

## Access to Finance and Risk Financial Attitude: Bridging Financial Literacy with MSME Sustainability

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*Abstract: This study aims to examine the direct effect of financial literacy and sustainability on micro, small, and medium enterprises (MSMEs) in Mataram, Indonesia. The study also analyzes the mediating effect of access to finance and financial risk attitude on the relationship between financial literacy and sustainability in MSMEs in Mataram, Indonesia, supported by the Resource-Based View (RBV), Knowledge-Based View (KBV), Pecking Order Theory, and Dual Process Theory. In addition, this study uses a descriptive quantitative methodology, where questionnaires were distributed to MSME practitioners in Mataram, and the data were analyzed using Structural Equation Model Partial Least Square (SEM-PLS). The findings indicate a positive relationship between financial literacy, access to finance, and financial risk attitude towards sustainability in MSMEs in Mataram. Furthermore, there is a significant effect of access to finance and financial risk attitude as mediators in the relationship between financial literacy and sustainability. Therefore, this study provides valuable insights for MSME practitioners to improve their financial knowledge and skills to support business growth and sustainability.*

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## **Introduction**

Global issues such as habitat destruction, overexploitation, pollution, disease outbreaks, and climate change significantly impact the scarcity of natural resources (Schipper et al., 2008). Consequently, the concept of business sustainability now focuses not only on profits but on three main pillars, known as the 3Ps: People, Planet, and Profit (Gleißner et al., 2022). Research by Chen et al. (2024) revealed that improving environmental performance to reduce carbon emissions is vital for enhancing the financial performance of both large companies and the Micro, Small, and Medium Enterprise (MSME). Furthermore, social responsibility practices are also essential for boosting SME profitability (Johnson, 2015; Valdez Juárez, 2017; Hahn et al., 2024). However, most SMEs in developing countries are less familiar with the concept of sustainability in economic, social, and environmental terms compared to their counterparts in European countries (Das et al., 2020). In that regard, researches by Hou & Fang (2023); Okere et al. (2023); and Garba et al. (2022) found that financial literacy, access to financing, and risk propensity are factors affecting growth and sustainability in economic, social, and environmental concepts in the MSME sector.

As an important business sector, MSMEs contribute to enhancing sustainable economic growth and development, as well as improving financial stability in every country (Ezebilo et al., 2019). Financial literacy enables MSMEs to improve their financial management skills (Madhavan et al., 2022), allowing MSME practitioners to access external funding (Okello et al., 2016), thereby supporting business sustainability (Turyakira et al., 2019; Kmmcb et al., 2020; Miswanto et al., 2024). However, access to external funding for MSMEs is frequently more difficult than for large companies due to their perceived solvency ratios by financial institutions (Ahlstrom et al., 2018). In addition, few studies indicate that strong environmental performance can enhance funding opportunities for MSMEs, as financial institutions increasingly adopt green financing initiatives (Andries et al., 2018; Aristei & Gallo, 2021; Kumar et al., 2022), encouraging companies to prioritize sustainability for economic growth (Wellalage et al., 2022).

In the pursuit of sustainability, financial risks can pose a significant threat to MSMEs, especially in developing economies. Characteristics such as economic turmoil, unstable exchange rates, rudimentary infrastructure, political unrest, high inequality, and weak trade policies challenge the sustainability of MSMEs (Wu & Si, 2018; Oláh et al., 2019). Macroeconomic situations, like financial crises, are obstacles for MSMEs seeking external financing (Lenssen et al., 2014). Therefore, supporting financial literacy is essential to reduce information asymmetry between debtors and creditors (Mutamimah et al., 2021), enabling MSMEs to compete in global financial markets (Aminu & Shariff, 2015). However, MSMEs also require regular business risk analysis to avoid excessive borrowing from banks (Offiong et al., 2019), which could lead to default risk (Mirza et al., 2023).

Various researchers have provided different results regarding the relationship between financial literacy and business growth and sustainability. Research by Eniola and Entebang (2017); Hussain et al. (2018); Ye & Kulathunga (2019); Ying et al. (2019); Mandongwe et al. (2020); Hou & Fang (2023); Yunita et al., (2023); Miswanto et al. (2024)

demonstrated that financial literacy positively effects performance, growth, and business sustainability in MSMEs. However, the researches by Eresia-Eke & Raath (2013) and Zaitul & Ilona (2022) discovered the financial literacy has no significant effect on business sustainability in MSMEs.

On the other hand, the research by Olarewaju & Msomi (2021) found a significant effect of financial literacy – such as financial awareness, budget management, and accounting skills – on access to external finance, thereby improving the performance of MSMEs (Mabula & Ping, 2018). This finding aligns with studies by Okello et al. (2016); Giang et al. (2019); Fatoki (2021); Kumar et al. (2022); Okere et al. (2023), which suggested that high access to finance is believed to improve the performance and growth of MSMEs. However, research by Goldhausen (2017) and Sibanda et al. (2018) indicated that access to finance has no significant effect on business performance and growth in MSMEs. In addition, Ye & Kulathunga (2019) found that access to finance and financial risk partially mediate the relationship between financial literacy and sustainability in SMEs.

Furthermore, research conducted by Goswami et al. (2017) revealed that education, training, and access to finance for MSME practitioners are crucial in avoiding financial risks that could potentially disrupt business performance (Cowling et al., 2015). Therefore, financial literacy is necessary in taking business risks to ensure that funding liquidity is maintained to avoid threats to business sustainability (Delić et al., 2016). Meanwhile, another study by Ferli (2023) found that financial risk attitudes do not significantly mediate the relationship between financial literacy and sustainability in MSMEs in Indonesia.

Due to the inconsistencies in the results of previous research, this study aims to investigate 'The Role of Access to Finance and Financial Risk in Mediating Financial Literacy and Sustainability in MSMEs in Mataram.' This research introduces novelty by using a sustainability measurement based on three concepts: economic, environmental, and social responsibility, so that the findings of this study are expected to provide comprehensive insights to complement previous studies. In addition, the research aims to raise awareness among MSME regulators and financial institutions to provide training that enhances the financial literacy of MSME practitioners, thereby fostering business sustainability and promoting economic development in Indonesia.

### *Theoretical Framework and Hypotheses*

*The Resource Based View (RBV)* suggests that organizations can achieve sustainable competitive advantage through unique resources (Barney, 1991; Grant, 1996; Das & Teng, 2000). Additionally, the theory of Knowledge Based View (KBV) developed by Grant (1996) emphasizes the importance of knowledge as a resource that is difficult to trade, imitate, rare, and specialized, helping companies gain a competitive edge (Barney, 1991). However, (Alchian & Demsetz, 1972) argued that efficient production stems not from superior resources but from intellectual capital (Carmeli & Tishler, 2004; Teece, 2000) leading to a sustainable competitive advantage (Ying et al., 2019). Research by Yakob et al. (2021) and Diéguez-Soto

et al. (2022), supports this, showing that financial literacy influences decision-making, which in turn promotes MSME growth (Astohar et al., 2022).

A MSME with good financial literacy is able to identify and respond to changes in the business, economic, and financial climates, thereby avoiding risks that could disrupt business performance and growth (Dahmen & Rodríguez, 2014). Research conducted by Ye & Kulathunga (2019); Yang et al. (2019); Mandongwe et al. (2020); Hou & Fang (2023); Miswanto et al. (2024) showed a positive and significant effect of financial literacy on the sustainability of MSMEs. Furthermore, financial literacy also supports sustainable supply chain management, so SMEs are expected to be able to implement environmentally friendly designs of the products offered (Toni et al., 2024).

H1: Financial Literacy has a positive and significant effect on Sustainability in MSMEs in Mataram.

Besides that, research by Zukime et al. (2019) informed that financial literacy is one of the factors that support MSME practitioners in determining the optimal level of finance. In addition, research by Carbó-Valverde et al. (2016) stated the main factor in MSMEs' failure in operations is the lack of funding from external parties. Therefore, financial literacy as knowledge of financial planning and management is needed so that MSME practitioners can access financial services in order to achieve the set financial goals (Hafeez et al., 2018). Researches by Adomako et al. (2016); Okello et al. (2016); Mabula & Ping (2018); Fatoki (2021) stated a positive and significant effect of financial literacy on access to finance in MSMEs. A high level of financial literacy can enable MSME practitioners to prepare quality financial reports (Fatoki, 2021), allowing banks to accept business capital loan applications (Lusardi & Mitchell, 2017; Kotzé & Smit, 2008).

H2: Financial Literacy has a positive and significant effect on Access to Finance for MSMEs in Mataram.

Pecking Order Theory assumes that companies prioritize internal funding for investments and financing before seeking external sources like debt or equity (Myers, 1984; L. Chen et al., 2011; Myers & Majluf, 1984). Access to finance is paramount to MSMEs growth, (Adomako et al., 2016; Moreira, 2016; Fowowe, 2017; Hussain et al., 2018), as it enhances sustainability by expanding market access, fostering innovation, and improving risk management (Yang et al., 2019; D'Apollito et al., 2024). However, MSMEs face challenges in external funding due to asymmetric information, high rates, and collateral requirements (López-Gracia & Sogorb-Mira, 2008; Stiglitz & Weiss, 1981). Research by Saksonova and Papiashvili (2021) indicates that low financial literacy limits funding access, while increased external financing boosts profitability and environmental awareness (Yunita et al., 2023). Additionally, firms with better environmental performance are more likely to secure bank credit, promoting sustainable economic growth (Sanistasya et al., 2019; Zhang, 2021).

H3: Access to Finance has a positive and significant effect on Sustainability in MSMEs in Mataram.

H4: Access to Finance can significantly mediate the relation between financial literacy and Sustainability in MSMEs in Mataram.

Massive business development is linked to increased economic instability, particularly for MSMEs in emerging markets, which face tougher conditions than those in developed markets (Oláh et al., 2019). To ensure sustainability, MSMEs must manage risks effectively, as financial risk attitudes impact sustainability and failure rates (Gärling et al., 2009; Caliendo et al., 2010). A positive financial risk-taking attitude, supported by financial literacy, helps address uncertainty and improve strategic performance (Ye & Kulathunga, 2019). Entrepreneurs are motivated by risk to sustain their businesses (Shpak et al., 2018), requiring skills to analyze risks and make informed decisions in a dynamic environment (Addo et al., 2022; Melnyk et al., 2017). Dual Process Theory explains decision-making through heuristic and analytic approaches, with the former being faster but biased, and the latter fostering logical decision-making to mitigate risks (Bottom et al., 2004; Neys, 2006). Research indicates that financial literacy enhances MSME performance and helps manage economic risks like inflation and interest rates (Jiménez et al., 2024; Mashizha et al., 2019; Nohong et al., 2019). H5: Financial Literacy has a positive and significant effect on Risk Financial Attitude in MSMEs in Mataram.

H6: Risk Financial Attitude has a positive and significant effect on Sustainability in MSMEs in Mataram.

H7: Risk Financial Attitude can significantly mediate the relationship between financial literacy and Sustainability in MSMEs in Mataram.

## Research Method

This quantitative associative study aims to examine the relationship between multiple variables, focusing on MSMEs in Mataram, West Nusa Tenggara. Purposive sampling was used to select MSMEs that have been operating for over 5 years and have received financial and bookkeeping training from the Cooperative and MSME Office of West Nusa Tenggara in 2022. The study distributed questionnaires to 116 MSME businesses as part of the sample, but only obtained responses from 100 participants, as 6 businesses were no longer operational. A closed-question Likert scale (1 = Strongly Disagree to 5 = Strongly Agree) was used. Building on previous research by Yunita et al., (2023), this study introduces Financial Risk Attitude as a mediating variable alongside Access to Finance to better understand MSME sustainability. The operational definitions of research variables are shown in the table below.

Table 1. Definition of Operational Variable

No	Variable	Indicators	Source
1	Financial Literacy	<ul style="list-style-type: none"> <li>• Financial Knowledge (FK)</li> <li>• Financial Skills (FS)</li> <li>• Financial Attitude (FA)</li> <li>• Financial Behavior (FB)</li> </ul>	(Yunita et al., 2023); (Okello et al., 2016); (Hussain et al., 2018); (Ye & Kulathunga, 2019)
2	Access to Finance	<ul style="list-style-type: none"> <li>• Accessibility (AS)</li> <li>• Usability (UB)</li> <li>• Quality (QT)</li> </ul>	(Yunita et al., 2023); (Okello et al., 2016)

3	Risk Financial Attitude	<ul style="list-style-type: none"> <li>• Well-Being (WB)</li> <li>• Risk Taking Propensity (RPe)</li> </ul>	(Ye & Kulathunga, 2019)
4	Sustainability	<ul style="list-style-type: none"> <li>• Risk Perception (RPr)</li> <li>• Economy (EC)</li> <li>• Environment (EV)</li> <li>• Social Responsibility (SR)</li> </ul>	(Yunita et al., 2023); (Ye & Kulathunga, 2019); (Ying et al., 2019); (Burlea-Schiopoiu & Mihai, 2019); (Degong et al., 2018)

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*Source: elaborated by the authors.*

This study uses descriptive analysis and data analysis with SmartPLS 3.2.9. The analysis consists of two stages: evaluating the measurement model (outer model) and the structural model (inner model). The mathematical framework of this study consists of two models, namely the outer model and the inner model.

*Outer model*

$$y = \alpha + \lambda x_1 \xi_1 + Z_1 + Z_2 + e \quad (1)$$

$\alpha$  – *alpha*;  $\lambda$  – *matrix loading factor*;  $\xi$  – *exogenous latent variable*;  $Z$  – *mediation variation*;  $e$  – *error*.

*Inner model*

$$\eta_1 = \gamma_{1.1} \xi_1 + \gamma_{1.2} \xi_2 + \gamma_{1.3} \xi_3 + \zeta_1 \quad (2)$$

$$\eta_2 = \gamma_{2.1} \xi_1 + \zeta_2 \quad (3)$$

$$\eta_3 = \gamma_{3.1} \xi_1 + \zeta_3 \quad (4)$$

$\gamma$  – *path coefficient connecting endogenous latent variables ( $\eta$ ) with exogenous variables ( $\xi$ ); and  $\zeta$  – *inner residual*.*

The relationship among those concepts has to be depicted in a figure of conceptual framework as example below.

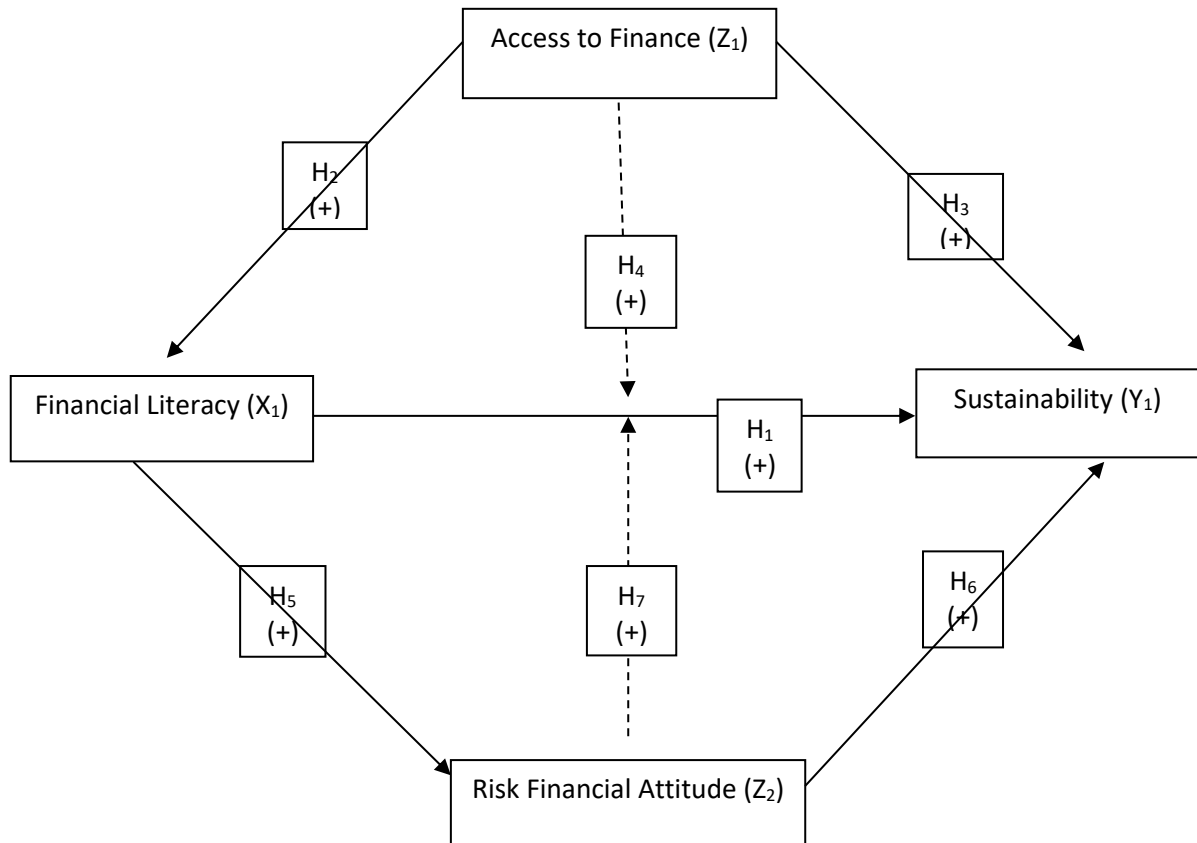


Figure 1. Conceptual Framework

**Result and Discussion**

*SMART-PLS Data Processing Results*

1. Outer Model Evaluation

Table 2. Outer Loading Test Results

Indicator	Access to finance	Sustainability	Financial literacy	Risk Financial
AS	0,441			
EC		0,787		
UB	0,769			
WB	0,836			
FS			0,845	
QT	0,867			
EV		0,806		
FK			0,788	
FB			0,662	
RPe				0,859
RPr				0,925
FA			0,609	
SR		0,842		

Source: Raw data processed by researchers, 2023

According to Table 2, the outer loading scores of several indicators are still below 0.60. Based on the research done by Hair et al. (2017) indicators with outer loading scores between 0.40-0.70 remain acceptable but may be removed depending on their effect on the AVE score.

Table 3. Average Variance Extracted Analysis Result

Variable	Average Variance Extracted (AVE)
Financial Literacy	0,536
Access to Finance	0,560
Sustainability	0,660
Risk Financial	0,797

Source: Raw data processed by researchers, 2023

The test results shown in Table 3 indicate that the AVE value for each variable is above 0.50. Therefore, it can be summarized all variables are convergently valid, as they have an AVE value above 0.50.

Discriminant Validity.

Table 4. Test Result of Fornell-Lacker

Variable	AF	BS	FL	RF
Access to Finance	0,748			
Sustainability	0,572	0,812		
Financial Literacy	0,687	0,574	0,732	
Risk Financial	0,257	0,445	0,410	0,892

Source: Raw data processed by researchers, 2023

Table 5. Test Result of Cross Loading

Indicator	Financial Literacy	Access to Finance	Sustainability	Risk Financial
FK	0,788	0,417	0,503	0,454
FS	0,845	0,606	0,455	0,357
FA	0,609	0,622	0,264	0,019
FB	0,662	0,382	0,436	0,311
AC	0,244	0,441	0,323	0,178
UB	0,473	0,769	0,229	0,067
QT	0,575	0,867	0,529	0,263
WB	0,655	0,836	0,543	0,226
EC	0,497	0,494	0,787	0,443
EV	0,432	0,438	0,806	0,294
SR	0,459	0,454	0,842	0,329
RPr	0,302	0,202	0,336	0,859
RPe	0,415	0,251	0,445	0,925

Source: Raw data processed by researchers, 2023



In Table 4, the square root value of AVE for each variable is greater than the value of the correlation between other latent variables. This indicated that all variables in this study meet the criteria of Fornell-Lacker. Additionally, the cross-loading results shown in Table 5 indicate that the loading value of each indicator on the measured construct has a greater value than the loading value on other constructs.

Table 6. Reliability Test Result

Variable dan Indikator	Cronbach's Alpha	Composite Reliability
FL	0,703	0,819
AF	0,723	0,828
BS	0,743	0,853
RF	0,750	0,887

Source: Raw data processed by researchers, 2023

Referring to Table 6, it can be observed that the composite reliability value for each variable is over 0.70. Furthermore, the Cronbach's alpha value for each variable meets the requirements, namely higher than 0.70. Hence, it can be stated for each variable to have a good reliability.

### 1. Inner Model Evaluation

Table 7. R-Square Test Result

Variable	R-Square	R-Square Adjusted
Access to Finance	0,472	0,467
Sustainability	0,446	0,429
Risk Financial	0,168	0,159

Source: Raw data processed by researchers, 2023

According to Table 7, the R-square value for the Access to Finance variable is 0.472, or 47.2%. It means a Financial Literacy (X) variable affects the Access to Finance variable by 47.2%. Meanwhile, 52.8% is influenced by other variables outside of Financial Literacy.

Similarly, the Risk Financial Attitude variable has an r-square value of 0.168 or 16.8%. It implies the Financial Literacy variable is only able to describe 16.8% of its influence on the Risk Financial Attitude variable and the remaining 83.2% by other variables. Meanwhile, the Sustainability variable having an R-square value of 0.446 indicates that the Financial Literacy, Access to Finance, and Risk Financial Attitude variables simultaneously affect the Sustainability variable by 44.6%. Another 55.4% is influenced by variables other than these three variables.

Table 8. F-Square Test Result

	Financial Literacy	Access to Finance	Sustainability	Risk Financial
Financial Literacy		0,895	0,043	0,202
Access to Finance			0,117	
Sustainability				0,103
Risk Financial				

Source: Raw data processed by researchers, 2023

Referring to Table 8, the influence of Financial Literacy on Access to Finance is 0.895. This indicates the effect of Financial Literacy as variable X on Access to Finance as variable Z is included at a high level in the structural level. Meanwhile, the influence of the variables Financial Literacy (X), Access to Finance (Z1), and Risk Financial Attitude (Z2) on Sustainability as variable Y is 0.043; 0.117; 0.103, respectively. Therefore, these three variables on Sustainability have little influence on the structural model.

Table 9. Path Coefficient and P-Value Test Results

Description	Original Sample (O)	T Statistics	P-Value	Conclusion
Financial Literacy -> Sustainability	0,226	1,975	0,049	<b>H<sub>a</sub> Accepted</b>
Financial Literacy -> Access to Finance	0,687	13,324	0,000	<b>H<sub>a</sub> Accepted</b>
Access to Finance -> Sustainability	0,350	3,735	0,000	<b>Ha Accepted</b>
Financial Literacy -> Access to Finance -> Sustainability	0,240	3,650	0,000	<b>H<sub>a</sub> Accepted</b>
Financial Literacy -> Risk Financial Attitude	0,410	4,639	0,000	<b>H<sub>a</sub> Accepted</b>
Risk Financial Attitude -> Sustainability	0,262	2,692	0,007	<b>Ha Accepted</b>
Financial Literacy -> Risk Financial Attitude -> Sustainability	0,108	2,339	0,020	<b>H<sub>a</sub> Accepted</b>

Source: Raw data processed by researchers, 2023

Referring to Table 9, it can be inferred that:

1. The relationship between financial literacy and sustainability has a positive and significant effect, with a path coefficient value of 0.226 and a p-value of 0.049 (<0.05).
2. There is a positive and significant relationship between financial literacy and access to finance, with a path coefficient value of 0.687 and a p-value of 0.000 (<0.05)

3. There is a positive and significant relationship between access to finance and sustainability, with a path coefficient value of 0.350 and a p-value of 0.000 (<0.05).
4. Access to finance has an indirect effect on the relationship between financial literacy and sustainability, with a path coefficient value of 0.240 and a p-value of 0.000 (<0.05)
5. The path coefficient value of 0.410 and its p-value of 0.000 (<0.05) indicate that there is a positive and significant relationship between financial literacy and risk financial attitude.
6. Risk financial attitude has a positive and significant influence on sustainability with a path coefficient value of 0.261 and a p-value of 0.007 (<0.05); and
7. Risk financial attitude successfully mediates the relationship between financial literacy and sustainability, with a coefficient value of 0.108 and a p-value of 0.020 (<0.05).

Table 10. Construct Cross validated Redundancy Test Result

Variable	SSO	SSE	Q <sup>2</sup> (=1-SSE/SSO)
Financial Literacy	400.000	400.000	
Access to Finance	400.000	302.532	0,244
Sustainability	300.000	218.035	0,273
Risk Financial	200.000	175.779	0,121

Source: Raw data processed by researchers, 2023

Based on Table 10, the Q2 values for access to finance, sustainability, and risk financial attitude variables are 0.244; 0.273; 0.121, respectively. Since the Q2 value of the three variables is not equal to zero, the model has predictive relevance. It means the observation value in this model gives a good value.

Table 11. Collinearity Statistics Test Result

Variable	Financial Literacy	Access to Finance	Sustainability	Risk Financial
Financial Literacy		1,000	2,130	1,000
Access to Finance			1,898	
Sustainability				
Risk Financial			1,203	

Source: Raw data processed by researchers, 2023

According to Table 11, the research model is clear of multicollinearity between constructs as the VIF value of each indicator is less than 5 (VIF < 5).

*Discussion*

The results of this study indicate a positive and significant relation exists among financial literacy and sustainability in MSMEs in Mataram. As this study result is consistent

with prior research from Eniola & Entebang (2017); Hussain et al. (2018); Ye & Kulathunga (2019); Yang et al. (2019); Mandongwe et al. (2020); Miswanto et al. (2024). The findings of this study are also in line with the Resource Based View and Knowledge Based View theories. Resource Based View theory focuses on using organizational resources to attain sustainable competitive advantage. Meanwhile, the Knowledge Based View theory considers the organization as a heterogeneous entity loaded with knowledge (Hoskisson & Hitt, 1999). Accordingly, knowledge is regarded as important and strategic as the company's resources enabling it to survive and thrive. (Mejri & Umemoto, 2010; Costello & Donnellan, 2011).

A high level of financial literacy among MSME practitioners is predicted to have an impact on increasing sales and profits, as well as expanding market share (Taftiyan & BaghiNasab, 2022). Organizational knowledge can be thought of as a component of dynamic capabilities (Nielsen, 2006) that an organization must have to be able to balance economic, social, and environmental conditions, as the three main pillars of sustainability performance (Eikelenboom & de Jong, 2019) in supporting the welfare of many parties (Mavlutova et al., 2022; Stella et al., 2022). On the other hand, MSME practitioners should have sufficient knowledge to be able to develop an appropriate business plan to access external funding (Oncioiu, 2014; Cong Do et al., 2019) This statement is also supported by research from Adomako et al. (2016); Okello et al. (2016); Mabula & Ping (2018); Fatoki (2021); Akhtar et al., (2023) stated that financial literacy contributes to helping MSMEs implement appropriate financial policies in order to improve proficiency in using financial services properly

H1: Financial Literacy has a positive and significant effect on Sustainability in MSMEs in Mataram (accepted).

H2: Financial Literacy has a positive and significant effect on Access to Finance for MSMEs in Mataram (accepted).

Besides that, the researches by Bunyasi & Email (2014); Moreira (2016); Fowowe (2017); Hussain et al. (2018); D'Apolito et al. (2024) in line with this study's findings proved that access to finance has an influence in supporting the sustainability of MSMEs. According to Pecking Order Theory, MSME financing policies adhere to a hierarchy with a preference for the use of internal financing and then external funding (Myers & Majluf, 1984). The results of this study also disclosed the fact the majority of MSME practitioners in Mataram are beginning to realize environmental performance is a factor considered by financial institutions in terms of applying for financing. Therefore, environmental policies required by banks encourage various businesses to invest in environmentally friendly activities and products (Luo et al., 2024). According to Ansong (2017) Corporate Social Responsibility (CSR) initiatives also have an effect on enhancing access to external finance for SMEs in Ghana. Meanwhile, access to finance plays an important role in supporting the connection between financial literacy and the sustainability of MSMEs (Hamdana et al., 2021; Ye & Kulathunga, 2019; Yunita et al., 2023). It is also in line with the results of this study that access to finance successfully mediates the relationship between financial literacy and sustainability in MSMEs in Mataram.

H3: Access to Finance has a positive and significant effect on Sustainability in MSMEs in Mataram (accepted).

H4: Access to Finance can significantly mediate the relation between financial literacy and Sustainability in MSMEs in Mataram (accepted).

The current business environment is experiencing massive changes resulting in an increased risk. Therefore, MSME practitioners must have adequate knowledge to be able to manage risks by making the right decisions to reduce the significant impact on business stability. Hence, this study found that financial literacy has a positive effect on risk financial attitude. The findings of this study are supported by Ye & Kulathunga (2019) proved financial literacy can affect the risk financial attitude of SMEs in Sri Lanka. According to the research by Addo et al., (2022), financial literacy is beneficial for predicting the impact of risks that may affect how MSME practitioners assess and manage finances (Khasanah & Irawati, 2022). Financial literacy is required to improve performance (Isimoya & Oluwaleye, 2023) through the formulation of appropriate policies in response to the risk climate in the business environment (Crick et al., 2018).

H5: Financial Literacy has a positive and significant effect on Risk Financial Attitude in MSMEs in Mataram (accepted).

An organization's propensity to make decisions depends on how effectively it manages risk to mitigate economic, social, political and environmental risks (Hatami-Marbini et al., 2024) which interferes with business sustainability. Research from (Hanggraeni et al., 2019) revealed how risk management is essential in a business in order to improve and enhance the performance of MSMEs. The results of this study indicated risk financial attitude influences business sustainability in MSMEs in Mataram. According to Dual Process Theory, a person tends to decide to take risky decisions based on two systems of thinking, namely heuristically and analytically. Therefore, the findings of this study support the previous research of (Rauch & Frese, 2000; Cressy, 2006; Goswami et al., 2017). Additionally, this research also proves that financial risk significantly mediates the relationship between financial literacy and sustainability in MSMEs in Mataram, which aligns with the studies by Roshan et al. (2020) and Campos Valenzuela et al. (2021)

H6: Risk Financial Attitude has a positive and significant effect on Sustainability in MSMEs in Mataram (accepted).

H7: Risk Financial Attitude can significantly mediate the relationship between financial literacy and Sustainability in MSMEs in Mataram (accepted).

## Conclusion

This study concludes that financial literacy, access to finance, and financial risk attitude positively influence MSME sustainability in Mataram. Additionally, access to finance and financial risk partially mediate the relationship between financial literacy and sustainability, addressing gaps in previous research. Financial literacy enables MSMEs to gain a competitive edge and access financing, as financial institutions assess credit applications based on business plans and financial statements. A lack of these documents signals low

financial literacy, limiting funding and threatening sustainability. While external funding can drive growth, effective financial risk management requires sound financial literacy for informed decision-making. Enhancing financial literacy improves performance and supports investments in environmental protection, promoting economic stability.

This study aims to inform regulators, such as the Office of Cooperatives and MSMEs and the Financial Services Authority, on promoting financial literacy initiatives. However, the findings are limited to MSMEs in Mataram, and may not apply elsewhere. Future research should consider additional variables like cooperative attitudes, social capital, knowledge sharing, and financial technology to provide a more comprehensive understanding of MSME sustainability.

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