

Factors Affecting Students' Academic Achievements in the College of Arts, Sciences, Education, and Information Technology, SY 2024-2025

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ABSTRACT

Academic achievement is a key indicator of student success and future professional development. However, various personal, academic, and environmental factors influence students' ability to perform well in their studies. This study examines the factors affecting students' academic achievement in the College of Arts, Sciences, Education, and Information Technology (CASE-IT). Using a quantitative research design, the researchers collected data from 69 respondents through survey questionnaires. The study explores three major categories of challenges: personal factors, which include motivation, time management, and mental health concerns; academic difficulties, such as heavy workload, difficulty understanding lessons, and poor exam performance; and environmental factors, including the availability of learning materials, quality of classroom facilities, and faculty support. The findings reveal that all three categories significantly impact students' academic performance. Low motivation, poor time management, and mental health concerns were identified as major barriers to success. Additionally, heavy academic workloads and inadequate study resources contributed to academic struggles, while a lack of proper learning facilities hindered student engagement. However, strong support positively influenced academic performance. Hypothesis testing confirmed a significant relationship between these factors and students' academic achievements. The study supports key educational theories, including Self-Determination Theory, which emphasizes the role of motivation in learning; Time Management Theory, which highlights the importance of effective scheduling in reducing academic stress; and Ecological Systems Theory, which explains how the learning environment shapes academic success. Based on the findings, the study recommends targeted interventions such as motivation and time management workshops, enhanced mental health support programs, improved access to study resources, and strengthened faculty mentorship. By addressing these challenges, institutions can create a more supportive academic environment that fosters student success. Future research may explore additional factors, such as socioeconomic conditions, that could further impact students' academic achievements.

Keywords: Academic achievement, personal factors, academic challenges, environmental factors, motivation, time management, faculty support

INTRODUCTION

This study examined the key personal, academic, and environmental factors affecting students' academic performance and future development in the College of Arts, Sciences, Education, and Information Technology (CASE-IT). Personal barriers such as low motivation, poor time management, and anxiety directly hinder students' focus, while heavy workloads, complex coursework, and low self-confidence pose significant academic obstacles. Additionally, environmental conditions such as unequal access to learning resources, facility quality, and the level of faculty support play a crucial role in shaping learning outcomes. Ultimately, identifying these interconnected challenges will guide targeted institutional interventions to enhance student support and academic success.

Statement of the Problem

This study aimed to examine the factors affecting students' academic achievements in CASE-IT by addressing the following questions:

1. What personal factors affect students' academic performance in CASE-IT?
2. What academic challenges do students in CASE-IT commonly face?
3. How do environmental factors influence the academic performance of CASE-IT students?
4. What strategies can be implemented to improve students' academic achievements based on the identified challenges?

Scope and Delimitations

This study focuses on identifying the personal, academic, and environmental factors affecting students' academic achievements in CASE-IT. The study is limited to CASE-IT students and does not include other colleges or universities. Data collection was conducted through surveys. The study does not examine external socio-economic factors such as family income or employment status, which may also affect academic performance.

Review of Related Literature

Academic performance is a multidimensional outcome influenced by students' personal characteristics, academic experiences, and learning environment. Personal factors such as motivation, time management, and mental health play an important role in shaping students' academic engagement and achievement. Consistent with Self-Determination Theory, autonomous motivation is associated with greater engagement, persistence, and positive academic outcomes, while supportive learning environments can strengthen students' psychological needs for autonomy, competence, and relatedness (Howard et al., 2021; Hornstra et al., 2020). Effective time management and self-regulation are likewise associated with improved academic performance because they help students organize tasks, prioritize responsibilities, and manage competing academic demands (Aeon et al., 2021). Conversely, anxiety and stress may interfere with concentration and academic functioning, with recent evidence showing a negative association between anxiety and college students' academic performance (Tang & He, 2023). Academic workload is also relevant, as excessive demands and limited time may contribute to exhaustion and academic burnout. (Raboca & Carburnarean, 2024). From an ecological perspective, students' performance is further shaped by their immediate educational environment, including classroom conditions, learning resources, institutional facilities, and faculty support. Research indicates that classroom environmental quality can affect learning and academic outcomes (Brink et al., 2021), while faculty autonomy support is associated with academic motivation, engagement, and achievement (Okada, 2023; Raboca & Carburnarean, 2024). Overall, these studies suggest that academic performance results from the interaction of individual motivation and self-regulation, psychological well-being, academic demands, and supportive institutional conditions.

Theoretical Framework

This study is anchored on three major complementary theories that address the personal, behavioral, and environmental dimensions of learning. First, Deci and Ryan's (1985) Self-Determination Theory serves as the psychological baseline, postulating that intrinsic motivation drives cognitive engagement, persistence, and overall performance in higher education environments. Second, Macan's (1994) Time Management Theory complements this by explaining how systematic planning, goal-setting, and effective scheduling serve as behavioral coping mechanisms that directly reduce perceived academic stress and enhance task efficiency. Finally, Bronfenbrenner's (1979) Ecological Systems Theory provides an environmental perspective, framing physical classrooms, instructional resources, and faculty support

networks as immediate microsystems that shape and constrain a student's cognitive development and overall educational attainment.

Conceptual Framework

This study adopts an Input-Process-Output (IPO) model to analyze how student challenges influence academic achievement:

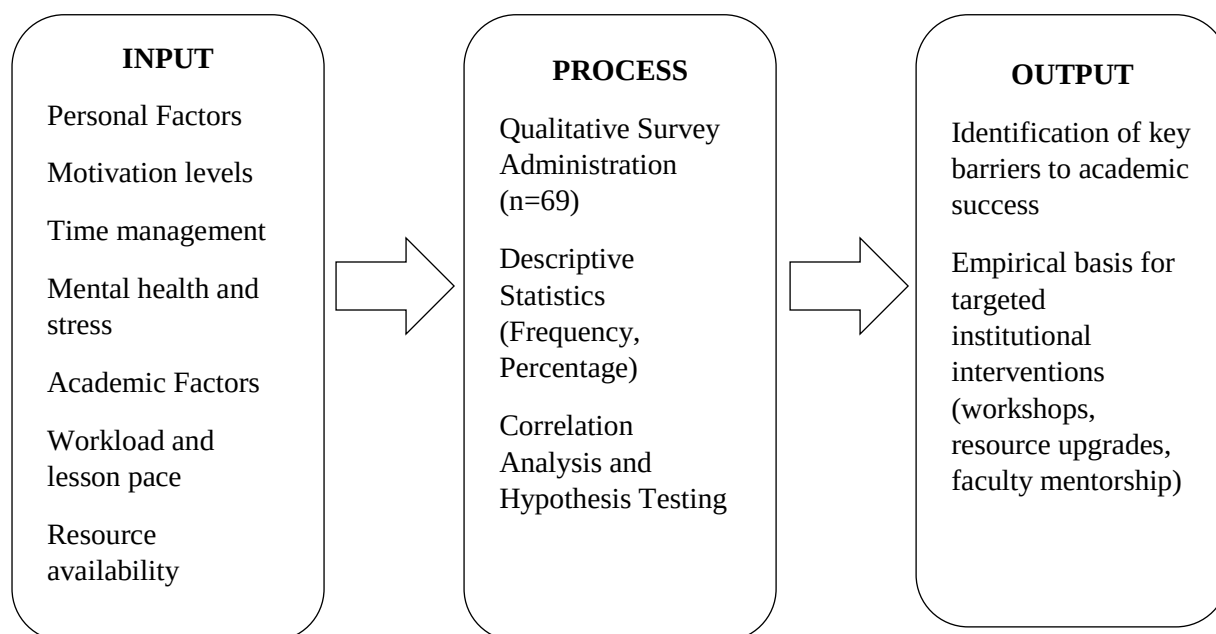


Figure1: Conceptual Framework

METHODOLOGY

Research Design

This study utilized a descriptive-correlational research design to examine the relationship between independent variables (personal, academic, and environmental factors) and student academic achievement outcomes.

Research Steps

This study followed a four-phase execution sequence. In Phase 1, the researchers developed survey instruments and aligned them with theoretical constructs, including Self-Determination Theory, Time Management Theory, and Ecological Systems Theory. Phase 2 involves securing administrative approvals and managing sample selection. Phase 3 focuses on field data collection through structured questionnaires distributed to students. Phase 4 completes the process with statistical entry, data analysis, and translation of findings into targeted academic support strategies.

Data Collection and Sample Selection

This study utilized a purposive or stratified sampling approach among enrolled students within CASE-IT. This method yielded a final sample size of 69 student respondents (n=69).

Data Analysis Methods

This study used both descriptive and inferential statistical techniques for data analysis. Descriptive statistics, such as frequency distributions, percentages, and weighted means, profiled student demographics and measured baseline academic barriers. For inferential analysis, Pearson's r or Spearman's ρ correlation coefficients, along with hypothesis testing (t -tests and ANOVA), were used to evaluate the significance of relationships between personal or environmental factors and academic achievement.

Research Hypothesis and Validation

This study tests the operational null hypothesis (H_0) that personal factors, academic workloads, and environmental conditions are not significantly related to student academic achievement. Academic experts conduct content validation of the survey instrument, and the scaling items are tested for internal consistency using Cronbach's $\alpha \geq 0.70$ prior to formal analysis.

Study Limitations and Ethical Considerations

This study is limited by a constrained sample size ($n=69$) specific to CASE-IT, which restricts the external generalizability of the findings to other institutions. Furthermore, self-reported survey responses may reflect social desirability bias regarding study habits and stress levels, and the cross-sectional design captures student performance at a single point in time. Ethically, we obtain informed consent before participation, maintain voluntary involvement, and anonymize and aggregate responses to protect student privacy.

RESULTS AND DISCUSSIONS

SOP 1: What personal factors affect students' academic performance in CASE-IT?

Internal personal factors significantly shape CASE-IT students' academic success. Intrinsic motivation emerged as the primary driver; highly motivated students showed stronger persistence, higher coursework engagement, and better academic marks, whereas unmotivated students procrastinated and showed declining cognitive retention. Effective time management, such as goal setting and prioritizing tasks, directly correlated with higher academic achievement, while poor scheduling increased stress, submission delays, and burnout. Additionally, elevated anxiety and mental health strain severely disrupted focus, executive functioning, and memory retention, confirming that internal self-regulation and mental well-being are vital to academic performance.

SOP 2: What academic challenges do students in CASE-IT commonly face?

Excessive coursework volume and rapid lesson pacing represent the most pervasive academic hurdles. Heavy workloads force students into superficial, deadline-driven learning rather than deep conceptual mastery, leading to cognitive fatigue. Furthermore, limited access to updated learning resources, essential software, and high-speed digital infrastructure creates technical bottlenecks that hinder assignment completion. These resource deficits, combined with fast-paced assessment schedules, diminish student self-confidence and lower overall class participation.

SOP 3: How do environmental factors influence the academic performance of CASE-IT students?

Immediate environmental microsystems directly influence student cognitive output. Inadequate physical classroom infrastructure, poor ventilation, and outdated laboratory equipment create physical discomfort and instructional delays. Conversely, supportive faculty dynamics characterized by clear rubric communication, approachable mentorship, and fair grading significantly enhance student resilience, task persistence, and course satisfaction. Supportive peer networks and collaborative study groups also mitigate individual academic strain and reinforce positive study habits

SOP 4: What strategies can be implemented to improve students' academic achievements based on the identified challenges?

To address these identified challenges, institutional interventions should focus on four key areas. First, the institution should institutionalize academic coping workshops that provide formal skills training in time management, task prioritization, and stress reduction to strengthen student self-regulation. Second, the curriculum should pace major project deadlines evenly throughout the semester and incorporate active learning strategies to prevent cognitive overload and student burnout. Third, physical and digital infrastructure require significant upgrades, specifically by modernizing computer laboratory equipment, expanding campus Wi-Fi coverage, and broadening student access to digital library resources. Finally, the institution should establish faculty mentorship programs to train instructors in autonomy-supportive teaching methods and structured student guidance, fostering an empathetic academic environment that builds student confidence and resilience.

SUMMARY

This study investigated the personal, academic, and environmental factors influencing students' academic achievement in CASE-IT. Utilizing a descriptive-correlational research design, data were collected from 69 student respondents ($n = 69$) to identify key barriers and their relationships with academic performance.

The findings revealed that internal personal factors, particularly intrinsic motivation and structured time management, serve as primary psychological and behavioral drivers of academic success. Conversely, poor time allocation and elevated mental stress significantly disrupted focus and performance. Major academic challenges identified included excessive coursework volume, rapid lesson pacing, and limited access to updated learning resources and software. Furthermore, environmental factors, specifically physical laboratory infrastructure, internet connectivity, and supportive faculty dynamics, exerted a direct influence on student engagement and cognitive mastery.

CONCLUSIONS

Based on the findings, the study concludes that academic achievement in CASE-IT is not solely a function of individual cognitive ability, but rather the result of an interconnected ecosystem involving personal self-regulation, instructional design, and environmental quality. Intrinsic motivation and time management skills are essential coping mechanisms that directly mitigate academic stress and support task execution. However, external pressures heavily influence these personal factors; rapid pacing, resource deficits, and suboptimal classroom facilities create friction that leads to burnout and reduced academic performance. Ultimately, supportive faculty mentorship and adequate learning infrastructure act as crucial enabling microsystems that build student resilience, confidence, and overall educational attainment.

RECOMMENDATIONS

To address the identified challenges and improve student academic outcomes, the following targeted institutional interventions are recommended:

First, the institution should establish academic coping workshops to institutionalize regular skills training in time management, task prioritization, and stress reduction, strengthening student self-regulation and resilience.

Second, academic leadership must calibrate curriculum pacing by systematically reviewing coursework distribution to space out project deadlines, reduce cognitive overload, and integrate active learning strategies that foster deep conceptual mastery.

Third, the administration should upgrade campus infrastructure by modernizing computer laboratory equipment, expanding campus Wi-Fi coverage, and broadening access to digital reference materials and specialized software subscriptions.

Fourth, the college should implement faculty mentorship programs that provide professional development training focused on autonomy-supportive teaching, empathetic instruction, and structured student mentorship frameworks.

ACKNOWLEDGEMENT

The authors express sincere gratitude to the administration, faculty, and students at Aldersgate College, Inc. for their active participation and cooperation in completing the study, *“Factors Affecting Students’ Academic Achievements in the College of Arts, Sciences and Information Technology.”*

AI DECLARATION STATEMENT

Artificial intelligence tools were used to process this document, assist with formatting and structural organization, and create illustrative visualizations of survey metrics. Institutional personnel verified and authored all underlying survey data and analysis and strategic recommendations.

REFERENCES

- Aeon, B., Faber, A., & Panaccio, A. (2021). Does time management work? A meta-analysis. *PLoS ONE*, 16(1), e0245066. <https://doi.org/10.1371/journal.pone.0245066>
- Brink, H. W., Loomans, M. G. L. C., Mobach, M. P., & Kort, H. S. M. (2021). Classrooms’ Indoor environmental conditions affecting the academic achievement of primary school children: A systematic review. *Indoor Air*, 31(2), 405–433. <https://doi.org/10.1111/ina.12745>
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Harvard University Press.
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. Plenum press. <https://doi.org/10.1007/978-1-4899-2271-8>
- Hornstra, L., Bakx, A., Mathijssen, S., & Denissen, J. J. A. (2020). Motivating gifted and non-Gifted students: The role of teachers' autonomy support and structure. *Learning and Individual Differences*, 80, 101871. <https://doi.org/10.1016/j.lindif.2020.101871>
- Howard, J. L., Bureau, J., Guay, F., Chong, J. X. Y., & Ryan, R. M. (2021). Student motivation and associated outcomes: A meta-analysis from self-determination theory. *Perspectives on Psychological Science*, 16(6), 1300–1323. <https://doi.org/10.1177/1745691620966789>
- Macan, T. H. (1994). Time management: Test of a process model. *Journal of Applied Psychology*, 79(3), 381–391. <https://doi.org/10.1037/0021-9010.79.3.381>
- Okada, R. (2023). Autonomy-supportive teaching, autonomous motivation, and academic achievement: A meta-analytic review. *Educational Psychology Review*.
- Raboca, H. M., & Cărbunărean, F. (2024). Faculty support and students’ academic motivation. *Frontiers in Education*, 9, 1406611. <https://doi.org/10.3389/feduc.2024.1406611>
- Tang, X., & He, W. (2023). The relationship between anxiety and academic performance in college students: A meta-analysis. *Frontiers in Psychology*, 14, 1123456. <https://doi.org/10.3389/fpsyg.2023.1123456>