

STRATEGIES FOR SUCCESS: HOW LEARNING APPROACHES AFFECT ACADEMIC PERFORMANCE AMONG UNIVERSITY STUDENTS

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Article history

Received date : 15-8-2024
Revised date : 16-8-2024
Accepted date : 7-9-2024
Published date : 15-10-2024

To cite this document:

Abdullah, N., Aziz, N. A., Mohd Shukry, A. I., Mat Nawi, N. A. M., Fadzil, F. H., Arshad, I. H., & Sain, Z. H. (2024). Strategies for success: How learning approaches affect academic performance among university students. *Journal of Islamic, Social, Economics and Development (JISED)*, 9 (66), 942 – 949.

Abstract: *Learning strategies are important for students at various levels of education. This means that a student's focus change while studying for continuous assessment than when learning to pass an exam. The objective of the study is to analyses the relationship between students' academic performance and their learning strategies. A comprehensive analysis was conducted to investigate the impact of various learning strategies on students' academic achievement. The participants included a diverse sample of students from different educational levels and backgrounds. Data collection has been done through quantitative survey among university students at a renowned university in Malaysia, SPSS version 28 has been used to analyze the learning strategies and academic performance of students, which allowed for the examination of correlations and patterns in the data. The findings show a significant relationship between certain learning strategies and academic performance where students use the right strategies when studying will improve the students' academics. This study contributes to the understanding of the importance of learning strategies in optimizing students' academic success to improve the learning environment and promote better learning outcomes.*

Keywords: *Learning Strategies, Academic Performance, Student Learning*

Introduction

Education is an important driver for development through human capital accumulation (Agyei et al., 2024). To achieve quality education, student must apply adequate learning strategies to achieved good results. Social media learning strategies can be defined as a set of skills that learners choose and apply to various tasks to accomplish specific learning objectives. The strategies vary from techniques for enhanced memory to improved studying for a test (Rovers et al., 2018). Learning strategies are important for students at various levels of education. This means that a student's focus changes more while studying for continuous assessment than when learning to pass an exam.

In the current modern age, where knowledge is readily available online, not all students know how to use the strategies of learning. One of the main goals of higher learning institutions is to be the place for students to control their learning process, acquire skills and competencies they can utilize inside and outside the classroom environment, and eventually prepare them for real-life challenges. Therefore this study has been conduct to see the appropriate learning strategies used by students to enhanced their academic performance.

Literature Review

Researchers have not reached a consensus on the definition of learning strategies. Cognitive and meta-cognitive strategies were recognized in the early studies (Agyei et al., 2024). Students can store and retrieve information by using cognitive strategies, which are approaches and procedures for processing information. Planning (such as goal-setting), monitoring (such as self-evaluation), and adjustment (such as modifying learning processes) are examples of metacognitive methods. Compared to cognitive and meta-cognitive strategies, inquiry-based learning is more challenging according to Dobber et al., (2017).

Ku & Ho (2010) investigated the role of metacognitive strategies in critical thinking. The study found that high-performing critical thinkers engage in more metacognitive activities, utilizing high-level planning and evaluating strategies more frequently, indicating their significant role in effective critical thinking. The author emphasizes the importance of fostering students' metacognitive strategies in critical thinking, emphasizing the role of metacognitive knowledge in effective regulation. The study suggests educators should explicitly teach and promote metacognitive strategies to improve student's critical thinking skills.

In the other hand, Teng et al., (2021) has conducted study about the interrelationship among metacognitive strategies, language learning motivation, self-efficacy belief, and English learning achievement in the context of online or remote learning by using surveys and an English test. The data was collected from 590 Chinese university students. Three surveys were administered to assess metacognitive strategies, language learning motivation, and self- efficacy belief. An English test was used to measure English learning achievement. The data collected from these instruments were then analyzed to evaluate the interrelationship between the variables of interest. The findings of the study indicated that self-efficacy belief was a significant predictor of English learning achievement. Based on the findings, the author suggests that enhancing learners' self-efficacy belief, motivation, and metacognitive strategies can potentially improve online English learning achievement.

In Malaysia, Fadilah et al., (2022) has investigated various learning strategies among postgraduate students in a Malaysian public university and their association with academic performance by using a quantitative method to measure learning strategies. The results suggest that postgraduate students actively apply similar learning strategies as undergraduate students.

The author recommends that other components be looked at in future studies in order to investigate the connection between learning styles and other indicators of academic performance.

In another work, Gambill et al., (2008) conducted a research study about the impact of student disorganization on academic performance and the lack of direct teaching of organizational skills in schools. The research involved teachers at three public schools who analyzed the reasons behind low grades. The study found that students' lack of organization significantly impacts their academic performance, with disorganized desks, lockers, and binders causing lower grades and ineffective instruction. However, resources like binders and organizational skills improved learning, reducing homework loss, preparing students for school, and resulting in better grades. Based on the findings, the author suggested that teachers should actively teach organizational habits and skills to students, rather than assuming these skills will be acquired at home. It also stated that students' academic performance can be enhanced by instituting a controlled classroom atmosphere, making them responsible for necessary resources, and offering binders and other organizational aids.

Recent work by Martínez-Serna et al., (2024) proposed a research in examining the relationship between student academic performance and attendance at synchronous online university courses in finance. The results show that attending lessons positively influences different measures of student performance, such as the probability of taking the final exam, the probability of passing the course, and the final grade obtained. This study particularly show that class attendance also contribute to the learning strategies to perform well in class.

Svjetlana et al., (2011) examined the relationship between comprehension strategies used in different aspects of comprehension processing and their relationship with text comprehension and academic achievement. The study involved 112 undergraduate psychology students, consisting of 10 males and 102 females. The researchers analyzed the relationships between reading strategies, text comprehension, and GPA. The study found comprehension strategies grouped by text-based and situational aspects, with paraphrasing being common. Good comprehenders used more global representation strategies, while elaboration and summarizing were influential predictors. Reading comprehension mediated the effects of reading strategies on GPA, suggesting stronger reading skills positively impact academic achievement. Based on the findings, the author suggests the importance of teaching and promoting effective comprehension strategies to enhance text comprehension and improve academic achievement. Educators should focus on fostering strategies that help students build a global understanding of the text, such as elaboration and summarization.

The previous research show that various learning strategies might affect a student's academic performance. Researchers have used multiple criteria to predict the student performance (Sarker et al., 2024). Identifying an adequate learning strategies that effects academic performance has always been a challenging task. There are lack of studies conducted particularly on right strategies to improve student academic achievement. Therefore, the objectives of the study is to analyses the relationship between students' academic performance and their learning strategies among university students by addressing research gaps and following research trends.

Method & Material

This study adopts the quantitative survey questionnaire to acquire data. Questionnaires were adapted and adopted from previous research of Puteh et al., (2022) and re-written in the Google form for easy data collection. For data analysis, SPSS version 28 was used to analyze both descriptive and inferential statistics. A total of 62 data were collected and proceeded to data analysis due to its completion. Data were collected using several social media platforms such as WhatsApp, Facebook, Telegram, and X that comprises students from both public and private universities in Malaysia.

Findings

Demographic Information

Demographic information for gender, females were dominant in universities as 79% of respondents are female (49 out of 62) while males only cater to 21% (13 out of 62). For institutions, 98.39% of 61 of the respondents are from public universities while only 1.61% of 1 is from private universities. For education level, most of the respondents are currently pursuing a Bachelor's degree (69.4%, 43 out of 62), while (20.97% or 13 of them are currently doing Diploma, while only (9.68% 3 out of 62) of them are doing Foundation. Table 1 – 3 show the demographic statistics for this study.

Table 1: Gender

Male (%)	Female (%)
21	79

Table 2: Institutions

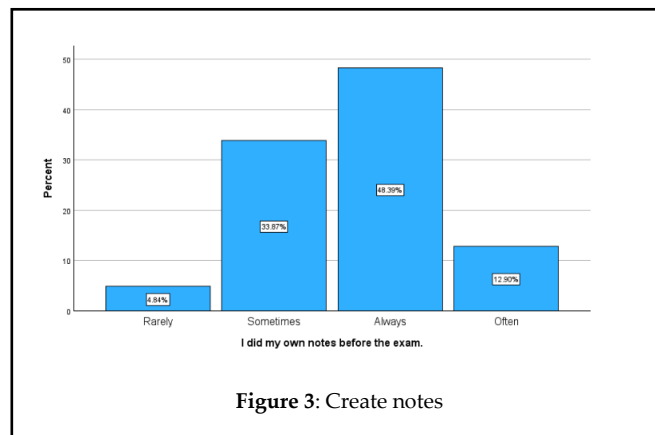
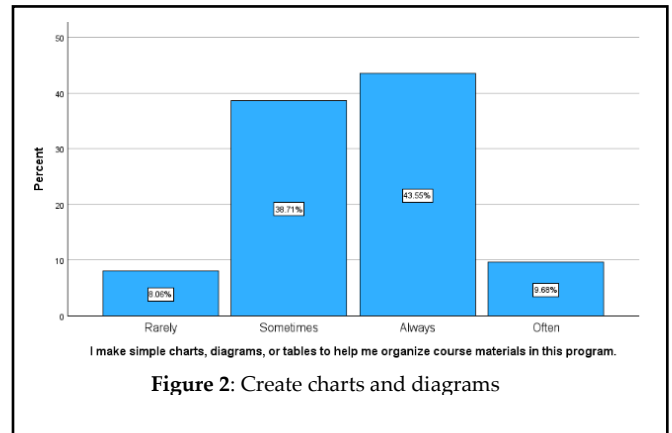
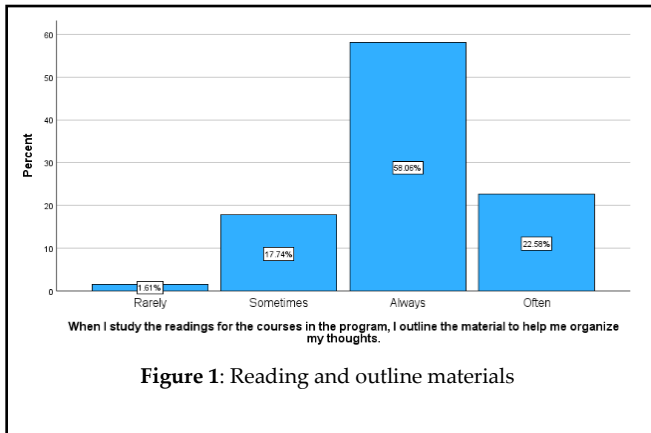
Public Universities (%)	Private Universities (%)
98.39	1.61

Table 3: Education Level

Education Level	Percentage (%)
Diploma	20.97
Degree	69.4
Master	9.68

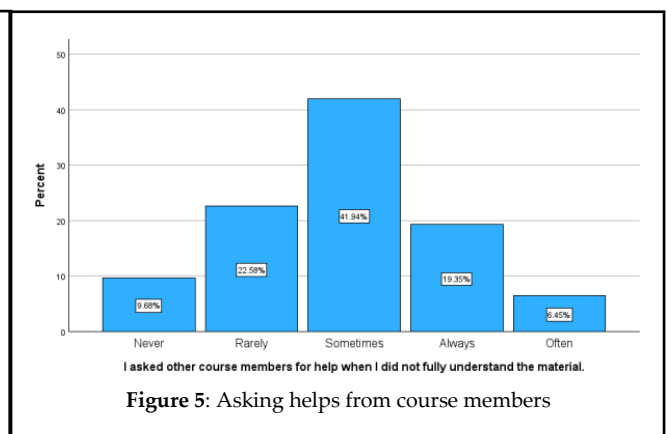
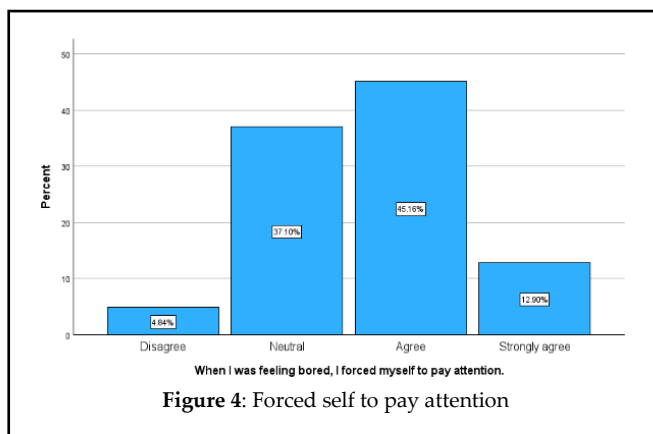
Student learning strategies

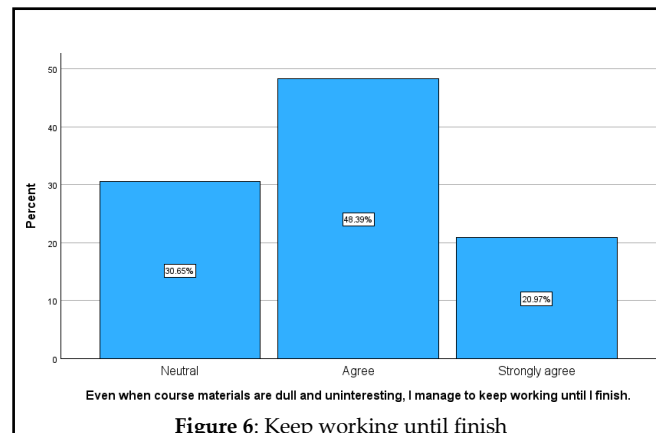
Figure 1 found that 73.8% (56 out of 62) of respondents are always reading for the course in the program, and outlining the material to help them organize their thoughts. In Figure 2 show 91.94% (42 out of 62) respondents make simple charts, diagrams, or tables to help them organize materials. Figure 3 found that 56.29% (37 out of 62) did their own notes before the exam.



Student Learning Approach

In student learning approach, the following figure show that 58.06% (32 out of 62) of respondents are forced themselves to pay attention when feeling bored. Figure 5 found that 67.74% (50 out of 62) respondents also asked other course members for help when they did not fully understand the material. The study also found that 69.36% (36 out of 62) even when course materials are dull and uninteresting, respondents manage to keep working until finish.





Relationships between learning strategies and academic performance

A total of 17 items were used to measure learning strategies by adapting and adopting the questionnaire of Fadilah Puteh et al., (2022). Prior to regression analysis, reliability analysis was performed to ensure the reliability of the measurement instrument. Table 4 below depicts the reliability analysis results. Hence, the relationships between learning strategies and academic performance were calculated using single-factor correlation techniques that use these 17 items computed into 1 independent variable namely learning strategies, while the dependent variable is the current CGPA of the respondents. The result of the coefficient is shown in Table 5 below from the findings coefficient table, it is found that learning strategies positively affect students' CGPA as the t -value is > 0.05 .

Table 4: Reliability analysis results

Reliability Statistics	
Cronbach's Alpha	N of Items
.773	17

Table 5: Coefficient analysis results

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.557	.606		.919	.362
	NewIV	.378	.171	.274	2.206	.031

a. Dependent Variable: CGPA

Discussion

The results have shown that consistently implementing effective learning strategies can significantly improve students' CGPA. Gambill et al., (2008) investigated the research about the impact of student disorganization on academic performance and the lack of direct teaching of organizational skills in schools. The study found that students' lack of organization significantly impacts their academic performance. Another study by Svjetlana Kolić-Vehovec, Igor Bajšanski, and Barbara Rončević Zubković (2011) investigated the relationship between comprehension strategies used in different aspects of comprehension processing and their relationship with text comprehension and academic achievement. The study found

comprehension strategies grouped by text-based and situational aspects, with paraphrasing being common. Good comprehension used more global representation strategies, while elaboration and summarizing were influential predictors. Reading comprehension mediated the effects of reading strategies on GPA, suggesting stronger reading skills positively impact academic achievement. Based on the findings, the author suggests the importance of teaching and promoting effective comprehension strategies to enhance text comprehension and improve academic achievement. Educators should focus on fostering strategies that help students build a global understanding of the text, such as elaboration and summarization. The implementation of effective learning strategies, such as active reading, time management, practice and application, collaborative learning, and the utilization of technology, plays a vital role in enhancing the academic performance of students, as discussed in the article titled "Learning Strategies and Academic Performance of Students." Lecturers can facilitate this process by introducing and explaining these strategies, utilizing visual aids and examples, engaging students in class discussions and activities, providing relevant resources, and offering one-on-one support to students who require additional guidance.

Conclusion

This study investigated the impact of learning strategies on academic performance among student in public and private universities in Malaysia. This study might help in improving the student's academic performance and institutional educational quality as well. The investigation led to identify the learning approach used by students since not all students know how to use the specific strategies of learning. As a result, active reading, practice, and application are just a few of the tactics mentioned that have been shown to improve student learning results.

Students must understand that there are additional learning processes in addition to those listed in this article, though. To determine which learning techniques are most effective for them, students should be encouraged to investigate and try out a variety of approaches. Due to the distinctive nature of each student, various tactics may have varied effects on various students. Students might find individualized tactics that enhance their learning process and academic achievement by actively searching out and experimenting with various ways.

Furthermore, it is critical that lecturers and instructors take an active part in educating their students about effective learning techniques. To assist students, comprehend the significance of these methods and how to use them successfully, lecturers should offer advice and tools. Lecturers can empower students to take control of their learning process and make wise choices about their study habits by adding discussions on learning techniques into their teaching methodologies.

The constant discussion of learning methodologies between students and lecturers is also advantageous. Lecturers can help students by providing ongoing assistance and direction, and lecturers can learn important lessons from students' viewpoints and experiences. Both students and lecturers can contribute to the collective knowledge and understanding of effective learning practices by establishing an open and collaborative atmosphere.

Last but not least, students must actively investigate and test out various learning techniques to identify those that best suit their learning preferences and enhance their academic success. Lecturers also have a duty to provide knowledge, tools, and advice regarding learning techniques and to foster an atmosphere that fosters discussion and ongoing development.

Together, students and lecturers can promote a climate of successful learning and open the door to success in the classroom and beyond.

References

- Agyei, E. A., Annim, S. K., Acquah, B. Y. S., Sebu, J., & Agyei, S. K. (2024b). Education infrastructure inequality and academic performance in Ghana. *Heliyon*, *10*(14), e34041. <https://doi.org/10.1016/j.heliyon.2024.e34041>
- Dobber, M., Zwart, R., Tanis, M., & Van Oers, B. (2017). Literature review: The role of the teacher in inquiry-based education. *Educational Research Review*, *22*, 194–214. <https://doi.org/10.1016/j.edurev.2017.09.002>
- Gambill, J. M., Moss, L. A., & Vescogni, C. D. (2008). *The Impact of Study Skills and Organizational Methods on Student Achievement*. <http://files.eric.ed.gov/fulltext/ED501312.pdf>
- Kolić-Vrhovec, S., Bajšanski, I., & Zubković, B. R. (2011). The role of reading strategies in scientific text comprehension and academic achievement of university students. *Annual Review of Psychology*, *18*(2), 81–90. https://bib.irb.hr/datoteka/466176.Reading_strategiestext_comprehension_and_GPA11_R_eview.pdf
- Ku, K. Y. L., & Ho, I. T. (2010). Metacognitive strategies that enhance critical thinking. *Metacognition and Learning*, *5*(3), 251–267. <https://doi.org/10.1007/s11409-010-9060-6>
- Martínez-Serna, M. I., Baixauli-Soler, J. S., Belda-Ruiz, M., & Yagüe, J. (2024). The effect of online class attendance on academic performance in finance education. *The International Journal of Management Education*, *22*(3), 101023. <https://doi.org/10.1016/j.ijme.2024.101023>
- Puteh, F., Kassim, A., Devi, S., & Katamba, A. (2022). Postgraduate Use of Learning Strategies: Are the Strategies Related to One Another? *International Journal of Academic Research in Business and Social Sciences*, *12*(10). <https://doi.org/10.6007/ijarbss/v12-i10/15008>
- Rovers, S. F. E., Stalmeijer, R. E., Van Merriënboer, J. J. G., Savelberg, H. H. C. M., & De Bruin, A. B. H. (2018). How and Why Do Students Use Learning Strategies? A Mixed Methods Study on Learning Strategies and Desirable Difficulties With Effective Strategy Users. *Frontiers in Psychology*, *9*. <https://doi.org/10.3389/fpsyg.2018.02501>
- Sarker, S., Paul, M. K., Thasin, S. T. H., & Hasan, M. a. M. (2024). Analyzing students' academic performance using educational data mining. *Computers and Education Artificial Intelligence*, *7*, 100263. <https://doi.org/10.1016/j.caeai.2024.100263>
- Teng, M. F., Wang, C., & Wu, J. G. (2021). Metacognitive Strategies, Language Learning Motivation, Self-Efficacy Belief, and English Achievement During Remote Learning: A Structural Equation Modelling Approach. *RELC Journal*, *54*(3), 648–666. <https://doi.org/10.1177/00336882211040268>