

DETERMINANTS OF ACADEMIC PERFORMANCE AMONG UNDERGRADUATE STUDENTS IN PERLIS PUBLIC UNIVERSITIES

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Article history

Received date : 13-1-2026
Revised date : 14-1-2026
Accepted date : 27-2-2026
Published date : 4-3-2026

To cite this document:

Omar, S. N. Z., Hisyammuddin, H. A. S., Abu Hassan, N. I., Mohd Zanian, N. H., Mzelan, N. F., & Wan Afthanorhan, W. S. N. A. (2026). Determinants of academic performance among undergraduate students in Perlis public universities. *Journal of Islamic, Social, Economics and Development (JISED)*, 11 (81), 85 – 92.

Abstract: *Student academic performance serves as a pivotal indicator of educational quality, graduate employability, and national human capital development within the Malaysian higher education landscape. Despite significant government investment, disparities in academic outcomes persist, suggesting that performance is shaped by a complex interplay of personal and environmental factors. This study investigates the relationship between time management, peer influence, digital literacy, and financial factors on the academic performance of undergraduate students in Perlis, Malaysia. Utilizing a quantitative correlational design, data were collected via structured questionnaires from 377 students at Universiti Teknologi MARA (UiTM) Arau and Universiti Malaysia Perlis (UniMAP). The findings aim to provide actionable insights for higher learning institutions to enhance student success and graduate outcomes.*

Keywords: *Academic Performance, Time Management, Peer Influence, Digital Literacy, Financial Factors, Public University.*

Introduction

The skills, Education serves as the primary vehicle for transmitting societal skills, values, and customs to the younger generation. Etymologically derived from the Latin term *educate*, education is intended to teach, raise, and draw out the inherent potential of individuals. In the contemporary globalized economy, the Malaysian higher education system operates within a unique socio-cultural framework characterized by a multi-ethnic society and a strategic emphasis on producing highly skilled graduates. However, the Department of Statistics Malaysia (2023) noted a concerning 7.9% increase in graduate underemployment, with the number of graduates in skill-related jobs rising from 1.55 million in 2021 to 1.68 million in 2023. This trend suggests that many graduates are occupying roles that do not align with their academic qualifications and technical skills.

Academic performance, which reflects a student's intellectual capacity, discipline, and progress, is critical to addressing these employability challenges. While the Malaysian government has prioritized education through the Twelfth Malaysia Plan (2021–2025) and allocated a substantial RM58.7 billion under the Malaysia MADANI Budget 2024, significant disparities in student outcomes remain. These disparities are closely linked to students' diverse backgrounds and the complex interplay of personal and environmental factors. Despite high-level investments, academic performance continues to be impeded by critical issues such as ineffective time management, fluctuating peer influence, varying levels of digital literacy, and financial instability. Time management is a fundamental determinant of academic success, yet many students struggle to balance workloads and meet deadlines. Poor time management often leads to increased stress and decreased motivation, resulting in weaker academic outcomes. Conversely, students with effective self-regulation and prioritization skills demonstrate higher concentration and overall performance. Furthermore, the social environment plays a decisive role; students within peer groups that prioritize academic discipline and engagement tend to perform better. While supportive peers enhance academic persistence and self-efficacy, negative peer influence characterized by socialization at the expense of effort can lead to disengagement and reduced academic confidence.

The integration of technology in higher education has further elevated digital literacy as a key academic requirement. However, a digital divide persists, as not all students can efficiently utilize digital information for academic tasks. Low digital literacy adversely affects learning performance, particularly in virtual environments, necessitating a reformulation of curricula to keep pace with technological advancements. Finally, financial stability remains a pervasive issue that indirectly diminishes academic concentration. Students facing financial shortfalls often resort to part-time employment, which divides their attention and contributes to academic stress. Understanding these variables, time management, peer influence, digital literacy, and financial factors is essential for developing effective educational strategies and enhancing national human capital. This research, therefore, seeks to examine the combined influence of these factors on the academic success of undergraduate students in public universities in Perlis to provide actionable insights for institutional improvement.

Literature Review

Academic Performance

Academic performance is fundamentally defined as a student's level of achievement and success within an educational setting. According to Hailu et al. (2024), it represents the extent to which a student, educator, or institution has fulfilled immediate or long-term educational objectives, typically measured through standardized assessments such as the Cumulative Grade Point Average (CGPA). Beyond mere grades, academic performance encompasses a broader spectrum of institutional assessments, including test scores and overall academic accomplishment. High academic achievement is often regarded as a reflection of an individual's intellectual capacity, the quality of their academic output, and their personal discipline. Research by Behr et al. (2020) emphasizes that understanding the root causes of low academic performance requires a multi-perspective approach involving policymakers, higher education institutions, and the students themselves. Furthermore, the significance of academic excellence extends into the professional realm; Faiz et al. (2025) highlight that graduate unemployment is frequently a consequence of low competency. Consequently, improving academic performance which is influenced by critical factors such as time management, peer influence, digital literacy, and financial stability is essential for enhancing graduate employability and meeting the rigorous demands of modern employers.

Time management and Academic Performance

Time management is recognized as a pivotal factor influencing student academic achievement within higher education. It is defined as a multidimensional skill that encompasses the planning, organizing, prioritizing, and regulating of academic activities. This process involves the strategic scheduling of tasks, the mitigation of distractions, and the rigorous application of self-discipline and self-regulation. Effective time management enables students to navigate heavy workloads, minimize procrastination, and sustain consistent study habits, all of which contribute significantly to improved academic outcomes. Empirical evidence highlights the tangible benefits of these practices. For instance, a study involving diagnostic radiology students at King Abdul-Aziz University revealed that 69.2% of high-performing students (GPA 4.55) attributed their success to well-organized tasks and planned schedules, while 66.3% consistently utilized to-do lists or calendars to manage their responsibilities. Within the Malaysian context, research reinforces the existence of a strong positive relationship between time management and academic performance. Furthermore, structured training in time management has been shown to enhance students' focus, organizational capabilities, and overall learning outcomes. Ultimately, mastering time management is essential for ensuring long-term academic success in a demanding university environment.

Peer Influence and Academic Performance

Peer influence is defined as the social and psychological impact exerted by individuals of similar age or status within academic settings. This phenomenon encompasses the ways in which classmates and social circles shape a student's study habits, intrinsic motivation, and self-confidence. According to Yang and Ompok (2024), healthy peer relationships foster emotional support and collaborative learning environments, which directly contribute to increased student engagement. Khan et al. (2023) further conceptualize peer influence as a dual-faceted construct: while supportive connections inspire academic diligence, negative peer pressure may inadvertently encourage engagement in non-academic behaviors. In higher education, the significance of peer influence intensifies as students' social networks expand. Peers often function as study companions, role models, partners, and even sources of healthy

competition. This construct is multidimensional, typically measured through four key dimensions: peer support, peer norms, peer pressure, and peer engagement. Empirical research by Guo et al. (2024) suggests that these relationships are vital for developing students' academic achievement and psychological resilience. Quantitatively, the impact of peer dynamics is substantial; Zafar et al. (2024) reported that peer influence accounts for 29% to 39% of the variance in academic performance. Khan et al. (2023) observed that students who benefit from high peer support coupled with moderate peer pressure tend to exhibit superior academic results. Conversely, excessive or negative peer pressure can be detrimental, as Kasim et al. (2025) found it negatively affects self-esteem, which indirectly leads to a decline in academic performance.

Digital Literacy and Academic Performance

Digital literacy is increasingly recognized as a fundamental pillar of academic success in the contemporary higher education landscape. Mokhtar et al. (2024) define this competency as a student's capacity to access, search, critique, and integrate digital information efficiently through technological devices within virtual learning environments. Furthermore, Naz et al. (2022) argue that digital literacy is a primary determinant of a student's engagement with information and their overall academic readiness in technology-based instructional settings. The conceptualization of digital literacy also extends to cognitive and communicative abilities. Limniot et al. (2021) describe it as the ability to critically assess digital materials, communicate effectively online, and process information with high efficiency. This is complemented by the work of Yildiz et al. (2020), who emphasize the necessity of critical thinking and problem-solving within digital engagement. Additionally, Asnawati et al. (2023) highlight that digital literacy involves the analysis, interpretation, and communication of information using ICT tools specifically to enhance the learning process. Collectively, empirical evidence from Mokhtar et al. (2024), Naz et al. (2022), Sari et al. (2022), and Asnawati et al. (2023) indicates that digital literacy exerts a significant influence on academic performance. Digitally competent students are better equipped to navigate complex learning platforms, engage critically with online resources, and foster self-directed learning habits, ultimately leading to superior academic achievement.

Financial and Academic Performance

Financial stability is a primary determinant of a student's ability to succeed academically, as it directly impacts their access to essential educational resources. According to Norazlan et al. (2020), financial constraints that prevent students from securing necessary learning materials and stable housing often lead to heightened stress levels and subpar academic outcomes. Within the Malaysian landscape, Hashim et al. (2024) introduced the Malaysia MADANI Millennials Financial Literacy Framework (M3-FLF), which highlights how a deficit in financial literacy and poor money management can undermine a student's economic standing. This instability subsequently triggers psychological distress and a significant lack of academic concentration. Empirical evidence further validates this relationship. Aziz et al. (2025) demonstrated that financial issues among private university students in Selangor are significantly correlated with high stress levels ($r = 0.848, p < 0.001$), which effectively depletes the time and energy students can dedicate to their studies. This is echoed by Che Hasan et al. (2025), who reported that students facing financial strain experience lower academic satisfaction and increased anxiety. Furthermore, financial issues have been identified as the most dominant predictor of student stress, directly correlating with poor academic performance. The practical implications of financial disadvantage are also evident in student behavior. Farahiyah et al. (2023) found a negative correlation between financial

factors and academic achievement ($r = -0.144, p > 0.05$), suggesting that students from lower economic backgrounds often prioritize part-time employment over classroom attendance to sustain themselves. Consequently, financial issues must be viewed through a holistic lens, not merely as a lack of funds, but as a complex condition involving economic constraints, psychological distress, and behavioral adjustments that collectively dictate a student's academic trajectory.

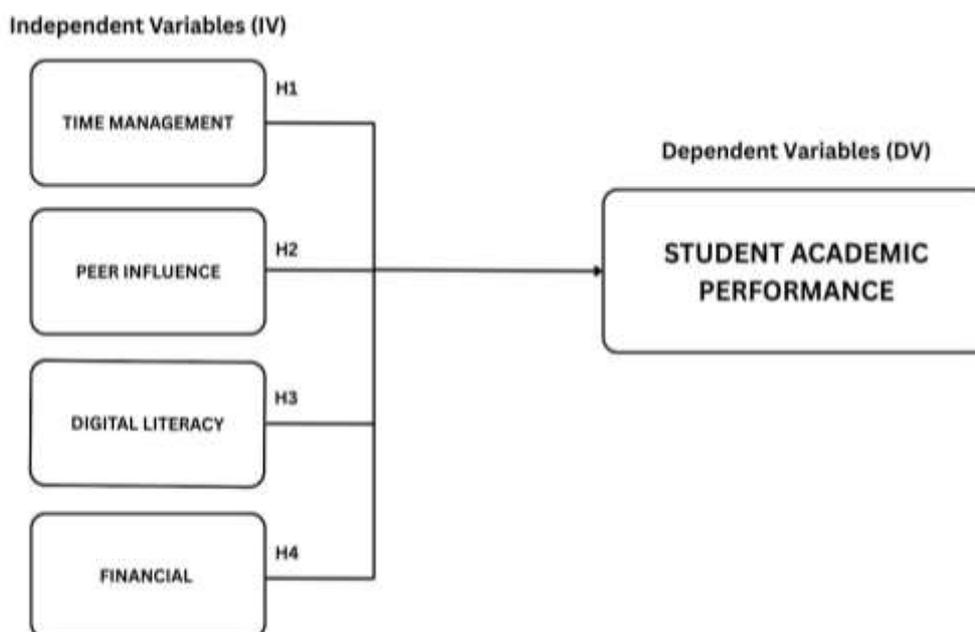


Figure 1: Conceptual Framework Illustrating the Relationship Between Independent Variables and Student Academic Performance

H1: There is a positive significant relationship between time management and student academic performance among public universities in Perlis.

H2: There is a positive significant relationship between peer influence and student academic performance among public universities in Perlis.

H3: There is a positive significant relationship between digital literacy and student academic performance among public universities in Perlis.

H4: There is a positive significant relationship between financial and student academic performance among public universities in Perlis.

Discussion and Conclusion

This research underscores that student academic performance within public universities in Perlis is a multifaceted outcome driven by an interplay of personal and environmental determinants, specifically time management, peer influence, digital literacy, and financial stability. The findings suggest that intellectual aptitude alone does not guarantee academic success; rather, it is significantly shaped by a student's capacity to regulate their schedules, engage with supportive social circles, and navigate digital learning environments (Setapa et al., 2024). Aligning with existing literature, this study confirms that students who exhibit disciplined time management and maintain academically oriented peer networks tend to achieve superior educational outcomes (Yang & Ompok, 2025). Furthermore, the role of digital literacy

is paramount in the modern educational landscape, where proficiency in utilizing technological tools directly correlates with improved learning efficiency and engagement.

Furthermore, this study emphasizes the critical role of university administrators and policymakers in cultivating an environment conducive to student success. To translate these insights into practice, higher learning institutions should implement targeted interventions, such as time management workshops and peer-mentoring programs. As noted by Salim et al. (2020), institutional support is vital in shaping individual competence and strategic operations within the academic framework. Simultaneously, enhancing the accessibility of financial support mechanisms including scholarships and financial literacy education is essential to alleviate the psychological stress associated with financial constraints (Sulaiman et al., 2023). Reducing financial anxiety allows students to maintain a consistent focus on their studies, thereby improving overall graduate employability and national human capital development. In conclusion, this research provides valuable insights into the determinants of student achievement in the Malaysian public university context. The findings serve as a strategic reference for educators to design support programs that align with the needs of contemporary learners.

Limitations and Suggestions for Future Research

Despite its contributions, this study is subject to limitations that provide avenues for future inquiry. To enhance the generalizability of the findings, future research should expand the geographical scope to include both public and private universities across various states in Malaysia. Additionally, researchers are encouraged to explore a broader range of variables, such as psychological well-being and family background, to develop a more exhaustive model of academic performance. Methodologically, adopting a longitudinal design would be beneficial to establish potential causal relationships over time. A mixed-methods approach could also provide deeper qualitative insights into the lived experiences and nuanced challenges faced by students. Finally, intervention-based studies are recommended to empirically evaluate the effectiveness of specific initiatives, such as digital workshops and financial literacy programs, in enhancing students' academic performance and overall learning outcomes.

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