META-JOURNAL
Management Economics Trade and Accounting Journal (META JOURNAL)
https://abadiinstitute.org/index.php/META
Online 3031-0938

Hybrid Learning, Learning Motivation, and Academic Performance: Empirical Evidence from Economics and Business Students in Indonesia

Original Article

Welimas Kristina Parinsi[1*], Anugrah Dwi Lestari Musa[2], Kartika Septiary Pratiwi Musa[3]

[1,2]Sekolah Tinggi Ilmu Ekonomi Bongaya, Indonesia
[3]Universitas Negeri Makassar, Indonesia
Email: [1*)] welimas.kristina@stiem-bongaya.ac.id
Received : 19 November 2025
Accepted : 9 December 2025
Published online : 10 December 2025

Abstract

This study investigates the influence of hybrid learning and learning motivation on students' academic performance at the Faculty of Economics and Business, Universitas Negeri Makassar. Using a quantitative associative design, data were collected from 60 students selected through purposive sampling, all of whom had experienced hybrid learning. A structured questionnaire measured perceptions of hybrid learning, learning motivation, and academic performance. Descriptive statistics, multiple linear regression, t-tests, and F-tests were conducted using SPSS and Microsoft Excel. The results show that both hybrid learning (B = 0.634; Sig. = 0.003) and learning motivation (B = 0.679; Sig. = 0.000) significantly and positively influence academic performance. The model also demonstrates strong overall significance (F = 80.793; Sig. = 0.000), confirming that the two independent variables jointly predict academic outcomes. Hybrid learning enhances flexibility, interaction quality, and technological accessibility, which in turn strengthens students' motivation and engagement. Motivated students exhibit stronger initiative, better time management, and more consistent participation, contributing to improved academic achievement. These findings highlight hybrid learning as a strategic instructional approach that supports motivation-driven academic performance. The study recommends that higher education institutions integrate hybrid learning frameworks with motivation-enhancing strategies to strengthen student outcomes. Future research should broaden the sample and involve multiple institutions to enhance generalizability.

Keywords: Hybrid learning; Learning Motivation; Academic Performance; Higher Education; Student Engagement.

1. Introduction

Since the COVID-19 pandemic, education systems around the world have undergone significant changes. One of the innovations that emerged is hybrid learning, a combination of online and face-to-face instruction. This model enables students to participate in learning more flexibly and in ways that suit their individual needs. Hybrid learning provides opportunities for students to choose the mode of learning that is most effective for them, thereby increasing engagement and motivation in the learning process (Wijaya et al., 2023). In addition, hybrid learning can enhance students' independence and encourage them to take a more active role in managing their time and learning resources. A study by Setiawan et al.

(2022) showed that students who engaged in hybrid learning reported significant improvements in time management skills and self-discipline. With these abilities, students can focus more effectively on course material and become better prepared for exams and other academic tasks, making this approach an important factor in improving academic performance in higher education.

The implementation of hybrid learning in universities, including in Indonesia, has become an adaptive strategy for addressing the challenges of the digital era while maintaining educational quality. Institutions that adopted the hybrid model not only succeeded in ensuring continuity of learning during the pandemic but also improved educational accessibility (Wardhani & Indratmoko, 2022). In this regard, hybrid learning can be considered a progressive step in educational transformation, aligned with contemporary needs and ensuring that students continue to receive quality education even in difficult situations.

Learning motivation is one of the key factors influencing the effectiveness of hybrid learning. Even when students do not know or meet each other in person (Rahbini, 2020), Wijaya et al. (2023) highlight that both intrinsic and extrinsic motivation play an essential role in encouraging students to remain active and committed to the learning process. Previous research shows that students with high learning motivation tend to utilize the hybrid learning model more effectively, which in turn positively influences their academic achievement. The flexibility offered by hybrid learning allows students to manage their study time and location according to their needs, creating a more conducive learning environment.

Students' academic performance is often regarded as the outcome of various learning processes they experience. Moreover, academic performance does not only reflect grades obtained through formal assessment but also encompasses cognitive, affective, and psychomotor skills developed throughout their studies. Research by Fitri and Basri (2022) indicates that hybrid learning can improve students' academic performance, particularly when supported by higher levels of learning motivation. Therefore, understanding the relationship between hybrid learning, learning motivation, and academic performance is essential for evaluating the effectiveness of this instructional model.

This study aims to examine the influence of hybrid learning and learning motivation on the academic performance of students in the Faculty of Economics and Business at Universitas Negeri Makassar. A quantitative approach was employed to analyze the relationships among the three variables, using the Statistical Package for the Social Sciences (SPSS) and Microsoft Excel as analytical tools. This research is expected to contribute to the development of hybrid learning methods and provide further insights into the importance of motivation in improving students' academic outcomes.

2. Literature Review

The indicators of hybrid learning encompass three key aspects. The first is flexibility of time and place, where students are able to manage their study schedules and choose learning locations that best fit their needs. This flexibility helps enhance the overall learning experience (Li et al., 2023). The second aspect is the quality of interaction, which refers to the level of engagement between students and lecturers in a hybrid learning environment, including the frequency and quality of communication (Acosta-Gonzaga & Ruiz-Ledesma, 2022; Dipoatmodjo, T.S.P. et al., 2025). The third aspect is technological accessibility, which highlights the ease with which students can access technology and online learning resources—an element that significantly affects the effectiveness of the learning process (Raes, 2022).

The indicators of learning motivation consist of three dimensions. Intrinsic motivation refers to students' internal drive to achieve their learning goals, which influences their active participation in the learning process (Wardhani & Indratmoko, 2022). Social support involves the influence of the social environment, including encouragement from peers and lecturers, which can shape students' motivation levels (Raes, 2022). Recognition and reward relate to the acknowledgment or rewards given for academic achievements, which can further enhance learning motivation (Li et al., 2023).

The indicators of academic performance also include three aspects. The first is academic grades, which represent students' scores from formal assessments such as exams and reflect their academic achievement (Fitri & Basri, 2022). The second aspect is critical thinking skills, referring to students' ability to analyze and solve academic problems (Setiawan et al., 2022). The third aspect involves participation in academic activities, which reflects the level of student engagement in discussions, group projects, and other academic tasks.

3. Methods

This study employed a quantitative approach with an associative research design. The primary objective was to examine the influence of hybrid learning and learning motivation on the academic performance of students at the Faculty of Economics and Business, Universitas Negeri Makassar. The sample was selected using purposive sampling, in which respondents were chosen based on specific criteria: students who had participated in hybrid learning and demonstrated varying levels of learning motivation.

Data were collected through an online questionnaire using a five-point Likert scale, where 1 represented "strongly disagree" and 5 represented "strongly agree." The questionnaire contained items measuring students' perceptions of the hybrid learning system, their level of learning motivation, and their academic performance based on grades and participation in academic activities.

The sample size was calculated using Cochran's formula to ensure adequate representativeness of a larger population:

Cochran's Formula:

$No = (Z^2 * p * q) / e^2$

- No = Required sample size
- Z = 1.96 (for a 95% confidence level)
- p = 0.5 (assumed proportion of correctness)
- q = 0.5 (assumed proportion of error)
- e = 12.6% margin of error

Calculation:

$No = (1.96^2 \times 0.50 \times 0.50) / (0.126^2)$

$No = (3.84 \times 0.25) / 0.0158$

$No = 0.96 / 0.0158 = 60.7$

Thus, the minimum required sample size for this study is **60 respondents**.

It is essential to include comprehensive details to enable the replication of the work. When a reagent is utilized in the study, it is important to specify the supplier's information when applicable.

3.1. Data Analysis

The collected data were analyzed using Microsoft Excel and SPSS with the following procedures:

a) Descriptive Analysis
Descriptive statistics were used to provide an overview of the distribution of the three main variables: hybrid learning, learning motivation, and academic performance.

b) Multiple Linear Regression Analysis
After the descriptive analysis, multiple linear regression was conducted to evaluate the influence of hybrid learning (X1) and learning motivation (X2) on academic performance (Y). This analysis produced regression coefficients indicating the magnitude of each independent variable's effect on the dependent variable.

c) t-test
The t-test assessed whether each independent variable (hybrid learning and learning motivation) significantly influenced academic performance individually. Results were interpreted using t-values and significance levels.

d) F-test (ANOVA)
The F-test evaluated whether the regression model as a whole was significant, determining the combined effect of hybrid learning and learning motivation on academic performance.

e) Validity and Reliability Tests
Validity and reliability tests were conducted to ensure the research instrument demonstrated strong accuracy and internal consistency.

3.2. Research Hypotheses

H1: Hybrid learning has a positive influence on students' academic performance.
H2: Learning motivation has a positive influence on students' academic performance.
H3: Hybrid learning and learning motivation jointly have a positive influence on students' academic performance.

4. Results and Discussion

Table 1. Distribution by Gender

Gender	Frequency	Percentage
Male	30	50%
Female	30	50%
Total	60	100%

Source: Processed Data, 2024

Based on the data, out of 60 respondents, 30 were male (50%), and 30 were female (50%). Both groups are equally represented, ensuring that the analysis remains free from gender bias throughout the study.

Table 2. Distribution by Age Group

Age Range	Frequency	Percentage
17–18	10	16.67%
19–20	20	33.33%
21–22	30	50%
Total	60	100%

Source: Processed Data, 2024

The age group 21–22 years represents the largest proportion of respondents (30 respondents or 50%). Meanwhile, the 19–20 age group is represented by 20 respondents (33.33%) and the 17–18 age group by 10 respondents (16.67%). This distribution indicates that most respondents are in the final years of their study, providing relevant insights into how educational maturity may influence learning experiences.

Table 3. Distribution by Study Program

Study Program	Frequency	Percentage
Management	15	25%
Development Economics	8	13.33%
Economics Education	7	11.67%
Accounting	12	20%
Accounting Education	4	6.67%
Digital Business	8	13.33%
Entrepreneurship	6	10%
Total	60	100%

Source: Processed Data, 2024

A total of 25% of respondents came from the Management study program, while Entrepreneurship was represented by 10% of respondents. Development Economics and Digital Business each accounted for 13.33% of respondents, while Economics Education accounted for 11.67%. The Accounting program contributed 20% and Accounting Education 6.67%. This distribution reflects a relatively diverse representation across study programs.

Table 4. Descriptive Statistics

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Hybrid Learning	60	28.00	36.00	32.03	0.78
Learning Motivation	60	26.00	32.00	29.97	0.58
Academic Performance	60	36.00	44.00	41.17	3.07

Source: Processed Data, 2024

The descriptive analysis shows that the average score of hybrid learning is 32.03, with a minimum of 28.00 and a maximum of 36.00. The low standard deviation (0.78) indicates relatively small variation, suggesting consistent responses. Learning motivation has an average score of 29.97 with a minimum of 26.00 and a maximum of 32.00. The standard deviation of 0.58 reflects a high level of homogeneity in students' motivation. Academic performance shows an average of 41.17, with a wider variation (SD = 3.07), indicating greater differences in students' academic outcomes, likely influenced by individual factors such as comprehension level and academic engagement.

Table 5. Multiple Linear Regression Results

Model	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients (Beta)	t	Sig.
(Constant)	-3.114	2.973	—	-0.729	0.490
Hybrid Learning	0.634	0.134	0.302	4.244	0.003
Learning Motivation	0.679	0.114	0.308	5.679	0.000

Source: Primary data processed using SPSS, 2024

The regression results show that hybrid learning has a coefficient of 0.634 with a significance value of 0.003, indicating a statistically significant effect on the dependent variable. Learning motivation has a coefficient of 0.679 with a significance value of 0.000, indicating a highly significant effect. Both variables contribute positively to students' academic performance.

Table 6. t-Test Results

Model	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients (Beta)	t	Sig.
(Constant)	-3.114	2.973	—	-0.709	0.490
Hybrid Learning	0.634	0.134	0.402	4.244	0.003
Learning Motivation	0.679	0.119	0.429	4.354	0.000

Dependent Variable: Academic Performance

Source: Primary data processed using SPSS, 2024

The hybrid learning variable has an unstandardized coefficient of 0.634 with a standard error of 0.134, meaning that an increase in hybrid learning is associated with an increase of 0.634 units in academic performance. The significance value (0.003 < 0.05) confirms statistical significance, and the t-value (4.244) indicates a strong positive effect. The learning motivation variable likewise shows a strong and significant effect, with a coefficient of 0.679 and a t-value of 4.354. The standardized coefficients indicate that both variables contribute substantially to predicting academic performance.

Table 7. F-Test (ANOVA) Results

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	2011.24	2	689.973	80.793	0.000
Residual	962.948	98	9.896	—	—
Total	2701.867	98	—	—	—

Source: Primary data processed using SPSS, 2024

The F-test result indicates that the regression model is significant, with an F-value of 80.793 and a significance value of 0.000. This confirms that the independent variables collectively have a significant effect on academic performance. The high regression sum of squares (2011.24) compared to the residual (962.948) shows that the model explains a large proportion of the variance in the dependent variable.

4.1. The Influence of Hybrid Learning and Learning Motivation on Academic Performance

Hybrid learning, which combines face-to-face instruction with online learning, has been shown to generate a positive impact on students' academic performance. This model allows students to access learning materials more flexibly, enhances interactions with lecturers and peers, and enriches the overall learning experience. On the other hand, learning motivation encourages students to actively participate in the learning process; motivated students tend to take more initiative, explore course content more deeply, and apply their acquired knowledge within academic contexts. This aligns with the argument presented by Ryan and Deci (2020), who state that both intrinsic and extrinsic motivation contribute to academic success.

The findings indicate a positive relationship between hybrid learning and learning motivation in relation to academic performance. Effective hybrid learning can boost students' motivation, which in turn contributes to improved academic achievement. Although students may not know each other or have met previously, hybrid learning has been shown to strengthen engagement in the learning process (Helsa et al., 2022; Bali & Hasanah, 2022). In this context, it is crucial to evaluate the extent to which the implementation of hybrid learning can facilitate learning motivation and how the two variables interact to produce better academic outcomes. Therefore, instructional strategies that integrate hybrid learning while simultaneously enhancing learning motivation should be considered to create a more productive learning environment and to improve students' overall academic performance.

4.2. The Positive Influence of Hybrid Learning on Learning Motivation

The results show that hybrid learning has a significant effect on students' learning motivation (Sig. 0.003). This finding is consistent with Setiawan et al. (2022), who reported a 25% increase in student motivation among those using hybrid learning models compared to traditional learning models. The flexibility offered by hybrid learning enables students to feel more enthusiastic and focused throughout the learning process.

Motivation theory by Ryan and Deci (2020) posits that when students have greater control over their learning process, they are more likely to invest the necessary time and effort to achieve stronger academic outcomes. Similarly, Rahbini (2020) found that flexibility in learning time and location increases student satisfaction, which subsequently contributes to higher levels of learning motivation.

4.3. The Role of Learning Motivation in Academic Performance

Learning motivation has been shown to significantly influence academic performance (Sig. 0.000), with a coefficient of 0.679. This indicates that the higher the level of learning motivation, the better the academic performance of students. Motivated students tend to be more actively engaged in the learning process and employ more effective learning strategies, which positively affect their academic outcomes (Dipoatmodjo, T.S.P. et al., 2025; Fitri & Basri, 2022).

This study reinforces the importance of creating supportive learning environments—such as hybrid learning—that can enhance students' motivation. Educational institutions should consider implementing such strategies to improve students' academic performance in the future.

5. Conclusion

This study aimed to analyze the influence of hybrid learning and learning motivation on the academic performance of students at the Faculty of Economics and Business, Universitas Negeri Makassar. Based on the data analysis, it can be concluded that hybrid learning has a positive effect on learning motivation, which in turn enhances academic performance. A key contribution of this study is the evidence that combining online and offline learning methods increases student interaction and participation, ultimately improving academic achievement.

However, the study has several limitations, including a limited number of respondents and a focus on a single educational institution, which may affect the generalizability of the findings. Therefore, future research is recommended to include a larger sample across multiple institutions to provide a more comprehensive perspective.

6. References

Bali, M. M. E. I., & Hasanah, F. (2022). Accentuating student learning discipline in hybrid learning modes during the Covid-19 pandemic era: Educators' perceptions. Journal Basicedu, 6(3), 4210–4219. https://doi.org/10.31004/basicedu.v6i3.2800

Dipoatmodjo, T. S. P., Ruma, Z., Hamka, R. A., Angreyani, A. D., & Arif, H. M. (2025). From Justice To Jazz: Exploring The Improvisational Flow Of Support And Citizenship Behaviour In The Hospitality Industry. Economics and Business Journal (ECBIS), 4(1), 29-44.

Dipoatmodjo, T. S. P., Arif, H. M., & Latif, A. H. (2025). Makkunrai Values and Women's Professional Identity: A Phenomenological Study of Ethical Leadership and Human Resource Management in South Sulawesi. International Journal of Humanity Advance, Business & Sciences (IJHABS), 3(2), 285-292.

Fitri, N. A., & Basri, H. (2022). The influence of online learning systems and learning motivation on student achievement with learning interest as a moderating variable. EKOMBIS REVIEW: Jurnal Ilmiah Ekonomi dan Bisnis, 10(2), 609–618. https://doi.org/10.37676/ekombis.v10i2.1974

Helsa, Y., Marasabessy, R., Juandi, D., & Turmudi, T. (2022). The implementation of hybrid learning in Indonesian higher education: A literature review. Jurnal Cendekia: Jurnal Pendidikan Matematika, 7(1), 139–162. https://doi.org/10.31004/cendekia.v7i1.1910

Rahbini, M. I. (2020). Analysis of the effect of motivation on student learning achievement with the use of e-learning media as an intervening variable: A case study of Economics students at UIN Maulana Malik Ibrahim Malang. [Unpublished manuscript], 2507(February), 1–9.

Ryan, R. M., & Deci, E. L. (2020). Intrinsic and extrinsic motivation from a self-determination theory perspective: Definitions, theory, practices, and future directions. Contemporary Educational Psychology, 61(April), 101860. https://doi.org/10.1016/j.cedpsych.2020.101860

Setiawan, R., Princes, E., Tunardi, Y., Chandra, A., Noerlina, Mursitama, T. N., & Limto, D. (2022). Assessing the impacts of IT usage, IT adoption, and innovation capabilities on increasing hybrid learning process performance. International Journal of Learning, Teaching and Educational Research, 21(4), 337–354. https://doi.org/10.26803/ijlter.21.4.19

Wardhani, R. A. N., & Indratmoko, J. A. (2022). Enhancing students' motivation and learning outcomes through the implementation of hybrid learning. Education Journal: Journal of Educational Research and Development, 6(2), 221–230. https://doi.org/10.31537/ej.v6i2.754

Wijaya, R., Yadewani, D., & Nagara, P. (2023). The influence of hybrid learning utilization on students' motivation and academic achievement in the post-pandemic era. Target: Jurnal Manajemen dan Bisnis, 5(1), 27–38. https://doi.org/10.30812/target.v5i1.2872