

Examining the Relationship Between English Reading Habits and Reading Comprehension Among Vocational School Students

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ABSTRACT

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Reading habits are widely believed to influence academic achievement, yet empirical evidence from rural vocational school contexts remains limited, particularly in English as a Foreign Language (EFL) settings. This study examined the correlation between English reading habits and reading achievement among eleventh-grade students at SMKN 2 Sekotong, a rural vocational school in Indonesia. Employing a quantitative correlational design with ex post facto approach, data were collected from 30 students selected through simple random sampling. Reading habits were measured using a Reading Habits Questionnaire (4-point Likert scale), while reading achievement was assessed through a 30-item reading comprehension test covering narrative and descriptive texts. After normality testing revealed non-normal distribution of reading achievement scores, Spearman's rank-order correlation was employed for analysis. The analysis revealed no statistically significant correlation between reading habits and reading achievement ($\rho = -0.023$, $p = 0.902$), indicating a very weak relationship. Students with similar self-reported reading habits demonstrated vastly different comprehension outcomes, with some low-habit readers outperforming high-habit readers. These findings challenge universal assumptions about the reading habits-achievement relationship and suggest that factors such as cognitive load, text appropriateness, instructional quality, and contextual resources may play more substantial roles than reading frequency alone. The results emphasize the need for contextualized, quality-focused literacy interventions rather than quantity-based approaches in rural vocational education settings.

1. INTRODUCTION

In the contemporary educational landscape, reading remains a fundamental pillar of academic success and lifelong learning. Despite the proliferation of digital resources and unprecedented access to information, many students continue to struggle with developing consistent reading habits and achieving satisfactory reading comprehension outcomes (Gilakjani & Sabouri, 2016; Qarqezi & Ab Rashid, 2017). This challenge is particularly pronounced in English as a Foreign Language (EFL) contexts, where students must navigate the dual complexities of language acquisition and comprehension skill development (Kasim & Raisha, 2017). Understanding the relationship between reading habits and reading achievement has thus become increasingly critical for educators and policymakers seeking to enhance student learning outcomes, particularly in vocational education settings where practical literacy skills are essential for future career success.

The role of reading habits in academic achievement has been extensively debated in educational research. Numerous studies have suggested a positive correlation between regular reading practices and improved comprehension skills. Hassan et al. (2021) and Ehsan and Sultana (2020) found significant correlations between secondary school students' reading habits and their reading achievement, while Bibi

et al. (2020) demonstrated that study habits, including reading practices, were significantly positively associated with academic performance. Azzahro and Sintawati (2024) emphasize that "a regular reading habit also improves comprehension, increases intelligence, and increases language meaning for students" (p. 51), underscoring the multifaceted benefits of sustained reading engagement. International evidence from diverse contexts further supports this relationship, with Balan et al. (2019) documenting significant correlations between reading habits and academic achievement among university students in Thailand, while Whitten et al. (2019) and Oriogu et al. (2017) demonstrated that reading habits significantly assist students in learning and enhancing their performance across various educational settings.

However, this seemingly straightforward relationship has been challenged by emerging research that questions the universality of the reading habits-achievement connection. Putra and Taufiq (2024) found no significant correlation between reading habits and reading comprehension, suggesting that other factors may mediate or moderate this relationship. This finding gains additional support from methodological concerns raised by various researchers who have documented dubious findings that fail to confirm the influence of reading habits on academic achievement (Abid, 2023; Quadir et al., 2024). Such contradictory findings indicate that the relationship between reading habits and academic outcomes may be more nuanced and context-dependent than previously assumed, necessitating further investigation across diverse educational settings and student populations.

The theoretical frameworks of Cognitive Load Theory and Cognitive Process Theory provide valuable lenses through which to examine this relationship. Sweller (1988) argues that cognitive load significantly impacts learning processes, suggesting that learners who receive well-structured materials without cognitive overload, combined with consistent practice, are more likely to achieve meaningful knowledge acquisition. Cierniak et al. (2009) emphasize that "the designs of instruction impose cognitive load on learners' limited working memory and that the cognitive load in turn influences learning outcomes" (p. 315), highlighting how instructional design factors can either facilitate or hinder reading comprehension. Recent applications of cognitive load theory to language learning contexts have demonstrated that inappropriate instructional formats and text presentation types can negatively influence second language reading comprehension performance by overloading learners' cognitive capacity (Houichi & Sarnou, 2020; Paas et al., 2003). Additionally, research on cognitive processes in reading suggests that good readers tend to engage with more challenging texts, thereby gaining richer reading experiences that contribute to their continued development (Taylor, 2023). These theoretical perspectives highlight the complexity of factors influencing reading achievement beyond mere habit formation.

Despite the growing body of research on reading habits and achievement, significant knowledge gaps remain, particularly regarding vocational school students in rural contexts. Most existing studies have been conducted in urban settings or general secondary schools, with limited attention to the unique challenges faced by vocational education students in remote areas. Rural schools tend to face greater challenges related to teacher recruitment and retention, limited resources, and geographic isolation (Showalter et al., 2017), which may significantly impact students' reading development and academic outcomes. Research on rural schools globally has consistently identified insufficient reading materials and quality instruction as persistent challenges (Edutopia, 2021). SMKN 2 Sekotong, located in Pelangan village, represents a particularly interesting case where curriculum implementation occurs with minimal assessment infrastructure and limited reading culture support. The question of whether reading habits significantly influence achievement in such resource-constrained environments remains largely unexplored. Furthermore, the extent to which self-reported reading habits accurately predict reading comprehension performance in EFL contexts requires additional empirical investigation.

This study addresses these gaps by examining the correlation between English reading habits and reading achievement among eleventh-grade students at SMKN 2 Sekotong. Specifically, this research investigates two primary questions: first, whether there exists a significant correlation between students' reading habits and their reading achievement; and second, to what extent reading habits contribute to reading achievement. By employing a quantitative correlational design with carefully selected instruments, this study provides empirical evidence that can inform educational policy and practice in similar contexts.

The significance of this research is both theoretical and practical. Theoretically, this study contributes to the ongoing scholarly discourse on the relationship between reading habits and academic achievement, particularly by providing data from an underrepresented educational context. The findings may help clarify inconsistencies in existing literature and offer insights into the contextual factors that moderate this relationship in vocational and rural educational settings. Practically, the results offer valuable implications for teachers, school administrators, and curriculum designers at SMKN 2 Sekotong and similar vocational institutions. Understanding whether and how reading habits influence achievement can guide the development of more effective reading intervention programs and inform resource allocation decisions. For teachers, the findings provide evidence-based guidance on the importance of cultivating not just reading frequency but also the quality and appropriateness of reading practices tailored to students' cognitive capacities and contextual needs. For schools, the results can inform system-wide improvements in literacy education and support evidence-based policy decisions that address the specific challenges of rural vocational education. Finally, this study serves as a foundation for future researchers interested in exploring the multifaceted relationship between reading behaviors and academic outcomes in diverse Indonesian educational contexts.

2. METHODOLOGY

This study employed a quantitative correlational design to examine the relationship between English reading habits and reading achievement among eleventh-grade students at SMKN 2 Sekotong. Specifically, the research utilized an *ex post facto* approach, which was particularly appropriate given that both the independent variable (reading habits) and dependent variable (reading achievement) existed prior to the investigation and required no experimental manipulation (Cohen et al., 2018). This design enabled systematic analysis of naturally occurring phenomena while maintaining the integrity of students' authentic reading behaviors and comprehension abilities. The correlational framework was selected to answer two primary research questions: whether a significant correlation exists between students' reading habits and their reading achievement, and to what extent reading habits contribute to reading achievement outcomes.

The target population comprised all eleventh-grade students enrolled at SMKN 2 Sekotong during the data collection period, totaling 194 students. From this population, a sample of 30 students was selected through simple random sampling technique, ensuring that each student had an equal probability of inclusion and minimizing potential selection bias. This sampling method was deemed appropriate for obtaining a representative subset of the population while maintaining practical feasibility for in-depth data collection and analysis.

Two primary instruments were employed to gather data for this investigation. Reading habits were measured using a Reading Habits Questionnaire (RHQ) consisting of items designed to assess multiple dimensions of reading behavior, including reading frequency, variety of reading materials, time allocation for different text types, and motivational support from family and academic environments. The questionnaire utilized a four-point Likert scale to capture nuanced variations in students' self-reported reading practices. Reading achievement was assessed through a comprehensive reading comprehension

test containing 30 multiple-choice items equally distributed between narrative texts (15 items) and descriptive texts (15 items). Each correctly answered item was awarded one point, yielding a total possible score of 30 points, which could be converted to percentages for interpretive purposes. Both instruments underwent rigorous validation processes to ensure their psychometric adequacy. The RHQ and reading comprehension test were examined for content validity through expert review and pilot testing. Reliability analysis conducted using SPSS software yielded acceptable internal consistency coefficients, confirming that both instruments demonstrated sufficient stability and consistency for measuring the intended constructs.

Data collection proceeded systematically in classroom settings under controlled conditions. Students first completed the RHQ, providing self-reported information about their reading habits and practices. Subsequently, they completed the reading comprehension test, which assessed their ability to understand and interpret both narrative and descriptive English texts. Throughout the data collection process, standardized administration procedures were maintained to ensure consistency and minimize potential confounding variables that could influence test performance.

For data analysis, descriptive statistics were initially calculated to summarize the central tendency and variability of both reading habit scores and reading achievement scores. Prior to conducting inferential statistical tests, assumption testing was performed to determine the appropriate correlation coefficient. The Shapiro-Wilk test was employed to assess normality of distribution for both variables, while a scatterplot was generated to examine linearity of the relationship. Results indicated that reading achievement scores violated the assumption of normal distribution ($W = 0.876, p = 0.002$), while reading habit scores were normally distributed ($W = 0.971, p = 0.554$). Additionally, the scatterplot revealed no clear linear pattern between variables. Consequently, Spearman's rank-order correlation coefficient (Spearman's rho) was selected as the appropriate nonparametric statistical test for analyzing the relationship between reading habits and reading achievement. The significance level was set at $\alpha = 0.05$ for hypothesis testing, with correlation strength interpreted according to standard guidelines where coefficients of 0.00-0.19 indicate very weak relationships, 0.20-0.39 weak, 0.40-0.59 moderate, 0.60-0.79 strong, and 0.80-1.00 very strong relationships.

3. RESULTS AND DISCUSSION

Results

This study examined the correlation between English reading habits and reading achievement among thirty eleventh-grade students at SMKN 2 Sekotong. The analysis employed descriptive statistics to characterize the sample, assumption testing to determine the appropriate statistical procedure, and Spearman's rank-order correlation to examine the relationship between variables. The findings are presented systematically to address the two research questions posed in this investigation.

Descriptive Statistics

Table 1 presents the descriptive statistics for both Reading Achievement Scores (RAS) and Reading Habit Scores (RHS). The Reading Achievement Score, derived from a 30-item reading comprehension test, ranged from 5 to 30, with a mean of 19.00 ($SD = 8.686$). This substantial variability suggests considerable heterogeneity in students' reading comprehension abilities, with some students demonstrating minimal comprehension while others achieved perfect or near-perfect scores. When converted to percentages, the mean score of 19.00 represents approximately 63% correct responses, indicating that on average, students performed at a moderate level on the reading comprehension assessment.

Table 1. Descriptive Statistics for Reading Achievement and Reading Habit Scores

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Reading Achievement Score	30	5	30	19.00	8.686
RHS	30	1.79	3.23	2.4113	0.31597
Valid N (Listwise)	30				

The Reading Habit Score, measured on a 4-point Likert scale through the Reading Habits Questionnaire, exhibited a range from 1.79 to 3.23, with a mean of 2.4113 ($SD = 0.31597$). This relatively narrow standard deviation indicates that students' self-reported reading habits were fairly homogeneous, clustering around the midpoint of the scale. The mean RHS of approximately 2.41 suggests that students generally reported moderate reading habits, neither particularly strong nor notably weak. The maximum observed RHS of 3.23 indicates that even the most dedicated readers in this sample did not consistently report reading habits at the highest level of the scale.

Assumption Testing

Prior to conducting correlation analysis, the normality of distribution for both variables was assessed using the Shapiro-Wilk test, which is appropriate for sample sizes under 50. Table 2 displays the results of normality testing for both variables.

Table 2. Shapiro-Wilk Test of Normality

Variable	Kolmogorov-Smirnov Statistic	df	Sig.	Shapiro-Wilk Statistic	df	Sig.
Reading Achievement Score	0.188	30	0.008	0.876	30	0.002
RHS	0.104	30	0.200*	0.971	30	0.554

The Shapiro-Wilk test results revealed that Reading Achievement Scores violated the assumption of normality ($W = 0.876$, $p = 0.002$), with the significance value well below the conventional $\alpha = 0.05$ threshold. This finding indicates that the distribution of reading comprehension scores significantly deviated from a normal distribution pattern. In contrast, Reading Habit Scores demonstrated normal distribution ($W = 0.971$, $p = 0.554$), with the p -value exceeding the 0.05 significance level, suggesting that self-reported reading habits followed an approximately normal distribution pattern in this sample.

To further examine the relationship between variables, a scatterplot was generated to assess linearity, which is another important assumption for parametric correlation analysis. Figure 1 illustrates the distribution of data points for RHS and RAS.

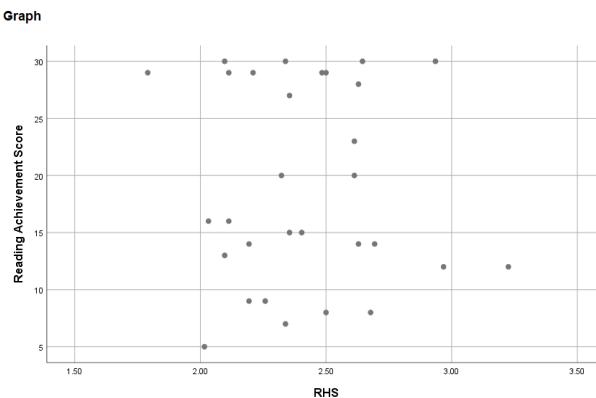


Figure 1. Scatterplot Examining Linearity between Reading Habit Scores and Reading Achievement Scores

The scatterplot revealed no discernible linear pattern between Reading Habit Scores and Reading Achievement Scores. Instead, the data points appeared scattered in a cloud-like formation without any clear directional trend, suggesting the absence of a linear relationship between the two variables. This

pattern of distribution, combined with the violation of normality for one of the variables, necessitated the use of a non-parametric statistical test. Consequently, Spearman's rank-order correlation coefficient (Spearman's rho) was selected as the appropriate statistical procedure for hypothesis testing, as it does not require assumptions of normality or linearity.

Hypothesis Testing Results

The primary research question addressed in this study was: Is there a significant correlation between students' reading habits and their reading achievement? Table 3 presents the results of the Spearman's rank-order correlation analysis.

Table 3. Spearman's Rank-Order Correlation between Reading Habits and Reading Achievement

Variable 1	Variable 2	Correlation Coefficient	Sig. (2-tailed)	N
Reading Achievement Score	Reading Achievement Score	1.000	--	30
Reading Achievement Score	RHS	-0.023	0.902	30
RHS	Reading Achievement Score	-0.023	0.902	30
RHS	RHS	1.000	--	30

The correlation analysis yielded a Spearman's rho coefficient of $\rho = -0.023$ with a two-tailed significance value of $p = 0.902$. This extremely small negative correlation coefficient, combined with a p -value substantially exceeding the predetermined $\alpha = 0.05$ significance level, led to the retention of the null hypothesis. The results indicate that there is no statistically significant correlation between students' self-reported reading habits and their reading comprehension achievement in this sample. The negative sign of the correlation coefficient, while noteworthy, is practically meaningless given its proximity to zero and lack of statistical significance.

Strength of Correlation

The second research question examined: To what extent do reading habits contribute to reading achievement? According to standard correlation interpretation guidelines where coefficients between 0.00 and 0.19 are classified as very weak, 0.20 to 0.39 as weak, 0.40 to 0.59 as moderate, 0.60 to 0.79 as strong, and 0.80 to 1.00 as very strong, the observed correlation coefficient of -0.023 falls well within the very weak category. This finding suggests that reading habits, as measured by the Reading Habits Questionnaire in this study, contributed negligibly to explaining variance in reading comprehension performance. In practical terms, reading habit scores accounted for less than 0.1% of the variance in reading achievement scores ($r^2 \approx 0.0005$), indicating that other factors beyond those captured by the reading habits questionnaire were responsible for differences in students' reading comprehension abilities.

Unexpected Findings

Several unexpected patterns emerged from the data that warrant discussion. First, despite 73% of students ($n = 22$) reporting reading habit scores above 2.0 on the 4-point scale, indicating at least moderate engagement with reading activities, their reading achievement scores varied tremendously, from as low as 5 to as high as 30. This wide dispersion suggests that students who reported similar reading habit frequencies achieved vastly different comprehension outcomes. Second, three students who scored in the lowest quartile for reading habits ($RHS < 2.0$) nevertheless achieved reading comprehension scores above 20 (67% accuracy), performing better than many of their peers who reported stronger reading habits. Conversely, five students with RHS above 2.5 scored below 15 on the reading achievement test (50% accuracy). These counterintuitive patterns challenge the assumption that self-reported reading frequency and reading comprehension performance operate in tandem.

Third, the distribution of reading achievement scores revealed a bimodal pattern, with clusters of students scoring both very low (5-10) and relatively high (25-30), while fewer students scored in the middle range. This distribution pattern may indicate the presence of distinct subgroups within the sample with fundamentally different reading skill levels, potentially reflecting varied educational backgrounds, language proficiency levels, or instructional experiences that the reading habits questionnaire did not capture. Finally, the near-zero correlation observed in this study stands in stark contrast to the moderate to strong positive correlations ($r = 0.40$ to 0.70) reported in several previous studies conducted in similar EFL contexts, suggesting that contextual or methodological factors may have played a crucial role in producing these divergent results.

Discussion

The present study investigated the relationship between English reading habits and reading achievement among eleventh-grade students at SMKN 2 Sekotong, a rural vocational school in Indonesia. Two primary research questions guided this investigation: whether a significant correlation exists between students' reading habits and their reading achievement, and to what extent reading habits contribute to reading achievement. The findings revealed no statistically significant correlation between these variables ($p = -0.023$, $p = 0.902$), with the correlation strength classified as very weak according to standard interpretation guidelines. These results provide an important contribution to the ongoing scholarly discourse on reading habits and academic achievement, particularly in underrepresented educational contexts.

The absence of a significant correlation between reading habits and reading achievement in this study contradicts the positive relationships reported in numerous previous investigations. Hassan et al. (2021) and Ehsan and Sultana (2020) documented significant correlations between reading habits and reading achievement among secondary school students, while Bibi et al. (2020) found that study habits, including reading practices, were significantly positively associated with academic performance. Similarly, international evidence from Balan et al. (2019), Whitten et al. (2019), and Oriogu et al. (2017) demonstrated that students who develop regular reading habits are more likely to achieve academic success. However, the present findings align more closely with emerging research that challenges the universality of this relationship.

Notably, this study corroborates the findings of Putra and Taufiq (2024), who similarly reported no significant correlation between reading habits and reading comprehension among Indonesian students. Furthermore, the null results resonate with methodological concerns raised by scholars who have documented dubious findings that fail to confirm the influence of reading habits on academic achievement (Abid, 2023; Quadir et al., 2024). These inconsistencies across studies suggest that the relationship between reading habits and achievement may be substantially more complex and context-dependent than previously assumed, influenced by mediating and moderating variables that require explicit investigation.

From the perspective of Cognitive Load Theory, the null findings may be explained by the possibility that students in this sample experienced cognitive overload when engaging with the reading comprehension test materials. Sweller (1988) argued that cognitive load significantly impacts learning processes, suggesting that learners who receive well-structured materials without cognitive overload are more likely to achieve meaningful knowledge acquisition. Cierniak et al. (2009) emphasized that "the designs of instruction impose cognitive load on learners' limited working memory and that the cognitive load in turn influences learning outcomes" (p. 315), highlighting how instructional design factors can either facilitate or hinder reading comprehension. In the present study, the reading comprehension test

consisted of narrative and descriptive texts that may have imposed excessive intrinsic or extraneous cognitive load on students, particularly given their EFL status and the potential mismatch between text difficulty and students' proficiency levels.

Recent applications of cognitive load theory to language learning contexts have demonstrated that inappropriate instructional formats and text presentation types can negatively influence second language reading comprehension performance by overloading learners' cognitive capacity (Houichi & Sarnou, 2020; Paas et al., 2003). If the texts used in this assessment were too linguistically complex relative to students' current proficiency levels, students may have expended their cognitive resources on basic decoding and vocabulary recognition rather than on higher-order comprehension processes (Mayer, 2001; Mayer & Moreno, 2003). This cognitive overload would effectively neutralize any potential benefits of frequent reading habits, as students' working memory would be consumed by surface-level text processing rather than meaning construction. The complex syntactic structures and low-frequency vocabulary common in academic English texts have been shown to create higher cognitive load (Höttecke et al., 2018; Plath & Leiss, 2017), potentially explaining why students' self-reported reading habits did not translate into superior comprehension performance.

The Cognitive Process Theory offers an additional lens through which to interpret these findings. Taylor (2023) noted that good readers tend to engage with more challenging texts, thereby gaining richer reading experiences that contribute to their continued development. However, this theory assumes a developmental process wherein frequent reading leads to gradual skill acquisition through exposure to progressively complex materials. In the context of SMKN 2 Sekotong, students may have been reading materials that were either too simple to challenge their comprehension skills or too difficult to facilitate meaningful learning. If students' self-reported reading habits primarily involved materials substantially easier than the test passages, the frequency of their reading would not necessarily prepare them for the cognitive demands of the assessment. Conversely, if they regularly encountered materials beyond their proficiency level without adequate scaffolding, their reading practice may have reinforced ineffective strategies rather than building comprehension skills.

Several methodological factors warrant consideration when interpreting these null findings. First, the reliance on self-report measures for reading habits introduces the potential for various biases that may have obscured the true relationship between reading habits and achievement. Verplanken and Orbell (2003) argued that reading habit assessment should encompass not only behavioral frequency but also automaticity and identity expression, suggesting that simple frequency-based questionnaires may fail to capture the multidimensional nature of habitual reading behavior. The Reading Habits Questionnaire employed in this study primarily assessed reading frequency, time allocation, material variety, and environmental support, but may not have adequately captured the quality, depth, or strategic nature of students' reading engagement.

Research on self-report validity has consistently documented problems with reference bias, social desirability bias, and recall bias that can distort self-reported behavioral data (Duckworth et al., 2022; Lavidas et al., 2022). Locher and Philipp (2023) emphasized that retrospective self-report data can be affected by cognitive schemata, social stereotypes, response tendencies, and memory effects, while Mol and Bus (2011) noted that self-reports in questionnaires are particularly susceptible to social desirability bias. In the present study, students may have over-reported their reading habits to present themselves favorably to teachers or researchers, particularly if they perceived that strong reading habits were socially desirable within their educational context. Conversely, students may have inaccurately recalled their reading behaviors due to memory limitations or difficulties estimating time spent reading across various activities and contexts.

The potential for response bias is further complicated by students' varying interpretations of questionnaire items. Varao-Sousa & Kingstone (2019) demonstrated that although construct validity of self-report measures can be acceptable, different measurement methods may not be used interchangeably due to systematic differences in what they actually assess. In this study, variations in students' proficiency in Bahasa Indonesia, the language in which the questionnaire was administered, may have influenced their comprehension and interpretation of items. Students who primarily communicate in Sasaknese in their daily lives may have faced challenges in accurately understanding questionnaire items, leading to responses that did not truly reflect their reading habits. This language barrier in self-report instruments represents a significant validity threat that previous research in monolingual contexts may not have adequately addressed.

The unique characteristics of the sample and research setting provide important context for interpreting the null findings. SMKN 2 Sekotong is located in Pelangan village, a rural area where students face challenges related to limited access to reading materials, insufficient library resources, and minimal exposure to English outside the classroom. Research on rural schools globally has consistently identified insufficient reading materials and quality instruction as persistent challenges (Showalter et al., 2017). Edutopia (2021) emphasized that rural schools tend to face greater challenges related to teacher recruitment and retention, limited resources, and geographic isolation.

In this context, students' self-reported reading habits may reflect very different underlying behaviors than those observed in urban or well-resourced settings. When students in this sample reported "frequent reading," they may have been referring to limited engagement with whatever materials were available rather than sustained, varied reading across diverse genres and difficulty levels. The quality and appropriateness of available reading materials likely mediated the relationship between reading frequency and comprehension development. If students had access only to materials significantly below or above their reading level, or to materials primarily in their native language rather than English, their reading habits would not necessarily translate into improved English reading comprehension.

The relatively small sample size ($N = 30$) also warrants consideration. While this sample size was adequate for detecting large effect sizes, it provided limited statistical power for detecting small to moderate correlations. Ceran Serdar et al. (2021) emphasized the importance of adequate sample size for achieving sufficient statistical power, noting that underpowered studies may fail to detect true relationships that exist in the population. However, given that the observed correlation in this study was essentially zero ($p = -0.023$), increasing the sample size would be unlikely to produce a statistically significant result, as the correlation coefficient itself suggests virtually no linear association between variables. Nevertheless, the findings should be interpreted with caution regarding their generalizability to the broader population of vocational school students in rural Indonesia.

The characteristics of the reading comprehension test itself may have contributed to the null findings. The test consisted of 30 multiple-choice items based on narrative and descriptive texts, formats that students may not have encountered regularly in their reading habits. If students' typical reading materials consisted primarily of social media posts, informal online content, or simplified texts, the academic genre and formal language of the test passages would represent a significant departure from their habitual reading experiences. Research has demonstrated that text familiarity and genre knowledge significantly influence comprehension performance (Grabe & Stoller, 2019), suggesting that the specific texts selected for assessment may have created conditions under which students' general reading habits provided little advantage.

Furthermore, the difficulty level of the test passages may have been inappropriate for this student population. Cain and Oakhill (2011), as cited in Taylor (2023), noted that poor readers may choose less

challenging books, missing out on rich reading experiences, while good readers interact more with challenging texts because they are comfortable tackling difficult words. If the reading comprehension test presented texts substantially more difficult than those students typically encountered, even students with strong reading habits would struggle to demonstrate their comprehension abilities. The mean reading achievement score of 19 out of 30 (63%) suggests that the test may have been moderately challenging for this sample, but the wide range of scores (5 to 30) indicates substantial variability in how students responded to the assessment.

The test administration context also deserves consideration. Students completed the reading comprehension test in a single classroom session, which may have introduced performance factors unrelated to their actual reading abilities. Test anxiety, fatigue, motivation, and environmental distractions could have influenced students' scores in ways that obscured any relationship with their habitual reading behaviors. Lavidas et al. (2022) documented that students' self-reports can be affected by the testing context and their emotional state during data collection, suggesting that both the reading habits questionnaire and the reading comprehension test may have captured state-dependent rather than trait-level characteristics.

The null findings suggest that factors other than reading habits may play more substantial roles in determining reading achievement in this context. Vocabulary knowledge, which several studies have identified as a critical predictor of reading comprehension (Melani et al., 2021; Santi et al., 2021), was not directly assessed in this study but likely varied considerably among students. Students with larger English vocabularies would naturally perform better on comprehension tests regardless of their reading habits, as vocabulary knowledge facilitates both decoding and meaning construction. Similarly, students' general English proficiency, grammatical knowledge, and prior exposure to English texts would influence their comprehension abilities independent of their current reading habits.

Motivation represents another potentially important variable not examined in this investigation. Research has demonstrated that reading motivation significantly influences both reading frequency and comprehension (Banditvilai, 2020). Students who are intrinsically motivated to read may both read more frequently and engage more deeply with texts, leading to better comprehension through enhanced cognitive processing rather than through simple frequency of exposure. Conversely, students who read frequently but with low motivation may demonstrate superficial processing that does not translate into comprehension gains. The Reading Habits Questionnaire used in this study assessed external support for reading but did not directly measure students' intrinsic motivation or enjoyment of reading activities.

Teaching quality and instructional strategies also warrant consideration as potential mediating variables. Students' reading achievement reflects not only their independent reading habits but also the quality of reading instruction they receive in school. Effective reading instruction that explicitly teaches comprehension strategies, vocabulary acquisition techniques, and metacognitive monitoring may compensate for limited reading habits, while ineffective instruction may fail to capitalize on students' frequent reading. Thohir et al. (2020) demonstrated that specific instructional strategies, such as question-generation, can effectively improve students' reading abilities, suggesting that pedagogical factors may exert stronger influences on reading achievement than reading habits alone.

The findings of this study carry both theoretical and practical implications for reading education in rural vocational school contexts. Theoretically, the results challenge the assumption that reading habits universally predict reading achievement across all contexts and populations. The null findings suggest that researchers must move beyond simple correlational models to examine the complex web of mediating and moderating variables that determine whether and how reading habits contribute to comprehension

outcomes. Future theoretical models should incorporate cognitive load, text-reader matching, instructional quality, and contextual resources as essential components rather than peripheral factors.

Practically, the results caution educators against assuming that simply encouraging students to read more frequently will necessarily improve their reading comprehension. Instead, interventions should focus on ensuring that students have access to appropriately leveled materials, that they receive explicit instruction in comprehension strategies, and that their reading practice is purposefully structured to build specific skills. Teachers should prioritize quality over quantity in reading assignments, carefully selecting texts that challenge students without overwhelming their cognitive resources. Additionally, schools should invest in building comprehensive libraries with diverse, appropriately leveled English reading materials that allow students to engage in sustained, progressive reading practice.

For curriculum designers and educational policymakers, these findings highlight the need for contextualized approaches to literacy education that account for the specific challenges faced by rural vocational schools. Standardized reading curricula developed for urban or general academic schools may not address the unique needs of students with limited access to resources and English language exposure. Policies should support the development of locally relevant reading programs that provide explicit instruction, abundant appropriate materials, and systematic assessment of both reading habits and reading skills. Furthermore, professional development for teachers should emphasize evidence-based reading instruction strategies rather than simply promoting reading frequency.

This study has several limitations that should be acknowledged. First, the relatively small sample size ($N = 30$) limits the generalizability of findings to other student populations and contexts. While the sample was adequate for the chosen statistical analysis, larger samples would provide more stable estimates of the relationship between variables and greater statistical power. Second, the reliance on self-report measures for reading habits introduces potential biases including social desirability, recall inaccuracy, and varied interpretation of questionnaire items. Although the instruments demonstrated acceptable reliability and validity in psychometric testing, self-report measures inherently capture participants' perceptions rather than objective behavioral records.

Third, the cross-sectional design of this study prevents any causal inferences about the relationship between reading habits and achievement. The concurrent assessment of both variables means that we cannot determine whether reading habits influence achievement, whether achievement influences habits, or whether both are caused by third variables. Longitudinal designs that track changes in reading habits and achievement over time would provide stronger evidence regarding directionality and causation. Finally, the study was conducted in a single rural vocational school with unique characteristics that may limit transferability of findings to other educational settings, including urban schools, general academic schools, or schools in different regions with different linguistic contexts and resource availability.

In conclusion, this study provides evidence that in the context of SMKN 2 Sekotong, a rural Indonesian vocational school, students' self-reported English reading habits did not significantly correlate with their reading achievement. This finding contributes to a growing body of research suggesting that the relationship between reading habits and achievement is more nuanced and context-dependent than previously assumed. The results emphasize the importance of considering cognitive load, text appropriateness, instructional quality, and contextual resources when examining factors that influence reading comprehension in EFL contexts. Rather than promoting reading frequency in isolation, educators and policymakers should adopt comprehensive approaches that ensure students engage in purposeful, scaffolded reading practice with appropriate materials and effective instructional support. Future research should employ longitudinal designs, objective measures of reading behavior, and examination of

mediating variables to better understand when, how, and for whom reading habits contribute to reading achievement outcomes.

4. CONCLUSION

This study investigated the correlation between English reading habits and reading achievement among eleventh-grade students at SMKN 2 Sekotong, a rural vocational school in Indonesia. Employing Spearman's rank-order correlation analysis on data from 30 participants, the findings revealed no statistically significant correlation between these variables ($p = -0.023$, $p = 0.902$), indicating a very weak relationship. These results challenge the widely held assumption that reading habits universally predict reading achievement and contribute to scholarly discourse by highlighting the context-dependent and multifaceted nature of this relationship, particularly in underrepresented rural EFL settings.

The study's theoretical contribution lies in demonstrating that Cognitive Load Theory and methodological considerations regarding self-report validity provide crucial explanatory frameworks for understanding null findings in reading research. Practically, the results caution educators against assuming that simply promoting reading frequency will necessarily improve comprehension outcomes. Instead, interventions should prioritize quality over quantity, ensuring students access appropriately leveled materials, receive explicit comprehension strategy instruction, and engage in purposeful reading practice supported by effective pedagogy and adequate resources.

Several limitations warrant acknowledgment, including the relatively small sample size ($N = 30$), reliance on self-report measures susceptible to bias, cross-sectional design preventing causal inferences, and single-site context limiting generalizability. Future research should employ longitudinal designs to track changes in reading habits and achievement over time, incorporate objective behavioral measures alongside self-reports, examine mediating variables such as vocabulary knowledge, motivation, and teaching quality, and investigate whether text difficulty and genre familiarity moderate the habits-achievement relationship. Additionally, larger-scale studies across diverse rural and urban vocational schools would enhance understanding of contextual factors influencing reading outcomes in Indonesian EFL contexts, ultimately informing evidence-based policies and practices that effectively support literacy development among vocational students.

5. REFERENCES

Abid, N., Aslam, S., Alghamdi, A. A., & Kumar, T. (2023). Relationships among students' reading habits, study skills, and academic achievement in English at the secondary level. *Frontiers in psychology*, 14, 1020269. <https://doi.org/10.3389/fpsyg.2023.1020269>

Anderson, L. W., & Krathwohl, D. R. (Eds.). (2001). *A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives*. Longman.

Azzahro, N., & Sintawati, F. (2024). The correlation between students' reading habit and students' reading comprehension at the eighth grade of SMP Negeri 3 Kramatwatu. *JEDLISH (Journal of English Education, Literature, and Linguistics)*, 4(1), 50-54. <https://doi.org/10.61664/jedlish.v4i1.166>

Balan, S., Katenga, J. E., & Simon, A. (2019). Reading habits and their influence on academic achievement among students at Asia Pacific International University. *Abstract Proceedings International Scholars Conference*, 7(1), 1490-1516. <https://doi.org/10.35974/isc.v7i1.928>

Banditvilai, C. (2020). The effectiveness of reading techniques for improving English reading and learning achievement of Thai university students. *LEARN Journal: Language Education and Acquisition Research Network*, 13(1), 64-80. <http://www.ijess.org/wp-content/uploads/2020/11/IJESSP24510008.pdf>

Bibi, A., Naseer, N., & Habib, Z. (2020). Study Habits of Students and Academic Achievement: A Correlational Study. *Global Educational Studies Review*, 5(3), 114-122. [http://dx.doi.org/10.31703/gesr.2020\(V-III\).12](http://dx.doi.org/10.31703/gesr.2020(V-III).12)

Ceran Serdar, C., Cihan, M., Yücel, D., & Serdar, M. A. (2021). Sample size, power and effect size revisited: Simplified and practical approaches in pre-clinical, clinical and laboratory studies. *Biochimia Medica (Zagreb)*, 31(1), Article 010502. <https://doi.org/10.11613/BM.2021.010502>

Cierniak, G., Scheiter, K., & Gerjets, P. (2009). Explaining the split-attention effect: Is the reduction of extraneous cognitive load accompanied by an increase in germane cognitive load? *Computers in Human Behavior*, 25(2), 315-324. <https://doi.org/10.1016/j.chb.2008.12.020>

Cohen, L., Manion, L., & Morrison, K. (2018). *Research methods in education* (8th ed.). Routledge. <https://doi.org/10.4324/9781315456539>

Duckworth, A. L., Milkman, K. L., & Laibson, D. (2022). Beyond willpower: Strategies for reducing failures of self-control. *Psychological Science in the Public Interest*, 19(3), 102-129. <https://doi.org/10.1177/1529100618821893>

Edutopia. (2021, March 23). Addressing the challenges of rural education. <https://www.edutopia.org/article/addressing-challenges-rural-students/>

Ehsan, T., & Sultana, N. (2020). Predicting the Role of Study Habits in Academic Achievement: A Study of University Students in Punjab. *Pakistan Journal of Education*, 37(1). <https://www.prdb.pk/article/predicting-the-role-of-study-habits-in-academic-achievement-8411>

Gilakjani, A. P., & Sabouri, N. B. (2016). A study of factors affecting EFL learners' reading comprehension skill and the strategies for improvement. *International Journal of English Linguistics*, 6(5), 180-187. <https://doi.org/10.5539/ijel.v6n5p180>

Grabe, W., & Stoller, F. L. (2019). *Teaching and researching reading* (3rd ed.). Routledge. <https://doi.org/10.4324/9781315726274>

Hassan, I. J., & Dweik, B. S. (2021). Factors and challenges in English reading comprehension among young Arab EFL Learners. *Academic Research International*, 12(1), 18-30. [http://www.savap.org.pk/journals/ARInt./Vol.12\(1\)/ARInt.2021\(12.1-02\).pdf](http://www.savap.org.pk/journals/ARInt./Vol.12(1)/ARInt.2021(12.1-02).pdf)

Houichi, A., & Sarnou, H. (2020). Cognitive load theory and its relation to instructional design: Perspectives of some Algerian EFL teachers. *Arab World English Journal*, 11(3), 110-127. <https://dx.doi.org/10.2139/ssrn.3764232>

Kasim, U., & Raisha, S. (2017). EFL students' reading comprehension problems: Linguistic and non-linguistic complexities. *English Education Journal (EEJ)*, 8(3), 308-321. <https://jurnal.usk.ac.id/EEJ/article/download/8920/7068>

Lavidas, K., Papadakis, S., Manesis, D., Grigoriadou, A. S., & Gialamas, V. (2022). The effects of social desirability on students' self-reports in two social contexts: Lectures vs. lectures and lab classes. *Information*, 13(10), 491. <https://doi.org/10.3390/info13100491>

Locher, F. M., & Philipp, M. (2023). Measuring reading behavior in large-scale assessments and surveys. *Frontiers in Psychology*, 13, 1044290. <https://doi.org/10.3389/fpsyg.2022.1044290>

Mayer, R. E. (2001). *Multimedia learning*. Cambridge University Press. <https://doi.org/10.1017/CBO9781139164603>

Mayer, R. E., & Moreno, R. (2003). Nine ways to reduce cognitive load in multimedia learning. *Educational Psychologist*, 38(1), 43-52. https://doi.org/10.1207/S15326985EP3801_6

Melani, B., Willian, S., Apgrianto, K., & Lail, H. (2021). Vocabulary coverage and reading comprehension of university EFL learners. *Advances in Social Science, Education and Humanities Research*, 546, 65-72. <https://doi.org/10.2991/assehr.k.210427.010>

Mol, S. E., & Bus, A. G. (2011). To read or not to read: A meta-analysis of print exposure from infancy to early adulthood. *Psychological Bulletin*, 137(2), 267-296. <https://doi.org/10.1037/a0021890>

Oriogu, C. D., Subair, R. E., & Oriogu-Ogbuiyi, D. C. (2017). Effect of Reading Habits on the Academic Performance of Students: A Case Study of the Students of Afe Babalola University, Ado-Ekiti, Ekiti State. *Teacher Education and Curriculum Studies*, 2(5), 74-80. <https://doi.org/10.11648/j.tecs.20170205.13>

Paas, F., Renkl, A., & Sweller, J. (2003). Cognitive load theory and instructional design: Recent developments. *Educational Psychologist*, 38(1), 1-4. https://doi.org/10.1207/S15326985EP3801_1

Plath, J., & Leiss, D. (2017). The impact of linguistic complexity on the solution of mathematical modelling tasks. *ZDM Mathematics Education*, 50(1), 159-171. <https://doi.org/10.1007/s11858-017-0897-x>

Putra, R. A., & Taufiq, W. (2024). Exploring factors influencing reading comprehension beyond habits in students. *Language Education Method*, 19(2). <https://doi.org/10.21070/ijemd.v19i2.814>

Qarqezi, M., & Ab Rashid, R. (2017). Reading comprehension difficulties among EFL learners: The case of first and second-year students at Yarmouk University in Jordan. *Arab World English Journal*, 8(3), 421-431. <https://doi.org/10.24093/awej/vol8no3.27>

Quadir, B., Yang, J. C., & Wang, W. (2024). Factors influencing the acquisition of English skills in an English learning environment using Rain Classroom. *Interactive Learning Environments*, 32(1), 1-19. <https://doi.org/10.1080/10494820.2022.2075015>.

Resta, I. A., Amalia, S., & Amrina, R. D. (2023). The correlation between students' reading habit and their reading comprehension achievement. *ENGLISH FRANCA: Academic Journal of English Language and Education*, 7(2), 317-326. <https://doi.org/10.29240/ef.v7i2.8291>

Santi, E., Kholipa, R., Putri, M. G., & Mujiono. (2021). Reading interest strength and vocabulary acquisition of EFL learners: A meta-analysis. *Journal of Language and Linguistic Studies*, 17(3), 1225-1242. <https://doi.org/10.52462/jlls.87>

Showalter, D., Klein, R., Johnson, J., & Hartman, S. L. (2017). Why Rural Matters 2015-2016: Understanding the Changing Landscape. A Report of the Rural School and Community Trust. *Rural School and Community Trust*. <https://eric.ed.gov/?id=ED590169>

Sweller, J. (1988). Cognitive load during problem solving: Effects on learning. *Cognitive Science*, 12(2), 257-285. https://doi.org/10.1207/s15516709cog1202_4

Taylor, R. M. (2023). *Reading motivation and engagement in the elementary and middle school years* [Doctoral dissertation, University of Nevada]. ProQuest Dissertations Publishing.

Thohir, L., Nawawi, N., Amin, M., & Putera, L. J. (2020). The effectiveness of question-generation strategy on improving the undergraduate students' reading ability. In *1st Annual Conference on Education and Social Sciences (ACCESS 2019)* (pp. 73-76). Atlantis Press. <https://doi.org/10.2991/assehr.k.200827.020>

Varao-Sousa, T. L., & Kingstone, A. (2019). Are mind wandering rates an artifact of the probe-caught method? Using self-caught mind wandering in the classroom to test, and reject, this possibility. *Behavior Research Methods*, 51(1), 235-242. <https://doi.org/10.3758/s13428-018-1073-0>

Verplanken, B., & Orbell, S. (2003). Reflections on past behavior: A self-report index of habit strength. *Journal of Applied Social Psychology*, 33(6), 1313-1330. <https://doi.org/10.1111/j.1559-1816.2003.tb01951.x>

Whitten, C., Labby, S., & Sullivan, S. L. (2019). The impact of pleasure reading on academic success. *Journal of Multidisciplinary Graduate Research*, 2(1). <https://jmgr-ojs-shsu.tdl.org/jmgr/article/view/11>