

Effect of Microfinance Services on the Growth of Micro, Small and Medium Enterprises in Plateau State, Nigeria: Moderating Role of Financial Literacy

¹Shittu Ibrahim Oladipupo., ²Michael Musa Pam

¹Department of Accounting and Finance Abubakar Tafawa Balewa University, Bauchi

²First Bank of Nigeria Ltd

DOI: <https://doi.org/10.51244/IJRSI.2025.120700156>

Received: 05 July 2025; Accepted: 11 July 2025; Published: 13 August 2025

ABSTRACT

The study examined the moderating role of Financial Literacy on the effect Microfinance services on the growth of Micro, Small and Medium Enterprises in Plateau State, Nigeria. Survey research designed was adopted by distributing 385 questionnaires to MSMEs owners in Jos North LGA of Plateau State. 346 of the distributed questionnaires were retrieved and subjected to analysis using multiple regression. The study found that Microfinance loan has a positive and significant effect on MSMEs performance and that financial literacy significantly affects MSMEs growth as entrepreneurs with financial literacy skills demonstrated better record-keeping, improved financial planning, and increased profitability. It was recommended that savings culture should be encourage by offering incentivized savings schemes and digital banking options tailored to MSMEs owners. Ensure that loan funds are strictly used for business growth and not for personal expenses and financial literacy programs should be encouraged and financial management courses should be incorporated into loan disbursement processes.

INTRODUCTION

Micro, Small and Medium Enterprises (MSMEs) are crucial drivers of economic development, especially in emerging economies like Nigeria. MSMEs provide employment, enhance income distribution, contribute to GDP growth, and foster innovation (Ogunleye & Akinlo, 2020). In Nigeria, MSMEs constitute approximately 96% of businesses and contribute over 48% to national GDP, according to SMEDAN (2021). However, despite their importance, the growth of MSMEs in Nigeria is often hindered by financial constraints, poor managerial skills, and inadequate market access (Ibrahim & Yusuf, 2020).

Microfinance services, which include loans, savings, and training, have been identified as essential in supporting MSMEs growth by providing financial inclusion and capacity-building opportunities (Baba & Audu, 2021). Microfinance institutions (MFIs) target individuals and enterprises that are typically excluded from traditional banking services due to lack of collateral or limited credit histories. The Central Bank of Nigeria (CBN) has recognized microfinance as a tool for poverty reduction and economic development and has implemented policies to promote MFIs across the country (Ogunwale & Adeola, 2019). However, the extent to which microfinance services contribute to the sustainable growth of MSMEs in Nigeria is still a subject of debate (Ogunleye & Akinlo, 2020).

Microfinance loans provide SEs with the capital needed for business expansion, equipment purchase, and working capital (Oladeji & Falola, 2021). Savings products offered by MFIs enable SEs to manage liquidity, create reserves for future investments, and smooth cash flow irregularities (Ibrahim & Yusuf, 2020). Lastly, training services enhance the managerial capabilities of SE owners, providing them with essential skills in financial management, marketing, and business planning (Ojo, 2018).

Despite these potential benefits, challenges persist in the relationship between microfinance services and MSMEs growth. Many MSMEs report difficulties in accessing microfinance loans due to high interest rates,

collateral requirements, and insufficient loan sizes (Adewale & Fashola, 2022). Furthermore, the level of business training provided by MFIs has been criticized as being too basic and not aligned with the specific needs of different sectors (Olatunji & Babalola, 2019). This study, therefore, seeks to explore the actual impact of microfinance services on MSMEs growth in Nigeria, with a focus on how loans, savings, and training services contribute to business expansion and sustainability. However, researchers have identified low level of financial literacy as a factor impeding the growth of MSMEs even if there is an access to microfinance services. Hence the need to examine the moderating role of Financial Literacy on the effect Microfinance services on the growth of Micro, Small and Medium Enterprises in Plateau State, Nigeria. The specific objectives are therefore to:

1. assess the impact of microfinance loans on MSMEs growth in Plateau State, Nigeria.
2. investigate the effect of microfinance savings products on MSMEs growth in Plateau State, Nigeria.
3. evaluate the impact of microfinance training services on MSMEs growth in Plateau State, Nigeria, and
4. examine the moderating effect of financial literacy on the relationship between microfinance services and on MSMEs growth in Plateau State, Nigeria.

LITERATURE REVIEW

Microfinance has been heralded as a powerful tool for poverty alleviation and economic development, particularly in developing nations. Its role in fostering financial inclusion has been critical, especially in countries like Nigeria where access to traditional financial services is limited for a significant proportion of the population. Microfinance services can be broadly classified into three key components: loans, savings, and training.

Microfinance Loans: Microfinance loans are small-scale credit facilities offered to individuals or small enterprises for productive purposes. These loans are designed to enable SEs to access the capital they need to start, expand, or maintain their businesses. The loan sizes are typically smaller than those provided by commercial banks, and the interest rates are often higher due to the increased risk associated with lending to low-income borrowers who have little or no collateral (Adewale & Fashola, 2022). The repayment schedules are usually flexible, and group lending models are often employed to minimize default rates.

Microfinance Savings: Savings products offered by MFIs allow SEs to safely deposit and accumulate funds over time. Savings accounts are critical for business owners, as they provide a buffer against financial shocks and enable SEs to plan for future investments. The ability to save also helps SEs smooth cash flow, ensuring that they can meet their day-to-day operational needs without relying solely on external borrowing (Ibrahim & Yusuf, 2020).

Microfinance Training: Training programs offered by MFIs aim to enhance the managerial and technical skills of SE owners. These programs often cover areas such as financial literacy, bookkeeping, marketing, and business planning. The underlying assumption is that improved skills and knowledge will lead to better business performance and, ultimately, the growth of SEs (Ojo, 2018).

While microfinance services are widely regarded as essential for promoting SE growth, their actual impact varies depending on factors such as loan accessibility, the quality of training provided, and the financial discipline of the enterprise owners. In Nigeria, despite the expansion of the microfinance sector, challenges such as high interest rates, lack of proper business advisory services, and limited loan sizes have been cited as barriers to the full realization of microfinance's potential to spur SE growth (Ibrahim & Yusuf, 2020).

The study is underpinned by Financial Intermediation Theory (FIT) and supported by the Human Capital Theory (HCT). The FIT posits that financial institutions, including microfinance institutions, act as intermediaries between savers and borrowers by efficiently channeling funds from surplus units (savers) to deficit units (borrowers) (Diamond, 1984). This process reduces transaction costs and information asymmetries, allowing borrowers, such as MSMEs, to access capital that they would otherwise not be able to obtain from traditional financial markets. Financial intermediaries, like MFIs, bridge the gap by assessing the creditworthiness of borrowers, monitoring loan usage, and enforcing repayment terms. For MSMEs,

microfinance institutions perform an essential intermediation role by making credit accessible to enterprises that lack collateral or a formal credit history. In Nigeria, where a large proportion of MSMEs operate in the informal sector, microfinance has been instrumental in reducing the barriers to financial access (Ogunwale & Adeola, 2019). By offering loans without the stringent requirements of commercial banks, MFIs enable SEs to finance business operations, invest in new equipment, and expand their market reach. The HCT at the same time underscores the importance of skill development in fostering business growth. In the context of MSMEs, the training provided by MFIs helps to build the managerial capacity of business owners, thus enhancing their ability to grow and sustain their enterprises over the long term (Ojo, 2018).

Ogundele and Babalola (2019) explored the relationship between microfinance loans and business sustainability in southwestern Nigeria and found a similar pattern of loan utilization leading to growth. However, they noted that the absence of proper financial literacy training often led to poor loan management by MSMEs owners, resulting in high default rates. The authors recommended that MFIs incorporate comprehensive financial training into their loan disbursement programs to ensure that SE owners have the requisite knowledge to manage credit effectively and sustain their businesses over the long term.

Baba and Audu (2021) conducted a comparative study between SEs that received microfinance loans and those that did not in the northern region of Nigeria. Their findings indicated that MSMEs with access to loans experienced an average growth rate of 45% in revenue over a three-year period, compared to a growth rate of only 12% for those without loan access. The study confirmed that microfinance loans are a crucial factor in enabling MSMEs to scale their operations, particularly in sectors such as retail and agriculture.

However, Adewale (2021) highlighted that while microfinance savings services are beneficial, many SEs in rural areas of Nigeria face difficulties in accessing formal savings products due to geographical barriers and lack of awareness. The study found that a significant proportion of SEs still rely on informal savings mechanisms, such as saving in cash at home or participating in informal savings groups. These informal methods, while accessible, often lack the security and interest-generating potential of formal savings products offered by MFIs.

In addition, Ibrahim and Yusuf (2020) found that MFIs in Nigeria often do not offer attractive interest rates on savings accounts, which discourages many MSMEs from actively participating in formal savings schemes. Their study recommended that MFIs develop more competitive savings products that offer higher returns on deposits to incentivize MSMEs to save regularly.

Yusuf and Adewale (2020) found that microfinance training programs contributed to the growth of SEs in northern Nigeria by enhancing the entrepreneurial skills of business owners. Their research revealed that training in financial literacy, business planning, and marketing helped MSMEs owners improve their ability to manage credit, reduce costs, and increase revenue. The study concluded that microfinance training is a critical determinant of MSMEs success, as it equips business owners with the knowledge and skills necessary to effectively utilize financial resources.

However, Ogundele (2021) argued that the impact of microfinance training on MSMEs performance varies depending on the quality and relevance of the training provided. His study found that some MFIs offer generic training programs that do not address the specific needs of individual MSMEs, limiting the effectiveness of the training. The study recommended that MFIs tailor their training programs to the unique challenges faced by different types of MSMEs, ensuring that the content is relevant and practical.

METHODOLOGY

This study adopts a survey research design which is ideal for gathering large amounts of data in a structured format. According to SMEDAN (2021), there are over 41 million MSMEs in Nigeria. However, this study focuses specifically on MSMEs that have utilized services from microfinance institutions (MFIs). Given the large and dispersed nature of MSMEs across Nigeria and specifically in Plateau State, the population for this study is considered infinite. The study targets small businesses within Jos North Local Government Area of Plateau State, which comprises all registered entrepreneurs who have accessed microfinance services. This

population is targeted because MSMEs rely on microfinance to support their growth due to limited access to formal bank credit. For an infinite population, the sample size is 384 as calculated using Cochran's (1963) formula:

$$n_o = (Z^2pq)/e^2$$

Where:

n_o = required sample size

Z = Z-value (1.96 for 95% confidence level)

p = estimated proportion of the population (0.5 used for maximum sample size)

$q = 1-p$ (1-0.5 = 0.5)

e = margin of error (0.05 for 5%)

Calculation Using 95% Confidence Level and 5% Margin of Error:

$$n_o = (1.96)^2 (0.5) (0.5)/(0.05)^2$$

$$Z^2 = 1.96 \times 1.96 = 3.8416$$

$$p \times q = 0.5 \times 0.5 = 0.25$$

$$e^2 = 0.05 \times 0.05 = 0.0025$$

$$n_o = (3.8416 \times 0.25)/0.0025$$

$$n_o = 0.9604/0.0025$$

$$n_o = 384.16 \quad \text{Approximately } 385.$$

RESULTS AND DISCUSSIONS

Response Rate

Out of 385 questionnaires distributed to small enterprise owners in Jos North Local Government Area of Plateau State, 346 were properly completed and returned, representing a response rate of 90.1%. This high response rate enhances the reliability and generalizability of the study findings and exceeds the minimum threshold recommended for social science research.

Demographic Characteristics of Respondents

Table 1: Summary of Responses on Study Variables (n=346)

| Variable | Mean | Std. Dev | Min | Max |
|-------------------------|------|----------|-----|-----|
| Microfinance Loans | 3.52 | 1.12 | 1 | 5 |
| Microfinance Savings | 2.89 | 1.21 | 1 | 5 |
| Business Training | 3.01 | 1.14 | 1 | 5 |
| Financial Literacy | 3.24 | 1.08 | 1 | 5 |
| Small Enterprise Growth | 2.98 | 1.17 | 1 | 5 |

According to Table 1, microfinance loans had the highest mean score of 3.52, indicating that most respondents find access to loans beneficial for business growth. This suggests that small enterprise owners rely heavily on

loans for expansion, inventory purchase, and operational needs. However, the standard deviation of 1.12 implies some variation in experiences, likely due to factors such as high-interest rates or repayment challenges.

Microfinance savings recorded the lowest mean score of 2.89, suggesting that respondents are less reliant on savings services. Many small enterprise owners may struggle with liquidity, making it difficult to save consistently. The relatively high standard deviation of 1.21 indicates that some respondents actively engage in saving, while others may not due to financial constraints.

Financial literacy (introduced as a moderator variable) had a mean score of 3.24, showing a moderate level of financial awareness among respondents. While many understand basic budgeting and record-keeping, gaps still exist, which could affect effective business management and the utilization of microfinance services.

Business training had a mean of 3.01, indicating moderate participation in business development programs. Some respondents have benefited from training, but accessibility remains a challenge.

Table 2: Gender Distribution of Respondents (n=346)

| Gender | Frequency | Percentage (%) |
|--------|-----------|----------------|
| Male | 201 | 58.1% |
| Female | 145 | 41.9% |
| Total | 346 | 100.0% |

The table presents the gender distribution of respondents, showing that 201 participants (58.1%) were male, while 145 participants (41.9%) were female. This indicates that male entrepreneurs slightly outnumber female entrepreneurs in the study sample. The higher representation of male respondents may reflect broader trends in business ownership, where men often have greater access to financial resources and entrepreneurial opportunities. However, the presence of a significant number of female respondents (41.9%) suggests that women are also actively engaged in small enterprise activities, contributing to economic growth.

Table 3: Age Distribution of Respondents (n=346)

| Age Group | Frequency | Percentage (%) |
|---------------|-----------|----------------|
| 18 – 25 years | 79 | 22.8% |
| 26 – 35 years | 148 | 42.8% |
| 36 – 45 years | 76 | 22.0% |
| 46+ years | 43 | 12.4% |
| Total | 346 | 100.0% |

The table presents the age distribution of respondents, highlighting the dominant age groups involved in small enterprise activities. The largest proportion of respondents (42.8%) falls within the 26–35 years category, indicating that most small enterprise owners in the study area are young adults in their prime working years. This aligns with studies suggesting that individuals in this age range are more likely to engage in entrepreneurial activities due to their energy, adaptability, and willingness to take risks.

The 18–25 years category comprises 22.8% of the respondents, reflecting a significant number of young entrepreneurs who may have recently entered the business sector, possibly due to unemployment or the desire for financial independence. The 36–45 years age group accounts for 22.0%, suggesting that middle-aged individuals are also actively involved in running small enterprises, likely leveraging their experience and financial stability.

Table 4: Business Characteristics of Respondents (n=346)

| Business Attribute | Frequency | Percentage (%) |
|--------------------|-----------|----------------|
| Business Age | | |
| Less than 1 year | 65 | 18.8% |
| 1 – 3 years | 126 | 36.4% |

| | | |
|----------------------|-----|-------|
| 4 – 6 years | 101 | 29.2% |
| 7+ years | 54 | 15.6% |
| Industry Type | | |
| Retail | 144 | 41.6% |
| Manufacturing | 79 | 22.8% |
| Agriculture | 54 | 15.6% |
| Services | 69 | 19.9% |
| Business Size | | |
| Micro (1-5) | 184 | 53.2% |
| Small (6-20) | 119 | 34.4% |
| Medium (21-50) | 43 | 12.4% |

In terms of business age, the largest proportion of respondents (36.4%) operates businesses that have been in existence for 1–3 years, indicating that many enterprises are still in their early stages of development. This is followed by 29.2% of businesses that have been running for 4–6 years, suggesting that a significant number of enterprises have gained some level of stability.

The majority of respondents (41.6%) are engaged in retail businesses, suggesting that trading activities dominate small enterprise operations in the study area. Manufacturing businesses account for 22.8%, highlighting the presence of small-scale production units. The services sector accounts for 19.9%, while agriculture-based businesses make up 15.6%.

Business size distribution shows that micro-enterprises (1–5 employees) constitute the largest category, representing 53.2% of respondents. Small enterprises (6–20 employees) account for 34.4%, while medium enterprises (21–50 employees) represent 12.4% of the sample.

Table 5: Financial Literacy Levels of Respondents (n=346)

| Financial Literacy Level | Frequency | Percentage (%) |
|--------------------------|------------|----------------|
| Very Low (1.0-1.8) | 32 | 9.2% |
| Low (1.9-2.6) | 87 | 25.1% |
| Moderate (2.7-3.4) | 156 | 45.1% |
| High (3.5-4.2) | 58 | 16.8% |
| Very High (4.3-5.0) | 13 | 3.8% |
| Total | 346 | 100.0% |

Table 5 shows the distribution of financial literacy levels among respondents. The majority of respondents (45.1%) have moderate financial literacy levels, followed by 25.1% with low financial literacy. Only 20.6% of respondents have high to very high financial literacy levels, indicating significant room for improvement in financial education among small enterprise owners.

Table 6: Descriptive Statistics of Study Variables (n=346)

| Variable | Mean | Std. Deviation | Skewness | Kurtosis |
|-------------------------|------|----------------|----------|----------|
| Microfinance Loans | 3.52 | 1.28 | -0.342 | -0.789 |
| Microfinance Savings | 2.89 | 1.34 | 0.156 | -0.923 |
| Business Training | 3.01 | 1.37 | -0.098 | -1.012 |
| Financial Literacy | 3.24 | 1.21 | -0.201 | -0.654 |
| Small Enterprise Growth | 2.98 | 1.29 | 0.087 | -0.845 |

Microfinance loans recorded the highest mean score of 3.52, indicating that respondents generally perceive access to microfinance loans as beneficial for their businesses. The skewness value of -0.342 suggests a slightly left-skewed distribution, while the kurtosis value of -0.789 indicates a platykurtic distribution (flatter than normal).

Financial literacy had a mean score of 3.24 with a standard deviation of 1.21, suggesting moderate levels of financial knowledge among respondents. The negative skewness (-0.201) indicates that more respondents scored above the mean than below it.

Small enterprise growth recorded a mean of 2.98, suggesting that while microfinance services contribute to business expansion, their overall impact is moderate. All variables show acceptable levels of skewness and kurtosis (within ± 2.0), indicating approximate normal distribution suitable for parametric statistical analysis.

Hierarchical Moderated Regression Analysis

To test the effect of microfinance services on small enterprise growth and the moderating role of financial literacy, hierarchical moderated regression analysis is conducted.

Table 8: Hierarchical Regression Results (n=346)

| Variables | Model 1 (Direct Effects) | Model 2 (Moderation Effects) |
|----------------------|--------------------------|------------------------------|
| | β | t |
| Constant | 0.845 | 2.341 |
| Microfinance Loans | 0.324** | 4.856 |
| Microfinance Savings | 0.187* | 2.634 |
| Business Training | 0.256** | 3.587 |
| Financial Literacy | - | - |
| ML \times FL | - | - |
| MS \times FL | - | - |
| BT \times FL | - | - |

Table 9: Model Summary Statistics

| Model | R | R ² | Adjusted R ² | R ² Change | F Change | Sig. F Change |
|---------|-------|----------------|-------------------------|-----------------------|----------|---------------|
| Model 1 | 0.585 | 0.342 | 0.336 | 0.342 | 59.42 | 0.000 |
| Model 2 | 0.649 | 0.421 | 0.409 | 0.079 | 11.84 | 0.000 |

Model 1 explains 34.2% of the variance in small enterprise growth ($R^2 = 0.342$, $F = 59.42$, $p < 0.001$). The addition of financial literacy as a moderator in Model 2 significantly improves the model, explaining 42.1% of the variance ($R^2 = 0.421$, F change = 11.84, $p < 0.001$). The R^2 change of 0.079 indicates that the moderating effect of financial literacy accounts for an additional 7.9% of the variance in small enterprise growth.

Table 10: ANOVA Results

| Model | Source | SS | df | MS | F | Sig. |
|---------|------------|--------|-----|-------|-------|-------|
| Model 1 | Regression | 234.56 | 3 | 78.19 | 59.42 | 0.000 |
| | Residual | 450.87 | 342 | 1.32 | | |
| | Total | 685.43 | 345 | | | |
| Model 2 | Regression | 288.47 | 7 | 41.21 | 41.87 | 0.000 |
| | Residual | 396.96 | 338 | 1.17 | | |
| | Total | 685.43 | 345 | | | |

Both models are statistically significant ($p < 0.001$), with Model 2 showing improved explanatory power due to the inclusion of moderating effects.

Table 11: Multicollinearity Test (VIF) - Model 2

| Variable | VIF | Tolerance |
|----------------------|------|-----------|
| Microfinance Loans | 1.67 | 0.599 |
| Microfinance Savings | 1.54 | 0.649 |

| | | |
|--------------------|------|-------|
| Business Training | 1.89 | 0.529 |
| Financial Literacy | 1.78 | 0.562 |
| ML \times FL | 2.34 | 0.427 |
| MS \times FL | 2.12 | 0.471 |
| BT \times FL | 2.45 | 0.408 |

All VIF values are below 3.0, and tolerance values are above 0.40, indicating that multicollinearity is not a concern in the moderated regression model.

Test of Hypotheses

H₀₁: Microfinance loans have no significant effect on small enterprise growth.

| Variable | Coefficient (β) | Std. Error | t-Statistic | p-Value |
|--------------------|-------------------------|------------|-------------|---------|
| Microfinance Loans | 0.324 | 0.067 | 4.856 | 0.000 |

The coefficient (β) of 0.324 suggests a significant positive relationship between microfinance loans and small enterprise growth. The t-statistic of 4.856 and p-value of 0.000 ($p < 0.001$) indicate that this relationship is highly statistically significant.

Decision: Reject H₀₁

Conclusion: Microfinance loans have a significant positive effect on small enterprise growth.

H₀₂: Microfinance savings have no significant effect on small enterprise growth.

| Variable | Coefficient (β) | Std. Error | t-Statistic | p-Value |
|----------------------|-------------------------|------------|-------------|---------|
| Microfinance Savings | 0.187 | 0.071 | 2.634 | 0.009 |

The coefficient (β) of 0.187 suggests a positive relationship between microfinance savings and small enterprise growth. The t-statistic of 2.634 and p-value of 0.009 ($p < 0.01$) indicate that this relationship is statistically significant.

Decision: Reject H₀₂

Conclusion: Microfinance savings have a significant positive effect on small enterprise growth.

H₀₃: Business training has no significant effect on small enterprise growth.

| Variable | Coefficient (β) | Std. Error | t-Statistic | p-Value |
|-------------------|-------------------------|------------|-------------|---------|
| Business Training | 0.256 | 0.071 | 3.587 | 0.000 |

The coefficient (β) of 0.256 suggests a positive relationship between business training and small enterprise growth. The t-statistic of 3.587 and p-value of 0.000 ($p < 0.001$) indicate that this relationship is highly statistically significant.

Decision: Reject H₀₃

Conclusion: Business training has a significant positive effect on small enterprise growth.

H₀₄: Financial literacy does not significantly moderate the relationship between microfinance services and small enterprise growth.

Table 12: Moderation Effects Summary

| Interaction Term | Coefficient (β) | Std. Error | t-Statistic | p-Value |
|-------------------------------|-------------------------|------------|-------------|---------|
| ML \times FL | 0.158 | 0.068 | 2.312 | 0.021 |
| MS \times FL | 0.143 | 0.072 | 1.976 | 0.049 |
| BT \times FL | 0.189 | 0.069 | 2.734 | 0.007 |
| Overall R ² Change | 0.079 | - | - | 0.000 |

All three interaction terms are statistically significant ($p < 0.05$), and the overall R² change is highly significant ($p < 0.001$), indicating that financial literacy significantly moderates the relationships between microfinance services and small enterprise growth.

Decision: Reject H₀₄

Conclusion: Financial literacy significantly moderates the relationship between microfinance services and small enterprise growth.

Simple Slopes Analysis

To better understand the moderation effects, simple slopes analysis is conducted at different levels of financial literacy (low: -1SD, moderate: Mean, high: +1SD).

Table 13: Simple Slopes Analysis Results

| Microfinance Service | Financial Literacy Level | Simple Slope | t-value | p-value |
|----------------------|--------------------------|--------------|---------|---------|
| Microfinance Loans | Low FL (-1SD) | 0.140 | 1.987 | 0.048 |
| | Moderate FL (Mean) | 0.298 | 4.521 | 0.000 |
| | High FL (+1SD) | 0.456 | 5.234 | 0.000 |
| Microfinance Savings | Low FL (-1SD) | 0.026 | 0.341 | 0.733 |
| | Moderate FL (Mean) | 0.169 | 2.487 | 0.013 |
| | High FL (+1SD) | 0.312 | 3.876 | 0.000 |
| Business Training | Low FL (-1SD) | 0.102 | 1.345 | 0.180 |
| | Moderate FL (Mean) | 0.231 | 3.356 | 0.001 |
| | High FL (+1SD) | 0.420 | 4.987 | 0.000 |

The simple slopes analysis reveals that:

- Microfinance Loans:** The positive effect is significant at all levels of financial literacy but becomes stronger as financial literacy increases.
- Microfinance Savings:** The effect is only significant at moderate and high levels of financial literacy, suggesting that financial literacy is crucial for maximizing the benefits of savings programs.
- Business Training:** The effect is significant only at moderate and high levels of financial literacy, indicating that financially literate entrepreneurs are better able to apply training knowledge.

DISCUSSION OF FINDINGS

Direct Effects of Microfinance Services

The study found significant positive effects of all three microfinance services on small enterprise growth.

- Microfinance Loans ($\beta = 0.324$, $p < 0.001$): This finding confirms that access to credit enables entrepreneurs to invest in business expansion, inventory, and operational improvements. The strong effect size suggests that loans are the most impactful microfinance service.
- Microfinance Savings ($\beta = 0.187$, $p = 0.009$): Unlike previous studies with smaller samples, this analysis reveals a significant effect of savings on business growth, supporting the financial stability theory.

3. Business Training ($\beta = 0.256$, $p < 0.001$): The significant effect confirms that capacity building enhances entrepreneurial skills and business performance.

Moderating Effect of Financial Literacy

1. Overall Moderation: The addition of financial literacy interactions increased the model's explanatory power by 7.9% ($\Delta R^2 = 0.079$, $p < 0.001$).
2. Differential Moderation: Financial literacy has the strongest moderating effect on business training ($\beta = 0.189$, $p = 0.007$), followed by microfinance loans ($\beta = 0.158$, $p = 0.021$) and savings ($\beta = 0.143$, $p = 0.049$).
3. Practical Significance: Simple slopes analysis shows that microfinance services are most effective for entrepreneurs with higher financial literacy, suggesting that financial education should be integrated with microfinance programs.

CONCLUSION AND RECOMMENDATIONS

This study examined the effect of microfinance services on the growth of MSMEs in Jos North, Plateau State, Nigeria. The specific objectives focused on the impact of microfinance loans, microfinance savings, financial literacy, and business training on small enterprise growth. The study employed survey research design, using structured questionnaires to collect data from 96 small enterprise owners who accessed microfinance services. The data were analyzed using descriptive statistics and regression analysis to test the hypotheses. The key findings include:

1. Microfinance loans significantly impact small enterprise growth. The analysis showed a positive and significant relationship between loans and business expansion, confirming that access to microfinance credit improves business performance. However, loan repayment challenges and high-interest rates remain concerns for entrepreneurs.
2. Microfinance savings do not significantly impact small enterprise growth. Despite the assumption that savings improve financial stability, the study found that most small business owners in the study area do not actively utilize micro-savings schemes, which may explain the lack of impact.
3. Business training does not significantly impact small enterprise growth. The study found that most microfinance training programs are not tailored to specific business needs, reducing their practical impact on entrepreneurial performance.
4. Financial literacy significantly affects small enterprise growth. Entrepreneurs with financial literacy skills demonstrated better record-keeping, improved financial planning, and increased profitability, reinforcing previous findings on the importance of financial education.

The following are the recommendations of the study:

1. Introduce flexible loan repayment plans to accommodate businesses with irregular cash flow patterns.
2. Encourage a savings culture by offering incentivized savings schemes and digital banking options tailored to small business owners.
3. Enhance financial literacy programs by integrating financial management courses into loan disbursement processes.
4. Revamp business training programs to be industry-specific and practical, ensuring that small business owners gain applicable skills.
5. Increase participation in financial literacy programs to improve decision-making and long-term business sustainability.
6. Adopt structured savings habits by setting aside portions of profits to create business resilience against financial shocks.
7. Utilize microfinance services effectively by ensuring that loan funds are strictly used for business growth and not for personal expenses.

REFERENCES

1. Adewale, O. (2021). Rural access to microfinance services in Nigeria: Geographic and social barriers. *Rural Development Quarterly*, 9(1), 23-38.
2. Adewale, T., & Fashola, B. (2022). Interest rates and microfinance accessibility in Nigeria: A barrier analysis. *West African Journal of Finance*, 16(2), 67-84.
3. Baba, M., & Audu, S. (2021). Microfinance services and small enterprise growth in northern Nigeria: A comparative analysis. *International Journal of Entrepreneurship and Small Business*, 12(4), 201-218.
4. Diamond, D. W. (1984). Financial intermediation and delegated monitoring. *Review of Economic Studies*, 51(3), 393-414.
5. Ibrahim, S., & Yusuf, A. (2020). Financial constraints and small enterprise growth in Nigeria: The microfinance alternative. *Nigerian Journal of Economic Development*, 13(3), 112-128.
6. Ogundele, K., & Babalola, S. (2019). Loan management and business sustainability in southwestern Nigeria. *Business Management Review*, 11(4), 156-173.
7. Ogunleye, E., & Akinlo, T. (2020). Small enterprises and economic development in Nigeria: Contemporary challenges. *Economic Policy Review*, 14(1), 78-95.
8. Ogunwale, S., & Adeola, R. (2019). Central Bank policies and microfinance development in Nigeria. *Banking and Finance Quarterly*, 7(2), 234-251.
9. Ojo, O. (2018). The impact of microfinance institutions on the development of small and medium enterprises in Nigeria. *International Journal of Small Business Research*, 6(2), 32-48.
10. Oladeji, P., & Falola, M. (2021). Microfinance loans and business expansion in Nigeria: Evidence from small enterprises. *Entrepreneurship and Development Journal*, 19(3), 89-106.
11. Olatunji, A., & Babalola, F. (2019). Training quality and small enterprise performance in Lagos region. *Management and Training Review*, 12(1), 67-84.
12. SMEDAN. (2021). *National survey of micro, small, and medium enterprises*. SMEDAN Press.
13. Yusuf, A., & Adewale, B. (2020). Entrepreneurial skills development through microfinance training in northern Nigeria. *Skills Development Review*, 15(3), 178 -195.