Jurnal Analisis Bisnis Ekonomi
Vol. 23 No. 1 (2025) pp. 44-61
pISSN: 1693-5950 | eISSN: 2579-647x
Journal Homepage: http://journal.unimma.ac.id/index.php/bisnisekonomi

Financial Literacy and Emergency Savings as Predictors of Financial Resilience among Rural Youth in Indonesia

Nur Hidayah[1], **Rayinda Faizah**[2], **Civi Erikawati**[3]
[1]Management, Faculty of Economics and Business, Universitas Muhammadiyah Magelang, Magelang, Indonesia
[2]Psychology, Faculty of Psychology and Humanities, Universitas Muhammadiyah Magelang, Magelang, Indonesia
[3]Entrepreneurship, Faculty of Business and Economics, Universitas 'Aisyiyah Surakarta, Surakarta, Indonesia

hida@unimma.ac.id

https://doi.org/10.31603/bisnisekonomi.v23i1.18063

Submitted: 29/12/2024 Revised: 13/02/2025 Accepted: 15/22/2025

Keywords: Financial resilience; Financial literacy; Emergency savings

Abstract

Purpose: This study examines the effects of financial literacy and emergency savings on the financial resilience of rural youth and tests whether emergency savings mediate the effect of financial literacy. Method: Survey data were collected in 2025 from 164 young people aged 14 to 30 in rural Magelang Regency, Indonesia, including married and unmarried respondents. The data were analyzed using partial least squares structural equation modeling with bootstrapping and permutation-based multigroup analysis. Findings: Financial literacy, measured through money management behavior, significantly increased emergency savings and financial resilience. Monthly emergency savings had no significant effect on resilience and did not mediate the effect of financial literacy. These relationships did not differ between married and unmarried youth. Implications: Financial education for rural youth should prioritize money management habits, such as recording expenses, planning, and setting financial goals, and marriage preparation programs should include practical financial planning. Originality: This study tests whether emergency savings contribute to resilience beyond financial literacy and shows that, among low-income rural youth, small monthly savings add little to resilience once money management behavior is considered.

Kata kunci: *Ketahanan keuangan; Literasi keuangan; Dana darurat*

Abstrak

Tujuan: Penelitian ini menguji pengaruh literasi keuangan dan dana darurat terhadap ketahanan keuangan pemuda perdesaan, serta menguji peran dana darurat sebagai mediator pengaruh literasi keuangan. Metode: Data survei dikumpulkan pada tahun 2025 dari 164 pemuda berusia 14 sampai 30 tahun di wilayah perdesaan Kabupaten Magelang, Indonesia, yang terdiri atas responden menikah dan belum menikah. Data dianalisis menggunakan partial least squares structural equation modeling dengan bootstrapping dan analisis multigrup berbasis permutasi. Temuan: Literasi keuangan, yang diukur melalui perilaku pengelolaan uang, berpengaruh signifikan terhadap dana darurat dan ketahanan keuangan. Tabungan darurat bulanan tidak berpengaruh signifikan terhadap ketahanan keuangan dan tidak memediasi pengaruh literasi keuangan. Pola hubungan ini tidak berbeda antara pemuda yang menikah dan belum menikah. Implikasi: Edukasi keuangan bagi pemuda perdesaan perlu mengutamakan kebiasaan mengelola uang, seperti mencatat pengeluaran, merencanakan keuangan, dan menetapkan tujuan keuangan, serta program bimbingan pranikah perlu memuat perencanaan keuangan praktis. Orisinalitas: Penelitian ini menguji apakah dana darurat berkontribusi terhadap ketahanan keuangan di luar pengaruh literasi keuangan, dan menunjukkan bahwa pada pemuda perdesaan berpenghasilan rendah, tabungan bulanan yang kecil hanya menambah sedikit ketahanan keuangan setelah perilaku pengelolaan uang diperhitungkan.

1. Introduction

Financial resilience has become a central concern in household finance because income shocks, unexpected expenses, and economic uncertainty are part of everyday life for

many families. Financial resilience refers to the ability of individuals and households to access and combine internal and external resources to cope with and recover from financial adversity (Salignac et al., 2019a). Households that lack this capacity are financially fragile: they cannot raise funds quickly when an emergency occurs, and small shocks can push them into debt or deprivation (Lusardi et al., 2011). For households in developing economies, where formal social protection is limited and income is often irregular, the ability to absorb shocks depends largely on how individuals manage their own resources.

In Indonesia, access to financial services has expanded faster than the knowledge and skills needed to use them well. The 2025 National Financial Literacy and Inclusion Survey reported a financial literacy index of 66.46 percent and a financial inclusion index of 80.51 percent, indicating that many people own financial products without fully understanding how to manage them. The same survey showed that literacy was lower in rural areas (59.60 percent) than in urban areas (70.89 percent), and that the 15 to 17 age group recorded the lowest literacy of all age groups at 51.68 percent (Otoritas Jasa Keuangan & Badan Pusat Statistik, 2025). These figures suggest that young people in rural areas are among the least prepared to manage money, even as they begin to take part in the financial system.

Rural youth also face financial responsibilities earlier than their urban peers, partly because early marriage remains common in rural areas. Indonesian law sets the minimum age of marriage at 19 years for both men and women. Although the proportion of Indonesian women aged 20 to 24 who married before 18 declined from 6.92 percent in 2023 to 5.90 percent in 2024 (Shahibah, 2025), early marriage remains concentrated among groups that are already economically disadvantaged. National survey evidence shows that girls from poorer households, rural areas, and families with lower education face higher odds of child marriage (Kuswanto et al., 2024). Early marriage is also linked to limited education and paid employment, and children of parents who married early are more likely to experience stunting and food insecurity (Hidayah et al., 2024). For rural young people who marry early, household responsibilities arrive before they have the income, skills, or savings to support a family. Within a short period, they must cover daily expenses, pregnancy and childbirth costs, and the needs of children, often with limited and irregular income. Even for those who remain unmarried, irregular rural employment means that the ability to plan, save, and control spending is a basic requirement for financial survival.

Previous research consistently shows that financial literacy strengthens financial resilience. Across seven countries in South Asia and Sub-Saharan Africa, financial and digital literacy were associated with better saving, borrowing, and risk management, and therefore with greater resilience, with notable effects for poor, rural, and female households (Kass-Hanna et al., 2022a). In Malaysia, greater financial knowledge increased the probability of being financially resilient (Hamid et al., 2023). In China, financial literacy helped households reduce financial risk and recover faster from the COVID-19 shock through wealth and risk mitigation effects (T. Liu et al., 2024). Longitudinal evidence from the United States also found that higher financial literacy was linked to higher resilience across groups, although the benefit was smaller for disadvantaged groups (Clark et al., 2024). Among young adults, financial behavior has been identified as the main channel through

which literacy, socialization, and self-control improve financial well-being (Sabri et al., 2024). In Indonesia, studies have linked financial literacy and financial behavior to household financial resilience during the pandemic (Pandin et al., 2021) and a recent review concluded that digital financial literacy consistently promotes regular saving and disciplined budgeting (Sarlawa, 2025).

Emergency savings occupy a special position in this literature. Several frameworks treat a financial cushion as a core component of resilience (Hamid et al., 2023; Salignac et al., 2019a), and the inability to cover expenses for three months without earnings has been identified as a major source of resilience gaps between groups (Clark et al., 2024). Studies in developing countries show that people with better financial behavior are more likely to hold an emergency fund, yet the size of that fund is determined mainly by income rather than by knowledge or attitude (Nguyen, 2023). Similarly, a lack of saving behavior for emergencies has been identified as the main reason households cannot handle financial shocks (Lulaj et al., 2021). These findings raise an important question that previous studies have not answered: does owning an emergency fund add to resilience beyond what financial literacy already explains, or does it serve as the channel through which literacy builds resilience? For low-income young people, owning an emergency fund does not necessarily mean that the fund is large enough to absorb a real shock, so its contribution may be weaker than commonly assumed.

Three gaps emerge from the literature. First, existing frameworks either treat emergency savings as a component of financial resilience (Hamid et al., 2023; Salignac et al., 2019a) or as an outcome of financial behavior (Nguyen, 2023), but rarely test whether savings contribute to resilience beyond what financial literacy already explains. As a result, it remains theoretically unclear whether emergency savings act as an independent buffer, as predicted by the buffer-stock saving theory, or merely reflect underlying money management capacity. Second, most evidence comes from national household surveys, workers, or university students, while rural youth, many of whom marry and form households at a young age, have received little attention. Third, although the OECD defines financial literacy as a combination of knowledge, behavior, and attitudes (OECD, 2023), few studies examine how the behavioral dimension of literacy shapes resilience among young people in rural settings.

This study addresses these gaps by examining the effects of financial literacy and emergency savings on the financial resilience of rural youth in Indonesia. Specifically, it tests whether financial literacy influences emergency savings and financial resilience, whether emergency savings influence financial resilience, and whether emergency savings mediate the relationship between financial literacy and financial resilience. Because a large share of rural youth marry early, the study also compares married and unmarried youth to examine whether these relationships differ across marital status. Because age at marriage was not recorded, this study does not test the effect of early marriage itself; instead, early marriage is treated as a contextual feature of the population, and marital status is used as the grouping variable. The novelty of this study lies in its population, rural youth with a high prevalence of early marriage who are rarely studied in the financial resilience literature, and in its direct test of the role of emergency savings alongside financial literacy within one model. The

findings are expected to inform financial education programs for rural young people and child marriage prevention policies that consider the economic readiness of young families. The remainder of this paper is organized as follows: the next section reviews the literature and develops the hypotheses, followed by the research method, results and discussion, and conclusion.

2. Literature Review

2.1. Theoretical Background

2.1.1. Conservation of Resources Theory

This study is grounded in the Conservation of Resources (COR) theory proposed by Hobfoll (1989). The theory states that individuals strive to obtain, retain, and protect the resources they value, and that stress arises when these resources are threatened, lost, or not regained after investment. Resources include personal characteristics, such as knowledge and skills, as well as object and energy resources, such as money and savings. Subsequent developments of the theory emphasize several principles (Halbesleben et al., 2014; Hobfoll et al., 2018). First, resource loss is psychologically more powerful than resource gain. Second, people must invest resources to protect against loss and to gain new resources. Third, people with more resources are less vulnerable to loss and more capable of gain, whereas those with fewer resources are more likely to experience loss spirals. Fourth, resources tend to travel in caravans, so that a person who possesses one resource is better able to acquire and sustain others.

COR theory offers a useful lens for understanding financial resilience. A financial shock, such as job loss, illness, or the cost of childbirth, represents a threat of resource loss. Individuals who possess financial knowledge and good money management habits are better able to anticipate such threats, accumulate reserves, and respond when a shock occurs. In this view, financial literacy is a personal resource, emergency savings are an object resource, and financial resilience reflects the capacity to protect one's resource base when adversity arises. For rural youth, who often face high resource demands with limited and irregular income, and especially for those who marry early, the theory predicts that personal resources such as financial literacy are especially important because they determine whether other resources can be built at all.

2.1.2. Buffer-Stock Saving Theory

The role of emergency savings is further explained by the buffer-stock saving theory (Carroll, 1997). The theory argues that households facing income uncertainty hold a target level of liquid wealth as a buffer against unexpected falls in income. This buffer allows them to maintain consumption when shocks occur instead of reducing spending sharply or falling into debt. Emergency savings are therefore a practical form of precautionary saving, and their absence is a key marker of financial fragility (Lusardi et al., 2011). Evidence from the United States shows that consumers with little or no emergency savings carry more revolving credit card debt, which makes any financial shock more costly for them (Stavins, 2021). However, the theory also implies that the protective value of a buffer depends on its size relative to the

shock. A small buffer may be exhausted quickly, which means that owning an emergency fund does not automatically guarantee resilience. This point is critical for young households in rural areas whose savings capacity is limited.

2.1.3. Financial Literacy

Financial literacy has been defined in various ways. Huston, (2010) distinguishes between financial knowledge and the ability to apply that knowledge in managing personal finances, arguing that literacy involves both understanding and use. Lusardi & Mitchell (2014) show that financial literacy affects a wide range of economic decisions, including saving, planning, and debt management. The OECD (2023) adopts a broader approach and measures financial literacy through three components: financial knowledge, financial behavior, and financial attitudes. Studies among young adults increasingly show that knowledge matters mainly when it is translated into behavior. Among Malaysian Millennials, financial knowledge shaped financial attitudes and behavior, and it was behavior that ultimately determined financial well-being (She, Ma, et al., 2024). Similarly, financial behavior was the key channel linking literacy to well-being among Malaysian young adults (Sabri et al., 2024). This study therefore follows the behavioral component of the OECD framework and operationalizes financial literacy as the application of financial knowledge in daily money management, reflected in recording income and expenses, saving regularly, paying bills on time, and comparing financial products before choosing them. Accordingly, the term financial literacy in this study refers to its behavioral dimension, and the findings should be interpreted as reflecting applied money management rather than financial knowledge. This approach is appropriate for young people with limited formal education, whose financial capability is more visible in what they do than in what they can answer on a knowledge test.

2.1.4. Emergency Savings

Emergency savings refer to funds set aside specifically to cover unexpected expenses or income loss. They differ from general saving because they are held in liquid form and intended for use in emergencies rather than for long-term goals. Several frameworks consider a financial cushion or current assets as part of financial resilience itself (Hamid et al., 2023; Z. Liu & Chen, 2024; Salignac et al., 2019a), while others treat it as an outcome of good financial behavior (Nguyen, 2023). Empirical evidence shows that a lack of emergency saving is one of the main reasons households fail to handle financial shocks (Lulaj et al., 2021), and that the inability to cover expenses for three months without earnings is a major source of resilience gaps between population groups (Clark et al., 2024). Among low-income households, liquidity-constrained families experienced larger declines in financial well-being after income and expense shocks (Bufe et al., 2022), and interventions to encourage emergency saving were most effective for households that had no emergency resources at all (Roll et al., 2023). In this study, emergency savings are measured by whether respondents set aside funds for emergencies and how much they set aside each month.

2.1.5. Financial Resilience

Financial resilience has been conceptualized as a multidimensional capacity. Salignac et al., (2019) define it as the ability to access and combine economic resources, financial knowledge and behavior, financial products and services, and social capital to cope with and recover from financial adversity. Liu & Chen (2024) propose a similar framework consisting of current assets, financial access, financial literacy, and social capital, and found that one in five Chinese families were financially vulnerable or had low resilience. More recent work emphasizes an ex-ante view, in which resilience reflects preparedness for future shocks rather than only recovery from past ones. Using this approach in India, Kamble et al., (2025) found that only about 2 percent of adults were financially resilient, and that rural residents, women, young people, and those with low education were the most vulnerable. Consistent with this forward-looking view, this study measures financial resilience through budgeting, the ability to meet basic needs from emergency funds after losing income, staying calm when facing financial problems, having a plan for unexpected financial events, planning finances for the medium and long term, and setting personal financial goals.

2.2. Hypotheses Theoretical Background

2.2.1. Financial Literacy and Emergency Savings

COR theory suggests that personal resources make it easier to acquire other resources. Financial literacy, as a personal resource, should therefore help individuals build object resources such as emergency savings. More financially literate individuals are more likely to plan and save (Lusardi & Mitchell, 2014). Among Saudi youth, financial literacy had a strong positive effect on saving behavior and mediated the influence of parents and peers on saving (Alshebami & Aldhyani, 2022). In Vietnam, people with better financial behavior were more likely to hold an emergency fund and to have savings covering at least three months of expenses, although financial knowledge and attitude alone were not significant (Nguyen, 2023). This finding suggests that the behavioral side of literacy, rather than knowledge alone, is what drives emergency saving. A review of 35 studies likewise concluded that digital financial literacy consistently promotes regular saving and disciplined budgeting (Sarlawa, 2025), while households lacking saving behavior were found to be unprepared for emergencies (Lulaj et al., 2021). Based on this reasoning, the first hypothesis is proposed:

H1: Financial literacy has a positive effect on emergency savings.

2.2.2. Financial Literacy and Financial Resilience

According to COR theory, individuals with richer personal resources are less vulnerable to resource loss. Financially literate individuals are better able to manage income, control spending, and anticipate risks, which strengthens their ability to withstand shocks. Empirical evidence across countries supports this argument. Financial and digital literacy were associated with greater resilience across seven countries in South Asia and Sub-Saharan Africa (Kass-Hanna et al., 2022a). Greater financial knowledge increased the probability of being resilient in Malaysia (Hamid et al., 2023), and financial literacy helped Chinese

households recover faster from the COVID-19 shock (Z. Liu & Chen, 2024). Longitudinal evidence from the United States also linked higher literacy to higher resilience, although the effect was weaker among disadvantaged groups (Clark et al., 2024). Among Indian adolescents and young adults, digital financial literacy improved financial well-being through financial capability and resilience (Hitesh & Sandhu, 2024). In Indonesia, financial literacy and behavior were found to shape household financial resilience during the pandemic (Pandin et al., 2021). Several frameworks even treat financial literacy as one of the core dimensions of resilience (Kamble et al., 2025; Z. Liu & Chen, 2024). Therefore, the second hypothesis is:

H2: Financial literacy has a positive effect on financial resilience.

2.2.3. Emergency Savings and Financial Resilience

The buffer-stock saving theory predicts that households with a liquid buffer can maintain consumption when income falls (Carroll, 1997). Emergency savings should therefore strengthen resilience by providing immediate resources when a shock occurs. Households without such savings are more likely to be financially fragile (Lusardi et al., 2011) and to rely on costly debt when shocks occur (Stavins, 2021). A financial cushion is widely regarded as a key component of resilience (Hamid et al., 2023; Salignac et al., 2019a), and Clark et al., (2024) found that the ability to cover three months of expenses without earnings was a major factor separating more resilient groups from less resilient ones. However, the protective effect of liquidity is not uniform. Bufe et al., (2022) found that not all sources of liquidity were equally effective in buffering low-income households against shocks, and evidence from Vietnam shows that the size of emergency funds depends mainly on income (Nguyen, 2023). Despite this uncertainty, theory and most prior evidence point to a positive effect, so the third hypothesis is:

H3: Emergency savings have a positive effect on financial resilience.

2.2.4. The Mediating Role of Emergency Savings

COR theory describes resources as forming caravans, in which one resource generates and sustains others (Hobfoll, 1989). Following this logic, financial literacy may improve resilience not only directly but also indirectly by helping individuals build emergency savings, which then serve as a buffer against shocks. Studies on young adults support the idea that literacy works through concrete financial actions. Among Malaysian young adults, financial behavior mediated the effect of financial literacy on financial well-being (Sabri et al., 2024), and among Indian youth, the effect of digital financial literacy on well-being was fully transmitted through financial capability and resilience (Hitesh & Sandhu, 2024). In Vietnam, financial behavior was the main pathway to holding an emergency fund (Nguyen, 2023). If literacy leads to emergency savings (H1), and emergency savings strengthen resilience (H3), emergency savings should act as a channel between the two. Thus, the fourth hypothesis is:

H4: Emergency savings mediate the effect of financial literacy on financial resilience.

2.2.5. The Role of Marital Status

COR theory also predicts that individuals facing greater resource demands are more vulnerable to loss spirals, in which an initial loss leads to further losses (Halbesleben et al., 2014; Hobfoll et al., 2018). Among rural youth, married individuals face heavier financial demands than their unmarried peers, including household expenses, pregnancy and childbirth costs, and childcare. Many of them also married young: child marriage in Indonesia is more common among poorer, rural, and less educated groups (Kuswanto et al., 2024), and it is associated with limited employment and poorer outcomes for children (Hidayah et al., 2024). Financial vulnerability is likewise concentrated among rural residents, women, and young people (Kamble et al., 2025). Under these heavier demands, the protective role of financial literacy and emergency savings may differ between married and unmarried youth. Therefore, the fifth hypothesis is:

H5: The effects of financial literacy and emergency savings on financial resilience differ between married and unmarried youth.

2.2.6. Research Framework

Based on the theoretical background and hypotheses above, the research framework is presented in **Figure 1**. Financial literacy is proposed to affect emergency savings (H1) and financial resilience (H2), emergency savings are proposed to affect financial resilience (H3), and emergency savings are proposed to mediate the effect of financial literacy on financial resilience (H4). Marital status is examined as a grouping variable through multigroup analysis (H5).

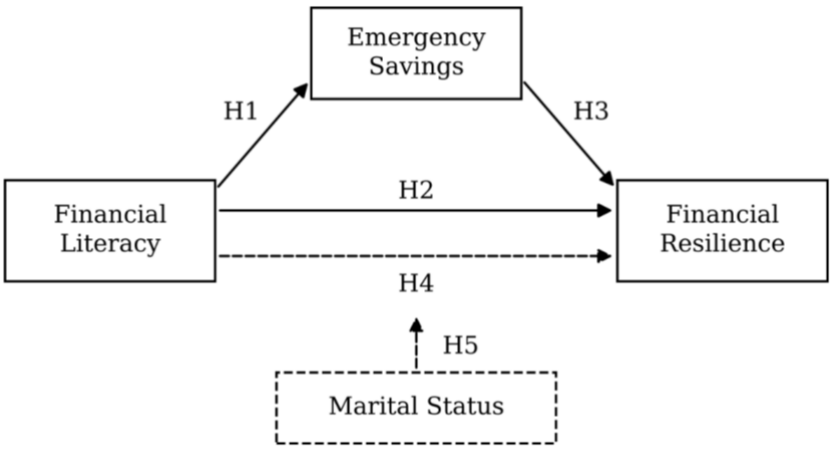


Figure 1. Conceptual model
Source: Model by authors

3. Methods

This quantitative cross-sectional study targeted young people aged 14 to 30 years living in rural subdistricts of Magelang Regency, Central Java, Indonesia, an agrarian area where early marriage remains common and many young people work in informal jobs. The unit of analysis was the individual, as each respondent reported on his or her own finances. Respondents, both married and unmarried, were selected through purposive sampling. Of

171 responses, six duplicates and one respondent outside the youth age range were removed, leaving 164 respondents. This exceeds the minimum of 155 required by the inverse square root method (Kock & Hadaya, 2018). Data were collected in 2025 through a structured questionnaire in Indonesian. Participation was voluntary, responses were kept confidential, and parental consent was obtained for respondents under 18.

Financial literacy was measured with four behavioral items adapted from the (OECD, 2023) framework on a five-point frequency scale (1 = never, 5 = always). Emergency savings were measured as a single ordinal indicator (0 = no emergency fund; 1 to 4 = increasing monthly savings categories), which is appropriate for a concrete attribute (Diamantopoulos et al., 2012). Financial resilience was measured with eight items adapted from (Salignac et al., 2019a) on a five-point agreement scale (1 = strongly disagree, 5 = strongly agree).

Data were analyzed using SEM-PLS (Hair et al., 2019). The measurement model was assessed through outer loadings, Cronbach's alpha, composite reliability, AVE, and HTMT (Henseler et al., 2015). The structural model was assessed through VIF, R^2, f^2, and bootstrapping with 5,000 subsamples, with mediation tested through the indirect effect (Zhao et al., 2010). Differences between married and unmarried youth were tested using permutation-based multigroup analysis (Henseler et al., 2015), and common method bias was checkarity VIF (Kock & Hadaya, 2018).

4. Results and Discussion

4.1. Descriptive Statistics

Table 1 presents the descriptive statistics of the constructs. The mean score of financial literacy was 3.27 (SD = 0.86), indicating that respondents practiced good money management only occasionally. Among the literacy items, paying bills on time had the highest mean (4.14), while recording income and expenses had the lowest (2.55). Financial resilience had a mean of 3.39 (SD = 0.65), close to the midpoint of the scale. Emergency savings had a mean of 1.62 (SD = 1.22) on the 0 to 4 scale. Although 78.0 percent of respondents reported owning an emergency fund, 72.7 percent of these owners set aside less than Rp500,000 per month.

Table 1. Descriptive statistics of constructs

Construct	Scale	Mean	SD
Financial literacy	1 to 5	3.27	0.86
Emergency savings	0 to 4	1.62	1.22
Financial resilience	1 to 5	3.39	0.65

4.2. Measurement Model

In the initial model, the average variance extracted (AVE) of financial resilience was 0.438, below the 0.50 threshold. Following Hair et al., (2019), indicators with the lowest loadings were removed one at a time until the AVE exceeded 0.50. FR8 (reliance on family or friends, loading = 0.425) and FR7 (access to formal financial institutions, loading = 0.491 after the first deletion) were removed, after which the AVE reached 0.524. The two removed

items represent external resources, namely access to formal financial institutions and support from social networks, which (Salignac et al., 2019a) treat as distinct dimensions of financial resilience. Their removal therefore narrows the construct to individual financial preparedness, which remains consistent with the forward-looking view of resilience adopted in this study (Kamble et al., 2025). The remaining six items cover budgeting, emergency coverage, emotional coping, contingency planning, long term planning, and goal setting, so the content of the construct was preserved. The remaining items with loadings between 0.40 and 0.70, namely FL3 (0.498), FR1 (0.622), and FR3 (0.674), were retained because the AVE and composite reliability of their constructs already met the thresholds and the items contributed to content validity (Hair et al., 2019).

Table 2 summarizes the final measurement model. Composite reliability values were 0.814 for financial literacy and 0.867 for financial resilience, exceeding the 0.70 threshold. Cronbach's alpha was 0.815 for financial resilience and 0.695 for financial literacy, the latter being marginally below 0.70. Because Cronbach's alpha tends to underestimate reliability, composite reliability is considered the more appropriate criterion in PLS-SEM (Hair et al., 2019), and internal consistency was therefore deemed adequate. The AVE values of 0.532 and 0.524 confirm convergent validity. All outer loadings were significant, with t-values ranging from 5.384 to 29.717, and all outer VIF values ranged from 1.279 to 1.998, indicating no collinearity among indicators.

Table 2. Measurement model results

Construct	Item	Loading	t-value	VIF	Cronbach's α	CR	AVE
Financial literacy	FL1	0.723	12.925	1.426	0.695	0.814	0.532
	FL2	0.841	29.717	1.566			
	FL3	0.498	5.384	1.279			
	FL4	0.806	23.976	1.647			
Emergency savings	EF	1.000				1.000	1.000
Financial resilience	FR1	0.622	10.676	1.410	0.815	0.867	0.524
	FR2	0.730	12.471	1.713			
	FR3	0.674	10.931	1.489			
	FR4	0.792	20.126	1.998			
	FR5	0.787	24.680	1.823			
	FR6	0.721	12.046	1.622			

Discriminant validity was established using two criteria (**Table 3**). Under the (Fornell & Larcker, 1981) criterion, the square root of the AVE for each construct was greater than its correlations with the other constructs. All HTMT values were below 0.85 (Henseler et al., 2015), with the highest value of 0.716 between financial literacy and financial resilience.

Because both financial literacy and financial resilience include items related to money management, the HTMT value between these two constructs was examined closely. The value of 0.716 is well below the 0.85 threshold, indicating that respondents distinguished between their daily money management practices and their preparedness for financial shocks. Common method bias is unlikely to be a serious problem, although it cannot be ruled out entirely in single-source survey data. Harman's single factor test showed that the first factor explained 40.11 percent of the variance, below the 50 percent threshold (Podsakoff et

al., 2003), and all full collinearity VIF values (1.433 to 1.859) were below 3.3 (Kock & Hadaya, 2018).

Table 3. Discriminant validity

Construct	FL	EF	FR
Fornell-Larcker criterion			
Financial literacy (FL)	**0.729**		
Emergency savings (EF)	0.549	**1.000**	
Financial resilience (FR)	0.559	0.329	**0.724**
HTMT			
Emergency savings (EF)	0.606		
Financial resilience (FR)	0.716	0.358	

4.3. Structural Model

The inner VIF value of 1.431 indicates no collinearity between the predictors of financial resilience. The explanatory power of the model was assessed using the coefficient of determination (R^2), with values of 0.25, 0.50, and 0.75 interpreted as weak, moderate, and substantial, respectively (Hair et al., 2019). As shown in **Table 4**, financial literacy explained 30.1 percent of the variance in emergency savings ($R^2 = 0.301$), while financial literacy and emergency savings together explained 31.3 percent of the variance in financial resilience ($R^2 = 0.313$). Both values indicate weak to moderate explanatory power, suggesting that other factors not included in the model, such as income and employment stability, also shape financial resilience. The adjusted R^2 values (0.297 and 0.305) were close to the R^2 values, indicating that the explanatory power was not inflated by the number of predictors.

Table 4. Coefficient of determination (R^2)

Endogenous construct	R^2	Adjusted R^2
Emergency savings	0.301	0.297
Financial resilience	0.313	0.305

The effect size (f^2) was then examined to assess the contribution of each predictor to the R^2 of its endogenous construct, with values of 0.02, 0.15, and 0.35 indicating small, medium, and large effects, respectively (Cohen, 2013). As presented in **Table 5**, financial literacy had a large effect on emergency savings ($f^2 = 0.431$) and a medium effect on financial resilience ($f^2 = 0.299$). In contrast, emergency savings had no meaningful effect on financial resilience ($f^2 = 0.001$), as the value was below the 0.02 threshold. These results indicate that removing financial literacy from the model would substantially reduce the explained variance in both endogenous constructs, whereas removing emergency savings would barely change the explained variance in financial resilience. The significance of the path coefficients was tested through bootstrapping with 5,000 subsamples, and the results are summarized in **Table 6**.

Financial literacy had a positive and significant effect on emergency savings ($\beta = 0.549$, $p < 0.001$), supporting H1, and on financial resilience ($\beta = 0.542$, $p < 0.001$), supporting H2. In contrast, emergency savings had no significant effect on financial resilience ($\beta = 0.031$, $p = 0.696$), so H3 was not supported. The indirect effect of financial literacy on financial

resilience through emergency savings was also not significant (β = 0.017, 95% CI [-0.069, 0.106]), and H4 was not supported. Because the direct effect was significant while the indirect effect was not, the relationship represents a direct-only nonmediation pattern (Zhao et al., 2010). Almost the entire total effect of financial literacy on financial resilience (0.559) operated through the direct path.

Table 5. Effect Size (f^2)

Path	f^2	Interpretation
Financial literacy → Emergency savings	0.431	Large
Financial literacy → Financial resilience	0.299	Medium
Emergency savings → Financial resilience	0.001	No effect

Table 6. Hypothesis testing results

Hypothesis	Path	β	SE	t	p	95% CI	Decision
H1	FL → EF	0.549	0.052	10.586	< 0.001	[0.444, 0.645]	Supported
H2	FL → FR	0.542	0.067	8.090	< 0.001	[0.417, 0.682]	Supported
H3	EF → FR	0.031	0.080	0.391	0.696	[-0.127, 0.187]	Not supported
H4	FL → EF → FR	0.017	0.044	0.385	0.700	[-0.069, 0.106]	Not supported
	Total effect FL → FR	0.559	0.056	10.022	< 0.001	[0.454, 0.673]	

To examine this result further, an additional model was estimated with emergency savings as the only predictor of financial resilience. In this model, emergency savings had a significant effect (β = 0.329, p < 0.001). The effect therefore disappeared only after financial literacy was included. This pattern is consistent with the possibility that the association between emergency savings and resilience is largely accounted for by financial literacy, although the cross-sectional data cannot establish this mechanism.

4.4. Multigroup Analysis

Before comparing the groups, measurement invariance was assessed using the MICOM procedure (Henseler et al., 2015). Compositional invariance was established for financial literacy (c = 0.996) and financial resilience (c = 0.990), as both correlations exceeded the 5 percent quantile of the permutation distribution, confirming partial measurement invariance and allowing the path coefficients to be compared across groups. **Table 7** presents the multigroup comparison between married (n = 95) and unmarried (n = 69) youth. The path coefficients followed the same pattern in both groups: financial literacy strongly affected emergency savings and financial resilience, while emergency savings did not affect resilience. The permutation test found no significant differences in any path (all p > 0.05), so H5 was not supported. However, married youth reported significantly higher financial resilience than unmarried youth (3.51 versus 3.24; Mann-Whitney p = 0.023), and a higher proportion of them owned an emergency fund (84.2 percent versus 69.6 percent). The two groups did not differ in age (19.18 versus 19.84 years; p = 0.594) or gender composition (55.8 percent versus 52.2 percent female), although other factors such as income and number of dependents could not be controlled. Financial literacy (3.31 versus 3.20; p =

0.477) and emergency savings scores (1.62 versus 1.61; p = 0.735) did not differ between the groups.

Table 7. Multigroup analysis by marital status

Path	Married (n = 95)	Unmarried (n = 69)	Difference	Permutation p
FL → EF	0.494	0.615	-0.122	0.244
FL → FR	0.592	0.536	0.056	0.688
EF → FR	0.036	0.023	0.013	0.937
R^2 (FR)	0.373	0.303		

4.5. Discussion

The first finding shows that financial literacy strongly increases emergency savings. This result is consistent with COR theory, which holds that personal resources make it easier to acquire other resources (Hobfoll, 1989; Hobfoll et al., 2018). Young people who regularly record their finances, save, and compare financial products are more likely to set aside money for emergencies. The finding supports evidence that literacy promotes saving among youth (Alshebami & Aldhyani, 2022; Lusardi & Mitchell, 2014) and that financial behavior is the main pathway to holding an emergency fund in developing countries (Nguyen, 2023). The saving item had the highest loading on financial literacy (0.841), suggesting that the habit of regular saving is the core link between literacy and emergency funds.

The second finding confirms that financial literacy is the main determinant of financial resilience among rural youth. This finding aligns with studies in South Asia and Sub-Saharan Africa (Kass-Hanna et al., 2022a), Malaysia (Hamid et al., 2023), China (Z. Liu & Chen, 2024), the United States (Clark et al., 2024), and Indonesia (Pandin et al., 2021). It also supports the view that literacy is effective when translated into behavior (Sabri et al., 2024; She, Rasiah, et al., 2024). Because literacy was measured through behavior in this study, the result suggests that what young people do with money matters more for resilience than what they own. In the language of COR theory, financial literacy functions as a personal resource that allows individuals to anticipate and manage resource threats, rather than simply providing a stock to draw on.

The most important finding is that, in this sample, emergency savings did not strengthen financial resilience once financial literacy was taken into account. This result contradicts the common assumption that a financial cushion is a core component of resilience (Hamid et al., 2023; Salignac et al., 2019a), but it can be explained by the buffer-stock saving theory. The theory implies that a buffer protects only if it is large enough relative to the shock (Carroll, 1997). In this study, nearly three quarters of fund owners set aside less than Rp500,000 per month. Although the total balance of their funds was not measured, such small contributions suggest that the accumulated funds of many respondents are unlikely to cover several months of household needs, particularly for young families facing childbirth and childcare costs. Owning an emergency fund that is built from small contributions may therefore give limited real protection. This interpretation is consistent with Bufe et al., (2022), who found that not all sources of liquidity were equally effective in buffering low-income households, and with Nguyen (2023), who showed that the size of emergency funds is driven

mainly by income. This result does not imply that emergency savings are unimportant. Emergency savings were related to resilience when examined alone, and their weak unique contribution in this study is likely tied to the small amounts that respondents were able to set aside.

Because emergency savings did not affect resilience, they also did not mediate the relationship between financial literacy and resilience. This result differs from studies that found financial behavior or capability to mediate the effect (Hitesh & Sandhu, 2024; Sabri et al., 2024a). The difference lies in the nature of the mediator. Behavior and capability are continuous practices that can be applied to any shock, whereas a small emergency fund is a limited stock that is easily exhausted. In terms of COR theory, the resource caravan from literacy to resilience appears to travel through planning and management practices rather than through accumulated savings. For rural youth with low and irregular incomes, the ability to plan, set goals, and respond to unexpected events seems to matter more than the money they have managed to set aside.

The multigroup analysis showed that these relationships did not differ between married and unmarried youth. Contrary to the prediction of COR theory that greater resource demands would change the role of resources (Halbesleben et al., 2014), financial literacy was equally important in both groups, and emergency savings were equally ineffective. Nevertheless, married youth reported higher resilience and were more likely to own an emergency fund. One possible explanation is that married youth carry household responsibilities that may encourage them to plan and set aside money, although the cross-sectional design does not allow this difference to be attributed to marriage itself. This finding should be interpreted carefully. Married youth in rural Indonesia often marry early and come from poorer and less educated families (Kuswanto et al., 2024), and their higher self-reported resilience may reflect a sense of responsibility rather than a stronger financial position, given that their emergency savings scores were the same as those of unmarried youth.

This study makes two theoretical contributions. First, it extends COR theory to youth financial resilience by showing that personal resources (financial literacy) are more decisive than object resources (emergency savings) when the object resources are small. Second, it refines the buffer-stock saving perspective by showing that the protective role of emergency savings depends on their adequacy, not merely their existence. These findings suggest that frameworks treating a financial cushion as a component of resilience (Hamid et al., 2023; Salignac et al., 2019a) should distinguish between owning a fund and having a fund large enough to absorb shocks.

Practically, the findings indicate that financial education for rural youth should focus on building money management habits, such as recording expenses, planning, and setting financial goals, rather than only encouraging them to open savings accounts. Recording income and expenses was the weakest practice among respondents, making it a clear starting point for intervention. Programs that promote emergency savings should also emphasize the adequacy of the fund, for example by setting a target of several months of basic expenses. For policymakers and religious affairs offices involved in premarital guidance, the findings

support including practical financial planning in marriage preparation programs, given that at least a third of respondents married below the legal minimum age.

5. Conclusion

This study examined the effects of financial literacy and emergency savings on the financial resilience of rural youth in Indonesia. The results show that financial literacy significantly increases both emergency savings and financial resilience, while emergency savings do not affect resilience and do not mediate the effect of literacy. These relationships were the same for married and unmarried youth, although married youth reported higher resilience. Taken together, the findings indicate that, mong the rural youth in this study, financial resilience depends mainly on how they manage their money rather than on whether they have set aside an emergency fund, particularly when monthly contributions to the fund are small. Theoretically, this study extends Conservation of Resources theory by showing that personal resources are more decisive than small object resources in building resilience, and it refines the buffer-stock saving perspective by emphasizing the adequacy of emergency savings rather than their mere existence. Practically, financial education for rural youth should prioritize money management habits such as recording expenses, planning, and setting goals, and marriage preparation programs should include practical financial planning. This study has several limitations. The cross-sectional design does not allow causal conclusions, and all variables were self-reported. The sample was drawn through purposive sampling from one regency, which limits generalizability. Financial literacy was measured only through its behavioral dimension, emergency savings were measured as monthly contributions rather than total balances, and the response options of one saving item combined two categories. In addition, the final measure of financial resilience focused on individual preparedness after two items on external resources were removed, so the results do not capture the role of financial access and social support. The data also did not record age at marriage or income, and the analysis was conducted at the individual rather than the household level. Future research should use longitudinal designs, measure emergency fund balances relative to monthly expenses, include financial knowledge and income as additional variables, record age at marriage to compare early and later marriage directly, and examine household level resilience by collecting data from both spouses.

Authors' Declaration

Authors' contributions and responsibilities

The authors made substantial contributions to the conception and design of the study. The authors took responsibility for data analysis, interpretation and discussion of results. The authors read and approved the final manuscript.

Funding

No funding information from the authors.

Availability of data and materials

All data are available from the authors.

Competing interests

The authors declare no competing interest.

Additional information

No additional information from the authors.

References

Alshebami, A. S., & Aldhyani, T. H. H. (2022). The Interplay of Social Influence, Financial Literacy, and Saving Behaviour among Saudi Youth and the Moderating Effect of Self-Control. *Sustainability*, *14*(14), 8780. https://doi.org/10.3390/su14148780

Bufe, S., Roll, S., Kondratjeva, O., Skees, S., & Grinstein-Weiss, M. (2022). Financial Shocks and Financial Well-Being: What Builds Resiliency in Lower-Income Households? *Social Indicators Research*, *161*(1), 379–407. https://doi.org/10.1007/s11205-021-02828-y

Carroll, C. D. (1997). Buffer-Stock Saving and the Life Cycle/Permanent Income Hypothesis. *The Quarterly Journal of Economics*, *112*(1), 1–55. https://doi.org/10.1162/003355397555109

Clark, R. L., Lusardi, A., & Mitchell, O. S. (2024). Does being financially resilient lead to better economic outcomes? *Journal of Financial Literacy and Wellbeing*, *2*(3), 191–208. https://doi.org/10.1017/flw.2024.23

Diamantopoulos, A., Sarstedt, M., Fuchs, C., Wilczynski, P., & Kaiser, S. (2012). Guidelines for choosing between multi-item and single-item scales for construct measurement: a predictive validity perspective. *Journal of the Academy of Marketing Science*, *40*(3), 434–449. https://doi.org/10.1007/s11747-011-0300-3

Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*, *18*(1), 39. https://doi.org/10.2307/3151312

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate Data Analysis*. Cengage.

Halbesleben, J. R. B., Neveu, J.-P., Paustian-Underdahl, S. C., & Westman, M. (2014). Getting to the "COR." *Journal of Management*, *40*(5), 1334–1364. https://doi.org/10.1177/0149206314527130

Hamid, F. S., Loke, Y. J., & Chin, P. N. (2023). Determinants of financial resilience: insights from an emerging economy. *Journal of Social and Economic Development*, *25*(2), 479–499. https://doi.org/10.1007/s40847-023-00239-y

Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, *43*(1), 115–135. https://doi.org/10.1007/s11747-014-0403-8

Hidayah, I., Suryahadi, A., Palmisano, F., & Kiefte-de Jong, J. C. (2024). The role of parental child marriage in children's food security and nutritional status: a prospective cohort study in Indonesia. *Frontiers in Public Health*, *12*. https://doi.org/10.3389/fpubh.2024.1469483

Hitesh, K., & Sandhu, S. (2024). Digital financial literacy and perceived financial well-being among indian adolescents and young adults: the importance of financial capability and resilience. *The Review of Finance and Banking*, *16*(2), 231–247. https://doi.org/10.24818/rfb.24.16.02.04

Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, *44*(3), 513–524. https://doi.org/10.1037/0003-066X.44.3.513

Hobfoll, S. E., Halbesleben, J., Neveu, J.-P., & Westman, M. (2018). Conservation of Resources in the Organizational Context: The Reality of Resources and Their Consequences. *Annual Review of Organizational Psychology and Organizational Behavior*, *5*(1), 103–128. https://doi.org/10.1146/annurev-orgpsych-032117-104640

Huston, S. J. (2010). Measuring Financial Literacy. *Journal of Consumer Affairs*, *44*(2), 296–316. https://doi.org/10.1111/j.1745-6606.2010.01170.x

Kamble, P. A., Mehta, A., & Rani, N. (2025). Measuring Multidimensional Financial Resilience: An Ex-ante Approach. *Social Indicators Research*, *176*(2), 533–567. https://doi.org/10.1007/s11205-024-03476-8

Kass-Hanna, J., Lyons, A. C., & Liu, F. (2022). Building financial resilience through financial and digital literacy in South Asia and Sub-Saharan Africa. *Emerging Markets Review*, *51*, 100846. https://doi.org/10.1016/j.ememar.2021.100846

Kock, N., & Hadaya, P. (2018). Minimum sample size estimation in PLS-SEM: The inverse square root and gamma-exponential methods. *Information Systems Journal*, *28*(1), 227–261. https://doi.org/10.1111/isj.12131

Kuswanto, H., Oktaviana, P. P., Efendi, F., Nelwati, N., & Malini, H. (2024). Prevalence of and factors associated with female child marriage in Indonesia. *PLOS ONE*, *19*(7), e0305821. https://doi.org/10.1371/journal.pone.0305821

Liu, T., Fan, M., Li, Y., & Yue, P. (2024). Financial literacy and household financial resilience. *Finance Research Letters*, *63*, 105378. https://doi.org/10.1016/j.frl.2024.105378

Liu, Z., & Chen, J.-K. (2024). Financial Resilience in China: Conceptual Framework, Risk and Protective Factors, and Empirical Evidence. *Journal of Family and Economic Issues*, *45*(4), 852–875. https://doi.org/10.1007/s10834-023-09943-7

Lulaj, E., Dragusha, B., Lulaj, D., Rustaj, V., & Gashi, A. (2021). Households savings and financial behavior in relation to the ability to handle financial emergencies: case study of Kosovo. *Acta Scientiarum Polonorum. Oeconomia*, *20*(1), 35–48. https://doi.org/10.22630/ASPE.2021.20.1.4

Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature*, *52*(1), 5–44. https://doi.org/10.1257/jel.52.1.5

Lusardi, A., Tufano, P., & Schneider, D. (2011). Financially Fragile Households: Evidence and Implications. *Spring*.

Nguyen, T. A. N. (2023). The power of financial behavior in emergency funds: Empirical evidence from a developing country. *Journal of Eastern European and Central Asian Research (JEECAR)*, *10*(3), 455–467. https://doi.org/10.15549/jeecar.v10i3.1223

OECD. (2023). *OECD/INFE 2023 International Survey of Adult Financial Literacy*. https://doi.org/10.1787/56003a32-en

Otoritas Jasa Keuangan, & Badan Pusat Statistik. (2025). *Siaran Pers Bersama: Indeks Literasi dan Inklusi Keuangan Masyarakat Meningkat, OJK dan BPS Umumkan Hasil Survei Nasional Literasi Dan Inklusi Keuangan (SNLIK) Tahun 2025*.

Pandin, M. Y. R., Ratnawati, T., & Yuhertiana, I. (2021). The Influence of Financial Structure, Financial Literacy and Financial Behavior on Household Financial Resilience Using Financial Inclusion and Financial Decision as Intervening

Variables On Cancer Survivors Household In East Java During COVID-19 Pandemic. *IJEBD (International Journal of Entrepreneurship and Business Development)*, *4*(1), 80–90. https://doi.org/10.29138/ijebd.v4i1.1273

Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, *88*(5), 879–903. https://doi.org/10.1037/0021-9010.88.5.879

Roll, S., Despard, M., Grinstein-Weiss, M., & Bufe, S. (2023). Emergency Savings among Persistently Poor Households: Evidence from a Field Experiment. *Social Work Research*, *47*(1), 34–49. https://doi.org/10.1093/swr/svac028

Sabri, M. F., Anthony, M., Law, S. H., Rahim, H. A., Burhan, N. A. S., & Ithnin, M. (2024). Impact of financial behaviour on financial well-being: evidence among young adults in Malaysia. *Journal of Financial Services Marketing*, *29*(3), 788–807. https://doi.org/10.1057/s41264-023-00234-8

Salignac, F., Marjolin, A., Reeve, R., & Muir, K. (2019). Conceptualizing and Measuring Financial Resilience: A Multidimensional Framework. *Social Indicators Research*, *145*(1), 17–38. https://doi.org/10.1007/s11205-019-02100-4

Sarlawa, R. (2025). Digital Financial Literacy and Financial Behavior: Pathways to Inclusion and Resilience. *Jurnal Ilmiah Manajemen Kesatuan*, *13*(6), 5709–5726. https://doi.org/10.37641/jimkes.v13i6.4460

Shahibah, A. (2025). Pernikahan Dini di Indonesia Terus Menurun Sedekade Terakhir. *GoodStats Data*.

She, L., Ma, L., Pahlevan Sharif, S., & Karim, S. (2024). Millennials' financial behaviour and financial well-being: the moderating role of future orientation. *Journal of Financial Services Marketing*, *29*(4), 1207–1224. https://doi.org/10.1057/s41264-024-00281-9

She, L., Rasiah, R., Weissmann, M. A., & Kaur, H. (2024). Using the Theory of Planned Behaviour to Explore Predictors of Financial Behaviour Among Working Adults in Malaysia. *FIIB Business Review*, *13*(1), 118–135. https://doi.org/10.1177/23197145231169336

Stavins, J. (2021). Unprepared for financial shocks: emergency savings and credit card debt. *Contemporary Economic Policy*, *39*(1), 59–82. https://doi.org/10.1111/coep.12477

Zhao, X., Lynch, J. G., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and Truths about Mediation Analysis. *Journal of Consumer Research*, *37*(2), 197–206. https://doi.org/10.1086/651257

This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License