

The Correlation Between Self-Efficacy and Students' Reading Ability

Liya Puspitasari | English Language Education, Universitas Islam Majapahit, Mojokerto, Indonesia

Wiwik Mardiana | English Language Education, Universitas Islam Majapahit, Mojokerto, Indonesia

Ahmad Ikil Saifulloh | English Language Education, Universitas Islam Majapahit, Mojokerto, Indonesia

liyaa.pus@gmail.com

Abstrak

This correlational quantitative study aimed to examine the relationship between self-efficacy and the English reading comprehension ability of ninth-grade students in Class IX-C at SMPN 2 Kemlagi. The study was motivated by students' low levels of self-confidence and high levels of reading anxiety, particularly in a developing school context with limited literacy resources. The participants consisted of 32 students selected using a cluster random sampling technique. Self-efficacy data were collected through a closed-ended questionnaire using a five-point Likert scale, which had been tested for validity and reliability. Meanwhile, data on students' reading ability were obtained from documentation of their original Mid-Semester Examination (UTS) scores in English. Descriptive and inferential analyses using the Pearson Product-Moment correlation revealed a statistically significant positive relationship between self-efficacy and reading ability ($r = 0.419$; $p = 0.017 < 0.05$). The t-test further supported this finding ($t_{\text{calculated}} = 2.530 > t_{\text{table}} = 2.042$), leading to the rejection of H_0 and acceptance of H_a . The resulting simple linear regression equation was $Y = 51.909 + 0.328X$, with a coefficient of determination (R^2) of 0.176. This indicates that self-efficacy contributed 17.6% to students' reading ability, while the remaining 82.4% was influenced by other linguistic, pedagogical, and environmental factors. The study concludes that strengthening students' psychological resources, particularly self-efficacy, may help reduce affective barriers and support more effective cognitive processing during reading comprehension.

Keywords: self-efficacy; reading ability; English as a foreign language; authentic assessment; quantitative correlation.

Introduction

In an era of rapidly evolving globalization, English plays a crucial role as the primary international communication tool for building global connectivity. In education, English is the primary medium used in scientific literature, academic publications, and for cross-border information sharing (Sari et al., 2024). In Indonesia, English is positioned as the primary foreign language (English as a Foreign Language / EFL) taught formally and compulsory from elementary to secondary education. Mastery of this foreign language is not only intended to meet academic curricular targets but also serves as the primary foundation for students to access science and

technology at the global level. Therefore, achieving optimal English language competence is one of the basic qualifications that students must possess to face the challenges of the times.

To achieve this level of proficiency, the English language learning process emphasizes mastery of four core language skills, with reading playing a crucial role. As explained by Hariyanti and Damanik (2024), reading is an active skill interconnected with writing, listening, and speaking, and involves communicative functions such as predicting and asking questions independently. Reading serves as the primary gateway for students to absorb information and construct new knowledge from various written sources. The reading process is not merely a mechanical act of spelling words, but rather an active cognitive process involving decoding, organizing ideas, interpreting, and constructing the holistic meaning of texts (Kusumarasyati, 2023).

However, in the reality of classroom learning, the success of cognitive processes when reading is greatly influenced by students' affective or psychological factors, one of which is self-efficacy. Self-efficacy refers to an individual's subjective perception or belief regarding their ability to organize and carry out the actions necessary to achieve specific learning goals (Bandura, 1997, in Schunk & DiBenedetto, 2020). Students with high self-efficacy tend to be more confident, persistent in facing complex text challenges, and able to demonstrate better academic achievement (Mohammed, 2022). Conversely, students with low self-efficacy in reading English texts tend to feel pessimistic, give up easily, and experience high levels of foreign language reading anxiety (Wang et al., 2024). Psychologically, this anxiety consumes working memory capacity, thus disrupting students' concentration and making it difficult for them to optimally comprehend the reading content.

This phenomenon of low self-efficacy is evident in ninth-grade students at SMPN 2 Kemlagi, Mojokerto Regency. Based on initial observations and informal interviews with subject teachers, most students showed hesitation when asked to read English texts, gave up quickly when faced with long sentences, and relied heavily on dictionaries or word-for-word translation apps. This condition is exacerbated by SMPN 2 Kemlagi's status as a developing school with limited literacy support facilities and a predominantly teacher-centered learning model. This passive learning method minimizes active student engagement, resulting in students lacking mastery experiences that can build their self-confidence sustainably.

In this study, students' reading abilities were evaluated using an authentic curriculum-based assessment instrument, namely Mid-Semester Exam (UTS) questions prepared by subject teachers. The selection of this UTS-based instrument was based on the consideration that the text and questions presented reflect a realistic level of difficulty, a linguistic context appropriate to curriculum demands, and relevance to students' daily learning experiences in the classroom. The use of this classroom-based evaluation is in line with the view that authentic assessment can reflect students' real-life achievement, motivation, and learning conditions in the school environment (O'Malley & Pierce, 1996, in Berliana & Tersta, 2024).

Although extensive research on self-efficacy and reading ability has been conducted, most previous studies have focused on high school or college students in urban areas with adequate facilities and used standardized tests developed by researchers. Conversely, research specifically examining junior high school (SMP) students in rural areas or developing schools with limited literacy facilities and using authentic curricular assessment instruments is still very limited. Therefore, this study aims to fill this research gap by analyzing the correlation between self-efficacy and reading ability of ninth-grade students at SMPN 2 Kemlagi. This study specifically analyzes the existence, reliability, strength, and direction of the relationship between the two variables. The results of this study are expected to provide theoretical and practical contributions for teachers in designing

learning interventions that not only hone linguistic skills but also build students' psychological capital.

Literature Review

The process of learning and mastering a language cannot be separated from the dynamics of individual affective and cognitive interactions. According to Bandura (1997, in Schunk & DiBenedetto, 2020), self-efficacy is built through four main sources of information, namely: (1) enactive mastery experiences (past successful experiences), (2) vicarious experiences (experiences observing models/peers), (3) social/verbal persuasion (encouragement and positive feedback from the environment), and (4) physiological and emotional states (physical and emotional conditions, such as anxiety levels). In the context of reading a foreign language, the perception of self-efficacy operates in three main dimensions: Magnitude (the level of difficulty of the task that can be faced), Strength (the strength or resilience of an individual's beliefs when facing obstacles), and Generality (the application of these beliefs to various types of texts and learning situations).

On the other hand, reading in a foreign language is an interactive meaning-making process that connects the reading structure with the reader's knowledge schema (Kusumarasyati, 2023). Reading components include understanding main ideas, analyzing explicit and implicit details, mastering vocabulary, and understanding grammatical structures (Hughes, 2020; Brown & Abeywickrama, 2019). When students read foreign texts, reading anxiety (Foreign Language Reading Anxiety) often arises due to limited vocabulary and doubts about their own abilities (Limeranto & Subekti, 2021). Referring to Eysenck's Processing Efficiency Theory and Krashen's Affective Filter Hypothesis, anxiety and low self-efficacy function as "affective inhibitors" that burden working memory and hinder in-depth language processing (Wang et al., 2024; Shehzad et al., 2019).

Several previous studies have examined the relationship between self-efficacy and reading ability. Rama (2022), in his study of eleventh-grade students at SMAN 2 Wawotobi, reported a moderate positive correlation ($r = 0.419$) between self-efficacy and reading comprehension. Rahma et al. (2019) found that self-efficacy in the reading domain was directly correlated with the use of active reading strategies and higher test scores. Research by Hindasyah et al. (2018) on elementary school students also confirmed a significant relationship between self-confidence and early reading skills. Furthermore, Tarigan et al. (2022) emphasized that self-efficacy is a vital psychological predictor in maintaining motivation for online learning. Meanwhile, Kusriani et al. (2021) showed that students with high self-efficacy were able to utilize learning strategies more optimally than students with low self-efficacy.

A synthesis of various previous studies shows similarities in the use of quantitative correlational methods to examine psychological variables of self-efficacy. However, the majority of previous studies focused on high school, college, or urban elementary school levels using researcher-made tests. The novelty and current position of this study lies in its focus on evaluation at a developing rural junior high school (SMPN 2 Kemlagi) using an authentic curricular value instrument based on the Mid-Semester Exam (UTS), thus having high ecological validity against actual classroom learning conditions.

Research Methods

This study used a quantitative approach with a correlational research design. This approach was chosen because the collected data are in the form of statistical figures that require objective hypothesis testing (Sugiyono, 2019). The correlational design was used to measure the strength and

direction of the linear relationship between two continuous variables, namely Self-Efficacy as the Independent Variable (X) and Reading Ability as the Dependent Variable (Y), without providing experimental treatment or manipulation to the research subjects (Ary et al., 2019).

This research was conducted at SMP Negeri 2 Kemlagi, Mojokerto Regency, during the odd semester of the current academic year. The population was all ninth-grade students of SMPN 2 Kemlagi. Sampling was conducted using the Cluster Random Sampling technique, taking into account the school's organizational structure, which is divided into complete classes (Creswell, 2012; Sugiyono, 2021). The selected sample was class IX-C, consisting of 32 students.

To collect empirical data, two types of research instruments were used, namely the Self-Efficacy questionnaire (Variable X): a closed questionnaire consisting of 30 statements with a 5-point Likert scale (Strongly Agree = 5 to Strongly Disagree = 1 for positive items, and vice versa for negative items). This questionnaire includes two main parts: General Self-Efficacy (15 items based on Bandura's Magnitude, Strength, and Generality dimensions) and Reading Ability Self-Efficacy (15 items that measure specific beliefs in reading, such as finding main ideas, vocabulary, inference, and critical reading). Next, the documentation of Mid-Term Exam Scores (Variable Y): a documentation sheet recapitulating the pure Mid-Semester Exam (UTS) scores for English subjects for grades IX-C compiled by subject teachers based on the national curriculum.

The data analysis procedure was carried out through several statistical stages with the help of SPSS version 26.0. The initial stage included testing the analysis prerequisites which included item validity tests (Pearson Bivariate correlation, condition $r_{\text{count}} > r_{\text{table}}$), instrument reliability tests (Cronbach's Alpha > 0.60), and data normality tests (One-Sample Kolmogorov-Smirnov, condition $p > 0.05$). After the prerequisites were met, hypothesis testing was continued using Pearson Product-Moment correlation analysis (r) and simple linear regression analysis ($Y = a + bX$) to determine the direction, strength, and contribution of determination (R^2) between variables.

Results and Discussion

Research Results

The empirical data analyzed in this study include the Self-Efficacy questionnaire scores (X) and authentic Reading Ability scores (Y) of 32 grade IX-C students of SMPN 2 Kemlagi. A summary of the results of the raw data collection is presented in Table 1.

Table 1. Statistical Description of Self-Efficacy and Reading Ability Variables

1. Variab les	2. N	3. Min Scor e	4. Max Scor e	5. Averag e	6. Standar d Deviation
7. Self-Efficacy	8. 32	9. 61	10. 108	11. 84.81	12. 12.85
13. Reading Ability	14. 32	15. 60	16. 100	17. 79.75	18. 9.99

Before hypothesis testing, the Self-Efficacy questionnaire instrument was tested for validity and reliability. At a significance level of $\alpha = 0.05$ and $N = 32$, the r_{table} value was 0.349. The results of the validity test showed that of the 30 items tested, 28 items were declared valid ($r_{\text{count}} > 0.349$). Two items were dropped because they did not meet the validity criteria, namely Item 13 ($r_{\text{count}} =$

0.272) and Item 30 (r count = -0.113), so both items were removed from further analysis. Reliability testing of the 28 valid items produced a Cronbach's Alpha value of 0.948 (> 0.60), which indicates that the instrument has a very high level of internal consistency.

Next, a normality test was performed using the One-Sample Kolmogorov-Smirnov test. The test results produced a significance value of Asymp. Sig. (2-tailed) of 0.200 ($p > 0.05$). This proves that the residual data is normally distributed and meets the assumptions for parametric analysis.

Hypothesis testing was conducted using Pearson Product-Moment correlation and simple linear regression. The statistical calculation results are presented in Tables 2 and 3.

Table 2. Results of Pearson Product-Moment Correlation Analysis
Correlations

		Self-Efficacy	Reading Ability
Self-Efficacy	Pearson Correlation	1	,419 *
	Sig. (2-tailed)		,017
	N	32	32
Reading Ability	Pearson Correlation	,419 *	1
	Sig. (2-tailed)	,017	
	N	32	32

Table 3. Results of Pearson Product-Moment Correlation Analysis
Coefficients^a

		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
Model		B	Std. Error	Beta		
1	(Constant)	51,909	11,095		4,679	,000
	Self-Efficacy	,328	,130	,419	2,530	,017

Based on the statistical analysis in Tables 2 and 3, several main findings were obtained:

- Significance Value: The p-value (Sig. 2-tailed) is $0.017 < 0.05$, which indicates a statistically significant relationship between Self-Efficacy and Reading Ability.
- Strength and Direction of the Relationship: The correlation coefficient value of $r = +0.419$ indicates a positive correlation level with moderate criteria (range 0.400 – 0.599). The positive direction indicates that the higher the student's self-efficacy, the higher the reading ability score obtained.
- Regression Equation: The simple regression equation is:

$$\hat{Y} = 51.909 + 0.328X$$

The constant value of 51.909 indicates the baseline reading ability if self-efficacy is zero, while the regression coefficient of 0.328 indicates that every 1 point increase in the self-efficacy score will be followed by an increase in the average reading score of 0.328 points.

- d. Hypothesis Test (t-Test): The t-test results yield $t_{\text{count}} = 2.530$. With $df = 32 - 2 = 30$ and $\alpha = 0.05$, the $t_{\text{table value}}$ is 2.042. Since $t_{\text{count}} > t_{\text{table}}$ ($2.530 > 2.042$), H_0 is rejected and H_a is accepted.
- e. Coefficient of Determination (R^2): The Model Summary test results yielded $R^2 = 0.176$. This value indicates that self-efficacy contributes 17.6% to students' reading ability, while the remaining 82.4% is influenced by external factors not examined in this model.

Discussion

The results of this study empirically prove that self-efficacy is directly proportional to the ability to read English texts in class IX-C students at SMPN 2 Kemlagi. The moderate positive correlation ($r = 0.419$) found explains the psychological dynamics that students' beliefs in their abilities play an important role in determining cognitive success when reading.

Theoretically, these findings reinforce Albert Bandura's Social Cognitive Theory, particularly in the context of how self-perception guides cognitive regulation and learning effort. When reading complex EFL texts, students often encounter linguistic barriers such as unfamiliar vocabulary and complex grammatical structures. Students with high self-efficacy tend to view these barriers as challenges to be mastered, rather than threats to be avoided. They are more persistent in applying cognitive strategies such as skimming, scanning, and contextual inference (Saifulloh, 2024; Saifulloh et al., 2023, 2025a, 2025b, 2025c, 2026; Saifulloh & Anam, 2022).

Conversely, this relationship mechanism can also be explained through Processing Efficiency Theory and the Affective Filter Hypothesis. When students have low self-efficacy, they experience high levels of reading anxiety. This anxiety acts as an emotional barrier that takes up working memory space. A large portion of students' cognitive capacity is allocated to processing fear of failure and uncertainty, leaving insufficient cognitive capacity for higher-order language processing (higher-order decoding). As a result, their understanding of the text becomes shallow and negatively impacts their academic evaluation results (mid-term exams).

Judging from the coefficient of determination ($R^2 = 0.176$), self-efficacy contributed 17.6% to the variation in reading scores. Although this figure is statistically significant, 82.4% of the remaining variance is influenced by other confounding variables. These variables include linguistic aspects (extensive vocabulary and grammar mastery), pedagogical aspects (teacher teaching strategies and learning media), and environmental aspects (family literacy support and use of learning resources at home). Therefore, improving reading ability cannot rely solely on affective aspects but must be combined with systematic language instruction.

Contextually, these findings provide important novelty for SMPN 2 Kemlagi as a developing school in a rural area. Amidst limited literacy and library facilities, the development of students' psychological capital in the form of self-efficacy has proven to be an effective, low-cost catalyst for improving student achievement. Teachers can create mastery experiences through scaffolding, creating a low-anxiety classroom climate, and providing constructive, persuasive feedback.

Conclusion

Based on the data analysis and discussion presented, this study concludes that there is a statistically significant positive relationship between Self-Efficacy and Reading Ability in grade IX-C students at SMPN 2 Kemlagi ($r = 0.419$, $p = 0.017 < 0.05$). Hypothesis testing confirms the acceptance of H_a ($t_{\text{count}} = 2.530 > t_{\text{table}} = 2.042$), with a regression model of $Y = 51.909 + 0.328X$. Self-efficacy contributes 17.6% to the variance of students' reading ability, while the remaining 82.4% is determined by linguistic, instructional, and other environmental factors. This study proves that self-efficacy functions as an emotional regulator that suppresses reading anxiety and optimizes students' working memory capacity in understanding texts.

The implications of this study emphasize the importance of shifting the paradigm of English language learning at the secondary school level, from focusing on mechanical grammar exercises to strengthening students' affective and self-confidence. Teachers are advised to implement scaffolding techniques, use task-based learning strategies, and create a conducive classroom atmosphere so that students do not feel pressured when making reading errors. School administrators are advised to increase the provision of more varied literacy resources. Meanwhile, for future researchers, it is recommended to expand the research variables to include vocabulary mastery and teacher teaching strategies to explain the 82.4% of variance uncovered in this study.

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Declaration

All authors declare their contributions to the planning, data collection, statistical analysis, and drafting of this article. This manuscript is original work and has no potential conflicts of interest with any parties.

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