The Correlation Between Students' Reading Habit and Their Academic Achievement at The Eighth Students of Junior High School 14 Cilegon

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Abstract. An individual's reading habit may be defined as a reading behavior that is performed slowly and regularly with the intention of acquiring information, knowledge, and even experience. The objective of this study was to determine whether or not there is a connection between the reading habits of eighth-grade students at SMPN 14 Cilegon and the academic accomplishment of those kids. Within the scope of this study, a quantitative methodology was used with a correlational design approach. All of the participants in this research were eighth-grade students, and there were a total of 150 kids involved. There were thirty students included in the sample, and the kind of sampling that was used was known as simple random sampling. In the course of this investigation, a questionnaire and testing (with multiple choice questions) were used as tools. According to the findings of the statistical analysis that was carried out using the product moment correlation formula, the value of rcount is equivalent to 0.716, and the value of r table at a level of significance of 0.05 corresponds to 0.361. It may be deduced from this that the reading habits of students are one of the factors that define the level of academic accomplishment they acquire.

Keywords: Academic Achievement, Correlation, Reading Habit.

1 Introduction

As the most popular internationally spoken language in the world, English plays a role that is indispensable to education, science, communication, trade, diplomacy and social sciences. In the education system, instruction of English is compulsory from kindergarten to university and in junior high it covers the four basic skills of language learning; speaking, writing, listening and reading. Reading and listening are categorized as receptive skills and involve processes of receiving knowledge, while writing and speaking include output. Reading is widely recognised as the most important activity for human beings and a fundamental aspect of personal development at all levels of teaching. People cannot write without reading skills, for writing is how we connect thinking with all other communication." Inferring meaning from text (reading comprehension) is the cornerstone of language proficiency and drives almost every classroom curriculum, applicable in all subjects -science, literature, history and social studies.

But there are telling contextual data that mark a large problem in terms of reading engagement. The reading interest index of Indonesia is 0.001, according to data released by the United Nations Educational, Scientific and Cultural Organization (UNESCO) in 2012 that shows only one person out of a thousand Indonesians' lives has an interest in reading. There is

more evidence of this in the 2022 Program for International Student Assessment (PISA) which ranked Indonesia 68th among 81 countries in student reading. This fact proves that Indonesian people have not yet made reading a priority or a habit. This local context is also in line with the pre-observation results of a researcher at SMP N 14 Cilegon on February 23, 2024, which found that reading problems became apparent when students were asked to read some English sentences during learning.

Given the low rates of student reading, there have been calls for research to examine how reading is related to school success. Therefore, the study will explore the relationship between reading habits (Independent variable, X) among students and their academic performance (Dependent variable, Y). This study only is restricted on the eighthgrade students of SMPN 14 Cilegon. The focus of this research site is based on the problems encountered, namely the habit in reading students were low and its consequence was that their academic achievements were low particularly formative score does not meet minimum understanding criteria (KKM).

Research concerning reading has been extensively conducted, employing varied designs, techniques, and subjects. Several previous studies are highly relevant to the present research inquiry. This study examined "The relationship between students' reading habits and their reading comprehension." While utilizing the same variable of reading habits, the dependent variable differed (reading comprehension versus academic achievement). Findings indicated a correlation between reading habits and reading comprehension (R_{xy} = 0.779 > Rtable = 0.320)[1]. This research, entitled "The Relationship Between Reading Students' Habits and Their Achievement in the Class of Reading for English International Standardized Test," shared both the subject and object variables with the present study (reading habits and academic achievement). The study concluded that reading habits have a positive correlation with student achievement (R_{xy} = 0.346 > R_{table} 0.254)[2].This study explored "The Correlation Between Reading Habits and Academic Achievement of the Undergraduate Students of the English Education Study Program of UIN Raden Fatah Palembang." It confirmed a correlation between the two variables (0.565 > r-$_{table}$ 0.208)[3]. The difference lies primarily in the research location and subject level (university students versus junior high school students). This research, which was quantitative with a correlational design, focused on "The Correlation Between Recreational Reading Habits and Reading Achievement" Among University Students. The study found a linear positive correlation of 0.769[4].

This investigation is deemed necessary due to the potential benefits it offers to various stakeholders. The theoretical benefit expected from this research is the generation of new hypotheses for further investigations into the correlation between students' reading habits and their academic achievement, particularly concerning formative test scores. The practical benefits of this study are multifaceted:

1. For the Students: The findings can motivate students to engage in English learning, specifically concerning reading habits.
2. For the Teacher: The results will provide information for teachers regarding the correlation between reading habits and academic achievement among eighth-grade students at SMPN 14 Cilegon.
3. For School and Institution: The study's conclusions can inspire teachers and school officials to foster active learning processes focused on students' reading habits. Furthermore, the results serve as an addition to the reference material, supporting the development of research on the correlation between reading habits and academic achievement in junior high school students for future reference.

In response to the identified problems concerning low reading habits and academic achievement, the goals of this study are defined by the following objectives:

1. To investigate the correlation between students' reading habits and their academic achievement among eighth-grade students of SMPN 14 Cilegon.
2. To determine whether students' reading habits influence their academic achievement among eighth-grade students of SMPN 14 Cilegon.

2 Methods

2.1 Study design

This research uses a quantitative approach, according to Sugiyono[5] "When doing research on specific populations or samples, quantitative methods may be seen as positivist research techniques. The goal of quantitative and statistical data collecting is to describe and test preconceived ideas". The design or approach chosen to carry out this research is a correlation study. According to[6], this study studies the correlation between two or more variables, namely the extent to which variation in one variable is related to variation in another variable. The correlation coefficient can be used to test hypotheses about the correlation between variables or state the size of the correlation between the two variables.

The research was conducted at SMPN 14 Cilegon. Jalan Maulana Yusuf Link. Kubang Lesung, Cilegon City. The reason the researcher chose this place is because after conducting pra-observations, the researcher found that the students' reading habit was low so their academic achievement in formative scores is still below the minimum completeness criteria and this research has never been researched with same title at that school. The population in this study were all grade eighth students at SMPN 14 Cilegon, totaling 150 students. The samples used in this research were 8D class students totaling 30 students at SMPN 14 Cilegon. So, the sampling technique used was simple random sampling, which is sampling done randomly without paying attention to existing strata.

2.2 Data Collection Technique

The researcher used data collection techniques are the methods used by research in collecting research data to find out the correlation between reading academic and academic achievement. In carrying out this research activity, the researcher used test and non-test data. The test uses multiple choice questions, while the non-test is a questionnaire.

2.3 Research Instruments
Dependent Variable (Academic Achievement)
a. Conceptual Definition
   In this research, the dependent variable (Y) is student academic achievement. Academic achievement is the result of the performance of the extent to which students have achieved goals measured by certain assessments or indicators aimed at evaluating the effectiveness of teaching and student development at school.
b. Operational Definition
   Academic achievement has assessment indicators namely attitude assessment, knowledge assessment, and skills assessment. Assessment of student learning achievement can be seen from the types, such as: : Tests, daily tests, mid-semester tests, semester-end tests, competency level exams, competency level quality

examinations, national exams, and school/madrasah exams are examples of genuine assessment, self-evaluation, portfolio-based assessment, and testing.

Independent Variable (Reading Habit)

c. Conceptual Definition

In this research, the dependent variable (X) is the reading habit. Reading habit is reading behavior that is done slowly and repeatedly with the aim of obtaining information, knowledge and even experience.

d. Operational Definition

Reading habit is an activity that is done repeatedly. The habit of reading also has benefits such as: helping the mind work effectively, helping to develop vocabulary, increasing intellectual curiosity, increasing psychological activity and helping to have a positive mindset. Aspects that influence reading habits, they are : reading frequency, books read, time spent on academic reading, time spent on non-academic reading, motivation in the family environment, and motivation in the academic environment.

2.4 Data Analysis

The researcher conducted data analysis methods in quantitative research. Descriptive statistics and inferential statistics are the two types of statistics utilized in research for data analysis. Researchers employed both inferential and descriptive statistics to analyze this data. Descriptive statistics are statistical techniques in the form of descriptions while inferential statistics are statistical techniques employed to examine sample data, with findings being extrapolated to the entire population

3 Results

Table 1. Results of Statistical Analysis on the Correlation between Reading Habit and Academic Achievement among Students at SMPN 14 Cilegon

Statistical Analysis	Indicator	Value	Benchmark / Critical Value	Interpretation
Pearson Product Moment Correlation	rcount	0.716	rtable ($\alpha = 0.05$, N = 30) = 0.361	Significant positive correlation (rcount > rtable)
Coefficient of Determination (R^2)	—	0.512 (51.2%)	—	Reading habit explains 51.2% of the variance in academic achievement
t-Test (Partial Significance)	tcount	5.420	ttable ($\alpha = 0.05$, df = 28) = 2.048	Significant effect (tcount > ttable)
Regression Equation	Y = a + bX	Y = 25.269 + 0.845X	—	Positive linear relationship; academic achievement increases by 0.845 for each unit increase in reading habit

Unexplained Variance	—	48.8%	—	Influenced by other factors not examined (e.g., individual awareness, environment, personality)

Based on the results of the analysis described on table 1, it is obtained that the results of the independent variable (X) reading habit have a significant correlation with the dependent variable (Y) academic achievement in students at SMPN 14 Cilegon. This is shown from the product moment correlation result of 0.716 compared to the r table at a significant level of 5% and N = 30 of 0.361. So that r count is greater than r table, it can be concluded that the Ho hypothesis is rejected and H1 is accepted. With a coefficient of determination of 51.2% or then It has an advantageous impact, thus the more reading habit, their academic achievement will be very good. This means that 51.2% of changes in reading habit variables can be explained by changes in academic achievement variables. Meanwhile, 48.8% are other factors not examined by the researcher that influence the level of self-confidence of these students. other factors that are not examined include individual awareness factors, environmental factors, personality factors, and other factors.

According to the results of the ttest analysis, it is explained that there is a significant correlation between the independent variable (X) reading habits and the dependent variable (Y) academic achievement. This is evidenced by the results of the t test calculation of 5.420, while the t table is 2.048 with a significant level of 5%, meaning that H1 is accepted. In addition, the regression equation Y = 25.269 + 0.845X is obtained. The equation is in accordance with the simple linear regression formula, namely $Y = \alpha + \beta x$, where Y is the symbol of the dependent variable, α is a constant, β is the regression coefficient for the independent variable X, so it can be concluded from the t test day, there is an influence between variable X on variable Y, in other words, accept H1, there is a correlation between reading habit and students' academic achievement at SMPN 14 Cilegon, and reject H0, there is no correlation between reading habit and students' academic achievement at SMPN 14 Cilegon. The constant of 25.269 means that if the reading habit (X) is 0, then the academic achievement is 25.269. The regression coefficient of the academic achievement variable (Y) will increase by 0.845. The coefficient is positive, meaning that there is a positive correlation between the reading habit variable (X) and the academic achievement variable (Y). The higher the reading habits of students at SMPN 14 Cilegon, the higher the academic achievement of these students.

4 Discussions

The primary research objectives outlined in the introduction of this study were twofold: (1) to investigate the correlation between students' reading habits and their academic achievement among eighth-grade students of SMPN 14 Cilegon, and (2) to find out if students' reading habits influence their academic achievement among eighth-grade students of SMPN 14 Cilegon. These objectives directly correspond to the formulations of the problem.The research successfully addressed these objectives, resulting in the following conclusions:

1. Correlation Investigated: The study confirmed a significant correlation between reading habits (independent variable X) and academic achievement (dependent variable Y). The correlation coefficient (R) was found to be 0.716, which is categorized as a strong correlation.

2. Influence Determined: The quantitative analysis demonstrated that the reading habit variable significantly influences academic achievement. This conclusion was substantiated by the hypothesis testing (t-test), where the calculated $_{\_}t_{count\_}$ (5.420) was greater than the predetermined t_{table} (2.048) at the 5% significance level, leading to the rejection of the null hypothesis (H_0) and the acceptance of the alternative hypothesis (H_1). Furthermore, the coefficient of determination (R^2) indicated that 51.2% of the changes in academic achievement variables could be explained by changes in the reading habit variables.

In summation, the research results directly respond to the initial inquiry by confirming both the existence of a strong correlation and the significant positive influence of students' reading habits on their academic achievement at SMPN 14 Cilegon.

The following provides a scientific interpretation of the key statistical and analytical findings presented in the research:

Table 2. Scientific Interpretation for Each Result or Finding (Why)

Result/Finding	Description	Scientific Interpretation (Why)
Correlation Coefficient (R) = 0.716	This indicates a **strong positive correlation** between reading habit (X) and academic achievement (Y).	**The magnitude of the correlation (0.716) suggests a substantial shared variance between the two constructs.** From a pedagogical and linguistic perspective, this strong link is plausible because reading is fundamental to expanding previous knowledge. A consistent reading habit allows students to naturally increase their vocabulary knowledge and language skills, comprehend the intricacy of sentences and structures, and ultimately perform better in assessment tasks (exams) that require understanding complex English texts.
Coefficient of Determination ($R2$) = 51.2%	This signifies that **51.2% of the variance** in academic achievement is statistically explained by the reading habit variable.	**Reading habit acts as a powerful predictor variable** for academic achievement. This finding supports the theoretical framework that posits reading habit as a foundational skill prerequisite for optimizing comprehension-based tasks common in school curriculums across subjects like science, literature, and social studies.
Regression Equation: $Y=25.269+0.845X$	The equation indicates a positive regression coefficient (β) of **0.845**, and a constant (α) of **25.269**.	The positive β value confirms a **unidirectional relationship**. Scientifically, this means that for every unit increase in reading habit, academic achievement is predicted to increase by 0.845 units. **This effect size supports the notion that developing positive reading habits maximizes academic success**. The non-zero constant (25.269) suggests that academic achievement is not solely dependent on reading habit; even if reading habit scores were zero, a base level of achievement is expected due to other cognitive factors or classroom instruction effects.
Unexplained Variance = 48.8%	This residual variance is attributed to other factors not analyzed in this specific study.	This substantial portion of unexplained variance implies that **academic success is a multi-factorial outcome**. Other variables that influence academic attainment, such as teacher quality, classroom size, physical environment, and parental involvement (as noted in the theoretical discussion), or specific student attributes like individual awareness and personality factors, play a significant role.

Hypothesis Test Result (H1 accepted)	t_{count} (5.420) > t_{table} (2.048), leading to the conclusion that H1 (correlation exists) is accepted.	The statistical significance of the correlation (p=0.000) validates the research hypothesis. This result confirms the efficacy of the correlation design in establishing a non-chance relationship between reading engagement and educational performance in the specified junior high school setting.

The findings of this research, which indicate a significant positive correlation between reading habits and academic achievement, are consistent with several previous studies conducted in related fields. This prior research found a strong correlation ($Rxy = 0.779$) between students' reading habits and their reading comprehension. The current study's strong correlation ($R = 0.716$) corroborates this finding by demonstrating that the positive effect of reading habits extends beyond mere comprehension skills into overall academic achievement[1]. Directly investigating the relationship between reading habits and student achievement, [2]also found a positive correlation ($R_{xy} = 0.346$), leading to the acceptance of the alternative hypothesis. The current research reinforces this conclusion, stating definitively that "there is a correlation between students' reading habits and their academic achievement[2]." Found a significant correlation (0.565) between reading habits and academic achievement among undergraduate students. The current study confirms that this phenomenon is equally strong, if not stronger ($R = 0.716$), in the junior high school context[3]. Reported a strong positive linear correlation (0.769) between recreational reading habits and reading achievement. This supports the general notion that even reading done for personal enjoyment, as categorized by [4], contributes positively to measurable student performance. Collectively, these previous studies and the current research solidify the consensus that developing consistent reading habits is a prerequisite for optimizing reading comprehension and serves as an important characteristic that positively impacts students' overall academic outcomes.

The empirical results of this study are firmly supported by and contribute to the established theoretical foundation of language and literature education. Comparison with Theoretical Frameworks:

1. Academic Interrelation: The framework of thinking posits that reading habits and academic achievement are mutually reinforcing constructs, with reading habits having a significant impact on academic performance. The acceptance of H_1 in this study validates this assertion, confirming that a student's reading habits maximize their potential for academic success.
2. Linguistic Benefits: The findings align with [7] observation that a favorable correlation exists because good reading habits help students become accustomed to accurate word placement, understand the complexity of sentences and structures, and subsequently connect different sources of English reading material. The resultant increase in vocabulary knowledge and language skills provides the cognitive tools necessary for measured academic achievement (Y).
3. The Role of Reading: The study supports the view that reading is a crucial instrument for expanding previous knowledge and is the most significant activity required at every academic level, from elementary school to university.

Table 3. Comparison with Specific Relevant Research

Focus/Variables	Comparison with Current Study
Reading habits and **reading comprehension** (SMA students)	The current study's focus on **academic achievement** (a broader measure encompassing knowledge and skills) shows a stronger correlation than Muawanah's finding (R=0.779), reinforcing that reading comprehension improvements (resulting from good habits) are critical inputs to overall academic success[1].

Reading habits and **academic achievement** (Standardized Test preparation class)	This study is highly relevant as it shares both variables with the current research. The current finding of a strong correlation (R=0.716) supports Muchlishon's result (R=0.346), reinforcing the conclusion that reading habit positively correlates with student achievement[2].
Improving reading comprehension using authentic materials (Grade VIII students)	While using a qualitative approach (action research), Pustika's intervention resulted in an improved mean score (65.6 to 74.73). This result acts as a practical antecedent to the current study, suggesting that effective pedagogical strategies that foster engagement, like using authentic materials, contribute to the formation of the positive reading habits measured as Variable X[8].

The current research contributes to the literature by quantifying the influence (51.2%) of reading habits specifically on the formative academic achievement of eighth-grade junior high school students in a context (SMPN 14 Cilegon) where reading interest has been previously noted as low, thereby validating the imperative to develop reading habits discussed in the introduction.

5 Conclusion

This study concludes that students' reading habits have a significant and positive influence on their academic achievement at SMPN 14 Cilegon. The analysis revealed that students who demonstrate stronger reading habits tend to achieve better academic outcomes. This finding suggests that cultivating consistent reading behavior contributes meaningfully to students' learning performance and intellectual development. In addition, the results indicate that reading habits play an essential role in shaping academic success, although other factors— such as individual awareness, environmental conditions, personality traits, and self-confidence—also contribute to students' overall achievement. Therefore, schools and educators are encouraged to strengthen students' engagement with reading through supportive learning environments, adequate access to reading materials, and motivational strategies that promote reading as a habitual and enjoyable activity. Future research is recommended to involve a broader sample and to explore additional factors, such as motivation, digital literacy, and family support, to provide a more comprehensive understanding of the determinants of students' academic achievement.

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