

THE MEDIATING ROLE OF ACADEMIC SELF-EFFICACY ON THE RELATIONSHIP BETWEEN ACADEMIC PRESSURE AND STUDENT WELL-BEING

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Abstract

Although there has been extensive research on the negative impact of academic pressure on students' well-being, studies examining the psychological mechanisms capable of mitigating these effects remain scarce, particularly in the education sector. Therefore, the purpose of this study is to examine the impact of academic pressure on students' well-being, with self-efficacy as a mediating factor and teachers' emotional support as a moderating factor in this relationship. A cross-sectional quantitative survey was conducted, covering a sample of 308 high school students. The data were analyzed using the Smart PLS 4.0 application through partial least squares structural equation modeling (PLS-SEM). The findings indicate that academic pressure is a significant predictor of student well-being ($\beta = 0.428$, $p < 0.001$) and self-efficacy ($\beta = 0.486$, $p < 0.001$), while self-efficacy is found to significantly enhance student well-being ($\beta = 0.433$, $p < 0.001$). Self-efficacy was identified as a partial mediator in the relationship between academic pressure and student well-being ($\beta = 0.210$, $p < 0.001$). Contribution of this study is the use of psychological mechanisms to mitigate the negative impact of academic pressure on student well-being. This differs from previous studies that explored this relationship directly. The findings of this study have practical implications for educators and policymakers by emphasizing the importance of strengthening students' self-efficacy and creating an emotionally supportive classroom environment to enhance student well-being

Keywords: *Academic Pressure, Self-Efficacy, Teacher Emotional Support, Student Well-Being*

INTRODUCTION

It is estimated that around 10-20% of adolescents experience depression, which impacts their mental health and academic performance (International Labor Organization & World Health Organization, n.d.; Kassebaum N, Kyu HH, Zoeckler L, 2017). Therefore, students' well-being is considered a very important issue because it increases the psychological burden on students. Several explanations (Kalpana & Perumalsamy, 2025) reveal that stress and emotions contribute to increased anxiety and sleep disturbances. Academic achievement demands from parents further exacerbate the condition (Kandel, 2025; Singh & Singh, 2025).

Academic pressure is often caused by a competitive learning environment and is directly related to physical fatigue as well

as the disruption of students' health and performance (Annaliza Nicole M. Cabañas, 2025; Ashraf & Ahmed, 2025; Galimyanova, P. V., & Katsman, 2024; Malik, 2024). Physical fatigue also increases emotional instability, stress, and psychological imbalance and reduces academic well-being (Araujo et al., 2024; Galimyanova, P. V., & Katsman, 2024; Jagiello et al., 2025; Ye et al., 2025). Consequently, psychological balance is needed to enhance student achievement and well-being (Thoyibah et al., 2025).

Academically, self-efficacy can be explained as a student's ability to manage academic stress and their confidence in their ability to achieve (Anchal, A., 2024; Bandura, 1997b). This conjecture is confirmed by (Chongjin, 2025; Memon et al., 2025; Wang, 2025), who found that students with high potential self-efficacy

abilities experience a lower stress phase. Self-efficacy minimizes the potential for burnout, which diminishes students' well-being (Anchal, A., 2024; Memon et al., 2025; Zhang, 2025), thereby enhancing learning motivation and improving psychological resilience (Jr, 2012; Kristensen et al., 2023; Michinov, Estelle., 2023). Externally, emotional support from teachers, which can create a psychologically safe classroom climate, must be considered in improving student well-being (Gao, Y., Lu, G., & Zhang, 2023). Thus, the interaction between students' emotional engagement and teachers' emotional support fosters motivation and positive perceptions among students (Alrabai, Fakhieh., 2025), thereby supporting academic achievement (Liang et al., 2025). Overall, the ability of educator to provide emotional protection to students contributes to students' well-being to a greater or lesser extent (Savina et al., 2025)

Many studies on teachers' self-efficacy and emotional support have been conducted, but the existing evidence remains fragmented, necessitating further research, including the following: First, some of the outcomes related to the consequences of teachers' self-efficacy and emotional encouragement still focus on educational achievement, student engagement, and learning motivation (Kaloko, 2026; Laka & Suryanto, 2024; Muhibbin et al., 2025; Prananto et al., 2025), whereas student well-being has not yet been fully explored (Hossain et al., 2022; Ma, 2026). Integration of educator self-efficacy and feeling well-being, as well as related psychological outcomes, has been extensively explored in higher education settings, whereas such research is still rare among high school adolescents (W. Guo et al., 2025; Li Y, Gao J, Guo L, Lu Y, 2025; Tang & Zhu, 2024). It can be concluded from the existing literature that a model in which self-efficacy mediates the relationship between academic stress and emotional support, and emotional support has not yet been explored in depth.

In the context of education, COR refers to students' efforts to acquire, maintain, and protect psychological resources. Self-efficacy and emotional support from teachers are viewed as psychological resources that can protect students from academic stress and maintain their well-being (Hoferichter et al., 2021; Xu, 2024). Several studies have clarified that teachers' positive emotional support contributes positively to increased self-efficacy, learning motivation, academic engagement, and academic achievement (İlter et al., 2025; Shao et al., 2025). Self-efficacy enhances the ability of students to manage stress, adapt to academic load and maintain student welfare (Eduardo & Torres, 2023; Izar-de-la-fuente & Escalante, 2023). Research integrating self-efficacy as a mediating mechanism and teachers' emotional support as a moderating mechanism to explain academic well-being within a single conceptual framework remains limited, particularly in the upper secondary education context. Therefore, this study provides a new conceptual framework to explain how students can maintain their well-being despite high academic pressure.

In-depth research on academic stress and the well-being of high school students remains crucial, given the increasing number of issues related to their well-being (Sarfika., Saifudin, 2025). Student's mental health affects their academic performance (Ekawati et al., 2025). On the other hand, (Raniti et al., 2022) explained that teachers' interpersonal support provided by teachers can reduce the negative impact of academic pressure. Therefore, this study simultaneously investigates internal psychological resources and social support as protective factors in maintaining the well-being of high school student in coping with academic stress.

Previous research has frequently demonstrated that academic pressure has paradoxical effects on student well-being. (Sullivan et al., 2023) explain that academic

pressure has the potential to negatively impact students' mental health. These findings are confirmed by longitudinal research, which indicates that academic pressure is the most significant risk factor for depression among adolescents (X. Guo et al., n.d.). Increased academic pressure on students leads to a decline in their well-being (Ansari et al., 2025). Furthermore, (Cheng & Lin, 2023) and (Jiang & Gao, 2022) highlight the relationship between academic pressure and student well-being, noting that the direct effects of academic pressure on well-being are often not significant. Thus, it can be concluded that the inconsistencies in previous research findings do not indicate a weak relationship between academic pressure and student well-being. This study aims to bridge the inconsistencies found in previous research by integrating a psychological mechanism that has rarely been tested. Self-efficacy serves as an explanatory variable in this study to account for why academic pressure has varying effects on student well-being, while also examining the role of teacher emotional support in determining the strength of this relationship.

METHOD

This study focuses on private schools because these institutions typically use a tuition-based accountability system, which makes academic performance higher than that of national schools. As a result, students experience more intense and consistent academic challenges, making private schools a relevant context for determining whether these challenges serve as obstacles that reduce learning or as challenges that increase learning. A cross-sectional quantitative survey was conducted in this to explore the relationship between academic stress, self-efficacy, teachers' emotional support, and student well-being. High school students often experience academic stress, which impacts their level of well-being. Purposive

sampling was used in the sampling process, targeting students in grades 10, 11, and 12 at private schools, aged 15–19 years.

The questionnaire distributed to the informants was designed to elicit students' responses regarding the academic stress they frequently experience, their self-efficacy, and the extent of teachers' emotional support that influences the well-being of middle-class students. The academic stress variable was measured with 8 questions covering the dimensions of academic load, expectation pressure, and time pressure (Ang & Huan, 2006). Self-efficacy was measured using 8 questions (Bandura, 1997a). Teachers' emotional support was measured using 8 questions based on the dimensions of attention, responsiveness, and respect (Allen et al., 2017). Student well-being was measured using the PERMA dimensions (Butler & Kern & Margaret L, 2016; Kern et al., 2015). Measurements were conducted based on a five-point Likert scale. Before conducting the main study, the researcher conducted a preliminary study involving 30 students. The pilot study was conducted to ensure the clarity and comprehensibility of the questionnaire items while providing preliminary evidence of the reliability of the instrument. The researcher recommended a Cronbach's alpha cutoff value greater than 0.70 for all constructs. Statistical analyses were conducted using partial least squares structural equation modeling (PLS-SEM) implemented through Smart PLS 4.0, as it was well-suited to the research model, which involved mediating and moderating mechanisms within the conceptual framework of the study.

Table 1. Sample Demographic Information of the Informant

Population Profile	Category	Number of respondents	%
Gender	Male	165	54%
	Female	143	46%
	Total	308	100%
Age	15	74	24%
	16	66	21%
	17	77	25%
	18	90	29%
	19	1	0,3%
	Total	308	100%
Average Final Academic Grade	< 70	0	0
	70-79	107	35%
	80-89	136	44%
	> 90	65	21%
	Total	308	100%
Technology Access	Cell phones	188	61%
	Cell phones and laptops	92	30%
	Cell phones, laptops, internet connections	28	9%
	Total	308	100%

RESULTS AND DISCUSSION

The demographic analysis presented in Table 1.1 shows a total of n=308 respondents, with 54% (n = 165) male and 46% (n = 143) female. By age group, 24% (n = 74) were at the age of 15, 21% (n=66) were 16 years old, 25% (n = 77) were 17 years old, 29% (n = 90) were aged 18 years old, and 0.3% (n = 1) were 19

years old. The average final academic grade was 35% (n = 107) for grades 70–79, 44% (n = 136) for grades 80–89, and 21% (n = 65) for grades above 90. Access to technology was as follows: 61% owned a cell phone (n = 188); 30% used both a cell phone and a laptop (n = 30); and 9% used a cell phone, a laptop, and had an internet connection (n = 9)

Table 2. Assessment of the Measurement Model

Construct	Item	Convergent Validity		Discriminant Validity	
		Outer Loading	Cross Loading	Cronbach Alpha	AVE
Academic pressure	APS 1	0.732	0.732	0.881	0.546
	APS 2	0.775	0.775		
	APS 3	0.751	0.751		
	APS 4	0.731	0.731		
	APS 5	0.713	0.713		
	APS 6	0.744	0.744		
	APS 7	0.728	0.728		
	APS 8	0.734	0.734		
Self-efficacy	SEF 1	0.785	0.785	0.899	0.585
	SEF 2	0.746	0.746		
	SEF 3	0.718	0.718		
	SEF 4	0.762	0.762		
	SEF 5	0.786	0.786		
	SEF 6	0.752	0.752		
	SEF 7	0.789	0.789		
	SEF 8	0.777	0.777		
Teacher emotional support	TES 1	0.759	0.759	0.892	0.567
	TES 2	0.788	0.788		
	TES 3	0.713	0.713		
	TES 4	0.743	0.743		

Construct	Item	Convergent Validity	Discriminant Validity		
		Outer Loading	Cross Loading	Cronbach Alpha	AVE
Student well-being	TES 5	0.766	0.766	0.955	0.537
	TES 6	0.768	0.768		
	TES 7	0.723	0.723		
	TES 8	0.759	0.759		
	SWB 1	0.771	0.771		
	SWB 2	0.732	0.732		
	SWB 3	0.746	0.746		
	SWB 4	0.704	0.704		
	SWB 5	0.728	0.728		
	SWB 6	0.738	0.738		
	SWB 7	0.740	0.740		
	SWB 8	0.725	0.725		
	SWB 9	0.722	0.722		
	SWB 10	0.754	0.754		
	SWB 11	0.711	0.711		
	SWB 12	0.747	0.747		
	SWB 13	0.745	0.745		
	SWB 14	0.728	0.728		
	SWB 15	0.704	0.704		
	SWB 16	0.726	0.726		
	SWB 17	0.753	0.753		
	SWB 18	0.733	0.733		
	SWB 19	0.719	0.719		
	SWB 20	0.725	0.725		

Tabel 3. Discriminant Validity of HTMT

Construct	Academic Pressure (APS)	Self-Efficacy (SEF)	Teacher Emotional Support (TES)	Student Well-being (SWB)
Academic pressure	-	0.541	0.275	0.680
Self-Efficacy	-	-	-	0.694
Teacher Emotional Support	-	0.095	-	0.134
Student Well-being	-	-	-	-

The Outer Model Assessment presented in Table 2 includes two types of validity tests: First, the convergent validity test determines the correlation among indicators in measuring the research variable. The convergent validity of the measurement model was assessed in accordance with the criteria recommended

by outer loading factor values, with the following thresholds: (>0.70 = very good, $0.60\text{--}0.70$ = acceptable, $0.40\text{--}0.60$ = considered for removal due to weakness, and <0.40 = must be removed). Based on the AVE value, a score of ≥ 0.50 is required (indicating that 50% of the variable can be explained by the indicators). The

convergent validity test presented in Table 2 meets all the specified criteria. Second, discriminant validity aims measure and confirm whether the construct being used is distinct from other constructs. The criterion for discriminant validity is that the cross-loading values measured must be higher for the construct being measured; based on the HTMT (heterotrait-monotrait ratio), the criterion is < 0.90 or, more strictly, < 0.85 . Based on the results of the discriminant validity tests presented in Tables 2 and 3,

these criteria have been met in their entirety. Third, the reliability test aims to determine the consistency of the responses provided by informants regarding the research constructs. The measurement criteria are based on a Cronbach's Alpha value of ≥ 0.70 and a CR of 0.70–0.95. The results of the reliability test in Table 2 indicate that the required value of Cronbach's Alpha ≥ 0.70 has been met.

Table 4. Summary of the Structural Model Results

Hypothesis	Relationship	β	t-value	p-value	f^2	Decision
H1	Academic pressure and student well-being	0.428	8.002	0,000	0.288	Accepted
H2	Self-Efficacy and Student Well-being	0.433	9.441	0,000	0.315	Accepted
H3	Academic Pressure and Self-Efficacy	0.486	11.030	0,000	0.309	Accepted
H4	Academic pressure, self-efficacy, student well-being	0.210	6.779	0,000	0.019	Accepted
H5	Academic pressure, teacher emotional support, student well-being	0.087	2.139	0,032	0.001	Accepted

Hypothesis 1: Academic pressure significantly improves student well-being ($\beta = 0.428$, t-value = 8.002, p-value = 0.000). The results indicate that academic pressure substantially contributes to explaining student well-being. This observation contradicts (Kristensen et al., 2023; Madigan, D.J., Curran, 2021; Pascoe et al., 2020), which reported high academic workload reduces emotional exhaustion, anxiety, and student well-being. Academic stress can serve as a challenge that strengthens student satisfaction when managed in moderation (Zhao, 2024). This confirm (COR) theory, which states that academic pressure is viewed as an environmental demand requiring students to invest cognitive resources to meet academic expectations (Hobfoll, 1989).

Hypothesis 2: Self-efficacy significantly influences ($\beta = 0.433$, t-value = 9.441, p-value = 0.000). The interpretation documented in this study aligns with the views of (Mao, Yanhui., 2023; Roslan, 2021), who suggested that students with high levels of self-efficacy will strive to improve and manage academic stress adaptively. In an academic context, students' self-efficacy can be seen in their satisfaction with academic success, which in turn strengthens their psychological resources (Tian et al., 2019). Strong self-efficacy, in agreement with the Conservation of Resources (COR) theory indicates that students are better prepared to face academic challenges, even in an uncondusive classroom environment (Clercq & Azeem, 2018).

Hypothesis 3: Academic pressure significantly affects self-efficacy ($\beta = 0.486$, $t\text{-value} = 11.030$, $p\text{-value} = 0.000$). From an academic perspective, students who have experienced academic demands develop a belief in the achievements they will attain. This is consistent with (Bandura, 1997a). This study shows that academic pressure does not always reduce students' self-efficacy; rather, under appropriate conditions, it can function as a stimulus to promote the development of competence and self-confidence (Gao, 2023; Podsakoff NP, LePine JA, 2007).

Hypothesis 4: Self-Efficacy plays a significant mediating role in the relationship between academic pressure and the well-being of high school students ($\beta = 0.210$, $t\text{-value} = 6.779$, $p\text{-value} = 0.000$). The results of this study are consistent with those of (Gao, 2023), who found that academic pressure has a

significant effect both directly and through the mediating role of self-efficacy. In an educational context, self-efficacy serves as a psychological resource that promotes student engagement; thus, it helps students maintain their well-being in the face of academic pressure.

Hypothesis 5: Emotional support from teachers moderates the pathway linking academic stress to high school students' well-being ($\beta = 0.210$, $t\text{-value} = 6.779$, $p\text{-value} = 0.000$). In line with (Clercq & Azeem, 2018; Romano et al., 2020), teachers' emotional support can alleviate the exhaustion caused by academic stress among high school students. In an educational context, emotional support from teachers creates a positive emotional climate by increasing student engagement (Liu, 2024; Shen et al., 2024; Zeng, Z., & Feng, 2025)

Table 5. Coefficient of determination

Endogenous Variable	R ²	R ² Adjusted	Q ² (1-SSE/SSSO)
Self-Efficacy	0.236	0.234	0.289
Student Well-being	0.556	0.550	0.135

The evaluation results presented in Table 6 show that academic pressure accounts for 23.6% of self-efficacy ($R^2 = 0.236$). This contribution is relatively low because there are other factors that contribute to shaping students' self-efficacy. Academic pressure, students' self-efficacy, and teachers' emotional support collectively explain 55.6% of student well-being ($R^2 = 0.556$); this contribution is considered fairly strong. Furthermore, the predictive relevance test showed that Q^2 was 0.289 (self-efficacy) and 0.135 (student well-being). This study supports the conclusion that the proposed model has a positive predictive capability and is quite effective in predicting the endogenous constructs under study. The theoretical implications presented in this study contribute to enriching COR in the context of upper-secondary academic education. Specifically, the findings underscore the role of self-efficacy as a psychological

resource for minimizing the negative effects of academic pressure. Furthermore, another key finding is that teachers' emotional support functions as a contextual resource that protects students' well-being from the adverse effects of academic pressure.

Important implications for school administrators (principals, teachers, or policymakers) in safeguarding students' well-being from the negative effects of academic pressure include the following: First, decision-makers must recognize that excessive academic pressure will have negative consequences if not accompanied by psychological support for students. Second, self-efficacy, acting as a mediating factor, indicates that schools need to implement regular academic guidance programs and learning experiences based on understanding and expertise, which in turn impact students' self-efficacy. Third, emotional support from the teacher

moderator indicates that teachers play a positive role in shielding students from the negative impact of academic pressure. Therefore, schools should invest in programs to develop the emotional support competencies of teachers through active listening, positive emotional responses, and supportive communication.

It should be noted that the research conducted by the researchers has certain limitations, including the following: First, there are limitation regarding the use of variables because a cross-sectional research design was used. Although the proposed relationship is based on a well-established theory, the data were collected at a single point in time, raising the question of whether the condition actually occurred before the outcome. For further investigation, a longitudinal and experimental study is proposed to reveal changes in student well-being over time and to confirm the hypothesis. Second, the data used consists of self-reports directly from the respondents, which may introduce bias. Ideally, data collection should employ longitudinal design and include various informants, such as teachers and parents. Third, the sample was limited to private schools in Kudus, so the research findings of the study could not be generalized widely. If possible, future research should use a larger sample size and include different locations

CONCLUSION

This study examines the relationship between academic pressure, self-efficacy, and teachers' emotional support in explaining student well-being in Indonesian high schools. The present findings show that academic pressure significantly predicts student well-being. This differs from previous frameworks, which were more deficit-oriented. These findings show that indicate that challenging demands in the form of academic pressure can become an adequate psychological resource when managed well. Teachers'

emotional support serves as a protective variable in safeguarding student well-being from academic pressure, thereby underscoring the main function of maintaining positive teacher-student interactions to yield positive outcomes. This study provides empirical evidence that self-efficacy as an individual resource and teachers' emotional support as a social resource play important roles in protecting students and reducing the negative effects of academic demands.

Finally, by demonstrating the self-efficacy significantly mediated the proposed relationship, whereas teacher emotional support significantly moderated, this study provides broader coverage results and a comprehensive explanation of the differences in outcomes regarding the negative effects of academic load on student well-being specifically and why some students facing they are able to minimize the negative impacts of academic pressure and even improve their well-being and performance.

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