

## The Effectiveness of KIP-Kuliah Scholarships on Student Academic Achievement in NTT Province: A Dual-Process Theory Approach to Financial Behavior and Social Environment

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### ABSTRACT

*Financial behavior of the KIP-Kuliah scholarship is a critical factor in supporting students' academic success. This study examines dual-process thinking: intuition (Type 1) and rationality (Type 2), and the effectiveness of the KIP-Kuliah scholarship in shaping students' financial behavior and academic achievement. Using a mixed-methods approach, the study integrates quantitative analysis through Structural Equation Modeling–Partial Least Squares (SEM-PLS) with qualitative interviews to enrich the interpretation of the findings. The results indicate that the KIP-Kuliah scholarship significantly improves academic achievement and encourages more structured financial behavior, with rational decision-making exerting a stronger influence than intuition. However, financial behavior does not mediate the relationship between scholarship effectiveness and academic performance, and the social environment does not moderate the effect of dual-process thinking on financial behavior. The study concludes that the scholarship directly enhances academic outcomes, while rational cognitive processes remain key to effective financial behavior.*

### Keywords:

Dual-Process Thinking; KIP-Kuliah Scholarship; Financial Behavior; Academic Achievement.

### ABSTRAK

*Perilaku keuangan penerima beasiswa KIP-Kuliah merupakan faktor penting dalam mendukung keberhasilan akademik mahasiswa. Studi ini meneliti pemikiran proses ganda: intuisi (Tipe 1) dan rasionalitas (Tipe 2), serta efektivitas beasiswa KIP-Kuliah dalam membentuk perilaku keuangan dan*

*prestasi akademik mahasiswa. Dengan menggunakan pendekatan metode campuran, studi ini mengintegrasikan analisis kuantitatif melalui Structural Equation Modeling–Partial Least Squares (SEM-PLS) dengan wawancara kualitatif untuk memperkaya interpretasi temuan. Hasil menunjukkan bahwa beasiswa KIP-Kuliah secara signifikan meningkatkan prestasi akademik dan mendorong perilaku keuangan yang lebih terstruktur, dengan pengambilan keputusan rasional memberikan pengaruh yang lebih kuat daripada intuisi. Namun, perilaku keuangan tidak memediasi hubungan antara efektivitas beasiswa dan kinerja akademik, dan lingkungan sosial tidak memoderasi pengaruh pemikiran proses ganda terhadap perilaku keuangan. Studi ini menyimpulkan bahwa beasiswa secara langsung meningkatkan hasil akademik, sementara proses kognitif rasional tetap menjadi kunci perilaku keuangan yang efektif.*

**Kata kunci:**

Dual-Process Thinking; Beasiswa KIP-Kuliah; Perilaku Keuangan; Prestasi Akademik.

## 1. Introduction

*Kartu Indonesia Pintar Kuliah* Scholarship (KIP-Kuliah) is a strategic government policy to increase access to higher education for students from underprivileged families (Larasati et al., 2022). This program aims to reduce economic barriers that are often the main obstacles to continuing their studies. In addition to providing financial support, KIP-Kuliah also encourages academic development, skill development, and active student contribution in national development (Kemdiktisaintek, 2025). Urgent government financial assistance is needed for rural communities, which generally have limited access to information. Many parents cannot afford to pay for their children's education, so this program is an important solution in easing the economic burden while expanding access to education, especially in peripheral areas (Neolaka et al., 2019). KIP-K also facilitates students choosing superior study programs, developing cognitive abilities and soft skills, and forming an attitude of discipline and responsibility in resource management (Anwar et al., 2023).

Previous studies have shown that financial aid to students from low socio-economic backgrounds has a significant impact on their academic achievement. In the United States, financial aid has been shown to increase the cumulative grade point average (GPA) of Hispanic First-Generation College Students (FGCS) (Latino et al., 2020). Hispanic students, who come from ethnic backgrounds such as Mexico, Puerto Rico, Cuba, and other Latin American countries, often experience academic difficulties and have higher dropout rates than non-Hispanic FGCS students. The study's results show that financial aid can help reduce this academic gap. Other research in the UK also highlights the large number of scholarships awarded to students in universities around the world, but there is still a lack of literature highlighting the effectiveness of their use (Moore & Burgess, 2023). The study found that scholarships ranging from £500 to £3,000 have increased

student retention, especially for those from lower-middle-income families. These findings confirm that, in addition to scholarship availability, it is important to assess how students use them effectively.

Nevertheless, scholarship effectiveness is not solely determined by the amount of funds provided but also by students' financial management behavior. Scholarships are not a single solution, and financial support should be balanced with other forms of support for the benefits obtained to be optimal (Zacharias & Ryan, 2021). In practice, not a few scholarship recipients face difficulties in managing expenses. Funds that should have been allocated for academic needs are instead used for less essential things. In fact, some students tend to use scholarship funds for consumptive purposes, such as entertainment and an excessive lifestyle (Anggraini, 2014; Erisa et al., 2024). One of the factors causing this condition is the low level of financial literacy among students, which has an impact on less-than-optimal fund management (Afiefa & Ahmad, 2023).

This condition shows that the effectiveness of the KIP-K scholarship can be influenced by behavioral deviations in fund management, which are closely related to cognitive and social factors. Studies on the efficacy of scholarships and the correlation with academic success in Indonesia have yielded inconclusive findings. Several studies state that KIP-Kuliah has a positive and significant impact on student academic achievement, such as students of the 2020 and 2021 batches of the Department of Economics Education, Faculty of Economics, Gorontalo State University (Anwar et al., 2023), and education management students, Surabaya State University class of 2021 (Jasmine, 2023). However, these studies are largely descriptive and do not incorporate cognitive factors such as dual-process thinking, nor do they examine how scholarship programs simultaneously influence both financial behavior and academic achievement. Moreover, prior research has focused on urban university settings and has not examined regions such as East Nusa Tenggara, where socio-economic constraints shape distinct behavioral dynamics (Situmorang et al., 2023). As a result, the existing literature has not yet provided a holistic explanation of how scholarships function within contexts marked by financial vulnerability and cognitive decision-making challenges. This study addresses these gaps by integrating cognitive, financial, and scholarship-related variables within a mixed-methods framework to provide a more comprehensive understanding of students' decision-making and academic performance. Additionally, other studies show that the implementation of the bidikmisi scholarship program has not been fully effective, as was the case at Ganesha University of Education (UNDIKSHA) (Andriadi et al., 2019). The problems faced include a lack of understanding of the program, limited communication forums between students and program managers, and the obligation to create student creativity programs (PKM) that have not been optimally supported. Other barriers stem from internal factors, such as weak financial management and limited financial education, as well as external factors, including social pressure, campus environment, and the influence of social media (Eichelberger et al., 2017).

Based on these gaps, the central problem in this research is the lack of empirical evidence on how cognitive factors, financial behavior, and scholarship effectiveness jointly shape the academic achievement of KIP-Kuliah recipients in East Nusa Tenggara. This issue is critical because the region continues to experience low higher education participation and persistent socio-economic constraints

that may influence students' financial decisions differently from those in urban areas. In this context, as shown in Nigeria, education plays a crucial role in strengthening social cohesion, fostering national identity, and equipping individuals with the competencies needed to address global challenges such as poverty, inequality, and climate change (Nwachukwu, 2024). As a fundamental human right and a key driver of national development, the prioritization of education reinforces the urgency of understanding how these factors interact within disadvantaged regions like East Nusa Tenggara.

This study incorporates Dual-Process Theory as a conceptual lens. Dual-process theory explains that individuals make decisions through two distinct cognitive systems: Type 1, which is fast, intuitive, and heuristic-driven, and Type 2, which is slow, analytical, and deliberate (Barr, 2018; Gonçalves & Cash, 2021). In the context of scholarship recipients, this framework helps explain why some students engage in impulsive, emotionally driven spending while others manage their funds more rationally through careful planning and evaluation. Integrating this theoretical perspective enables a deeper understanding of how cognitive processes influence financial behavior and, ultimately, academic outcomes. This theoretical grounding also strengthens the study's ability to explain variations in scholarship effectiveness, particularly in regions with socio-economic disparities.

Based on this phenomenon and theoretical background, this study aims to examine the contribution of the KIP-Kuliah scholarship to students' academic achievement in the NTT region; the role of internal factors such as financial literacy and fund management ability in supporting effective scholarship utilization; and the influence of external factors, including family expectations, peer interactions, campus environment, and social media, on recipients' financial behavior. Accordingly, this study focuses on assessing how the KIP-Kuliah scholarship increases gross participation rates and enhances the quality of human resources in NTT through improved academic performance. The cognitive aspect is the main concern in assessing the effectiveness of scholarship funds. This study uses a dual-process theoretical approach to describe cognitive processes in financial decision-making. This theory combines two main aspects: internal aspects, such as financial literacy and the ability to manage scholarship funds wisely (Parmitasari et al., 2020), as well as external aspects, such as family and peer expectations (Rajagukguk & Sari, 2022), the campus environment (Milner et al., 2023), and social media dynamics (Greenhow et al., 2019).

Prior studies indicate that financial support programs, such as the KIP-K Scholarship, can directly enhance students' academic outcomes and shape their financial decisions. Therefore, Study 1 focuses on testing the direct and mediating relationships among these variables. The proposed hypotheses are:

H1: KIP-K Scholarship has a positive effect on students' academic achievement.

H2: KIP-K Scholarship affects students' financial behavior, as explained by the dual-process model.

H3: Student financial behavior, as described by dual-process theory, affects student academic achievement.

H4: Financial behavior, as described by dual-process theory, mediates the relationship between the KIP-K Scholarship and academic achievement.

To accommodate the indication of the social environment's influence, this study was continued with study 2. The proposed hypotheses:

H5a: The social environment can moderate the relationship of intuition (P1) to financial behavior.

H5b: The social environment can moderate rational relationships (P2) to financial behavior.

H6: Financial behavior, as described by dual-process theory, moderates the relationship between KIP scholarship and academic achievement.

## **2. Methods**

### *2.1 Research Design*

This study employs an explanatory sequential mixed-methods design, integrating quantitative and qualitative approaches to provide a comprehensive understanding of how internal and external factors influence students' financial behavior and academic achievement. The quantitative phase was used to test the theoretical model statistically using Smart PLS. Hypothesis analysis was divided into 2 studies. Study 1 examines the direct relationship between the KIP-K Scholarship and academic achievement, as well as the mediating role of financial behavior in this relationship. Study 2 examined the potential moderating effects of the social environment on the dual-process model of financial behavior. This study was followed by a qualitative phase designed to explain and enrich the quantitative findings through in-depth narratives and contextual insights from scholarship recipients.

### *2.2 Population and Sample*

The population in this study comprises all active KIP-Kuliah scholarship recipients across higher education institutions in the East Nusa Tenggara (NTT) region who have received the scholarship for at least 1 academic year. Because comprehensive institutional records on the total number of scholarship recipients were not available, the population is defined conceptually rather than numerically (Beaulieu et al., 2018). To ensure regional representation, the study attempted to include at least one higher education institution from each district across the three major islands of Timor, Flores, and Sumba. In Timor and Flores, multiple universities and polytechnics agreed to participate. However, in Sumba, only one district-level institution was available for data collection, as the two other universities declined participation. Consequently, the final sample reflects the institutions that granted access rather than the full distribution of scholarship recipients in the region.

Using purposive sampling, students were selected based on the following criteria: (1) active KIP-Kuliah status, (2) enrollment for at least two semesters, and (3) adequate experience in scholarship fund utilization. A total of 1,696 eligible students from 18 participating institutions formed the quantitative sample. Their institutional distribution and demographic characteristics (age, gender, housing, and GPA) represent the actual respondent group and are presented in the descriptive analysis section.

For the qualitative phase, six informants from each participating institution were purposively selected to ensure variation in academic performance, socio-economic background, living arrangements, and scholarship management practices. This approach ensured rich, diverse perspectives, strengthening the depth and validity of the study's qualitative findings.

### *2.3 Research Instruments*

The quantitative instrument consists of a structured questionnaire developed from established theoretical indicators drawn from prior empirical studies. Content validity was evaluated using Exploratory Factor Analysis (EFA) to confirm the dimensional structure of each construct, and the analysis was conducted using SmartPLS 3.0. The qualitative instrument consists of a semi-structured interview guide, designed based on preliminary findings from the quantitative phase. The guide includes probing questions about scholarship utilization, financial decision-making, internal and external influences, and academic engagement. This allows informants to elaborate while remaining aligned with the research objectives.

### *2.4 Data Collection*

Quantitative data were collected using an online and offline survey distributed to eligible KIP-Kuliah recipients from August 18 to September 30, 2025. Respondents provided informed consent before participation. The data collection process ensured the confidentiality and anonymity of all participants. The qualitative phase involved in-person semi-structured interviews. Each interview lasted approximately 20-30 minutes. With participants' consent, interviews were audio-recorded and subsequently transcribed verbatim. Informants were encouraged to describe their lived experiences, challenges, and strategies for managing scholarship funds, as well as the factors influencing their financial behavior and academic performance. Member checking was conducted with selected informants to validate the accuracy of the interpretations.

### *2.5 Data Analysis Techniques*

Quantitative data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM), which is appropriate for complex models involving multiple latent variables (Akter et al., 2017). The analysis followed recommended steps, including model assessment, reliability and validity testing, and hypothesis evaluation. Qualitative data were analyzed through thematic analysis to identify recurring patterns and themes. Triangulation across informants was employed to enhance the credibility and dependability of the findings.

## **3. Results and Discussion**

### *3.1 Results*

The data in this study describe the characteristics of KIP-Kuliah scholarship recipients enrolled at various universities across three main regions of East Nusa Tenggara Province: Timor Island, Flores Island, and Sumba Island. Data collection was conducted from July to September 2025, covering several demographic and academic indicators, including age, gender, housing type,

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scholarship period, and Cumulative Grade Point Average (GPA). The housing variable is classified into three categories: students who live at home, in boarding houses, or in campus dormitories. Meanwhile, the scholarship period refers to the duration for which students have received the KIP-Kuliah scholarship, ranging from first-year recipients to those who have been beneficiaries for more than two years. Table 1 below displays data on average age, gender distribution, residence, period, and average GPA.

**Table 1.** Respondent Characteristics

Island/ University	Number	Age	Gender		Housing			Period	GPA
			Male	Female	Home	Boarding	Dormitory		
<b>Timor Island</b>									
Politeknik Negeri Kupang	126	21	34	92	53	73	0	>2	3.39
Politeknik Pertanian Negeri Kupang	134	20	60	74	20	113	1	1	3.42
Universitas Katolik Widya Mandira Kupang	153	20	47	106	46	94	13	1	3.49
Universitas Muhammadiyah, Kupang	153	20	32	121	17	121	15	1	3.72
Universitas Nusa Cendana	115	21	21	94	38	77	0	>2	3.40
Universitas Timor, Kefamenanu	213	20	37	176	45	161	7	1	3.34
Universitas Tribuana, Kalabahi	78	21	18	60	45	33	0	1	3.57
<i>Subtotal</i>	972		249	723	264	672	36		
<b>Flores Island</b>									
Institut Keguruan dan Teknologi, Larantuka	63	21	49	14	30	27	6	1	3.61
Institut Nasional Flores, Mbay	42	20	18	24	22	20	0	1	3.36
Politeknik Cristo Re, Maumere	9	20	9	0	3	6	0	1	3.64
Politeknik eLBajo Commodus, Labuan Bajo	54	20	15	39	16	38	0	1	3.57
Politeknik Santo Wilhelmus, Boawae	35	21	8	27	18	17	0	1	3.38
Sekolah Tinggi Ilmu Pertanian Flores, Bajawa	87	21	20	67	37	50	0	1	3.60

Universitas Flores, Ende	123	20	42	81	49	72	2	1	3.50
Universitas Katolik Indonesia Santu Paulus, Ruteng	82	20	12	70	16	62	4	1	3.35
Universitas Muhammadiyah, Maumere	6	21	0	6	3	3	0	>2	3.82
Universitas Nusa Nipa, Maumere	117	21	31	86	57	55	5	1	3.63
<i>Subtotal</i>	618		204	414	251	350	17		
<b>Sumba Island</b>									
Universitas Kristen Wira Wacana, Waingapu	106	21	38	68	49	56	1	1	3.5
<b>Total Respondents</b>	<b>1,696</b>		<b>491 (29%)</b>	<b>1,205 (71%)</b>					

Source: Field observation (2025)

The total number of respondents in this study was 1,696 students, consisting of 491 male students (29%) and 1,205 female students (71%), indicating that the majority of KIP-Kuliah scholarship recipients were women. Based on regional distribution, Timor Island has the highest number of recipients, with 972 students, followed by Flores Island with 618 students and Sumba Island with 106 students. The average age of scholarship recipients ranges from 20 to 21, which reflects the typical age of undergraduate students. They are relatively new, with an average duration of one year. Only three universities have recipients with a duration of more than two years (> 2): Politeknik Negeri Kupang, Universitas Nusa Cendana, and Universitas Muhammadiyah, Maumere. Based on housing category, most scholarship recipients live in boarding houses (around 672 students), followed by those living with their parents (264 students), and a small number living in dormitories (36 students). Meanwhile, the scholarship period indicator shows that most students receive the KIP-Kuliah scholarship for 1 academic year, while a small number have received it for more than 2 years. Academically, students perform well, with average GPAs ranging from 3.34 to 3.82 and an overall average of 3.52. This score shows that KIP-Kuliah scholarship recipients generally have satisfactory academic achievements.

### 3.1.1 Measurement Model

In this research, the measurement instruments underwent comprehensive evaluation through analyses of convergent validity, discriminant validity, and internal consistency reliability to ensure that each construct accurately reflected the concept it was intended to measure. The initial assessment focused on convergent validity, which was examined using the Average Variance Extracted (AVE) and the indicator loadings. Based on established standards, the acceptable cutoff values are 0.708 for loading factors and 0.50 for AVE, suggesting that each indicator should account for at least 50% of the variance in the corresponding construct. However, indicators with loading values between 0.4 and

0.7 may be retained if their exclusion does not enhance the model’s Composite Reliability (CR) or AVE (Hair et al., 2021). As shown in Table 2, all retained constructs in this study met the requirements for convergent validity, confirming that the measurement items consistently represent their respective latent constructs and thereby strengthening the overall reliability of the structural model.

**Table 2.** Measurement Model

<b>Variables</b>	<b>rho_A</b>	<b>CR</b>	<b>AVE</b>
Intuition (P1)	0.814	0.850	0.589
Rational (P2)	0.915	0.934	0.741
KIP-Kuliah Scholarship (X)	0.860	0.893	0.629
Academic Achievement (Y)	0.858	0.888	0.614
Social Environment (M)	0.791	0.848	0.530
Financial Behavior (Z)	0.860	0.889	0.572

Source: Data processed (2025)

The results of the measurement model evaluation show that all constructs demonstrate acceptable reliability and validity. Indicator loadings range from 0.576 to 0.902, with most values above the recommended threshold of 0.70. One item in the KIP-Kuliah construct shows a lower loading (0.584), but it remains within the acceptable range and is theoretically relevant, so it was retained. Composite reliability (CR) values range from 0.848 to 0.934, confirming strong internal consistency. The AVE values (0.530–0.741) indicate adequate convergent validity across all constructs. These results confirm that the measurement model is robust and suitable for further structural analysis.

Subsequently, a discriminant validity assessment was conducted to verify that each construct in the model was conceptually and empirically distinct from the others. The results, evaluated using the HTMT approach, revealed that the square root of the Average Variance Extracted (AVE) for each construct exceeded its correlations with other constructs, thereby confirming adequate discriminant validity. In addition, the HTMT (Heterotrait–Monotrait Ratio) values for all construct pairs were below the recommended threshold of 0.90 (Dzin & Lay, 2021), demonstrating the absence of substantial overlap among the measured constructs. These outcomes indicate that each variable captures a distinct dimension of the underlying phenomenon, strengthening confidence in the distinctiveness and reliability of the employed constructs. Table 3 provides the detailed results of the discriminant validity analysis based on the HTMT criterion.

**Table 3.** Heterotrait-Monotrait Ratio (HTMT)

	<b>Intuition (P1)</b>	<b>Rational (P2)</b>	<b>KIP-Kuliah Scholarship (X)</b>	<b>Financial Behavior (Z)</b>	<b>Social Environment (M)</b>	<b>Academic Achievement (Y)</b>
Intuition (P1)						
Rational (P2)	0.613					

KIP-Kuliah Scholarship (X)	0.219	0.262			
Financial Behavior (Z)	0.197	0.267	0.611		
Social Environment (M)	0.308	0.276	0.600	0.572	
Academic Achievement (Y)	0.304	0.350	0.561	0.684	0.648

Source: Data processed (2025)

The internal consistency of each construct was examined using the rho\_A coefficients and Composite Reliability (CR) (Hair et al., 2019). As indicated in Table 1, both the Cronbach’s alpha and CR values exceed the recommended threshold of 0.70, confirming that all constructs demonstrate satisfactory reliability.

### 3.1.2 Hypothesis Testing

Study 1: The influence of dual-process on financial behavior gives different results. Intuitive thinking does not affect financial behavior, whereas rational thinking does (Picture 1). This strengthens the approval of Kahneman's (2013) The idea that rational thinking plays a greater role in financial decision-making. It can be concluded that students who receive KIP-Kuliah in NTT tend to be more rational in their use of funds. Table 4 shows the results of the hypothesis test.

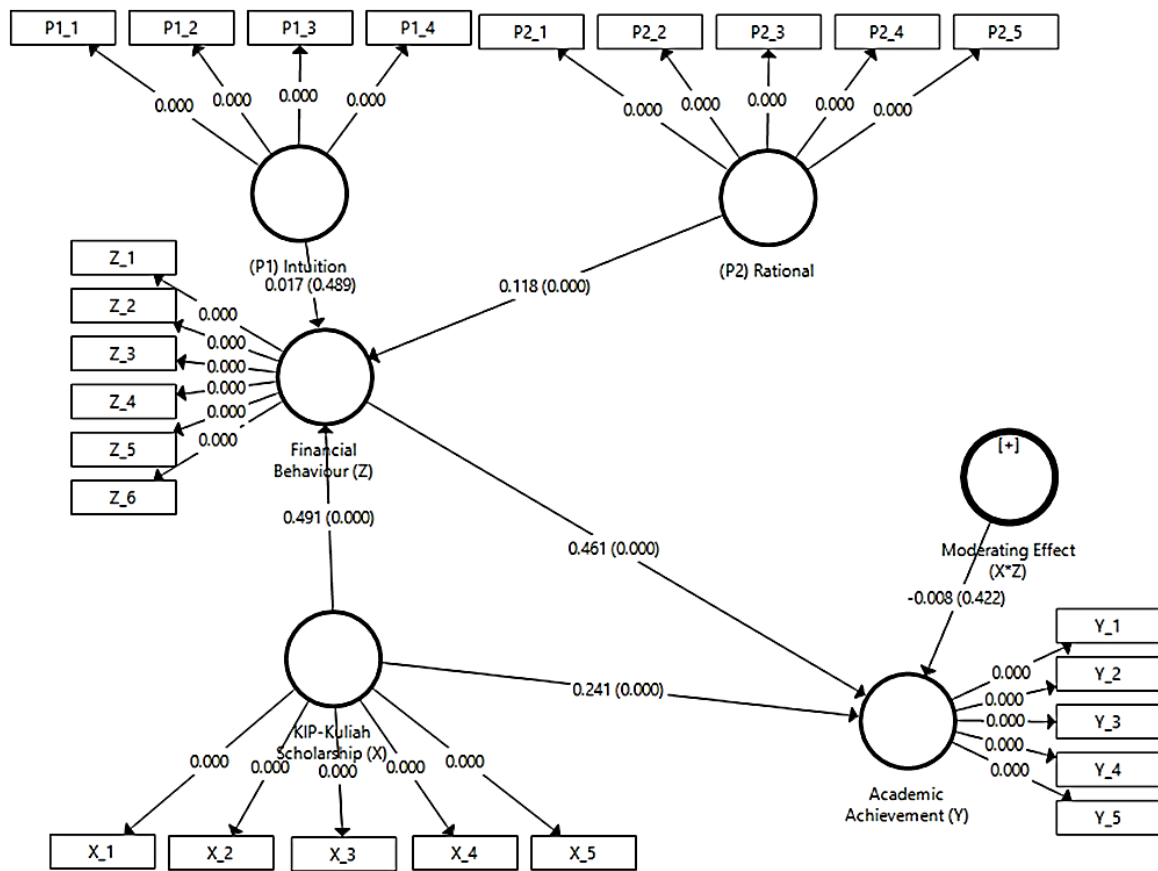
**Table 4.** The Hypotheses Testing Results

Hypothesis: Path	$\beta$	t-value	Sig.
(P1) Intuition -> Financial Behavior (Z)	0.017	0.718	0.473
(P2) Rational -> Financial Behavior (Z)	0.118	4.215**	0.000
The KIP-Kuliah Scholarship (X) -> Financial Behavior (Z)	0.491	16.111**	0.000
The KIP-Kuliah Scholarship (X) -> Academic Achievement (Y)	0.241	7.868**	0.000
Moderating Effect (X*Z) -> Academic Achievement (Y)	-0.008	0.784	0.433
Financial Behavior (Z) -> Academic Achievement (Y)	0.461	18.130**	0.000

\*\*Significant at  $p < 0.05$

Hypothesis 1: Accepted. The KIP-Kuliah scholarship has a positive effect on academic achievement ( $\beta = 0.241$ ,  $t = 7.868$ ). The path coefficient indicates a meaningful positive relationship, suggesting that the more effectively students utilize the scholarship, the better their academic achievement tends to be. Hypothesis 2: Accepted; the receipt of KIP-Kuliah scholarships affects financial behavior ( $\beta = 0.491$ ,  $t = 16.111$ ). These results support previous research (Ahmed et al., 2022; Byantoro et al., 2024). Students who receive the KIP-Kuliah scholarship demonstrate noticeable changes in their financial management, including an increased ability to set priorities, limit non-essential spending, and begin allocating funds for future needs. Hypothesis 3: Accepted; student financial behavior described by dual-process affects student achievement ( $\beta = 0.461$ ,  $t = 18.130$ ). Students with good financial behavior (frugal, disciplined, and planned) will be more focused on studying and less burdened by daily financial problems. On the other hand, poor financial behavior

(wasteful spending, poor fund management) can cause financial stress, leading to decreased concentration in studies. H4: Rejected. The financial behavior described by Dual-Process did not mediate the relationship between the effectiveness of KIP-Kuliah scholarship use and academic achievement ( $0.433 < 0.05$ ). This means that while financial behavior is important, it does not reinforce or weaken the influence of school (Castleman & Long, 2016). Both students with good and bad financial behavior still feel the direct benefits of scholarships on academic achievement. The implication is that both students with good and bad financial behavior still feel the direct benefits of scholarships on academic achievement. The direct relationship between the KIP-Kuliah scholarship and academic achievement, and the moderating role of financial behavior, is explained in Picture 1 below.



**Picture 1.** The Path-Coefficients and P-Values from The Model of Study 1

Study 2: To test the effect of the social environment on the emergence of ideas in the dual-process model of financial behavior, Study 2 examines the social environment as a moderation variable. All the variables involved are shown in Table 5 below.

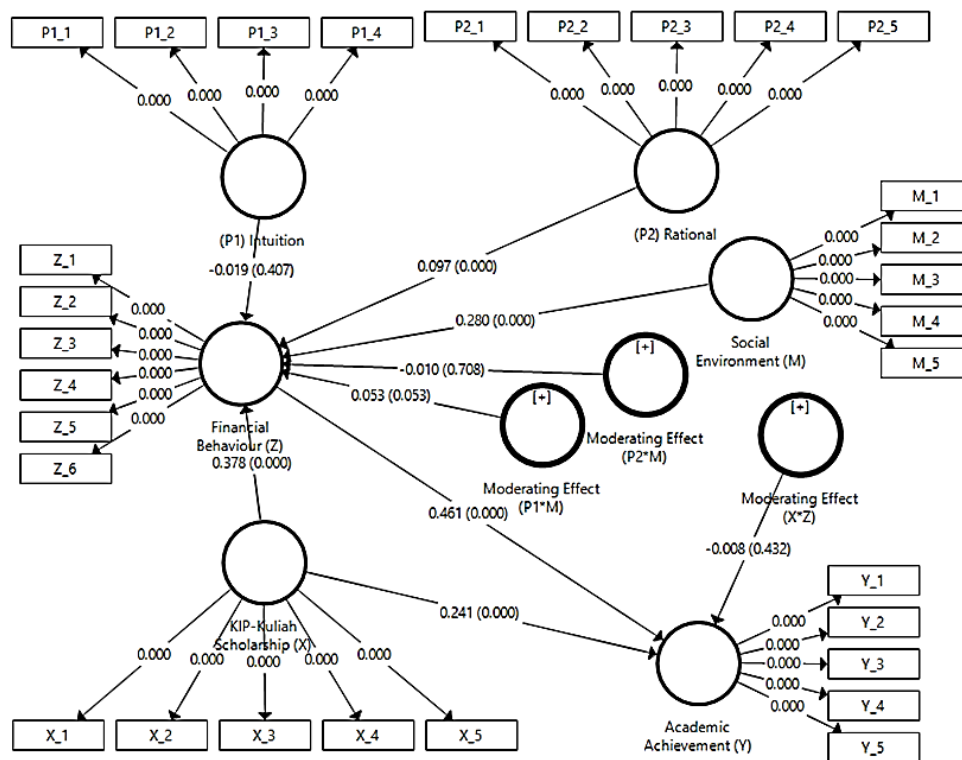
**Table 5.** The Hypotheses Testing Results for Study 2

Hypothesis: Path	$\beta$	t-value	Sig.
(P1) Intuition -> Financial Behavior (Z)	-0.019	0.798	0.407

(P2) Rational -> Financial Behavior (Z)	0.097	3.570**	0.000
Financial Behavior (Z) -> Academic Achievement (Y)	0.461	17.387**	0.000
KIP-Kuliah Scholarship (X) -> Academic Achievement (Y)	0.241	7.602**	0.000
KIP-Kuliah Scholarship (X) -> Financial Behavior (Z)	0.378	10.342**	0.000
Moderating Effect (P1*M) -> Financial Behavior (Z)	0.053	1.947	0.053
Moderating Effect (P2*M) -> Financial Behavior (Z)	-0.010	0.363	0.708
Moderating Effect (X*Z) -> Academic Achievement (Y)	-0.008	0.810	0.432
Social Environment (M) -> Financial Behavior (Z)	0.280	8.911**	0.000

\*\*Significant at  $p < 0.05$

Hypotheses 5a and 5b were rejected, indicating that the social environment does not moderate the relationship between either instinctive (P1) ( $0.053 > 0.05$ ) or rational (P2) ( $0.708 > 0.05$ ) dual-process thinking and financial behavior. Although the social environment, such as family, friends, and the community, typically serves as a role model or external influence that can strengthen or weaken the way intuitive or rational thinking shapes financial behavior, its moderating effect was not supported in this study. Hypothesis 6: Rejected; financial behavior does not mediate the relationship between the receipt of the KIP-Kuliah scholarship and the academic achievement of the student ( $0.432 > 0.05$ ). Picture 2 shows the path coefficients and p-values of study model 2.



Picture 2. The Path Coefficients and P-Values from The Model of Study 2

### 3.2 Discussion

The findings indicate that intuition does not significantly influence students' financial behavior,

whereas rationality does. KIP-Kuliah recipients in NTT tend to adopt a rational approach, as reflected in their allocation of funds for academic needs such as learning materials and transportation. The socio-economic context of East Nusa Tenggara, one of Indonesia's provinces with the highest poverty rates, likely shapes how students manage their scholarship funds. Individuals from lower-income backgrounds generally exhibit greater caution in financial decision-making, as even minor errors may have substantial consequences for their welfare (Greenberg & Hershfield, 2019). This pattern aligns with scarcity mindset theory, which posits that conditions of scarcity heighten focus on essential goals and strengthen self-regulation in decision-making (Liang et al., 2021).

The KIP-Kuliah scholarship has a direct positive effect on academic achievement. This finding aligns with previous studies showing that tuition assistance reduces students' financial burdens, enabling them to concentrate more on academic activities (Bettinger, 2015; Reed & Hurd, 2016). In the context of NTT, where many students come from low-income families, the existence of scholarships provides a sense of security and financial stability. This shows that scholarship's effectiveness lies not solely in cost but also in increasing academic engagement. These findings confirm that government aid policies have had a significant impact on academic research.

In addition to influencing academic achievement, receiving the KIP-Kuliah scholarship also affects students' financial behavior. These findings reinforce previous studies suggesting that having a stable source of income, even in limited amounts, can help students manage their expenditures more carefully and establish clearer financial priorities (Ahmed et al., 2022; Byantoro et al., 2024). This behavioral change is particularly important for students in East Nusa Tenggara (NTT), who previously relied heavily on family support amid economic constraints. Through the scholarship, students gain greater autonomy in managing their finances, although formal practices of financial recording and budgeting have not yet been fully established. Thus, the scholarship not only provides academic support but also serves as an indirect means of fostering financial literacy.

Sound financial behavior has also been shown to contribute to improved academic performance. This finding is consistent with prior research on the relationship between financial discipline and learning focus, in which poor financial management can trigger financial stress that ultimately disrupts the academic process (Castleman & Long, 2016). In this study, students who manage their daily expenses effectively tend to demonstrate higher levels of concentration in their studies. This reinforces the view that financial literacy constitutes an important skill that supports academic success.

Despite the positive relationship between financial behavior and academic achievement, further analysis indicates that financial behavior does not mediate the relationship between the scholarship and academic performance. In other words, the scholarship's effect on academic achievement is direct and does not depend on changes in financial behavior. These findings suggest that educational assistance exerts a particularly strong influence on academic outcomes, rendering the mediating role of financial behavior statistically insignificant. This is consistent with the findings of Castleman & Long (2016), who argue that educational aid can have a direct impact on academic performance even in the absence of improvements in financial literacy. For students in NTT, the fulfillment of basic needs such as transportation costs, learning materials, and daily necessities is sufficient to alleviate the financial pressure and anxiety that have previously interfered with the learning process. The

reduction of this psychological burden creates greater cognitive space for students to allocate their energy and attention to academic activities (Ameloot et al., 2024), thereby enhancing their concentration and overall learning performance.

Furthermore, the social environment did not moderate the relationships between either intuition or rationality and students' financial behavior. This finding contrasts with Kim et al. (2017), who emphasized the importance of peer, family, and community influence in shaping financial behavior. The lack of a significant moderating effect may be attributed to the social environment of students in NTT, which generally exhibits low levels of financial literacy and therefore does not serve as an effective behavioral reference. In addition, students from low-income families tend to rely more on rational considerations than on social pressure when managing scholarship funds (Berg, 2016). These findings contribute to a new understanding that, in economically disadvantaged communities, rational thinking ability plays a central role in shaping financial behavior.

When social environment variables were incorporated into the model, financial behavior no longer functioned as a mediator. This further confirms that the relationship between the scholarship and academic performance remains direct, even within a more complex analytical framework. The scholarship's dominant effect persists, indicating that educational assistance plays a strong structural role in enhancing students' academic success. Consequently, environmental and behavioral factors are unable to intervene in the primary influence of the scholarship. These results underscore that education financing policies represent one of the most effective instruments for improving academic achievement more equitably, regardless of social conditions or individual financial behavior (Baker, 2018).

#### **4. Conclusion**

The results of this study demonstrate that the KIP-Kuliah scholarship program has a substantial impact on students' academic success in East Nusa Tenggara Province. Beyond providing financial assistance for education, this scholarship serves as an enabling instrument that allows students from low-income families to access higher education. By reducing financial pressure, students can focus more effectively on their studies, experience lower financial stress, and be more likely to complete their education on time. These findings reinforce the view that KIP-Kuliah is an effective government policy that not only expands access to higher education but also improves the quality of human resources in economically constrained regions.

The study also shows that students' financial behavior, shaped by intuitive and rational thinking as described in dual-process theory, supports the learning process. However, the findings indicate that the scholarship's influence on academic achievement occurs primarily directly, rather than through the mediation of financial behavior or social factors. This suggests that although financial management skills and social context remain important, the immediate benefits of the scholarship are reflected in financial stability and a sharper focus on learning. Future research should extend similar analyses to other regions to capture broader variations in socio-economic contexts and incorporate richer mixed-method approaches that integrate quantitative trends with students' qualitative experiences. Additional variables, such as digital literacy, institutional support, and psychological

traits (e.g., conscientiousness, self-control, risk preferences), may also provide deeper insights into how scholarships shape financial behavior and academic outcomes. Such developments would increase the relevance and contribution of KIP-Kuliah research to the formulation of higher education policies in Indonesia. Some articles older than seven years are still used because they are key references in this research.

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