

Influencing Factors of Outstanding Student at University: A Scoping Review

Faizah^{1,2*}, Dewi Retno Suminar³

^{1,3}*Doctoral Psychology Program, Faculty of Psychology, Universitas Airlangga, Surabaya, Indonesia*

²*Department Psychology, Universitas Brawijaya, Malang, Indonesia*
faizah-2022@psikologi.unair.ac.id

Keywords: Outstanding Student, University, Scoping review.

Abstract: This study aimed to provide an overview of existing research on outstanding university students, identify key success factors, and offer recommendations for future research. Using a scoping review guided by the PRISMA ScR Protocol and Joanna Briggs Institute (JBI) guidelines, literature was sourced from Scopus, Web of Science, and ScienceDirect. The findings highlighted two categories of factors: internal (self-motivation, hard work, commitment, curiosity, etc.) and external (role models, peer support, university resources, brand image). Notably, conflicting evidence on parental income's impact was observed. This review synthesized insights from ten studies, identifying eight internal and six external factors that influenced student success.

1 INTRODUCTION

The phenomenon that describes the dropout rate shows the percentage of dropout rates in Indonesia in 2019 was 7% (602.208) of the total enrolled students (8.483.213) the data of higher education statistics Indonesia (2020). College dropouts consist of students who dropout and resign. This situation happened because many students also still feel unsure of their abilities. Many college students are not confident in their skills, appearance, and abilities. However, to be a success is the dream of a student at university.

As researchers, we need college students who can set an example for other students to increase their achievement at university. And it is not easy to be an outstanding student at a university, an outstanding student is not only pursuing knowledge in their field but also having activities in developing his soft skills that are expected to become independent, full of initiative, work carefully, be responsible, and take responsibility in dealing with employment and entrepreneurship (Pusprenas Kemdikbud, 2022).

Outstanding students in Indonesia are students who have systematic and clear indicators from the Indonesian government committee because every year there is a prestigious event in the selection of outstanding students both academically and non-academically. The university will make selections

from the study program, faculty, and university levels with various mentoring agendas according to the assessment scores from the national selection committee. Choosing the best college student in Indonesia has been going on for a long time managed by Pusprenas (Pusat Prestasi Nasional) In Indonesia.

A literature review discussion that focuses on outstanding students needs to be conducted to get information about what and how influencing factors to outstanding students on campus. This study aims to describe the scope of existing research; Identify influencing factors of outstanding students at university or summarize findings. This study has been already registered with OSF and DOI number <https://doi.org/10.17605/OSF.IO/WUHB7>.

2 METHOD

2.1. Scoping Review Methodological Framework

This scoping review follows Arksey and O'Malley framework (2005), and there are six steps on Joanna Briggs Institute (Peters et al., 2017) (1) identify research questions; (2) identify relevant studies; (3) study selection; (4) chart the data; (5) collating, summarizing, and reporting the results; (6) consultation (optional). This step of scoping reviews

from JBI (Peters et al., 2020), but I'm not used to the last step with the consultation of its conditional situation. Using the PRISMA procedure to assess the current research focused on identifying characteristics or factors of an outstanding student at university. A scoping review is a useful tool to examine a specific research topic to provide a descriptive overview of the research findings and identify gaps in the existing literature (Pham et al., 2014).

2.2. Database Search Strategy

Scopus, Web of Science, and Google Scholar databases were used for searching the literature, with the following term "An outstanding student or high performance or success student or high achievement" and "university or college or higher education" in the Indonesian language with the term "Mahasiswa berprestasi". The search date was set from September to October 2022.

2.3. Selection of Studies

The selection of studies for inclusion followed guidance from the Preferred Reporting Items for

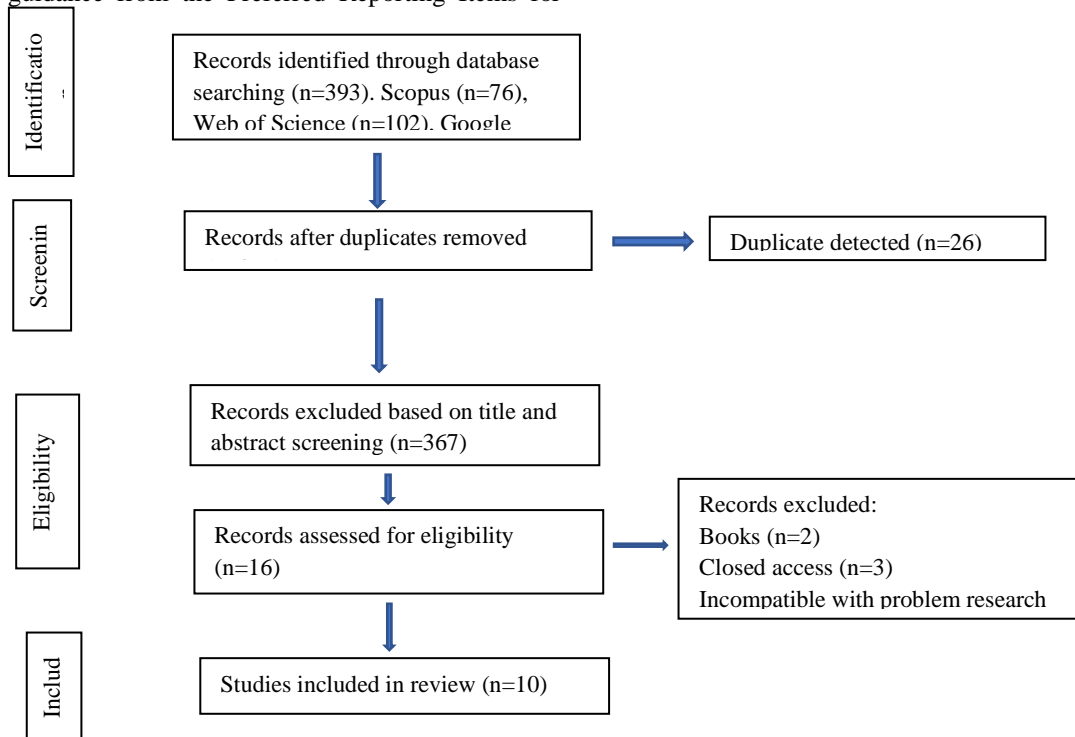


Figure 1. Prisma flow diagram

Systematic Reviews and Meta-Analyses Extension for Scoping Reviews (PRISMA-ScR) checklist (Tricco et al, 2018). The process of study selection is documented in the form of a PRISMA flow diagram (Page et al, 2021) presented in Figure 1. The inclusion criteria of the studies were 1) the articles specifically related to an outstanding student at the university (undergraduate program), 2) original research articles (quantitative and qualitative studies) and review articles, and 3) articles with full text in English or Indonesian, 4) be published in 2010 to 2022 (to earn updating phenomenon). The title and abstract used were screened by the first researcher, and the results were discussed by others to get an agreement.

2.4. Data Extraction

Using The Rayyan to the extraction of data from each title and abstract. Subsequently, looking for the year of publication, the population studied, the phenomenon of research, main results, and recommendations for the next research. Extracted data are presented in table 1.

3 RESULTS

3.1. Search, Article Selection, and Extracted Data

The final search resulted in 393 items by Scopus (n=76), Web of Science (n=102), and Google Scholar (n=215). Finally, a total of 10 articles were identified for inclusion in the review (Figure 1). The details of these articles were summarized in Table 1. The oldest of the included articles was published in 2013 and the newest in 2022. Most of the excluded articles discussed are incompatible with the inclusion criteria such as being published in books, and some of the articles are closed access and unrelated to the theme of research. Article screening and selection results were identified when the process was repeated a second time by the study author.

Overall studies were conducted using samples of outstanding students or high academic performance or successful students at university. All studies reported internal and or external factors to influence an existing student on high achievement at university. External factors in this study reported 4 studies (Ras, 2013; Alabdulkarem, et al 2021; Hamid, et al 2022; Ayasrah, et al 2022), Internal factors reported 3 studies (Thaariq, et al 2019; Pertegal-Felices, et al 2017; Sibanda, et al 2015), and between two factors identified 3 studies (Shobirin & Safii, 2021; Ahmady, et al 2022; Nguyen, et al 2022). These all factors were identified to lead the researcher to understand the characteristics of an outstanding student at the university.

3.2. Summary of Reported Results

The summaries of the report are based on the aim of this study to describe the scope of existing research, then identify characteristics from factors of outstanding students at the university and lastly provide recommendations for future inquiries. Ten of the studies described various results for understanding the basis of influencing outstanding students in their activities. These studies detected internal and external factors for an outstanding student at the university.

a. Internal factors of an outstanding student at the university

Increasing learning motivation was very important for outstanding students at the university (Thaariq, et al, 2019) . They want to learn because they want to find experiences, try to get networking or new channels with the same vision, and they are always hungry to learn. The way for these students to excel in improving

learning motivation is to stay dominant by joining the competition (Thaariq, et al, 2019). Self-motivation to become successful in the future. Fraser and Killen (2005) identify “dedication to a career goal” as crucial to student success. More than sixty percent of the respondents perceive this factor to be highly influential towards success. Motivation is the core activity in the starting element that was carried out by outstanding students (Shobirin & Safii, 2021). Motivation consists of curiosity and ideas to make decisions and overcome problems. Other factors which appear at the top of both studies for student success are hard work, commitment, and dedication as well as assignment completion and submission (Sibanda et al, 2015). However, there was no significant difference between those who had higher or lower GPAs when it came to motivation to study, studying in a group alone or with one colleague, studying hours per day, studying hours at weekends, and the use of the following while studying (Mapping, Note Forming, Highlighting, Summarizing, recording, etc) (Hamid et al, 2022).

Curiosities, the existence of ideas, and the searching strategy are the internal factors or the self-motivation in information-seeking activities. Self-motivation arises in Outstanding Students because they are aware of the importance of information sources in supporting the learning and creative process (Shobirin & Safii, 2021). Of the eight emotional variables analyzed, seven didn't show significant differences, and the emotional variables of attention, clarity, repair, intrapersonal, interpersonal, adaptability, and stress management of both student groups (students who enrolled in high academic performance and in the traditional modality) could be considered equal. However, the results showed significant differences in general mood, although both values are close (Pertegal-Felices, et al, 2017).

b. External Factors of an Outstanding Student at the University

Parental income is an influencing factor in students' learning strategies, outstanding students whose parents are high-income have a better learning strategy than those whose parents are low-income (Ras, 2013). The same result of research by Alabdulkarem, et al (2021) clarify that family financial status was associated with higher report academic performance.

However, the study of a medical student at the university (Hamid et al, 2022) provided different data that the social-economic status of the student's families was not found to significantly influence their academic performance. The attitudes of teachers and outstanding students towards blended learning were at an average level (Ayasrah et al, 2022).

The motivation of the Outstanding Students' selves was strengthened by the existence of external factors such as peers, lectures, and scientific communication forums (workshop/seminar). External factors, which are factors that strengthen internal factors, have implications for the strategies planned by Outstanding Students. (Shobirin & Safii, 2021). Likewise, role models in education practice (lecturers) have some characteristics which make them excellent people. Characteristics like being patient, humble, kind, caring, honest, truthful, showing empathy, and having effective interactions (Ahmady et al, 2022).

The findings of the present study showed that (a medical teacher) role model can have five character types, including an

excellent personal character, effective coach abilities, inspiring medical leadership, expert clinical teacher, and professional physician; these lead to some positive roles in clinical education (Ahmady et al, 2022). The result of research Nguyen et al (2022) shows that the university's support strongly influences the student experience, and from there, the student experience has a significant impact on the university's brand image. The student experience is a central factor that any university should pay attention to further develop its service quality and brand image.

The following was a summary of studies of internal and external factors that can lead us to understand the influence of an outstanding student at the university, presented in table 2.

For 10 studies, eight internal and six external factors can affect them as outstanding students at university. The parental income or family finances is still debated (gap) between researchers for the finding of factors that can affect them as an outstanding student at university.

Table 2. Summaries of internal and external factors of an outstanding student

Internal factors	External factors
1. Self-motivation or learning motivation	1. The attitude or role model of the
2. Hard work	2. Peer support
3. Commitment	3. Scientific communication forum
4. Dedication	4. Universities support
5. Curiosity	5. Brand image universities
6. Existence of an idea	6. Student experience
7. Searching strategies	7. Parental income or family financial
8. General mood	

Table 1. Study overview

No	Author (year)	Method/Sample	Penomenon of interest	Findings	Limitation/Recommendation
1	Thaariq, Z.Z., Kuswandi, D., Diana, R.C., Shelinawati, U. (2019)	Descriptive quantitative method, 26 outstanding students at Universitas Negeri Malang.	Researchers are interested in studying research related to learning motivation and ways of learning from outstanding students.	The results of the research are expected to be a reference in increasing learning motivation for other students. It explained about the desires of respondents in learning. From the picture, it is explained that 75 percent of respondents want to learn because they are trying to find experience, 13 percent of respondents say they want to learn because they are trying to find a new channel (friends) with the same vision, 4 percent say the first and third choice, 4 percent say they have a character who is hungry for learning and wants learn whenever and wherever and 4 percent say they want to learn. (Internal factors)	The way for students to excel in improving learning motivation is to stay dominant by joining the competition. This can be a reference for other students in increasing motivation to learn in order to increase their potential. So that this research can be an inspiration to learn to prepare the future of students as a whole thoroughly and optimally.
2	Ras, F. (2013)	Descriptive quantitative method. The sample consists of 101 outstanding students who are studying and doing well in the English Education program were recruited for this study.	The purpose of this study is to identify the relationship of the use of language learning strategies used by outstanding students based on socio-economic status, school type, and academic background in English Studies.	The results show that outstanding students' learning strategies are at a moderate level. This finding has important implications for developing the learning strategies used by outstanding students, which would impact the development of quality human capital. One of the issues that emerge from these findings is that parental income is an influencing factor in students' learning strategies. The results showed that outstanding students whose parents are with high income have a better learning strategy. outstanding students whose parents have low income show low learning strategies. This situation implies that a greater effort should be made possible, whether at the national level or family level, to enhance the families' socio-economic standing which would have a direct and positive impact on children's education. (External factors)	The findings of this study provide some insight for further research to explore the learning strategies employed by high achievers in a more detailed manner. Further research might compare learning strategies practiced by the top students from different higher institutions in different locations, involving a variety of demographic backgrounds and parental occupations. It is suggested that a scheme for families with very low income is to be worked out immediately for the improvement of the student's academic quality.

3	Alabdulkarem, A., Alhojailan, M., Alabdulkarem, S. (2021)	Survey quantitative method. A total of 3565 Saudi undergraduate students completed the survey.	The reasons for outstanding performance are complex and influenced by several principles and factors. An example of this complexity is that success factors might change depending on the culture of students.	That many factors had a significant relationship with the reported academic performance (RAP). Among those factors, the parents' education level and work field, type of intermediate and high schools, and the attendance of prayers in mosques were significantly associated with the reported performance. 20 factors were found to have a significant relationship with the reported academic performance. Those factors were gender, university, college, praying in mosques, extracurricular activities, eating breakfast, paternal education level, paternal work field, family perceived financial status, residence, classification of intermediate school, classification of high school, tutor in school, high school graduation score, Qiyas test score, Tahseli test score, preparatory year GPA, the preparatory year overall usefulness, improvement of English in a preparatory year, and most-used social media platform. (External factors)	In future studies, developing statistical models is crucial to better understand the impact of the factors examined here with the RAP. Future work might also consider studying the factors (i.e., RAP and the other factors of interest) as continuous instead of categorical variables. Continuous factors can provide more knowledge and show the shape of the relationship. For instance, the students who reported themselves to be involved in extracurricular activities also reported higher RAP.
4	Shobirin, M.S.H., & Safii, M. (2021)	This study used the descriptive qualitative approach. The sample was eighteen finalists of the 2019 Outstanding Student Competition in Universitas Negeri Malang that were selected using the purposive sampling technique	The purpose of this study is to determine the internal and external factors in the information-seeking behavior pattern of the 2019 Outstanding Students in Universitas Negeri Malang (UM).	These factors are classified by outstanding students into internal factors which consist of curiosity and critical thinking, and external factors which include the relationship between Outstanding Students, lecturers, and peers, the access to scientific references, and the facilities to the citation sources and reference sources. (Internal and external factors)	These actions were carried out to obtain and understand the needed information holistically so that the learning resources owned by outstanding students are broad, controlled, and able to become a source of reference in making papers with in-depth discussion. The goal or the final target of 2019 UM Outstanding Students in searching for information is to gain the appropriate knowledge to be used in making decisions.

5	Hamid, N.A.A., Mohamed, H.K.A., Essa, M.E.A. (2022)	A descriptive cross-sectional study. A total of 260 undergraduate medical laboratory students.	The academic performance of medical laboratory students is influenced by multiple factors. The aim of this study is to determine the factors influencing the academic performance of students at the Faculty of Medical Laboratory Science	This study showed a statistically significant relationship between performance and, disease or disability of the medical laboratory student him\herself, education level of the father, presence of a physician in the family, admission to the faculty whether it is general or private, secondary school certificate type, number of secondary schools examination attempts, sleeping hours per day, attendance to all academic and clinical laboratory activities and students own notes as a primary source of study. (External factors)	The study, therefore, concluded that students' academic performance could be influenced by some other factors which should be investigated in future research.
---	---	--	--	--	--

6	Pertegal-Felices, M.L., , Castejón-Costa1, J.L., Gilar-Corbíl, R., Mora-Mora, H. (2017)	To conduct this study, 88 students with the degree in computer engineering at a Spanish University were chosen and divided into two groups: a group of 44 students enrolled in HAP and another group of 44 students enrolled in the traditional modality	This study is aimed to know the differences in the emotional intelligence profile of High Academic Performance (HAP) students. HAP groups have all manner of aid and support to lead their members to reach the highest level of academic performance possible for the most brilliant students with the greatest aptitudes. These groups are characterized by having highly qualified professors, admitting a very small number of students, having a preference for Erasmus exchanges, obtaining travel aid to learn languages, and obtaining training from research staff in diverse fields, among other aspects. Membership in this group is recognized with a specific mention in the European Supplement to their degree	Of the eight emotional variables analyzed, seven did not show significant differences and the emotional variables of attention, clarity, repair, intrapersonal, interpersonal, adaptability, and stress management of both student groups could be considered equal. However, the results showed significant differences in general mood, although both values are close. (Internal factors)	The study shows no significant differences, being recommended to consider providing aid and support for HAP students in the development of this type of intelligence. Future studies can aim at increasing the sample size of participants in new HAP groups created in subsequent years and designing interventions for the development of the Emotional Intelligence (EI) within the degree program curricula at universities that specifically target these groups.
7	Ahmady, S., Kohan, N., Namazi, H., Zarei, A., Mirmoghtadaei, Z.S., Hamidi, H. (2022)	Qualitative-descriptive study. Twenty-five medical students, medical graduates, and faculty members participated in 25 interviews.	The purpose of this study was to gain an in-depth understanding of the outstanding qualities of successful role models.	The results of this study illustrated five crucial qualities of a good clinical role model including excellent character, an effective coach and mentor, an inspiring medical leader, an expert clinical teacher, and a professional physician. Our results also highlighted the lasting effects of positive role modeling of clinical teachers on medical trainees' professional careers. (Internal and external factors)	The result of this study illustrated the crucial qualities of a good medical role model. This result can assist the leaders to engage with medical educators to better understand the process of role modeling and design the best plan for the development of role modeling in medical education.

8	Ayasrah, S., Alnasrawen, M.S., Alshorman, A., Aljarrah, A. (2022)	Quantitative method. The study was conducted on a sample of 69 teachers and 201 outstanding students.	This study focuses on explaining the attitudes of teachers and outstanding students toward Blended learning in light of the Covid-19 pandemic.	The results of the study revealed that the attitudes of teachers and outstanding students towards blended learning in light of the spread of coronavirus were at an average level. The results of the study also showed that there were no statistically significant differences between teachers and outstanding students' attitudes towards Blended learning in light of the spread of the Covid-19 pandemic due to gender. According to the grade level, from the outstanding students' point of view, it also revealed the existence of an inverse relationship and a weak degree between the teachers' tendency towards Blended learning based on the teaching experience. (External factor)	Therefore, it is believed that teachers' and outstanding students' attitudes towards e-learning in general and Blended learning, in particular, should be strengthened by providing rewards, incentives, and the necessary equipment and technologies needed for Blended learning. In addition, the use of modern technologies should be encouraged. Emerging technological software should be dealt with by holding training courses and workshops. Finally, the infrastructure for the e-learning system should be developed at the national level
9	Nguyen, H.N., Nguyen, T.T.P., Phan, T.D., Pham, C.T., Tran, T.T. (2022)	Research data were collected by a structured questionnaire with 300 students from various studying majors of 12 prominent universities across the nation.	The current study examines the interrelationships between university support, student experience, and university brand image.	The findings firstly suggest that university support positively and significantly impacts students' perceived support and overall student experience. Second, the student experience has a noticeable impact on the university's image. In addition, the current paper also emphasizes the significant role of the student experience in mediating the relationship between university brand image and student-perceived support. (Internal and external factors)	The student experience is a central factor that any university should pay attention to further develop its service quality and brand image. This is also an opportunity for other future studies to test this research model in a different context at different times. From the research results, the paper recommended that the universities focus on optimizing the student experience through its support to enhance the brand image in the market.
10	Sibanda, L., Iwu, C.G., Benedict, O.H. (2015)	A quantitative approach. The population for the study consisted of second-year students because they fit the context within which this study defines success and failure.	This study's main intention was to quantitatively identify factors that are responsible for students' academic success or failure.	The study has found several factors responsible for success and failure respectively. Among the highly influential factors for success are regular study, regular attendance, and assignment completion, which are regarded as products of hard work, commitment, and dedication. Regarding failure, factors such as lack of effort, lack of dedication and commitment, and not finishing or doing assignments ranked highly. (Internal factor)	The results of this study will not only add to the literature on student academic performance but will also provide those in management of higher education with the necessary suggestions for intervening in issues of student academic performance. The reason for this was to realize from the findings, possible interventions for the reasons for failure to try to improve the factors that lead to success.

4 DISCUSSION

The national or international award process for outstanding students at university is challenging. In its implementation, the selection of outstanding students has the following objectives (1) Selecting and awarding students who have high achievements (2) Motivating students to carry out curricular, curricular and extracurricular activities as a vehicle to synergize students' hard skills and soft skills (3) Encourage universities to develop an academic culture that can facilitate students to achieve a proud achievement on an ongoing basis (Sumitro, Rismanto, & Prasetyo, 2017). Outstanding students can become a model for other students.

Based on the result, describing the factors that can affect them as outstanding students at university there are two factors (internal and external factors). For 10 studies, it was found that there were eight internal factors and six external factors that can influence them as outstanding students at university. Internal and external factors are important aspects of information-seeking activities for an outstanding student at university (Shobirin & Safii, 2021).

Internal factors reveal more about the inner strength that will help students to accomplish tasks as outstanding students on campus. A lot of researchers discuss the motivation aspect as an internal factor that can drive their energy for achieving a goal. Students who are highly motivated to learn, will always work hard, are tough, not easily discouraged, are future-oriented, accomplish assignments that have moderate levels of difficulty, and welcome feedback about their achievements are also responsible for solving problems (Mulyaningsih, 2014). Other internal factors are hard work, commitment, dedication, curiosity, the existence of an idea, searching strategies, and general mood still have contributed to increasing appearance and abilities.

External factors are more visible in the role of the environment in providing support for outstanding students, the opportunity the campus provides will be a valuable experience for students, a campus basis of a macro system in their life to get successful at university. For this study, External factors that can support an outstanding student at universities such as the attitude or role model of the lecturer, peer support, scientific communication forum, universities support, the brand image of universities, and student experience. The University's support strongly influences the student experience, and from there, the student experience has a significant impact on the university's brand image. The student experience is a central factor that any university should pay attention to further develop its service quality and brand image (Nguyen et al, 2022).

Parental involvement in student education can lead to better performance (Jeynes, 2007).

Nevertheless, parental income or family finances are still debated among researchers regarding the factors that can affect them. According to Ras (2013) and Alabdulkarem et al, (2021), parental income is an influencing factor in students' learning strategies, outstanding students whose parents are high-income have a better learning strategy than those whose parents are low-income. However, Hamid et al (2022) provided different data that the social-economic status of the student's families was not found to significantly influence their academic performance.

The results of this literature review manuscript need to be followed up and an empirical test to be carried out on factor analysis based on a list of internal and external factors of an outstanding student at university

5 CONCLUSION

In conclusion, there are two points of these a scoping review of an outstanding student at university:

1. From existing research, ten studies discuss the influence factors of an outstanding student at universities.
2. Influencing factors that can affect outstanding students there are eight internal factors and six external factors.

ACKNOWLEDGMENT

This scoping review was conducted by the first author in partial fulfillment of the Doctorate in Psychology in Airlangga University Surabaya, East Java, Indonesia. This study was supported by my colleague Ms. Ulifa Rahma as the second reviewer of extraction data, at Brawijaya University, East Java, Indonesia.

REFERENCE

- Alabdulkarem, A., Alhojailan, M., Alabdulkarim, S. (2021). Comprehensive Investigation of Factors Influencing University Students' Academic Performance in Saudi Arabia. *Educ. Sci.* 2021, 11, 375.
- Ahmady, S., Kohan, N., Namazi, H., Zarei, A., Mirmoghtadaei, Z.S., Hamidi, H. (2022). *Annals of Medicine and Surgery* 82, 104652. <https://doi.org/10.1016/j.amsu.2022.104652>
- Hamid, N.A.Y.A., Mohamed, H.K.A., Essa, M.E.A. (2022). Factors Affecting the Academic Performance among Students at Faculty of Medical Laboratory Science. *Biomed J Sci & Tech Res* 43(4). *BJSTR. MS.ID.006934*.

- Jeynes, W.H. (2007). The relationship between parental involvement and urban secondary school student academic achievement: A meta-analysis. *Urban Educ.*, 42, 82–110.
- Mulyaningsih, I. E. (2014). Pengaruh interaksi sosial keluarga, motivasi belajar, dan kemandirian belajar terhadap prestasi belajar. *Jurnal Pendidikan Dan Kebudayaan*, 20(4), 441–451.
- Nguyen, H.N., Nguyen, T.T.P., Phan, T.D., Pham, C.T., Tran, T.T. (2022). Addressing the interplay amongst university support, student experience, and university brand image at Vietnamese higher education institutions. *Problems and Perspectives in Management*, 20(2), 311-320. doi:10.21511/ppm.20(2).2022.26
- Page, M.J., Moher, D., Bossuyt, P.M., Boutron, I., Hoffmann, T.C., Mulrow, C.D., Shamseer, L., Tetzlaff, J.M., Akl, E.A., Brennan, S.E. (2021). PRISMA 2020 explanation and elaboration: updated guidance and exemplars for reporting systematic reviews, *BMJ* 372.
- Pertegal-Felices, M.L., Castejón-Costa1, J.L., Gilar-Corbí1, R., Mora-Mora, H. (2017). Emotional Intelligence Profile of High Academic Performance Students in Computer Engineering. *Journal of Education*, Vol. 197(3) 25–3.
- Peters, M., Godfrey, C., McInerney, P., Munn, Z., Trico, A., & Khalil, H. (2020). Chapter 11: Scoping Reviews. In E. Aromataris & Z. Munn (Eds.), *JBIMES Manual for Evidence Synthesis*. JBI. <https://doi.org/10.46658/JBIMES-20-12>
- Ras, F. (2013). Outstanding Students' Learning Strategies in Learning English at Riau University, Indonesia. *Asian Social Science*; Vol. 9, No. 12, 20-29.
- Shobirin, M.S.H & Safii, M. (2021). Internal and External Factors In The InformationSeeking Behavior Pattern Of The 2019 Outstanding Students In Universitas Negeri Malang (UM). *Library Philosophy and Practice (e-journal)*. 5769.
- Sibanda, L., Iwu, C.G., Benedict, O.H. (2015). Factors influencing academic performance of university students. *Demography and Social Economy*, 2015, № 2 (24). DOI: <http://dx.doi.org/10.15407/dse2015.02.103>
- Sumitro, N. E., Rismanto, R., & Prasetyo, A. (2017). Pengembangan Sistem Informasi Penentuan Mahasiswa Berprestasi Menggunakan Metode Promethee (Studi Kasus Politeknik Negeri Malang). *Jurnal Informatika Polinema*, 3(4), 54–54.
- Tricco, A.C., Lillie, E., Zarin, W., O'Brien, K.K., Colquhoun, H., Levac, D., Moher, D., Peters, M.D.J., Horsley, T., Weeks, L. (2018). PRISMA extension for scoping reviews (PRISMA ScR): checklist and explanation, *Ann. Intern. Med.* 169 (7) 467–473.
- Thaariq, Z.Z., Kuswandi, D., Diana, R.C., Shelinawat, U. (2019). Factors That Influence Outstanding Students (Mawapres) In Learning Motivation. *Jurnal Pendidikan dan Pembelajaran*, Volume 26, Issue 2, 60-65.

A scoping review protocol of outstanding students at the university JBI 2017*

By: Faizah 2022

*Peters MDJ, Godfrey C, McInerney P, Baldini Soares C, Khalil H, Parker D. Chapter 11: Scoping Reviews. In: Aromataris E, Munn Z (Editors). Joanna Briggs Institute Reviewer's Manual. The Joanna Briggs Institute, 2017. Available from <https://reviewersmanual.joannabriggs.org/>

Scoping Review Details	
Scoping Review title:	Influencing factors of the outstanding student at university: A scoping review
Review objective/s:	The objective of the review is to map and identify the available evidence to provide an overview of factors that can affect outstanding students at university. This study has been already registered with OSF and DOI number https://doi.org/10.17605/OSF.IO/WUHB7
Review question/s:	<p>Questions:</p> <ol style="list-style-type: none"> 1. What is the scope of existing research on this topic? 2. What are the influencing factors of outstanding students at university? <p>Aims:</p> <ol style="list-style-type: none"> 1. Describe the scope of existing research 2. Identify influencing factors of outstanding students at university or summarize findings
Inclusion/Exclusion Criteria	
Population	<ol style="list-style-type: none"> 1. Undergraduate students 2. An outstanding student at university (Academic or non-academic, skill or ability)
Concept	Finding factors that can influence outstanding students at university
Context	Higher education or campus or university
Types of Study	In a scoping review, the process of study selection is documented in the form of a PRISMA flow diagram. Using JBI 2017 protocol.
Study Details and Characteristics	
Extraction of data, study citation details (e.g. author/s, year of publication, The phenomenon of interest, findings, limitation/recommendation)	Using The Rayyan (https://www.rayyan.ai) to the extraction of data from each title and abstract. Subsequently, looking for the year of publication, the population studied, the phenomenon of research, main results, and recommendations for the next research. Extracted data are presented in table 1. Study overview
Database search strategy	Scopus, Web of Science, and Google Scholar databases were used for searching the literature, with the following term “An outstanding student or high performance or success student or high achievement” and “university or college or higher education” in the Indonesian language with the term “Mahasiswa berprestasi”.
Inclusion criteria	The inclusion criteria of the studies were: <ol style="list-style-type: none"> 1) the articles specifically related to an outstanding student at the university (undergraduate program), 2) original research articles (quantitative and qualitative studies) and review articles, 3) articles with full text in English or Indonesian, 4) be published from 2010 to 2022 (to earn updating phenomenon).
Details/Results extracted from study (about the concept of the scoping review)	

Summary of the result

The final search resulted in 393 items by Scopus (n=76), Web of Science (n=102), and Google Scholar (n=215). Finally, a total of 10 articles were identified for inclusion in the review (Figure 1).

These studies reported internal and or external factors to influence an existing student on high achievement at university.

1. External factors in this study reported 4 studies (Ras, 2013; Alabdulkarem, et al 2021; Hamid, et al 2022; Ayasrah, et al 2022),
2. Internal factors reported 3 studies (Thaariq, et al 2019; Pertegal-Felices, et al 2017; Sibanda, et al 2015),
3. And between two factors identified 3 studies (Shobirin & Safii, 2021; Ahmady, et al 2022; Nguyen, et al 2022).

For ten studies, eight internal and six external factors can affect them as outstanding students at university. The parental income or family finances is still debated (gap) between researchers for the finding of factors that can affect them as an outstanding student at university.
