

The Effect of Self-Regulation on Strategic Thinking Ability

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Abstract

This study aims to analyze the relationship between self-regulation and strategic thinking skills in students, especially in the context of decision-making in a dynamic educational environment. The background of this research departs from the need to understand the psychological factors that influence strategic thinking processes, which are increasingly important in facing complex challenges in various fields, including business and education and to prepare students as future leaders. Self-regulation, which involves an individual's ability to control emotions, behaviours, and thoughts, is believed to play a significant role in shaping effective strategic thinking skills. The research method used was a quantitative method with a sample of 238 respondents consisting of final-year students. The sampling technique was purposive random sampling. The variables involved in this study are self-regulation as an independent variable and strategic thinking ability as a dependent variable. The instrument used is a structured questionnaire that measures the two variables using a 5-point Likert scale. The results showed that there was a significant positive relationship between self-regulation and strategic thinking skills. Individuals with a high level of self-regulation tend to be more able to think strategically, show better analytical skills, and be more adaptive in dealing with changing situations. The development of self-regulation can be a key factor in improving strategic thinking skills, which are relevant in a variety of professional and academic contexts.

Keywords: Self-Regulation; Strategic Thinking; Decision-Making; Adaptation

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INTRODUCTION

In the midst of increasingly complex global challenges, strategic thinking skills are one of the important skills that must be developed, especially in preparing the younger generation as future leaders (Hidayat, 2021; Karagianni & Montgomery, 2018; Mahmudin, 2023). Strategic thinking is not only related to the ability to analyze problems in depth but also the

ability to see long-term opportunities and design effective solutions (Elsbach & Stigliani, 2018; McMillan & Overall, 2016; Mintrom & Luetjens, 2016). In the context of students, this ability is becoming increasingly crucial because they are future leaders who will play an important role in determining the direction of national development in the future.

Strategic thinking is a cognitive process that involves the ability to anticipate threats, explore opportunities, consider various alternative actions, and make decisions that result in a long-term competitive advantage (Comins, 2018; Ndei & Kinyua, 2024; Shaik & Dhir, 2020). Previous research has highlighted that strategic thinking skills are not only influenced by intellectual factors but also involve psychological factors, one of which is self-regulation ability. Previous research has highlighted that strategic thinking skills are not only influenced by intellectual factors but also involve psychological factors, one of which is self-regulation ability (Sabilla, 2021; Morin & Herman, 2022). Self-regulation includes a person's ability to control emotions, behaviours, and thoughts in dealing with various situations. This ability helps students stay focused on long-term goals and make wise decisions, especially in the context of leadership (Bjerke, 2024; Duckworth et al., 2016; Napiersky & Woods, 2018).

Previous research has shown that self-regulation, especially in terms of emotion regulation, plays an important role in improving the quality of strategic thinking. Emotion regulation strategies, such as situation modification, distraction, cognitive reassessment, and emotional suppression, can help a person stay calm in challenging emotional situations, thereby improving the quality of decision-making (Poernomo, 2020; Saptoto et al., 2024). This is in line with the findings, which show that individuals with good self-regulation skills tend to have better strategic thinking skills. They are better able to see the big picture, process information effectively, and control impulses and emotions that can hinder rational decision-making.

Although a lot of research on self-regulation and decision-making has been done (Billieux, 2012; Cameron et al., 2017), the specific relationship between self-regulation and strategic thinking skills has not been explored in depth. Most previous studies have focused on organizational and leadership contexts, such as those researched by Pisapia et al. (2015) regarding organizational leaders, while studies highlighting the role of self-regulation in individuals outside of professional contexts are still limited. In addition, research on strategic thinking in students as future leaders has not been studied comprehensively.

This research aims to fill this gap by exploring the influence of self-regulation on strategic thinking skills, especially among students. This study is important because strategic thinking not only supports students' academic performance but also prepares them to become leaders capable of facing future challenges and dynamics. By understanding the mechanism of how self-regulation affects strategic thinking skills, this research is expected to make a significant contribution to the development of learning and training programs, both in the context of formal and non-formal education.

METHOD

Design

This study uses a quantitative approach with statistical procedures as the basis for data analysis. The methods used include descriptive statistics to describe the data and inferential statistics to make predictions. Descriptive statistics will include mean value distributions, standard deviations, and data tabulations, while inferential statistics use multiple regression analysis because it involves more than one predictor.

Participants

This research was carried out using samples taken from various private universities in several cities in Indonesia, namely at Universitas Nurtanio Bandung, Universitas Marsekal Suryadarma Jakarta, Politeknik Kesehatan TNI AU Adisutjipto Yogyakarta, Politeknik Kesehatan Ciumbuleuit Bandung, from August 2022 to January 2023. The subject of the study is students who serve in student organizations at the university. Data collection was carried out using a questionnaire method, which was designed to measure strategic leadership variables, personality traits, self-regulation, and organizational factors relevant to this study.

Instruments

A partial correlation analysis and t-test will also be used to enrich the results of the study. However, for practical reasons, only the results of research related to self-regulation and the quality of strategic thinking skills will be reported as the focus of the analysis in this study.

Analysis

Data analysis will be carried out using SPSS version 26 software. The results obtained from the statistical methods used will provide a comprehensive picture of the relationship between the variables studied so that they can be used to make predictions and test hypotheses that have been proposed in research.

RESULT AND DISCUSSION

Based on the results of the research, the quality of strategic thinking of S1 students is considered high in three main dimensions, namely Strategic Vision, Strategic Orientation, and Strategic Implementation. Overall, students showed good ability in formulating, directing, and implementing strategies in the context of student organizations, with an average score of 3.94. In the Strategic Vision dimension, which includes the ability to anticipate change, identify opportunities, and formulate innovative strategies, students get an average score of 3.94. This shows that students are able to have a clear vision regarding change and opportunities for self-development, as well as understand the consequences of every decision they make.

Furthermore, in the Strategic Orientation dimension, which involves aligning activities with the organization's vision and exploring opportunities to contribute to organizational goals, students obtained an average score of 3.96. They demonstrate a high ability to align organizational activities with a long-term vision and maximize the use of existing resources. Meanwhile, in the Strategic Implementation dimension, which includes strategy implementation and stakeholder engagement, the average score is 3.91. This shows that students have good abilities in ensuring strategy implementation, monitoring program implementation, and supporting organizational success by providing the necessary resources and appropriate rewards.

In terms of validity, all indicators in the three dimensions of strategic thinking were declared valid with a value of > 0.196 . The reliability of the measurement instrument is also very high, with a Cronbach's Alpha of 0.956, indicating the consistency and reliability of the measurement results. The normality test showed a normal distribution of data with a significance value of 0.071 (> 0.05). In addition, there were no multicollinearity issues in the data, indicated by a Tolerance value of > 0.10 and a VIF < 10 . The heteroscedasticity

test also showed that all variables had a significance value of > 0.05 , which indicates that the regression model is free from heteroscedasticity problems.

Overall, the results of this study show that S1 students have high strategic thinking skills. They are able to formulate a vision, direct organizational activities well, and ensure that the implementation of strategies runs optimally. With a valid and reliable measurement instrument, this study provides a strong picture of the quality of strategic thinking of S1 students.

From the results of the research provided, self-regulation and personality have a strong relationship with strategic thinking skills, especially through aspects of self-control and responsibility. Self-regulation and strategic thinking skills are closely interrelated. The ability to delay gratifications with an average of 4.24 and manage emotions with an average of 4.09 indicates that individuals with good self-regulation are able to maintain emotional balance and make long-term decisions, even under pressure. In addition, the ability to set and pursue goals with an average of 3.92 shows that individuals who are able to manage themselves tend to be more focused and motivated in formulating and achieving the set strategy.

Personality also plays an important role in strategic thinking. Awareness of responsibility, with an average of 3.56, is related to discipline, where responsible and reliable people are better able to formulate structured strategies and follow plans consistently. Openness to new experiences, which has an average of 3.65, reflects the importance of flexibility in strategic thinking, where open individuals tend to be more innovative and bold in exploring new solutions.

Effective self-regulation, especially in terms of the ability to control emotions, postpone momentary gratification, and stay focused on goals, is an important foundation in the development of strategic thinking skills. With good self-regulation, individuals are able to face difficult situations without losing their way, as well as make wiser and more measurable decisions in the long run. In addition, a disciplined personality, character, and openness to new experiences contribute to formulating more innovative and adaptive strategies. Those who have a high sense of responsibility and a tendency to think creatively are usually more successful in strategic thinking because they are able to combine the elements of perseverance and flexibility. The combination of self-control, discipline, and openness to new ideas allows individuals to develop strategies that are not only effective but also responsive to changes in the environment and existing challenges.

The results of this study show that self-regulation has a significant effect on strategic thinking skills, supporting previous research that states that individuals with good self-regulation are able to control their emotions and behaviour so that they can think more clearly and strategically (Hardyanti, 2020; Wulandari, 2016). Students who have a good level of self-regulation tend to be better able to plan long-term actions, consider alternative solutions, and make rational decisions, all of which are important elements of strategic thinking (Boureau et al., 2015; Christakou, 2014; Duckworth et al., 2016)

Self-regulation in this context includes the ability to control emotions in the face of academic and social pressures, which allows students to stay focused on long-term goals (Kristiyani, 2016; Meizayani et al., 2021; Wijaya et al., 2022). The ability to postpone gratifications and set priorities also supports better and more rational decision-making in the long run. This is in line with the findings of Hardyanti (2020) and Yoduke et al. (2023), which emphasize the importance of regulating emotions in stressful situations to improve strategic thinking skills.

Student involvement in organizations has also been proven to play a role in improving strategic thinking skills. Organizational experience provides students with the opportunity to engage in complex and collaborative decision-making processes involving situational analysis and strategic planning. This reinforces previous research showing that involvement in organizations can help students develop strategic thinking and leadership skills (Haksanggulawan et al., 2023; Hasanah et al., 2023).

Overall, this study makes an important contribution to the literature on the influence of self-regulation on strategic thinking, especially in the context of students. However, this study also has limitations, such as limitations on samples that only come from universities in Indonesia, so generalizing the results needs to be done carefully. Further research may further explore how other factors, such as leadership style or educational environment, affect the relationship between self-regulation and strategic thinking.

This study found that self-regulation has a significant influence on students' strategic thinking skills. Aspects of emotional, cognitive, and behavioural regulation all contribute to improving the quality of strategic thinking. In addition, involvement in organizational activities also enhances students' strategic thinking skills. This result emphasizes the importance of developing self-regulation and managerial experience in order to prepare students as prospective leaders who are able to think strategically in the long term.

CONCLUSION

The study reveals that S1 students exhibit a high level of strategic thinking, averaging 3.94 across three key dimensions: Strategic Vision, Strategic Orientation, and Strategic Implementation. Their ability to anticipate change, identify opportunities, formulate innovative strategies, and align activities with long-term goals is significantly influenced by strong self-regulation, which averages 3.68. This high self-regulation enables students to delay gratification, manage emotions, and maintain focus under pressure, reinforcing their strategic thinking skills. The study further highlights the validity and reliability of the measurement instrument (Cronbach's Alpha = 0.956) and the robustness of the regression model. Additionally, participation in student organizations positively contributes to the development of strategic thinking through decision-making and leadership experiences. These findings emphasize the crucial role of self-regulation and organizational involvement in preparing students to become future leaders capable of navigating academic, social, and professional challenges with a strategic mindset.

REFERENCES

- 'Aidah, S., & Fahmi, M. N. (2024). Peran Suami Perfeksionisme Dalam Meningkatkan Resiliensi Keluarga: Sebuah Tinjauan Literatur. *Usrah: Jurnal Hukum Keluarga Islam*, 5(1), 75–88. <https://doi.org/10.46773/usrah.v5i1.1299>
- Billieux, J. (2012). Problematic Use of the Internet and Self-Regulation: A Review of the Initial Studies. *The Open Addiction Journal*, 5(1), 24–29. <https://doi.org/10.2174/1874941001205010024>
- Bjerke, R. (2024). The Multiple Advantages of Self-Leadership in Higher Education: The Role of Health-Promoting Self-Leadership among Executive MBA Students. *Administrative Sciences*, 14(9), 211. <https://doi.org/10.3390/admsci14090211>
- Boureau, Y.-L., Sokol-Hessner, P., D, N., & Daw. (2015). Deciding How To Decide: Self-

- Control and Meta-Decision Making. *Trends in Cognitive Sciences*, 19(11).
[https://www.cell.com/trends/cognitive-sciences/abstract/S1364-6613\(15\)00204-1](https://www.cell.com/trends/cognitive-sciences/abstract/S1364-6613(15)00204-1)
- Cameron, L. D., Biesecker, B. B., Peters, E., Taber, J. M., & Klein, W. M. P. (2017). Self-regulation principles underlying risk perception and decision making within the context of genomic testing. *Social and Personality Psychology Compass*, 11(5).
<https://doi.org/10.1111/spc3.12315>
- Christakou, A. (2014). Present simple and continuous: Emergence of self-regulation and contextual sophistication in adolescent decision-making. *Neuropsychologia*, 65, 302–312. <https://doi.org/10.1016/j.neuropsychologia.2014.09.008>
- Comins, J. (2018). Critical Thinking for Strategic Intelligence. *Revista de Estudios En Seguridad Internacional*, 4(1), 257–259. <https://doi.org/10.18847/1.7.15>
- Duckworth, A. L., Gendler, T. S., & Gross, J. J. (2016). Situational Strategies for Self-Control. *Perspectives on Psychological Science*, 11(1), 35–55.
<https://doi.org/10.1177/1745691615623247>
- Elsbach, K. D., & Stigliani, I. (2018). Design Thinking and Organizational Culture: A Review and Framework for Future Research. *Journal of Management*, 44(6), 2274–2306.
<https://doi.org/10.1177/0149206317744252>
- Haksanggulawan, A., Hajar, I., & Putera, A. (2023). Tinjauan Strategi Terkini dalam Manajemen Sumber Daya Manusia: Inovasi dan Tantangan di Era Digital. *Jurnal Ekonomi, Manajemen Dan Akuntansi Sekolah Tinggi Ilmu Ekonomi Enam-Enam Kendari*, 1(2), 401–407. <https://doi.org/https://doi.org/10.572349/neraca.v1i5.646>
- Hardyanti, E. (2020). Hubungan Regulasi Emosi Dengan Intensitas Nyeri Haid (Disminore) Pada Remaja. *Jurnal Kesehatan*, 3(1), 2–10.
- Hasanah, J., Zainal Alim, M., Febriansyah, V., & Isa Anshori, M. (2023). Budaya Organisasi Dan Kepemimpinan Transformasional: Sistematika Tinjauan Literatur. *Jurnal Ilmiah Dan Karya Mahasiswa*, 1(4), 248–261. <https://doi.org/10.54066/jikma-itb.v1i4.502>
- Hidayat, U. S. (2021). *Urgensi Penguatan Pendidikan Karakter Dalam Menyiapkan Generasi Emas 2045: Strategi Membangun Generasi Cerdas, Berkarakter dan Berdaya Saing di Abad 21*.
- Karagianni, D., & Jude Montgomery, A. (2018). Developing leadership skills among adolescents and young adults: a review of leadership programmes. *International Journal of Adolescence and Youth*, 23(1), 86–98.
<https://doi.org/10.1080/02673843.2017.1292928>
- Kristiyani, T. (2016). Self regulated learning konsep, implikasi, dan tantangannya bagi siswa di Indonesia. *Sanata Dharma University Press, Yogyakarta*, 262–275.
- Mahmudin, T. (2023). The Importance of Entrepreneurship Education in Preparing the Young Generation to Face Global Economic Challenges. *Journal of Contemporary Administration and Management (ADMAN)*, 1(3), 187–192.
<https://doi.org/10.61100/adman.v1i3.78>
- McMillan, C., & Overall, J. (2016). Wicked problems: turning strategic management upside down. *Journal of Business Strategy*, 37(1), 34–43. <https://doi.org/10.1108/JBS-11-2014-0129>
- Meizayani, A., Efendi, P., Idramsya, I., & Wijaya, A. (2021). *Literature Review: Efektifitas Cognitive Behavior Therapy for Insomnia (CBT-I) Terhadap Kualitas Tidur*. [http://repository.poltekkesbengkulu.ac.id/858/%0Ahttp://repository.poltekkesbengkulu.ac.id/858/1/PDF AFIFAH MEIZAYANI - SKRIPSI STR KEPERAWATAN 2021.pdf](http://repository.poltekkesbengkulu.ac.id/858/%0Ahttp://repository.poltekkesbengkulu.ac.id/858/1/PDF%20AFIFAH%20MEIZAYANI%20-%20SKRIPSI%20STR%20KEPERAWATAN%202021.pdf)
- Mintrom, M., & Luetjens, J. (2016). Design Thinking in Policymaking Processes: Opportunities and Challenges. *Australian Journal of Public Administration*, 75(3),

- 391–402. <https://doi.org/10.1111/1467-8500.12211>
- Napiersky, U., & Woods, S. A. (2018). From the workplace to the classroom: Examining the impact of self-leadership learning strategies on higher educational attainment and success. *Innovations in Education and Teaching International*, 55(4), 441–449. <https://doi.org/10.1080/14703297.2016.1263232>
- Ndei, F. M., & Kinyua, G. M. (2024). Sustainable Competitive Advantage as an Outcome of Strategic Thinking: Evidence from Review of Literature. *International Journal of Education and Research*, 12(3). [https://ir-library.ku.ac.ke/bitstream/handle/123456789/27812/Sustainable Competitive Advantage as an Outcome of Strategic...pdf?sequence=1](https://ir-library.ku.ac.ke/bitstream/handle/123456789/27812/Sustainable%20Competitive%20Advantage%20as%20an%20Outcome%20of%20Strategic...pdf?sequence=1)
- Nur Sabilla, S. (2021). Mindful Parenting pada Orangtua dengan Anak Gangguan Pemusatan Perhatian dan Hiperaktivitas (GPPH): Tinjauan Sistematis. *Psikologika: Jurnal Pemikiran Dan Penelitian Psikologi*, 26(1), 195–216. <https://doi.org/10.20885/psikologika.vol26.iss1.art10>
- Poernomo, B. (2020). Peran Perguruan Tinggi Dalam Menyiapkan Pemimpin Masa Depan menghadapi Era VUCA. *Electoral Governance Jurnal Tata Kelola Pemilu Indonesia*, 12(2), 6. <https://talenta.usu.ac.id/politeia/article/view/3955>
- Robson, D. A., Allen, M. S., & Howard, S. J. (2020). Self-Regulation in Childhood as a Predictor of Future Outcomes: A Meta-Analytic Review. *Psychological Bulletin*, 146(4), 324–354. <https://doi.org/10.1037/bul0000227>
- Saptoto, R., Asri, Y. N., & Palupi, T. N. (2024). *Soft Skill Seni Mengenal Potensi Diri*.
- Shaik, A. S., & Dhir, S. (2020). A meta-analytical review of factors affecting the strategic thinking of an organization. *Foresight*, 22(2), 144–177. <https://doi.org/10.1108/FS-08-2019-0076>
- Shelly Morin, & Tatang Herman. (2022). Systematic Literature Review : Keberagaman Cara Berpikir Siswa Dalam Pemecahan Masalah. *Jurnal Pembelajaran Matematika Inovatif (JPMI)*, 5(1), 271–286. <https://doi.org/https://doi.org/10.22460/jpmi.v5i1.p271-286>
- Wijaya, Y. A., Yudhawati, N. L. P. S., Andriana, K. R. F., & Ilmy, S. K. (2022). Classification of Nursing Theory Developed By Nursung Experts: A Literature Review. *Nursing Sains*, 23(2), 1–49.
- Wulandari, S. (2016). Hubungan antara kecerdasan emosi dengan self regulated learning pada siswa plus al-azhar Medan. *Skripsi: Universitas Medan Area*, 31. <http://hdl.handle.net/123456789/1615>
- Yoduke, F., Daulima, N. H. ., & Mustikasari, M. (2023). Strategi Koping Pada Remaja Dalam Menurunkan Gejala Kecemasan Dan Depresi : Literature Review. *Alauddin Scientific Journal of Nursing*, 4(1), 16–24. <https://doi.org/10.24252/asjn.v4i1.34251>