Financial Inclusion: The Impact of Financial Literacy

Review of Integrative Business & Economics Research

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ABSTRACT

Micro, Small, and Medium Enterprises (MSMEs) contribute to the economy's health. To preserve their businesses, owners or managers are required to not only attempt various means to achieve their sales target but also to ensure optimal financial management. Business decision-making is related to financial decisions, which indicates the need for financial management understanding and skills. The research is a survey study, and data are collected from owners and managers of the MSMEs. This study aims to obtain a depiction of MSMEs' financial inclusion. The study also explores the antecedents of financial literacy, which ultimately determines the MSMEs' financial inclusion. The study's findings indicate that financial communication, information, and attitudes toward money affect MSMEs' financial literacy. The study's results also confirm the impact of financial literacy on MSMEs' financial inclusion.

Keywords: Financial Literacy; Financial Inclusion; Micro, Small, and Medium Enterprises.

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1. INTRODUCTION

MSMEs experience many problems and challenges in accessing debt financing (Lim, Aquino, Garcia, Ong, & Soliman, 2020), especially funding from formal financial institutions (Bongomin, Ntayi, & Munene, 2017a) in developing countries. Fund availability at financial institutions does not always mean prospective debtors can access these funds (Wasiuzzaman, Nurdin, Abdullah, & Vinayan, 2020).

For various business activities, business owners need funds that they can obtain from multiple sources. Loans are a source of funding that business owners often want to take advantage of, but not all entrepreneurs have access to this option. A lack of financial knowledge can prevent potential borrowers from getting loans (Xu, Shi, Rong, & Yuan, 2020).

Microbusiness owners frequently need more financial literacy to make crucial financial decisions (Drexler, Fischer, & Schoar, 2014) since sound financial decision-making is influenced by financial literacy (Grohmann, Kluhs, & Menkhoff, 2018; Rasool & Ullah, 2020). With financial knowledge and skills, individuals can maintain and secure a good standard of living (Hossain & Maji, 2021).

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Financial literacy has a relationship to financial inclusion. Higher financial literacy will lead to higher financial inclusion (Turvey & Xiong, 2017). Comprehending the role of financial literacy in determining financial inclusion is essential for policymakers concerned with increasing financial inclusion. Previous research explores the connection between financial literacy and financial inclusion at the country level, and the results showed a positive relationship between financial literacy and financial inclusion measuring items (Grohmann, Kluhs, & Menkhoff, 2018).

This study examines the impact of financial literacy on MSME financial inclusion. The study also seeks to identify the antecedents of financial literacy.

2. THEORETICAL FRAMEWORK

Financial inclusion relates to how individuals access and utilize financial services. Financial inclusion can include individual decisions related to finances that can determine their financial well-being, such as savings, using credit, payment methods, and managing financial risks (Global Findex Database, 2017).

Financial inclusion can be measured using the ownership and use of a bank account at a formal financial institution which can facilitate the handling of money and various financial transactions. In addition, financial inclusion can also be measured through the ownership and use of a debit card, making it easier to pay for multiple needs instead of using cash (Grohmann, Kluhs, & Menkhoff, 2018). Measuring financial inclusion can also use other indicators, such as payment products, savings, investment, insurance, credit, or pension products (OECD, 2018).

Previous research on financial inclusion used components of ownership and active consumption of financial products. Concerning product ownership, the measure focuses on financial products such as savings or pension funds, payment products, insurance, and credit. Active consumption of financial products is measured using indicators regarding awareness of the availability of financial products, selection of financial products, and independence in using money and meeting needs (Morgan & Long, 2020).

Financial literacy influences individuals' behaviour (Firli & Fanesa, 2022) and is necessary for better financial behaviour (Susan, Winarto, & Gunawan, 2022). Financial inclusion is positively and significantly related to financial literacy. Increasing financial literacy can increase financial inclusion (Bongomin, Ntayi, & Munene, 2017b). Financial literacy also affects access to credit (Lyons, Grable, & Zeng, 2017). Many factors can influence small businesses' efforts to gain access to credit, both related to demographic characteristics and behavioral traits (Asiedu, Freeman, & Nti-Addae, 2012). Other research focusing on specific financial literacy regarding loans found that MSME entrepreneurs can increase their access to banking-specific financial services by having financial knowledge and skills related to calculating interest, utilizing loan applications, and repaying loans (Susan M. , 2023).

3. METHODS

This research is an explanatory study to confirm the model of the relationship between financial inclusion, financial literacy, and its antecedents. The study used data from micro, small, and medium-sized enterprises in West Java, Indonesia, with the business fields including fashion, services, handicrafts, culinary, trade, and others. By using purposive sampling technique based on the sample criteria, the sample is determined to be MSME entrepreneurs, either business owners or managers. In total, 210 participants

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completed the questionnaires which are considered sufficient for the study analysis. The summary statistics of the sample are presented in Table 1.

Testing the validity and reliability of measuring instruments is conducted to ensure further data processing. The study uses structural equation modeling to examine the relationship between financial inclusion and financial literacy and the antecedents of financial literacy. It can test the relationship between variables in one technique. The application of structural equation modeling enables the assessment of the contribution of each indicator in measuring the construct as well as the representation of the construct through a combined set of indicators (Hair, Black, Babin, & Anderson, 2019).

Table 1 Data Statistics

Variable	Classification	Total
Participants	Owners	161
	Managers	49
Age (years)	21 – 30	87
	31 – 40	74
	> 40	49
Education	Bachelor	126
	Postgraduate	48
	Others	36
Business Field	Fashion	45
	Service	39
	Handicrafts	3
	Culinary	45
	Trading	49
	Others	29

4. RESULTS AND DISCUSSION

The structural equation model was constructed with direct paths from predictor to mediator and outcome variables, as presented in Figure 1. The results indicated model fit with Comparative fit index (CFI) = 0.91, Incremental fit index (IFI) = 0.92, Normed fit index (NFI) = 0.85, and Root mean square error of approximation (RMSEA) = 0.072.

The data was processed further after going through validity and reliability testing, the results of which are presented in Table 2. Following the study's objectives to explore the influence of several financial literacy antecedents, the results of the hypothesis testing indicate that two factors determine the financial literacy of MSME entrepreneurs, namely Financial Socialization Agents and Money Attitude, with p-values of 2.87 and 2.18, respectively. It indicates that the frequency of discussions with friends or colleagues regarding the latest financial information can determine the financial knowledge and skills of MSME managers or owners. Likewise, the increasing number of promotions and the latest financial information they obtain through various media, both online and offline, can increase their financial literacy. The study's findings support previous studies' results, which also show the role of financial socialization agents in determining financial literacy (Isomidinova & Singh, 2017) (Susan M. , 2023). Specifically, the more significant the part of the family (Thomas & Subhashree, 2020) (Zhao & Zhang, 2020) and the media

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(Sohn, Joo, Grable, Lee, & Kim, 2012) as socialization agents, the higher the financial literacy.

Table 2 Validity and Reliability Test Results

Variable	Corrected Item-Total Correlation	Cronbach's Alpha
Self-efficacy	0.528	0.743
	0.414	
	0.654	
	0.612	
Financial Anxiety	0.546	0.821
	0.714	
	0.670	
	0.648	
Financial Education	0.631	0.795
	0.745	
	0.578	
Financial Socialization Agents	0.468	0.631
	0.468	
Money Attitude	0.704	0.789
	0.747	
	0.378	
	0.636	
Mathematics Anxiety	0.856	0.941
	0.887	
	0.875	
	0.818	
Financial Literacy	0.388	0.813
	0.465	
	0.491	
	0.595	
	0.671	
	0.659	
	0.661	
Financial Inclusion	0.600	0.814
	0.636	
	0.672	
	0.628	

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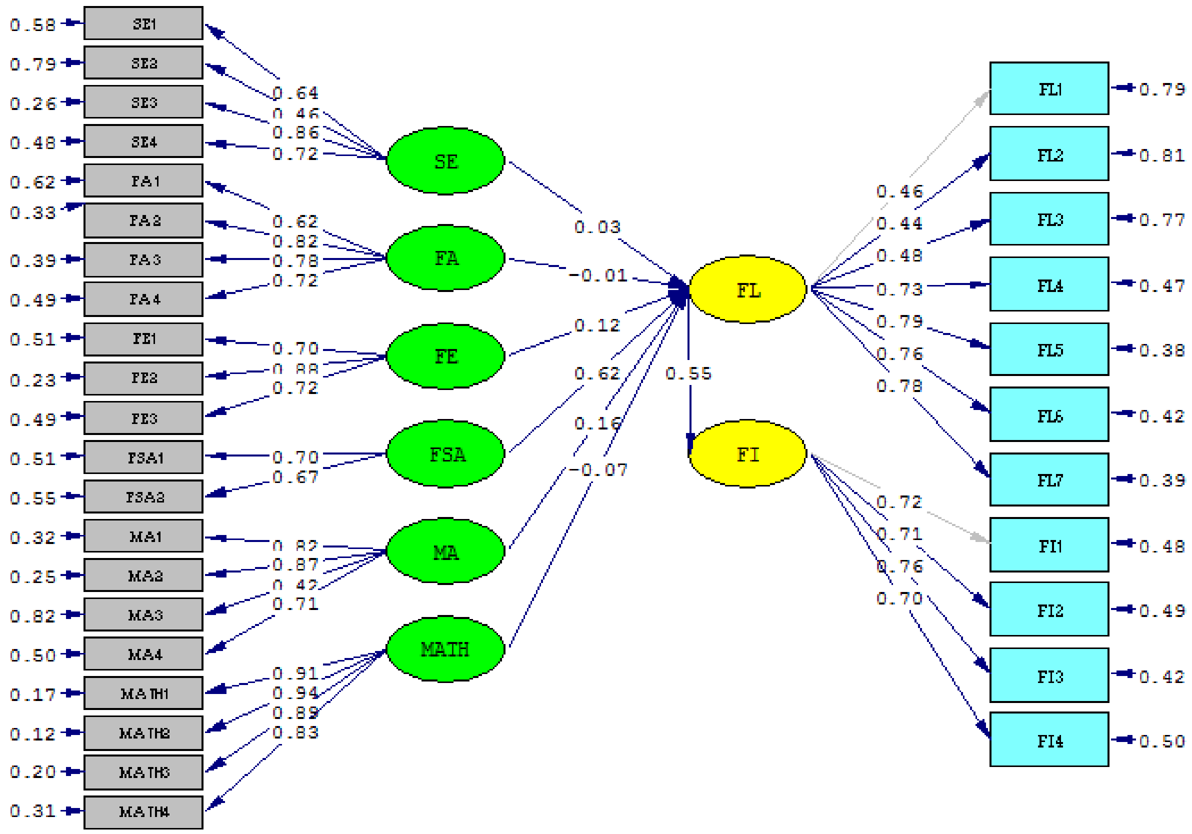

Figure 1 Structural Model Results
Note:
SE: Self-efficacy
FA: Financial Anxiety
FE: Financial Education
FSA: Financial Socialization Agents
MA: Money Attitude
MATH: Mathematics Anxiety
FL: Financial Literacy
FI: Financial Inclusion

In addition, their attitudes related to the value and importance of money, the effort needed to get money, and the opportunities that can be obtained by having money will determine their competence and financial skills. In the context of attitudes toward money, the study's findings also corroborate the results of previous studies, which show a positive effect of money attitude on financial literacy (Albeerdy & Gharleghi, 2015; Susan, Winarto, & Gunawan, 2023).

Based on the research hypothesis testing, it also shows that financial literacy affects financial inclusion, and it is indicated by a t-value of 4.91. It means that individuals with knowledge and skills in managing finances will have access to and utilize financial services provided by various financial service providers. By having adequate financial literacy, individuals can make decisions regarding the ownership and use of payment products, savings and investment products, insurance products, and loan products. These financial decisions can ultimately determine the welfare of the individuals. The findings of the study related to the role of financial literacy support previous research, which showed that MSME owners or managers with high financial literacy could increase their

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access to finance (Susan, 2020b) to enable better growth through the utilization of investment opportunities (Ahmad & Arif, 2015).

The estimation results confirm the positive effect of financial literacy on financial inclusion, implying that any increase in financial literacy can improve financial inclusion. The results corroborate with results from previous studies (Morgan & Long, 2020)'s research results also show the positive impact of financial literacy on financial inclusion, both regarding financial products and active consumption. Table 3 summarizes these significant empirical results.

Table 3: Hypothesis Testing Results

Structural relationship	t-value
Financial Socialization Agents → Financial Literacy	2.87
Money Attitude → Financial Literacy	2.18
Financial Literacy → Financial Inclusion	4.91

The findings of this study emphasize the role of institutions such as the Financial Services Authority and Ministries related to MSMEs in supporting MSMEs' development. Various training related to financial literacy is needed, neither related to savings, investment, capital markets, or pension funds or literacy training in managing finances for business purposes. The support of the media that provides various financial information can increase owners' and managers' financial information, encouraging increased financial literacy of MSME entrepreneurs and eventually increasing their access to finance.

5. CONCLUSION

This study empirically investigates the impact of financial literacy on MSMEs' financial inclusion. The research findings emphasize the importance of financial literacy of MSMEs in determining access to finance related to payment products, savings or investments, insurance, and loan products. The findings of this empirical research imply the need for MSME entrepreneurs to become more financially literate to increase their access to finance.

The study found evidence that the financial competence of MSMEs is influenced by communication and financial information obtained from the media and their reference groups. The attitude of MSMEs related to money also determines their financial literacy. It indicates the need for a positive money attitude and improving interactions with financial socialization agents to improve financial information.

Further research needs to focus on the implications of MSME financial inclusion. In addition, future studies must also consider a larger sample size.

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REFERENCES

[1] Ahmad, S., & Arif, A. (2015). Strengthening Access to Finance for Women-owned SMEs in Developing Countries. *Equality, Diversity and Inclusion: An International Journal*, Vol.34(7), pp.634-639.

[2] Albeerdy, M., & Gharleghi, B. (2015). Determinants of the financial literacy among college students in Malaysia. *International Journal of Business Administration*, Vol.6, No.3, pp.15-24.

[3] Asiedu, E., Freeman, J., & Nti-Addae, A. (2012). Access to credit by small businesses: how relevant are race, ethnicity, and gender? . *American Economic Review*, 102(3), pp.532-537.

[4] Bongomin, G., Ntayi, J., & Munene, J. (2017a). The Relationship between Access to Finance and Growth of SMEs in Developing Economies - Financial Literacy as a Moderator. *Review of International Business and Strategy*, 27(4), pp. 520-538.

[5] Bongomin, G., Ntayi, J., & Munene, J. (2017b). Institutional framing and financial inclusion Testing the mediating effect of financial literacy using SEM bootstrap approach. *International Journal of Social Economics*, Vol.44(12), pp.1727-1744.

[6] Drexler, A., Fischer, G., & Schoar, A. (2014). Keeping it simple: financial literacy and rules of thumb. *American Economic Journal: Applied Economics*, 6(2), pp.1-31.

[7] Firli, A., & Fanesa, A. (2022). The Influence of Financial Literacy and Income on Generation Z's Interest in Using Fintech Lending: A Study in a Major City of Indonesia. *Review of Integrative Business and Economics Research*, Vol.11(2), pp.129-143.

[8] Global, F. D. (2017). *Measuring Financial Inclusion and the Fintech Revolution.* Washington, DC.: World Bank.

[9] Grohmann, A., Kluhs, T., & Menkhoff, L. (2018). Does financial literacy improve financial inclusion? Cross country evidence. *World Development*, 111, pp.84-96.

[10] Hair, J., Black, W., Babin, B., & Anderson, R. (2019). *Multivariate Data Analysis.* Hampshire: Cengage Learning, EMEA.

[11] Hossain, M., & Maji, S. (2021). Antecedents of Financial Literacy: Evidences from West Bengal, India. *Business Insight: Journal of The Department of Commerce, B.U.*, Vol.8, pp.15-38.

[12] Isomidinova, G., & Singh, J. (2017). Determinants of financial literacy: a quantitative study among young students in Tashkent, Uzbekistan. *Electronic Journal of Business & Management*, Vol.2 (1), pp.61-75.

[13] Lim, J., Aquino, J., Garcia, J., Ong, R., & Soliman, D. (2020). The Impact of Demand Side Barriers and Supply Side Barriers to Financial Inclusions: A Study on Micro Enterprises in Metro Manila. *Review of Integrative Business and Economic Research*, Vol.9, Supp. Issue 3, pp.295-334.

[14] Lyons, A., Grable, J., & Zeng, T. (2017). Impacts of financial literacy on loan demand of financially excluded households in China. *Consumer Interests Annual*, 64, pp.1-26.

[15] Morgan, P., & Long, T. (2020). Financial literacy, financial inclusion, and savings behavior in Laos . *Journal of Asian Economics*, 68, pp.1-20.

[16] OECD. (2018). *Toolkit for Measuring Financial Literacy and Financial Inclusion.* OECD/INFE.

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[17] Rasool, N., & Ullah, S. (2020). Financial literacy and behavioural biases of individual investors: empirical evidence of Pakistan stock exchange. *Journal of Economics, Finance and Administrative Science*, Vol.25, No.50, pp.261-278.
[18] Sohn, S., Joo, S., Grable, J., Lee, S., & Kim, M. (2012). Adolescents' financial literacy: The role of financial socialization agents, financial experiences, and money attitudes in shaping financial literacy among South Korean youth. *Journal of Adolescence*, Vol.35, Issues 4, pp.969-980.
[19] Susan, M. (2020a). The antecedents of financial literacy: a study on college students. *International Journal of Economic Policy in Emerging Economies*, Vol.13(4), pp.337-343.
[20] Susan, M. (2020b). Financial Literacy and Growth of Micro, Small, and Medium Enterprises in West Java, Indonesia. *International Symposia in Economic Theory and Econometrics*, Vol.27, pp.39-48.
[21] Susan, M. (2023). Financial literacy on loans and budgets of micro, small, and medium enterprises. *International Journal of Trade and Global Markets*, Vol.17(3/4), pp.355-362.
[22] Susan, M., Winarto, J., & Gunawan, I. (2022). Financial Literacy: How It Determines the Performance of Micro, Small, and Medium Enterprises. *Review of Integrative Business and Economics Research*, Vol.11(2), pp.218-225.
[23] Susan, M., Winarto, J., & Gunawan, I. (2023). Financial Literacy of Micro, Small, and Medium Enterprises: Empirical Study During the Pandemic Period. *International Symposia in Economic Theory and Econometrics*, Vol.31, pp.113-122.
[24] Thomas, B., & Subhashree, P. (2020). Factors that Influence the Financial Literacy among Engineering Students. *Procedia Computer Science*, 172, pp.480-487.
[25] Turvey, C., & Xiong, X. (2017). Financial inclusion, financial education and e-commerce in rural China. *Agribusiness*, Vol.33(2), pp.279-285.
[26] Wasiuzzaman, S., Nurdin, N., Abdullah, A., & Vinayan, G. (2020). Creditworthiness and access to finance: a study of SMEs in the Malaysian manufacturing industry. *Management Research Review*, Vol.43(3), pp.293-310.
[27] Xu, N., Shi, J., Rong, Z., & Yuan, Y. (2020). Financial literacy and formal credit accessibility: Evidence from informal businesses in China. *Finance Research Letters*, 36(3), pp.1-6.
[28] Zhao, H., & Zhang, L. (2020). Talking money at home: the value of family financial socialization. *International Journal of Bank Marketing*, Vol.38, No.7, pp.1617-1634.

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