Factors Influencing Academic Resilience Among University Student: A Systematic Literature Review

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Abstract. This study aims to identify the factors that influence academic resilience in university students from various studies. This study used PRISMA as a research method with the article search included databases from Scopus, Science Direct, Pubmed, and Emerald Insight with the keywords "academic resilience" AND "higher education" OR "university" OR "college" OR "university student". Based on the inclusion criteria, eight articles were obtained for further analysis. From the articles studied, it was concluded that the factors that influence academic resilience are divided into risk factors and protective factors. Risk factors are associated with the potential for negative consequences in academic life, while protective factors are related to individual characteristics, contexts, or interactions that contribute to the prediction of positive outcomes, especially in challenging situations. These protective factors are divided into two categories, namely internal factors and external factors.

Keywords: Academic resilience, university student, risk factor, protective factor

1 Introduction

College students are individuals who are currently undergoing the process of education at a higher institution. During this process, they experience changes in their study habits compared to high school rather than higher institutions [1]. In college, students are faced with various academic demands and challenges. The adaptation process in college is full of diverse assignments, both individual, group and practical, as well as high expectations for understanding concepts and solving problems which can trigger stress in students [1]. The situation of pressure and various stressors faced by students requires them to be able to balance their time and energy to fulfil all their responsibilities [2].

Based on the study by Ononye et al. [3], students need to be resilient academically to overcome various academic challenges and demands. Vikriani et al. [4] describe resilience as the ability of students to withstand various academic obstacles they encounter during their studies. Facing various complex obstacles and pressures, it takes resilience to persevere, bounce back, and build strong academic resilience [5]. Various challenges and difficult situations require the ability for individuals to survive and recover from stressful situations, making them individuals with strong academic resilience.

Academic resilience reflects one's capacity for academic achievement to succeed even under adverse conditions such as obstacles, challenges, difficulties, and academic

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failures [6]. The achievement of academic resilience is not independent of the factors that protect it. Prior studies have identified a range of factors, including self-regulation, social support, academic procrastination, optimism, and spirituality, that can impact academic resilience [7]. Kutlu and Yavuz [8] call the factors that help individuals achieve success protective factors these protective factors are divided into two categories: Internal and external protective factors in which these could be categorized as personal traits and social influences respectively. Resilience is inversely related to the impact of adverse events relative to protective factors. If adverse events overwhelm protective factors, resilience will [9].

In addition to protective factors, risk factors can hinder or weaken an individual's capacity to recover from failure, challenges, and difficulties during learning. Risk factors are various reasons or circumstances that can hinder students' learning achievements [10]. The existence of these factors does increase the likelihood of individuals experiencing difficulties; however, with the right intervention and support, students with academic resilience risk factors can still achieve success in their studies [11].

The diversity of factors influencing academic resilience in each individual is an important and exciting topic for researchers from various countries worldwide to discuss. The goal of this research is to determine the factors that contribute to academic resilience among students from diverse studies. Understanding these factors can help students develop their resilience and achieve better results.

2 Method

A systematic literature review was conducted to find articles that met the desired criteria. This research used PRISMA as a research method, using databases for article search, including Scopus, Science Direct, Pubmed, and Emerald Insight, with the keywords "academic resilience" AND "higher education" OR "university" OR "college" OR "university student". Inclusion criteria were used to help find relevant articles. The inclusion criteria used in this study were (1) Published articles within the last 5 years (2020-2024); (2) Discussing factors that affect students' academic resilience; (3) Articles in English; (4) Not a review article; (5) Open access. The retrieval of articles was based on an examination of titles, keywords, full-text availability, and accessibility. Figure 1 shows the retrieval process.
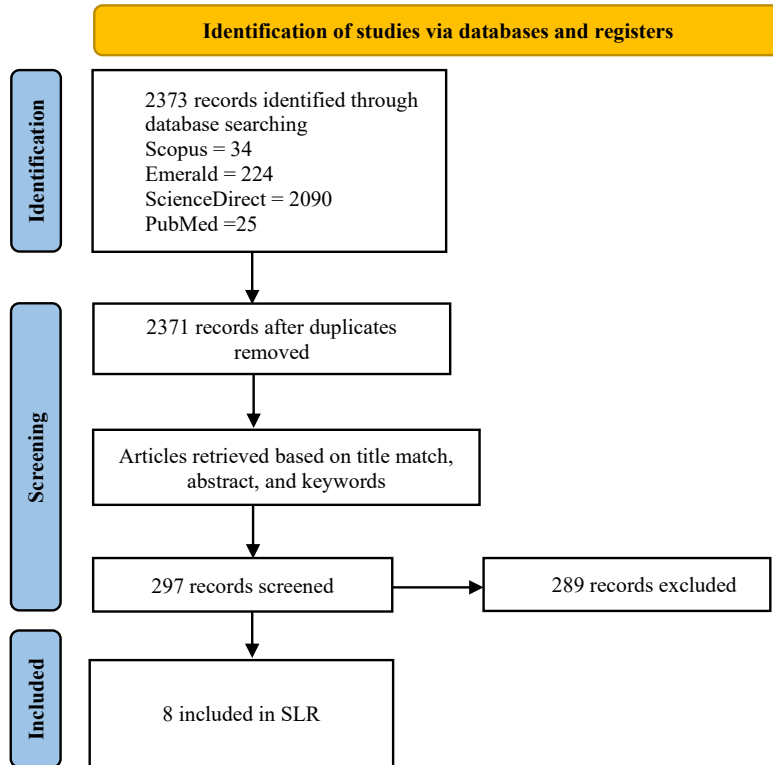
Figure 1. Article Selection Process

3 Result

The article selection process was conducted between May 24-26, 2024. The search for articles was conducted using four databases from Scopus, Science Direct, Pubmed, and Emerald Insight. This initial search yielded 2,373 articles. All 2,373 articles were then screened using the Rayyan application. Two articles were identified as duplicates, and after applying the inclusion criteria, 297 articles were found. We selected articles that mentioned the research variables in the title, abstract, or keywords. A total of 289 articles were excluded, leaving 8 articles. Source of the remaining articles: Scopus (4) Science Direct (3) Pubmed (1) Emerald Insight (0).

Table 1: Journal article review results

No.	Article title and author	Participant	Method	Research findings	Country
1	Academic Resilience among Indonesian College	303 undergraduate students from	Quantitative	Future orientation and peers support contributed to	Indonesia

				academic resilience	
	Students during the COVID-19 Pandemic: The Role of Future Orientation and Peer Support (Kumalasari, 2023)	private and public universities			
2	Academic resilience for preservice teachers among field of sciences: A measurement scale in education (Dalimunthe et al., 2021)	236 preservice teachers from from the fields of social, science and languages at Medan and North Sumatera	Quantitative	Preservice teachers' academic resilience is constructed by composure, commitment, control, coordination, empathy, perseverance, and adaptive	Indonesia
3	Adaptation of The Academic Resilience Scale (ARS-30): Turkish Version Validity and Reliability Study (Cengiz & Peker, 2022)	687 university students at Atatürk University in the academic year of 2021	Quantitative	A positive relationship exists between academic resilience and self-efficacy. Additionally, self-efficacy can boost academic resilience.	Turkey
4	Resilience in Higher Education: A Conceptual Model and its Empirical Analysis (Durso et al., 2021)	25 university students in the final e final year of the Accounting program at a public university	Qualitative	The main sources of stress and obstacles such as didactic-pedagogical problems, relationships with peers, and the reward system in Higher Education Institution become risk factors for academic resilience, while protective factors related to the academic system	Brazil
5	Assessment of Academic Resilience and Its Associated Factors Among Pharmacy Students in Twelve	3950 pharmacy students from 12 countries	Quantitative	The factors influencing the academic resilience include the student's country of origin, the type of	Egypt, Turkey, Indonesia, Pakistan, Bangladesh, Iraq, Jordan,

					Nigeria, Malaysia, Saudi Arabia, Sudan, and the United Arab Emirates
	Countries (Elnaem et. al, 2024)			institution, gender, year of study, extracurricular activities, sports, family support, and mental health.	
6	Emotion and cognition are two wings of the same bird: Insights into academic emotion regulation, critical thinking, self-efficacy beliefs, academic resilience, and academic engagement in Iranian EFL context (Namaziandost et.al, 2023)	411 university students at three public university who were studying English in specialized programs	Quantitative	The study investigated the influence of AER and CT on the AR of Iranian university students. The findings revealed a positive correlation between AER, CT, and AR.	Iran
7	The effect of emotion regulation strategies on nomophobia in college students: The masking role of resilience (Cui et. al, 2024)	756 university students from a university in northeastern China	Quantitative	Cognitive reappraisal and expressive suppression indirectly affect resilience	China
8	University students' mental well-being during COVID-19 pandemic: The mediating role of resilience between meaning in life and mental well-being (Rasheed et. al, 2022)	302 univeristy students from public and private universities in Punjab	Quantitative	There was more meaning in life contributes to more resilience during COVID-19. Resilience is influenced by both having a sense of life meaning and actively seeking it, which ultimately leads to better mental health	Pakistan

The first article identified was a study by Kumalasari [12] that studied the resilience of Indonesian university students in their academic pursuits during the pandemic of COVID-19. The research findings indicated that academic resilience was assisted by future orientation and peer support. The study found that having goals for the future was an internal factor, while

getting support from peers reflected as a factor that is external. This study also found that gender was a moderating factor that influences the connection between having goals for the future and being academically resilient.

The second article was a finding based on the study by Dalimunthe et al. [13] on measuring the academic resilience of preservice science teachers. This study aimed to develop a new instrument to measure how well future teachers can handle academic challenges. The research findings indicated that the preservice teachers become academically resilient through calmness, commitment, control, coordination, empathy, perseverance, and adaptability.

The third article is a study by Cengiz and Peker [14]. This research focused on adapting the scale into Turkish and examining its validity and reliability in which "Academic Resilience Scale (ARS-30)" was used. The findings of this study indicate that students who are academically resilient have shown a positive relationship with students that have self-efficacy. Hence, this shows that academic resilience is positively affected by self-efficacy.

The fourth article is a study by Durso et al. [11]. This study aims to identify how higher education students develop resilience during their studies in the undergraduate program. The findings of this study are the stress and obstacles which are the main sources, this includes didactic-pedagogical problems, difficulties with peer relationships, and the unfair reward system in Higher Education Institutions become risk factors for academic resilience. Also, in the institutions, protective factors are relationships with lecturers, connections with peers, and opportunities to participate in extracurricular activities.

The fifth article, a study written by Elnaem et al. [15] that investigates the academic resilience of pharmacy students from 12 different countries and identifies their level of academic resilience based on the factors affecting it. The findings of this study indicate that the factors influencing the academic resilience of pharmacy students include the student's country of origin (resilience levels vary between countries, with Sudan, Pakistan, and Nigeria having the highest levels), the type of institution (Private university students often demonstrate greater resilience compared to their public university counterparts), gender (for negative affective and emotional responses), year of study (First-year students typically exhibit stronger resilience than their upperclassmen counterparts), extracurricular activities, sports, family support, and mental health. This research also describes how students cope with challenges and their support systems. It was found that sports, religion, and family are important in helping students cope the hardships in their studies. This information is useful for understanding what helps pharmacy students be resilience in their studies. It can be used to create interventions to help students and improve their success.

The sixth article is a study by Namaziandost et al. [16]. This research aims to explore the impact of academic emotion regulation and critical thinking on the states of self-efficacy belief, academic resilience, and academic engagement among students in the context of English as a Foreign Language (EFL) in Iran. The findings of this study are that academic emotion regulation and critical thinking can influence the state of academic resilience of students particularly in higher education in Iran. The results showed a positive connection between managing emotions and critical thinking skills with overall academic resilience.

The seventh article is a study by Cui et al. [17] investigating the ways of thinking of reappraisal strategies and expressing their emotions directly and indirectly that influence their fear of being without their phones through resilience. The study discovered that these thinking and emotional strategies can indirectly influence resilience.

The eighth article is a study conducted by Rasheed et al. [18] on the mental well-being of students during the COVID-19 Pandemic. This research aims to investigate the mental well-being of students taking online classes and whether resilience could mediate the

connection between a student's sense of purpose in life and their mental well-being. The findings of this study showed that during COVID-19, the meaning in life aids higher resilience in students. This study indicates that students with high levels of life meaning presence and life meaning search have higher resilience, which ultimately led to better mental well-being.

4 Discussion

This study intends to identify the factors influencing academic resilience among university students based on various studies. The literature review revealed eight articles that elucidate the diverse factors contributing to academic resilience, encompassing risk, internal, and external protective factors.

Several risk factors that can hinder students' academic resilience are explained by Durso et al. [11]. These include didactic-pedagogical problems, such as ineffective teaching strategies, lack of interaction with lecturers, and inadequate supporting materials, which can increase stress and make it difficult for students to learn. Poor relationships, a heterogeneous learning environment, and a lack of integration with peers can make students feel isolated and unsupported. In addition, the reward system of State Higher Education Institutions (HEIs), which is based on grades obtained throughout the program of study, is perceived as unfair and has a direct impact on education, which can trigger stress and anxiety that can become risk factors for students' academic resilience.

Several internal protective factors that influence students' academic resilience include future orientation, which means having clear goals and plans for the future can provide motivation and perseverance to overcome challenges in their studies [12]. According to Dalimunthe et al. [13], other factors include calmness, commitment, control, coordination, empathy, perseverance, and adaptability. Namaziandost et al. [16] also mention academic emotion regulation, which is the ability to manage negative emotions effectively in the learning context, which can help students complete tasks better. Additionally, critical thinking, which involves the capacity to evaluate information and solve problems critically, can help students learn more effectively [16]. Internal protective factors include self-efficacy beliefs and mental health [14]. According to Cengiz and Peker [14], self-efficacy beliefs are the belief in one's ability to complete academic tasks, which can increase motivation and resilience. According to Rasheed et al. [18], good mental health can help students to be more focused and motivated in their studies.

Next, there are several external factors influence academic resilience. Peer support refers to having supportive and encouraging friends who can help students feel connected and valued [11], [12]. According to Durso et al. [11], a good relationship with lecturers, which involves having supportive and accessible lecturers, can provide students with the guidance and direction they need. Opportunities to participate in extracurricular activities can help students develop new skills. Family support, exercise, religion, and country of origin can also influence academic resilience. Family support, which involves having a supportive and understanding family, can provide emotional encouragement and assistance to students. Engaging in physical activity regularly can positively impact students' overall health, leading to better stress management and focus. Religious belief can provide meaning and purpose in life, which can help students cope with challenges and build resilience [11]. Lastly, as explained by Elnaem et al. [15], the type of institution and year of study show that private universities were generally more resilient than those in public universities, and first-year students were more resilient than students in later years.

Naturally, this study has certain limitations. These limitations include: 1) As the year 2024 is only in its first quarter, not many publications have been detected in the SCOPUS, Sciencedirect, Pubmed, and Emerald Insight search engines; 2) the researchers only utilized the SCOPUS, Sciencedirect, Pubmed, and Emerald Insight databases; and 3) the study only analyzed data from the past five years. Based on the findings, it is expected that schools and families can identify students who are vulnerable to risk factors and take preventive measures, for example by providing counseling services, mentoring, or peer tutoring, as well as designing programs that can strengthen students' internal and external protective factors, such as training in independent learning skills or character development. Recommendations for future research include employing a more diverse range of databases to gather more comprehensive data. Additionally, future research could investigate trends over the next ten years or decade.

5 Conclusion

Several factors have been identified as influencing academic resilience in students, based on the research findings. These factors can be categorized into risk, internal, and external protective factors. The study reveals that academic resilience is shaped by a complex interplay of factors, including risk factors that can hinder students' progress, internal strengths that support success, and external factors from their social environment. Understanding these factors can guide students, lecturers, and educational institutions in developing strategies that are effective to foster academic resilience and support student achievement.

References

[1] Siregar, I. K., & Putri, S. R. (2020). Hubungan self-efficacy dan stres akademik mahasiswa. Consilium: Berkala Kajian Konseling dan Ilmu Keagamaan, 6(2), 91–95. https://doi.org/10.37064/consilium.v6i2.6386

[2] Saidin, K., Veloo, A,. & Rohaidah-Shari (2016). Exploring postgraduate students' challenges in doing master research. In: International Conference on Education and New Development (END 2016). 146-150. ISBN: 978-989-99389-8-4.

[3] Ononye, U., Ogbeta, M., Ndudi, F., Bereprebofa, D., & Maduemezia, I. (2022). Academic resilience, emotional intelligence, and academic performance among undergraduate students. Knowledge and Performance Management, 6(1), 1–10. https://doi.org/10.21511/kpm.06(1).2022.01

[4] Vikriani, A., Wilson, W., & Alvi, R. R. (2023). Pengaruh aspirasi terhadap resiliensi akademik mahasiswa rantau program studi pendidikan masyarakat universitas riau. Innovative: Journal Of Social Science Research, 3(5), 1276–1286. https://doi.org/10.31004/innovative.v3i5.4487

[5] Setyawan, I. (2021). Melihat peran pemaafan pada resiliensi akademik siswa. Jurnal EMPATI, 10(3), 187-193. https://doi.org/10.14710/empati.2021.31282

[6] Cassidy, S., Mawdsley, A., Langran, C., Hughes, L., & Willis, S. C. (2023). A large-scale multicenter study of academic resilience and well-being in pharmacy education. American Journal of Pharmaceutical Education, 87(2), 265–272. https://doi.org/10.5688/ajpe8998

[7] Surya, A. L. J., & Armiati, A. (2023). Analisis faktor yang mempengaruhi resiliensi akademik mahasiswa saat penyelesaian skripsi. Jurnal Ecogen, 6(4), 542-550. https://doi.org/10.24036/jmpe.v6i4.15468

[8] Kutlu, Ö., & Yavuz, H. Ç. (2016). Factors that play a role in the academic resilience of academicians. Journal of Educational Sciences Research, 6(2), 131–150. https://doi.org/10.12973/jesr.2016.62.8

[9] Rambod, M., Hamidizadeh, S., Bazrafshan, M.-R., & Parviniannasab, A. M. (2023). Risk and protective factors for resilience among adolescents and young adults with beta-thalassemia major. BMC Psychology, 11(1), 1-10. https://doi.org/10.1186/s40359-023-01268-2

[10] Yang, S., & Wang, W. (2022). The role of academic resilience, motivational intensity and their relationship in efl learners' academic achievement. Frontiers in Psychology, 12, 1-8. https://doi.org/10.3389/fpsyg.2021.823537

[11] Durso, S. de O., Afonso, L. E., & Beltman, S. (2021). Resilience in higher education: a conceptual model and its empirical analysis. Education Policy Analysis Archives, 29. https://doi.org/10.14507/epaa.29.6054

[12] Kumalasari, D. (n.d.). Academic resilience among Indonesian college students during the covid-19 pandemic: the role of future orientation and peer support. Electronic Journal of Research in Educational Psychology, 21(3), 541–558. https://doi.org/10.25115/ejrep.v21i61.7945

[13] Dalimunthe, M. B., Djatmika, E. T., Pratikto, H., Handayati, P., Dewi, R., & Mustakim, S. S. (2021). Academic resilience for preservice teachers among field of sciences: A measurement scale in education. International Journal of Evaluation and Research in Education (IJERE), 10(4), 1262. https://doi.org/10.11591/ijere.v10i4.21859

[14] Cengiz, S., & Peker, A. (2022). Adaptation of the academic resilience scale (ars-30): Turkish version validity and reliability study. Turkish Psychological Counseling and Guidance Journal, 12(65), 215-228. https://www.doi.org/10.17066/tpdrd.1138267

[15] Elnaem, M. H., Wan Salam, W. N. A. A., Thabit, A. K., Mubarak, N., Abou Khatwa, M. M., Ramatillah, D. L., Isah, A., Barakat, M., Al-Jumaili, A. A., Mansour, N. O., Fathelrahman, A. I., Adam, M. F., Jamil, S., Baraka, M., Rabbani, S. A., Abdelaziz, D. H., Elrggal, M. E., Okuyan, B., & Elcioglu, H. K. (2024). Assessment of academic resilience and its associated factors among pharmacy students in twelve countries. American Journal of Pharmaceutical Education, 88(5), 100693. https://doi.org/10.1016/j.ajpe.2024.100693

[16] Namaziandost, E., Rezai, A., Heydarnejad, T., & Kruk, M. (2023). Emotion and cognition are two wings of the same bird: Insights into academic emotion regulation, critical thinking, self-efficacy beliefs, academic resilience, and academic engagement in Iranian EFL context. Thinking Skills and Creativity, 50, 1-14. https://doi.org/10.1016/j.tsc.2023.101409

[17] Cui, M., Wang, S., Gao, Y., Hao, Y., & Dai, H. (2024). The effect of emotion regulation strategies on nomophobia in college students: The masking role of resilience. Heliyon, 10(9), e30075. https://doi.org/10.1016/j.heliyon.2024.e30075

[18] Rasheed, N., Fatima, I., & Tariq, O. (2022). University students' mental well-being during COVID-19 pandemic: The mediating role of resilience between meaning in life and mental well-being. Acta Psychologica, 227, 103618. https://doi.org/10.1016/j.actpsy.2022.103618