
Financial Literacy, Efficacy, Stress, and Credit Behavior among Medical Students in Banyumas Regency, Indonesia

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ABSTRACT

This study examines the relationship between financial literacy, financial efficacy, financial stress, and credit behavior among Banyumas Regency, Indonesia medical students. The research aims to understand how these factors interact and influence the financial decision-making of students in a high-pressure academic environment. Data were collected through an online survey targeting medical students with experience in consumer credit, and responses were analyzed using SEM-PLS methods. The results show that financial literacy does not significantly influence credit behavior directly, nor does financial efficacy mediate the relationship between financial literacy and credit behavior. However, financial stress was found to play a significant moderating role, demonstrating its critical influence on students' financial decisions. These findings highlight the importance of addressing psychological factors like stress and enhancing financial literacy and efficacy. The study provides practical implications, suggesting the need for tailored financial education programs that integrate stress management strategies to equip medical students better to handle financial challenges. These interventions can foster responsible credit behavior and financial stability by addressing knowledge gaps and emotional burdens. This research contributes to the broader understanding of financial decision-making, emphasizing the interconnectedness of financial knowledge, self-efficacy, stress, and behavior, particularly in the unique context of medical students. Future studies are encouraged to explore these relationships in other high-stress academic or professional environments to enhance the understanding of financial behavior dynamics further.



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1. INTRODUCTION

Financial literacy is increasingly recognized as a critical skill for medical students, encompassing the ability to manage personal finances effectively. This competency is essential not only for personal financial stability but also for making informed decisions regarding career paths and specialty choices, particularly in light of the significant debt many medical students incur (Jeremy et al., 2020; Poon et al., 2022). Studies indicate that medical students often exhibit a lack of financial knowledge despite a strong interest in learning about financial principles, which can adversely affect their academic and personal lives (Whelan et al., 2021). Assessments of financial knowledge reveal that many medical students struggle with budgeting and decision-making skills, which can lead to increased debt and a tendency to favor higher-paying specialties over primary care (Jeremy et al., 2020; Poon et al., 2022). Implementing structured financial education programs within medical curricula could enhance students' financial literacy, thereby fostering better financial decision-making and potentially influencing their career trajectories positively (Jeremy et al., 2020; Poon et al., 2022).

Financial efficacy, defined as the confidence in one's ability to manage finances, plays a crucial role in shaping financial behavior and decision-making. Research indicates that individuals with higher financial self-efficacy are more likely to engage in proactive financial behaviors, such as budgeting and saving, which are essential for effective financial management (Hossain et al., 2022; Sahid, Nuris, & Hussin, 2023; Zen, 2023). This self-belief influences immediate financial decisions and fosters long-term financial planning and resilience against economic challenges (Herawati et al., 2020; Ramadani et al., 2023). Fostering financial efficacy among students is vital for empowering them to handle future financial responsibilities. Studies show that enhancing self-efficacy can improve financial behaviors, promoting better financial outcomes and overall well-being (Lukesi et al., 2021; Ramadani et al., 2023). Educational interventions to increase financial self-efficacy can equip students with the necessary skills to navigate complex financial landscapes, ultimately leading to more informed and confident financial decision-making (Jumady et al., 2024; Zen, 2023).

Financial stress is a significant concern for medical students, primarily due to the demanding nature of medical education. The high costs associated with tuition fees, living expenses, and inadequate financial planning contribute to this stress, which can lead to detrimental effects on both academic performance and mental health (Hossain et al., 2022; McMichael et al., 2022). Research indicates that students often experience heightened financial anxiety, particularly those from underrepresented backgrounds or first-generation college students, who report greater difficulty in managing financial responsibilities (Hassan et al., 2024; McMichael et al., 2022). The impact of financial stress on academic performance is profound, as students facing financial difficulties often struggle to concentrate on their studies, leading to lower grades and increased dropout rates (Moore et al., 2021). Additionally, financial stress is closely linked to mental health issues, including anxiety and depression, which can further exacerbate academic challenges (Dewi et al., 2022; Hasan et al., 2020; Javed et al., 2023). Therefore, addressing financial stress through better financial education and support systems is crucial for enhancing the overall well-being and academic success of medical students (McMichael et al., 2022; Moore et al., 2021).

Credit behavior among medical students is characterized by varied usage patterns, often influenced by their financial literacy and socioeconomic backgrounds. Many students use credit cards for essential expenses, such as tuition and living costs, which can lead to responsible and irresponsible credit behaviors. Responsible credit usage includes timely payments and maintaining low balances, fostering financial stability. In contrast, reckless behaviors, such as accumulating high debt or missing payments, can have long-term implications, including damaged credit scores and increased financial stress (Robb & Chy, 2023; Zhang & Zhang, 2020). Credit behavior is crucial in shaping financial stability and future debt management. Students who engage in responsible credit practices are better

equipped to manage their finances post-graduation, leading to healthier financial habits and reduced anxiety related to debt (Robb & Chy, 2023). Conversely, those who exhibit irresponsible credit behaviors may face challenges in managing future debts, potentially impacting their career choices and overall financial well-being (Robb & Chy, 2023). Therefore, promoting financial education and responsible credit usage among medical students is essential for fostering long-term financial health (Robb & Chy, 2023; Zhang & Zhang, 2020).

The interconnections between financial literacy, efficacy, stress, and credit behavior are crucial in understanding how these factors influence each other and shape the financial landscape for medical students. Financial literacy equips students with the knowledge necessary to make informed credit decisions, while financial efficacy—defined as confidence in managing finances—can significantly reduce financial stress (Djou & Lukiastuti, 2021; Hamid & Loke, 2020). High levels of financial literacy and efficacy are associated with responsible credit behaviors, mitigating financial stress and lowering reliance on credit (Djou & Lukiastuti, 2021; Hamid & Loke, 2020). Improved financial literacy and efficacy can empower students to manage their finances more effectively, leading to reduced financial stress and healthier credit usage patterns. This is particularly relevant for medical students, who often face financial pressures due to high tuition and living costs (Djou & Lukiastuti, 2021; Hamid & Loke, 2020; Robb & Chy, 2023; Zhang & Zhang, 2020). By fostering these skills, educational institutions can prepare students for financial independence, enabling them to navigate their financial responsibilities more confidently and sustainably (Djou & Lukiastuti, 2021; Hamid & Loke, 2020).

Literature Review

Theory Establishment

Financial Literacy Theory posits that financial literacy encompasses the knowledge and skills necessary for effective financial management, including budgeting, credit usage, and debt management. Individuals with higher financial literacy are better equipped to make informed financial decisions, positively impacting their credit behavior (Barboza et al., 2021; Widyastuti et al., 2023). It was found that financial literacy significantly affects access to formal credit, suggesting that those with better financial understanding are more likely to utilize credit responsibly (Widyastuti et al., 2023).

Behavioral Finance Theory explores how psychological factors influence financial decision-making. Financial literacy positively correlates with responsible financial behaviors, including credit card usage (Xu et al., 2022). Conversely, it was highlighted that financial illiteracy can lead to poor financial decisions and increased debt (Barboza et al., 2021). These findings underscore the importance of financial literacy in promoting responsible credit behavior and avoiding detrimental financial outcomes.

Self-efficacy theory, rooted in Bandura's work, suggests that an individual's belief in their ability to manage financial tasks (financial self-efficacy) plays a crucial role in shaping financial behavior. Financial literacy positively influences financial self-efficacy, which, in turn, reduces risky credit behavior (Surya & Evelyn, 2023). This finding highlights that enhancing financial literacy improves knowledge and confidence in financial decision-making, leading to more responsible credit usage.

The Credit Behavior Model examines the factors influencing credit behavior, including financial literacy, self-efficacy, and external pressures. Financially literate individuals are more likely to engage with formal credit markets (Kristanto, 2021). This suggests that financial literacy is critical in shaping responsible credit behavior

Hypotheses Development

Financial Literacy and Credit Behavior

Financial literacy is defined as the knowledge, skills, and confidence to make responsible financial decisions, which includes understanding budgeting, credit, and debt management (Poon et al., 2022; Tahir et al., 2023). It is pivotal in shaping credit behavior among individuals, particularly students. Higher financial literacy is associated with responsible credit usage, as individuals equipped with financial knowledge are more likely to make informed decisions regarding borrowing and repayment (Tahir et al., 2023; Yulianah & Muflikhati, 2023). Conversely, a lack of financial literacy can lead to irresponsible borrowing practices and increased debt accumulation, as individuals may not fully understand the implications of their credit choices (Białowolski et al., 2020).

The relationship between financial literacy and credit behavior is critical for fostering financial stability. Students with strong financial literacy are better positioned to navigate credit markets, avoid high-interest debt, and manage their financial resources effectively (Poon et al., 2022; Riaz et al., 2022). This understanding is particularly relevant for medical students, who often face significant financial pressures from tuition and living expenses. By enhancing financial literacy, educational institutions can help mitigate the risks associated with poor credit behavior, ultimately promoting healthier financial habits and reducing the likelihood of future debt problems (Kristanto, 2021; Poon et al., 2022).

H1: Financial literacy negatively affects credit behavior among medical students.

Financial Efficacy as mediation

Financial efficacy refers to an individual's confidence in managing personal finances effectively. This concept is rooted in Bandura's Social Cognitive Theory, which emphasizes the importance of self-efficacy in influencing behavior and decision-making (Altaf et al., 2024; Riaz et al., 2022). Individuals with high financial efficacy are likelier to engage in responsible financial behaviors, including prudent credit usage. Financial efficacy mediates the relationship between financial literacy and credit behavior by serving as a psychological bridge that translates knowledge into action. Research by Ali and Marwat indicates that financial self-efficacy plays a crucial mediating role in the financial capabilities of individuals, suggesting that those with higher financial literacy are more likely to develop confidence in their financial decision-making abilities (Ali & Marwat, 2021). This confidence, in turn, leads to better credit behavior, as individuals feel empowered to make informed choices regarding borrowing and repayment.

Furthermore, A report highlights that financial self-efficacy mediates the relationship between attitudes toward money and financial literacy, reinforcing that increased financial knowledge enhances self-efficacy, positively influencing credit behavior (Riaz et al., 2022). Current research also supports this notion, asserting that financial self-efficacy is essential for effective financial management, impacting credit behavior (Altaf et al., 2024).

H2: Financial efficacy mediates the relationship between financial literacy and credit behavior among medical students.

Financial stress as a moderator

Financial stress refers to the psychological strain experienced due to financial burdens, such as high expenses, debt, and the inability to meet financial obligations. This stress can manifest in various ways, including anxiety and impaired decision-making (McDermid et al., 2021; Ravikumar et al., 2022). It is often exacerbated by external factors such as economic downturns or unexpected expenses, leading to a cycle of financial insecurity. Financial stress can significantly influence credit behavior. Individuals experiencing high levels of financial stress may resort to impulsive credit usage as a coping

mechanism to alleviate immediate financial pressures (Choi et al., 2020). This impulsive behavior can lead to increased debt accumulation and poor financial decision-making. Chronic financial stress may impair an individual's ability to make sound financial decisions, resulting in a higher likelihood of engaging in irresponsible credit behaviors (McDermid et al., 2022). For instance, a previous report found that financial stress negatively impacts financial well-being and can lead to increased reliance on credit as a means of coping, which ultimately exacerbates financial difficulties (Choi et al., 2020).

Moreover, studies have shown that financial stress moderates the relationship between financial literacy and credit behavior. For example, individuals with high financial literacy may still engage in poor credit behavior if they are under significant financial stress, as the stress can cloud judgment and lead to impulsive decisions (Xiao & Kim, 2022). Conversely, those with lower financial literacy may be more adversely affected by financial stress, leading to a cycle of poor credit management and increased financial strain (Zafary et al., 2024).

H3: Financial stress moderates the relationship between financial literacy and credit behavior among medical students.

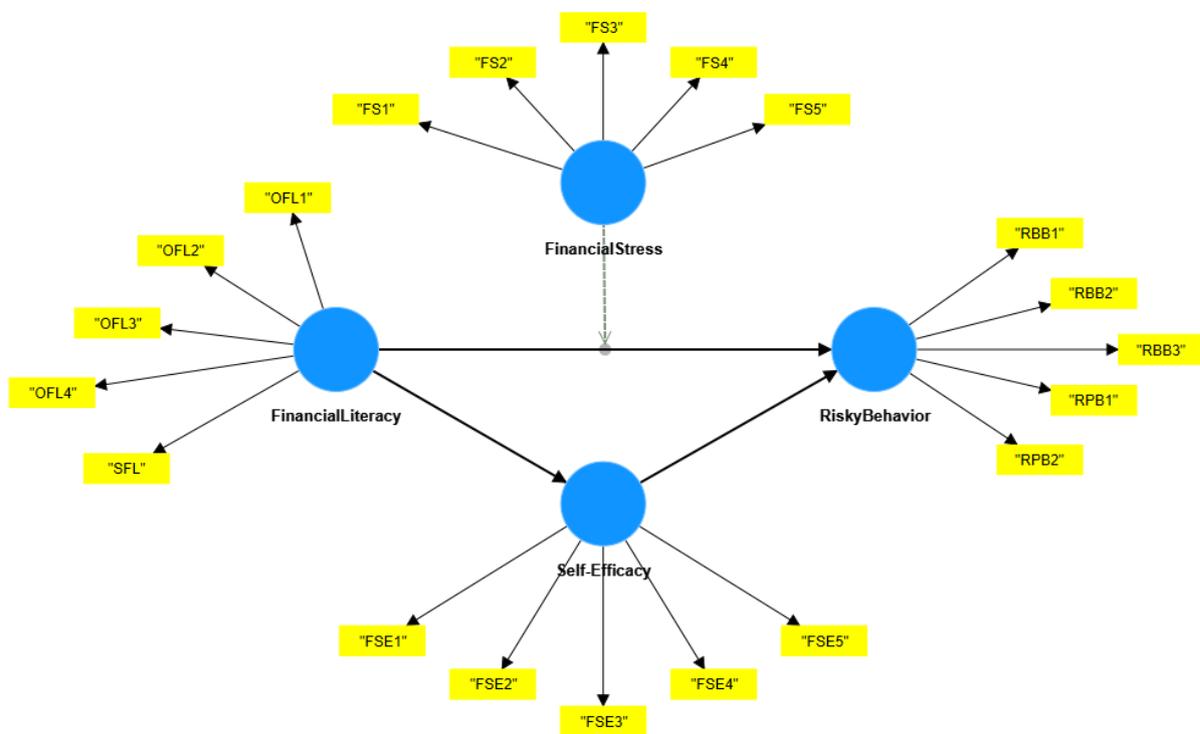


Figure 1. Conceptual Framework

2. METHOD

The data for this study were collected via an online survey targeting medical students in Banyumas Regency, Central Java Purwokerto. Before the formal survey, a pretest was conducted with a small group of college students to ensure the questionnaire's accuracy, clarity, and completeness. Based on their feedback, adjustments were made to enhance the questionnaire's clarity. The comprehensive survey involved sending links and instructions to pass to other friends (snowball sampling). To focus on the relevant population, only medical students with prior experience in consumer credit were included in the final analysis, resulting in a sample of 120 respondents.

As summarized in Table 2, the sample consisted of 120 respondents, including 89 females (74.2%) and 31 males (25.8%). Regarding their place of origin, 65 female respondents (73%) and 19 male respondents (61%) were from rural areas, while 24 females (27%) and 12 males (39%) resided

in urban areas. The distribution of respondents across academic years was as follows: among females, 27% were in their 1st year, 35% in their 2nd year, 16% in their 3rd year, and 22% in their 4th year, while among males, 42% were in their 1st year, 26% in their 2nd year, 19% in their 3rd year, and 13% in their 4th year. Statistical analysis revealed no significant differences in respondents' origin ($p = 0.2$) or academic year ($p = 0.3$) between genders.

This study employed a five-point Likert scale to measure key constructs, including financial literacy, efficacy, financial stress, and risky credit behavior. Risky credit behavior as a dependent variable was measured using two dimensions: risky paying behavior and risky borrowing behavior, adapted from a previous report (Limbu, 2017). Risky paying behavior included reverse-coded items, such as paying bills on time and in full. Risky borrowing behavior assessed impulsive borrowing and credit card misuse. Responses ranged from 1 (never) to 5 (very often), and the scale demonstrated reliability with a Cronbach's α of 0.725. Financial literacy was conceptualized as a two-dimensional construct encompassing subjective and objective financial literacy (Nejad & Javid, 2018). Subjective financial literacy was assessed via a self-reported item asking respondents to rate their overall financial knowledge on a scale from 1 (very low) to 5 (very high). Objective financial literacy was measured through a five-question quiz on interest rates, inflation, bonds, mortgages, and stocks, with scores ranging from 0 (no correct answers) to 5 (all correct answers). These measures captured both personal financial competencies and the economic aspects of online consumer credit. Financial self-efficacy was assessed using a scale adapted from a previous publication (Mindra et al., 2017). The scale included five items reflecting confidence in financial decision-making, covering self-control, financial planning, and problem-solving. Responses were recorded on a five-point Likert scale (1 = strongly disagree, 5 = strongly agree), with a Cronbach's α of 0.804. Financial stress was measured with items adapted previous report (Lim et al., 2014). Respondents rated their agreement with statements about financial stress on a five-point Likert scale (1 = strongly disagree, 5 = strongly agree). The scale's reliability was confirmed with a Cronbach's α of 0.803, as summarized in Table 3.

Variable Measurement

Table 1. Variable Measurement

Construct (ref)	Indicators (code)
Financial literacy (formative) (Nejad & Javid, 2018)	1) How would you assess your overall financial knowledge? (SFL) 2) High inflation increases the cost of living (OFL1) 3) If interest rates rise quickly, bond prices could also rise quickly (OFL2) 4) The total amount of interest on a 10-year mortgage is less than that on a 20-year mortgage (OFL3) 5) Buying a single company's stock usually offers a safer return than a stock mutual fund (OFL4)
Credit behavior (formative) (Limbu, 2017)	1) I always pay bills on time each month (reversed) (RBB1) 2) I always pay off consumer credit in full every month (reversed) (RBB2) 3) I often borrow money on credit cards (RBB3) 4) I am more impulsive when I use consumer credit for online shopping (RBB4) 5) I am less concerned about the price of a product when I use consumer credit (RBB5)
Self-efficacy (formative) (Mindra et al., 2017)	1) I have confidence that I can manage my finances (FSE1) 2) I can stick to my spending plan when unexpected expenses arise (FSE2) 3) I am fully capable of making personal financial planning (FSE3)

Financial stress (reflective) (Lim et al., 2014)	4) I have the ability to make progress toward my financial goals (FSE4)
	5) I can easily handle financial challenges (FSE5)
	1) I feel a lot of stress about my personal finances (FS1)
	2) I worry about being able to pay monthly expenses (FS2)
	3) I worry about having enough money to pay for school (FS3)
	4) The total amount of money I owe causes me great stress (FS4)
	5) I do not have enough money to participate in many of the same activities as my peers do (FS5)

(Source: Research Data, 2024)

3. RESULTS AND DISCUSSION

Results

The descriptive statistics presented in Table 4 provide insights into the variability and central tendencies of the variables measured in this study. The standard deviation values enable us to assess the degree of consistency or variability among the respondents' answers. In contrast, the mean values provide an understanding of the overall trends in the responses. The standard deviation for financial literacy items ranges from 1.039 to 1.353. This suggests relatively low variability, indicating respondents' fairly consistent perceptions of their financial literacy. OFL2 has the smallest standard deviation (1.039) among these items, reflecting the highest response consistency. In contrast, OFL1 exhibits slightly more variability, with a standard deviation 1.353. For credit behavior, the standard deviations range from 1.295 to 1.518, indicating moderate response variability. RBB4, with the highest standard deviation (1.518), suggests greater diversity in risky borrowing behavior than other items. Conversely, RBB1 shows the least variability, with a standard deviation 1.295, pointing to more consistent responses. The standard deviations for self-efficacy are between 1.159 and 1.443. This indicates a generally uniform perception of financial self-efficacy among the participants, though some variation exists. FSE2 shows the least variability (1.159), while FSE4 and FSE5 exhibit slightly higher standard deviations, at 1.436 and 1.443, respectively, indicating more diverse views on these aspects of self-efficacy. For financial stress, standard deviations range from 1.213 to 1.449. FS5 demonstrates the lowest variability (1.213), indicating consistent perceptions of stress in this aspect, while FS4 has the highest standard deviation (1.449), suggesting more diverse experiences of financial stress.

Table 2. Profile of respondent

Variable	N	Female N = 89 ¹	Male N = 31 ¹	p-value ²
ORIGIN	120			0.2
Rural		65 (73%)	19 (61%)	
Urban		24 (27%)	12 (39%)	
YEAR	120			0.3
1st Year		24 (27%)	13 (42%)	
2nd Year		31 (35%)	8 (26%)	
3rd Year		14 (16%)	6 (19%)	
4th Year		20 (22%)	4 (13%)	

(Source: Research Data, 2024)

¹n (%); ²*p<0.05; **p<0.01; ***p<0.001

The mean values for financial literacy items range from 3.76 to 4.12, with a grand mean of 3.89. These findings suggest that respondents generally rate their financial literacy as above average, particularly for OFL2, which has the highest mean score (4.12), indicating strong perceived

knowledge. The mean values for credit behavior range from 3.38 to 3.77, with a grand mean of 3.59. This indicates moderate engagement in risky credit behavior, with RBB1 having the highest mean (3.77), suggesting it is the most prevalent risky behavior among respondents, while RBB4 (3.38) reflects relatively lower engagement. For self-efficacy, the mean values range from 3.66 to 3.92, with a grand mean of 3.78. Respondents generally perceive themselves as confident in managing financial tasks, with FSE3 having the highest mean (3.92), reflecting strong financial planning and decision-making abilities. The mean values for financial stress are between 3.53 and 3.79, with a grand mean of 3.69. FS3 has the highest mean (3.79), suggesting that respondents experience moderate stress levels related to financial issues.

Table 3. Quality control (validity, reliability, and multicollinearity issues)

Variable and item	Loading factor	AVE	Composite reliability	Chronbach alpha	VIF
Financial literacy		0.464	0.811	0.710	
SPL	0.561				1.701
OFL1	0.671				1.191
OFL2	0.534				1.478
OFL3	0.595				1.683
OFL4	0.686				1.069
Credit behavior		0.496	0.769	0.725	
RBB1	0.503				3.208
RBB2	0.582				1.991
RBB3	0.678				1.309
RBB4	0.647				1.971
RBB5	0.520				2.666
Self-efficacy		0.567	0.865	0.804	
FSE1	0.541				1.365
FSE2	0.559				1.707
FSE3	0.690				2.327
FSE4	0.796				1.946
FSE5	0.447				1.751
Financial stress		0.558	0.863	0.803	
FS1	0.835				1.752
FS2	0.686				1.786
FS3	0.433				1.613
FS4	0.737				1.907
FS5	0.789				1.388

(Source: Research Data, 2024)

The grand mean is the arithmetic mean derived from the averages of each variable, providing an overall measure of central tendency. As presented in Table 4, the grand mean for financial literacy is 3.89, reflecting respondents' generally above-average self-assessment of their financial knowledge and skills. The grand mean for credit behavior is 3.59, indicating moderate levels of risky credit

behavior among the participants. For self-efficacy, the grand mean is 3.78, suggesting that respondents exhibit relatively strong confidence in managing financial tasks. Finally, the grand mean for financial stress is 3.69, highlighting moderate levels of perceived financial stress among the respondents. The overall grand mean across these variables, calculated by summing the individual grand means and dividing by the number of variables, is approximately 3.74. This value suggests that, on a scale of 1 to 5, the respondents' judgments are slightly above the midpoint, indicating a balanced but somewhat positive perception across financial literacy, credit behavior, self-efficacy, and financial stress.

Table 4. Descriptive Statistics

Variable and item	Min	Max	Std Dev	Mean	Grand mean
Financial literacy					3.89
SPL	1	5	1.226	3.9	
OFL1	1	5	1.353	3.79	
OFL2	1	5	1.039	4.12	
OFL3	1	5	1.145	3.91	
OFL4	1	5	1.341	3.76	
Credit behavior					3.59
RBB1	1	5	1.295	3.77	
RBB2	1	5	1.438	3.52	
RBB3	1	5	1.448	3.57	
RBB4	1	5	1.518	3.38	
RBB5	1	5	1.344	3.74	
Self-efficacy					3.78
FSE1	1	5	1.381	3.66	
FSE2	1	5	1.159	3.87	
FSE3	1	5	1.241	3.92	
FSE4	1	5	1.436	3.73	
FSE5	1	5	1.443	3.73	
Financial stress					3.69
FS1	1	5	1.288	3.73	
FS2	1	5	1.393	3.66	
FS3	1	5	1.256	3.79	
FS4	1	5	1.449	3.53	
FS5	1	5	1.213	3.74	

(Source: Research Data, 2024)

Hypothesis testing is conducted to determine whether the data supports the proposed hypotheses. The results indicate that H1 (Financial literacy negatively affects credit behavior among medical students) has a coefficient of -0.135 and a p-value of 0.221, above the 0.05 significance level. Therefore, H1 is rejected, suggesting that financial literacy does not significantly influence credit behavior in a negative direction. For H2 (Financial efficacy mediates the relationship between financial literacy and credit behavior among medical students), the coefficient is -0.034, with a p-value of 0.626, also exceeding the 0.05 threshold. Thus, H2 is rejected, indicating that financial efficacy does not

mediate this relationship significantly. However, H3 (Financial stress moderates the relationship between financial literacy and credit behavior among medical students) is supported. The coefficient is -0.174, with a p-value of 0.003 below the 0.05 significance level. This finding confirms that financial stress significantly moderates the relationship between financial literacy and credit behavior. Overall, these results highlight the significant moderating role of financial stress while rejecting the direct effect of financial literacy and the mediating role of financial efficacy.

Table 5. Hypothesis Testing

Hypothesis	Coefficient	P-Value	Decision
H1: Financial literacy negatively affects credit behavior among medical students	-0.135	0.221	Rejected
H2: Financial efficacy mediates the relationship between financial literacy and credit behavior among medical students.	-0.034	0.626	Rejected
H3: Financial stress moderates the relationship between financial literacy and credit behavior among medical students.	-0.174	0.003	Supported

(Source: Research Data, 2024)

Discussion

This study explored the relationships between financial literacy, financial efficacy, financial stress, and credit behavior among Banyumas Regency, Indonesia medical students. The hypothesis testing revealed mixed results. Financial literacy was found not to significantly affect credit behavior directly (H1 rejected), nor did financial efficacy mediate the relationship between financial literacy and credit behavior (H2 rejected). However, financial stress emerged as a significant moderator, demonstrating its critical role in shaping credit behavior (H3 supported). The findings contribute to the existing literature by emphasizing the importance of financial stress as a moderating factor, particularly within the unique context of medical students. This highlights that while financial literacy and efficacy may play roles in financial behavior, the psychological burden of financial stress can significantly influence decision-making.

The rejection of Hypothesis 1 (H1) indicates that financial literacy does not negatively impact credit behavior among medical students. This finding aligns with research suggesting that financial literacy may not directly correlate with improved financial behavior, as evidenced by studies indicating no significant influence of financial knowledge on financial behavior (Ruslim et al., 2022; Sari & Listiadi, 2021). Contextual factors, such as cultural and demographic differences in the Banyumas Regency, may further explain these results. For instance, local financial practices and social norms can shape credit behavior, potentially mitigating the effects of financial literacy (Gunata, 2024; Habibah, 2024). Moreover, previous studies have reported mixed outcomes regarding the relationship between financial literacy and credit behavior. Methodological differences, such as sample demographics and measurement tools, may account for these discrepancies (Ninan & Kurian, 2021; Sahid, Nuris, & Muhammad Saiful Haq Bin, 2023). For example, while some studies found a positive relationship between financial literacy and responsible financial behavior, others indicated that psychological factors, such as self-efficacy and risk tolerance, play a more significant role (Cui, 2024; Robba, 2024). Thus, while financial literacy is essential, it may not be sufficient to deter risky credit behavior, highlighting the need for a broader understanding of the factors influencing financial decisions (Csorba, 2020; Lavonda et al., 2021).

The absence of a mediating effect of financial efficacy in the relationship between financial literacy and credit behavior can be attributed to several factors. First, the unique financial pressures medical students face, such as high educational costs and limited income, may overshadow the influence of financial efficacy on their credit behavior. This demographic's specific context might lead to a reliance on credit as a coping mechanism, regardless of their financial literacy levels (Poon et al., 2022). Furthermore, this study's survey design and variable interactions may differ from previous research reporting significant mediation effects. For instance, studies that found financial self-efficacy as a mediator often involved populations with different financial backgrounds or educational contexts, which may have influenced their outcomes (Riaz et al., 2022). In contrast, this study's focus on medical students could highlight the limitations of financial efficacy in high-stress financial environments, diverging from findings in less pressured contexts (Velasco, 2022). The broader implication of these findings suggests that financial efficacy may not serve as a critical link in all contexts, emphasizing the necessity for context-specific interventions that consider the unique financial realities of different populations (Altaf et al., 2024).

The significant moderating effect of financial stress on the relationship between financial literacy and credit behavior highlights the complex interplay between these variables. Financial stress can exacerbate individuals' challenges, particularly medical students, who often operate in high-pressure environments with substantial educational expenses and limited income (Adiputra, 2021). This stress may lead to impulsive financial decisions, overshadowing the benefits of financial literacy and resulting in riskier credit behaviors. The strong influence of financial stress is particularly relevant in the context of medical students, who may experience unique financial pressures that differ from other demographics. These pressures can include high tuition fees, living expenses, and the burden of student loans, which can significantly impact their financial decision-making processes (Yu et al., 2022). Prior studies have established the critical role of stress in financial decision-making, aligning with behavioral finance theories that stress can impair judgment and lead to suboptimal financial choices (Wahyuni et al., 2022; Yuneline, 2023). This study's findings contribute novel insights by specifically linking financial stress to credit behavior moderation within the medical student demographic, an area that has received limited attention in existing literature. By emphasizing the need for context-specific interventions, this research underscores the importance of addressing financial stress in financial education programs to enhance credit behavior outcomes (Yeni, 2024).

The findings from this study can inform practical interventions aimed at improving financial literacy and managing financial stress among medical students. Tailored financial literacy programs that address the specific financial challenges faced by medical students can enhance their understanding of credit management and responsible borrowing practices (Poon et al., 2022). Additionally, integrating stress management workshops into these programs can help students develop coping strategies to mitigate the effects of financial stress, thereby promoting healthier credit behaviors (Nowotny, 2022). Addressing financial stress is crucial for fostering better financial decision-making among medical students. The high-pressure environment they operate in can lead to impulsive financial behaviors, which may be counteracted by providing resources that enhance both financial literacy and stress management skills (Xu et al., 2022). Universities and policymakers can play a significant role in this regard by implementing initiatives that offer financial counseling, workshops, and resources tailored to the unique needs of medical students (Poon et al., 2022). Moreover, creating a supportive environment encouraging open discussions about financial challenges can help destigmatize financial stress and promote healthier financial behaviors. By focusing on these areas, universities and policymakers can effectively mitigate risky financial behaviors and support the overall well-being of medical students (Kristanto, 2021).

The findings of this study contribute significantly to existing theories, particularly behavioral finance and self-efficacy theory. By demonstrating that financial stress moderates the relationship between financial literacy and credit behavior, the research underscores the importance of psychological factors in financial decision-making processes. This aligns with behavioral finance principles, emphasizing how emotional and cognitive biases can influence financial choices (Zhang & Chatterjee, 2023). The findings also support self-efficacy theory, suggesting that individuals with higher financial literacy may feel more capable of managing their finances. Still, this capability can be undermined by financial stress (Hamid & Loke, 2020). A novel aspect of this research is the specific role of financial stress as a moderator in the context of medical students. While previous studies have explored the impacts of financial literacy on credit behavior, few have examined how financial stress interacts with these variables, particularly within high-pressure environments like medical education (Surya & Evelyn, 2023). This unique focus expands the understanding of financial literacy's indirect effects on credit behavior, suggesting that financial literacy alone may not be sufficient to promote responsible credit practices if individuals are experiencing significant financial stress (Herdhiana, 2023). Overall, these insights highlight the need for interventions that enhance financial literacy and address financial stress, thereby fostering healthier credit behaviors among vulnerable populations such as medical students (Buccioli et al., 2021).

4. CONCLUSION

This study investigated the relationships between financial literacy, financial efficacy, financial stress, and credit behavior among Banyumas Regency, Indonesia medical students. The findings revealed that while financial literacy and financial efficacy did not significantly influence credit behavior directly or mediate its relationship with financial literacy, financial stress played a critical moderating role in shaping credit behavior. These results highlight that financial literacy and efficacy alone are insufficient to promote responsible credit behavior without addressing the psychological burden of financial stress, particularly in high-pressure environments like medical education. This study provides novel insights by emphasizing the importance of financial stress as a key factor influencing financial decisions, offering a unique perspective on how these variables interact within the context of medical students. The findings underscore the need for universities and policymakers to implement tailored financial literacy programs that incorporate stress management strategies, enabling students to develop coping mechanisms and make more informed financial decisions. By addressing financial knowledge and the emotional challenges associated with financial stress, such initiatives can foster healthier credit practices and better financial outcomes. These insights contribute significantly to the theoretical understanding of financial behavior, particularly within behavioral finance and self-efficacy frameworks, while also providing practical guidance for interventions to enhance medical students' financial well-being. Future research should explore these relationships in other high-stress academic or professional environments and examine additional factors that may influence financial behavior, further building on the findings of this study.

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