LedTure
Journal onLanguage, Education, Literature and Culture Vol 2, No.2: Desember 2024
https://bing.ukaw.ac.id/ejournal/index.php/ledture e-ISSN Online: 3026-0302 DOI: 10.1357/l.v2i2.52

THE CORRELATION BETWEEN MORPHOLOGICAL AWARENESS AND VOCABULARY MASTERY OF FOURTH-SEMESTER STUDENTS OF ENGLISH EDUCATION STUDY PROGRAM AT ARTHA WACANA CHRISTIAN UNIVERSITY

Evandertus Poilema[1*], Erni Selfina Nggala Hambandima[2], and Seprianus Arwadi Nenotek[3]
[123] Artha Wacana Christian University

[*)]Corresponding author: hiitsmeevan@gmail.com
Received date: 22-11-2024; Accepted date: 07-01-2025

Abstract. The correlation between morphological awareness and vocabulary mastery is a crucial area of investigation within language education. Understanding this relationship is important because it can inform effective teaching strategies that enhance vocabularya cquisition among students. Research shows a general link between morphological awareness and vocabulary mastery but lacks focus on specific educational stages. This study addresses that gap by examining fourth-semester students in the English Education Study Program at Artha Wacana Christian University, who have just completed their morphology course, to see how well they apply this knowledge to improve their vocabulary. Thus, the researcher formulate the research problem as follow: Is there any correlation between morphological awareness and vocabulary mastery of fourth-semester students of the English Education Study Program at Artha Wacana Christian University? The research utilized a quantitative approach with a correlation study design. Morphological awareness tests and vocabulary level tests were administered to a sample of 20 fourth-semester students. The findings revealed a correlation coefficient (rxy) of 0.802, which exceeds the 5% and 1% levels of significance, indicating a very high correlation between the two variables. These results suggest that enhancing morphological awareness could be an effective strategy for improving vocabulary mastery. Therefore, educators should consider incorporating morphological awareness activities into their teaching practices to support vocabulary development in their students.

Keywords: ***morphological awareness, vocabulary mastery, quantitative approach,***

INTRODUCTION

English is recognized globally as an essential language for communication, education, and business. As a lingua franca, mastering English opens doors to better job opportunities and access to higher education. To achieve proficiency, learners must master the four basic skills of speaking, reading, writing, and listening, which are closely connected to three key components of language learning: grammar, pronunciation, and vocabulary. Among these, vocabulary plays a particularly crucial role. It serves as the foundation for communication, allowing learners to express their ideas clearly and effectively in both written and spoken forms (Alqahtani, 2015).

Vocabulary, defined as a collection of words with meanings used for communication, is fundamental to mastering English. According to Richard and Renandya (as cited in Rohmatillah, 2014), vocabulary is central to language proficiency, providing the foundation for the development of other language skills. Without a strong vocabulary base, learners struggle to understand and produce meaningful sentences. Therefore, acquiring an extensive vocabulary is crucial for

mastering the English language, particularly in the context of English as a Foreign Language (EFL).

However, many EFL learners face significant challenges when it comes to learning and retaining vocabulary. One common issue is the difficulty in understanding the different forms of a word, especially due to morphological differences between the learners' native language and English (Fedriyanto et al., 2022). Morphology, the study of word structure, offers insights into how words are formed and how their meanings change through inflections and derivations. By understanding morphology, learners can improve their ability to recognize and understand new words. This ability, referred to as morphological awareness, plays a crucial role in vocabulary acquisition.

Morphological awareness refers to the ability to understand the structure of words, including their roots, prefixes, and suffixes, and how these elements contribute to word meaning (Chang et al., 2005). Studies have shown that a strong morphological awareness can significantly enhance learners' vocabulary mastery (Adam, 2018). By breaking down complex words into their components, learners can infer meanings without relying heavily on dictionaries. This skill is especially beneficial for EFL learners, as it helps them navigate unfamiliar vocabulary with greater confidence and efficiency.

Previous studies have identified a positive correlation between morphological awareness and vocabulary mastery, yet few have focused on the specific context of students transitioning from learning morphological theory to applying it practically. This study aims to fill that gap by examining the relationship between morphological awareness and vocabulary mastery among fourth-semester students of the English Education Study Program at Artha Wacana Christian University. Having completed a course on morphology in the previous semester, these students provide a unique opportunity to assess the immediate impact of morphological instruction on their vocabulary development. Therefore, this study seeks to investigate the correlation between morphological awareness and vocabulary mastery, focusing on the extent to which morphological knowledge contributes to vocabulary acquisition in an EFL context.

THEORETICAL FRAMEWORK

Aspects of Morphological Awareness

Morphological awareness refers to the understanding and ability to manipulate morphemes, the smallest meaningful units in a language. According to Arviyolla et al. (2022), morphological awareness can be broken down into two key aspects: morpheme identification and morphological structure:

1. Morpheme Identification

Morpheme identification is the ability to recognize and differentiate between the components of a word, including prefixes, suffixes, and root words. This process involves identifying the meaning of new words by analyzing their morphological structure. For example, by identifying the prefix "un-" in the word "unhappy," learners can infer the meaning as "not happy." This syntactic aspect of morphological

awareness allows learners to decode the meanings of words by examining their parts, aiding in vocabulary expansion.

2. Morphological Structure

Morphological structure awareness refers to the ability to generate new word forms by combining different morphemes. Learners can use their understanding of morphemes to create new words, such as forming "untouchable" from "touch" by adding the prefix "un-" and the suffix "-able." This aspect enables learners to expand their vocabulary by applying knowledge of word formation rules, contributing to a deeper understanding of language structure.

The Contribution of Morphological Awareness to Vocabulary Mastery

Morphological awareness plays a crucial role in vocabulary acquisition by helping learners decode and understand the structure of words. It enhances vocabulary learning by enabling students to recognize patterns in word formation and apply these patterns to unfamiliar words. Schreuder and Baayen (1995) argue that morphological awareness improves word recognition, which is essential for reading fluency and comprehension. Yücel-Koç (2015) also highlights that morphological awareness helps learners decipher word meanings, spelling, and pronunciation, leading to long-term vocabulary retention.

According to Al Farsi (2008), teaching morphological awareness provides learners with strategies to independently decipher new words, as it equips them with the knowledge of how words are formed. This understanding allows learners to break down complex words into their base forms and affixes, enabling them to infer meanings without relying solely on external aids such as dictionaries. Kuo and Anderson (2006) suggest that learners with high morphological awareness can understand word derivations and grammatical structures, further aiding their vocabulary development.

McCutchen and Logan (2011) emphasize that students with strong morphological awareness are better able to produce correct word forms, which contributes to their overall language proficiency. Bellomo (2009) found that training in morphological analysis improved vocabulary mastery among learners, suggesting that teaching morphological skills can be an effective vocabulary-building strategy.

Morphological Awareness as a Vocabulary Learning Strategy

Morphological awareness provides an effective strategy for improvingvocabulary mastery. This approach involves teaching students how to break down words into morphemes (prefixes, suffixes, and roots) and understand their meanings. For example, learners who recognize the suffix "-ion" in "graduation" understand that it indicates a noun form, while the prefix "un-" in "undisciplined" signals a negative meaning. By understanding such patterns, learners can decipher unfamiliar words and enhance their vocabulary.

Compared to Indonesian, English has a more complex morphological structure. Nunens and Bryant (as cited in Nurhemida, 2007) suggest that many English words appear irregular in spelling or pronunciation but follow predictable patterns when analyzed morphologically. For example, "musician" is irregular in terms of letter-sound correspondence, but its formation from "music" and the suffix "-ian" (indicating a person who performs a task) is morphologically regular. Thus, teaching learners to analyze words morphologically can significantly enhance their vocabulary development by helping them recognize and predict word patterns.

METHODOLOGY

This study employed a quantitative approach with a correlational design to examine the relationship between morphological awareness and vocabulary mastery.A quantitative approach was selected because the data collected consists of numbers, which were analyzed using statistical techniques (Hermawan, 2019). The correlational design was chosen to identify the extent to which variations in one variable are related to variations in another variable (Azwar, 2017). The study focused on fourth-semester students from the English Education Study Program at Artha Wacana Christian University.

The participants of this study were 20 fourth-semester students from the English Education Study Program. These students were selected based on the assumption that they had completed a morphology course in the previous semester and had acquired basic morphological knowledge, making them suitable subjects for this research.

To collect the data, two tests were administered: the Morphological Awareness Test and the Vocabulary Level Test. The Morphological Awareness Test was adapted from Chang et al. (2005) and measured students' ability to understand morphemic units in English. It comprised two parts: the Morpheme Identification Test and the Morphological Structure Test. The Morpheme Identification Test measured the students' ability to break down complex words into smaller parts and was modified by the researcher to suit university students. The Morphological Structure Test assessed students' ability to create new words using different morphemes, and it was also adjusted by the researcher to better fit the research context. The Vocabulary Level Test, adapted from Webb et al. (2017), measured students' vocabulary knowledge across five word levels: 1000, 2000, 3000, 4000, and 5000. This test contained 50 items, each with 30 matching questions.

The research followed several steps. First, the researcher prepared the instruments, including the Morphological Awareness Test and the Vocabulary Level Test. Then, the tests were administered to the 20 students, with detailed instructions provided to ensure consistency and prevent bias. After collecting the completed tests, the data were analyzed using Spearman's Rho correlation coefficient in IBM SPSS Version 22 to determine the correlation between morphological awareness and vocabulary mastery. Finally, the results were presented and interpreted.

Data analysis in this study employed Pearson Product Moment in SPSS version29 to explore the correlation between the two variables. A normality test using the Shapiro-Wilk method was conducted to ensure that the residuals of the regression model were normally distributed, given the sample size of fewer than 50 participants.A linearity test was also performed to assess whether there was a significant linear relationship between the independent and dependent variables.

FINDINGS AND DISCUSSION

This study aimed to investigate the correlation between morphological awareness and vocabulary mastery among fourth-semester students of the English Education Study Program at Artha Wacana Christian University. Data were collected through two tests: the Morphological Awareness Test and the Vocabulary Level Test. The scores obtained from both tests were analyzed to determine the relationship between the two variables.

Morphological Awareness Score

Table 1. Descriptive Statistics

Descriptive Statistics							
	N	Range	Minimum	Maximum	Mean	Std. Deviation	Variance
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic
Morphological Awareness	20	35	50	85	67.45	10.390	107.945
Valid N (listwise)	20						

The table above showed that the total data was 20 respondents. The range of this data was 35, the maximum score was 85 and the minimum score is 50. The mean of the data was 67.45 standard derivation was 10.390 and the variance was 107.945.

Vocabulary Level Score

Table 2. Descriptive Statistics

Descriptive Statistics							
	N	Range	Minimum	Maximum	Mean	Std. Deviation	Variance
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic
Morphological Awareness	20	35	50	85	67.45	10.390	107.945
Valid N (listwise)	20						

The data above showed that the range score was 41, the minimum score was 56, the maximum score of the students was 97, the mean score of students was 70.95, the standard score deviation was 11.473 and the variance was 131.629.

Normality and Linearity

Table 3. Test of Normality

Variable	Shapiro-Wilk		
	Statistic	df	Sig.
Morphological Awareness	.937	20	.214
Vocabulary Mastery	.921	20	.102

Based on the results of the normality test above, it is known that the significance value of the vocabulary variable has a normal distribution of data, namely 0.214 ($p > 0.05$) which is above 0.05. The morphology variable also has a normal distribution of data, namely 0.102 ($p < 0.05$) which is above 0.05. Thus, the normality of the two variable is normally distributed.

Table 4. Test of Linearity

Variable	Test for Linearity
	Sig.
Morphological Awareness	0.001
Vocabulary Mastery	0.001

Based on the results of the linearity test above, it is known that the variables morphology awareness and vocabulary mastery have a linear relationship because both of the variables have a significance value below 0.05 ($p < 0.05$).

The Correlation between Students' Morphological Awareness and Vocabulary Mastery

The analysis of the correlation was using the Pearson Product Moment formula. The researcher used IBM SPSS for Windows (Version 29) to measure the correlation between morphological awareness and vocabulary mastery. The result of the calculation can be seen in the following table:

Table 5. The Result of Correlation

Correlation			
		Morphological Awareness	Vocabulary Mastery

Morphological Awareness	Pearson Correlation	1	,802**
	Sig. (2-tailed)		,001
	N	20	20
Vocabulary Mastery	Pearson Correlation	,802**	1
	Sig. (2-tailed)	001	
	N	20	20
Correlation is significant at the 0.01 level (2-tailed).			

Based on the table above, it can be concluded that there is a correlation between morphological awareness and vocabulary mastery. The Pearson correlation coefficient is 0.802 indicates a correlation between the two variables. The significance level of 0.001 confirms that this correlation is statistically significant at the 0.01 level. The results of this study demonstrate a significant and very high positive correlation (r = 0.802) between morphological awareness and vocabulary mastery among fourth-semester students. This finding suggests that students who possess higher levels of morphological awareness tend to perform better in vocabulary tests. The results align with previous studies by Gallert et al. (2020) and Alsaeedi (2017),which emphasize the role of morphological awareness in helping learners decode unfamiliar words and expand their vocabulary. Additionally, this study supports the notion that understanding morphemes, roots, and affixes contributes to vocabulary development by enabling students to break down complex words into simpler, more comprehensible components.

The findings also corroborate the work of Apriyani & Ilma (2020), Abdillah (2018), and Adam (2018), all of whom found significant correlations between morphological awareness and vocabulary mastery in different student populations. In conclusion, this study highlights the importance of integrating morphological instruction into language learning, as it can significantly enhance students' vocabulary acquisition. Educators are encouraged to incorporate activities that promote morphological awareness to help students improve their vocabulary mastery.

CONCLUSION

The purpose of this study was to investigate the correlation between morphological awareness and vocabulary mastery among fourth-semester students of the English Education Study Program at Artha Wacana Christian University. Using a quantitative approach, data were collected through tests and analyzed with SPSS version 29. The findings revealed a Spearman rho correlation coefficient of 0.802, indicating a very high positive correlation between the two variables. This result supports the acceptance of the alternative hypothesis (Ha), confirming that a significant correlation exists between morphological awareness and vocabulary mastery, while the null hypothesis (H0) is rejected. In conclusion, students with higher levels of morphological awareness tend to demonstrate stronger vocabulary mastery, highlighting the importance of morphological awareness in enhancing language learning outcomes.

REFERENCE

Adam, A. (2018). Relationship between Morphological Awareness and Vocabulary Mastery. ANGLO-SAXON: *Jurnal Ilmiah Program Studi Pendidikan Bahasa Inggris, 9*(1).

Ahour, Touran and Salamzadeh, Parisa. Vocabulary Learning Strategies Used by Poor Iranian High School Students. *International Journal of Language Teaching and Research, 2*(1), 2014.

Ajija, R. S., Sari, D. W., Setianto., Rahmat, H., Primanti., & Martha, R. (2011). Cara Cerdas Menguasai E-views. Penerbit Salemba Empat.

Al Farsi, B.(2008). Morphological Awareness and Its Relationship to Vocabulary Knowledge and Morphological Complexity Among Omani EFL University Students*(Unpublished master's thesis)*. University of Queensland, St Lucia, AU.

Alqahtani, M. (2015). The Importance of Vocabulary in Language Learning and How to Be Taught. *International Journal of Teaching And Education, 3*(3), 21-34.

Alsaeedi, W. A. (2017). *The Role of Morphological Awareness in Vocabulary Acquisitionin English of Saudi EFL Learners*.

Alsalamah, N. (2011). The Relationship Between Morphological Awareness and English Vocabulary Acquisition of Saudi Female Students at King Saud University(Master's thesis). The University of WISCONSIL, USA. Retrieved from https://minds.wisconsin.edu/handle/1793/61500

Ar, S. D., & Ilma, R. (2020). The Influence of Morphological Awareness on College Students' Vocabulary Mastery. *Didascein: Journal of English Education, 1*(1).

Arikunto, S. (2010). Prosedur Penelitian: Suatu Pendekatan Praktik (Edisi Revisi). Rineka Cipta.

Aronoff, M., & Fudeman, K. (2005). What is morphology? Malden, MA: Wiley Blackwell.

As Aronoff, M., & Fudeman, K. (2022). *What is morphology? 3rd ed*. John Wiley & Sons.

Asyiah, D. N. (2017). The Vocabulary Teaching and Vocabulary Learning: Perception, Strategies, and Influences on Vocabulary Mastery. *Jurnal Bahasa Lingua Scientia, 9*(2), 293-318.

Azwar, S. (2017). Metode Penelitian Psikologi (Edisi II). Pustaka Pelajar.

B. W. Y., & Shu, H. U. A. (2005). The Role of Morphological Awareness in Children's Vocabulary Acquisition in English. *Applied psycholinguistics, 26*(3), 415-435.

Bellomo, T.S. (2009) Morphological Analysis as A Vocabulary Strategy for L1 and L2 College Preparatory Students. *The Electronic Journal for English as a Second Language*. 13(3).

Candraloka, O. R., & Novitasari, A. (2022). The Effect of Using Tree Diagram Technique for Improving Students' Vocabulary Mastery. *J-SHMIC: Journal of English for Academic, 9*(2), 69-80.

Carstairs-McCarthy, A. (2017). *Introduction to English Morphology: words and their structure*. Edinburgh University Press.

Coates, R. (1999). Word Structure. London: UK.

Creswell, J. W. (2016). Research Design. Pendekatan Metode Kualitatif, Kuantitatif, dan Campuran. Pustaka Pelajar.

Fedriyanto, M. G., & Istiara, F. (2022). The Correlation Between Students' Morphological Awareness and Students' Vocabulary Mastery of Sixth Semester Students of English Department at Stkip-Pgri Bandar Lampung in Academic Year 2021/2022. *Journal of English Education Students (JEES), 4*(1),1-8.

Gellert, A. S., Arnbak, E., Wischmann, S., & Elbro, C. (2021). Morphological intervention for students with limited vocabulary knowledge: Short-and long-term transfer effects*. Reading Research Quarterly, 56(3),* 583-601.

Ghozali, I. (2015). LiAplikasi Analisis Multivariate dengan Program SPSS. Semarang: Badan Penerbit Universitas Diponegoro.

Ghozali, I. (2018). Aplikasi Analisis Multivariate dengan Program IBM SPSS 25. Badan Penerbit Universitas Diponegoro.

Hermawan, I. (2019). Metodologi Penelitian Pendidikan: Kuantitatif, Kualitatif & Mixed Method. Hidayatul Quran Kuningan.

Lieber, R. (2021). *Introducing Morphology.* Cambridge University Press.

McCutchen, D. and B. Logan (2011). Inside Incidental Word Learning: Children's Strategic Use of Morphological Information to Infer Word Meanings. Reading Research Quarterly. 46(4), p. 334-349. DOI: 10.1002/RRQ.003

Nafiah, H. A. (2017). *The Correlation Between Students'morphological Awareness of Affixes to Their Reading Comprehension (A Study of Fifth Semester Students of English Department of Teacher Training and Education Faculty at IAIN Salatiga in Academic Year of 2016/2017) (Doctoral dissertation, IAIN Salatiga).*

O'Grady, W., & de Cuzman, V. P. (1997). Morphology: the analysis of word structure. In W. O'Grady, M. Dobrovolsky, F. Katamba (Eds). (1997).Contemporary linguistics: an introduction (132- 180). London: Longman.

Priyatno, Duwi. (2016). *Belajar Alat Analisis Data Dan Cara Pengolahannya Dengan SPSS Praktis dan Mudah Dipahami untuk Tingkat Pemula dan Menengah.* Gava Media.

Rohmatillah, R. (2017). *A Study on Difficulties in Learning Vocabulary*. *English Education: Jurnal Tadris bahasa Inggris, 6*(1), 75- 93.

Santoso, Slamet. (2013). Statistika Ekonomi Plus Aplikasi SPSS. Universitas Muhammadiyah Ponorogo Press.

Schreuder, R., & Baayan, R. H. (1995). Modeling morphological processing. In L. Feldman (Ed.), Morphological aspects of language processing (pp. 131-154).

Shadikah, Arina Afiyati., Fauziati, Endang., and Supriyadi, Slamet. (2017) *The Effect of Vocabulary Learning Strategies on Vocabulary Mastery Based On Gender Differences.* Proceeding of 2nd International Conference of Arts Language And Culture. Published journal.

Siregar, Syofian. (2015). Statistika Parametrik Untuk Penelitian Kuantitatif Dilengkapi Dengan Perhitungan Manual dan Aplikasi SPSS Versi 17. Jakarta: Bumi Aksara.

Sugiyono. 2016. Metode Penelitian Kuantitatif, Kualitatif, Dan R&D. Bandung: Alfabeta.

Yıcel-Koç, M. (2015). *The Role of Morphological Awareness in Academic Vocabulary and Reading Comprehension Skills of Adult ESL Learners* (Unpublished doctoral dissertation). Seattle Pacific University, Seattle.

Zamzami, M. F. (2019). *The Effect of Using Duolingo Application Through Students' Vocabulary Mastery (Bachelor's thesis), Jakarta: FITK UIN Syarif Hidayatullah Jakarta).*

.