in Speech and Language*, 36(1), 31–41. https://doi.org/10.1055/s-0034-1396444
- Yurtbaşı, M. (2015). Building English vocabulary through roots, prefixes, and suffixes. Global Journal of Foreign Language Teaching. *Global Journal of Foreign Language Teaching*, 05(1), 44-51. www.awer-?-center.org/gjflt/
- Zhang, D. & Koda, K. (2012). Contribution of morphological awareness and lexical inferencing ability to L2 vocabulary knowledge and reading comprehension among advanced EFL learners: Testing direct and indirect effects. *Reading and Writing*, 25(5), 1195–1216.