

Research Article

The Influence of Internal and External Factors on Study Duration: Mediating Effects of KIP-K Scholarship Utilization Using Structural Equation Modeling

Allya Lestari Berutu, M. Sayuti*, Amri

Department of Industrial Engineering, Faculty of Engineering, Universitas Malikussaleh, Aceh Utara, Indonesia, 25355

*Corresponding Author: sayuti_m@unimal.ac.id | Phone: +6285277293401

ABSTRACT

Students who receive the KIP-Kuliah Scholarship are expected to complete their studies efficiently in accordance with academic standards. However, delays in study completion are still observed, indicating the influence of internal and external factors. This study aims to analyze the effects of learning motivation, time management, self-efficacy, campus environment, social support, and economic conditions on study duration, with scholarship utilization serving as a mediating variable. The research employed a quantitative approach by distributing questionnaires to 100 respondents and analyzing the data using Structural Equation Modeling (SEM) with SmartPLS. The results indicate that both internal and external factors play a significant role in encouraging effective scholarship utilization and supporting efficiency in study completion. The R-square values of 0.941 (94.1%) for the scholarship utilization variable and 0.965 (96.5%) for the study duration variable demonstrate a very strong predictive capability of the model. Furthermore, scholarship utilization contributes to helping students optimize their academic processes, thereby enabling more timely study completion. These findings confirm that efficiency in study duration results from a combination of personal factors, social support, and effective scholarship utilization.

Keywords: Structural Equation Modeling, SmartPLS Internal Factors; External Factors; Scholarship Utilization; Study Duration; KIP-Kuliah; Structural Equation Modeling; SmartPLS

1. INTRODUCTION

Higher education plays a strategic role in developing high-quality, independent, and competitive human resources. Timely completion of study programs is a key indicator of learning effectiveness, students' self-management abilities, and the optimal utilization of available resources (Nasution & Wahyuni, 2025). Within the framework of Industrial and Organizational Psychology (IOP), universities can be viewed as educational organizations, while students function as organizational members who are required to perform academic tasks, such as attending lectures, completing assignments, and graduating within the stipulated timeframe (Sugara Budiman et al., 2025); (Putri et al., 2025).

Internal factors, including learning motivation and time management, play an essential role in academic achievement. Motivation serves as a driving force that fosters focus, consistency, and perseverance in overcoming academic challenges (Andika Rindi, 2019); (Yogi Fernando et al., 2024); (Ahmadi et al., 2020). Effective time management enables students to allocate their time efficiently for learning activities and timely task completion (Nika Sintesa, 2022); (Fanani et al., 2024). In addition, self-efficacy represents an individual's belief in their own abilities, which influences how students think, act, and motivate themselves in academic context; (Muna et al., 2021). External factors, such as social support and the campus environment, also affect students' study progression. Social support from parents, peers, and the surrounding environment helps students cope with academic pressures and challenges (Anriyadi et al., 2020); (Dukungan et al., 2020). A supportive campus environment enhances learning concentration, while socioeconomic conditions may influence students' access to and utilization of academic resources (Wahyudin & Nourliana, 2013); (Sundari et al., 2023). The Kartu Indonesia Pintar–Kuliah (KIP-Kuliah) program is a form of financial assistance designed to reduce students' economic burden and allow them to focus more effectively on their academic responsibilities (Diniyati et al., 2024); (Hassan et al., 2024).

Previous studies have reported significant effects of learning motivation, time management, and learning environment on the academic performance of scholarship recipients. (Ulfah Arini et al., 2024) found that learning motivation positively influences task completion commitment among KIP scholarship recipients. (Fanani et al., 2024) demonstrated that time management has a significant impact on academic productivity, while (Meliana et al., 2023) emphasized the importance of motivation and active student engagement in improving academic achievement. Similar findings were reported by (Nu'man,

2023) and (Prameswari & Wardani, 2024) highlighting the critical roles of motivation and learning environment in determining academic outcomes. Based on these considerations, this study aims to analyze the influence of internal and external factors on students' study duration, with the utilization of the KIP-Kuliah scholarship as a mediating variable, using the Structural Equation Modeling (SEM) approach (Niszar, 2023); (Krisnawan & Safirin, 2021); (Istianingsih & Wijanto, 2008).

2. RESEARCH METHOD

This study was conducted on students of Universitas Malikussaleh who are recipients of the Bidikmisi/KIP-Kuliah scholarship. A quantitative research approach was employed, as the data collected were numerical and analyzed using statistical techniques. To examine the relationships among variables, this study applied Structural Equation Modeling (SEM) based on Partial Least Squares (PLS) with the assistance of SmartPLS software. This approach enables simultaneous analysis of relationships between latent variables and their indicators and is suitable for handling complex research models. The data used in this study consisted of primary and secondary data. Primary data were collected directly from respondents through the distribution of questionnaires to KIP-Kuliah scholarship recipients, while secondary data were obtained from relevant institutional sources, particularly data on the total number of KIP-Kuliah scholarship recipients.

2.1 Population and Sample

The population of this study comprised all KIP-Kuliah scholarship recipients at Universitas Malikussaleh, totaling 6,381 students. The sample represents a subset of the population selected to reflect its overall characteristics. The sample size was determined using the Slovin formula with a 10% margin of error. Based on this calculation, a sample size of 98.45 was obtained and subsequently rounded up to 100 respondents. Thus, this study involved 100 KIP-Kuliah scholarship recipient students as research participants.

2.2 Data Collection Techniques and Operational Definition of Variables

Data collection was carried out through an online questionnaire distributed via Google Forms and shared with eligible respondents through WhatsApp. The respondents met the criterion of being Universitas Malikussaleh students who receive the KIP-Kuliah scholarship. The research instrument consisted of written statements measured using a five-point Likert scale, ranging from strongly disagree to strongly agree, to assess respondents' perceptions and attitudes toward the research variables. The research variables were categorized into independent and dependent variables. The independent variables included internal and external factors, namely learning motivation, time management, self-efficacy, campus environment, social support, and economic condition. Learning motivation represents students' internal drive to achieve academic goals (Ahmadi et al., 2020), while time management reflects students' ability to organize and utilize time effectively (Brady et al., 2022). Self-efficacy refers to students' confidence in their ability to meet academic demands (Delinda et al., 2024). External factors include the campus environment, defined as the physical, social, and academic conditions that influence the learning process (Deng & Lee, 2025), social support from family, peers, and lecturers (Ulfa et al., 2025), and economic condition, which relates to students' ability to meet educational needs (Aulia et al., 2024). The dependent variables in this study were scholarship utilization and study duration. Scholarship utilization is defined as the effectiveness of using KIP-Kuliah funds to support academic needs and facilitate study continuity (Saputra, 2025), Study duration refers to the length of time required by students to complete all academic requirements until obtaining a bachelor's degree (Faradisa et al., 2022). The relationships among variables were analyzed through a structural model, as illustrated in Figure 1 and the measurement indicators for each variable are presented in detail in Table 1.

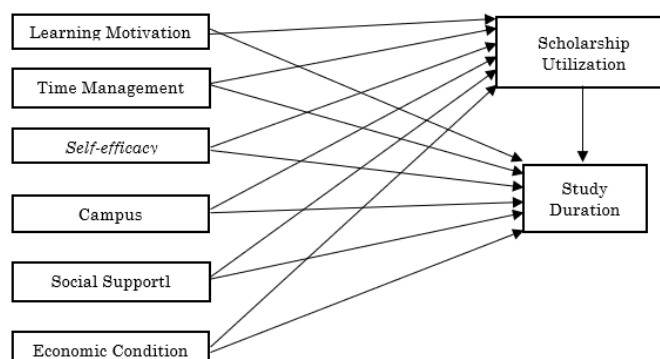


Figure 1. Initial Structural Model

Table 1. Variabels and Questionnaire Indicators

Variable	Indicators
Learning Motivation (X1)	Striving to achieve the best learning outcomes in every semester Feeling motivated to continuously improve academic abilities Attending lectures enthusiastically despite facing difficulties Viewing higher education as a means to achieve life goals
Time Management (X2)	Organizing schedules for lectures, studying, and other activities regularly Completing academic assignments according to predetermined deadlines Being able to allocate time between lectures, organizational activities, and personal life Avoiding procrastination in academic tasks
Self-Efficacy (X3)	Being confident in completing academic assignments successfully Being able to cope with academic pressure and responsibilities Having confidence in taking examinations and completing academic projects Completing studies on time according to the academic plan
Campus Environment (X4)	Campus facilities adequately support the learning process Lecturers actively provide guidance and feedback to students Relationships among students are positive and mutually supportive The academic system operates in an orderly manner and supports study progress
Social Support (X5)	Family provides motivation to continue and complete studies Peers provide support in completing assignments and facing examinations Lecturers or academic advisors are willing to assist when academic difficulties arise
Economic Condition (X6)	Family economic conditions are stable during the study period No difficulties in fulfilling academic-related needs Able to participate in all academic activities without financial constraints No need to seek additional employment to cover tuition fees
Scholarship Utilization (Y1)	No need to seek additional employment to cover tuition fees Financial conditions support focused learning without excessive economic pressure The KIP-K scholarship is fully utilized for academic needs Scholarships enable participation in all academic activities
Study Period (Y2)	The study program progresses smoothly according to the academic schedule Taking the maximum allowable credit units each semester Achieving optimal academic performance each semester Completing semesters in accordance with the prescribed academic timeline

2.3 Data Analysis Method

This study employed Structural Equation Modeling (SEM) using the Partial Least Squares (PLS) approach with SmartPLS software. The sample consisted of 100 respondents from student cohorts of 2021, 2022, 2023, and 2024, selected using the Slovin formula. This method was chosen because it allows simultaneous analysis of relationships among latent variables, does not require normally distributed data, and is suitable for relatively small sample sizes.

The stages of data analysis in this study included:

1. Model Specification, involving the development of a conceptual model that describes the relationships among latent variables and their indicators based on theoretical foundations.
2. Model Estimation, conducted using the PLS algorithm to obtain latent variable scores.
3. Measurement Model (Outer Model) Evaluation, including convergent and discriminant validity tests as well as reliability testing, with criteria of outer loading ≥ 0.7 , AVE ≥ 0.5 , and composite reliability ≥ 0.7 .
4. Structural Model (Inner Model) Evaluation, assessed through R-square values to examine the model's predictive capability and hypothesis testing using a significance level of p-value < 0.05 .

3. Results and Discussion

Data analysis in this study was conducted using the Partial Least Squares–Structural Equation Modeling (PLS-SEM) method. The stages of analysis included model specification, parameter estimation, evaluation of the measurement model (outer model), and evaluation of the structural model (inner model).

3.1 Model Specification

Model specification was carried out by formulating the relationships among latent variables in the form of an integrated structural model and measurement model (full/hybrid model). This model illustrates the causal relationships among latent variables analyzed using a path diagram. The latent variables included Learning Motivation (X1), Time Management (X2), Self-Efficacy (X3), Campus Environment (X4), Social Support (X5), Economic Condition (X6), Scholarship Utilization (X7),

and Study Period (X8). Each latent variable was measured using several indicators, as presented in Table 2, and The model specification is visualized in the form of a path diagram using SmartPLS 4, as presented in Figure 2.

Table 2. Components of the Structural Equation Modeling (SEM) Diagram

Variable	Indicator/Construct	Statement
Learning Motivation (X1)	X1.1	Striving to achieve the best learning outcomes in every semester
	X1.2	Feeling motivated to continuously improve academic abilities
	X1.3	Attending lectures enthusiastically despite facing difficulties
	X1.4	Viewing higher education as a means to achieve future goals
Time Management (X2)	X2.1	Organizing schedules for lectures, studying, and other activities regularly
	X2.2	Completing academic assignments according to predetermined deadlines
	X2.3	Being able to manage time between lectures, and organizational activities
	X2.4	Avoiding procrastination in academic tasks
Self-Efficacy (X3)	X3.3	Being confident in completing academic assignments successfully
	X3.3	Being able to cope with academic pressure and responsibilities
	X3.4	Having confidence in undertaking examinations and academic projects
	X3.4	Completing studies on time according to the academic plan
Campus Environment (X4)	X4.1	Lecturers provide guidance to help students graduate on time
	X4.2	Peers support collaborative learning and mutual assistance
	X4.3	The academic atmosphere is conducive to learning
	X4.4	Campus facilities (library, Wi-Fi, study rooms) support academic activities
Social Support (X5)	X5.1	Family provides motivation to continue and complete studies
	X5.2	Peers provide support in completing academic assignments
	X5.3	Family offers encouragement to persist in higher education
	X5.4	Lecturers are willing to assist when academic difficulties arise
Economic Condition (X6)	X6.1	Family economic conditions are stable during the study period
	X6.2	No difficulties in fulfilling academic-related needs
	X6.3	Able to participate in all academic activities without financial constraints
	X6.4	No need to seek additional employment to cover tuition fees
Scholarship Utilization (X7)	X7.1	No need to seek additional employment to finance education
	X7.2	Financial conditions support focused learning without economic pressure
	X7.3	The KIP-Kuliah scholarship is fully utilized for academic needs
	X7.4	Scholarships enable participation in all academic activities
Study Period (X8)	X8.1	Regularity of the academic process
	X8.2	Optimal utilization of study workload
	X8.3	Effective management of academic constraints during the study period
	X8.4	Timeliness of study completion

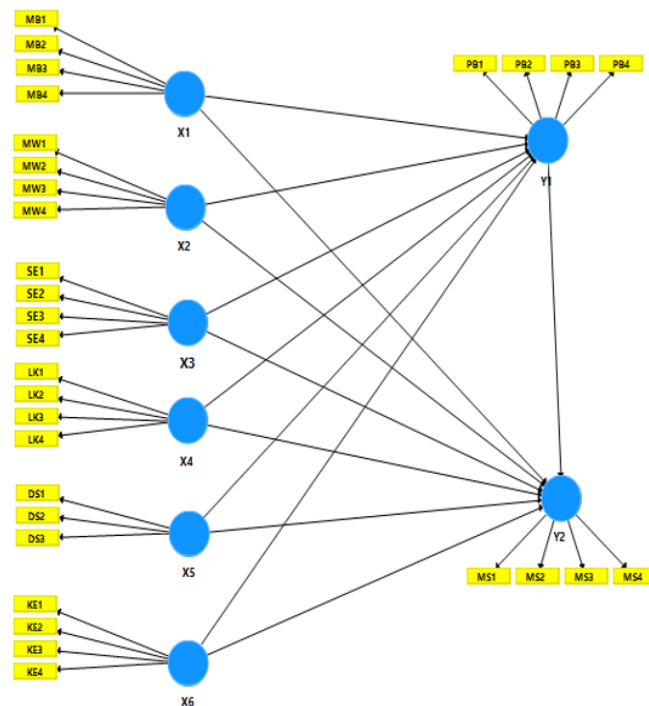


Figure 2. Measurement Model Specification

3.2 Model Estimation

The model estimation stage was conducted using the Partial Least Squares (PLS) algorithm, which is an iterative procedure to obtain latent variable scores based on the collected questionnaire data. The resulting latent variable scores serve as the basis for further analysis in the evaluation of the measurement model and the structural model. The results of the measurement model estimation are presented in Figure 3.

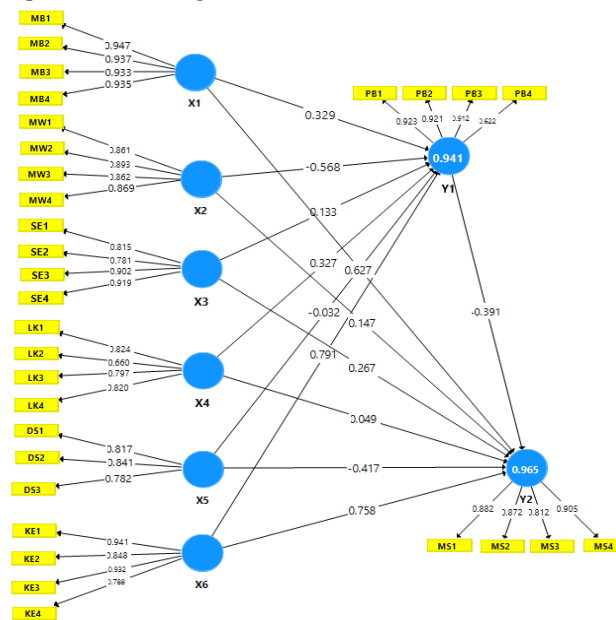


Figure 3. Bootstrapping Model Estimation

3.3 Results of the Measurement Model (Outer Model) Evaluation

The evaluation of the measurement model (outer model) was conducted to ensure that each indicator validly and reliably represents its corresponding latent variable before proceeding to the structural model analysis. The outer model assessment in this study includes convergent validity, discriminant validity, and composite reliability. Convergent validity was assessed to evaluate the adequacy of indicators in representing their respective constructs or latent variables. This assessment is based on the standardized loading factor, which indicates the level of correlation between an indicator and its construct. An indicator is considered valid if it has an outer loading value ≥ 0.70 . The results of the outer loading test are presented in Table 3.

Table 3. Outer Loading Results

Variable	Indicator/Construct	Outer Loading	Description
Learning Motivation	X1.1	0.947	Valid
	X1.2	0.937	Valid
	X1.3	0.933	Valid
	X1.4	0.935	Valid
Time Management	X2.1	0.861	Valid
	X2.2	0.893	Valid
	X2.3	0.862	Valid
	X2.4	0.869	Valid
Self-Efficacy	X3.1	0.815	Valid
	X3.2	0.781	Valid
	X3.3	0.902	Valid
	X3.4	0.919	Valid
Campus Environment	X4.1	0.824	Valid
	X4.2	0.880	Valid
	X4.3	0.797	Valid
	X4.4	0.820	Valid
Social Support	X5.1	0.817	Valid
	X5.2	0.841	Valid
	X5.3	0.782	Valid
Economic Condition	X6.1	0.777	Valid
	X6.2	0.780	Valid
	X6.3	0.870	Valid

	X6.4	0.860	Valid
Scholarship Utilization	Y1.1	0.923	Valid
	Y1.2	0.921	Valid
	Y1.3	0.912	Valid
	Y1.4	0.822	Valid
Study Period	Y2.1	0.823	Valid
	Y2.2	0.819	Valid
	Y2.3	0.941	Valid
	Y2.4	0.941	Valid

Based on **Table 3**, all indicators have outer loading values greater than 0.70; therefore, all indicators are declared valid in measuring their respective constructs. In addition, the quality of the measurement model was also evaluated using the Average Variance Extracted (AVE) value. A model is considered satisfactory if the AVE value exceeds 0.50. The results of the convergent validity test based on AVE values are shown in **Table 4**.

Table 4. Average Variance Extracted (AVE) Values

Variable	Average Variance Extracted (AVE)
Learning Motivation	0.880
Time Management	0.760
Self-Efficacy	0.733
Campus Environment	0.606
Social Support	0.663
Economic Condition	0.773
Scholarship Utilization	0.730
Study Period	0.754

Discriminant validity was assessed using cross-loading values, where each indicator must have a loading value greater than 0.70 on its associated construct and higher than its loadings on other constructs. The cross-loading results are presented in **Table 5**.

Table 5. Cross Loading Values

Indicators	MB	MW	SE	DS	LK	KE	PB	MS
X1.1	0.947	0.861	0.696	0.708	0.766	0.533	0.559	0.812
X1.2	0.937	0.822	0.815	0.784	0.763	0.595	0.634	0.873
X1.3	0.933	0.882	0.677	0.738	0.773	0.538	0.548	0.798
X1.4	0.935	0.881	0.838	0.790	0.742	0.563	0.596	0.841
X2.1	0.947	0.861	0.696	0.708	0.766	0.533	0.559	0.812
X2.2	0.922	0.893	0.683	0.800	0.817	0.552	0.566	0.803
X2.3	0.662	0.862	0.873	0.694	0.630	0.647	0.557	0.804
X2.4	0.659	0.869	0.852	0.744	0.671	0.592	0.510	0.771
X3.1	0.937	0.822	0.815	0.784	0.763	0.595	0.634	0.873
X3.2	0.525	0.594	0.781	0.758	0.782	0.837	0.869	0.604
X3.3	0.666	0.824	0.902	0.638	0.578	0.719	0.611	0.880
X3.4	0.626	0.791	0.919	0.657	0.590	0.685	0.614	0.819
X4.1	0.533	0.614	0.648	0.824	0.712	0.633	0.699	0.534
X4.2	0.562	0.592	0.488	0.880	0.503	0.360	0.375	0.509
X4.3	0.445	0.551	0.619	0.797	0.778	0.663	0.697	0.456
X4.4	0.893	0.830	0.775	0.820	0.781	0.687	0.681	0.886
X5.1	0.922	0.893	0.683	0.800	0.817	0.552	0.566	0.803
X5.2	0.535	0.621	0.697	0.820	0.841	0.724	0.758	0.536
X5.3	0.499	0.483	0.550	0.577	0.782	0.729	0.666	0.530
X6.1	0.483	0.535	0.690	0.736	0.764	0.941	0.934	0.631
X6.2	0.542	0.544	0.690	0.622	0.758	0.848	0.749	0.652
X6.3	0.499	0.552	0.710	0.747	0.761	0.932	0.921	0.649
X6.4	0.575	0.714	0.824	0.602	0.585	0.788	0.706	0.810
Y1.1	0.421	0.438	0.641	0.664	0.703	0.860	0.923	0.533
Y1.2	0.499	0.552	0.710	0.747	0.761	0.932	0.921	0.649
Y1.3	0.399	0.430	0.607	0.630	0.671	0.859	0.912	0.497
Y1.4	0.822	0.727	0.749	0.689	0.612	0.536	0.622	0.787
Y2.1	0.914	0.796	0.827	0.758	0.712	0.626	0.666	0.882
Y2.2	0.584	0.728	0.842	0.611	0.597	0.746	0.617	0.872

Y2.3	0.947	0.861	0.696	0.708	0.766	0.533	0.559	0.812
Y2.4	0.637	0.794	0.868	0.680	0.608	0.796	0.670	0.905

Composite Reliability is used to assess the level of internal construct consistency in a structural equation model. The interpretation of Composite Reliability (CR) values is in line with Cronbach's Alpha, where a value ≥ 0.7 indicates reliability and a value ≥ 0.8 indicates excellent reliability. The results of the Cronbach's Alpha and Composite Reliability tests are presented in [Table 6](#).

Tabel 6. Nilai Cronbach's Alpha and Composite reliability

Variable	Cronbach's alpha	Composite reliability (rho_a)
Learning Motivation	0.954	0.956
Time Management	0.895	0.895
Self-Efficacy	0.877	0.877
Campus Environment	0.783	0.815
Social Support	0.745	0.748
Economic Condition	0.900	0.904
Scholarship Utilization	0.866	0.875
Study Period	0.891	0.893

3.4 Results of the Structural Model (Inner Model) Evaluation

The structural model (inner model) was used to analyze the causal relationships among latent variables. The evaluation was conducted using R-square (R^2) values and path significance testing through the bootstrapping technique. The R^2 value indicates the proportion of variance in endogenous variables explained by exogenous variables. The criteria for assessing R^2 values are 0.67 (substantial), 0.33 (moderate), and 0.19 (weak). The results of the R-square analysis are presented in [Table 7](#).

Table 7. R-square Values

Variable	R-square	Adjusted R-square
PB	0.941	0.937
MS	0.965	0.962

The Scholarship Utilization (PB) variable has an R^2 value of 0.941, while the Study Period (MS) variable has an R^2 value of 0.965. Both values exceed 0.67, indicating that the structural model has very strong explanatory power in predicting the endogenous variables.

3.5 Hypothesis Testing Results

Hypothesis testing was conducted to examine the direct effects among latent variables by analyzing the path coefficients, T-statistics, and P-values obtained from the bootstrapping procedure. A relationship is considered statistically significant if the P-value < 0.05 . The results of hypothesis testing are presented in [Table 8](#).

Table 8. Hypothesis Testing Results

Variable	Original Sample	Sample mean (M)	(STDEV)	T-statistik (O/STDEV)	P-values	Description
X1 -> Y1	0.329	0.300	0.104	3.154	0.002	Accepted
X1 -> Y2	0.627	0.585	0.124	5.040	0.000	Accepted
X2 -> Y1	-0.568	-0.541	0.184	3.084	0.002	Accepted
X2 -> Y2	0.147	0.221	0.192	0.766	0.444	Rejected
X3 -> Y1	0.133	0.117	0.186	0.717	0.474	Rejected
X3 -> Y2	0.267	0.255	0.204	1.307	0.192	Rejected
X4 -> Y1	0.327	0.357	0.105	3.128	0.002	Accepted
X4 -> Y2	0.049	0.042	0.102	0.481	0.631	Rejected
X5 -> Y1	-0.032	-0.032	0.121	0.263	0.793	Rejected
X5 -> Y2	-0.417	-0.404	0.198	2.102	0.036	Accepted
X6 -> Y1	0.791	0.779	0.141	5.598	0.000	Accepted
X6 -> Y2	0.758	0.724	0.226	3.351	0.001	Accepted
Y1 -> Y2	-0.391	-0.378	0.123	3.168	0.002	Accepted

Based on **Table 8**, learning motivation (X1) has a positive and significant effect on both scholarship utilization (Y1) and study period (Y2). This indicates that students' internal motivation to achieve academic success and complete their studies plays an important role in optimizing scholarship utilization and accelerating study completion. Time management (X2) shows a negative and significant effect on scholarship utilization, but does not have a significant effect on the study period. This finding suggests that time management skills influence how students utilize scholarships, but do not directly determine the length of study duration. Furthermore, self-efficacy (X3) does not have a significant effect on either scholarship utilization or the study period. This indicates that students' confidence in their abilities has not yet become a dominant factor in determining scholarship utilization or study completion. The campus environment (X4) has a positive and significant effect on scholarship utilization, but does not significantly affect the study period. This suggests that a conducive academic environment encourages optimal scholarship utilization, although it does not directly influence study duration. Social support (X5) does not significantly affect scholarship utilization, but has a negative and significant effect on the study period. This finding indicates that social support may help students overcome academic challenges, thereby contributing to faster study completion. Economic condition (X6) has a positive and significant effect on both scholarship utilization and the study period. This demonstrates that students' economic conditions play an important role in supporting smooth academic progress and optimal utilization of scholarship assistance. In addition, scholarship utilization (Y1) has a negative and significant effect on the study period (Y2), indicating that more effective scholarship utilization increases the likelihood of completing studies within a shorter time frame. Overall, although not all exogenous variables significantly affect the endogenous variables, the research model as a whole is able to explain the relationships among variables effectively and provides a comprehensive overview of the factors influencing scholarship utilization and study duration among KIP-K scholarship recipients.

4. CONCLUSION

Based on the results of the analysis using the SEM-PLS method on students receiving the KIP-K Scholarship at Universitas Malikussaleh, it can be concluded that internal and external factors play different roles in influencing scholarship utilization and study duration. Learning motivation and time management have a significant effect on scholarship utilization, whereas self-efficacy does not show a significant influence. Among external factors, the campus environment and social support significantly affect scholarship utilization, while economic conditions have not yet become a primary determining factor. Furthermore, learning motivation, social support, and economic conditions have a significant effect on the study period, whereas time management, self-efficacy, and the campus environment do not have a direct influence. Scholarship utilization is found to have a negative and significant effect on the study period, indicating that optimal management of scholarship funds can help students complete their studies more quickly by increasing learning focus and reducing financial burdens.

RECOMMENDATIONS

Based on the research findings, it is recommended that universities and KIP-K scholarship administrators enhance programs aimed at strengthening learning motivation and providing academic mentoring for KIP-K scholarship recipients, as learning motivation has been proven to significantly affect both scholarship utilization and study duration. In addition, it is necessary to strengthen non-financial support systems, such as time management training and academic counseling, to enable students to utilize scholarships more effectively. Universities are also expected to create a more conducive campus environment and reinforce social support through the roles of academic advisors and student service units, thereby assisting students in completing their studies on time. For the government and KIP-K program administrators, the results of this study may serve as an evaluation reference to integrate academic and social development aspects into scholarship policies, rather than focusing solely on financial assistance.

ACKNOWLEDGEMENTS

The authors would like to express their gratitude to Universitas Malikussaleh for the support and facilities provided during the conduct of this research. Appreciation is also extended to the academic supervisors for their valuable guidance, feedback, and support in the preparation and refinement of this article. In addition, the authors sincerely thank all KIP-K scholarship recipients who willingly participated as respondents and provided the necessary data, enabling this study to be successfully completed.

AUTHOR CONTRIBUTIONS

All authors discussed the results and contributed to the manuscript from the initial stage to the final version.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest related to this study.

REFERENSI

- Ahmadi, E. A., Herwidyaningtyas, F. B., & Fatimah, S. (2020). The Influence of Organizational Culture, Work Motivation, and Job Satisfaction on Management Lecturer Performance (Empirical Study at Higher Education in the Residency of Bojonegoro). *Journal of Industrial Engineering & Management Research*, 1(3), 76–83 . <https://doi.org/10.7777/jiemar.v1i3.68>
- Andika Rindi, et al. (2019). The Influence of Work Motivation and Job Competition on Work Productivity Through Job Satisfaction as an Intervening Variable on Employees of Panca Budimedan Development University. *Journal of Management Tools*, 11(1), 189–204.
- Aulia, S., Zahra, M., & Hidayat, D. R. (2024). Family Socioeconomic Status Influences Academic Burnout Among College Students : A Systematic Study. 8(1), 63–70.
- Brady, A. C., Wolters, C. A., Yu, S. L., Roy, M., & Brady, A. C. (2022). Self-regulation of time : The importance of time estimation accuracy. October, 1–9. <https://doi.org/10.3389/fpsyg.2022.925812>
- Delinda, D., Qanita, N., Saputri, A. R., Wiwanda, S., Zulfira, C. A., & Fadiah, Y. E. (2024). *Jurnal Psikologi dan Bimbingan Konseling*. 8(1).
- Deng, L., & Lee, C. (2025). How perceived campus environments influence college students ' mental health : Mediating roles of campus life experiences. *Journal of Environmental Psychology*, 108(February), 102808. <https://doi.org/10.1016/j.jenvp.2025.102808>
- Diniyati, A. I., Fadillah, G., Anggina, L., Prasetya, R., Salsabila, S., Morowati, S. E., & Rozak, R. W. A. (2024). Spending Patterns of KIP KULIAH Scholarship Recipients: Priority of Fund Use Between Essential Needs and Lifestyle. *Journal of Management Innovation, Entrepreneurship, Business and Digital*, 1(2), 81–93Dukungan, P., Keluarga, S., Perilaku, T., & Binaan, W. (2020). *Hasanuddin Journal of Sociology (hjs)*. 2(1).
- Fanani, Z. S., Fauziyyah, N. S., & Maharani, A. P. (2024). Analysis of the Influence of Time Management in a Lecture Environment on Student Productivity Levels. *MUSYTARI: Journal of Management, Accounting, and Economics*, 12(6), 81–90.
- Faradisa, L. N., Kusumastuti, D., & Abdillah, A. A. (2022). Overview of Achievement Motivation. 14(1), 99–112.
- Hassan, M. R., Danendra, M. F., Santoso, A. K. P., & Rakhmawati, N. A. (2024). Analysis of the Effectiveness of Using Personal Financial Management Applications Among College Students. *Information Technology Ethics*, 1(1), 1–10. <https://doi.org/10.5281/zenodo.14238465>
- Istianingsih, I., & Wijanto, S. H. (2008). Analysis of the Success of Accounting Software Use from the Perception of Users (Study of the Implementation of the Information System Success Model). *Indonesian Journal of Accounting and Finance*, 5(1), 50–76. <https://doi.org/10.21002/jaki.2008.03>
- Krisnawan, M. Y. A., & Safrin, M. T. (2021). Penerapan Metode Pls Pada Analisis Faktor Kemampuan Daya Saing Berkelanjutan Umkm Batik Di Kota Xyz. *Juminten*, 2(1), 120–131. <https://doi.org/10.33005/juminten.v2i1.218>
- Meliana, D., Gustra, I., Armenia, M., & Hasibuan, S. (2023). Analisis Pengaruh Motivasi Belajar, Keaktifan Mahasiswa dan Kompetensi Dosen Terhadap Prestasi Belajar dengan Metode SEM-PLS. *Proceeding Mercu Buana Conference on Industrial Engineering*, 5(July), 240–251.
- Muna, M. S., Khotimah, N., & Zuhaira, Y. J. (2021). Self-Efficacy Guru terhadap Dinamika Pembelajaran Online di Masa Pandemi Covid-19. *Edukatif : Jurnal Ilmu Pendidikan*, 3(5), 3113–3122. <https://doi.org/10.31004/edukatif.v3i5.754>
- Nasution, I. W., & Wahyuni, S. (2025). Aspek-Aspek Psikologi Dalam Psikologi Organisasi. 02(June), 873–876.
- Nika Sintesa. (2022). Analisis Pengaruh Time Management Terhadap Kedisiplinan dan Akademik Mahasiswa. *Trending: Jurnal Manajemen Dan Ekonomi*, 1(1), 36–46. <https://doi.org/10.30640/trending.v1i1.465>
- Niszar BungaKusuma, C., & Waluyo, M. (2023). Analisis Faktor Produktivitas Kerja Menggunakan Smart PLS pada Industri Konstruksi Baja. *JATI UNIK: Jurnal Ilmiah Teknik Dan Manajemen Industri*, 7(1). <https://doi.org/10.30737/jatiunik.v7i1.5141>
- Nu'man, M. (2023). Analisis struktur kovarians indikator terkait kesehatan pada lansia yang tinggal di rumah, dengan fokus pada kesehatan subjektif. *Aleph*, 87(1,2), 149–200.
- Prameswari, E., & Wardani, D. (2024). Pengaruh Motivasi Belajar Ekstrinsik, Perilaku Belajar, Dan Lingkungan Belajar Terhadap Prestasi Akademik Mahasiswa (Studi Pada Mahasiswa Stie Indonesia Banking School Angkatan 2021 - 2023). *Journal of Accounting, Management and Islamic Economics*, 2(2), 551–560. <https://doi.org/10.35384/jamie.v2i2.611>

- Putri, D. A., Islam, U., Sumatera, N., Siregar, F. N., Islam, U., Sumatera, N., Andriansi, R., Islam, U., Sumatera, N., Pasaribu, R., Islam, U., Sumatera, N., Lubis, S. A., Islam, U., Sumatera, N., & Medan, K. (2025). Peran psikologi indutri dan organisasi dalam meningkatkan kesejahteraan karyawan dan produktivitas kerja. 2(3), 653–661.
- Saputra, W. (2025). Pengaruh Pemanfaatan Beasiswa KIP Kuliah terhadap Hasil Belajar Mahasiswa Pendidikan Ekonomi FKIP Universitas Riau. 8, 9797–9804.
- Sugara Budiman, B., Prastyo, Y., Supriyadi, A., & Ardiansyah, R. (2025). Peran Psikologi Industri dalam Meningkatkan Kinerja Karyawan Melalui Pemodelan Sistem Pada Proses Manufaktur. Jurnal Psikologi Industri, 5, 1.
- Sundari, Ayuni, D. S., & Prahara, R. S. (2023). Analisis Kondisi Sosial Ekonomi Dan Tingkat Pendidikan Masyarakat Desa Talok, Kecamatan Dlanggu, Kabupaten Mojokerto. Jurnal Agama, Sosial, Dan Budaya, 6(4), 773–788.
- Sulyani, E., & Dewi, S. S. (2022). JOUSKA : Jurnal Ilmiah Psikologi Hubungan Self Efficacy Dengan Student Engagement Pada Siswa di MAN 2 Bener Meriah The Correlation Of Self Efficacy With Student Engagement In Students at MAN 2 Bener Meriah. 1(2), 133–142. <https://doi.org/10.31289/jsa.v1i2.1339>.
- Ulfa, R., Jannah, R., Fadhila, J., Azizah, M., & Syawla, G. (2025). Pengaruh Dukungan Sosial Teman Sebaya terhadap Regulasi Emosi pada Mahasiswa Baru. 3(2016).
- Ulfah Arini, D., Khairunnisa, K., & Mualif, M. (2024). Pengaruh Motivasi Belajar Terhadap Komitmen Penyelesaian Tugas Luaran Pada Mahasiswa Penerima Beasiswa Kartu Indonesia Pintar Program Studi Teknik Industri Universitas Pamulang. Jurnal Ilmu Multidisiplin, 3(2), 221–226. <https://doi.org/10.38035/jim.v3i2.635>
- Yogi Fernando, Popi Andriani, & Hidayani Syam. (2024). Pentingnya Motivasi Belajar Dalam Meningkatkan Hasil Belajar Siswa. ALFIHRIS : Jurnal Inspirasi Pendidikan, 2(3), 61–68. <https://doi.org/10.59246/alfihris.v2i3.843>.