
The Interplay Between Time Management, Motivation, and Academic Performance Among University Students

Makiah Makiah¹ & Anis Nusron²

¹Bumigora University, Mataram, Indonesia; makiah28@universitasbumigora.ac.id

²Institut Teknologi dan Bisnis Yadika, Bangil Pasuruan, Indonesia; anisnusron@itbyadika.ac.id

Article history:

Received:

05th Dec. 2024

Revised:

06th Jan. 2025

Accepted:

07th Jan 2025

Abstract

This study examines the relationship between time management and motivation on academic performance among university students. The objective of the research is to explore how these factors influence academic outcomes and to address inconsistencies in prior findings. A quantitative methodology was employed, targeting the entire student population of a private university in East Java, Indonesia. Data were collected through a structured questionnaire distributed via Google Forms, ensuring convenience and accessibility. Pearson Correlation analysis was used to assess the relationships between the variables. The results revealed that time management was not significantly associated with academic performance, while motivation demonstrated a significant positive correlation with academic outcomes. These findings underscore the importance of fostering motivation and cultivating positive attitudes to enhance academic success. The study highlights practical implications for educators and policymakers in designing interventions that target motivational factors to improve student performance in higher education settings.

Keywords

Academic performance; Time management; Motivation.

Corresponding Author

Makiah Makiah

Bumigora University, Mataram, Indonesia; makiah28@universitasbumigora.ac.id

1. INTRODUCTION

Education and achievement at the tertiary level are deeply intertwined, as education represents a pathway for individuals to achieve personal success and enhance their quality of life. Academic achievement, particularly at the university level, is often demonstrated through students' academic performance, which reflects their ability to meet educational standards and excel in their studies. In recent years, academic performance has become a central focus in the field of education, garnering attention from educators, researchers, and policymakers. Moreover, the issue of student learning outcomes frequently appears in public discourse and academic research, highlighting its significance in the modern educational landscape.

To achieve academic success, students require effective learning strategies and the ability to utilize time and resources efficiently. Crede and Kuncel (2008) emphasized that study skills play a pivotal role in fostering academic competence, as they encompass essential cognitive and self-management abilities. According to Gettinger and Seibert (2019), the use of appropriate study skills is fundamental for students to effectively process information, manage their learning, and achieve their academic goals.

However, the increasing accessibility of digital technologies introduces both opportunities and challenges. While students can easily access a wealth of information, they are simultaneously exposed to distractions such as social media, online gaming, and other digital content, which can adversely affect their focus and time management.

The exploration of learning skills and their relationship with academic performance has a long history, beginning with early studies in the mid-20th century (Hartley, 2015). Over time, researchers have expanded their focus to include a wide range of factors influencing academic performance. For instance, studies by Hassanbeigi et al. (2011) and UHCL (2021) identified various skills such as time management, note-taking, test strategies, motivation, and attitudes as critical components of academic success. Furthermore, previous research has shown that low motivation often leads to poor learning outcomes (Gettinger & Seibert, 2019), suggesting that motivation is a key determinant of academic achievement.

Despite extensive research in this area, the relationship between specific learning skills—such as time management, procrastination, motivation, and attitudes—and academic performance remains a subject of debate. While some studies (e.g., Crede & Kuncel, 2008; Griffin et al., 2012; Fazal et al., 2012) have demonstrated a positive association between learning skills and academic outcomes, others have reported inconsistent or inconclusive findings. For example, Griffin et al. (2012) noted that GPA, a commonly used measure of academic performance, may not always accurately reflect students' learning abilities. This inconsistency underscores the need for further investigation into the factors that influence academic performance and the mechanisms through which they operate.

Given the critical role of academic performance in shaping students' educational trajectories and future opportunities, understanding the factors that impact it is both urgent and important. This study aims to address the existing research gap by investigating the relationships between time management and motivation, and their collective influence on academic performance. By focusing on these variables, this research seeks to provide evidence-based insights that can inform strategies to enhance students' learning experiences and outcomes in higher education.

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Time Management and Academic Performance

Time is a finite and invaluable resource that significantly impacts an individual's well-being and performance (Boniwell & Osin, 2015). The ability to effectively manage time is a critical skill, especially in the context of achieving academic success. Time management is broadly defined as an individual's ability to plan and use time efficiently and productively to achieve specific goals. It involves techniques to manage, prioritize, and allocate time appropriately, enabling individuals to meet their responsibilities and objectives (Hassanbeigi et al., 2011). Beyond merely organizing schedules, time management encompasses an awareness of time's value, systematic planning, monitoring, and organizing tasks to optimize productivity (Ocak & Boyraz, 2016).

Research suggests that effective time management skills play a vital role in students' academic performance. According to Hassanbeigi et al. (2011), students with strong time management abilities are better able to balance their academic tasks and other responsibilities, resulting in improved academic outcomes. Fazal et al. (2012) and Griffin et al. (2012) also highlight the positive correlation between time management and academic performance, emphasizing its role as a critical determinant of success. Time management enables students to prioritize academic activities, meet deadlines, and allocate sufficient time for studying and other educational tasks, ultimately enhancing their overall performance.

In contrast, procrastination, the tendency to delay or postpone tasks, poses significant challenges to academic success. Çapan (2010) defines academic procrastination as the intentional delay of academic responsibilities, such as deferring exam preparation or completing assignments at the last minute. Procrastination is often associated with a lack of self-regulation and time awareness, resulting in inefficiency and reduced academic performance (Eerde, 2003). It reflects a behavioral tendency to postpone decision-making or task execution, which can lead to missed deadlines, lower quality of work, and heightened stress.

Research underscores the detrimental effects of procrastination on academic outcomes. Several studies report a moderate to strong negative correlation between academic procrastination and academic performance (Eerde, 2003). Students who frequently procrastinate tend to struggle with time management, leading to diminished focus and productivity. This, in turn, adversely impacts their ability to achieve academic goals.

Effective time management is not only about scheduling but also involves strategies for overcoming procrastination. According to Eerde (2010), recording, managing, and consolidating time effectively allows individuals to utilize their resources efficiently and achieve their objectives. Conversely, procrastination disrupts these processes, creating barriers to success. Ocak and Boyraz (2016) highlight that mastering time management skills requires a conscious effort to plan, monitor, and execute tasks while avoiding procrastination.

The relationship between time management and academic performance remains a critical area of research, as it highlights the dual role of time-related behaviors in shaping academic outcomes. While time management positively influences academic performance by fostering efficiency and goal achievement, procrastination undermines these efforts, leading to suboptimal results. Based on the above literature review, this study hypothesizes:

H₁: Time management has a significant influence on academic performance.

Motivation and Academic Performance

Hendricks' (1997) identifies motivation and attitude as critical predictors of academic performance, a finding supported by subsequent research (Bakar et al., 2010). Motivation is widely recognized as one of the most important psychological constructs in education due to its profound influence on learning behaviors and outcomes (Hassanbeigi et al., 2011). Robbins and Judge (2017) define motivation as the

process that determines an individual's intensity, direction, and persistence in efforts to achieve a goal. Motivation can be classified into two distinct types: intrinsic and extrinsic motivation. Intrinsic motivation arises from internal drives to engage in activities for their inherent satisfaction, fostering autonomy and self-regulation. In contrast, extrinsic motivation is driven by external factors, such as rewards or the avoidance of negative outcomes (Li et al., 2014; Rozi et al., 2024; Wuryaningrat et al., 2024).

Attitude, another significant psychological construct, refers to an individual's favorable or unfavorable evaluative judgment about objects, people, or events (Robbins & Judge, 2018; Sunyoto, 2013). Attitudes consist of three interrelated components: cognitive, affective, and behavioral. The cognitive component encompasses beliefs or perceptions about the attitude object, derived from observations or knowledge. The affective component involves the emotional responses or feelings associated with the object, while the behavioral component reflects an individual's intent to act in a specific way toward the object (Robbins & Judge, 2018). In the context of education, learning attitudes typically represent a student's positive outlook toward specific learning activities and their alignment with the broader goals of higher education (Crede & Kuncel, 2008).

The role of motivation and attitude in academic success has been extensively documented. Hassanbeigi et al. (2011) and Komarraju, Karau, and Schmeck (2009) emphasized that motivation is a critical determinant of academic success. Similarly, studies by Crede and Kuncel (2008), Agustina et al. (2021), Everaert et al. (2017), Kusurkar et al. (2013), and Wu et al. (2020) found that motivation significantly correlates with academic performance. Motivation acts as a driving force, enabling individuals to overcome challenges and persist in achieving their goals (Gultom & Ferinia, 2023). Additionally, the alignment of intrinsic motivation with long-term educational objectives enhances academic engagement and performance.

Learning strategies and attitudes are equally important for academic success. Gettinger and Seibert (2019) highlighted that the key to effective learning lies in adopting diverse strategies and understanding the appropriate context for their application. A positive learning attitude fosters engagement, goal alignment, and a willingness to adopt behaviors conducive to academic achievement. Students with positive learning attitudes are more likely to embrace learning opportunities and align their efforts with the broader objectives of higher education (Crede & Kuncel, 2008).

The relationship between motivation, attitude, and academic performance remains a significant area of inquiry. While prior studies have consistently demonstrated the influence of these factors on academic outcomes, there is a need for further investigation to clarify their combined and individual effects. This study builds on existing literature to explore the following hypothesis:

H2: Motivation have a significant influence to academic performance.

3. RESEARCH METHOD

The study employs a descriptive quantitative-correlational research design to examine the relationship between time management, procrastination, motivation, and attitudes and their influence on student academic performance. It also aims to identify the main predictors of academic performance among students at Private University "X" in East Java. This design facilitates an investigation into both individual and collective relationships between the variables while predicting academic outcomes. The population of this study comprised 100 undergraduate students from the accounting and management study programs at Private University "X." The study used a saturated sampling technique, involving the entire population to ensure high representativeness and minimize sampling errors, a method particularly suitable for small population sizes.

Data collection was conducted using a structured questionnaire distributed via Google Forms to maximize accessibility and convenience for respondents. The questionnaire consisted of two sections: the first gathered demographic data such as gender, age, academic program, and GPA, while the second utilized the Study Skills Assessment Questionnaire (SSAQ), adapted from UHCL (2021). The SSAQ measured time management, procrastination, motivation, and attitudes using a 4-point Likert scale ranging from "1: never" to "4: always." The four measured domains were time management and procrastination, assessing students' planning and avoidance of delays; motivation and attitude, examining intrinsic and extrinsic drivers for learning as well as positive or negative perspectives toward academic activities; and academic performance, indicated by self-reported GPA.

The data collection process, conducted entirely online, involved sharing the Google Form with all undergraduate students through institutional email and social media platforms. Clear instructions were provided to participants, and anonymity was ensured to encourage honest responses. Data collection was completed over two weeks, allowing sufficient time for participation. The data were analyzed using both descriptive and inferential statistical methods. Descriptive statistics summarized the demographic data and response distributions for each variable to provide an overview of the sample characteristics. Inferential analysis involved the Pearson Correlation test to assess the strength and direction of relationships between time management, procrastination, motivation, attitudes, and academic performance. To identify the main predictors of academic performance, multiple linear regression analysis was conducted with a significance level of 0.05, determining the factors most strongly influencing GPA. This comprehensive approach ensured a robust exploration of the relationships and predictive power of the variables studied.

4. RESULTS AND DISCUSSIONS

The respondent demographic data, as summarized in Table 1, shows that the majority of participants were female (71.0%), while males accounted for 29.0% of the sample. Most respondents were aged 21-23 years old (82.0%), followed by those older than 24 years (15.0%) and those aged 18-20 years (3.0%). Regarding academic programs, 61.0% of the respondents were enrolled in the bachelor's

degree program in management, while 39.0% were pursuing a bachelor’s degree in accounting. These characteristics reflect a diverse but predominantly female and young adult population, with a majority engaged in management studies

Table 1.
Description of Respondents

Characteristics		Frequency	Percentages (%)
Gender	Male	29	29.0
	Female	71	71.0
Age (years old)	18-20	3	3.0
	21-23	82	82.0
	>24	15	15.0
Study Program	Bachelor’s degree in management	61	61.0
	Bachelor’s degree in accounting	39	39.0

Source: Primary Data Processed

The results of Pearson Correlation data analysis can be seen in table 2 which shows the correlation between variables.

Table 2
Correlation Analysis Result

		Time Manag.	Motivation	Academic Performance
Time Manag.	Pearson Correlation	1	.546**	.100
	Sig. (2-tailed)		.000	.324
	N	100	100	100
Motivation	Pearson Correlation	.546**	1	.213*
	Sig. (2-tailed)	.000		.033
	N	100	100	100
Academic Performance	Pearson Correlation	.100	.213*	1
	Sig. (2-tailed)	.324	.033	
	N	100	100	100

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Table 3
Main Predictor in Variables

Model		Unstandardized Coefficients		Standardized Coefficients
		B	Std. Error	Beta
1	(Constant)	3.534	.075	
	Time Manag.	-.001	.006	-.024
	Motivation	.011	.006	.226

The results of the present study suggest that motivation play significant roles in shaping students' academic performance, whereas time management do not exhibit a strong relationship with academic success, as outlined in the literature. Time management is widely regarded as a critical skill for academic success, allowing students to prioritize tasks, meet deadlines, and allocate sufficient time for studying (Hassanbeigi et al., 2011; Fazal et al., 2012). Effective time management has been linked to higher academic achievement because it helps students organize their academic responsibilities and reduces stress by preventing procrastination (Griffin et al., 2012). However, in this study, the Pearson Correlation analysis indicated no significant relationship between time management and academic performance. This finding diverges from the expectations set by previous studies, which have suggested a positive relationship between time management and academic outcomes (Hassanbeigi et al., 2011). A possible explanation for this discrepancy could be the unique characteristics of the study population at Private University "X," which may have distinct time management practices that do not significantly affect their GPA. Moreover, while procrastination is often considered detrimental to academic performance (Çapan, 2010; Eerde, 2003), this study did not find a significant correlation, possibly due to the relatively low levels of procrastination in the sample, or other compensatory factors such as individual study habits or external support mechanisms that might have mitigated the negative impact of procrastination.

On the other hand, the relationship between motivation, attitude, and academic performance was found to be statistically significant. The Pearson Correlation results showed that motivation and attitude had a positive and significant relationship with academic performance, supporting previous studies that have established motivation as a key predictor of academic success (Hassanbeigi et al., 2011; Agustina et al., 2021). Motivation, both intrinsic and extrinsic, serves as the driving force behind students' efforts to achieve their academic goals (Robbins & Judge, 2017), and a positive attitude towards learning fosters greater engagement with educational activities (Crede & Kuncel, 2008). This study's findings corroborate these claims, demonstrating that students who are motivated and have a positive attitude toward learning are more likely to perform well academically. Motivation and attitude also align with the findings of Gettinger and Seibert (2019), who emphasized that a diverse set of learning strategies and the appropriate application of those strategies are integral to academic success. Students with a favorable learning attitude and high motivation tend to engage more deeply with the material, resulting in better academic performance.

Additionally, further analysis results presented in table 3 highlighted that motivation and attitude are the main predictors of academic performance, with a stronger β coefficient compared to time management, suggesting that these psychological factors have a more substantial impact on students' academic outcomes. This reinforces the importance of fostering intrinsic motivation and cultivating a positive attitude toward learning to enhance academic performance, which has been echoed in previous research (Komarraju et al., 2009; Everaert et al., 2017).

In conclusion, while time management was not significantly related to academic performance in this study, motivation and attitude were found to be strong predictors of success, aligning with the extensive body of literature that underscores their importance in academic achievement. This study provides valuable insights for educators and institutions to focus on strategies that enhance student motivation and attitude, which could, in turn, improve academic performance. Future research could further explore the dynamics of time management and procrastination, taking into account other potential mediating variables that could explain their limited impact in this context.

5. CONCLUSION

This study aimed to investigate the relationship between time management and motivation on academic performance among undergraduate students at Private University "X" in East Java. Specifically, the research sought to determine whether time management and motivation were significantly related to students' academic performance, measured by their GPA. The results indicated that while time management did not show a significant relationship with academic performance, motivation was found to have a significant and positive impact on academic outcomes.

Theoretically, these findings contribute to the growing body of literature that emphasizes the importance of motivation and attitude in predicting academic performance. Although time management and procrastination are often considered critical factors in academic success, this study suggests that psychological factors such as motivation and attitude may play a more prominent role in influencing students' academic outcomes. These results align with previous research that underscores the role of intrinsic and extrinsic motivation in driving academic achievement (Hassanbeigi et al., 2011; Agustina et al., 2021) and the importance of positive learning attitudes in enhancing student engagement and performance (Crede & Kuncel, 2008).

From a practical perspective, the findings imply that educators and institutions should focus on fostering motivation and cultivating positive learning attitudes to enhance students' academic performance. Interventions aimed at improving student motivation, such as goal-setting activities, creating a supportive learning environment, and promoting intrinsic motivation, could be beneficial. Additionally, strategies to develop students' positive attitudes toward learning, such as increasing their engagement with academic tasks and aligning their educational goals with personal values, may improve their academic outcomes.

Despite these valuable contributions, this study has some limitations. The sample size, while adequate for the analysis, was limited to students from a single private university in East Java, which may not be fully representative of the broader student population in Indonesia or elsewhere. Furthermore, the use of self-reported measures, such as questionnaires, may introduce response biases, as students may overstate their motivation or attitude levels. Another limitation is the cross-sectional nature of the study, which does not allow for causal inferences. Future research could expand the sample to include students from other institutions and regions to enhance the generalizability of the

findings. Longitudinal studies could also be conducted to explore the causal relationships between time management, motivation, attitude, and academic performance over time.

In conclusion, this study highlights the significant role of motivation and attitude in influencing academic performance, suggesting that fostering these psychological factors could be key to improving student success. While time management and procrastination were not found to significantly impact academic performance in this context, further research is needed to explore the nuanced relationship between these variables and other factors that may mediate their effects. Future studies could also consider incorporating other student characteristics, such as personality traits and learning styles, to provide a more comprehensive understanding of the factors that contribute to academic achievement.

REFERENCES

- Agustina, E. T., Wahyudin, A. Y., & Pratiwi, A. A. (2021). The students' motivation and academic achievement at tertiary level: A correlational study. *Journal of Arts and Education*, 1(1), 29–38.
- Alyami, A., Abdulwahed, A., Azhar, A., & Binsaddik, A. (2021). Impact of time-management on the student's academic performance: A cross-sectional study. *Scientific Research Publishing*, 12, 471–485. <https://doi.org/10.4236/ce.2021.123033>
- Bakar, K. A., Tarmizi, R. A., Mahyuddin, R., Elias, H., Luan, W. S., & Ayub, A. F. M. (2010). Relationships between university students' achievement motivation, attitude and academic performance in Malaysia. *Procedia Social and Behavioral Sciences*, 2(2), 4906–4910. <https://doi.org/10.1016/j.sbspro.2010.03.793>
- Beachboard, M. R., Beachboard, J. C., Li, W., & Adkison, S. R. (2011). Cohorts and relatedness: Self-determination theory as an explanation of how learning communities affect educational outcomes. *Research in Higher Education*, 52(8), 853–874. <https://doi.org/10.1007/s11162-011-9221-8>
- Boniwell, I., & Osin, E. (2015). Beyond time management: Time use, performance and well-being. *Organizational Psychology*, 5(3), 85–104.
- Çapan, B. E. (2010). Relationship among perfectionism, academic procrastination and life satisfaction of university students. *Procedia Social and Behavioral Sciences*, 5, 1665–1671. <https://doi.org/10.1016/j.sbspro.2010.07.342>
- Crede, M., & Kuncel, N. R. (2008). Study habits, skills, and attitudes. *Association for Psychological Science*, 3(6), 425–454.
- Eerde, W. Van. (2003). A meta-analytically derived nomological network of procrastination. *Personality and Individual Differences*, 35, 1401–1418.
- Eerde, W. Van. (2010). Procrastination at work and time management training. *The Journal of Psychology: Interdisciplinary and Applied*, 137(5), 421–434. <https://doi.org/10.1080/00223980309600625>
- Everaert, P., Opdecam, E., & Maussen, S. (2017). The relationship between motivation, learning approaches, academic performance and time spent. *Accounting Education*, 26(1), 78–107. <https://doi.org/10.1080/09639284.2016.1274911>
- Fazal, S., Hussain, S., & Majoka, M. I. (2012). The role of study skills in academic achievement of students: A closer focus on gender. *Pakistan Journal of Psychological Research*, 27(1), 37–51.
- Gettinger, M., & Seibert, J. K. (2019). Contributions of study skills to academic competence. *School Psychology Review*, 31(3), 350–365.
- Griffin, R., Mackewn, A., Moser, E., & Vanvuren, K. W. (2012). Do learning and study skills affect academic performance? – An empirical investigation. *Contemporary Issues in Education Research*, 5(2), 109–116.
- Gultom, M. P., & Ferinia, R. (2023). Pengaruh budaya organisasi dan komunikasi terhadap kinerja karyawan: Studi pada Allianz. *Klabat Journal of Management*, 4(1), 30–43.
- Hartley, J. (2006). Improving study skills. *British Educational Research Journal*, 12(2), 111–123. <https://doi.org/10.1080/0141192860120201>

- Hassanbeigi, A., Askari, J., Nakhjavani, M., Shirkhoda, S., Barzegar, K., Mozayyan, M. R., & Fallahzadeh, H. (2011). The relationship between study skills and academic performance of university students. *Procedia Social and Behavioral Sciences*, 30, 1416–1424. <https://doi.org/10.1016/j.sbspro.2011.10.276>
- Komarraju, M., Karau, S. J., & Schmeck, R. R. (2009). Role of the Big Five personality traits in predicting college students' academic motivation and achievement. *Learning and Individual Differences*, 19(1), 47–52. <https://doi.org/10.1016/j.lindif.2008.07.001>
- Kusurkar, R. A., Ten Cate, T. J., Vos, C. M. P., Westers, P., & Croiset, G. (2013). How motivation affects academic performance: A structural equation modelling analysis. *Advances in Health Sciences Education*, 18, 57–69. <https://doi.org/10.1007/s10459-012-9354-3>
- Li, L., Hu, H., Zhou, H., He, C., Fan, L., Liu, X., Zhang, Z., Li, H., & Sun, T. (2014). Work stress, work motivation and their effects on job satisfaction in community health workers: A cross-sectional survey in China. *BMJ Open*, 4, 1–9. <https://doi.org/10.1136/bmjopen-2014-004897>
- Ocak, G., & Boyraz, S. (2016). Examination of the relation between academic procrastination and time management skills of undergraduate students in terms of some variables. *Journal of Education and Training Studies*, 4(5), 76–84. <https://doi.org/10.11114/jets.v4i5.1313>
- Olowookere, E. I., Alao, A. A., Odukoya, J. A., Adekeye, O. A., & Agbude, G. A. (2015). Time management practices, character development and academic performance among university undergraduates: Covenant University experience. *Scientific Research Publishing*, 6(January), 79–86.
- Robbins, S. P., & Judge, T. A. (2017). *Essentials of organizational behavior* (14th ed.). Pearson Education Limited.
- Robbins, S. P., & Judge, T. A. (2018). *Essentials of organizational behavior* (14th ed.). Pearson Education Limited.
- Rozi, A. F., Sundari, A., & Syaikuddin, A. Y. (2024). Work Environment, Employee Motivation, and Discipline as Drivers of Employee Performance in Local Government-Owned Bank. *Klabat Journal of Management*, 5(2), 167-183.
- Studygs. (n.d.). 10 time management strategies for college students. Retrieved from <https://www.studygs.net/time-management-strategies/>
- Sunyoto, D. (2013). *Teori, kuesioner, dan proses analisis data perilaku organisasi*. Center for Academic Publishing Service (CAPS).
- UHCL. (2021). *Study skills assessment questionnaire* (Issue July).
- Wu, H., Li, S., Zheng, J., & Guo, J. (2020). Medical students' motivation and academic performance: The mediating roles of self-efficacy and learning engagement. *Medical Education Online*, 25(1). <https://doi.org/10.1080/10872981.2020.1742964>
- Wuryaningrat, N. F., Hidayat, N., & Kumajas, M. L. (2024). The Impact of Transformational and Transactional Leadership on Employee Performance. *Klabat Journal of Management*, 5(2), 103-113.