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The Role of Financial Literacy on Sustainable Development of Micro, Small and Medium Enterprises (MSMEs) in Africa

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Abstract

This study examines the relationship between financial literacy and the sustainable development of Micro, Small, and Medium Enterprises (MSMEs) in Africa. Using a quantitative research approach, a regression analysis was conducted to investigate the effects of financial knowledge, financial skills, and financial experience on MSMEs' sustainable development. The results revealed that all three variables had statistically significant effects on sustainable development, as indicated by p-values below the 5% level of significance. The findings suggest that a higher level of financial knowledge, practical financial skills, and hands-on experience in financial matters positively influence the sustainable development of MSMEs. These results contribute to the existing literature on financial literacy and provide insights for policymakers and practitioners seeking to enhance the financial capabilities of MSMEs to promote sustainable economic growth in Africa.

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Introduction

Micro, Small, and Medium Enterprises (MSMEs) play a vital role in promoting economic growth, employment and poverty reduction in Africa. However, the sustainable development of MSMEs is often hindered by various challenges, including limited access to financial resources. In this context, financial literacy plays a crucial role in empowering MSMEs to make informed financial decisions, manage resources effectively, and drive sustainable development. This article explores the significance of financial literacy and its impact on the sustainable development of MSMEs in Africa. Financial literacy equips MSMEs with the knowledge and skills needed to access financial services and resources. It enables entrepreneurs to understand the different types of financial products available, such as loans, grants, and equity financing, and make informed decisions about which options are best suited to their needs (Aduda & Ochieng, 2019). With improved financial literacy, MSMEs can navigate the complex financial landscape, build strong business cases, and present their financial needs effectively to financial institutions, thereby increasing their chances of securing funding for sustainable growth.

Financial literacy empowers MSMEs with the ability to develop and implement effective financial plans and strategies. Entrepreneurs who possess financial literacy skills can create realistic budgets, monitor cash flows, and effectively manage financial resources (Makanyeza & Chikoko, 2020). This enables MSMEs to allocate resources efficiently, identify areas for cost reduction or investment, and make timely financial decisions that contribute to their long-term sustainability. Financial literacy enhances MSMEs' ability to identify, assess, and manage financial risks effectively. Entrepreneurs who possess financial literacy skills are better equipped to understand financial statements, analyze market trends, and make informed decisions regarding risk mitigation strategies (Agyapong, 2019). By understanding the financial risks associated with their business operations, MSMEs can implement appropriate risk management measures, such as insurance coverage or diversification strategies, to protect their financial stability and ensure sustainable development.

Financial literacy plays a crucial role in enabling MSMEs to achieve financial growth and expand their operations. With enhanced financial knowledge, entrepreneurs can identify opportunities for business expansion, assess the financial feasibility of growth strategies, and access the necessary financial resources to support their expansion plans (Nwokah, 2017). Financially literate MSMEs are more likely to attract investors, secure loans, and negotiate favorable terms, thereby facilitating their growth and contributing to sustainable development. Financial literacy promotes financial inclusion and empowers MSMEs to actively participate in the formal financial sector. By understanding financial concepts, terms, and practices, entrepreneurs can confidently engage with financial institutions, negotiate favorable terms, and access a wider range of financial services (ILO, 2019). This inclusion facilitates MSMEs' integration into the formal economy, enhances their credibility, and opens up opportunities for collaboration and partnerships, which ultimately contributes to their sustainable development.

Financial literacy plays a pivotal role in the sustainable development of MSMEs in Africa. By enhancing access to finance, facilitating financial planning and management, enabling effective risk management, supporting financial growth and expansion, and promoting financial inclusion and empowerment, financial literacy empowers MSMEs to overcome financial challenges and drive sustainable development. Policymakers, financial institutions, and educational institutions should prioritize initiatives that promote financial literacy among MSMEs, as it catalyzes their growth, resilience, and contribution to Africa's economic development (Santoso, 2020).

Despite the growing recognition of the importance of financial literacy for the sustainable development of Micro, Small, and Medium Enterprises (MSMEs) in Africa, there is still a significant research gap in this area. Existing studies have provided valuable insights into the role of financial literacy in enhancing access to finance, financial planning, risk management, financial growth, and financial inclusion for MSMEs (Mpi, 2019). However, there is a need for further research to explore the specific mechanisms through which financial literacy impacts sustainable development outcomes, such as job creation, poverty reduction, and economic growth. Additionally, more research is needed to understand the contextual factors that influence the effectiveness of financial literacy interventions and the barriers that MSMEs face in accessing and applying financial literacy knowledge. Bridging this research gap will provide policymakers, practitioners, and researchers with a deeper understanding of how to design and implement effective financial literacy programs that can contribute to the long-term sustainable development of MSMEs in Africa. So, this paper examined the effect of financial knowledge, financial skill, and financial attitude on the Sustainable Development of Micro, Small, and Medium Enterprises in Africa.

2. Review of literature

2.1. Financial Literacy

Financial literacy refers to the knowledge, skills, and understanding of financial concepts and practices that enable individuals to make informed and effective financial decisions. It encompasses a range of topics, including budgeting, saving, investing, debt management, insurance, and understanding financial products and services (OECD, 2021).

2.2. Micro, Small and Medium Enterprises (MSMEs) in Africa

Micro, Small, and Medium Enterprises (MSMEs) in Africa are defined based on various criteria, including the number of employees, annual turnover, and total assets. The classification of MSMEs varies across countries and regions, but generally, microenterprises have fewer than 10 employees, small enterprises have between 10 and 50 employees, and medium enterprises have between 50 and 250 employees. These enterprises play a vital role in driving economic growth, employment generation, and poverty reduction in Africa, contributing to the development of local communities and fostering entrepreneurship (AfDB, 2017).

2.3. Empirical Review and Hypothesis

In this study, three financial literacy indicators were used as independent variables. Hence, the empirical review and hypothesis have been developed accordingly.

Financial knowledge and sustainable development of MSMEs

The relationship between financial knowledge and the sustainable development of Micro, Small, and Medium Enterprises (MSMEs) is significant. Financial knowledge refers to the understanding of financial concepts, practices, and strategies that enable entrepreneurs to make informed financial decisions (Meressa, 2020). When MSME owners and managers possess financial knowledge, they are better equipped to access financial resources, manage their finances effectively, and make strategic investments that contribute to long-term sustainability (Aduda & Ochieng, 2019). Financial knowledge enables MSMEs to navigate the complex financial landscape, identify growth opportunities, mitigate financial risks, and optimize their financial performance. By making sound financial decisions, MSMEs can enhance their profitability, expand their operations, create employment opportunities, and contribute to the overall economic development of the communities in which they operate (Nwokah, 2017). Thus, financial knowledge plays a crucial role in empowering MSMEs to achieve sustainable development outcomes. So, the research hypothesis can be developed as follows:

- H1: Financial knowledge has a positive effect on the Sustainable development of MSMEs

Financial Skills & Sustainable Development of MSMEs

The relationship between financial skills and the sustainable development of Micro, Small, and Medium Enterprises (MSMEs) is crucial. Financial skills refer to the practical abilities and competencies in managing finances, including budgeting, cash flow management, financial analysis, and financial decision-making. Possessing strong financial skills enables MSME owners and managers to effectively allocate resources, monitor financial performance, and make informed decisions that contribute to the long-term sustainability of their enterprises (Beck et al., 2008). By having a solid understanding of financial concepts and being adept at financial skills, MSMEs can optimize their financial operations, identify growth opportunities, and navigate financial challenges. This, in turn, enhances their profitability, resilience, and ability to create employment opportunities, thereby fostering sustainable development (Klapper & Love, 2011). The financial skill of business operators has a positive effect on the growth and sustainable development of SMEs (Buchdadi et al., 2020). Hence, the researchers developed a hypothesis as follows:

- H2: Financial skills has a positive effect on the sustainable development of MSMEs

Financial Attitude & Sustainable Development of MSMEs

The relationship between financial attitude and the sustainable development of Micro, Small, and Medium Enterprises (MSMEs) is significant. Financial attitude refers to an individual's beliefs, perceptions, and behaviors toward money and financial matters (Mandell, 2008). A positive financial attitude, characterized by factors such as financial discipline, risk-taking propensity, and a growth mindset, can have a profound impact on the sustainable development of MSMEs. Entrepreneurs with a positive financial attitude are more likely to adopt prudent financial practices, such as effective budgeting, saving, and investment strategies (Lusardi & Mitchell, 2011). They are also more inclined to seek financial opportunities, take calculated risks, and adapt to changing market conditions. By fostering a positive financial attitude, MSMEs can enhance their financial resilience, capitalize on growth opportunities, and contribute to long-term sustainable development.

- H3: Financial attitude has a positive effect on the sustainable development of MSMEs

2.3. Conceptual Framework

This section provides a conceptual framework for this study based on an empirical literature review. It explains the key variables and the relationships among them. The conceptualization helps answer the study's research questions. Hence, the following conceptual framework will be developed to serve as a road map to analyze the entire analysis in the model below, variables such as four independent variables incorporated in the model, and Sustainable development of MSMEs is the dependent variable. In the model, three independent variables are incorporated: financial knowledge, financial skills, and financial attitude and Sustainable development of MSMEs as dependent variables.

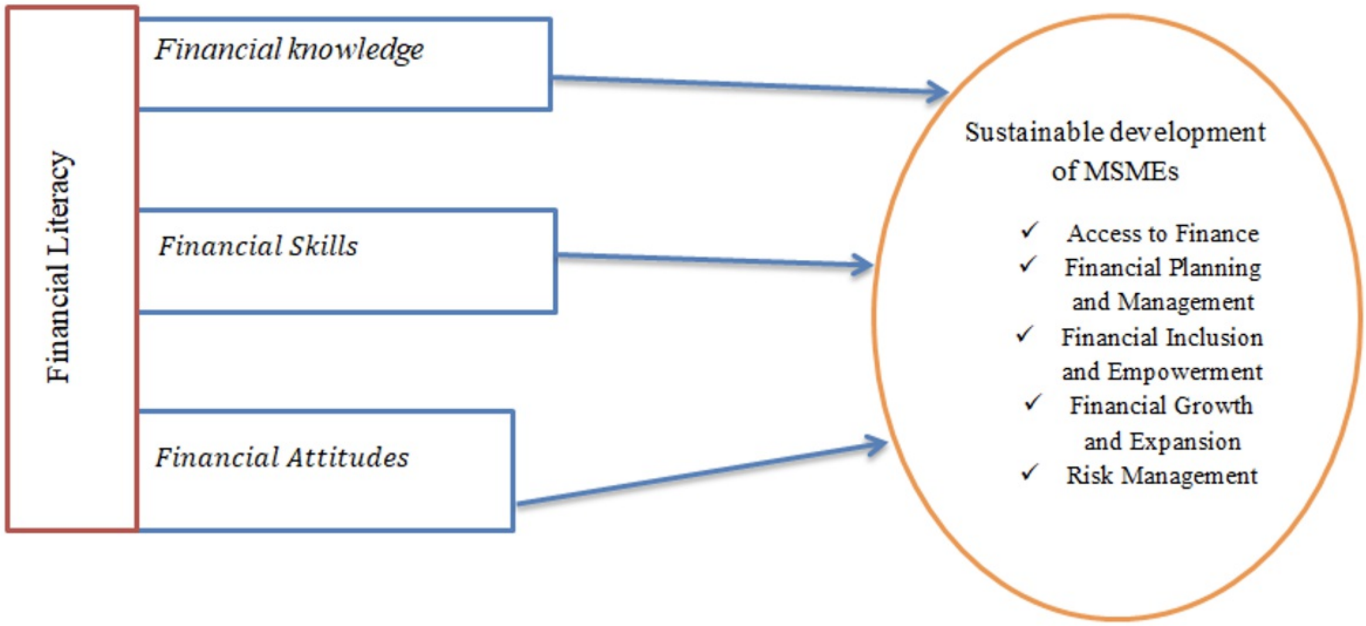

Figure 1. Conceptual framework

3. Materials & Methods

3.1. Research Design

The researchers employed a co-relational research design. A co-relational research design is a type of non-experimental research method that examines the relationship between two or more variables. It is used to determine whether there is a correlation between the variables and, if so, what kind of correlation exists. A correlation reflects the strength and/or direction of the relationship between two (or more) variables. The direction of a correlation can be either positive or negative.

3.2. Research Approach

The research approach that was employed in this study is the quantitative research method. Quantitative research is a method of empirical investigation that emphasizes the use of mathematical and statistical analysis to measure and quantify data. This approach is often used to study large populations and is characterized by the collection of numerical data through surveys, experiments, or other methods. The data is then analyzed using statistical techniques to identify patterns, relationships, and trends. The goal of quantitative research is to provide objective and reliable information that can be used to make informed decisions and draw valid conclusions about a given population or phenomenon. In this study, the researchers employed the quantitative approaches.

3.3. Data sources and collection tools

The researchers used primary sources of data to undertake the study. The source of primary data is 850 MSME operators. The researchers adopted a structured survey questionnaire to collect perceptions on factors affecting the MSME's Sustainable development in Africa.

3.4. Sampling Design

The total number of Micro, Small, and Medium Enterprises (MSMEs) in Africa is not a static figure and can vary over time. However, according to data from the African Development Bank (AfDB), as of 2017, there were approximately 44 million MSMEs in Africa. It is important to note that this number may have changed since then due to factors such as business growth, closures, and new registrations. Additionally, the number of MSMEs can vary across different countries and regions within Africa due to variations in economic development, business ecosystems, and regulatory environments. The sampling design of this research paper is shown in the following Table 1.

The sampling structure of this paper includes target population, sampling technique and sample size (see Table 1).

Table 1. Sampling design

Target Population	Sampling Method	Sample size
55.8 million MSMEs in Africa	The researchers purposively selected 1,080 MSMEs (54*20 each from 54 African countries)	1,080 MSMEs operators

Source: Africa MSME Pulse Survey Report (2023).

3.5. Data Analysis Methods

In addition to descriptive statistics and correlation analysis, the researchers employed an ordered probit regression model due to the categorical nature of data. The ordered probit regression model equation for analyzing the relationship between financial knowledge, financial skills, financial attitude, and the sustainable development of MSMEs can be represented as follows:

$$Y^* = \beta 0 + \beta 1X1 + \beta 2X2 + \beta 3X3 + \varepsilon$$

Where:

- Y^* represents the latent variable for the sustainable development of MSMEs.
- $\beta 0$ is the intercept term.
- X1 represents the independent variable for financial knowledge.
- X2 represents the independent variable for financial skills.
- X3 represents the independent variable for financial attitude.
- $\beta 1$, $\beta 2$, and $\beta 3$ are the coefficients for the respective independent variables.
- ε represents the error term.

The dependent variable Y^* is not directly observed but is instead categorized into ordered response categories (e.g., low, medium, high) based on the value of Y^*. The ordered probit regression model estimates the probabilities of each category, given the independent variables, using a probit link function.

4. Results

The analysis section of this research is based on 680 survey questionnaires collected from MSMEs operating in Africa. The researcher targeted to collect data from 1,080 MSME operators or owners but collected 680 survey questionnaires, which implied that the response rate was 63%.

4.1. Descriptive Statistics

Descriptive statistics is a branch of statistics that involves summarizing and describing data. It provides a way to organize, analyze, and present data in a meaningful and concise manner. Descriptive statistics include measures such as central tendency (mean, median, mode), measures of dispersion (range, variance, standard deviation), and measures of shape (skewness, kurtosis). These statistics help to understand the characteristics of a dataset, such as the average value, variability, and distribution. By using descriptive statistics, researchers and analysts can gain valuable insights and make informed decisions based on the data at hand. In this, the mean value of the variables was discussed in the following Table 2.

Table 2. Descriptive Statistics

Variables	N	Minimum	Maximum	Mean	Std. Deviation
Sustainable development of MSMEs	680	1.00	5.00	2.8235	1.18584
financial knowledge	680	1.00	5.00	2.9665	1.11361
financial skills	680	1.00	5.00	2.8706	1.28238
financial attitude	680	1.00	5.00	2.7706	1.20395

According to Table 2, Sustainable development of MSMEs (mean = 2.82): The mean value of 2.82 indicates the average level of sustainable development among the MSMEs in your dataset. This value suggests that, on average, the MSMEs in your sample are experiencing a moderate level of sustainable development. Financial knowledge (mean = 2.96): The mean value of 2.96 indicates the average level of financial knowledge among the MSME owners or managers in your dataset. This value suggests that, on average, the individuals have a relatively higher level of financial knowledge, which may positively contribute to their decision-making and financial management abilities. Financial skills (mean = 2.87): The mean value of 2.87 represents the average level of financial skills possessed by the MSME owners or managers in your dataset. This value suggests that, on average, individuals have a moderate level of financial skills, indicating their ability to effectively manage financial operations, allocate resources, and make informed financial decisions. Financial attitude (mean = 2.77): The mean value of 2.77 indicates the average level of financial attitude among the MSME owners or managers in your dataset. This value suggests that, on average, the individuals have a slightly lower level of positive financial attitude, which may affect their financial behaviors and decision-making processes. It is important to note that these interpretations are based solely on the mean values of the variables and do not consider other statistical measures, such as standard deviation or any potential relationships between the variables.

4.2. Correlation analysis

Correlation analysis is a statistical technique used in research to examine the relationship between two or more variables. It determines the strength and direction of the relationship by calculating the correlation coefficient, which ranges from -1 to +1. A positive correlation coefficient indicates a direct relationship, meaning that as one variable increases, the other variable also tends to increase. In contrast, a negative correlation coefficient signifies an inverse relationship, where as one variable increases, the other variable tends to decrease. Correlation analysis helps researchers understand the degree to which variables are related and can be used to make predictions or identify patterns in the data. However, it is important to note that correlation does not imply causation, meaning that even if two variables are strongly correlated, it does not necessarily mean that one variable causes the other to change. The correlation analysis is shown in the following Table 3.

Table 3. Correlations

Correlations among variables		Sustainable development of MSMEs	financial knowledge	financial skills	financial attitude
Sustainable development of MSMEs	Pearson Correlation	1	.626**	.306**	.496**
	Sig. (2-tailed)		.000	.000	.000
	N	680	680	680	680
financial knowledge	Pearson Correlation	.626**	1	.126**	.304**
	Sig. (2-tailed)	.000		.001	.000
	N	680	680	680	680
financial skills	Pearson Correlation	.306**	.126**	1	.172**
	Sig. (2-tailed)	.000	.001		.000
	N	680	680	680	680
financial attitude	Pearson Correlation	.496**	.304**	.172**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	680	680	680	680

***. Correlation is significant at the 0.01 level (2-tailed).*

Based on the correlation coefficients provided in Table 3, which indicate statistically significant positive correlations between the variables, here is the interpretation for each variable: Financial knowledge (correlation coefficient: +0.626): The correlation coefficient of +0.626 suggests a strong positive correlation between financial knowledge and the sustainable development of MSMEs. This indicates that higher levels of financial knowledge are associated with higher levels of sustainable development. It suggests that MSME owners or managers who possess more financial knowledge are more likely to experience greater sustainable development in their businesses. Financial skills (correlation coefficient: +0.306): The correlation coefficient of +0.306 indicates a moderate positive correlation between financial skills and the sustainable development of MSMEs. This suggests that higher levels of financial skills are associated with higher levels of sustainable development. It implies that MSME owners or managers with better financial skills are more likely to achieve greater sustainable development in their businesses. Financial attitude (correlation coefficient: +0.496): The correlation coefficient of +0.496 suggests a moderate positive correlation between financial attitude and the sustainable development of MSMEs. This indicates that a more positive financial attitude is associated with higher levels of sustainable development. It suggests that MSME owners or managers with a positive financial attitude, such as being proactive, optimistic, and adaptable, are more likely to experience greater sustainable development in their businesses. These interpretations imply that there is a positive relationship between financial knowledge, financial skills, financial attitude, and the sustainable development of MSMEs. However, please note that correlation does not imply causation, and additional analysis, such as regression modeling, would be needed to establish the causal relationship between these variables.

4.4. Regression Result

The ordered probit model is a statistical model used to analyze and predict outcomes that are ordered or ranked in nature. It is commonly used in social sciences and economics to understand and quantify the relationship between a set of explanatory variables and an ordered response variable. The model assumes that the underlying latent variable follows a standard normal distribution and uses a probit link function to estimate the probabilities of each outcome category. By estimating the model parameters, we can make predictions and draw insights about the factors influencing the ordered response variable.

Model fitting information

Model fitting information for the ordered probit model provides valuable insights into the goodness of fit and overall performance of the model. One commonly used measure is the pseudo-R-squared, which indicates the proportion of the outcome's variance explained by the model. A higher pseudo-R-squared value suggests a better fit, indicating that the independent variables included in the model are capturing a significant portion of the variation in the dependent variable. Additionally, assessing the significance of the model's coefficients through the likelihood ratio test or Wald test can provide further information on the overall fit and significance of the model. Overall, interpreting model fitting information for the ordered probit model helps to evaluate the model's ability to explain the observed variation in the ordered outcome variable and assess the significance of the included independent variables. In this study, the researcher considered (Nagelkerke=0.558) for model fitting information in the following Table 4. The value of Nagelkerke=0.558 indicated that three independent variables, such as financial knowledge, financial skills, and financial attitudes, jointly explained 55.8% variation in the sustainable development of MSMEs in Africa.

Table 4. Regression result of ordered probit model

Pseudo R-Square **Cox and Snell=0.531** **Nagelkerke=0.558**								
		Estimate	**Std. Error**	**Wald**	**df**	**Sig.**	**95% Confidence Interval**	
							Lower Bound	**Upper Bound**
Constant	[SDMSME = 3.44]	2.400	.178	181.104	1	.000	2.050	2.749
Location	Financial Knowledge	.726	.046	253.288	1	.000	.637	.816
	Financial Skills	.255	.034	55.338	1	.000	.188	.322
	Financial Attitude	.413	.039	112.218	1	.000	.337	.490

Link function: Probit regression analysis

Fitted model

$$\text{MSMEs sustainable development} = 3.44\text{constant} + 0.726 * \text{financial knowledge} + 0.255 * \text{financial skills} + 0.413 * \text{financial knowledge} + \text{Error} \quad (2)$$

In the regression equation model provided in Table 4, the coefficients for each independent variable represent the estimated impact or contribution of that variable on the sustainable development of MSMEs. Here is the interpretation of the regression coefficients: Financial knowledge (0.726): The coefficient of 0.726 for financial knowledge suggests that, on average, a one-unit increase in financial knowledge is associated with a 0.726-unit increase in the sustainable development of MSMEs, holding other variables constant. This indicates that higher levels of financial knowledge among MSME owners or managers have a positive impact on the sustainable development of their businesses. Financial skills (0.255): The coefficient of 0.255 for financial skills indicates that, on average, a one-unit increase in financial skills is associated with a 0.255-unit increase in the sustainable development of MSMEs, holding other variables constant. This suggests that higher levels of financial skills, such as financial management, budgeting, or forecasting abilities, contribute positively to the sustainable development of MSMEs. Financial attitude (0.413): The coefficient of 0.413 for financial attitude suggests that, on average, a one-unit increase in financial attitude is associated with a 0.413-unit increase in the sustainable development of MSMEs, holding other variables constant. This indicates that a more positive financial attitude, characterized by factors such as financial discipline, risk-taking propensity, and a growth mindset, has a positive impact on the sustainable development of MSMEs.

4. Discussion

Based on the regression equation provided, it appears that three variables are being examined: financial knowledge, financial skills, and financial knowledge and their relationship with MSMEs' sustainable development. The researchers discussed the potential implications of each variable based on empirical evidence and theories of financial literacy. The researcher accepted all hypotheses because all variables are statistically significant at a 5% level of significance and positively contributed to MSMEs' sustainable development. Financial knowledge: The positive coefficient (0.726) suggests that an increase in financial knowledge has a positive effect on MSMEs' sustainable development. This finding aligns with previous research that has established a positive relationship between financial literacy and business performance (Aduda & Ochieng, 2019). A higher level of financial knowledge enables entrepreneurs to make better financial decisions, manage resources effectively, and navigate financial challenges more successfully. Financial skills: The coefficient of 0.255 indicates that financial skills also have a positive impact on MSMEs' sustainable development. This finding is consistent with the notion that possessing practical financial skills, such as budgeting, cash flow management, and financial analysis, can enhance the financial performance of small businesses (Buchdadi et al., 2020). Entrepreneurs with strong financial skills are better equipped to handle financial tasks and make informed financial decisions. Financial attitude: Assuming the third variable is a financial attitude, the coefficient of 0.413 suggests that experience in dealing with financial matters is positively associated with MSMEs' sustainable development. This finding is supported by the notion that hands-on experience in managing the financial aspects of a business leads to improved financial outcomes (Mandell, 2008). Entrepreneurs who have accumulated financial experience are likely to be more adept at identifying and responding to financial challenges, resulting in better business performance. Overall, the regression results indicate that financial knowledge, financial skills, and financial attitude have statistically significant effects on MSMEs' sustainable development. These findings are consistent with empirical evidence and theories of financial literacy, which highlight the importance of financial knowledge, skills, and experience in driving business success.

5. Conclusion

Financial literacy plays a crucial role in the sustainable development of micro, small-scale and medium-sized businesses in Africa. When business owners/operators/ possess a strong understanding of financial concepts, such as budgeting, cash flow management, and investment decisions, they are better equipped to make informed and strategic choices. Financial literacy enables small business owners to effectively manage their resources, identify growth opportunities, and navigate through economic challenges. Additionally, it empowers them to interpret financial statements, assess profitability, and make sound financial decisions that drive long-term success. By improving financial literacy among small-scale business owners, we can enhance their ability to thrive in a competitive marketplace and contribute to economic growth. Accordingly, this study has shown a clear understanding of the effect of financial literacy on the MSME's sustainable development. Particularly, the findings of this research demonstrated that financial knowledge, behavior, and attitude have positive and statistically significant effects on the sustainable development of MSMEs in Africa. Hence, the researcher forwarded the possible recommendations for MSMEs owners operating in Africa and government bodies supporting the sustainability of MSMEs based on research findings concluded from hypotheses one up to three. Firstly, the finding of research hypothesis one proved that financial knowledge has a statistically significant and positive influence on the sustainable development of MSMEs in Africa.

Improving the financial knowledge of sustainable development of MSMEs in Africa.is crucial for the growth and sustainability of MSMEs. To enhance financial literacy among SME owners, several strategies can be implemented. Firstly, organizing workshops and training sessions specifically tailored to address the financial challenges faced by SMEs can be highly effective. These sessions can cover topics such as basic accounting principles, financial management techniques, and understanding financial statements. Secondly, establishing partnerships between local government bodies, financial institutions, and business associations can facilitate access to financial resources and expertise. These collaborations can provide SMEs with mentorship programs, financial counseling, and access to affordable credit options. Additionally, developing user-friendly online resources and mobile applications that provide SME owners with easy access to financial tools and information can be beneficial. By implementing these strategies, SMEs in Africa can enhance their financial knowledge, make informed decisions, and ultimately improve their overall performance and competitiveness.

Secondly, the finding of this study related to the second hypothesis was that financial skills have a statistically significant and positive influence on the sustainable development of MSMEs in Africa. Hence, MSMEs owners and concerned government bodies improve the financial skills of MSMEs. To improve the financial skills of MSMEs in Africa, several strategies can be implemented. Firstly, organizing financial literacy workshops and training programs specifically tailored to the needs of MSMEs can enhance their understanding of financial concepts and practices. These workshops can cover topics such as budgeting, record-keeping, cash flow management, and investment strategies. Secondly, establishing partnerships between financial institutions, government agencies, and business support organizations can provide MSMEs with access to financial resources, mentorship, and advisory services. This collaboration can help SMEs develop sound financial strategies and make informed decisions. Additionally, the MSME supporting agencies work on implementing incentives or rewards programs that encourage MSMEs to adopt positive financial behaviors, such as timely loan repayments and responsible financial management, which can further promote a culture of financial discipline among business owners. By implementing these measures, the financial behavior of sustainable development of MSMEs in Africa can be improved, leading to their long-term sustainability and growth.

Last but not least, the finding of this study related to the third hypothesis was that financial attitude has a statistically significant and positive influence on sustainable development of MSMEs in Africa. So, MSMEs owners or managers, as well as government agencies, should pay attention to enhancing the positive financial attitude of MSMEs. Improving the financial attitude of sustainable development of MSMEs in Africa. Firstly, fostering a culture of financial responsibility and accountability among SME owners and managers is crucial. This can be achieved through targeted training and workshops that emphasize the importance of financial planning, budgeting, and tracking expenses. Secondly, promoting financial transparency and encouraging MSMEs to maintain accurate and up-to-date financial records can help in identifying areas for improvement and making informed decisions. Thirdly, providing access to financial advisors or consultants who can offer guidance on financial matters can be valuable for SMEs. These advisors can assist MSMEs in developing financial strategies, understanding financial risks, and exploring funding options. Furthermore, creating networking opportunities and platforms for MSMEs to share experiences and best practices can foster a positive financial attitude by promoting collaboration and learning from successful peers. By implementing these measures, the sustainable development of MSMEs in Africa can develop a more positive financial attitude, leading to increased financial stability and performance.

List of Abbreviations

- **MSMEs:** Micro, Small Scale and Medium Enterprises
- **SDGs:** Sustainable Development Goals

Declarations

Availability of data and materials

The data is included in the manuscript.

Competing interests

The authors declare that there are no competing interests.

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Ethics approval and consent to participate

Not applicable since this research did not involve human subjects.

Consent for publication

Not applicable.

Author's Contributions

The authors have carried out all the works of the study.

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