

The Effect of Self-Efficacy and Self-Esteem on Academic Achievement of Grade 10 Students at MAN Kota Palangkaraya^{1*}Fahrurrazi., ²Asep Solikin , ²Agung Riadin ¹[Departement of Guidance and counseling, Universitas Muhammadiyah Palangka Raya, Indonesia.](#)²[Departement of Primary Teacher Education, Universitas Muhammadiyah Palangka Raya, Indonesia.](#)**Research Article****Citation Information:**

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ABSTRACT

Academic performance among adolescents in Palangkaraya City is influenced by various internal factors, specifically the psychological constructs of self-efficacy and self-esteem. This study aims to investigate the relationship between self-efficacy, self-esteem, and the academic achievement of students. The research utilizes a quantitative approach with a correlational study design. The sample consists of 183 students from MAN Palangkaraya, selected to represent the student population in the region. Data were collected using Indonesian-adapted versions of the Academic Self-efficacy Scale and the Self-esteem Inventory-Long Form (SEI-LF). To ensure the instruments' cultural and linguistic suitability, a pilot study was conducted to establish reliability and validity within the local context. Pearson correlation analysis and multiple linear regression was conducted to evaluate the linear relationship between these variables. It is hoped that the findings will contribute to a deeper understanding of how self-efficacy and self-esteem impact academic success. The results are intended to provide a guide for developing educational strategies focused on enhancing these psychological traits to improve overall student academic achievements.

Keywords: Self-Efficacy, Self-Esteem, Academic Achievement, Scale Adaptation.

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Email: fahrurrazi2025@gmail.com**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).

According to Bandura's (1997) Social Cognitive Theory, self-efficacy is the belief in one's ability to successfully execute specific tasks. Bandura argued that this self-perception shapes human behaviour by influencing individual effort and resilience during difficulties. In education, high self-efficacy helps students manage stress and stay motivated. Recent research confirms that self-efficacy directly impacts both student engagement and academic achievement (Meng & Zhang, 2023; Liu et al., 2026), giving students the confidence to overcome learning challenges. According to social cognitive theory, student motivation is deeply rooted in personal beliefs regarding one's own capabilities. Scholars such as Schunk and DiBenedetto (2020) have demonstrated that self-efficacy acts as a primary mediator between an individual's cognitive processes and their ultimate academic achievement.

Self-esteem is an individual's overall attitude toward their self-worth, a concept pioneered by Morris Rosenberg (1965) as a baseline sense of personal value. Rosenberg argues that healthy self-esteem isn't about feeling superior, but simply accepting one's worth as an equal among peers. For students, this positive self-evaluation fosters the resilience and drive needed for academic success and perseverance (Neroni et al., 2022). Conversely, low self-esteem breeds self-doubt, which disrupts motivation and drags down academic performance (Rahman et al., 2025). Ultimately, this baseline sense of worth acts as a core pillar of a student's broader self-concept. As Al-Qadri et al. (2024) note, it is this overall self-perception that dictates how deeply students engage with and commit to their education.

In the Indonesian educational context, student development is guided by Law No. 20 of 2003 on the National Education System, which emphasizes the development of students' potential, character, and competencies. Academic achievement,

typically measured through numerical scores from assignments and examinations, serves as a primary indicator of these learning outcomes. Recent empirical evidence has consistently highlighted the influence of internal psychological factors on this success. For instance, Kencono et al. (2024) confirmed that self-efficacy acts as a significant predictor of academic outcomes among students in Indonesia, while Zahroh and Dewi (2022) demonstrated that self-esteem significantly correlates with academic achievement, fostering greater persistence in learning tasks. Despite these insights, research examining the combined influence of both self-efficacy and self-esteem on academic achievement remains limited, particularly within the distinct setting of public Islamic high schools (MAN). This study addresses that gap by investigating these relationships among 10th-grade students at MAN Kota Palangkaraya.

Research examining the combined relationship of self-efficacy and self-esteem on academic achievement remains limited, particularly among senior high school students in Palangkaraya. This creates a practical problem for local educators who lack data on how student mindset affects grades within the city's unique school system. Therefore, this study aims to investigate the relationship between self-efficacy, self-esteem, and academic achievement among 10th-grade students at MAN Kota Palangkaraya. This specific location was chosen because, as a public Islamic school (Madrasah Aliyah Negeri), its students face the distinct challenge of balancing a standard national curriculum alongside an intensive religious workload. MAN Kota Palangkaraya provides the ideal setting to study this dynamic, as it is the premier public Islamic high school in the city with a large, competitive student body. Based on these objectives, the hypothesis of this study is that there is a significant positive relationship between self-efficacy and self-esteem, both partially and simultaneously, with 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). To achieve this, multiple linear regression analysis is applied to determine how well the two independent variables simultaneously predict students' academic outcomes.

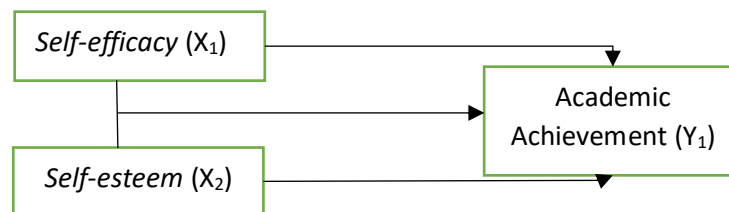


Figure 1. Research Aim

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.

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.

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. Furthermore, alongside self-efficacy (Bandura, 1997), self-esteem was assessed using adapted version of the Self-Esteem Inventory Long Form (SEI-LF), originally developed by Coopersmith (1967). The Self-Esteem Inventory – Long form (SEI-LF)

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 for their overall semester grade average across all subjects. The students filled in the necessary details for their academic achievement through the Google Form provided.

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 ($\alpha = 0.93$), 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 ($\alpha = 0.94$), and also via Guttman split-half reliability ($r = 0.94$) are found to be sufficient.

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).

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. 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 $\alpha = 0.05$.

RESULTS AND DISCUSSION

Results

The results of this study would be obtained through statistical analyses, including validity and reliability tests, classical assumption tests (normality, linearity, and multicollinearity), Pearson correlation, and multiple linear regression analysis. These assumption tests were conducted prior to the hypothesis testing, and the results confirmed that the data were normally distributed, had a linear relationship, and were free from multicollinearity symptoms. 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-LF) 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 (40 items), while self-esteem had a coefficient of 0.94 (58 items). These results indicate that both instruments are highly reliable...

Table I. Validity and Reliability table for ASE and SEI-LF Scales (N = 183)

Variable / Scale	Number of Items	Range of Corrected Item-Total zCorrelation	Cronbach's Alpha	Status
Academic Self-Efficacy (ASE)	40	.345 - .812	.938	Valid & Reliable
Self-Esteem Inventory (SEI-LF)	58	.310 - .728	.941	Valid & Reliable

Table II. Correlations table

		Correlations		
		Performance	ASE adapted version	SEI-LF adapted version
Performance	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-LF 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-LF) 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-LF 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-LF 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 III. Regression analysis Coefficients output

Coefficients^a

	Model	Unstandardized Coefficients		Standardized	t	Sig.
		B	Std. Error	Coefficients		
I	(Constant)	59.368	1.270		46.756	.000
	ASE_TOTAL	.111	.009	.574	12.562	.000
	SEI-LF_TOTAL	.160	.015	.493	10.803	.000

a. Dependent Variable: Performance

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.

Table IV. Regression analysis model output
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
I	.793 ^a	0,628	0,624	2,680

a. Predictors: (Constant), SEI-LF, ASE

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. ...

To test the research hypothesis, an F-test was conducted. The results show that SEI-LF and ASE significantly predict academic achievement, $F(2, 180) = 152.062, p < .001$. This confirms that both independent variables jointly influence students' academic performance.

Table V. ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
I	Regression	2184.495	2	1092.248	152.062	.000 ^b
	Residual	1292.926	180	7.183		
	Total	3477.421	182			

a. Dependent Variable: Prestasi

b. Predictors: (Constant), SEILR_TOTAL, ASE_TOTAL

Discussion

The Pearson correlation analysis revealed that self-efficacy has a strong, positive, and significant relationship with academic achievement ($r = .622, p < .001$). 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 ($r = .550, p < .001$). 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 Asakereh and Yousofi (2018), who emphasized that self-esteem, alongside self-efficacy and reflective thinking, serves as a vital component in the academic success of students by shaping their overall engagement and perseverance in challenging educational environments. 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, $F(2, 180) = 152.062, p < .001$. Looking at the individual coefficients, self-efficacy has a stronger influence ($\beta = .574, t = 12.562, p < .001$) compared to self-esteem ($\beta = .493, t = 10.803, p < .001$). 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. The findings of this study are consistent with those of Abdullah (2021), who observed that self-efficacy and self-esteem are significant predictors of academic achievement in Indonesian secondary education settings. This suggests that regardless of the school type or regional location, these psychological constructs consistently play a pivotal role in shaping student 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 shows that self-efficacy and self-esteem share significant, positive links with students' academic achievement, where self-efficacy stands out as the stronger predictor. In light of these associations, Guidance and Counseling (BK) teachers—especially at MAN Palangkaraya City could design school activities that focus on students' psychological development. For instance, counselors could offer group guidance sessions to help students better manage their self-perception regarding their school grades. Additionally, schools might promote parental involvement to foster positive self-worth at home, while teachers could introduce peer-learning setups to help students feel more capable in their classes. Understanding these psychological connections can guide schools in creating a more encouraging learning atmosphere, although future studies with larger sample sizes and different designs are needed to explore true causal effects.

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