

Exploring the Impact of Affixation, Vocabulary Mastery, and Reading Interest on Students' Comprehension of Authentic Texts: A Study of Third-Semester English Students at University

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ABSTRACT

Reading comprehension of authentic texts is influenced by various linguistic and motivational factors. This study investigated the contributions of affixation mastery, vocabulary mastery, and reading interest to the reading comprehension of third-semester English students. A correlational research design with multiple regression analysis was employed. The participants were 55 third-semester English students at STAIN Mandailing Natal. Data were collected using objective tests to assess affixation and vocabulary mastery, and a questionnaire to measure reading interest. Descriptive and inferential statistics, including hypothesis testing and regression analysis, were conducted using Minitab version 22. The analysis revealed that affixation mastery significantly contributed to students' reading comprehension ($p = 0.002$). Vocabulary mastery ($p = 0.001$) and reading interest ($p = 0.000$) also showed significant positive contributions. Collectively, the three variables accounted for 43.53% of the variance in reading comprehension, indicating a substantial combined influence. The remaining 56.47% of the variance was attributed to other unexamined factors. These findings suggest that both linguistic competencies and motivational aspects are critical in enhancing students' comprehension of authentic texts. The study emphasizes the need for instructional strategies that support morphological awareness, vocabulary development, and the cultivation of reading interest to improve reading outcomes in EFL contexts.

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1. INTRODUCTION

Reading comprehension is widely recognized as a fundamental academic skill, especially in higher education, where students are expected to engage with complex texts across disciplines. Proficient reading not only enables learners to acquire new knowledge but also to think critically, evaluate arguments, and apply information to real-world contexts. According to Eftita (2014), proficiency in reading English is particularly vital in academic settings, as it allows students to access an expansive body of knowledge and academic literature. Reading, therefore, should not be reduced to the mere

decoding of words or the identification of unfamiliar terms. Rather, it encompasses the ability to construct meaning, interpret messages, and critically engage with the content (Siregar & Harida, 2021).

Despite the importance of reading comprehension, students in Indonesia continue to struggle in this area. The Programme for International Student Assessment (PISA, 2022) ranks Indonesia 70th out of 80 participating countries in reading literacy, with an average score of only 359—well below the global average. In addition, the United Nations Educational, Scientific and Cultural Organization (UNESCO) has reported alarmingly low reading interest among Indonesians, with only 0.001% of the population engaging in reading on a regular basis (Kurniati et al., 2023). These statistics highlight the urgent need to address deficiencies in reading comprehension, particularly at the tertiary level where students are expected to process academic texts independently. Among the key factors influencing reading comprehension are students' mastery of affixation, vocabulary, and their interest in reading.

Affixation, a fundamental aspect of morphological knowledge, plays a crucial role in enhancing vocabulary depth and reading comprehension. It involves the addition of prefixes or suffixes to base words, which alters the word's meaning or grammatical category (Plag, 2003). As Finegan (2004) notes, affixation allows readers to decode unfamiliar words by recognizing familiar morphemes, thereby facilitating comprehension. McCarthy (2016) emphasizes that affixation can occur before, after, or even within a root word, allowing for both simple and complex morphological constructions. For example, the word "unhappiness" illustrates the application of both a prefix ("un-") and a suffix ("-ness") to the base "happy," transforming its meaning and grammatical function. Simaremare et al. (2021) further assert that affixation enables the construction of new words, supporting readers' understanding of varied word classes and syntactic roles.

Affixes are commonly categorized based on their position within a word. Chairunnisa et al. (2024) distinguish between prefixes, which precede the base word, and suffixes, which follow it. Lieber (2016) defines a prefix as a syllable or group of syllables added to the beginning of a word to modify its meaning. Conversely, Haspelmath and Sims (2010) explain that a suffix is added to the end of a word and often modifies grammatical function. For instance, in the word "flavorless," the suffix "-less" negates the meaning of the root word, indicating absence. Sunandar (2022) similarly describes suffixes as bound morphemes attached to the end of root words. Understanding these morphological structures is critical for interpreting the meaning of unfamiliar words in academic texts, particularly those written in authentic, non-simplified language.

In addition to affixation, vocabulary mastery is another vital predictor of reading comprehension. Students who possess a broad and nuanced vocabulary are more likely to interpret academic texts effectively. Hornby (1995) defines vocabulary as the set of words known and used by an individual, often organized by subject or context. Bombo et al. (2022) stress that vocabulary knowledge is inextricably linked to reading proficiency, as it enables learners to decode, infer, and construct meaning from text. They further argue that vocabulary instruction should be integrated into reading activities to reinforce comprehension. A limited vocabulary often results in superficial or inaccurate understanding, especially when encountering technical or discipline-specific terminology common in authentic texts.

Moreover, students' reading interest serves as a motivational factor that significantly influences their engagement and comprehension. Ross (2016) defines reading interest in three dimensions: the amount of reading undertaken, the preferred topics or genres, and the intrinsic appeal of textual elements. Reading interest shapes the extent to which students are willing to invest time and cognitive effort in reading tasks. According to Guthrie et al. (2007), students who are more interested in reading are more likely to adopt deep reading strategies and persist in understanding complex texts. Therefore, fostering reading interest is essential in promoting sustained reading behavior and improved comprehension outcomes.

The type of reading material also plays a crucial role in comprehension. In this context, authentic materials—texts created by native speakers or writers for real communicative purposes—are increasingly used in language and content-based instruction. Mishan (2005) defines authentic materials

as language instances designed for real audiences rather than for instructional purposes. These include newspapers, advertisements, pamphlets, and magazine articles. Guo (2012) asserts that the authenticity of such texts lies in their natural language use and context-specific communication. Millenia et al. (2024) further elaborate that authentic materials reflect real-life discourse and help bridge the gap between classroom learning and real-world application. However, the complexity and unpredictability of authentic texts can pose challenges for students who lack sufficient linguistic or motivational resources.

As authentic texts gain prominence in academic curricula, it becomes increasingly important to investigate the extent to which students' linguistic knowledge and motivation support their ability to comprehend these texts. Although the individual roles of affixation mastery, vocabulary mastery, and reading interest have been examined in previous research, few studies have explored how these three variables interact to influence comprehension, especially in the context of authentic materials at the university level. Most existing research has focused on vocabulary or reading interest in isolation or used textbook-based materials that lack real-world complexity. This presents a gap in the literature that needs to be addressed.

The present study aims to fill this gap by examining the combined contributions of affixation mastery, vocabulary mastery, and reading interest to the comprehension of authentic texts among third-semester English students at a university in Indonesia. By adopting an integrated approach, this research seeks to provide a more comprehensive understanding of the linguistic and motivational factors that underpin reading comprehension. The novelty of this study lies in its focus on the intersection of morphological awareness, lexical competence, and reading motivation in the context of authentic academic materials—a perspective that remains underexplored in Indonesian higher education.

2. METHODS

2.1 Research Design

This study used a correlational design with multiple regression analysis to examine the contributions of three independent variables; affixation mastery, vocabulary mastery, and reading interest on students' reading comprehension of authentic texts. Correlational analysis was used to evaluate the direction and strength of the correlations between these variables (Lodico et al., 2006). Multiple regression, as described by Cohen et al. (2018), allowed the researcher to determine how these three variables jointly and individually influence the dependent variable, students' reading comprehension.

2.2 Population and Sample

Population of this research was all the English students of the third semester students of STAIN Mandailing Natal in academic years 2023. The population of this research can be seen on the following table:

Table 1. The Number of Population

No	Class	Quantity of Students
1.	Tadris Bahasa Inggris 1	30
2.	Tadris Bahasa Inggris 2	25

The researcher used a total sampling in taking the sample. Total sample was chosen as the sample because the population was less than 100. Therefore, the number of samples in this study was 55 students.

2.3 Instruments of the Research

This study employed both tests and a questionnaire as research instruments. The tests were designed to assess students' affixation mastery, vocabulary mastery, and their reading comprehension of authentic texts. Meanwhile, the questionnaire was used to measure students' reading interest. To ensure content validity, the affixation and vocabulary mastery tests were reviewed and validated by Dr. Zul Amri, M.Ed., a faculty member of the English Department at Universitas Negeri Padang. Similarly, the reading interest questionnaire and the reading comprehension test were validated by Senorica Yulia Sari, S.Pd., M.TESOL, also a lecturer in the English Department at Universitas Negeri Padang.

To examine construct validity, a pilot study was conducted with third-semester English students at UIN Syekh Ali Hasan Ahmad Addary Padangsidempuan. The purpose of this tryout was to ensure that the instruments accurately measured the intended constructs.

The reliability of the instruments was evaluated using Cronbach's Alpha formula. The results indicated that all instruments demonstrated high reliability, with coefficients exceeding the acceptable threshold of 0.60. Specifically, the Cronbach's Alpha values were as follows: 0.906 for the affixation mastery test, 0.885 for the vocabulary mastery test, 0.869 for the reading interest questionnaire, and 0.911 for the reading comprehension test. These results confirm that all instruments used in the study were reliable.

Data analysis was carried out using three statistical techniques: descriptive statistics, inferential statistics, and hypothesis testing, ensuring a comprehensive examination of the relationships among the study variables.

3. FINDINGS AND DISCUSSION

The data from this study consisted of three independent variables, namely affixation mastery, vocabulary mastery, and reading interest, with one dependent variable, namely reading comprehension of authentic text. The results were analyzed and categorized to determine the level of proficiency in each area.

3.1. Descriptive Statistics

3.1.1 Affixation mastery

The students' affixation mastery test revealed a mean score of 78.20, with a standard deviation of 9.403. The results were categorized as follows: 15% of students were classified in the high category, 70% in the moderate category, and 15% in the low category. This indicates that most students (70%) displayed moderate affixation mastery.

3.1.2 Vocabulary mastery

The students' vocabulary mastery test showed a mean score of 77.40 and a standard deviation of 9.072. The category distribution revealed that 13% of students were in the high category, 67% in the moderate category, and 20% in the low category. Similar to affixation mastery, most students (67%) were in the moderate category for vocabulary mastery.

3.1.3 Reading interest

The analysis of students' reading interest revealed a mean score of 84.40 with a standard deviation of 5.762. The results indicated that 7% of students had high reading interest, 78% had moderate interest, and 15% had low interest. Thus, the majority of students (78%) were found to have moderate reading interest.

3.1.4 Reading Comprehension of Authentic Text

The students' reading comprehension of authentic texts showed a mean score of 79.07 and a standard deviation of 8.304. The distribution of scores revealed that 89% of students fell into the moderate category, while 11% were in the low category. Notably, no students achieved a high level of reading comprehension.

3.2. Inferential Statistics

The data was examined using inferential statistics, which describe the acquired data exactly as it is without attempting to draw broad conclusions or generalizations (Sugiyono, 2007). Then, there were some steps to do the inferential statistics analysis as follows. Firstly, check the normality of the residual. Second, check the linearity test, and check the multicollinearity test by using Minitab version 22.

3.2.1 Normality of Residual

The normality test was conducted on all the variables (affixation mastery, vocabulary mastery, reading interest, and reading comprehension of authentic text). Kolmogorov-Smirnov was used to test the normality of the residuals.

Table 2. Normality of Residual

Variable	Sig. Value
Affixation Mastery	0.150
Vocabulary Mastery	0.150
Reading Interest	0.150
Reading Comprehension of Authentic Text	0.150

Source: Minitab version 22

Table 2 above shows that all variables are distributed normally. Where the P-Value of affixation mastery is $0.150 > 0.05$, P-Value of vocabulary mastery is $0.150 > 0.05$, the P-Value of reading interest is $0.150 > 0.05$, and the P-Value of reading comprehension of authentic text is $0.150 > 0.05$, which indicates that the residuals follow a normal distribution because the P-Value of all variables is greater than 0.05.

3.2.2 Multicollinearity test

The test for multicollinearity was assessed using Minitab version 22 to detect and evaluate the extent of correlation among independent variables in a regression model. Multicollinearity was detected by using the Variance Inflation Factor (VIF). It can be seen if there is a correlation between the independent variables, or if the Variance Inflation Factor (VIF) is bigger than 10. Furthermore, the multicollinearity test revealed no issues with multicollinearity among the independent variables.

Table 3. Multicollinearity Test

Variable	VIF	Interpretation
Affixation Mastery	1.03	No multicollinearity
Vocabulary Mastery	1.11	No multicollinearity
Reading Interest	1.12	No multicollinearity

Source: Minitab version 22

The results showed that the Variance Inflation Factor (VIF) values for all independent variables were within acceptable limits. Specifically, the VIF value for affixation mastery was 1.03, for vocabulary mastery was 1.11, and for reading interest was 1.12. Since all VIF values were below the threshold of 10, it can be concluded that there was no indication of multicollinearity among the independent variables.

3.3. Hypothesis Testing

The hypothesis was tested to determine the contribution of affixation mastery, vocabulary mastery, and reading interest to students' reading comprehension of authentic text by using multiple regression analysis technique.

3.3.1 Multiple regression

The output of multiple regression analysis by using the Minitab program version 22 is presented as follows:

Table 4. Multiple Regression Coefficient of Independent Variables

Variable	Coefficient (B)	T-Value	P-Value
Affixation Mastery	0.485	2.90	0.006
Vocabulary Mastery	0.401	2.43	0.019
Reading Interest	0.528	3.43	0.001

Source: Minitab version 22

The multiple regression analysis revealed that affixation mastery (X1), vocabulary mastery (X2), and reading interest (X3) all had positive influences on students' reading comprehension of authentic texts (Y). Based on the multiple regression analysis above, the results of the regression coefficients for the independent variables toward the dependent variable were: affixation mastery, 0.006; vocabulary mastery, 0.019; and reading interest, 0.001. The interpretation of this hypothesis was analyzed if $P\text{-Value} > 0.05$ H_0 was accepted. If $P\text{-Value} < 0.05$ H_a was accepted. Based on the result, affixation mastery was $0.006 < 0.05$, vocabulary mastery was $0.019 < 0.05$, and reading interest was $0.001 < 0.05$. So it can be concluded that H_a is accepted. There is a significant contribution of affixation mastery, vocabulary mastery, and reading interest to students' reading comprehension of authentic texts.

3.3.2 Test Coefficient of Determination R^2 (R Square)

The output of coefficient of determination R-square by using Minitab program version 22, is presented as follows:

Table 5. Coefficient of Determination R-Square

Standard Error (S)	R-Square (R^2)
6.94797	43.53%

Source: Minitab version 22

Based on the findings of the coefficient of determination analysis presented in the table above, S (Standard Error of the Estimate) = 6.94797 represents the average deviation of observed values from the regression line. The adjusted R-squared (R^2) value of all three independent variables to reading comprehension of authentic text is 43.53 %. This means that the ability of the independent variables to influence the dependent variable is 43.53 %.

Discussion

This study found that when affixation mastery, vocabulary mastery, and reading interest were combined, they together contribute 43.53% to students' reading comprehension of authentic texts. This suggests that these factors are interrelated and collectively influence students' ability to comprehend and interpret texts. This study suggests that these factors are interrelated and collectively influence students' ability to comprehend and interpret texts. All of those become the important factors that influence students' success in reading comprehension of authentic text. The reason behind these significant contributions to these three factors. First, affixation mastery enables students to break down

unfamiliar words into meaningful parts prefixes, suffixes, and root words making it easier for them to infer the meaning of new vocabulary. This morphological awareness, as noted by Liu et al. (2024), is essential for decoding complex words and is positively associated with improved reading comprehension at various stages of language development.

Afrilya et al. (2024) also noted that students often face difficulties in interpreting English sentences correctly without understanding affixation, as affixes can change both the grammatical class and the meaning of words. This reinforces the finding of this research, which shows that affixation mastery is crucial in avoiding misinterpretation and ensuring accurate comprehension of authentic texts. Similar to this, White et al. (1989) highlighted that morphological awareness which includes the capacity to recognize and understand affixes, improves students' reading comprehension, especially when they come across new terminology. This is clear from the current study, which found that students who were more proficient in affixation performed better on reading comprehension assessments that used real texts.

Second, vocabulary mastery is a crucial component of reading comprehension. Students who have a large vocabulary are better able to comprehend texts, identify key ideas, and grasp the nuances of meaning in context. Nation (2001) emphasized that a wide vocabulary base is essential for fluent reading and comprehension, particularly in authentic texts that are often rich in diverse and context-dependent vocabulary. This finding is in line with Beck et al. (2002), who argued that vocabulary knowledge is one of the strongest predictors of reading comprehension. According to their study, a well-developed vocabulary enables learners to engage more deeply with reading content and facilitates comprehension, especially in complex or academic texts. This idea is further supported by Tager (2015), who claims that reading gives students the chance to expand their vocabulary while also improving their reading comprehension skills. This reciprocal relationship was demonstrated in the current study, where students who had read more actively scored higher on comprehension tests because they had a larger vocabulary.

Third, reading interest plays a motivational role by encouraging students to engage actively and consistently with reading materials. As Guthrie and Wigfield et al. (2000) have shown, when students are interested in reading, they are more likely to apply reading strategies, persevere through challenging texts, and build a habit of reading that enhances comprehension over time. Similarly, Reflinda (2024) emphasized that reading interest allows individuals to focus their attention more effectively, increasing the depth of reading engagement. Students become more receptive to reading input and are more likely to comprehend the content thoroughly when they feel emotionally and cognitively involved. This is in line with the findings of the present study, which show that students with a higher interest in reading performed better in understanding authentic texts.

4. CONCLUSION

This study reveals that students' reading comprehension of authentic texts is significantly influenced by their affixation mastery, vocabulary mastery, and reading interest. This study showed that independent variables simultaneously contributed 43.53% to students' reading comprehension of authentic text. These factors collectively shape and determine students' ability to comprehend authentic texts. However, this study has some limitations. Although it covered all 55 students in the population, the research was still limited to one institution and one semester, which may restrict the generalization of the findings to other contexts. Moreover, the study only examined three variables; affixation mastery, vocabulary mastery, and reading interest while other important factors such as reading strategies, background knowledge, and learning motivation were not considered. Therefore, future research is suggested to include students from different institutions and academic levels, extend the time span of investigation, and integrate additional variables to provide readers a more thorough grasp of how well they comprehend authentic texts.

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