INTRODUCTION

Education as described through students' development is a crucial aspect, where academic achievement is one of the primary indicators of educational success. Academic achievement not only reflects students' learning outcomes but also plays a significant role in determining their future success. In this instance, psychological factors such as self-efficacy and self-esteem are identified as important predictors of students' academic performance (Neroni et al., 2022; Al-Qadri et al., 2024).

Self-efficacy as a concept refers to an individual's belief in their ability to successfully perform tasks in specific situations. Recent studies shown that self-efficacy has a direct influence on students' engagement and academic achievement (Meng & Zhang, 2023; Liu et al., 2026). Students with high self-efficacy tend to be more confident to overcome academic challenges and achieving their learning goals.

Self-esteem presented as an individual's overall evaluation of their self-worth. Empirical evidence suggests that self-esteem is associated with academic success, as well as motivation and perseverance (Neroni et al., 2022). Students experiencing low self-esteem are more likely to have self-doubt, affecting their motivation and academic performance negatively (Rahman et al., 2025). According to Al-Qadri, et al. (2024), self-esteem is closely related to self-concept, which influences students' academic engagement and commitment.

In Indonesian educational context, student development is guided by Law No. 20 of 2003 on the National Education System, emphasizing the development of students' potential, character, and competencies. Academic achievements are commonly measured through numerical scores derived from assignments and examinations, serving as a key indicator of students' learning outcomes.

Research examining their combined relationship with academic achievement remains limited, particularly among senior high school students in Palangkaraya. Therefore, this study aimed to investigate the relationship between self-efficacy and self-esteem and the academic achievement of 10th-grade students at MAN Kota Palangkaraya.

METHOD

This study employs a quantitative approach with a correlational research design. This method is utilized to test specific theories by examining the relationships between measurable variables using statistical procedures (Creswell & Creswell, 2018). The primary objective is to measure the strength and direction of the association between self-efficacy, self-esteem, and academic achievement without experimental manipulation (Siedlecki, 2020).

Research Procedures and Flow

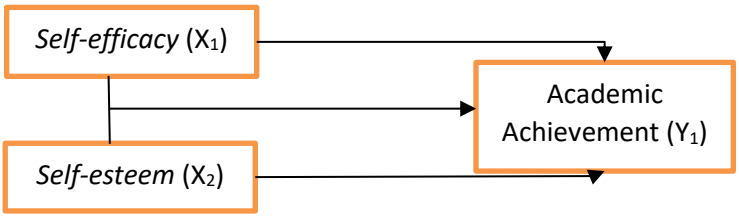

Figure 1. Research Aim

The research was conducted at MAN Palangkaraya, Central Kalimantan, between January and February 2026. The study followed a systematic flow: (1) adaptation and translation of the measurement scales, (2) a pilot study to verify linguistic and cultural validity, (3) simple random sampling of the student population, (4) administration of the research instruments, and (5) statistical analysis of the gathered data alongside secondary academic records.

Population and Sample

The population consisted of 336 of tenth-grade students at MAN Kota Palangkaraya (Academic Year 2025/2026). The sample size was determined using the Slovin formula to ensure statistical representation:

$$n = \frac{N}{1 + N(e)^2}$$

With a population (N) of 336 and a margin of error (e) of 0.05, the calculation yielded a target sample (*n*) of 183 students. Participants were selected via simple random sampling, a technique appropriate for populations categorized as homogeneous.

Research Instruments

The study utilized two primary psychological instruments. Self-efficacy was measured using the adapted version of Academic Self-Efficacy Scale (ASE) developed by Gafoor and Ashraf (2007). This 40-item scale includes 20 positive and 20 negative items covering dimensions such as learning processes, reading, comprehension, memory, and exam performance. Self-esteem was assessed using adapted version of the Self-Esteem Inventory – Long Form (SEI-LF) (McClelland, 2011). The Self-Esteem Inventory (SEI-LR) was selected due to its established validity and widespread use in measuring global self-esteem. This 58-item instrument measures five distinct dimensions: General Self (26 items), Social Self-Peers (8 items), Home-Parents (8 items), School-Academic (8 items), and a Lie Scale (8 items) to detect social desirability bias. The former instruments utilize a five-point Likert scale (Strongly Agree to Strongly Disagree), while the latter utilize binary that implied yes (like me) or no (unlike me).

Both instruments were distributed to the subjects via Google Forms. For the secondary data, information was taken from the students' academic report cards. The students filled in the necessary details for their academic achievement through the Google Form provided.

Validity and Reliability

The adapted ASE Scale demonstrated validity with Corrected Item - Total Correlation with the lowest sitting at .380 and the highest at 0.812. Reliability was established via Cronbach's alpha (α = 0.93), and Guttman split-half reliability (r = 0.92). For the SEI-LF The validity test results showed that all items had Corrected Item-Total Correlation values ranging from 0.310 to 0.728, which are greater than the minimum criterion of 0.30. Therefore, all items are considered valid. Reliability measured via Cronbach's alpha (α = 0.94), and also via Guttman split-half reliability (r = 0.94) are found to be sufficient.

Data Analysis

Prior to hypothesis testing, prerequisite tests for normality and linearity were conducted. Normality was assessed to determine if the data followed a Gaussian distribution, where H_0 is accepted if $p > 0.05$. Linearity was tested via SPSS to ensure a straight-line relationship exists between variables.

The relationship between variables was analysed using the Pearson Correlation Coefficient (r):

$$r_{xy} = \frac{n \sum x_i \, y_i - (\sum x_i)(\sum y_i)}{\sqrt{\left(n \sum x_i^2 - (\sum x_i)^2\right)\left(n \sum y_i^2 - (\sum y_i)^2\right)}}$$

To determine the simultaneous contribution of the two independent variables (Self-efficacy X_1 and Self-esteem X_2) on the dependent variable (Academic Achievement Y), a Multiple Correlation analysis was applied. Finally, the significance of the relationship was tested using the t-test formula:

$$t = \frac{r\sqrt{n-2}}{\sqrt{1-r^2}}$$

Where *t* is the calculated value, r is the correlation coefficient, and *n* is the number of respondents. Hypotheses were tested at a significance level of α = 0.05.

RESULTS AND DISCUSSION

Results

The results of this study would be obtained through statistical analyses, including validity and reliability tests, Pearson correlation, and multiple linear regression analysis. The validity test using Corrected Item-Total Correlation showed that all items in the Academic Self-Efficacy (ASE) and Self-Esteem Inventory – Long Form (SEI-LR) instruments had correlation values above 0.30, indicating that all items were valid. Furthermore, the reliability test using Cronbach's Alpha demonstrated that the self-efficacy variable had a coefficient of 0.93, while self-esteem had a coefficient of 0.94. These results indicate that both instruments are highly reliable.

Table I. Correlations table

Correlations

		Prestasi	ASE adapted version	SEI-LR adapted version
Prestasi	Pearson Correlation	1	.622**	.550**
	Sig. (2-tailed)		0.000	0.000
	N	183	183	183
ASE adapted version	Pearson Correlation	.622**	1	0.098
	Sig. (2-tailed)	0.000		0.186
	N	183	183	183
SEI-LR adapted version	Pearson Correlation	.550**	0.098	1
	Sig. (2-tailed)	0.000	0.186	
	N	183	183	183

The results are to show Pearson correlation analysis revealed that self-efficacy has a significant positive relationship with academic achievement ($r = 0.622$, $p < 0.05$). This finding indicates that students with higher levels of self-efficacy tend to achieve better academic performance. Similarly, self-esteem also showed a positive and significant relationship with academic achievement ($r = 0.550$, $p < 0.05$), suggesting that students with higher self-esteem tend to perform better academically.

Furthermore, the results of multiple linear regression analysis showed that self-efficacy and self-esteem simultaneously influence academic achievement, with an R^2 value of 0.628. This means that 62.8% of the variance in academic achievement can be explained by these two variables. Among the predictors, self-efficacy showed a stronger effect ($\beta = 0.57$) compared to self-esteem ($\beta = 0.49$).

One of the most interesting and crucial findings in this study is the absence of a significant correlation between adapted Academic Self-Efficacy (ASE) and adapted Self-Esteem (SEI-LR) in 10th grade students at MAN Palangkaraya City. Based on the results of the Pearson correlation analysis (Table I), the relationship between the two independent variables shows a value of $r = .098$ with a significance level of $p = .186$ ($p > .05$). Statistically, this finding confirms the absence of multicollinearity in the multiple regression model used. This absence of multicollinearity is an excellent indicator, because it proves that the ASE and SEI-LR instruments measure two completely different and independent psychological constructs, so that each variable can provide a unique predictive contribution to students' Academic Achievement without overlapping.

Theoretically, this independence finding provides in-depth psychological insights into the profile of early adolescent students. Although often considered similar in everyday conversation, self-efficacy and self-esteem operate in different cognitive and affective domains. Self-efficacy is rooted in task-specific social cognitive theory. It is a student's cognitive belief in their ability to manage and complete specific academic tasks, such as reading, understanding material, or taking exams. On the other hand, self-esteem reflects an individual's subjective and affective evaluation of their overall self-worth (global self-worth).

Referring to the dimensions of the SEI-LR instrument used, self-esteem is not only shaped by school performance, but is also strongly influenced by peer acceptance (Social Self-Peers) and family dynamics (Home-Parents). Recent research also makes it clear that self-esteem influences overall social functioning and emotional resilience, beyond mere academic competence. The absence of this correlation (r = .098) indicates a complex psychological reality in the field. A student at MAN Kota Palangkaraya may very well have high academic self-efficacy—for example, he or she is very confident in being able to complete a math or biology assignment with a perfect score—but at the same time struggle with low self-esteem due to feeling socially unpopular, feeling physically unattractive, or experiencing conflict at home. Academic competence does not automatically compensate for feelings of social inadequacy. Conversely, there are students who have very high self-esteem; they feel loved by their families, have many friends, and are very confident in their social interactions. However, when faced with a difficult physics exam, they may have low self-efficacy and doubt their intellectual ability to solve the problem.

Both operate separately within the individual. This finding confirms that academic achievement (Achievement) is influenced by two different psychological pathways. The first pathway is instrumental: students need cognitive confidence that they can complete the task (Self-Efficacy). The second pathway is affective-emotional: students need mental resilience and feelings of worth to have the basic motivation to attend and make an effort in school (Self-Esteem). The fact that these two variables together predict 62.8% of the variance in academic achievement (R^2 = 0.628), even though they are not correlated with each other, underscores the urgency for educators and school counselors to facilitate students' cognitive development and emotional well-being separately and comprehensively.

Table II. Regression analysis Coefficients output

Coefficients[a]					
			Standardized Coefficients	t	Sig.
			Beta		
(Constant)	59,368	1,270		46,756	0,000
ASE_TOTAL	0,111	0,009	0,574	12,562	0,000
SEILR_TOTAL	0,160	0,015	0,493	10,803	0,000

These findings highlight the importance of psychological factors in education. Enhancing students' self-efficacy and self-esteem can be an effective strategy to improve academic achievement. Therefore, educators are encouraged to implement learning approaches that strengthen students' confidence and positive self-perception.

Tabel III. Regression analysis model output

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.793[a]	0,628	0,624	2,680
a. Predictors: (Constant), SEILR_TOTAL, ASE_TOTAL				

Descriptive statistics showed that the academic achievement scores indicated that most students achieved satisfactory performance. These results suggest that the respondents generally possess adequate psychological and academic characteristics.

Discussion

The results of this study should indicate that self-efficacy has a positive and significant relationship with academic achievement. This finding suggests that students who have higher confidence in their abilities tend to perform better academically. Students with strong self-efficacy are more likely to be motivated, persistent, and able to overcome academic challenges. This result is in line with previous studies which state that self-efficacy plays an important role in determining students' learning behaviour and academic performance.

In addition, self-esteem was also found to have a positive and significant relationship with academic achievement. This means that students who have a more positive evaluation of themselves tend to have better academic outcomes. High self-

esteem can increase students' confidence and motivation in learning, while low self-esteem may lead to self-doubt and reduced effort in academic activities. This finding is consistent with previous research which shows that self-esteem is related to students' motivation and academic success.

Furthermore, the results of the regression analysis show that self-efficacy and self-esteem simultaneously influence academic achievement. However, self-efficacy has a stronger influence compared to self-esteem. This indicates that students' belief in their abilities is a more dominant factor in achieving academic success than their general self-evaluation. These findings provide additional insight that psychological factors, especially self-efficacy, should be considered in improving students' academic performance.

Overall, this study supports existing theories that emphasize the importance of psychological factors in education. The findings suggest that efforts to improve academic achievement should not only focus on cognitive aspects, but also on developing students' confidence and positive self-perception. Therefore, teachers and schools are encouraged to create learning environments that can support the development of self-efficacy and self-esteem among students.

CONCLUSION

This study demonstrates that self-efficacy and self-esteem significantly enhance students' academic achievement, with self-efficacy serving as the stronger predictor. To translate these findings into practice, Guidance and Counseling (BK) teachers—particularly at MAN Palangkaraya City—should adopt a targeted, dual-intervention strategy. This includes implementing Cognitive-Behavioral group guidance to help students separate their fundamental self-worth from their academic grades, utilizing family counseling and home visits to nurture self-esteem within the home environment, and collaborating with subject teachers on peer-tutoring programs to build self-efficacy through mastery experiences. Ultimately, creating this supportive psychological ecosystem will improve both academic outcomes and student well-being, though future research should further expand on these insights by incorporating broader samples and additional variables.

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