The current issue and fulltext archive of this journal is available on Manova at:
https://doi.org/10.15642/manova.v9i2

Does Income Matter? Financial Literacy, Financial Health, and Financial Well-Being: PLS-MGA Evidence

Received 12 April 2026
Revised 06 July 2026
Accepted 15 July 2026

Badriatul Mawadah[1*], Jacelyn[2], Yulfiswandi[3]
Universitas Internasional Batam,[1,2,3]
badriatul.mawadah@uib.ac.id[1],
jacelyn2341149@uib.ac.id[2], yulfis.wandi@uib.ac.id[3]

Abstract

Objective – This research aims to examine the direct and indirect effects of financial literacy on financial well-being, with financial health as a mediating variable, while also exploring differences based on income levels

Design/methodology/approach – This study uses a quantitative approach with Partial Least Squares Structural Equation Modeling (PLS-SEM) and Multi-Group Analysis (PLS-MGA) on 270 young adults aged 25–35 years in Blitar City and Blitar Regency, Indonesia. The variables include financial literacy, financial health, financial well-being, and income as a grouping variable.

Findings – The results indicate that financial literacy has a significant positive effect on financial well-being, both directly and indirectly through financial health. Financial health plays a significant mediating role, suggesting that good financial conditions strengthen well-being. Multi-group analysis shows no significant income-based differences in the relationships between financial literacy and financial health, and between financial health and financial well-being. However, a significant difference is found in the direct effect of financial literacy on financial well-being, which is stronger among low-income individuals.

Research limitations/implications – This study is limited to young adults in Blitar, Indonesia, which may affect generalizability. Future research should include broader regions and additional variables such as financial behavior or psychological factors.

Practical implications – The findings emphasize the importance of improving financial literacy, especially for low-income groups, through targeted programs focusing on budgeting, saving, and debt management

Originality/value – This study integrates financial health as a mediator and examines income differences using PLS-MGA, highlighting the stronger role of financial literacy among low-income individuals

Jurnal Manajemen dan Inovasi
©ManovaPublishing
DOI
https://doi.org/10.15642/manova.v9i2.2521

INTRODUCTION

Financial well-being has become an essential indicator of individuals' quality of life, particularly in the context of increasing economic uncertainty and the growing complexity of household financial management (Roy, 2025). Financial well-being not only reflects the ability to meet current financial needs but also includes a sense of financial security for the future and the capacity to cope with financial shocks (CFPB, 2015). In practice, income level does not always correspond to an individual's level of financial well-being. Empirical observations show that some individuals with relatively low income can manage their finances effectively, maintain savings, and avoid financial distress (Buckland & Wilson, 2021). Conversely, individuals with higher income may experience financial pressure due to poor financial planning, excessive consumption, and inadequate debt management (Lim et al., 2022).

In the context of Blitar, socioeconomic disparities remain an important concern. Although the poverty rate decreased to 7.57%, equivalent to a reduction of approximately 6,870 individuals, the Poverty Gap Index increased, indicating that financial difficulties among the poorest population groups have become more severe (BPS, 2025). This phenomenon suggests that improvements in aggregate economic indicators do not necessarily translate into better financial conditions for all members of society. Consequently, understanding how financial literacy and financial health contribute to financial well-being across different income groups becomes particularly relevant, as individuals with limited economic resources may rely more heavily on financial capabilities to maintain their financial stability and quality of life (Mawadah & Sumiati, 2025).

Previous studies emphasize financial literacy as a key factor influencing financial well-being. Financial literacy enables individuals to understand financial concepts, manage resources efficiently, and make informed financial decisions (Lusardi & Messy, 2023; Mawadah & Sumiati, 2024, 2025). Individuals with higher financial literacy tend to allocate their income more effectively, regardless of the absolute amount of income they earn.

In addition, the concept of financial health has gained increasing attention as an intermediate condition linking financial literacy and financial well-being. Financial health reflects the stability of an individual's financial condition, including cash flow management, emergency savings, and debt control (CFPB, 2015). Individuals with adequate financial literacy are more likely to maintain sound financial health, which subsequently contributes to higher levels of financial well-being (Gerrans et al., 2014; Mawadah & Sumiati, 2024, 2025).

Despite the growing body of literature on financial literacy and financial well-being, most existing studies treat income merely as a control variable or focus solely on direct relationships among variables. Limited attention has been given to examining whether the strength of these relationships differs across income groups. Moreover, empirical studies that investigate the mediating role of financial health and test group differences using Multi-Group Analysis (MGA), particularly in the context of local communities, remain scarce. This gap highlights the need for a deeper understanding of how financial literacy, financial health, and financial well-being interact differently across income levels.

Therefore, this study is important to examine the effect of financial literacy on financial well-being, both directly and indirectly through financial health, while considering income-based differences. Using a Structural Equation Modeling–Partial Least Squares (SEM-PLS) approach with Partial Least Squares Multi-Group Analysis (PLS-MGA), this research aims to identify whether the relationships among the variables differ significantly across income groups. The findings are expected to contribute to the financial well-being literature and provide practical insights for policymakers in designing more inclusive and targeted financial literacy programs, particularly for low-income communities.

THEORETICAL BACKGROUND AND RESEARCH MODEL

Subjective Well-Being (SWB), as formulated by Diener (1984), refers to an individual's overall evaluation of life, which consists of life satisfaction and the balance between positive and negative emotional experiences. Life satisfaction represents a reflective judgment of one's life circumstances, whereas positive and negative affect describe how frequently individuals experience pleasant or unpleasant emotions. The integration of evaluative and emotional components allows SWB to capture both how people think and feel about their lives, making it a widely accepted framework for assessing well-being (Diener & Ryan, 2009).

Moreover, Self-Determination Theory (SDT) introduced by (Ryan & Deci, 2000) explains well-being through the satisfaction of basic psychological needs, namely autonomy, competence, and relatedness. In the financial domain, SDT implies that financial literacy supports autonomy and competence by empowering individuals to manage financial decisions effectively, while financial health strengthens feelings of security and control. Together, these factors help reduce financial strain and promote positive emotional states, thereby enhancing overall well-being.

The results of the data analysis demonstrate that financial literacy has a positive and significant influence on individuals' financial well-being, both directly and indirectly through financial-related behaviors (Do & Lan, 2024; Mawadah & Sumiati, 2024, 2025). Higher levels of financial literacy enable individuals to make informed financial decisions, adopt responsible financial behaviors, and manage financial resources more effectively, which ultimately enhances their overall financial well-being (Gosal & Nainggolan, 2023). The findings further reveal that sound financial behavior plays a crucial mediating role, indicating that financial literacy not only improves financial well-being directly but also strengthens it by fostering healthier financial practices (Sajuyigbe et al., 2024). This evidence highlights the fundamental importance of financial literacy in shaping sustainable financial outcomes, particularly among economically active individuals. Consequently, strengthening financial literacy through targeted education, advisory services, and supportive public policies is essential to promote positive financial behaviors and long-term financial well-being. These findings provide important implications for policymakers, financial educators, and financial counselors in designing effective financial education programs aimed at improving individuals' sustainable financial well-being (Alqam & Hamshari, 2024; Zhang & Chatterjee, 2023).

H_1: Financial literacy positively influences an individual's financial well-being

Financial health reflects an individual's ability to maintain financial stability through effective cash flow management, adequate savings, and controlled debt obligations (Yoganandham, 2025). Individuals with good financial health are more capable of meeting their daily financial needs, coping with unexpected financial shocks, and planning for future financial goals (Ariffin et al., 2023). Such financial stability contributes to a greater sense of financial security and perceived control, which are key dimensions of financial well-being (Apriansah & Mulyatini, 2022). Therefore, individuals with stronger financial health are expected to experience higher levels of financial well-being (Mawadah & Sumiati, 2024, 2025; Tejada-peña & García-santillán, 2025).

H_2: Financial Health positively influences an individual's financial well-being.

Financial literacy provides individuals with essential knowledge and skills to manage financial resources effectively, including budgeting, saving, and debt management (Nogueira & Almeida, 2025). Individuals with higher financial literacy are more likely to make informed financial decisions, avoid excessive financial risk, and allocate income efficiently (Hilgert & Luttrell, 2023). These capabilities enable individuals to maintain stable financial conditions and improve their overall financial health. Accordingly, financial literacy is expected to have a positive influence on an individual's financial health (Delafrooz & Paim, 2011; Gerrans et al., 2014; Herdjiono et al., 2023; Rehr et al., 2022).

H_3: Financial literacy positively influences an individual's financial Heat

While financial literacy directly enhances individuals' understanding of financial management, its contribution to financial well-being often operates through improved financial conditions (Mawadah & Sumiati, 2024, 2025; Vörös et al., 2021). Financial literacy encourages responsible financial behaviors that strengthen financial health, such as maintaining emergency savings and managing debt prudently (Mashumi et al., 2023). Improved financial health, in turn, enhances financial security and satisfaction (Bai, 2023; Owusu & Laryea, 2023). Therefore, financial health is expected to function as a mediating mechanism through which financial literacy influences financial well-being.

H_4: Financial Heath mediates the effect of financial literacy on financial well-being

Income heterogeneity may shape the extent to which financial literacy contributes to financial health and financial well-being (Gerrans et al., 2025; Ramadhani et al., 2025). Individuals in lower-income groups typically face tighter financial constraints, making financial literacy a critical resource for managing limited income, maintaining financial stability, and avoiding financial vulnerability. In contrast, higher-income individuals often have greater financial flexibility, which may reduce their dependence on financial literacy in sustaining financial health and achieving financial well-being (Chhatwani, 2022; Munisamy & Sahid, 2022; Mushtaq et al., 2022). Consequently, the effects of financial literacy on financial health, the influence of financial health on financial well-being, and the direct relationship between financial literacy and financial well-being are expected to differ significantly across income groups.

Furthermore, income differences may also affect the mechanism through which financial literacy enhances financial well-being via financial health (Hilgert & Luttrell, 2023). For individuals with lower income, improvements in financial literacy are more likely to translate into better financial health, which in turn plays a pivotal role in enhancing financial well-being. Conversely, among higher-income groups, stronger financial resilience and access to resources may weaken the mediating role of financial health in this relationship (Curry & Curry, 2025; Kandpal et al., 2023; Koltai et al., 2018; Zhang, 2021). Therefore, the indirect effect of financial literacy on financial well-being through financial health is expected to vary significantly across income groups, indicating differences in the mediating role of financial health.

H_5: There is a significant difference in the effect of financial literacy on financial health between income groups.

H_6: There is a significant difference in the effect of financial health on financial well-being between income groups.

H_7: There is a significant difference in the direct effect of financial literacy on financial well-being between income groups.

The proposed hypothesis is clearly depicted in the theoretical model:

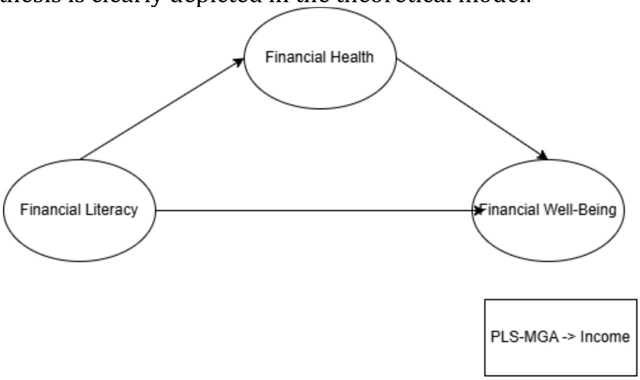

Figure 2. Conceptual Model

Source: processed by researchers (2026)

RESEARCH METHODS

This study adopts a causal research framework to investigate the relationships between financial literacy, financial health, and financial well-being, emphasizing the mediating role of financial health. In addition, this research incorporates Partial Least Squares Multi-Group Analysis (PLS-MGA) to examine whether the structural relationships among the constructs vary across different income categories. The measurement of financial literacy was developed based on established instruments proposed by Lusardi & Messy (2023) and OECD (2022). Indicators of financial health were adapted from the Consumer Financial Protection Bureau (CFPB, 2015), which focus on financial stability, including cash flow management, savings adequacy, and debt control. Meanwhile, financial well-being was assessed using measurement items drawn from Riitsalu et al. (2023) and Salignac et al. (2020), capturing both present financial conditions and perceived future financial security.

A purposive sampling technique was applied as the sampling strategy, targeting adult individuals residing in Blitar City and Blitar Regency, East Java, who are actively involved in managing their personal or household finances. As the exact population size could not be determined, the required sample size followed the recommendation of Hair et al. (2022), suggesting a minimum of five to ten observations per indicator in PLS-SEM studies. Data were collected through an online self-administered questionnaire using a five-point Likert scale, ranging from strongly disagree to strongly agree.

To examine income-based differences in the structural relationships, this study employed Partial Least Squares Multi-Group Analysis (PLS-MGA). Respondents were classified into two income groups to reflect variations in financial capacity. Group 1 (low income) consisted of individuals with monthly income below IDR 1,000,000, while Group 2 (middle–high income) included individuals earning between Rp 1,000,000 and Rp 5,000,000 per month. The PLS-MGA approach was applied to compare path coefficients across these groups, allowing this study to identify whether the effects of financial literacy on financial health and financial well-being, as well as the mediating role of financial health, differ significantly based on income levels.

ANALYSIS AND RESULTS

This study analyzed data from 270 valid respondents who satisfied the predetermined inclusion criteria. Data were collected through an online questionnaire using a purposive sampling technique, targeting young adults aged 25–35 years residing in Blitar City and Blitar Regency, East Java. All collected responses were subjected to a data screening and cleaning process to ensure completeness and consistency, resulting in 270 usable observations included in the final analysis.

Table 1
CHARACTERISTICS OF RESPONDENTS

Criteria	Classification	Number (People)	Percentage (%)
Gender	Male	112	42%
	Female	158	58%
Income	Rp 0 – Rp 1,000,000	135	50%
	> Rp 1,000,000 – Rp 5,000,000	135	50%

Source: processed by researchers (2026)

To provide an overview of the respondents' demographic profile, Table 1 presents the distribution of participants based on gender and income level. The results indicate that female respondents constituted the majority of the sample (58%), while male respondents accounted for 42%. Regarding income classification, the sample was evenly divided between the two income groups, with 50% of respondents earning below IDR 1,000,000 per month and the remaining 50% earning between IDR 1,000,000 and IDR 5,000,000 per month.

Table 2.
DESCRIPTIVE STATISTIC (MEASUREMENT, VALIDITY & RELIABILITY)

Construct and Items	Convergence Validity		Internal Consistency Reliability	
	SFL	*AVE*	*CR*	*α*
Financial Literacy		***0.650***	***0.952***	***0.951***
FL 1	***0.865***			
FL 2	***0.823***			
FL 3	***0.868***			
FL 4	***0.756***			
FL 5	***0.843***			
FL 6	***0.789***			
FL 7	***0.832***			

Construct and Items	Convergence Validity		Internal Consistency Reliability	
	SFL	***AVE***	***CR***	***α***
FL 8	***0.794***			
FL 9	***0.795***			
FL 10	***0.729***			
FL 11	***0.834***			
FL 12	***0.734***			
Financial Heath		***0.731***	***0.942***	***0.939***
FH 1	***0.884***			
FH 2	***0.771***			
FH 3	***0.853***			
FH 4	***0.871***			
FH 5	***0.866***			
FH 6	***0.875***			
FH 7	***0.862***			
Financial Well-being		***0.655***	***0.927***	***0.924***
FWB 1	***0.788***			
FWB 2	***0.783***			
FWB 3	***0.785***			
FWB 4	***0.854***			
FWB 5	***0.728***			
FWB 6	***0.818***			
FWB 7	***0.869***			
FWB 8	***0.840***			

Source: processed by researchers (2026)

Table 3
DIRECT AND INDIRECT EFFECT TEST RESULTS

Hypothesis	Effect	Original Sample	T Statistics	P values	Result
H1	*Financial literacy → Financial Well-being*	0.342	4.643	0.000	Accepted
H2	*Financial Heath → Financial Well-being*	0.523	8.991	0.000	Accepted
H3	*Financial literacy → Financial Heath*	0.741	22.606	0.000	Accepted
H4	*Financial Literacy → Financial Heath → Financial Well-being*	0.388	9.078	0.000	Accepted

Source: processed by researchers (2026)

Tables 2 and 3 summarize the results of the measurement and structural model assessments. The measurement model demonstrates satisfactory convergent validity and internal consistency reliability, with all indicator loadings exceeding 0.70, AVE values ranging from 0.650 to 0.731, and strong reliability indicated by Composite Reliability (0.927–0.952) and Cronbach's alpha (0.924–0.951) across all constructs. These results confirm that the instruments used to measure financial literacy, financial health, and financial well-being are both valid and reliable. The structural model results further reveal that financial literacy has a positive and significant effect on financial well-being ($\beta = 0.342$, $p < 0.001$) and financial health ($\beta = 0.741$, $p < 0.001$), while financial health significantly influences financial well-being ($\beta = 0.523$, $p < 0.001$). Moreover, the indirect effect of financial literacy on financial well-being through financial health is also significant ($\beta = 0.388$, $p < 0.001$), indicating that financial health partially mediates the relationship between financial literacy and financial well-being.

Table 4
MICOM

Variable	Step 2	Step 3a (mean)	Step 3b (variance)
Financial Heath	0.103	0.020	0.023
Financial literacy	0.343	0.280	0.403
Financial Well-being	0.767	0.080	0.401

Source: processed by researchers (2026)

Table 5
PLS-MGA ANALYSIS

	Original (INCOME_1)	Original (INCOME_2)	Difference (INCOME_1 - INCOME_2)	1-tailed (INCOME_1 vs INCOME_2) p value	2-tailed (INCOME_1 vs INCOME_2) p value
Financial Health -> Financial Wellbeing	0.475	0.555	-0.081	0.750	0.501
Financial Literacy -> Financial Health	0.739	0.753	-0.014	0.595	0.810
Financial Literacy -> Financial Wellbeing	0.509	0.162	0.347	0.004	0.009

Source: processed by researchers (2026)

The PLS-MGA results show that the effect of financial literacy on financial health is consistent across income groups, indicating that basic financial capabilities—such as budgeting, saving regularly, avoiding unnecessary debt, and managing daily finances—are essential for maintaining financial stability among young adults in Blitar, regardless of income level. Similarly, the influence of financial health on financial well-being does not differ significantly between income groups, suggesting that stable financial conditions, including the ability to meet expenses and manage obligations, universally contribute to perceived financial well-being in both Blitar City and Regency.

However, a significant difference emerges in the direct effect of financial literacy on financial well-being across income levels. Among low-income individuals in Blitar, financial literacy plays a more critical role in determining financial well-being, as many young adults face limited employment opportunities, informal or unstable income, and rising living costs. In this context, practical financial literacy such as controlling spending, prioritizing essential needs, and committing to short-term financial goals becomes a key mechanism for achieving financial well-being despite low income (Bayu et al., 2024). Conversely, for middle–high-income individuals, financial well-being is less directly influenced by financial literacy, as greater income stability and access to financial resources provide a buffer against financial stress (Chen, 2024; Hilgert & Luttrell, 2023).

These findings have important policy implications for the Blitar region. Local governments, financial institutions, and community organizations should adopt income-sensitive financial education programs. For low-income groups, initiatives should emphasize applied financial skills, including household budgeting, debt avoidance, and emergency savings. Meanwhile, for middle–high-income groups, policies may focus on enhancing financial health through long-term financial planning, investment literacy, and productive financial inclusion. Tailoring financial literacy programs to local economic conditions in Blitar can strengthen financial resilience and promote more inclusive and sustainable financial well-being among young adults.

DISCUSSION

This study provides important insights into the role of financial literacy in shaping financial well-being among young adults. The findings confirm that financial literacy significantly improves financial well-being both directly and indirectly through financial health. This result is consistent with previous studies showing that financially literate individuals are more likely to make informed financial decisions, accumulate savings, and achieve greater financial security, which ultimately enhances their overall well-being (Gerrans et al., 2025; Lusardi & Mitchell, 2014; Xiao & Porto, 2017).

The results of this study support H1, indicating that financial literacy has a positive and significant effect on financial well-being. This finding suggests that individuals with higher levels of financial literacy are better equipped to understand financial concepts, evaluate financial alternatives, and make informed financial decisions, which ultimately enhance their overall financial well-being. This result is consistent with the studies of(Mawadah & Sumiati (2025); Bayu et al. (2024) and Choung et al. (2023), which demonstrated that financially literate individuals tend to exhibit more effective financial behaviors and experience higher levels of financial satisfaction and security.

Furthermore, H2 was supported, confirming that financial literacy positively influences financial health. Individuals with greater financial knowledge are more capable of managing cash flows, controlling debt obligations, maintaining emergency savings, and planning for future financial needs. These findings support the arguments of Mawadah & Sumiati (2025); Netemeyer et al. (2018), who emphasized that financial literacy serves as a fundamental capability that enables individuals to maintain sound financial conditions and strengthen their financial resilience.

The findings also support H3, indicating that financial health has a positive and significant effect on financial well-being. Individuals who maintain healthy financial conditions, characterized by stable cash flow, adequate savings, manageable debt levels, and the ability to meet financial obligations, are more likely to experience greater financial security and satisfaction. This result aligns with the framework proposed by the Consumer Financial Protection Bureau (CFPB, 2015) and the findings of (Brüggen et al., 2017; Delafrooz & Paim, 2011; Joo & Grable, 2004), which highlight financial health as a key determinant of perceived financial well-being.

In addition, H4 was supported, demonstrating that financial health partially mediates the relationship between financial literacy and financial well-being. This finding indicates that financial literacy contributes to financial well-being not only directly but also indirectly through improvements in financial health (Mashumi et al., 2023; Parker et al., 2016; Vörös et al., 2021; Weida et al., 2020). In other words, financial knowledge alone may not be sufficient to enhance well-being unless it is translated into effective financial behaviors and practices. This result reinforces the notion that financial literacy becomes meaningful when individuals apply their knowledge to manage financial resources effectively, maintain financial stability, and achieve long-term financial goals.

Finally, the results support H5, revealing significant differences in the direct effect of financial literacy on financial well-being between low-income and middle-to-high-income groups (Beckker et al., 2025; Susilawaty, 2026). The relationship was found to be stronger among low-income individuals, suggesting that financial literacy plays a more critical role when financial resources are limited. Under conditions of financial constraint, the ability to budget carefully, prioritize expenditures, avoid excessive debt, and make informed financial decisions becomes increasingly important for maintaining financial well-being. Conversely, individuals with higher incomes may benefit from greater financial flexibility and resource availability, reducing their reliance on financial literacy alone. These findings support the resource substitution perspective, which argues that personal capabilities become more valuable when external economic resources are scarce, highlighting the importance of targeted financial literacy interventions for lower-income populations.

CONCLUSIONS

This study concludes that financial literacy plays a significant role in enhancing financial well-being, both directly and indirectly through financial health. Financial health partially mediates this relationship, indicating that individuals who are able to manage expenses, control debt, and maintain financial stability are more likely to experience higher financial well-being. The multi-group analysis further reveals that the effects of financial literacy on financial health and financial health on financial well-being are consistent across income groups. However, the direct effect of financial literacy on financial well-being is significantly stronger among low-income individuals. In the context of Blitar, where many young adults face limited income, informal employment, and increasing living costs, practical financial literacy becomes a critical factor in achieving financial well-being despite economic constraints.

Despite these findings, this study has several limitations that should be acknowledged. The cross-sectional design restricts the ability to observe changes in financial conditions over time, while the reliance on self-reported data may introduce subjective bias. In addition, the focus on young adults in Blitar City and Regency may limit the generalizability of the results to other regions. Therefore, policymakers and local stakeholders are encouraged to implement income-sensitive financial education programs that emphasize practical financial skills, particularly for low-income groups. Future research should consider longitudinal approaches, broader income classifications, and additional behavioral or psychological variables to deepen the understanding of financial well-being dynamics across different socioeconomic contexts.

REFERENCE

Alqam, M. A., & Hamshari, Y. M. (2024). The impact of financial literacy on financial inclusion for financial well-being of youth: evidence from Jordan. *Discover Sustainability*, *5*(1). https://doi.org/10.1007/s43621-024-00704-6

Apriansah, A., & Mulyatini, N. (2022). FINANCIAL WELL-BEING : A WAY TO MAINTAIN LONG-TERM FINANCIAL SECURITY. *JURISMA: Jurnal Riset Bisnis Dan Manajemen*, *12*(2).

Ariffin, A. Z., Rashid, N. H. K. A., & Yusof, A. F. M. (2023). THE IMPACT OF FINANCIAL SHOCK FACTOR AND FINANCIAL WELL-BEING FACTOR ON THE RESILIENCE OF MALAYSIAN B40 HOUSEHOLD. *Journal of Business and Management INABA (JBMI)*, *02*(02).

Bai, R. (2023). Impact of financial literacy, mental budgeting and self control on financial wellbeing: Mediating impact of investment decision making. *PLoS ONE*, *18*(11 November), 1–18. https://doi.org/10.1371/journal.pone.0294466

Bayu, O. P. B., Sambeka, M. E. F., & Prischa. (2024). Promoting Financial Well-Being through Financial Literacy for Gen Z. *ECo-Buss*, *7*(1), 756–767.

Beckker, K. De, Frijns, B., Hubers, F., & Derkx, S. (2025). The long-term impact of financial literacy on wealth : Evidence from longitudinal data. *Economics Letters*, *257*(October), 112682. https://doi.org/10.1016/j.econlet.2025.112682

BPS. (2025). *Jumlah Penduduk Miskin Kabupaten Blitar*.

Brüggen, E. C., Hogreve, J., Holmlund, M., Kabadayi, S., & Löfgren, M. (2017). Financial well-being: A conceptualization and research agenda. *Journal of Business Research*, *79*(C), 228–237. https://doi.org/10.1016/j.jbusres.2017.03.013

Buckland, B. J., & Wilson, L. (2021). *Control , Sufficiency , and Social Support Lessons from Low-income Canadians about Financial Wellbeing*. *March*, 1–19.

CFPB. (2015). *Measuring financial well-being: A guide to using the CFPB financial well-being scale*.

Chen, N. (2024). Income insecurity and social protection: Examining the impact of the COVID-19 pandemic across income groups. *PloS One*, *19*(9), e0310680.
https://doi.org/10.1371/journal.pone.0310680

Chhatwani, M. (2022). Income satisfaction among Millennials during COVID-19: the interplay among cognitive, noncognitive and financial factors. *International Journal of Social Economics*, *49*(3), 430–448. https://doi.org/10.1108/IJSE-03-2021-0183

Choung, Y., Chatterje Swarn, & Pak, T. Y. (2023). Digital financial literacy and financial well-being. *Emerging Perspectives on Financial Well-Being*, *58*(1), 104438. https://doi.org/10.4018/979-8-3693-1750-1.ch003

Curry, J. T., & Curry, J. T. (2025). Modeling the dynamic interplay between financial literacy , resilience , and emotional well-being across diverse demographics and emotional well-being across diverse demographics. *Cogent Economics & Finance*, *13*(1). https://doi.org/10.1080/23322039.2025.2544177

Delafrooz, N., & Paim, L. H. (2011). Determinants of financial wellness among Malaysia workers. *African Journal of Business Management*, *5*(24), 10092–10100.

Diener, E. (1984). Subjective well-being. *Psychological Bulletin*, *95*(3), 542–575. https://doi.org/10.1037/0033-2909.95.3.542

Diener, E., & Ryan, K. (2009). Subjective Well-Being: A General Overview. *South African Journal of Psychology*, *39*(4), 391–406. https://doi.org/10.1177/008124630903900402

Do, H., & Lan, H. (2024). Influence of Financial Literacy on Financial Well-Being : A Case of Vietnam. *Journal of Economics, Management and Trade*, *30*(9), 1–15.

Gerrans, P., Hoffmann, A. O. I., Mcnair, S. J., & Pallant, J. I. (2025). More than objective knowledge : Exploring heterogeneity in individuals ' response to a financial education initiative across multiple financial literacy domains. *Pacific-Basin Finance Journal*, *90*, 102669. https://doi.org/10.1016/j.pacfin.2025.102669

Gerrans, P., Speelman, C., & Campitelli, G. (2014). The Relationship Between Personal Financial Wellness and Financial Wellbeing: A Structural Equation Modelling Approach. *Journal of Family and Economic Issues*, *35*(2), 145–160. https://doi.org/10.1007/s10834-013-9358-z

Gosal, G. G., & Nainggolan, R. (2023). THE INFLUENCE OF DIGITAL FINANCIAL LITERACY ON INDONESIAN SMES ' FINANCIAL BEHAVIOR AND FINANCIAL WELL-BEING. *International Journal of Professional Business Review*, *8*(12), 1–13.

Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2022). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)* (3e ed.). Thousand Oaks, CA: Sage.

Herdjiono, I., Siswantoyo, S., Sukiyono, K., Hutama, P. S., Hakim, A. R., Nggaruaka, T., Awotkay, A. S., &

Hilgert, R. K., & Luttrell, M. (2023). Investigating the Impact of Financial Literacy and Income on Financial Behaviors Among Millennials. *Indonesia Accounting Research Journal*, *11*(1), 37–50.

Joo, S., & Grable, J. E. (2004). An Exploratory Framework of the Determinants of Financial Satisfaction. *Journal of Family and Economic Issues*, *25*(1), 25–50. https://doi.org/10.1023/B:JEEI.0000016722.37994.9f

Kandpal, V., Chandra, D., Dalei, N. N., & Handoo, J. (2023). *Financial Capability and Financial Well-Being for a Sustainable Society BT - Financial Inclusion in Circular Economy: A Bumpy Road Towards Sustainable Development* (V. Kandpal, D. Chandra, N. N. Dalei, & J. Handoo (eds.); pp. 91–102). Springer International Publishing. https://doi.org/10.1007/978-3-031-22723-3_5

Koltai, J., Bierman, A., & Schieman, S. (2018). Financial circumstances, mastery, and mental health: Taking unobserved time-stable influences into account. *Social Science & Medicine*, *202*, 108–116. https://doi.org/https://doi.org/10.1016/j.socscimed.2018.01.019

Lim, H., Macdonald, M. M., & Heckman, S. J. (2022). *Determinants of financial worry*. *September 2020*, 171–221. https://doi.org/10.1111/joca.12496

Lusardi, A., & Messy, F.-A. (2023). The importance of financial literacy and its impact on financial wellbeing. *Journal of Financial Literacy and Wellbeing*, *1*(1), 1–11. https://doi.org/10.1017/flw.2023.8

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

Mashumi, W., Mustafa, W., Islam, A., Asyraf, M., & Hassan, S. (2023). The Effects of Financial Attitudes , Financial Literacy and Health Literacy on Sustainable Financial Retirement Planning : The Moderating Role of the Financial Advisor. *Sustainability*, *15*(3).

Mawadah, B., & Sumiati, S. (2024). The importance of financial health as a mediator of financial stress on financial well-being in young adults. *International Journal of Research in Business & Social Science*, *13*(5), 494–502.

Mawadah, B., & Sumiati, S. (2025). Determinants of financial well-being in young adults's quarter-life crisis. *Jurnal Ekonomi Dan Bisnis*, *28*(2), 423–446.

https://doi.org/https://doi.org/10.24914/jeb.v28i2.12647
Munisamy, A., & Sahid, S. (2022). *Socioeconomic Sustainability for Low-Income Households : The Mediating Role of Financial Well-Being*.
Mushtaq, U., Suhail, L., & Bhat, A. (2022). Impact of financial literacy on financial well - being : a mediational role of financial self - efficacy. *Journal of Financial Services Marketing*, *0123456789*. https://doi.org/10.1057/s41264-022-00183-8
Netemeyer, R. G., Warmath, D., Fernandes, D., & Lynch, J. G. (2018). How Am I Doing? Perceived Financial Well-Being, Its Potential Antecedents, and Its Relation to Overall Well-Being. *Journal of Consumer Research*, *45*(1), 68–89. https://doi.org/10.1093/jcr/ucx109
Nogueira, M. C., & Almeida, L. (2025). *Financial Literacy , Financial Knowledge , and Financial Behaviors in OECD Countries*. *1*, 1–15.
OECD. (2022). *OECD/INFE Toolkit For Measuring Financial Literacy And Financial Inclusion 2022*.
Owusu, S. P., & Laryea, E. (2023). The impact of anchoring bias on investment decision-making: evidence from Ghana. *Review of Behavioral Finance*, *15*(5), 729–749. https://doi.org/10.1108/RBF-09-2020-0223
Parker, S., Castillo, N., Garon, T., & Levy, R. (2016). Eight Ways to Measure Financial Health. *Center for Financial Services Innovation (CFSI)*, *May*, 1–16.
Ramadhani, S. D., Norisanti, N., & Nurmala, R. (2025). The Effect of Financial Literacy , Income Level on Financial Well- Being through Financial Behavior as a Mediating Variable. *DIJEFA: Dinasti International Journal of Economics, Finance & Accounting*, *6*(4), 2832–2843.
Rehr, T. I., Regan, E. P., Abukar, Z., & Meshelemiah, J. C. A. (2022). Financial Wellness of First-Generation College Students. *College Student Affairs Journal*, *40*(1), 90–105. https://doi.org/10.1353/csj.2022.0007
Riitsalu, L., Sulg, R., Lindal, H., Remmik, M., & Vain, K. (2023). From Security to Freedom— The Meaning of Financial Well-being Changes with Age. *Journal of Family and Economic Issues*.
Roy, D. (2025). Do Financial Well-Being and Quality of Life Affect per Capita Productivity?: A Cross-Country Empirical Study. In K. Agha & A. J. Ali (Eds.), *Insights on Wellbeing and Happiness in the Workplace* (pp. 57–86). IGI Global Scientific Publishing. https://doi.org/https://doi.org/10.4018/979-8-3693-2939-9.ch004
Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, *55*(1), 68–78. https://doi.org/10.1037/0003-066X.55.1.68
Sajuyigbe, A. S., Adegun, E. A., Adeyemi, F., Johnson, A. A., Oladapo, J. T., & Jooda, D. T. (2024). THE INTERPLAY OF FINANCIAL LITERACY ON THE FINANCIAL Behavior AND WELL-BEING OF YOUNG
ADULTS: EVIDENCE FROM NIGERIA. *Jurnal Ilmu Ekonomi Terapan*, *9*(1), 120–136. https://doi.org/10.20473/jiet.v9i1.56411
Salignac, F., Hamilton, M., Noone, J., Marjolin, A., & Muir, K. (2020). Conceptualizing Financial Wellbeing: An Ecological Life-Course Approach. *Journal of Happiness Studies*, *21*(5), 1581–1602. https://doi.org/10.1007/s10902-019-00145-3
Susilawaty, L. (2026). *The Effect of Financial Literacy , Locus of Control , and Financial Stress on Financial Well-Being : Evidence from Middle-Income Households in Indonesia* (Vol. 2025, Issue Icebm 2025). Atlantis Press International BV. https://doi.org/10.2991/978-94-6239-670-8
Tejada-peña, E., & García-santillán, A. (2025). Exploring the Link Between Financial Health Indicators : Insights from Perception , Lived Experiences and Financial Resilience : A Study on Employees of a Sugar Mill Company. *Journal of Risk and Financial Management*, *18*(11), 1–18.
Vörös, Z., Szabó, Z., Kehl, D., Kovács, O. B., Papp, T., & Schepp, Z. (2021). The forms of financial literacy overconfidence and their role in financial well-being. *International Journal of Consumer Studies*, *45*(6), 1292–1308. https://doi.org/10.1111/ijcs.12734
Weida, E. B., Phojanakong, P., Patel, F., & Chilton, M. (2020). Financial health as a measurable social determinant of health. *PLoS ONE*, *15*(5). https://doi.org/10.1371/journal.pone.0233359
Xiao, J. J., & Porto, N. (2017). Financial education and financial satisfaction: Financial literacy,

behavior, and capability as mediators. *International Journal of Bank Marketing*, *35*(5), 805–817. https://doi.org/10.1108/IJBM-01-2016-0009

Yoganandham, G. (2025). Mastering economic and financial sources with reference to budgeting, savings, early investing, debt management and the power of financial planning - a comprehensive analysis. *Degres Journal*, *10*(0376), 19–33.

Zhang, Y. (2021). *Social Insurance of the Middle Income Group in China BT - The Middle Income Group in China and Russia* (P. Li & M. K. Gorshkov (eds.); pp. 183–195). Springer Singapore. https://doi.org/10.1007/978-981-16-1464-4_11

Zhang, Y., & Chatterjee, S. (2023). Financial Well-Being in the United States: The Roles of Financial Literacy and Financial Stress. *Sustainability*, *15*(5), 4505. https://doi.org/10.3390/su15054505