



## Financial literacy, financial behavior, and financial decision: The mediating role of investment intention among SMEs in Indonesia

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### ABSTRACT

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Financial literacy and financial behavior are two primary determinants of financial decision-making among small and medium enterprises (SMEs), and empirical research holds significant promise for entrepreneurship. Therefore, this study investigates these linkages and analyzes the mediating role of investment intention in promoting investment decisions among SMEs in Malang Raya, East Java, Indonesia. The research employed a quantitative methodology using partial least squares structural equation modeling (PLS-SEM) and was grounded in the Theory of Planned Behavior (TPB). A total of 310 halal-certified SME owners in Malang Raya participated in this study. The results reveal that financial literacy can influence investment; however, it does not necessarily promote investment decisions. Additionally, financial behavior showed a negative direct effect on investment decisions, but it contributes positively when mediated by intention. This finding confirms that investment intention can be a strong predictor of decision-making. The contributions of this study are twofold. First, it adds to the existing literature on the role of financial literacy and its components in supporting investment decisions, particularly within the context of entrepreneurship and SMEs. Second, it highlights the limited role of intention alone, suggesting that individual or organizational knowledge can directly influence behavior, and that intention is an integral part of behavior.

**Contribution/Originality:** This study proposes a better understanding of investment intention as a mediator within the Theory of Planned Behavior (TPB) framework for business. The findings highlight the role of intention, which, in some cases, cannot directly promote behavior. This observation slightly contradicts the TPB, which posits that intention is a precursor to behavior.

## 1. INTRODUCTION

Small and medium enterprises (SMEs) are recognized as vital contributors to Indonesia's economy, primarily through the creation of new job opportunities. Additionally, various studies highlight the significance of SMEs in delivering social benefits and alleviating poverty (Bertsatos, Missos, & Rizos, 2025; Edobor & Sambo-Magaji, 2025). Despite their economic and social importance, SMEs face financial vulnerability due to insufficient literacy and weak decision-making practices (Imansyah, Cepi, Pahlavi, & Hakim, 2025). Previous research indicated that poor decision-making, such as excessive dependence on short-term loans, can negatively affect the performance of SMEs (Ratnawati,

Sudarmiatin, Soetjipto, & Restuningdiah, 2022). Therefore, understanding financial decision-making among SMEs is essential, as it can influence business survival and contribute to the broader economy of nations.

A successful financial decision is associated with an individual's knowledge and attitude toward finance, commonly known as financial literacy. Financial literacy encompasses fundamental financial concepts, including budgeting, saving, investing, and risk management (Yakob, Yakob, Hafizuddin-Syah, & Rusli, 2021). The aforementioned study also remarked that less literate individuals can cause financial mismanagement and poor financial decisions. The study stated that recent economic challenges, including global market fluctuations and technological shifts, further affect financial risks among small and medium-sized businesses (Pu, Qamruzzaman, Mehta, Naqvi, & Karim, 2021). Hence, there is a need for studies to understand financial decision-making among SMEs, including financial literacy and behavior, and their effects on intentions and actions. Given that Indonesia's economy depends heavily on entrepreneurial activities, examining the determinants of financial and investment decisions is of significant importance.

Previous studies on SMEs and finance have emphasized the importance of both financial literacy and behavior for enterprise performance (e.g., Hutahayan, 2021; Tuffour, Amoako, & Amartey, 2020). Researchers in emerging markets have reported that financial literacy enhances investment readiness (Halim et al., 2021) and creditworthiness (Molosiwa & Holland, 2025). In Indonesia, studies indicate that the levels of financial literacy among SME owners remain modest; however, improvements in financial behavior are observable through community savings groups (Al-Shami, Damayanti, Adil, Farhi, & Al Mamun, 2024; Astari, Rika, & Candraningrat, 2022). International literature also explores the interconnectedness of financial literacy and behavior (Changwasha & Mutezo, 2023; Yakob et al., 2021), although the precise pathways influencing financial decision-making remain a subject of debate.

In addition, there is limited research focusing on the mediating role of investment intention in the connection between financial literacy, financial behavior, and decision-making among SMEs in Indonesia. Furthermore, most studies in Indonesia adopt descriptive approaches without examining mediation or structural pathways (e.g., Al-Shami et al., 2024; Astari et al., 2022) and leave questions unanswered about how literacy and behavior translate into effective financial decisions. To address this gap, this study aims to explore how investment intention mediates the influence of literacy and behavior on these decisions. The findings provide valuable insights for the literature, academics, and policymakers regarding investment decisions among SMEs.

The paper is divided into five sections. It begins with the fundamental theory of the Theory of Planned Behavior (TPB) in understanding intention and behavior. The next section covers methodology using Partial Least Squares Structural Equation Modeling (PLS-SEM). Subsequently, the results and discussion are presented. The paper concludes with a summary of findings and implications.

## 2. LITERATURE REVIEW

The Theory of Planned Behavior (TPB) is a robust theory to explain that behavior is influenced by attitudes, social pressures, perceived control and intention (Ajzen, 1991). Within SMEs, this structure explains how owners' evaluative beliefs about perceived expectations from peers and lenders, and perceived capability to execute financial matters, translate into investment intention and, in turn, into actual financial choices. The reasoned action approach is also engaged to provide measurement and intervention design for intention-driven behaviors (Fishbein & Ajzen, 2010). In addition, this study also involves behavioral finance, which holds that decision-makers use heuristics and display biases that distort judgment under risk, such as loss aversion and overconfidence (Barberis & Thaler, 2003; Kahneman & Tversky, 1979). Owner-managers in resource-constrained settings face information limitations, which make heuristic processing prominent during financing and investment decisions. This perspective clarifies deviations from normative models and highlights bias-aware interventions in SME finance (Baker & Nofsinger, 2010; Shefrin, 2000). Positioning literacy as an intangible asset connects it to performance through the resource-based view, which

considers valuable and non-substitutable resources as the basis for competitive advantage in small firms (Barney, 1991).

### 2.1. Financial Literacy

Financial literacy (FL) refers to the ability to comprehend and evaluate financial knowledge to make informed financial choices (Lusardi & Mitchell, 2014). Concerning SMEs, FL is the primary variable to support entrepreneurs in managing resources and assessing investment alternatives (Fatoki, 2014). Previous research has shown that entrepreneurs with FL will be more confident in deciding on capital, which can be beneficial for productive activities (Ali, 2023; Ratnawati et al., 2022). In this sense, literacy shapes knowledge and motivates SMEs to engage in forward-looking financial and economic decisions. Furthermore, FL provides a ground for entrepreneurs to make sound financial decisions (Herdjiono & Damanik, 2016). A higher level of literacy equips SME owners to evaluate risks and benefits, resulting in decisions that promote growth and sustainability (Imansyah et al., 2025; Suidarma et al., 2024). Therefore, the first set of hypotheses is stated below.

*H<sub>1</sub>: FL influences investment intention.*

*H<sub>2</sub>: FL influences investment decisions.*

### 2.2. Financial Behavior

Financial behavior (FB) is significant in promoting investment decisions among SMEs. FB refers to the actions of individuals or organizations in managing their finances, such as budgeting and investing. A study indicated that FB can translate knowledge into investment actions when guided by preliminary financial knowledge (Fatoki, 2014). Indeed, the FB among entrepreneurs is crucial in managing resources and maintaining business operations (Fatoki, 2014). Studies have shown that entrepreneurs with positive financial behaviors are more confident in their investment intentions. Furthermore, financial behavior also plays a direct role in improving financial decisions. Positive behaviors reduce reliance on intuition and quick fixes, leading to better intentions and decision-making processes. These results can enhance financial planning and increase competitiveness (Lusardi & Mitchell, 2014). Based on this, the following hypothesis is proposed.

*H<sub>3</sub>: Facebook influences investment intention.*

*H<sub>4</sub>: FB behavior influences investment decisions.*

### 2.3. The Mediating Role of Investment Intention

The authors argue that investment intention can mediate the effect of FL and FB on financial decision-making. According to Ajzen (1991), intention is defined as one's readiness to perform a particular action in reflecting motivational factors that influence behavior. While investment intention shows the willingness of SMEs to allocate resources toward productive activities, such as capital expansion and technology acquisition (Appiah, Odei, & Kumi-Amoah, 2024). Intention, therefore, acts as a psychological resource that directs knowledge and behavior into actual decisions, which helps SMEs to regulate their choices with greater consistency and commitment (Ali, 2023). In line with the TPB, intention is the most immediate predictor of behavior (Ajzen, 1991; Fishbein & Ajzen, 2010). For instance, entrepreneurs with high levels of FL who also develop strong investment intentions will make systematic and growth-oriented financial decisions (Suidarma et al., 2024). Similarly, positive FB will promote intentions, which in turn support higher-quality decisions (Ratnawati et al., 2022). Thus, this study hypothesizes that.

*H<sub>5</sub>: Investment intention influences investment decision.*

*H<sub>6</sub>: Investment intention mediates the relationship between financial literacy and investment decisions.*

*H<sub>7</sub>: Investment intention mediates financial behavior and investment decisions.*

### 3. METHOD

This study focuses on factors influencing financial decision-making among SMEs in Indonesia. Three variables were employed as exogenous latent variables, including financial literacy (FL), financial behavior (FB), and financial decision (FD), while investment intention served as a mediating construct. Structural Equation Modeling (SEM) was used to examine both direct and indirect effects among the constructs in the model.

Data were obtained through a structured questionnaire containing 20 measurement items, each rated on a five-point Likert scale ranging from "1" (strongly disagree) to "5" (strongly agree). To determine the appropriate sample size, this study applied the Raosoft online calculator with a 5% margin of error.

The required minimum sample size was calculated for a total population of 5,138 halal-certified SMEs in Malang Raya, Indonesia. In this research, online questionnaires were distributed to approximately 350 respondents, with 310 valid responses received.

The study employed purposive sampling, selecting participants based on two criteria: (1) SME owners from different sectors holding halal certification, and (2) SMEs that have been operating for at least two years. This approach ensured that participants represented businesses with established operations and halal certification. To support the quantitative research and human involvement, the study obtained approval from the Ethics Committee of Universitas Negeri Malang.

### 4. RESULTS

#### 4.1. Demographic Respondents

A total of 310 halal-certified SME owners in Malang Raya participated in this quantitative survey. Most respondents were male (66%), while females accounted for 34%. In terms of age, the largest group was between 41 and 50 years old (46%), followed by those aged 20 to 40 years (28%), and those above 50 years old (26%). Regarding business sectors, culinary enterprises dominated with 71.6%, while services (12.5%), fashion (11.8%), and handicrafts (4.1%) represented smaller proportions.

Educational backgrounds showed that most respondents held a bachelor's degree (57.2%), with others completing postgraduate studies (13.7%), senior high school (14.8%), diplomas (12.5%), and junior high school (1.8%).

#### 4.2. Outer Model

Table 1 presents the factor loadings of the indicators used in the model. All outer loadings exceeded 0.6, confirming good convergent validity in agreement with the threshold mentioned by Hair, Hult, Ringle, and Sarstedt (2019). For FL, loadings ranged from 0.912 to 0.953. Indicators for FB ranged between 0.744 and 0.940, while investment intention ranged from 0.879 to 0.940.

Investment decision indicators also displayed strong loadings. The results indicate that the measurement model satisfies validity and reliability criteria and is suitable for further analysis using PLS-SEM. As presented in the table, all latent variables achieved Cronbach's Alpha (CA) values above 0.7, demonstrating robust internal consistency (e.g., investment decision = 0.915; financial behavior = 0.906).

Composite Reliability (CR) values also exceeded 0.7 for all constructs (e.g., FL = 0.952), confirming high reliability. In this model, AVE values were greater than 0.5, such as 0.800 for the investment decision, which supports convergent validity.

Table 1. Validity and Reliability

Variable	Item	Loading factor	CA	CR (rho_a)	CR (rho_c)	AVE
Financial literacy	FL1	0.915	0.943	0.952	0.956	0.814
	FL2	0.912				
	FL3	0.897				
	FL4	0.828				
	FL5	0.953				
Financial behavior	FB1	0.806	0.906	0.919	0.927	0.682
	FB2	0.845				
	FB3	0.817				
	FB4	0.789				
	FB5	0.744				
	FB6	0.940				
Investment intention	II1	0.940	0.947	0.949	0.959	0.825
	II2	0.886				
	II3	0.915				
	II4	0.879				
	II5	0.920				
Investment decision	ID1	0.833	0.915	0.932	0.941	0.800
	ID2	0.815				
	ID3	0.957				
	ID4	0.963				

Table 2. Discriminant validity.

Variable	FD	FL	ID	FB
Financial decision (FD)	0.894			
Financial literacy (FL)	0.852	0.902		
Investment intention (II)	0.919	0.896	0.908	
Financial behavior (FB)	0.853	0.955	0.921	0.826

The Fornell and Larcker (1981) criterion (Table 2) confirmed discriminant validity, as the AVE values for all latent variables (investment decision, financial literacy, investment intention, and financial behavior) were greater than the correlations among them. For instance, the correlation between investment decision and financial literacy was 0.852, which is lower than the AVE of investment decision (0.894). Similar results were observed across other constructs that indicates each latent variable is distinct.

#### 4.3. Inner Model

The R<sup>2</sup> results (Table 3) indicate that FD achieved a value of 0.925 (adjusted R<sup>2</sup> = 0.923), meaning that 92.5% of its variance is explained by FL, FB, and investment intention. For investment intention, the R<sup>2</sup> was 0.851 (adjusted R<sup>2</sup> = 0.850), demonstrating that 85.1% of its variance is accounted for by the model. These results confirm robust predictive power and an excellent model fit.

Table 3. R-Squared.

Variable	R-square	R-square adjusted
Financial decision	0.925	0.923
Investment intention	0.851	0.850

This study also examined the effect sizes (f<sup>2</sup>) of the model to determine the extent of influence that independent variables have on the dependent constructs. The statistical results indicated that FL has a small effect on investment decision (f<sup>2</sup> = 0.011) and on investment intention (f<sup>2</sup> = 0.020). Additionally, investment intention has a moderate effect on investment decision (f<sup>2</sup> = 0.114). Furthermore, FB has a small effect on investment decision (f<sup>2</sup> = 0.046) but a larger effect on investment intention (f<sup>2</sup> = 0.329).

4.4. Hypothesis Testing

After completing the inner model estimation, this study proceeded to hypothesis testing. Table 4 presents the direct and indirect estimations using PLS-SEM. The results indicated that FL can influence investment intention ( $\beta = 0.182, t = 2.014, p = 0.044$ ), but it has no significant impact on investment decision ( $\beta = 0.146, t = 1.882, p = 0.060$ ). Additionally, FB can promote both investment decision ( $\beta = -0.331, t = 3.573$ ) and investment intention ( $\beta = 0.747, t = 8.543, p < 0.001$ ). In this study, investment intention can promote investment decision ( $\beta = 0.335, t = 5.025, p < 0.001$ ). Regarding mediation analysis, FL did not influence investment decisions through investment intention ( $\beta = 0.061, t = 1.770, p = 0.077$ ). Conversely, FB showed a significant indirect effect on investment decisions through investment intention ( $\beta = 0.250, t = 4.472, p = 0.000$ ).

Table 4. Direct and indirect effect.

Path	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics ( O/STDEV )	P values
FL → ID	0.146	0.141	0.077	1.882	0.060
FL → II	0.182	0.179	0.090	2.014	0.044
II → ID	0.335	0.339	0.067	5.025	0.000
FB → FD	-0.331	-0.324	0.093	3.573	0.000
FB → II	0.747	0.751	0.087	8.543	0.000
FL → II → ID	0.061	0.061	0.034	1.770	0.077
FB → II → ID	0.250	0.254	0.056	4.472	0.000

Note: FB = Financial behavior, FD = Financial decision, II = Investment intention, ID = Investment decision.

5. DISCUSSION

This study investigates the connection between financial literacy (FL), financial behavior (FB), and investment intention (II) in shaping investment decisions (ID). The initial results indicated that FL does not have a significant direct effect on ID. One explanation for this finding is that the level of financial knowledge among SMEs is insufficient to influence financial decisions. Despite possessing better financial literacy, it does not necessarily impact investment decisions. This outcome aligns with recent studies, which suggest that while financial literacy supports understanding, it does not guarantee active investment behavior (Maheshwari, 2024). Nevertheless, the analysis confirmed the second hypothesis that FL enhances investment intention, and the results show that SMEs with sufficient financial knowledge are more prepared to commit to investing in their businesses (Sobaih & Elshaer, 2023).

The next finding indicated that FB negatively influences ID. This outcome differs from earlier findings that associate disciplined financial practices with positive investment performance (Baihaqqy, Disman, Sari, & Ikhsan, 2020). One explanation is that financial habits reduce the willingness to engage with risk, which leads to fewer investment choices. Additionally, this is related to risk aversion among SME owners who exhibit conservative financial approaches. In this regard, individuals with strong financial control and planning tend to prefer liquidity preservation and stability over uncertain returns, resulting in limited investment engagement. Conversely, the findings also indicate that financial behavior can stimulate investment intentions (Che Hassan, Abdul-Rahman, Mohd Amin, & Ab Hamid, 2023). A prior study supports that behavior contributes to investment outcomes when intention is established (Rahman, Isa, Masud, Sarker, & Chowdhury, 2021).

Furthermore, investment intention has been acknowledged to have a significant effect on ID. The basic explanation supporting this finding is that intention influences individual or organizational readiness to act, directly affecting the decision-making process. The Theory of Planned Behavior emphasizes that intention is the primary predictor of actual behavior (Ajzen, 1991). The next finding indicated that intention can mediate FB and ID, but it failed to mediate FL and ID. From this finding, it brings implications for both investors and policymakers. First, the limited impact of FL on investment decisions requires that financial education focus not only on basic literacy, such as knowledge and attitude, but also on the application of decision-making for investments. A study suggested that

simulation exercises and investment workshops could help individuals and SMEs translate knowledge into actionable investment decisions (Maheshwari, 2024). Second, educational institutions and workplace programs are in a strong position to incorporate these practices into their training. Financial service providers and educational platforms can use this understanding to set clear investment goals and connect them to practical financial tools.

## 6. CONCLUSION

The study concludes that FL failed to promote ID, but it has an effect on enhancing investment intention among SMEs. In this study, FB shows a negative direct impact on ID, although it has a positive effect through intention. Additionally, ID is identified as the most immediate factor influencing decision-making, linking financial readiness to action. Based on these findings, programs and policies that combine financial literacy with behavioral training are essential for transforming financial readiness into meaningful investment actions and ensuring long-term financial stability. Like other studies, this research has limitations, including its focus on a specific context and a limited range of variables. Therefore, future research should explore additional factors such as financial self-efficacy and overconfidence. Furthermore, long-term studies could examine changes in literacy and intention among individuals and businesses, providing a deeper understanding of the factors that drive investment intention and decision-making.

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**Transparency:** The authors state that the manuscript is honest, truthful, and transparent, that no key aspects of the investigation have been omitted, and that any differences from the study as planned have been clarified. This study followed all writing ethics.

**Data Availability Statement:** The corresponding author can provide the supporting data of this study upon a reasonable request.

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**Authors' Contributions:** All authors contributed equally to the conception and design of the study. All authors have read and agreed to the published version of the manuscript.

## REFERENCES

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Al-Shami, S. A., Damayanti, R., Adil, H., Farhi, F., & Al Mamun, A. (2024). Financial and digital financial literacy through social media use towards financial inclusion among batik small enterprises in Indonesia. *Heliyon*, 10(15), e34902. <https://doi.org/10.1016/j.heliyon.2024.e34902>
- Ali, Z. (2023). Predicting SMEs performance through green supply chain practices: A mediation model link of business process performance. *Asia Pacific Journal of Marketing and Logistics*, 35(2), 432–450. <https://doi.org/10.1108/APJML-05-2021-0296>
- Appiah, M. K., Odei, S. A., & Kumi-Amoah, G. (2024). Modelling the determinants of SME's investment intention in the Ghanaian energy sector: The role of local content policy. *International Journal of Energy Sector Management*, 18(1), 94–118. <https://doi.org/10.1108/IJESM-05-2022-0003>
- Astari, P., Rika, N. P., & Candraningrat, I. R. (2022). Financial literacy moderate the effect of fintech on the financial performance of micro, small and medium enterprises. *International Journal of Business Management and Economic Review*, 5(4), 36–47.
- Baihaqqy, M. R. I., Disman, N., Sari, M., & Ikhsan, S. (2020). The effect of financial literacy on the investment decision. *Budapest International Research and Critics Institute-Journal*, 3(4), 3073–3083.
- Baker, H. K., & Nofsinger, J. R. (2010). *Behavioral finance: Investors, corporations, and markets*. United States: Wiley.
- Barberis, N., & Thaler, R. (2003). A survey of behavioral finance. In G. M. Constantinides, M. Harris, & R. M. Stulz (Eds.), *Handbook of the economics of finance*. In (Vol. 1, pp. 1053–1128). Netherlands: Elsevier

- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-120. <https://doi.org/10.1177/014920639101700108>
- Bertsatos, G., Missos, V., & Rizos, A. (2025). Does the productivity of SMEs affect poverty within the EU27? An empirical investigation. *Bulletin of Economic Research*, 77(2), 181-197. <https://doi.org/10.1111/boer.12483>
- Changwasha, M., & Mutezo, A. T. (2023). The relationship between financial literacy and financial access among SMES in the Ekurhuleni municipality. *Acta Commercii-Independent Research Journal in the Management Sciences*, 23(1), a1142. <https://doi.org/10.4102/ac.v23i1.1142>
- Che Hassan, N., Abdul-Rahman, A., Mohd Amin, S. I., & Ab Hamid, S. N. (2023). Investment intention and decision making: A systematic literature review and future research agenda. *Sustainability*, 15(5), 3949. <https://doi.org/10.3390/su15053949>
- Edobor, F., & Sambo-Magaji, A. (2025). Small and medium enterprises (SMEs) and sustainable economic development. In P. Kumar, S. Dadwal, R. Verma, & S. Kumar (Eds.), *Digital transformation for business sustainability and growth in emerging markets* (pp. 197-222). Emerald Publishing Limited.
- Fatoki, O. (2014). The financial literacy of micro entrepreneurs in South Africa. *Journal of Social Sciences*, 40(2), 151-158.
- Fishbein, M., & Ajzen, I. (2010). *Predicting and changing behavior: The reasoned action approach*. United Kingdom: Psychology Press.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2019). *A primer on partial least squares structural equation modeling (PLS-SEM)* (2nd ed.). United States: SAGE Publications, Inc.
- Halim, Z. A., Zolkefli, M. N., Kusairi, S., Nor, S. M., Zawawi, N. H. M., & Sukemi, M. N. (2021). Investment literacy, social influence and undergraduates' readiness to invest: dataset from Malaysia. *Data in Brief*, 34, 106700. <https://doi.org/10.1016/j.dib.2020.106700>
- Herdjiono, M. V. I., & Damanik, L. A. (2016). The influence of financial attitude, financial knowledge, parental income on financial management behavior. *Jurnal Manajemen Teori dan Terapan*, 9(3), 226-241.
- Hutahayan, B. (2021). The relationships between market orientation, learning orientation, financial literacy, on the knowledge competence, innovation, and performance of small and medium textile industries in Java and Bali. *Asia Pacific Management Review*, 26(1), 39-46.
- Imansyah, M. A., Cepi, P., Pahlavi, W., & Hakim, D. (2025). *Financial literacy, technology, and SME performance: The role of financial access*. Paper presented at the Proceedings of the International Conference on Accounting, Management, and Economics (ICAME 2025), Atlantis Press.
- Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica*, 47(2), 263-291. <https://doi.org/10.2307/1914185>
- 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>
- Maheshwari, P. (2024). A review of the relationship between financial literacy and financial management in India. *International Journal of Multidisciplinary Research and Technology*, 5(9), 48-53. <https://doi.org/10.5281/zenodo.13836511>
- Molosiwa, T., & Holland, J. (2025). The impact of financial literacy on the performance of small and medium-sized enterprises (SMEs): A review of literature. *International Journal of Research in Business & Social Science*, 14(3), 320-332. <https://doi.org/10.20525/ijrbs.v14i3.4157>
- Pu, G., Qamruzzaman, M., Mehta, A. M., Naqvi, F. N., & Karim, S. (2021). Innovative finance, technological adaptation and SMEs sustainability: The mediating role of government support during COVID-19 pandemic. *Sustainability*, 13(16), 9218. <https://doi.org/10.3390/su13169218>
- Rahman, M., Isa, C. R., Masud, M. M., Sarker, M., & Chowdhury, N. T. (2021). The role of financial behaviour, financial literacy, and financial stress in explaining the financial well-being of B40 group in Malaysia. *Future Business Journal*, 7(1), 52. <https://doi.org/10.1186/s43093-021-00099-0>

- Ratnawati, Sudarmiati, Soetjipto, B. E., & Restuningdiah, N. (2022). The role of financial behavior as a mediator of the influence of financial literacy and financial attitudes on MSMEs investment decisions in Indonesia. *Journal of Social Economics Research*, 9(4), 193-203. <https://doi.org/10.18488/35.v9i4.3231>
- Shefrin, H. (2000). *Beyond greed and fear: Understanding behavioral finance and the psychology of investing*. Usa: Harvard Business School Press/Oxford University Press.
- Sobaih, A. E. E., & Elshaer, I. A. (2023). Risk-taking, financial knowledge, and risky investment intention: Expanding theory of planned behavior using a moderating-mediating model. *Mathematics*, 11(2), 453. <https://doi.org/10.3390/math11020453>
- Suidarma, I. M., Widiyanti, K. S., Masno, M., Sukarnasih, D. M., Armanid, A., & Marsudiana, I. D. N. (2024). Financial literacy can overcome barriers to MSME financing: Evidence from Indonesia. *Jurnal Akuntansi Syariah*, 8(2), 160-183. <https://doi.org/10.46367/jas.v8i2.2050>
- Tuffour, J. K., Amoako, A. A., & Amartey, E. O. (2020). Assessing the effect of financial literacy among managers on the performance of small-scale enterprises. *Global Business Review*, 23(5), 1200-1217. <https://doi.org/10.1177/0972150919899753>
- Yakob, S., Yakob, R., Hafizuddin-Syah B. A. M., & Rusli, R. Z. A. (2021). Financial literacy and financial performance of small and medium-sized enterprises. *The South East Asian Journal of Management*, 15(1), 72-96. <https://doi.org/10.21002/seam.v15i1.13117>

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