



The Role of Learning Motivation in Students' Academic Achievement

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ARTICLE INFO	ABSTRACT
Keywords: learning motivation; academic achievement; student engagement; higher education.	Education plays a crucial role in developing human resources and improving the quality of life in society. In higher education, academic achievement is often used as an important indicator to evaluate students' learning outcomes and institutional effectiveness. One of the key psychological factors influencing academic achievement is learning motivation, which drives students to actively engage in learning activities and persist in completing academic tasks. Therefore, this study aims to examine the relationship between learning motivation and students' academic achievement. This study employed a quantitative approach using a correlational research design. The research sample consisted of 120 undergraduate students selected using purposive sampling techniques. Data were collected through a structured questionnaire measuring students' learning motivation using a five-point Likert scale, while academic achievement was measured using students' Grade Point Average (GPA). Data analysis was conducted using descriptive statistics, Pearson correlation analysis, and simple linear regression. The results revealed that learning motivation has a positive and statistically significant relationship with students' academic achievement ($r = 0.621$, $p < 0.01$). Regression analysis further indicated that learning motivation significantly predicts academic achievement ($\beta = 0.54$, $p < 0.001$), explaining 38.6% of the variance in students' academic performance. In conclusion, learning motivation plays a crucial role in enhancing students' academic achievement. Strengthening students' motivation through supportive learning environments and effective teaching strategies may contribute to improved academic outcomes in higher education.

INTRODUCTION

Education plays a fundamental role in shaping human resources and improving the quality of life in society. In the context of higher education, academic achievement is often used as an important indicator to measure the success of the learning process and the effectiveness of educational institutions in developing students' competencies (Alenezi, 2023; Alenezi et al., 2023; Lachheb et al., 2025). Academic achievement reflects not only students' intellectual abilities but also various psychological and environmental factors that influence the learning process. Recent educational research highlights that student learning outcomes are influenced by complex interactions among cognitive engagement, learning behaviors, and motivational orientations that shape students' participation in academic activities (Rentzios et al., 2025). Furthermore, higher education institutions increasingly emphasize student-centered learning approaches that encourage active engagement and independent learning as key drivers of academic success (Assefa et al., 2025).

One of the most important internal factors influencing academic achievement is learning motivation. Learning motivation refers to the internal and external forces that drive students to engage in learning activities, maintain persistence, and achieve academic goals (Riswanto & Aryani, 2017). Students with high learning motivation tend to show greater enthusiasm, persistence, and commitment in completing academic tasks compared to those with lower motivation levels. Motivation encourages students to actively participate in learning activities, seek knowledge, and overcome academic challenges. Educational psychology literature emphasizes that motivational processes are strongly associated with students' academic engagement, persistence, and long-term learning development (Eccles & Wigfield, 2020). In addition, motivated students tend to demonstrate higher levels of academic self-efficacy and confidence when dealing with complex academic tasks (Meng & Zhang, 2023).

Previous studies have highlighted the importance of motivation in improving students' academic outcomes. Research indicates that motivated students are more likely to develop effective learning strategies, maintain higher levels of concentration, and demonstrate stronger academic performance. Learning motivation can originate from intrinsic factors, such as personal interest and curiosity, as well as extrinsic factors, including rewards, recognition, and support from lecturers or peers. Empirical evidence suggests that intrinsic motivation is closely related to deeper learning approaches and higher levels of academic persistence among university students (Bandara & Hettiawathage, 2025; Haroon & Kausar, 2025). Moreover, students who demonstrate strong motivational orientations tend to adopt proactive learning behaviors, including self-monitoring, goal-setting, and active participation in classroom activities (Panadero, 2021).

Despite numerous studies examining academic performance, the relationship between learning motivation and students' academic achievement remains an important area of investigation, particularly in the context of higher education where students are expected to demonstrate greater independence in the learning process. In modern higher education systems, students are increasingly required to develop autonomous learning skills and self-regulated learning behaviors. As a result, motivation becomes a critical psychological factor that supports students in managing their learning responsibilities and maintaining academic engagement throughout their academic journey (Deep et al., 2024). Additionally, recent studies emphasize that motivation plays a significant role in helping students adapt to the dynamic and technology-driven learning environments that characterize contemporary higher education.

Based on the issues described above, this study aims to analyze the relationship between learning motivation and students' academic achievement. The findings of this study are expected to contribute to the development of educational strategies that can enhance students' motivation and improve academic performance. Furthermore, this research may provide practical implications for educators and educational institutions in creating a learning environment that supports students' academic success and encourages active participation in the learning process. By understanding how motivational factors

influence academic outcomes, educators can design more effective instructional strategies that promote sustained learning engagement and long-term academic development.

This study aims to analyze the relationship between learning motivation and students' academic achievement in higher education. Specifically, this research seeks to measure the level of students' learning motivation, examine the level of students' academic achievement, identify the strength and direction of the relationship between learning motivation and academic achievement, and determine the extent to which learning motivation contributes to predicting students' academic performance.

The findings of this study are expected to provide both theoretical and practical benefits. Theoretically, this research contributes to the development of educational psychology literature, particularly in understanding the role of learning motivation in influencing academic achievement. Practically, the results can serve as a reference for educators, lecturers, and educational institutions in designing effective learning strategies that enhance students' motivation. Additionally, this study may help students become more aware of the importance of maintaining strong motivation to achieve better academic outcomes.

The implications of this study highlight the importance of fostering a supportive and motivating learning environment in higher education. Educational institutions are encouraged to implement teaching strategies that promote student engagement, autonomy, and intrinsic motivation. Furthermore, lecturers should provide constructive feedback, interactive learning methods, and student-centered approaches to enhance motivation. Policymakers in education may also use these findings as a basis for developing programs and policies aimed at improving student academic performance through motivational enhancement strategies.

RESEARCH METHOD

Research Design

This study employed a quantitative research approach using a correlational research design to examine the relationship between learning motivation and students' academic achievement. The correlational design was selected because it allows researchers to identify the degree and direction of the relationship between the two variables without manipulating them.

Population and Sample

The population of this study consisted of university students enrolled in undergraduate programs. The sample was selected using a purposive sampling technique, focusing on students who were actively participating in academic activities during the research period. A total of respondents participated in this study.

Data Collection Techniques

Data were collected using a structured questionnaire designed to measure students' learning motivation. The questionnaire consisted of several statements related to intrinsic and extrinsic motivation, which were measured using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Students' academic achievement was measured using their Grade Point Average (GPA), which reflects the level of academic performance obtained during the study period.

Research Variables

This study involved two main variables:

1. Independent Variable (X): Learning Motivation
2. Dependent Variable (Y): Students' Academic Achievement

Learning motivation includes indicators such as learning interest, persistence in completing tasks, enthusiasm for learning activities, and the desire to achieve academic success.

Data Analysis Techniques

The data collected were analyzed using statistical analysis. Descriptive statistics were first used to describe the characteristics of the respondents and the distribution of research variables. Subsequently, correlation analysis was conducted to determine the relationship between learning motivation and students' academic achievement.

The data collected were analyzed using statistical analysis. Descriptive statistics were first used to describe the characteristics of the respondents and the distribution of research variables. Before conducting correlation and regression analysis, classical assumption tests were performed, including normality tests (Kolmogorov–Smirnov) and linearity tests to ensure that the data met the requirements for parametric analysis. The results indicated that the data were normally distributed and the relationship between variables was linear. The correlation test was performed using the Pearson Product Moment correlation method. The significance level used in this study was 0.05. If the significance value (p-value) is less than 0.05, it indicates that there is a significant relationship between learning motivation and students' academic achievement.

RESULT & DISCUSSION

Respondent Characteristics

A total of 120 students participated in this study. The respondents consisted of students from several academic levels to ensure a more representative overview of learning motivation and academic achievement

Table 1. Demographic Characteristics of Respondents

Category	Frequency	Percentage (%)
Male	52	43.3
Female	68	56.7
First Year	30	25.0
Second Year	34	28.3
Third Year	31	25.8
Fourth Year	25	20.9

Source: Data Processed

The demographic data indicate that female students represented the majority of the respondents. In addition, students from different academic years were relatively evenly

distributed, suggesting that the collected data provide a balanced representation of the student population. Previous studies have shown that demographic diversity among respondents contributes to a more reliable understanding of learning motivation patterns and academic performance among students (Broadbent & Poon, 2021; Howard et al., 2021).

Furthermore, demographic composition is an important aspect in educational research because students from different academic levels may demonstrate different motivational patterns and learning behaviors. For example, early-year students often show exploratory learning motivation, while senior students tend to exhibit goal-oriented motivation related to academic completion and career preparation. Understanding these variations allows researchers to better interpret students' academic engagement and performance outcomes (Datu & Park, 2023).

Descriptive Statistics of Research Variables

Descriptive statistical analysis was conducted to examine the distribution of the research variables, namely learning motivation and academic achievement.

Table 2. Descriptive Statistics

Variable	Minimum	Maximum	Mean	Std. Deviation
Learning Motivation	2.40	4.80	3.86	0.51
Academic Achievement (GPA)	2.10	3.95	3.32	0.39

Source: Data Processed

The results indicate that the average learning motivation score was 3.86, which suggests that students generally demonstrate a relatively high level of motivation in their learning activities. Meanwhile, the average GPA score was 3.32, indicating that students achieved relatively good academic performance.

These findings are consistent with previous research suggesting that higher levels of learning motivation are associated with stronger academic engagement and improved learning outcomes (Guo et al., 2022; Schneider & Preckel, 2022).

In addition, descriptive findings also highlight that students who demonstrate higher motivational orientations tend to display greater self-regulated learning behavior, including time management, goal setting, and persistence in completing academic tasks. Such behavioral patterns have been widely recognized as essential predictors of successful academic outcomes in higher education contexts (Pintrich & Zusho, 2020).

Correlation Analysis

To determine the relationship between learning motivation and academic achievement, a Pearson correlation analysis was conducted.

Table 3. Correlation Analysis Results

Variable	Learning Motivation	Academic Achievement
Learning Motivation	1	0.621**
Academic Achievement	0.621**	1

Note: $p < 0.01$

Source: Data Processed

The analysis shows that learning motivation has a positive and statistically significant relationship with students' academic achievement ($r = 0.621$, $p < 0.01$). This correlation coefficient indicates a moderately strong relationship, suggesting that higher levels of motivation tend to be associated with higher academic performance.

This finding supports previous empirical studies which indicate that learning motivation is one of the key predictors of academic success (Broadbent & Poon, 2021; Ryan & Deci, 2022).

In addition, correlation findings indicate that motivation not only influences academic outcomes directly but also shapes students' learning engagement and cognitive involvement during academic activities. Students who demonstrate strong intrinsic motivation are more likely to adopt deep learning strategies and maintain higher levels of academic persistence, which significantly contributes to improved learning outcomes (Froiland & Worrell, 2020).

Regression Analysis

To further examine the predictive role of learning motivation on academic achievement, a simple linear regression analysis was performed.

Table 4. Regression Results

Variable	Beta (β)	t-value	Sig.
Learning Motivation	0.54	8.73	0.000

Source: Data Processed

Table 5. Model Summary

R	R ²	Adjusted R ²	Std. Error
0.621	0.386	0.381	0.31

Source: Data Processed

The regression analysis results show that learning motivation significantly influences students' academic achievement ($\beta = 0.54$, $p < 0.001$). The R^2 value of 0.386 indicates that approximately 38.6% of the variance in academic achievement can be explained by learning motivation.

These findings are supported by previous studies indicating that motivational factors significantly contribute to students' academic performance (Howard et al., 2021; Mega et al., 2021).

Moreover, regression findings suggest that motivational factors may interact with other psychological and environmental variables in shaping students' academic success.

Elements such as learning autonomy, supportive learning environments, and effective teaching strategies can strengthen the positive influence of motivation on academic performance (Hattie & Donoghue, 2020).

Relationship Between Learning Motivation and Academic Achievement

The relationship between learning motivation and academic achievement can be illustrated in the conceptual framework.

The figure illustrates that learning motivation acts as an independent variable that directly influences students' academic achievement. Students with stronger motivation tend to demonstrate greater persistence, engagement, and commitment in completing academic tasks.

Previous research has emphasized that motivation encourages students to engage actively in the learning process and develop deeper cognitive engagement with academic materials (Ryan & Deci, 2022).

Furthermore, motivational orientation also plays a crucial role in promoting self-directed learning behaviors among students. Highly motivated students tend to take greater responsibility for their learning processes, actively seek feedback, and continuously improve their academic skills, which ultimately leads to higher academic achievement (Zimmerman & Schunk, 2021).

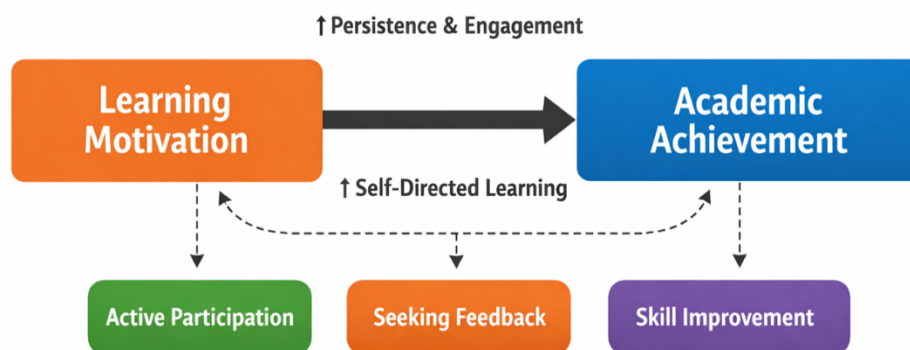


Figure 1. Conceptual Framework of the Relationship between Learning Motivation and Academic Achievement

Interpretation of Findings

The findings of this study highlight the critical role of motivation in shaping students' academic performance. Students with higher motivation levels are more likely to adopt effective learning strategies and demonstrate persistence in overcoming academic challenges.

Furthermore, motivated students tend to actively participate in classroom discussions, complete assignments on time, and seek additional learning resources to improve their understanding of course materials.

Overall, the results confirm that learning motivation serves as a key psychological factor that drives students' engagement in the learning process and positively influences academic success (Guo et al., 2022).

In addition, recent educational research emphasizes that motivation is closely related to students' long-term academic persistence and lifelong learning attitudes. Students who maintain strong learning motivation tend to develop positive academic identities and stronger resilience when facing academic difficulties (OECD, 2023).

Discussion

The results of this study indicate that learning motivation has a positive and significant relationship with students' academic achievement. The correlation analysis shows a moderately strong relationship between the two variables, suggesting that students who demonstrate higher levels of motivation tend to achieve better academic performance. This finding highlights the important role of motivational factors in influencing students' engagement and persistence in the learning process.

One possible explanation for this relationship is that motivated students are more likely to demonstrate greater commitment to their academic responsibilities. Students with high learning motivation tend to allocate more time and effort to studying, completing assignments, and participating in academic activities. As a result, they are better prepared to understand course materials and perform well in assessments, which ultimately leads to higher academic achievement.

The findings of this study are consistent with previous research that emphasizes the critical role of motivation in educational outcomes. Several studies have shown that motivation acts as a psychological driver that encourages students to engage actively in learning activities, maintain focus during the learning process, and overcome academic challenges. Students with strong intrinsic motivation, such as curiosity and interest in learning, often demonstrate deeper engagement in academic tasks compared to those who rely primarily on external rewards.

Furthermore, the regression analysis indicates that learning motivation contributes significantly to explaining variations in students' academic achievement. Although motivation accounts for a substantial proportion of the variance in academic performance, the results also suggest that other factors play an important role. These factors may include learning strategies, teaching methods, family support, academic environment, and students' cognitive abilities. Therefore, academic achievement should be viewed as a multidimensional outcome influenced by various psychological, social, and educational factors.

Another important implication of these findings is related to the role of educators and educational institutions in fostering students' motivation. Learning environments that encourage active participation, provide constructive feedback, and support students' autonomy may enhance students' intrinsic motivation. In addition, the integration of interactive learning methods, collaborative learning, and digital learning platforms can increase students' engagement and motivation to learn.

Overall, the results of this study emphasize that strengthening students' learning motivation can be an effective strategy for improving academic achievement. Educational institutions should therefore prioritize the development of learning environments that stimulate students' curiosity, encourage self-directed learning, and support their academic growth. By fostering strong learning motivation, educators can help students achieve better academic outcomes and develop lifelong learning habits.

CONCLUSION

This study examined the relationship between learning motivation and students' academic achievement. The results of the statistical analysis revealed that learning motivation has a positive and significant relationship with academic achievement. Students who demonstrate higher levels of motivation tend to achieve better academic performance. This finding confirms that motivation plays an important role in encouraging students to actively engage in learning activities and persist in completing academic tasks.

The regression analysis further indicates that learning motivation contributes significantly to explaining variations in students' academic achievement. Although motivation explains a considerable portion of academic performance, the findings also suggest that other factors such as learning strategies, teaching quality, academic environment, and social support may also influence students' academic outcomes.

From a practical perspective, the findings highlight the importance of fostering students' learning motivation in educational settings. Educators and educational institutions should create supportive learning environments that encourage student participation, autonomy, and engagement in learning activities. Implementing innovative teaching strategies and providing constructive feedback may help strengthen students' intrinsic motivation and improve their academic performance.

However, this study has several limitations. The research focuses only on the relationship between learning motivation and academic achievement without examining other potential influencing factors. Future research is recommended to include additional variables such as learning strategies, emotional intelligence, and learning environments to obtain a more comprehensive understanding of the determinants of academic success.

Overall, this study contributes to the growing body of literature on educational psychology by emphasizing the crucial role of learning motivation in shaping students' academic achievement.

REFERENCES

- Alenezi, M. (2023). Digital Learning and Digital Institution in Higher Education. *Education Sciences*, 13(1). <https://doi.org/10.3390/educsci13010088>
- Alenezi, M., Wardat, S., & Akour, M. (2023). The Need of Integrating Digital Education in Higher Education: Challenges and Opportunities. *Sustainability (Switzerland)*, 15(6). <https://doi.org/10.3390/su15064782>
- Assefa, Y., Tilwani, S. A., Moges, B. T., & Majeed, H. (2025). Unpacking student engagement and its mediating role in predicting the relationship between self-determination and academic satisfaction among undergraduate students in higher education. *Social Sciences & Humanities Open*, 12, 101797. <https://doi.org/10.1016/j.ssaho.2025.101797>
- Bandara, K. M. N. T. K., & Hettiwaththage, R. C. (2025). The Interplay of Intrinsic and Extrinsic Motivation in Academic Achievement: A Comprehensive Review. *Sri Lanka Journal of Social Work*, 9(2), 1–32. <https://doi.org/10.4038/sljsw.v9i2.24>
- Broadbent, J., & Poon, W. H. (2021). Self-regulated learning strategies and academic achievement in online higher education learning environments: A systematic review. *Educational Psychology Review*, 33(3), 1–29. <https://doi.org/10.1007/s10648-020-09514-1>
- Datu, J. A. D., & Park, N. (2023). Academic engagement and well-being among university students. *Journal of Happiness Studies*, 24(2), 657–676. <https://doi.org/10.1007/s10902-022-00582-4>
- Deep, P. Das, Chen, Y., Ghosh, N., & Rahaman, Md. S. (2024). The Influence of Student–Instructor Communication Methods on Student Engagement and Motivation in Higher Education Online Courses During and After the COVID-19 Pandemic. *Education Sciences*, 15(1), 33. <https://doi.org/10.3390/educsci15010033>
- Eccles, J. S., & Wigfield, A. (2020). From expectancy-value theory to situated expectancy-value theory: A developmental, social cognitive, and sociocultural perspective on motivation. *Contemporary Educational Psychology*, 61, 101859. <https://doi.org/10.1016/j.cedpsych.2020.101859>
- Froiland, J. M., & Worrell, F. C. (2020). Intrinsic motivation and academic achievement. *Contemporary Educational Psychology*, 60, 101860. <https://doi.org/10.1016/j.cedpsych.2020.101860>
- Guo, J., Marsh, H. W., Morin, A. J. S., Parker, P. D., & Kaur, G. (2022). Directionality of expectancy-value and academic achievement: A longitudinal investigation. *Journal of Educational Psychology*, 114(6), 1231–1247. <https://doi.org/10.1037/edu0000642>
- Haroony, A., & Kausar, F. N. (2025). Influence of Curiosity on Students' Lifelong Learning Orientation and Cognitive Engagement in Higher Education. *Journal of Asian Development Studies*, 14(4), 86–102. <https://doi.org/10.62345/jads.2025.14.4.8>
- Hattie, J., & Donoghue, G. (2020). Learning strategies: A synthesis and conceptual model. *Npj Science of Learning*, 5(1), 1–13. <https://doi.org/10.1038/s41539-020-00072-2>
- Howard, J. L., Bureau, J.-S., Guay, F., Chong, J. X., & Ryan, R. M. (2021). Student motivation and associated outcomes: A meta-analysis from self-determination theory. *Educational Psychology Review*, 33(4), 1–35. <https://doi.org/10.1007/s10648-020-09545-8>

- Lachheb, A., Leung, J., Abramenska-Lachheb, V., & Sankaranarayanan, R. (2025). AI in higher education: A bibliometric analysis, synthesis, and a critique of research. *Internet and Higher Education*, 67. <https://doi.org/10.1016/j.iheduc.2025.101021>
- Mega, C., Ronconi, L., & De Beni, R. (2021). What makes a good student? How emotions, self-regulated learning, and motivation contribute to academic achievement. *Journal of Educational Psychology*, 113(6), 1214–1230. <https://doi.org/10.1037/edu0000312>
- Meng, Q., & Zhang, Q. (2023). The Influence of Academic Self-Efficacy on University Students' Academic Performance: The Mediating Effect of Academic Engagement. *Sustainability (Switzerland)*, 15(7). <https://doi.org/10.3390/su15075767>
- Rentzios, C., Karagiannopoulou, E., & Ntritsos, G. (2025). Academic Emotions, Emotion Regulation, Academic Motivation, and Approaches to Learning: A Person-Centered Approach. *Behavioral Sciences*, 15(7), 900. <https://doi.org/10.3390/bs15070900>
- Riswanto, A., & Aryani, S. (2017). Learning motivation and student achievement : description analysis and relationships both. *COUNS-EDU: The International Journal of Counseling and Education*, 2(1), 42. <https://doi.org/10.23916/002017026010>
- Ryan, R. M., & Deci, E. L. (2022). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *Contemporary Educational Psychology*, 68, 102056. <https://doi.org/10.1016/j.cedpsych.2022.102056>
- Schneider, M., & Preckel, F. (2022). Variables associated with achievement in higher education: A systematic review of meta-analyses. *Psychological Bulletin*, 148(1), 1–34. <https://doi.org/10.1037/bul0000310>
- Zimmerman, B. J., & Schunk, D. H. (2021). Self-regulated learning and academic achievement. *Educational Psychologist*, 56(3), 1–14. <https://doi.org/10.1080/00461520.2021.1897037>



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