

# Academic Burnout among Medical Students in Indonesia: Is It Related to Academic Resilience?

Gisela Bellinson Kase<sup>1</sup>, Maria Nugraheni Mardi Rahayu<sup>2</sup>

<sup>1,2</sup>Fakultas Psikologi Kristen Satya Wacana

Submitted: 17 November 2024, Revised: 17 Oktober 2025, Accepted: 24 November 2025

DOI: 10.38156/psikowipa.v6i2.219



This work is licensed under a [CC BY 4.0](https://creativecommons.org/licenses/by/4.0/)

## Abstract

The study load borne by medical education study program students in each academic year can be an academic difficulty that if not resolved will cause stress which can become academic burnout. One way to avoid and even overcome academic burnout is to have academic resilience. The purpose of this study was to determine whether there is a significant negative relationship between academic resilience and academic burnout in medical education study program students in Indonesia that can be used as reference for higher education institutions in developing learning that also focuses on maintaining students' well being. This study used a correlational quantitative research design using The Maslach Burnout Inventory- Student Survey (MBI-SS) scale and the Indonesian version of the ARS Scale. The sampling technique used was accidental sampling with a total of 109 respondents of preclinical students of medical education study programs in Indonesia. The results found that the correlation value between academic resilience and academic burnout was  $r = -0.64$  ( $p = 0.00 < 0.05$ ) so it can be concluded that there is a significant negative relationship between academic resilience and academic burnout in medical education study programs students in Indonesia.

**Keywords:** Academic burnout; academic resilience; students of medical education study program

## Abstrak

Beban studi yang ditanggung oleh mahasiswa program studi pendidikan dokter di tiap tahun akademik dapat menjadi suatu kesulitan akademik yang jika tidak teratasi akan dapat menyebabkan stres yang dapat menjadi academic burnout. Salah satu cara untuk menghindari bahkan mengatasi academic burnout adalah dengan memiliki resiliensi akademik. Tujuan dari penelitian ini adalah untuk mengetahui apakah terdapat hubungan negatif yang signifikan antara resiliensi akademik dengan academic burnout pada mahasiswa program studi pendidikan dokter di Indonesia yang dapat digunakan sebagai acuan bagi lembaga pendidikan tinggi dalam mengembangkan pembelajaran yang juga berfokus pada pemeliharaan kesejahteraan mahasiswa. Penelitian ini menggunakan desain penelitian kuantitatif korelasional dengan menggunakan skala The Maslach Burnout Inventory-Student Survey (MBI-SS) serta Skala ARS versi Indonesia. Teknik sampling yang digunakan adalah teknik accidental sampling dengan jumlah responden sebanyak 109 orang mahasiswa prelinik program studi pendidikan dokter di Indonesia. Hasil penelitian menemukan bahwa nilai korelasi antara resiliensi akademik dan academic burnout adalah  $r = -0,64$  ( $p = 0,00 < 0,05$ ) sehingga dapat disimpulkan bahwa terdapat hubungan negatif yang signifikan antara resiliensi akademik dengan *academic burnout* pada mahasiswa program studi pendidikan dokter di Indonesia.

**Kata kunci :** *Academic burnout*; resiliensi akademik; mahasiswa program studi pendidikan dokter

---

<sup>1</sup> Corresponding author E-mail addresses

[giselakase72@gmail.com](mailto:giselakase72@gmail.com) (Gisela Bellinson Kase)

## Introduction

Medical students generally undergo two types of education, namely academic education and professional education, as stipulated in the Republic of Indonesia Law Number 20 of 2013, Article 1 Paragraph 1. Academic education in medical training typically lasts approximately 3.5 years ([Regulation of the Minister of Research, Technology, and Higher Education Number 18 of 2018](#)) and is also known as preclinical education ([Bianca, Budiarsa, & Samatra, 2021](#)). During the preclinical phase, theoretical learning is delivered through lecturer-led instruction using block systems and problem-based learning. In addition to theoretical learning, medical students are also required to engage in practical learning activities, such as hands-on practice sessions and laboratory-based learning ([Gaur et al., 2020](#)).

During preclinical education, medical students are required to master a large volume of material from various disciplines, such as anatomy, within a relatively short period of time. This knowledge must be understood both in the short term, for examination purposes, and in the long term, for future professional practice as physicians ([Bow et al., 2013](#)). Preclinical medical education presents unique dynamics and challenges. In the first year, medical students must adapt to university life and the learning system of medical education programs ([Amelia et al., 2014](#); [Picton et al., 2022](#)), manage substantial educational costs ([Picton et al., 2022](#)), and often cope with relocation or changes in living arrangements ([Jillani et al., 2023](#)). Furthermore, first-year medical students enter a highly competitive learning environment, which may lead to feelings of falling behind compared to peers, as well as the development of exclusivity due to intensive study demands and early professional identity formation as future physicians ([Picton et al., 2022](#)).

In the second year, the academic burden becomes more complex, characterized by increasingly difficult material and the need to develop more advanced clinical skills ([Amana, Wilson, & Hermawati, 2020](#)). This increased academic load makes second-year students particularly vulnerable to anxiety, especially during challenging circumstances such as the COVID-19 pandemic ([Wang & Zhao, 2020](#)). Moreover, the second year is a critical period in which students focus on professional curriculum components, and academic performance during this year often plays a significant role in recommendations for further education. At the same time, many students become actively involved in student organizations, requiring greater discipline and self-management to balance academic and organizational responsibilities ([Anisa, 2018](#)).

The third year of academic medical education is marked by continued involvement in student organizations ([Nyambe et al., 2016](#)), intensified academic competition, and preparation of the undergraduate thesis ([Ahmad et al., 2022](#)). Meanwhile, the fourth year is generally dedicated to community service programs (Kuliah Kerja Nyata/KKN) as part of the implementation of the Tri Dharma of Higher Education, particularly community engagement ([Pusparini, 2017](#)). Completion of the undergraduate thesis remains a major requirement for graduation at this stage ([Aryawan & Diniari, 2020](#)). Additionally, fourth-year medical students face challenges related to career decision-making, including preparation for specific career pathways, enhancing competencies aligned with chosen specialties, increasing compatibility with residency programs, and completing medical training requirements ([Benson et al., 2015](#)).

The extended duration of medical education lasting approximately six years, the extensive and diverse learning materials, intensive examination schedules, thesis preparation, community service activities, and the transition from academic to professional education contribute to significant academic stress among medical students (Salam et al., 2015). Furthermore, the SPICES learning approach, which emphasizes self-directed learning, may impose additional burdens on students. Without adequate development of independent learning skills, students may experience poor academic performance, leading to suboptimal academic achievement (Cazan & Schiopca, 2014). Such conditions can hinder students' ability to acquire the knowledge and skills required to become competent physicians and negatively affect their academic success. Disrupted learning processes ultimately contribute to increased stress levels among students (Barseli et al., 2017).

Research by Nurrezki and Irawan (2020) reported that medical students experience a stress prevalence of 41.30%. Elevated stress levels are associated with factors such as heavy academic workloads requiring mastery of complex material within limited timeframes, numerous academic deadlines and examinations, and feelings of guilt when taking breaks, which reduce opportunities for rest. These findings indicate that the complexity of medical education is closely related to academic stress, which remains a persistent and unresolved issue. Unmanaged stress can ultimately lead to academic burnout among students (Lin & Huang, 2014).

A preliminary study was conducted through interviews with six preclinical medical students from first to fourth year between May and June 2024. The findings revealed that common problems experienced during preclinical education included physical exhaustion from attending lectures, leading to absenteeism; difficulties in time management for academic and organizational activities, particularly during major organizational events; challenges in adapting to the learning dynamics of medical education; and stress resulting from frequent examinations. Specifically, one of the six students experienced severe fatigue that led to frequent illness and superficial task completion due to poor time management. Additionally, four of the six students reported poor academic performance due to difficulties in identifying effective learning methods, resulting in low Grade Point Averages (GPA) during the first year. These experiences also contributed to feelings of being in the wrong major.

Follow-up interviews with one second-year clinical medical student in June 2024 revealed similar challenges, including difficulties in academic adjustment, heavy coursework and examination demands, external pressure to graduate on time, time management issues, and fatigue due to dense schedules. These challenges were particularly pronounced during specific academic years, with feelings of wanting to give up emerging during the fourth year while completing the thesis. Nevertheless, the student was ultimately able to complete the thesis and graduate on time. Based on these experiences, medical students are indicated to experience symptoms of academic burnout.

Academic burnout refers to a psychological condition experienced by students, characterized by exhaustion, disengagement from academic activities, and feelings of incompetence as students (Schaufeli et al., 2002). Dyrbye (as cited in Cheng et al., 2020) described academic burnout among medical students as a psychological syndrome marked by emotional exhaustion, loss of professional identity, and decreased achievement leading to reduced effectiveness. Reis et al. (2015) further defined academic burnout as physical, cognitive, and emotional exhaustion

accompanied by disengagement from academic activities due to excessive academic demands.

Several factors influence academic burnout among university students, including perceived social support (Muflihah & Savira, 2021; Kilic et al., 2021), loneliness and medical professionalism (Gradiski et al., 2022), stress (Kilic et al., 2021), empathy (Cho & Jeon, 2019; Kilic et al., 2021), psychological need satisfaction (Cho & Jeon, 2019), and academic resilience (Khaekal et al., 2022). Preliminary interview findings indicated that students employed various strategies to cope with academic burnout, such as receiving support from family and peers, taking short breaks, persistently studying despite fatigue, and adopting alternative learning strategies, including watching educational videos and engaging in peer discussions. One student relied on recorded lectures when feeling exhausted, while four students reflected on their academic journey and sought inspiration from role models to maintain motivation. Follow-up interviews with a clinical student confirmed these findings, emphasizing self-reflection, responsibility toward family expectations, social support, and the continuous search for effective learning strategies as key factors in overcoming burnout.

These findings suggest that medical students demonstrate **academic resilience** in coping with academic burnout. Academic resilience is defined as an individual's ability to effectively overcome academic setbacks, challenges, difficulties, and pressures (Martin & Marsh, 2006). Cassidy (2016) described academic resilience as behavioral and cognitive-affective responses to academic adversity. Academic resilience can be developed through academic self-efficacy, planning, persistence, control, and emotional composure (low anxiety) (Martin & Marsh, 2006).

Although studies examining academic resilience and academic burnout either directly or with mediating variables have reported consistent findings, research specifically addressing the relationship between academic resilience and academic burnout remains limited. Romano et al. (2021) found a significant negative relationship between academic resilience and academic burnout, with peer relationship satisfaction acting as a mediator. Similarly, Alfiyani (2021) reported that academic resilience and learning motivation were both negatively associated with academic burnout.

Given the observed phenomena and research gap, this study aims to examine the relationship between academic resilience and academic burnout among medical students in Indonesia. This research is justified by the limited number of studies addressing these variables simultaneously, despite consistent evidence, and the absence of prior studies focusing specifically on Indonesian medical students. Therefore, this study is expected to contribute both theoretical and practical insights.

## Research Method

This study employed a quantitative correlational research design to examine the relationship between academic resilience and academic burnout among medical students in Indonesia. The population of the study consisted of students enrolled in medical education programs, while the research sample included 109 medical students from various universities in Indonesia. The sample was obtained using a non-probability sampling technique, specifically accidental sampling (Sugiyono, 2017).

The inclusion criteria for this study were: (1) active medical students from the 2020–2023 cohorts enrolled in medical education programs at universities in Indonesia; (2) students currently undergoing preclinical education (not yet graduated at the time of data collection); and (3) students who had never taken academic leave prior to the study and were not on academic leave during the research period. The instrument used to measure academic burnout was the Maslach Burnout Inventory–Student Survey (MBI-SS) developed by Schaufeli et al. (2002) and translated by the researcher for use among Indonesian medical students. The MBI-SS consists of 15 items, including 5 items measuring Exhaustion, 4 items measuring Cynicism, and 6 items measuring Professional Efficacy. Each item is rated on a 7-point Likert scale, ranging from 0 (never) to 6 (always). The instrument was tested for reliability and item discrimination.

According to Azwar (2019), a scale demonstrates good item discrimination if the item–total correlation coefficient is  $\geq 0.30$ . However, a coefficient of  $r_{ix} \geq 0.25$  may be accepted when a greater number of items is required in psychological measurement (Azwar, 2019). Based on the item discrimination analysis, two items (item 5 with  $r = 0.19$  and item 7 with  $r = 0.17$ ) did not meet the criteria and were therefore excluded. As a result, the final MBI-SS consisted of 13 items, with item discrimination indices ranging from 0.26 to 0.74, and a Cronbach's alpha coefficient ( $\alpha$ ) of 0.84. According to Azwar (2019), reliability coefficients ( $r_{xx'}$ ) range from 0 to 1, and a scale is considered reliable when its coefficient approaches 1. Thus, the MBI-SS was deemed reliable and suitable for measuring academic burnout among medical students.

The instrument used to measure academic resilience was the Indonesian adaptation of the Academic Resilience Scale (ARS-30) developed by Cassidy (2016), which was adapted into Indonesian by Kumalasari, Luthfiyanni, and Grasiawaty (2020). The Indonesian ARS begins with a narrative paragraph describing a situation in which a student experiences academic difficulty due to poor academic performance and perceived failure. This is followed by 24 items, consisting of 10 items measuring Perseverance, 8 items measuring Reflecting and Adaptive Help-Seeking, and 6 items measuring Negative Affect and Emotional Response. Each item is rated on a 6-point Likert scale, ranging from 1 (strongly disagree) to 6 (strongly agree).

The scale underwent reliability and item discrimination testing. Based on the item discrimination analysis, item 13 showed a corrected item–total correlation of  $r_{ix} = 0.14$ , which did not meet the acceptable threshold. Therefore, item 13 was excluded, resulting in a final total of 23 items, with discrimination indices ranging from 0.29 to 0.72, and a Cronbach's alpha coefficient ( $\alpha$ ) of 0.89. According to Azwar (2019), this indicates high reliability. Thus, the Indonesian version of the ARS can be considered reliable.

Validity testing of the Indonesian ARS conducted by Kumalasari et al. (2020) used construct reliability (CR). The results demonstrated high construct reliability ( $CR \geq 0.70$ ), with CR values of 0.99 for the Perseverance dimension, 0.99 for the Reflecting and Adaptive Help-Seeking dimension, and 0.91 for the Negative Affect and Emotional Response dimension. These results indicate that the Indonesian ARS has good construct reliability and satisfactory convergent validity, making it a valid and appropriate instrument for measuring academic resilience among medical students.

Data analysis in this study employed the Pearson Product–Moment correlation test to examine the relationship between academic resilience and academic burnout. The analysis was conducted using IBM SPSS Statistics version 26.

## Results

Data were collected by distributing an online questionnaire via Google Forms to medical students across Indonesia through social media platforms. A total of 109 respondents participated in the study. The demographic characteristics of the respondents are presented in Table 1 below.

**Table 1. Gender**

Category	Frequency	Percentage
Male	15	13.8%
Female	94	86.2%
Total	109	100%

**Table 2. Age**

Age (Years)	Frequency	Percentage
18	9	8.3%
19	23	21.1%
20	18	16.5%
21	33	30.3%
22	19	17.4%
23	4	3.7%
24	2	1.8%
25	1	0.9%
Total	109	100%

**Table 3. Type of University**

Category	Frequency	Percentage
Public University (Under Ministry of Education, Culture, Research, and Technology)	58	53.2%
Public University (Under Ministry of Religious Affairs)	1	0.9%
Private University	50	45.9%
Total	109	100%

**Table 4. Study Program**

Program	Frequency	Percentage
Bachelor of Medicine (S1 Medicine)	45	41.3%
Bachelor of Medical Education (S1 Medical Education)	64	58.7%
Total	109	100%

**Table 5. Year of Enrollment**

Cohort Year	Frequency	Percentage
2020	24	22.0%
2021	32	29.4%
2022	27	24.8%
2023	26	23.9%
Total	109	100%

**Table 6. Type of Courses Taken**

*(Respondents could select more than one option)*

Course Type	Frequency	Percentage
Face-to-Face Classes (Offline/Online)	86	43.2%
Practicum/Laboratory Sessions	50	25.1%
Community Service / Field Learning (KKN, Internship, PKL)	18	9.0%
Thesis	45	22.6%
Total	199	100%

**Table 7. Source of Tuition Funding**

*(Respondents could select more than one option)*

Funding Source	Frequency	Percentage
Self-funded (Savings / Income from Work)	6	4.7%
Parents	103	79.8%
Relatives (Uncle, Aunt, Grandparents, etc.)	9	7.0%
Government Scholarship	10	7.8%
Private Scholarship (University Partner / Non-Partner)	1	0.8%
Religious Foundation Scholarship	0	0.0%
Total	129	100%

**Table 8. Type of Courses Taken**

*(Respondents could select more than one option)*

Course Type	Frequency	Percentage
Face-to-Face Classes (Offline/Online)	86	43.2%
Practicum / Laboratory Sessions	50	25.1%
Community Service / Field Learning (KKN, Internship, PKL)	18	9.0%
Thesis	45	22.6%
Total	199	100%

**Table 9. Source of Tuition Funding**

*(Respondents could select more than one option)*

Funding Source	Frequency	Percentage
Self-funded (Savings / Income from Work)	6	4.7%
Parents	103	79.8%
Relatives (Uncle, Aunt, Grandparents, etc.)	9	7.0%
Government Scholarship	10	7.8%
Private Scholarship (University Partner / Non-Partner)	1	0.8%
Religious Foundation Scholarship	0	0.0%
Total	129	100%

**Table 10. Province of Origin (Domicile Before Enrolling in University)**

Province	Frequency	Percentage
Banten	4	3.7%
Bengkulu	1	0.9%
Special Capital Region of Jakarta	9	8.3%
Special Region of Yogyakarta	3	2.8%
West Java	9	8.3%
Central Java	14	12.8%
East Java	14	12.8%
South Kalimantan	3	2.8%
Central Kalimantan	4	3.7%
Riau Islands	1	0.9%
Lampung	2	1.8%
North Maluku	1	0.9%
West Nusa Tenggara	1	0.9%
East Nusa Tenggara	11	10.1%
Riau	3	2.8%
South Sulawesi	3	2.8%
Southeast Sulawesi	19	17.4%
North Sulawesi	2	1.8%
West Sumatra	2	1.8%
South Sumatra	1	0.9%
North Sumatra	2	1.8%
Total	109	100%

**Table 11. Current Living Arrangement**

Living Arrangement	Frequency	Percentage
Dormitory	3	2.8%
Boarding House (Shared with Friends/Relatives)	52	47.7%
House/Rented House (With Nuclear Family or Relatives)	5	4.6%
House/Rented House (Staying with Relatives)	36	33.0%
House/Rented House (Living Alone)	6	5.5%
Other	4	3.7%
Total	109	100%

The table above presents the demographic characteristics of the 109 respondents, who were medical education students. The majority of respondents were female (94 students; 86.2%), while 15 students were male (13.8%). Most respondents were 21 years old (33 students; 30.3%), followed by those aged 19 years (23 students; 21.1%). In terms of academic background, most respondents were enrolled in the Bachelor of Medical Education (S1 Medical Education) program, totaling 64 students (58.7%). The largest proportion of respondents belonged to the 2021 cohort (32 students; 29.4%). Additionally, 86 respondents (43.2%) were attending face to face classes. Regarding financial support, 103 respondents (79.8%) reported that their studies were funded by their parents. Most respondents' domiciles prior to university were located on major Indonesian islands, including Java, Sumatra, Kalimantan, and Sulawesi. During their studies, 52 respondents (47.7%) resided in boarding houses. Following the presentation of respondents' demographic characteristics, the remaining research data are described and presented in Table 2 below.

**Table 12. Description of Research Data**

Variabel Penelitian	in	ax	M	ean	M	S	Mean	Sta
				Empiris	tandar		Hipotesis	ndar
					Deviasi			Deviasi
					Empiris			Hipotesis
Resiliensi Akademik	0	38	1	10,62	1	3,58	80,50	19,16
Academic Burnout		1	6	9,28	2	1,40	39,00	13,00

The descriptive statistical analysis (Table 12) shows that the independent variable of the study, academic resilience, has an empirical mean of 110.62 with an empirical standard deviation of 13.58. The empirical mean of academic resilience (110.62) is higher than the hypothetical mean of academic resilience (80.50). Likewise, the empirical standard deviation of academic resilience (13.58) is lower than its hypothetical standard deviation (19.16). Meanwhile, the dependent variable, academic burnout, has an empirical mean of 29.28 with an empirical standard deviation of 11.40. The empirical mean of academic burnout (29.28) is lower than the hypothetical mean (39.00). Similarly, the empirical standard deviation of academic burnout (11.40) is lower than the hypothetical standard deviation (13.00). These descriptive statistics guided the subsequent data categorization process. The categorization of the independent variable, academic resilience, is presented in Table 13 below.

**Table 13. Categorization of Academic Resilience**

Category	Interval	Frequency	Percentage
Very Low	$X \leq 51.76$	0	0.00%
Low	$51.76 < X \leq 70.92$	1	0.90%
Moderate	$70.92 < X \leq 90.08$	7	6.40%
High	$90.08 < X \leq 109.24$	40	36.70%
Very High	$X > 109.24$	61	56.00%
Total		109	100%

Based on Table 13, medical education students in Indonesia generally demonstrate a very high level of academic resilience (56.00%). The dependent variable, academic burnout, was also categorized, as shown in Table 14 below.

**Table 14. Categorization of Academic Burnout**

Category	Interval	Frequency	Percentage
Very Low	$X \leq 19.50$	23	21.10%
Low	$19.50 < X \leq 32.50$	45	41.30%
Moderate	$32.50 < X \leq 45.50$	31	28.40%
High	$45.50 < X \leq 58.50$	9	8.30%
Very High	$X > 58.50$	1	0.90%
Total		109	100%

Based on Table 14, medical education students in Indonesia generally exhibit a low level of academic burnout (41.30%). After data categorization, further statistical analysis was conducted. The data analysis technique used was the Pearson Product-Moment correlation test to examine the relationship between academic resilience and academic burnout. The hypothesis testing results are presented in Table 15 below.

**Table 15. Hypothesis Testing Results**

Variables	r	p	Interpretation
Academic Resilience & Academic Burnout	-0.64	0.00	Significant negative relationship

The hypothesis testing using Pearson’s Product-Moment correlation yielded a correlation coefficient of  $r = -0.64$  with a significance value of  $p = 0.00$  ( $p < 0.05$ ). This result indicates a significant negative relationship between academic resilience and academic burnout. Moreover, the negative correlation between academic resilience and academic burnout can be classified as a strong correlation. According to Sugiyono (2017), a correlation is considered strong when the coefficient falls within the interval of 0.60–0.79. This finding implies that higher levels of academic resilience are associated with lower levels of academic burnout, and conversely, lower academic resilience is associated with higher academic burnout.

## Discussion

The results of this study indicate a significant negative relationship between academic resilience and academic burnout among medical education students in Indonesia. This finding is evidenced by a correlation coefficient of  $r = -0.64$  with a significance value of  $p = 0.00$  ( $p < 0.05$ ). Thus, it can be concluded that the research hypothesis stating that there is a significant negative relationship between academic resilience and academic burnout among medical education students in Indonesia is supported. These findings are consistent with the study conducted by Salsabila, Zwagery, and Rusli (2023), which reported a negative relationship between academic resilience and academic burnout among high school students transitioning from

online to offline learning in Banjarmasin. Similar results were also found in a study by Hanifah (2024) involving nursing professional students at Universitas Muhammadiyah Yogyakarta, where the correlation analysis revealed a negative relationship between academic resilience and academic burnout, although with a lower correlation coefficient ( $r = -0.375$ ). These results suggest that higher levels of academic resilience are associated with lower levels of academic burnout, even when the strength of the relationship varies.

Medical education students with good academic resilience are characterized by persistent efforts to overcome academic difficulties, such as working diligently to resolve academic challenges within their capabilities (Adni et al., 2024). Furthermore, students with high academic resilience are able to reflect on past academic difficulties and seek both internal and external support to cope with these challenges. Such resilience enables students to respond positively to academic difficulties, viewing them not as catastrophic events but as manageable challenges (Adni et al., 2024).

Medical education students in Indonesia face demanding academic conditions, including dense curricula, student-centered learning systems that require proactive engagement (Suardiantari & Rustika, 2019), intense competition among peers (Sagita et al., 2023), and frequent examinations in various formats, such as written and practical exams (Prajanti et al., 2021). According to Aida and Rosiana (2022), such academic environments can cause students to feel overwhelmed and pressured when they perceive themselves as unable to meet academic demands, which may lead to academic burnout.

High academic resilience enables students to exhibit adaptive cognitive, affective, and behavioral responses to academic difficulties. These adaptive responses support the development of effective stress-coping strategies (Wijianti & Purwaningtyas, 2020). Medical education students with high academic resilience tend to apply adaptive coping strategies, including both problem-focused and emotion-focused coping, allowing them to regulate their behavior in addressing academic challenges. This regulatory capacity is rooted in students' beliefs that they have control over themselves and that their environment can change (de la Fuente et al., 2016). Such beliefs facilitate adaptive coping and protect students from experiencing academic burnout or mitigate its negative effects (Sunaras et al., 2023).

This finding aligns with the study by Saberi et al. (2022), which demonstrated a significant relationship between academic resilience and academic burnout among medical students in Iran. In their study, academic resilience functioned as a protective factor that enabled students to cope with academic pressure and reduce exposure to stressors, thereby preventing academic burnout. Conversely, low academic resilience among medical education students is characterized by limited effort to overcome academic difficulties, a lack of reflection on past academic challenges, insufficient utilization of internal or external support, and negative responses to academic adversity (Okvellia & Setyandari, 2022). When faced with academic demands perceived as overwhelming, students with low academic resilience tend to exhibit maladaptive cognitive, affective, and behavioral responses (Abubakar et al., 2021). These maladaptive responses are associated with ineffective stress-coping strategies, which may further contribute to academic burnout (Efendi & Kusuma, 2019).

Students with maladaptive coping strategies often fail to acknowledge academic problems and engage in self-criticism, which exacerbates academic burnout (Vizoso et al., 2019). According to de la Fuente et al. (2016), this occurs because

students focus more on regulating emotional states under stress rather than actively managing behaviors to solve academic problems. Such emotion-focused regulation, when not balanced with problem solving strategies, increases vulnerability to academic burnout (Vizoso et al., 2019).

Descriptive statistical analysis categorized academic resilience into five levels, revealing that most medical education students demonstrated high (36.70%) and very high (56.00%) levels of academic resilience. Students with low academic resilience tend to show limited initiative in overcoming academic difficulties, struggle to learn from previous academic challenges, and inadequately utilize external support. They also tend to perceive academic difficulties negatively, viewing them as disruptive obstacles.

Students with moderate academic resilience display sufficient initiative in addressing academic difficulties, learn from past challenges, and attempt to seek external assistance, although they may still harbor some negative perceptions of academic difficulties. In contrast, students with high academic resilience exhibit strong initiative, effective learning from past experiences, appropriate utilization of external support, and positive perceptions of academic difficulties. They believe in their ability to overcome challenges and apply both problem-focused and emotion-focused coping strategies effectively (Muhlisa & Nur'aeni, 2021).

Academic burnout was also categorized into five levels, with most students falling into the low (41.30%) and moderate (28.40%) categories. Students with low academic burnout generally do not experience excessive fatigue or disengagement from academic activities and perceive themselves as competent students. Those with moderate academic burnout begin to feel fatigued and disengaged but still attempt to fulfill academic responsibilities. Meanwhile, students with high academic burnout experience severe exhaustion, disengagement from academic activities, and feelings of incompetence, leading to withdrawal from academic responsibilities.

Although this study confirms a significant negative relationship between academic resilience and academic burnout, other factors may also influence the results. These include participants' demographic backgrounds, such as cohort year, types of courses taken, sources of tuition funding, province of origin, and living arrangements. In this study, demographic data were used solely to describe participant characteristics and were not included in the analysis. However, such factors may influence students' academic experiences and perceptions of questionnaire items.

Another limitation concerns the academic burnout instrument used, which was translated into Indonesian but not fully adapted for Indonesian medical students with diverse backgrounds. Future research is encouraged to consider demographic variables as potential contributing factors and to conduct cultural adaptation and validation of measurement instruments to ensure equivalence across participant groups.

This study also has methodological limitations. As a correlational study, it does not establish causality between academic resilience and academic burnout. Additionally, the relatively small sample size (109 respondents) limits generalizability. The gender distribution was also imbalanced, with a predominance of female participants, which restricts generalization and comparison across genders. Furthermore, the use of accidental sampling may have contributed to this imbalance. The study focused solely on preclinical medical students, limiting its applicability to

clinical students and postgraduate medical trainees (PPDS), whose academic dynamics may differ due to greater practical demands. Future studies are encouraged to include larger and more diverse samples, including clinical and specialist medical students, to better understand the dynamics of academic resilience and academic burnout across medical education stages.

## References

- Abubakar, U., Azli, N. A. S. M., Hashim, I. A., Kamarudin, N. F. A., Latif, N. A. I. A., Badaruddin, A. R. M., Razak, M. Z., & Zaidan, N. A. (2021). The relationship between academic resilience and academic performance among pharmacy students. *Pharmacy Education*, 21(1), 705–712. <https://doi.org/https://doi.org/10.46542/pe.2021.211.705712>
- Adni, A., Susani, Y. P., Sari, D. P., & Elizar, L. J. A. (2024). Kajian literatur: Resiliensi sebagai variabel psikologis yang berperan penting dalam proses pendidikan mahasiswa kedokteran. *Ibnu Sina: Jurnal Kedokteran Dan Kesehatan - Fakultas Kedokteran Universitas Islam Sumatera Utara*, 23(2), 145–154. <https://doi.org/https://doi.org/10.30743/ibnusina.v23i2.640>
- Ahmad, S. R., Anissa, M., & Triana, R. (2022). Hubungan tingkat stres dengan kejadian insomnia pada mahasiswa angkatan 2017 Fakultas Kedokteran Universitas Baiturrahmah. *Indonesian Journal for Health Sciences*, 6(1), 1–7. <https://doi.org/10.24269/ijhs.v6i1.3936>
- Aida, K. N., & Rosiana, D. (2022). Pengaruh academic self-efficacy terhadap academic burnout pada mahasiswa kedokteran. *Bandung Conference Series: Psychology Science*, 2(2), 373–378. <https://doi.org/10.29313/bcsps.v2i3.3059>
- Alfiyani, D. A. (2021). *Academic burnout ditinjau dari resiliensi akademik dan motivasi belajar pada siswa Sekolah Menengah Pertama (SMP) Negeri "X" di Paliyan selama pembelajaran daring* [Bachelor's thesis, UIN Sunan Kalijaga Yogyakarta]. Institutional Repository UIN Sunan Kalijaga Yogyakarta. [ACADEMIC BURNOUT DITINJAU DARI RESILIENSI AKADEMIK DAN MOTIVASI BELAJAR PADA SISWA SEKOLAH MENENGAH PERTAMA \(SMP\) NEGERI "X" DI PALIYAN SELAMA PEMBELAJARAN DARING - Institutional Repository UIN Sunan Kalijaga Yogyakarta \(uin-suka.ac.id\)](https://doi.org/10.24269/ijhs.v6i1.3936)
- Amana, D. R., Wilson, W., & Hermawati, E. (2020). Hubungan tingkat aktivitas fisik dengan tingkat depresi pada mahasiswa tahun kedua Program Studi Kedokteran Fakultas Kedokteran Universitas Tanjungpura. *Jurnal Cerebellum*, 6(4), 94–99. <https://doi.org/10.26418/jc.v6i4.47800>
- Amelia, S., Asni, E., & Chairilisyah, D. (2014). Gambaran ketangguhan diri (resiliensi) pada mahasiswa tahun pertama Fakultas Kedokteran Universitas Riau. *Jurnal Online Mahasiswa Fakultas Kedokteran Universitas Riau*, 1(2), 1–9.
- Anisa, R. (2018). Hubungan antara prestasi belajar dengan keikutsertaan dan tingkat keaktifan dalam berorganisasi mahasiswa tahun kedua dan ketiga Fakultas Kedokteran Universitas Islam Malang. *Jurnal Kesehatan Islam : Islamic Health Journal*, 7(2), 51–56. <https://doi.org/10.33474/jki.v7i2.8924>
- Aryawan, P. K. D., & Diniari, N. K. S. (2020). Gambaran stresor dan coping stres dalam proses penyelesaian skripsi pada mahasiswa Fakultas Kedokteran Universitas Udayana tahun 2016. *Jurnal Medika Udayana*, 9(9), 87–92.
- Ataai, M., Saleh-Sedghpour, B., Asadzadeh-Dahraei, H., & Sadate-Shamir, A. (2021). Effect of self-regulation on academic resilience mediated by perceived

- competence. *International Journal of Behavioral Sciences*, 15(3), 156–161. <https://doi.org/10.30491/ijbs.2021.269390.1463>
- Azwar, S. (2019). *Penyusunan skala psikologi* (2nd Ed.). Pustaka Pelajar.
- Barseli, M., Ildil, I., & Nikmarijal, N. (2017). Konsep stres akademik siswa. *Jurnal Konseling Dan Pendidikan*, 5(3), 143–148. <https://doi.org/10.29210/119800>
- Benson, N. M., Stickle, T. R., & Raszka, W. V. (2015). Going “fourth” from medical school: Fourth-year medical students’ perspectives on the fourth year of medical school. *Academic Medicine*, 90(10), 1386–1393. <https://doi.org/10.1097/ACM.0000000000000802>
- Bianca, N., Budiarsa, I. G. N. K., & Samatra, D. P. G. P. (2021). Gambaran kualitas tidur mahasiswa program studi pendidikan dokter Fakultas Kedokteran Universitas Udayana pada tahap preklinik dan klinik. *Jurnal Medika Udayana*, 10(12), 1–5.
- Bow, H. C., Dattilo, J. R., Jonas, A. M., & Lehmann, C. U. (2013). A crowdsourcing model for creating preclinical medical education study tools. *Academic Medicine*, 88(6), 766–770. <https://doi.org/10.1097/ACM.0b013e31828f86ef>
- Cassidy, S. (2016). The academic resilience scale (ARS-30): A new multidimensional construct measure. *Frontiers in Psychology*, 7, 1–11. <https://doi.org/10.3389/fpsyg.2016.01787>
- Cazan, A.-M., & Schiopca, B.-A. (2014). Self-directed learning, personality traits and academic achievement. *Procedia - Social and Behavioral Sciences*, 127, 640–644. <https://doi.org/10.1016/j.sbspro.2014.03.327>
- Cheng, J., Zhao, Y. Y., Wang, J., & Sun, Y. H. (2020). Academic burnout and depression of Chinese medical students in the pre-clinical years: The buffering hypothesis of resilience and social support. *Psychology, Health and Medicine*, 25(9), 1094–1105. <https://doi.org/10.1080/13548506.2019.1709651>
- Cho, E., & Jeon, S. (2019). The role of empathy and psychological need satisfaction in pharmacy students’ burnout and well-being. *BMC Medical Education*, 19(1), 1–12. <https://doi.org/10.1186/s12909-019-1477-2>
- de la Fuente, J., Sevillano, L. Z., & Martínez-Vicente, J. M. (2016). Effects of level of personal self- regulation and different contexts of stress on coping strategies in higher education. In C. H. Gallagher (Ed.), *Academic Performance* (Issue February, pp. 77–89). Nova Science Publishers, Inc. <https://novapublishers.com/shop/academic-performance-student-expectations-environmental-factors-and-impacts-on-health/>
- Efendi, M. Z., & Kusuma, D. (2019). Hubungan antara resiliensi dengan strategi coping pada mahasiswa yang menempuh program skripsi di Fakultas Ilmu Pendidikan Universitas Negeri Surabaya. *Character : Jurnal Penelitian Psikologi*, 5(3), 1–6. <https://doi.org/https://doi.org/10.26740/cjpp.v5i3.26589>
- Gaur, U., Majumder, M. A. A., Sa, B., Sarkar, S., Williams, A., & Singh, K. (2020). Challenges and opportunities of preclinical medical education: COVID-19 crisis and beyond. *SN Comprehensive Clinical Medicine*, 2(11), 1992–1997. <https://doi.org/10.1007/s42399-020-00528-1>
- Gradiski, I. P., Borovecki, A., Ćurković, M., San-Martín, M., Delgado Bolton, R. C., & Vivanco, L. (2022). Burnout in international medical students: Characterization of professionalism and loneliness as predictive factors of burnout. *International Journal of Environmental Research and Public Health*,

- 19(3), 1–13. <https://doi.org/10.3390/ijerph19031385>
- Hanifah, N. (2024). *Hubungan academic resilience dengan academic burnout pada mahasiswa profesi keperawatan Universitas Muhammadiyah Yogyakarta* [Universitas Muhammadiyah Yogyakarta]. <https://etd.umsida.ac.id/id/eprint/46251/>
- Jillani, U., Bhutto, Z. H., & Ahmad, K. B. (2023). Role of emotional intelligence, resilience, and year of enrollment for adjustment among university students. *Pakistan Journal of Psychological Research*, 38(2), 267–280.
- Khaekal, M. F., Zubair, A. G. H., & Minarni. (2022). Resilience akademik sebagai prediktor terhadap academic burnout pada mahasiswa tingkat akhir di Kota Makassar. *Jurnal Psikologi Karakter*, 2(2), 126–134. <https://doi.org/10.56326/jpk.v2i2.1875>
- Kilic, R., Nasello, J. A., Melchior, V., & Triffaux, J. M. (2021). Academic burnout among medical students: respective importance of risk and protective factors. *Public Health*, 198(December 2022), 187–195. <https://doi.org/10.1016/j.puhe.2021.07.025>
- Kumalasari, D., Luthfiyanni, N. A., & Grasiawaty, N. (2020). Analisis faktor adaptasi instrumen resiliensi akademik versi Indonesia: Pendekatan eksploratori dan konfirmatori. *Jurnal Penelitian Dan Pengukuran Psikologi*, 9(2), 84–95. <https://doi.org/10.21009/jppp.092.06>
- Lin, S. H., & Huang, Y. C. (2014). Life stress and academic burnout. *Active Learning in Higher Education*, 15(1), 77–90. <https://doi.org/10.1177/1469787413514651>
- Martin, A. J., & Marsh, H. W. (2006). Academic resilience and its psychological and educational correlates: A construct validity approach. *Psychology in the Schools*, 43, 267–282. <https://doi.org/10.1002/pits.20149.1>
- Muflihah, L., & Savira, S. I. (2021). Pengaruh persepsi dukungan sosial terhadap burnout akademik selama pandemi. *Character : Jurnal Penelitian Psikologi*, 8(2), 201211. <https://ejournal.unesa.ac.id/index.php/character/article/view/40975>
- Muhlisa, N., & Nur'aeni. (2021). Hubungan antara strategi coping dengan resiliensi akademik pada mahasiswa fakultas kedokteran. *PSIMPHONI*, 2(1), 75–84. <https://doi.org/https://doi.org/10.30595/psimphoni.v1i2.8099>
- Nurrezki, S., & Irawan, R. (2020). Hubungan stres, cemas, dan depresi dengan kejadian migrain pada mahasiswa kedokteran di Jakarta. *Damianus: Journal of Medicine*, 19(1), 1–7. <https://doi.org/10.25170/djm.v19i1.1200>
- Nyambe, H., Harsono, & Rahayu, G. R. (2016). Faktor-faktor yang mempengaruhi self directed learning readiness pada mahasiswa tahun pertama, kedua dan ketiga di Fakultas Kedokteran Universitas Hasanuddin dalam PBL. *Jurnal Pendidikan Kedokteran Indonesia: The Indonesian Journal of Medical Education*, 5(2), 67–77.
- Okvellia, C. T. H., & Setyandari, A. (2022). Resiliensi akademik mahasiswa tingkat akhir program studi bimbingan dan konseling tahun ajaran 2021/2022. *Solution: Journal of Counseling and Personal Development*, 4(2), 1–7. <https://e-journal.usd.ac.id/index.php/solution/article/view/6928>
- Peraturan Menteri Riset, Teknologi, dan Pendidikan Tinggi Nomor 18 Tahun 2018 Tentang Standar Nasional Pendidikan Kedokteran. <https://peraturan.bpk.go.id/Home/Details/140458/permen-ristekdikti-no->

18-tahun-2018

- Picton, A., Greenfield, S., & Parry, J. (2022). Why do students struggle in their first year of medical school? A qualitative study of student voices. *BMC Medical Education*, 22(1), 1–13. <https://doi.org/10.1186/s12909-022-03158-4>
- Prajanti, A. M., Yudiansyah, A. G., & Anisa, R. (2021). Korelasi stres dan mekanisme koping selama pembelajaran daring dengan performa akademik mahasiswa pre-klinik Fakultas Kedokteran Universitas Islam Malang. *Jurnal Kedokteran*, 9(2), 1–10. <https://jim.unisma.ac.id/index.php/jkkfk/article/view/13582>
- Pusparini, M. (2017). Kuliah kerja nyata (KKN) sebagai metode pembelajaran di Fakultas Kedokteran Universitas YARSI. *Majalah Kesehatan PharmaMedika*, 9(1), 20–32.
- Reis, D., Xanthopoulou, D., & Tsaousis, I. (2015). Measuring job and academic burnout with the oldenburg burnout inventory (OLBI): Factorial invariance across samples and countries. *Burnout Research*, 2(1), 8–18. <https://doi.org/10.1016/j.burn.2014.11.001>
- Romano, L., Consiglio, P., Angelini, G., & Fiorilli, C. (2021). Between academic resilience and burnout: The moderating role of satisfaction on school context relationships. *European Journal of Investigation in Health, Psychology and Education*, 11(3), 770–780. <https://doi.org/10.3390/EJIHPE11030055>
- Saberi, A., Saadat, S., Ashraf, A., Lakeh, M. H., Entezari, M., & Hatamian, H. (2022). Anxiety, academic resilience, and burnout among medical students in Iran: A cross-sectional study during the COVID-19 pandemic. *Journal of Iranian Medical Council*, 5(2), 238–246. <https://doi.org/https://doi.org/http://dx.doi.org/10.18502/jimc.v5i2.10461>
- Sagita, A. W., Akbar, R. R., & Anggraini, D. (2023). Gambaran medical student syndrome pada mahasiswa preklinik di Fakultas Kedokteran Universitas Baiturrahmah. *Scientific Journal*, 2(1), 24–37. <https://doi.org/https://doi.org/10.56260/sciena.v2i1.86>
- Salam, A., Mahadevan, R., Rahman, A. A., Abdullah, N., Harith, A. A. A., & Shan, C. P. (2015). Stress among first and third year medical students at University Kebangsaan Malaysia. *Pakistan Journal of Medical Sciences*, 31(1), 169–173. <https://doi.org/https://doi.org/10.12669%2Fpjms.311.6473>
- Salsabila, G., Zwagery, R. V., & Rusli, R. (2023). Peranan academic resilience terhadap academic burnout pada peserta didik SMA dalam peralihan pembelajaran daring ke pembelajaran luring di kota Banjarmasin. *Jurnal Psikologi: Media Ilmiah Psikologi*, 21(2), 1–11. <https://doi.org/https://doi.org/10.47007/jpsi.v21i2.341>
- Schaufeli, W. B., Martínez, I. M., Pinto, A. M., Salanova, M., & Barker, A. B. (2002). Burnout and engagement in university students a cross-national study. *Journal of Cross-Cultural Psychology*, 33(5), 464–481. <https://doi.org/10.1177/0022022102033005003>
- Suardiantari, L. N., & Rustika, I. M. (2019). Peran kecerdasan emosional dan efikasi diri terhadap problem focused coping pada mahasiswa preklinik Program Studi Pendidikan Dokter Fakultas Kedokteran Universitas Udayana. *Jurnal Psikologi Udayana, Special Ed*, 99–110. <https://ojs.unud.ac.id/index.php/psikologi/article/view/52508/31019>
- Sugiyono. (2017). *Metode penelitian kuantitatif, kualitatif, dan r&d*. Bandung: Alfabeta.

- Sunaras, S., Novianty, L., & Rahayu, R. (2023). Hubungan resiliensi akademik dan mekanisme koping dengan academic burnout pada mahasiswa prodi sarjana keperawatan. *Jurnal Keperawatan 'Aisyiyah*, 10(2), 87–95. <https://doi.org/10.33867/jka.v10i2.402>
- Undang-Undang Nomor 20 Tahun 2013 Tentang Pendidikan Kedokteran. [UU No. 20 Tahun 2013 tentang Pendidikan Kedokteran \[JDIH BPK RI\]](#)
- Vizoso, C., Arias-Gundín, O., & Rodríguez, C. (2019). Exploring coping and optimism as predictors of academic burnout and performance among university student. *Educational Psychology*, 39(6), 768–783. <https://doi.org/https://doi.org/10.1080/01443410.2018.1545996>
- Wang, C., & Zhao, H. (2020). The impact of COVID-19 on anxiety in Chinese university students. *Frontiers in Psychology*, 11, 1–8. <https://doi.org/10.3389/fpsyg.2020.01168>
- Wijianti, D. K. A., & Purwaningtyas, F. D. (2020). Coping stres, resiliensi pada mahasiswa tingkat akhir. *Jurnal Psikologi Wijaya Putra (Psikowipa)*, 1(2), 11–17. <https://doi.org/https://doi.org/10.38156/psikowipa.v1i2.35>