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The Role of Positive and Negative Factors on Academic Flow in Students: A Systematic Review

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A B S T R A C T

Academic flow is a psychological condition or experience that can be felt by students, characterized by feelings of happiness and increased concentration, focus, and self-control. This study uses the Systematic Literature Review (SLR) method with the aim of conducting a literature review related to positive (supporting) and negative (inhibiting) factors of academic flow. In this systematic review, 15 journals discussing the supporting and inhibiting factors of academic flow in students were analyzed, sourced from Scopus and Publish or Perish. These findings provide insights into the factors that can either support or hinder the achievement of academic flow.

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INTRODUCTION

Academic flow is one of the psychological conditions that can occur in students. The academic flow originates from the concept of *flow* developed by Csikszentmihalyi in the 1970s. It aims to understand how people experience enjoyment while engaging in activities without receiving any external rewards for the enjoyment itself (Biasutti, 2011). Csikszentmihalyi defined *flow* as a subjective state in which an individual becomes so deeply involved in an activity that they lose awareness of time, fatigue, and everything external, except the activity itself (Csikszentmihalyi & Larson, 2014). The flow concept is further explained by Jackson and Marsh (1996; Lesmana, 2019) as a state in which individuals experience such deep enjoyment in an activity that they lose self-awareness, supported by having clear goals, an understanding of their abilities, and full concentration and control over the activity. Another explanation by Arif (2016) describes flow as a state of intense joy and satisfaction when an individual engages with a challenging task within their field, pushing them to utilize all their skills, efforts, and resources—sometimes even exceeding their limits.

According to Csikszentmihalyi and Larson (2014), there are three conditions necessary to achieve flow: First, the perceived challenge and opportunity to act must match the individual's skill level. In other words, for flow to occur, the challenge should be at a level appropriate to the individual's capacity; if the challenge exceeds their skills, it may lead to anxiety or boredom. Therefore, balancing challenge and personal skill is one key requirement for experiencing flow. Second, having clear goals, as flow, is more likely when activities are performed with well-defined objectives. These goals serve as a guide for behavior—third, immediate feedback related to the progress of the activity. Feedback informs the individual about their performance and helps them decide whether to adjust or maintain their current actions, reducing doubt about the next steps.

According to Csikszentmihalyi (1990; Biasutti, 2011), there are nine characteristics of flow, namely, first, the balance between challenges and skills, where flow is controlled by the ability to balance between challenges and self-skills; second, action and awareness must go hand in hand, where there needs to be a combination of action and awareness so that concentration and performance increase. Maintaining the relationship between the body (action) and mind (awareness) is the best way to achieve flow because it must remain focused and entirely in control of what is done; third, clear goals and precise concepts related to what to do next; fourth, namely clear feedback, which feedback is used to control the development of activities and achievement of goals so that it can enable the fulfillment of predetermined goals; fifth, namely concentration on the task because when reaching flow all attention will be focused on aspects relevant to the task and eliminate all distractions from consciousness.

Sixth is self-control, where when reaching flow, there is no worry about failure and loss of control because of full involvement in the activity. The feeling of complete control over the demands of the activity is also accompanied by no effort to return to consciousness from the activity that is full of focus; seventh, loss of consciousness, where when reaching flow, all focus will be on the activity

so that it is difficult to return to consciousness of oneself; eighth, a sense of not being disturbed by time, where people in a state of flow do not realize that time has passed when involved in an activity; ninth, an autotelic experience that describes the existence of internal drive and strong motivation due to curiosity, so that when in a state of flow will automatically do activities with encouragement from within.

LITERATURE REVIEW

Flow experiences are rare in everyday life but can occur in various aspects, such as work, learning, or religious practices (Csikszentmihalyi & Larson, 2014). One example of flow in daily life is in academic activities, known as academic flow. Elliot and Dweck (2005; Jannah, 2020) define academic flow as students' full engagement in academic activities to the point where they lose track of time and fatigue, with the activity being the sole focus of their mind. Another definition states that academic flow is a psychological experience in students characterized by happiness, increased concentration, focus, and self-control (Csikszentmihalyi, 2015; Ramadan, 2024). Seligman (2018; Ramadan, 2024) also describes academic flow as part of the positive emotions experienced by individuals during academic activities, marked by joy, enthusiasm, and full awareness.

Generally, the factors influencing academic flow are divided into two main categories: individual (internal) and environmental (external) factors. Internal factors include physical and psychological aspects. In terms of physical condition, good health, strength, and stamina are important because achieving flow requires significant energy to engage in academic tasks (Csikszentmihalyi & Larson, 2014; Baumann & Scheffer, 2011; Aini & Fahriza, 2020). Flow is unlikely to occur if the body cannot endure or is easily fatigued. Psychologically, mentally healthy individuals tend to concentrate better and are less distracted by external concerns, thus more capable of reaching academic flow (ibid.). External factors include learning environment, teaching methods, and social context, all of which can influence the emergence of flow in academic settings. Nevertheless, internal and external factors can either support or hinder the achievement of academic flow.

Students at various levels and types of education can experience academic flow. Students are defined as individuals with the potential to grow and who continue to develop through the educational process (Ramli, 2015). Students may have already experienced academic flow in the learning process, making it an important experience. Research by Shernoff, Csikszentmihalyi, and Schneider (1997; Ramadan, 2024) found that students who experience academic flow tend to enjoy participating in learning, show academic improvement, are highly motivated when facing challenging tasks, and display greater learning motivation. Therefore, academic flow is considered a crucial factor; when students reach this state, they are more likely to feel comfortable, focused, and committed to learning and completing academic tasks. Thus, this systematic review aims to identify the positive factors that support the achievement of

academic flow and the negative factors that hinder it in students across all educational levels.

METHODOLOGY

In writing this systematic review, the author first creates a systematic review research question using the SPIDER formulation (Sample, Phenomenon of Interest, Design, Evaluation, Research Type). The research question of this systematic review is: What are the supporting (positive) and inhibiting (negative) factors that are internal or external in achieving academic flow in students at various levels of education? Furthermore, the author determines the keywords or terms to use in searching the database with the keywords used, including academic flow, flow in academic, flow academic, student flow, and flow in learning. Furthermore, the author uses some of these keywords to search the database using Scopus and Publish or Perish.

After conducting a search, the author downloaded all the journals and checked them using Rayyan. Journals with appropriate titles and abstracts will be rechecked as a whole, after which out of 354 journals found, only 15 discuss positive and negative factors that influence academic flow in students. The journal selection flow chart can be seen in Figure 1. The limitations used in this systematic review are (1) journals that discuss positive and negative factors in influencing academic flow; (2) research subjects are students at various levels of education; (3) journals used are English-language journals; (4) types of research in non-experimental quantitative journals; (5) research journals are in the last 10 years, namely from 2015 to 2025. Then, journals that are not included in the criteria are (1) journals that do not discuss positive and negative factors that influence academic flow; (2) journals that use experimental methods to test how much influence they have on academic flow (3) journal articles in the form of reviews, books, literature reviews, meta-analyses, or research using experimental methods.

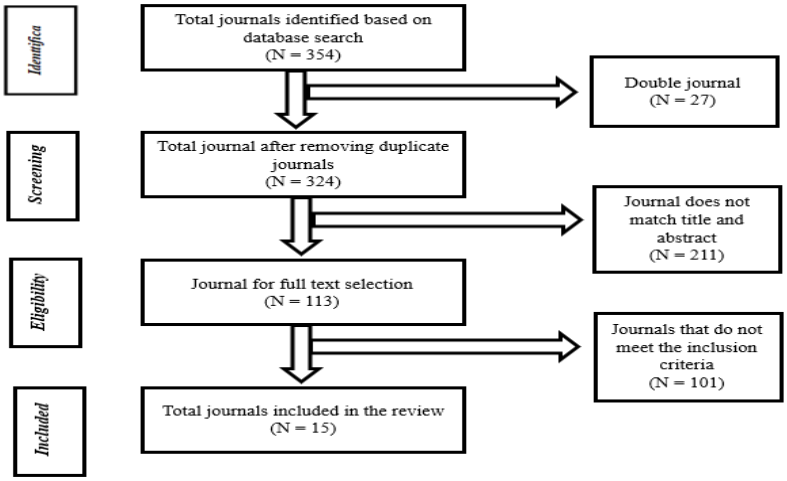

Figure 1. Flow diagram of the article selection process for the Systematic Literature Review stages

RESULTS AND DISCUSSION

Academic flow is a psychological condition or experience that can be experienced by students marked by feelings of happiness and increased concentration, focus, and self-control. In order to achieve the experience of academic flow in students, supporting factors are needed that come from internal or external students. However, it is not uncommon for academic flow to be hampered when factors cannot achieve it. According to in this systematic review, there are positive (supporting) factors and negative (inhibiting) factors in academic flow in students.

Thus, based on the results of the analysis, it was found that in the positive factors, many internal factors were found from students, where internal factors on academic flow have a considerable influence, considering that the academic flow experience is an individual experience that only focuses on oneself and ignores other circumstances outside of that. Based on consistent findings from Csikszentmihalyi's research (2021; Putri et al., 2023), intrinsic factors are the main drivers of student involvement in learning activities, so they tend to be more able to achieve academic flow. This statement is then supported by research conducted by Rahardjo (2022; Putri et al., 2023) that students who have intrinsic motivation will experience deeper academic flow, where students will feel a strong connection with the lesson, have goals and interests in the lesson, and have a high tendency to be involved in learning. Then, external positive factors come from social support from teachers and peers. Social support is important in achieving academic flow because it can motivate students to learn. Because the social support received by students is in the form of instrumental support, support for appreciation, emotional support, and informative support from teachers or other students (Apriani & Nastiti, 2023). However, if there is low social support, it will be increasingly complex for students to achieve academic flow because it affects the lack of student motivation to learn.

Furthermore, the negative factors were primarily due to low positive or internal factors. In contrast, others found that online learning methods, academic stress, burnout, procrastination, and negative emotions were obstacles to achieving academic flow in students. The disturbance most felt by students was due to online learning, which triggered other problems such as academic stress, burnout, procrastination, and negative emotions. Research conducted by Wijaya et al. (2023; and Putri et al., 2023) found that excessive use of digital devices in the learning process can interfere with students' concentration, making it difficult to achieve an academic flow experience. The use of digital can interfere with concentration, break focus, and hinder the in-depth learning process. The study shows that interference from digital use can trigger stress and confusion in students, which results in a loss of focus and attention of students to learning and reduces students' interest and effectiveness in the learning process (ibid.).

The explanation of the positive (supporting) factors and negative (inhibiting) factors of academic flow in students is shown in the table below.

Table 1. Research Results on Systematic Literature Review (SLR): Positive and Negative Factors Affecting Academic Flow in Students

No	Writer	Subject	Positive Factors	Negative Factors	Results
1	Suryaratri, et al (2022)	400 students (135 males and 265 females)	Social support and academic self-efficacy	Fear, anxiety, and stress during online learning	Positive and significant influence of social support and academic self-efficacy on the academic flow of students who carry out distance learning activities.
2	Novitasar, et al (2020)	271 students	Social support and commitment to tasks	Lack of peer support leads to lack of commitment to tasks	Social support and commitment to the task effectively contribute to achieving academic flow experiences.
3	Ljubin-Golub, et al (2020)	213 students (149 female and 63 male) and one subject without gender information	- Teacher autonomy support for student motivation - Independent learning motivation	Burnout in students	The results of the study show that teachers need to support students' need for independence and facilitate students' academic flow with the aim of preventing burnout in students.

4	Mao et al. (2020)	590 students	Self-esteem and academic self-efficacy	Anxiety in learning	The results show that anxiety hurts academic flow. Self-esteem and academic self-efficacy can reduce anxiety and develop psychological sustainability and resilience, including academic flow in students.
5	Ljubin-Golub, et al (2018)	288 students	- Adaptive perfectionism - Cognitive and behavioral engagement	- Maladaptive perfectionism - Negative emotional involvement (anxiety)	The results of the study showed that high adaptive perfectionism has a positive relationship with academic flow mediated by high behavioral and cognitive involvement. While maladaptive perfectionism has a negative relationship with academic flow

					mediated by negative emotional involvement (anxiety).
6	Alp & Sungur (2017)	117 students (54 males and 63 females)	Academic achievement	Academic procrastination behavior	The study's results showed that procrastination has a negative relationship with academic flow, namely concentration on the task at hand. Academic achievement has a positive relationship with the academic flow, namely the balance between challenges and skills.
7	Jamilah & Raharjo (2023)	100 students (50 male and 50 female)	Achievement motivation	Academic stress	The results show that achievement motivation in students has a positive influence on academic flow. Academic stress in students has a negative influence on academic flow.

8	Yusro & Khotimah (2023)	210 Vocational High School students (SMK)	- Self-regulated learning - Commitment to academic tasks	Low self-regulated learning and commitment to academic tasks	The research results show that the higher the self-regulated learning, the higher the academic flow.
9	Akyol & Kabasakal (2023)	893 students (grade 9 junior high school students and grades 10 to 12 senior high school students), consisting of 328 male students and 565 female students.	- Academic self-efficacy - Self-regulation - School engagement	Low academic self-efficacy and self-regulated learning impact students' lack of involvement in school.	The results show that there is a positive relationship between academic self-efficacy and self-regulation on academic flow. Then academic engagement is strongly correlated with academic flow. However, there is no relationship between academic flow and gender differences.
10	Ljubin-Golub (2021)	113 students majoring in mathematics	- Achievement goal - Motivation regulation	- Avoidance of academic tasks	It was found that the use of achievement goals in academics was able to predict the

					presence of academic flow. In addition, self-regulation motivation strategies were able to facilitate the presence of academic flow experiences in students.
11	Pantu (2021)	296 students who participated in online learning	- High levels of academic self-efficacy	- Low academic self-efficacy	The results of the study showed that there was a significant positive influence of academic self-efficacy on academic self-efficacy during online learning.
12	Nur'aeni & Azzahra (2021)	127 high school students (Islamic boarding school) with 56 students in grade 10, 41 students in grade 11, and 30 students in grade 12	- Student engagement	- Lack of student involvement in learning (lack of self-motivation)	The study's results showed a positive relationship between student engagement and the achievement of academic flow in students. In addition, not all students can achieve academic

					flow due to a lack of motivation from within themselves, so students need to have student engagement. The study's results also showed that students who attend schools with a boarding school system can still achieve academic flow experiences.
13	Budiani et al., (2021)	176 5th semester students of the Faculty of Psychology, University of Surabaya	Peer social support	Academic stress	The results of the study showed a negative correlation between academic stress and academic flow. While peer social support has a positive correlation with academic flow.
14	Chasanah & Pratisti (2024)	250 practical students of Muhammadiyah University of Surakarta	Self-regulated learning	Academic stress	The results of the study showed that there was a significant positive

					relationship between self-regulated learning and academic flow. While academic stress had a significant negative relationship with academic flow.
15	Ningtyas & Nastiti (2022)	174 students of Muhammadiyah 8 Middle School, Tanggulangin, Sidoarjo	Achievement motivation	A lack of enthusiasm among students for academic activities can reduce their motivation to achieve.	The results of the study showed a positive relationship between achievement motivation and academic flow in students.

Based on table 1 shows that there are various positive (supporting) and negative (inhibiting) factors in achieving academic flow experience in students at various levels and types of education. However, students recorded from the results of the systematic review were mainly junior high school (SMP) students, senior high school (SMA) students, and college students, while for students from the elementary school (SD) level, it was not found. Some positive (supporting) factors of academic flow in students from the results of the systematic review are: 1) social support from teachers or peers; 2) self-efficacy or academic self-efficacy; 3) self-esteem; 4) academic achievement and achievement goal; 5) achievement motivation, independent learning motivation, and motivation regulation; 6) self-regulated learning or self-regulation; 7) school engagement or student engagement; 8) commitment to tasks; 9) adaptive perfectionism; 10) cognitive and behavioral abilities. Meanwhile, the negative factors (inhibitors) of academic flow are: 1) fear, anxiety, and stress of online learning; 2) low social support from friends or teachers; 3) burnout; 4) learning anxiety; 5) academic procrastination; 6) academic stress; 7) low self-regulated learning; 8) low self-efficacy; 9) low academic engagement; 10) low motivation towards academics; 11) negative emotions.

The findings of the positive (supporting) factors for achieving academic flow are mostly related to the psychological conditions and characteristics of students,

adaptive learning strategies, and social support. Psychological conditions and characteristics such as self-efficacy, self-esteem, and achievement motivation encourage students to have self-confidence and be motivated to face various forms of academic challenges. In addition, the adaptive perfectionism of students in the learning process, which, if managed and used correctly, will encourage increased academic performance without excessive pressure. Then, related learning strategies, including the existence of clear achievement goals and student involvement in every school activity (school or student engagement), support the creation of full concentration and deep involvement from students, which are two important components of achieving academic flow (Dewi et al., 2024). The ability to regulate oneself in learning (self-regulated learning) and commitment to tasks are also important determinants of achieving academic flow because students can actively manage their learning independently, overcome obstacles, and maintain focus (ibid.).

Furthermore, the findings of the most dominant negative factors (inhibitors) in achieving academic flow are anxiety and stress, especially related to online learning. Based on journal analysis, this is exacerbated by low social support which causes students to be less motivated in academics, thus inhibiting the achievement of academic flow. Then, there are psychological problems such as burnout, negative emotions, and low self-efficacy which are also obstacles in achieving academic flow. Furthermore, not only psychological conditions but also negative behaviors in learning, such as academic procrastination and low learning motivation, are also the causes of decreased involvement and learning satisfaction in students. If we look at several journals that have been analyzed, it can be seen that there are several positive factors (supporters) that can turn into negative factors (inhibitors) when students are in a non-optimal condition in the academic activity process, such as low self-regulation and academic involvement.

CONCLUSIONS AND RECOMMENDATION

Academic flow is one of the academic experiences that can be achieved by students because, with the academic flow experience, students will gain meaningful academic experience because they are able to pass each academic challenge well. However, to achieve this experience, there needs to be factors that support the achievement of academic flow. Based on a systematic review of 15 journals, 12 journals explain that supporting factors from within students play an important role in achieving academic flow in students at various levels and types of education. While external supporting factors are only mentioned in three journals. Then, for the inhibiting factors in achieving academic flow, most are influenced by the low or lack of internal supporting factors from students. Another inhibiting factor for academic flow is that the learning model affects the poor psychological condition and performance of students so that they cannot achieve academic flow during the learning process.

FURTHER STUDY

This study still has limitations so that further research is still needed on the topic "The Role of Positive and Negative Factors on Academic Flow in Students: A Systematic Review".

REFERENCES

Aini, N. Q., & Fahriza, I. (2020). Flow akademik pada pendidikan. *Jurnal Dinamika Pendidikan*, *13*(3),369-376. https://doi.org/10.51212/jdp.v13i3.1633.

Akyol, M. E., & Kabasakal, H. Z. (2023). Examining Academic Flow Levels of High School Students According to Different Variables. *ISPEC International Journal of Social Sciences & Humanities*, *7*(2), 348-362. https://doi.org/10.5281/zenodo.7986534.

Alp, A., & Sungur, S. (2017). Investigating relationships between undergraduate students' flow experience, academic procrastination behavior, and calculus course achievement. *Eurasian Journal of Educational Research*, *17*(72), 1-22. https://dergipark.org.tr/en/pub/ejer/issue/42492/511820.

Apriani, F. E., & Nastiti, D. (2023). Hubungan antara dukungan sosial dengan flow akademik pasca pandemi covid 19 pada siswa sma. *HELPER: Jurnal Bimbingan dan Konseling*, *40*(2), 100-114. https://doi.org/10.36456/helper.vol40.no2.a7976.

Arif, I. S. (2016). *Psikologi positif: pendekatan saintifik menuju kebahagiaan*. PT Gramedia Pustaka Utama: Jakarta.

Azzahra, R. (2021). Student engagement and academic flow on students at boarding school. *Education, Sustainability & Society (ESS)*, *4*(2), 58–61. 10.26480/ess.02.2021.58.6.

Biasutti, M. (2011). Flow and optimal experience. *Encyclopedia of creativity, Second Edition,* 1, 522–528. Academic Press. https://www.research.unipd.it/handle/11577/167105.

Budiani, A. H., Pandjaitan, L. N., & Yuwanto, L. (2021). Hubungan antara Stres Akademik dan Dukungan Sosial Teman dengan Flow Akademik Mahasiswa (Relationship between Academic Stress and Peer Social Support with Student Academic Flow). *Jurnal Ilmiah Psikologi Mind Set*, *12*(2), 65-77. https://repository.ubaya.ac.id/42272/.

Chasanah, L. R. D., & Pratisti, W. D. (2024). *Hubungan Stres Akademik dan Self Regulated Learning dengan Flow Akademik pada Mahasiswa Praktikum Universitas Muhammadiyah Surakarta* (Doctoral dissertation, Universitas Muhammadiyah Surakarta). https://eprints.ums.ac.id/124603/2/naspub%20liya%20UP.pdf.

Csikszentmihalyi, M., & Larson, R. (2014). *Flow and the foundations of positive psychology*. [Ebook]. Dordrecht: Springer. https://link.springer.com/content/pdf/10.1007/978-94-017-9088-8.pdf.

Dewi, P. E. S., Mertasari, N. M. S., & Ratnaya, I. G. (2024). Self-Regulation, Achievement Motivation, and Academic Flow on High School Physics Learning Achievement. *Jurnal Imiah Pendidikan dan Pembelajaran*, *8*(3), 538-546.

Jamilah, Z. N. H., & Raharjo, T. (2023). Achievement Motivation, Academic Stress, and Academic Flow: A Correlation Study on Santri. *ANFUSINA: Journal of Psychology*, *6*(1), 1-12. https://dx.doi.org/10.24042/ajp.v6i1.16437.

Jannah, E. R. (2020). Analisis Korelasi Self Efficacy dan Flow Akademik dengan Prestasi Belajar Pendidikan Agama Islam di Sekolah Menengah Kejuruan YPM (Yayasan Pendidikan Maarif) 5 Sukodono Sidoarjo. *Intelektual: Jurnal Pendidikan dan Studi Keislaman*, *10*(1), 17-26. https://doi.org/10.33367/ji.v10i1.1088.

Lesmana, T. (2019). Hubungan antara academic self-concept dan academic self-efficacy dengan flow pada mahasiswa Universitas X. *Jurnal Psikologi Ulayat*, *6*(2), 117-134. https://doi.org/10.24854/jpu90.

Ljubin-Golub, T. (2021). The role of achievement goals in motivational regulation and flow in learning. *Psychological applications and trends*, 177-181. DOI: 10.36315/2021inpact037.

Ljubin-Golub, T., Rijavec, M., & Jurčec, L. (2018). Flow in the academic domain: The role of perfectionism and engagement. *The Asia-Pacific Education Researcher*, *27*, 99-107. https://doi.org/10.1007/s40299-018-0369-2.

Ljubin-Golub, T., Rijavec, M., & Olčar, D. (2020). Student flow and burnout: The role of teacher autonomy support and student autonomous motivation. *Psychological studies*, *65*(2), 145-156. https://doi.org/10.1007/s12646-019-00539-6.

Mao, Y., Yang, R., Bonaiuto, M., Ma, J., & Harmat, L. (2020). Can flow alleviate anxiety? The roles of academic self-efficacy and self-esteem in building psychological sustainability and resilience. *Sustainability*, *12*(7), 2987. https://doi.org/10.3390/su12072987.

Ningtyas, W. D., & Nastiti, D. (2022). The Relationship Between Achievement Motivation and Academic Flow in Middle School Students of Muhammadiyah 8 Tanggulangin Sidoarjo during the Covid-19 Pandemic. *Journal of Islamic and Muhammadiyah Studies*, *2*, 10–21070. https://doi.org/10.21070/jims.v2i0.1541.

Novitasari, K. T., Hidayati, F., & Setyowati, R. (2020). Relationship between social support and commitment to the task with academic flow to

students. *Jurnal Psikologi Pendidikan & Konseling Vol*, *6*(1). https://core.ac.uk/download/pdf/350040959.pdf.

Pantu, E. A. (2021). Online learning: the role of academic self-efficacy in creating academic flow. *Psychological Research and Intervention*, *4*(1), 1-8.

Putri, R. N., Efandi, S., Khairunisa, D., Rahman, A., & Wahyuni, R. (2023). Melacak Keberhasilan dan Tantangan dalam Mencapai Flow Akademik: Sebuah Tinjauan Komprehensif. *Behavioral Science Journal*, *1*(2), 10-18. https://jurnal.syedzasaintika.ac.id/index.php/06/article/view/2198/0.

Ramadan, R. (2024). Hubungan antara Self Efficacy dengan Flow Academic terhadap Mata Pelajaran Matematika Siswa Kelas XII SMA Adabiah 2 Kota Padang. *YASIN: Jurnal Pendidikan dan Sosial Budaya,* 4(6), 1232-1245. https://doi.org/10.58578/yasin.v4i6.3970.

Suryaratri, R. D., Komalasari, G., & Medellu, G. I. (2022). The Role of Academic Self-Efficacy and Social Support in Achieving Academic Flow in Online Learning. *International Journal of Technology in Education and Science*, *6*(1), 164-177. https://eric.ed.gov/?id=EJ1334735.

Yusro, M., & Khotimah, S. K. (2023, October). Academic Flow of Vocational Students: The Role of Self-Regulated Learning and Task Commitment. In *International Conference on Sustainable Health Promotion* (Vol. 3, No. 1, pp. 121-126).