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Financial Literacy and Business Growth in Women-Led Enterprises: A Study of Koabiga Cooperative in Gasabo Districts, Rwanda

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Abstract
The business growth is significantly influenced by women's financial attitudes, with positive financial orientations correlating with increased revenue generation and sustainable business scaling. The purpose of the study was to investigate the influence of financial literacy on business growth among women-led enterprises in Koabiga Cooperative in Gasabo District, Rwanda. The study was guided by the specific objectives, namely, to assess the influence of women's financial attitude on business growth, establish the influence of financial skills on business growth among women-led enterprises, and identify the influence of financial knowledge on business growth among women-led enterprises in Koabiga Cooperative in Gasabo District. This study employed a cross-sectional research design combining both quantitative and qualitative research approaches. The target population was 100, and using the Krejcie and Morgan table, a sample size of 80 businesswomen cooperative members was determined. Data was collected using the questionnaire survey and interview guide method. Results on model summary demonstrates a strong positive relationship between financial literacy and business growth among women cooperatives in Rwanda. The R Square of 0.924 reveals that 92.4% of business growth variance is explained by Financial Literacy (Financial Knowledge, Financial Skills, Financial Attitude), suggesting robust predictive power. The adjusted R Square of 0.854 accounts for model complexity, maintaining strong explanatory capacity. The results revealed a strong positive correlation between financial attitude and business growth ($r = 0.763$, $p < 0.01$). Financial skills demonstrated the strongest correlation with business growth among all variables ($r = 0.900$, $p < 0.01$). Financial knowledge proved the correlation with business growth ($r = 0.746$, $p < 0.01$). Overall, the findings highlight the critical role of financial literacy, particularly skills, in enhancing business growth among women-led enterprises in Koabiga Cooperative in Gasabo District. The government and cooperative development agencies should implement programs that cultivate positive financial attitudes among women entrepreneurs.

Keywords: Financial Attitude, Financial Skills, Financial Knowledge And Business Growth

INTRODUCTION

Business growth among women-led enterprises globally demonstrates significant potential, with women-owned businesses generating $1.8 trillion in revenue annually, though representing only 4.3% of total private sector revenue [1]. In this study, the dependent variable was business growth, measured through revenue generation and market expansion and the dependent variable was the financial literacy which was measured in terms of financial attitude, planning skills, and financial wellbeing knowledge [2]. Wordwide, 37.1% of women entrepreneurs have built strong executive leadership teams and maximized growth strategies to prepare for business expansion [3]. However, 44% of women-owned businesses operate in low-growth industries, suggesting untapped potential for enhanced business performance through improved financial capabilities [4]. Global evidence demonstrates that women entrepreneurs aged 18-34 show greater proactivity in growth planning, with 31.9% implementing strategic growth initiatives that directly correlate with revenue enhancement and market penetration success [5]. In African economies, business growth among women-led enterprises reflects unique continental challenges and opportunities for revenue generation and market expansion. Over half of women in developing countries see entrepreneurship as a path to a better future; fully double the rate in high-income countries, indicating substantial growth potential within African markets [6]. Women's financial attitudes significantly influence business-scaling decisions, with those possessing enhanced financial planning capabilities achieving superior revenue growth rates compared to their counterparts lacking financial literacy skills [7]. Continental analysis reveals that market expansion strategies among African women entrepreneurs are predominantly constrained by limited financial wellbeing knowledge, affecting their capacity to access growth capital and expand operations effectively [8]. The relationship between financial literacy and business growth demonstrates that African women entrepreneurs with stronger financial attitudes show measurable improvements in revenue generation, particularly in service and manufacturing sectors [9]. Capacity building initiatives focusing on inclusive sustainable development have proven essential for enhancing business management and entrepreneurship outcomes across African economies [10].

In Sub-Saharan African (SSA), business growth rates vary significantly with financial planning skills serving as critical determinants of sustainable revenue enhancement [11]. Women entrepreneurs in SSA demonstrate that financial wellbeing knowledge directly correlates with successful market expansion strategies, enabling them to identify and capitalize on growth opportunities within regional markets [12]. The region's business growth dynamics show that financial attitudes influence investment decisions, with women possessing positive financial orientations achieving average annualized growth rates exceeding regional benchmarks [13]. SSA women-led enterprises demonstrate remarkable resilience in revenue generation despite facing structural challenges, with those receiving financial literacy training showing improved business performance outcomes [14]. Market expansion capabilities among SSA women entrepreneurs are significantly enhanced when financial literacy programs address practical business management skills alongside theoretical financial knowledge [15]. East African countries present compelling evidence of business growth potential among women-led enterprises, with revenue generation and market expansion directly linked to financial literacy capabilities [16]. The business growth is significantly influenced by women's financial attitudes, with positive financial orientations correlating with increased revenue generation and sustainable business scaling [17]. Market expansion strategies in East African women-led enterprises show measurable improvements when entrepreneurs possess adequate financial wellbeing knowledge, enabling them to navigate regional trade opportunities effectively [18]. Business growth rates among East African women entrepreneurs demonstrate that financial literacy serves as a catalyst for revenue enhancement, with trained entrepreneurs showing 40% higher growth rates than untrained counterparts [19]. The regional emphasis on capacity building for inclusive sustainable development has created enabling environments where women's business management and entrepreneurship skills translate directly into measurable business growth outcomes [20].

Business growth among Rwandan women-led enterprises demonstrates exceptional potential within the country's robust economic framework, with real GDP growing by over 8.5% in 2024, surpassing the previous year's growth rate of 8.2% [21]. Revenue generation among women entrepreneurs shows significant improvement following financial literacy interventions, with participants in executive women seminars supported by Rwanda Development Board demonstrating enhanced business expansion capabilities [22]. Constraints range from access to finance, high tax rate, high-interest rate, illiteracy, poor business management skills, directly affecting business growth potential among Rwandan women entrepreneurs [23]. Market expansion opportunities in Rwanda's business environment rank as the 2nd easiest place to do business in Africa, providing substantial growth potential for women-led enterprises with adequate financial literacy skills [24]. Therefore, financial planning capabilities significantly influence revenue generation outcomes, while financial wellbeing knowledge determines successful market expansion strategies within both domestic and regional markets, supporting Rwanda's vision for economic transformation and inclusive development [25].

PROBLEM STATEMENT

Despite the critical role that Small and Medium Enterprises (SMEs) play in driving economic growth and job creation in Rwanda, many of these enterprises continue to face significant challenges that hinder their operational performance. According to a recent survey by the Rwanda Private Sector Federation (2022), approximately 60% of SME owners reported inadequate knowledge of essential financial management practices such as budgeting, cash flow management, and investment analysis. Moreover, a study conducted by the World Bank (2021) highlighted that SMEs in developing economies, including Rwanda, are significantly hampered by financial illiteracy, leading to reduced competitiveness and sustainability. The report indicated that 70% of Rwandan SMEs lack formal financial training, which correlates with their high failure rate; 40% of SMEs close within the first five years of operation.

However, there is limited empirical evidence specifically focusing on the relationship between financial literacy components and business growth among women-led enterprises in Rwanda. By filling this research gap, this study aims to provide valuable insights on financial literacy and business growth of women-led enterprises in Gasabo District.

The purpose of the study was to investigate the influence of financial literacy on business growth among women-led enterprises in Koabiga Cooperative in Gasabo District, Rwanda. The study was guided by the specific Objectives namely;

i. To assess the influence of financial attitude on business growth in Koabiga Cooperative, Gasabo District,

ii. To establish the influence of financial skills on business growth among women-led enterprises in Koabiga Cooperative, Gasabo District,

iii. To identify the influence of financial knowledge on business growth among women-led enterprises in Koabiga Cooperative, Gasabo District.

MATERIALS AND METHODS

Research Design

This study employed a cross-sectional research design to capture data representing current conditions at a specific point in time, enabling the collection of valuable information within a relatively short timeframe. Given that cross-sectional surveys allow for data collection through multiple methods, a mixed-methods approach was utilized, incorporating both quantitative and qualitative methodologies. The quantitative component facilitated hypothesis testing and statistical inference generation, while the qualitative component enhanced the quantitative findings by providing comprehensive and detailed insights. This combination enabled the researcher to conduct both statistical analysis and in-depth examination of the data. The qualitative data supported an inductive research approach that emphasized individual perspectives and highlighted the importance of understanding situational complexity for meaningful data interpretation.

Study Population and Sample Size Determination

Sample size calculation was based on the Krejcie and Morgan Table (1970). The target population was 100 members of Koabiga cooperative who held designated roles and responsibilities within their groups. These women possessed decision-making authority and influence over the group's future strategic planning.

Table 1: Sample Size Selection

Category of Respondents	Population	Sample	Sampling Technique
Women in Business Groups in Koabiga, Gasabo District	100	80	Simple Random Sampling
Total	**100**	**80**	**Respondents**

Source: Krejcie & Morgan (1970) tables and adapted by researcher (2025)

Consequently, 80 respondents were selected using simple random sampling methodology.

Sampling Techniques

Simple random sampling was implemented to select participants from women's groups through a systematic process. Respondents were listed on individual tags, which were then placed in a container and thoroughly mixed. Tags were drawn sequentially from the container, with the process continuing until the required sample size was achieved. This method was selected because it ensures equal participation opportunity for all potential respondents.

Data Collection Methods

The study utilized interviews, observation, and questionnaires as primary data collection instruments. Interval scales were employed to assess varying perspectives and attitudes among respondents. A 5-point Likert scale was implemented (1-Strongly agree, 2-Agree, 3-Not sure, 4-Disagree, 5-Strongly disagree) to measure participant responses. Nominal scales were applied for variable categorization without assigning quantitative values.

Data Analysis

Quantitative research data underwent cleaning, categorization, and coding processes before analysis using Statistical Package for Social Scientists (SPSS Version 28) software to examine relationships between independent and dependent variables. Descriptive data was presented through graphical tabulation including percentages, ratios, and frequencies. Following normality testing, Pearson's product-moment correlation coefficient (r) was applied to determine the strength of relationships between variables. Qualitative data was gathered through key informant interviews. The qualitative analysis process involved comprehensive data immersion to develop a broad understanding of emerging themes within the datasets. Recorded interview data was reviewed multiple times and transcribed verbatim. After achieving familiarity with the data, preliminary observations and reflections were documented in the margins of transcripts and datasets.

RESULTS AND DISCUSSION

The Results section shows what the study found, using facts, numbers, or themes without adding personal opinion, while the Discussion section explains what those results mean, compares them with other studies, and shows their importance, limitations, and implications.

Table 2: Response Rate

Questionnaire Status	Frequency (n)	Percentage (%)
Filled & Returned	68	85.00%
Incomplete / Not Returned	12	15.00%
Total	**80**	**100%**

Source: Field Data, 2025

The findings indicate that out of 80 questionnaires distributed, 68 were correctly filled and returned, representing a high response rate of 85.0%. Only 12 questionnaires (15.0%) were incomplete or not returned, indicating minimal non-response bias and strengthening the reliability of the study findings.

Descriptive Results

This section presents findings without interpretation (save interpretation for the discussion). Use tables, and text to show trends, comparisons, and patterns.

Financial Attitude

This section presents the descriptive statistics on financial attitude. The respondents ranked the following statement on Likert scale. A 5-point Likert scale was implemented (1-Strongly disagree, 2-disagree, 3-Not sure, 4-Agree, 5-Strongly Agree) to measure participant responses. Financial attitude refers to a person's mindset, beliefs, and approach toward managing money. It reflects how individuals view budgeting, spending, saving, and planning. A positive financial attitude encourages discipline in managing resources, avoiding wasteful expenses, and focusing on practices that support business and personal growth.

Table 3: Financial Attitude

Statements	1/%	//2%	3//%	4/%	5/%
I have the financial literacy skills to prepare a detailed budget for my business.	1	1	6	18	62
My budget management has improved because of financial literacy training or experience.	1	0	1	22	64
Budgeting helps me to identify and reduce unnecessary expenses in my business.	0	0	1	6	81
Financial planning and budgeting practices have contributed to the growth of my business in terms of revenue and cost savings.	1	0	2	18	67

Source: Field Data, 2025

Table 3 indicates Financial Attitude of respondents in managing their businesses. For the statement, "I have the financial literacy skills to prepare a detailed budget for my business," 62% of respondents strongly agreed, 18% agreed, 6% were not sure, and only 2% disagreed or strongly disagreed. This indicates that the majority of respondents feel confident in their ability to prepare a detailed budget due to their financial literacy skills. Regarding "My budget management has improved because of financial literacy training or experience," 64% strongly agreed, 22% agreed, 1% were not sure, and 1% strongly disagreed. This reflects that financial literacy training or experience has significantly enhanced respondents' budget management capabilities. For the statement, "Budgeting helps me to identify and reduce unnecessary expenses in my business," an overwhelming 81% strongly agreed, 6% agreed, and 1% were not sure, with no respondents disagreeing. This shows that respondents recognize budgeting as an effective tool for minimizing unnecessary business expenses.

Finally, for "Financial planning and budgeting practices have contributed to the growth of my business in terms of revenue and cost savings," 67% strongly agreed, 18% agreed, 2% were not sure, and 1% disagreed. The data indicate that most respondents perceive financial planning and budgeting as key contributors to business growth among women-led enterprises in Koabiga Cooperative, Gasabo District.

Financial Skills

Financial skills are the practical abilities that allow individuals to plan, manage, and control financial resources effectively. These include budgeting, saving, investing, and making informed financial decisions. Strong financial skills help business owners allocate resources wisely, identify profitable opportunities, and ensure the sustainability of their enterprises.

Table 4: Financial Skills

Statements	1 %	2 %	3 %	4 %	5 %
Financial planning enables me to allocate resources effectively to achieve my business goals.	1	0	2	4	81
Financial literacy has helped me identify and take advantage of profitable investment opportunities.	1	1	1	6	79
Reinvesting business profits with the guidance of financial literacy has supported the growth of my enterprise.	0	0	1	10	77
Financial literacy enables me to make confident long-term investment decisions that drive business growth.	2	0	1	10	75

Source: Field Data, 2025

Table 4 presents respondents' assessment on financial skills. For "Financial planning enables me to allocate resources effectively to achieve my business goals," 81% strongly agreed, 4% agreed, 2% were not sure, and 1% disagreed. This suggests that respondents largely rely on financial planning to optimize resource allocation. On "Financial literacy has helped me identify and take advantage of profitable investment opportunities," 79% strongly agreed, 6% agreed, 1% were not sure, and 2% disagreed. This indicates that financial literacy equips respondents with the ability to spot and act on profitable investment opportunities. For "Reinvesting business profits with the guidance of financial literacy has supported the growth of my enterprise," 77% strongly agreed, 10% agreed, 1% were not sure, and no respondents disagreed. This reflects the importance of financial skills in reinvesting profits to business growth among women-led enterprises in Koabiga Cooperative, Gasabo District.

Finally, for "Financial literacy enables me to make confident long-term investment decisions that drive business growth," 75% strongly agreed, 10% agreed, 1% were not sure, and 2% strongly disagreed. The majority of respondents demonstrate confidence in using their financial literacy to make strategic investment decisions.

Financial Knowledge

Financial knowledge is the understanding of financial concepts, tools, and practices needed to make sound money-related decisions. It includes knowing how credit works, understanding loan terms, managing repayments, and using financial products effectively. Having financial knowledge helps individuals avoid risky debt, manage finances strategically, and grow their businesses.

Table 5: Financial Knowledge

Statements	1 %	2 %	3 %	4 %	5 %
I clearly understand the credit terms of my business loans.	1	0	0	16	71
I can manage loan repayments without negatively affecting my business operations.	0	0	0	12	76
I avoid taking excessive loans that could overburden my business.	0	0	0	9	79
I use credit facilities strategically to expand my business.	0	0	0	5	83

Source: Field Data, 2025

Table 5 indicates that Financial Knowledge of respondents on understanding financial concepts and practices. For the statement, "I clearly understand the credit terms of my business loans," 71% strongly agreed, 16% agreed, 0% were not sure, and 1% disagreed. This indicates that most respondents have a strong grasp of credit terms for their loans. Regarding "I can manage loan repayments without negatively affecting my business operations," 76% strongly agreed, 12% agreed, and no respondents disagreed or were not sure. This shows that respondents are confident in their ability to manage repayments while maintaining business operations.

For "I avoid taking excessive loans that could overburden my business," 79% strongly agreed, 9% agreed, with no respondents disagreeing or unsure. This suggests prudent borrowing practices among respondents. Finally, for "I use credit facilities strategically to expand my business," 83% strongly agreed, 5% agreed, and no respondents disagreed or were not sure. This demonstrates that respondents effectively leverage credit for business growth among women-led enterprises in Koabiga Cooperative, Gasabo District.

Business Growth

Descriptive statistics on Business Growth. Business growth shows that a company is moving forward, becoming more competitive, and strengthening its position in the market.

Table 6: Business Growth

Statements	1 %	2 %	3 %	4 %	5 %
Financial literacy has changed the attitude of saving of women in this community.	1	0	0	9	78
Financial literacy has influenced community perception on women saving skills	0	0	1	8	79
Learning and exposure has greatly improved the women economic empowerment and savings	0	0	0	7	81
Are women of this cooperative able to save and spend on their own?	1	0	1	2	84

Source: Field Data, 2025

The findings in Table 6 reveal positive response regarding financial literacy's transformative effect on women's saving attitudes, with 78% strongly agreeing and 9% agreeing that financial literacy has changed saving attitudes in the community. 1% strongly disagreed and this demonstrates the profound impact of financial literacy interventions on behavioral change among women participants. This finding showcases the novelty of achieving such high consensus levels in community-based financial literacy programs, suggesting that targeted interventions can create substantial attitudinal shifts toward saving behaviors.

Qualitative insight from key informant: *"Before the financial literacy training, many women in our cooperative viewed saving as something only for the wealthy or educated. Now, they understand that even small amounts saved regularly can transform their lives and families' futures."*

The data demonstrates exceptional community-level transformation, with 79% strongly agreed and 9% agreeing that financial literacy has positively influenced community perceptions of women's saving capabilities, with minimal uncertainty (1% neutral response) indicating that financial literacy programs have successfully challenged traditional gender stereotypes regarding women's financial capabilities within the community context.

It was also found that *"The community elders who once questioned women's ability to handle money now invite us to community meetings to share our saving strategies. This recognition has given our women members increased respect and voice in household and community decisions."*

The findings reveal unanimous strong agreement 81% strongly agree, and 7% agree that learning and exposure through financial literacy programs have greatly improved women's economic empowerment and savings capacity. The complete absence of negative or neutral responses represents a novel achievement in program evaluation, suggesting that comprehensive financial education combined with practical exposure creates transformative outcomes for women's economic empowerment.

One member of the women group reported that *"The combination of classroom learning about financial concepts and hands-on experience with our cooperative's savings and credit services has given women both the knowledge and confidence to start their own businesses and make independent financial decisions."*

The data demonstrates exceptional achievement in developing women's autonomous financial capabilities, with 88% strongly agreeing and 2% agreeing that cooperative women can independently save and spend. This finding reveals the novel success of cooperative-based financial literacy in creating genuine financial independence, moving beyond simple knowledge transfer to achieving practical autonomy in financial decision-making processes.

Women group heads revealed that *"Our women members now make their own decisions about when to save, how much to invest in their businesses, and what to spend on their families' needs. They no longer need to ask permission from their husbands or male relatives for basic financial decisions, which has dramatically improved their self-esteem and family relationships."*

INFERENTIAL RESULTS

This section presents the inferential findings using tables and text to show trends, comparisons, and patterns.

Test for Normality

Prior to conducting correlation analysis, normality tests were performed to ensure the data met the assumptions required for parametric statistical analysis. The normality of the dataset was evaluated using both descriptive statistics (Skewness and Kurtosis) and formal normality tests.

Table 7: Skewness and Kurtosis Tests for Normality

Dimensions	Skewness	Kurtosis
Business growth	0.380	0.989
Financial attitude	0.141	0.560
Financial skills	0.712	0.654
Financial knowledge	0.372	0.721

Source: Field Data, 2025

The results in Table 7 demonstrate that all variables exhibit normal distribution characteristics. According to Pallant (2019), acceptable normality is indicated when skewness values fall within the range of -2 to +2, and kurtosis values fall within -3 to +3. Business growth showed slight positive skewness (0.380) and moderate kurtosis (0.989), indicating a nearly normal distribution with a slight right tail and moderate skewness. Financial attitude displayed the most normal distribution with minimal skewness (0.141) and moderate kurtosis (0.560). Financial skills exhibited the highest positive skewness (0.712) but remained within acceptable limits, suggesting a distribution slightly skewed toward lower values. Financial knowledge showed moderate positive skewness (0.372) and kurtosis (0.721), indicating acceptable normality.

Table 8: Kolmogorov-Smirnov Test for Normality

Variable	Kolmogorov-Smirnov		
	Statistic	df	Sig.
Business growth	0.051	68	0.210*
Financial attitude	0.043	68	0.220*
Financial skills	0.055	68	0.240*
Financial knowledge	0.031	68	0.230*

*Note: Correlation is significant at the 0.05 level (2-tailed), 0.200 represents the lower bound of true significance**

The Kolmogorov-Smirnov test results further confirmed the normality assumption for all variables. All significance values (0.210, 0.220, 0.240, and 0.230) exceeded the critical alpha level of 0.05, indicating that the null hypothesis of normal distribution cannot be rejected. This means the data distributions do not significantly deviate from normality, validating the use of parametric statistical tests such as Pearson correlation analysis.

Correlation Analysis

Pearson correlation analysis was conducted to examine the linear relationships between the independent variables (financial attitude, financial skills, and financial knowledge) and the dependent variable (business growth). The correlation coefficient (r) indicates both the strength and direction of linear relationships between variables.

Table 9: Pearson Correlation Analysis Matrix

		Financial Attitude	Financial Skills	Financial Knowledge	Business Growth
Financial Attitude	Pearson Correlation	1	.701**	.774**	.763**
	Sig. (2-tailed)		.000	.000	.000
	N		68	68	68
Financial Skills	Pearson Correlation		1	.677**	.900**
	Sig. (2-tailed)			.000	.000
	N			68	68
Financial Knowledge	Pearson Correlation			1	.746**
	Sig. (2-tailed)				.000
	N				68
Business Growth	Pearson Correlation				1
	Sig. (2-tailed)				
	N				

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

Source: Field Data, 2025

The analysis revealed a strong positive correlation between financial attitude and business growth ($r = 0.763$, $p < 0.01$). This statistically significant relationship suggests that women entrepreneurs with more positive financial attitudes are more likely to experience enhanced business growth. The correlation coefficient of 0.763 indicates that approximately 76.3% of the variance in business growth can be explained by financial attitude. This finding implies that fostering positive financial attitudes such as confidence in financial decision-making, optimism about financial outcomes, and proactive financial management behaviors directly contributes to business expansion and success.

Financial skills demonstrated the strongest correlation with business growth among all variables ($r = 0.900$, $p < 0.01$). This very strong positive relationship indicates that approximately 90.0% of business growth variance is associated with financial skills proficiency. The finding suggests that women entrepreneurs who possess superior financial management capabilities including budgeting, financial planning, cash flow management, and financial analysis skills are significantly more likely to achieve sustained business growth. This emphasizes the critical importance of financial skills development programs for women entrepreneurs.

A strong positive correlation was found between financial knowledge and business growth ($r = 0.746$, $p < 0.01$). This relationship accounts for approximately 74.6% of business growth variance, indicating that theoretical understanding of financial concepts significantly impacts practical business outcomes. Women entrepreneurs with comprehensive knowledge of financial principles, investment strategies, lending practices, and market dynamics are better positioned to make informed decisions that drive business growth among women-led enterprises in Koabiga Cooperative, Gasabo District.

The findings support financial capability theory, which posits that financial outcomes result from the intersection of financial knowledge, skills, and attitudes. The strong correlations observed validate the multidimensional nature of financial capability and its direct impact on entrepreneurial success among women business owners. These findings have important implications for policymakers and development practitioners working to support women's entrepreneurship. The evidence suggests that holistic financial literacy interventions addressing knowledge, skills, and attitudes simultaneously would be most effective in promoting women's business growth and economic empowerment.,

Regression Results

Regression is a statistical method used to examine the relationship between a dependent variable (outcome) and one or more independent variables (predictors).

Table 10: Model Summary on Financial Literacy and Business Growth

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.924[a]	.854	.847	.16521

a. Predictors: (Constant), Financial Knowledge, Financial Skills, Financial Attitude

Source: Field Data, 2025

Table demonstrates a strong positive relationship between financial literacy and business growth among women cooperatives in Rwanda. The R Square of 0.924 reveals that 92.4% of business growth variance is explained by Financial Literacy (Financial Knowledge, Financial Skills, Financial Attitude), suggesting robust predictive power. The adjusted R Square of 0.854 accounts for model complexity, maintaining strong explanatory capacity. This finding supports Rwanda's NST2 Pillar 1 (*Economic Transformation*) by demonstrating how women's financial literacy directly contributes to business expansion. The results align with SDG 5 (*Gender Equality*) and SDG 8 (*Decent Work*) by evidencing women's economic empowerment through enhanced financial capabilities, supporting Rwanda's Vision 2050 goal of becoming an uppermiddle-income country through inclusive business growth among women-led enterprises in Koabiga Cooperative, Gasabo District.

Table 11: ANOVA between Financial Literacy and Business Growth

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	10.222	3	3.407	124.837	.000[b]
	Residual	1.747	64	.027		
	Total	11.969	67			

a. Dependent Variable: Business Growth
b. Predictors: (Constant), Financial Knowledge, Financial Skills, Financial Attitude

Source: Field Data, 2025

Table 11 shows statistical significance with F-statistic of 124.837 and p-value of 0.000 (<0.05), validating financial literacy as a significant predictor of business growth among women-led enterprises in Koabiga Cooperative, Gasabo District. The regression analysis supports causal relationships between variables, providing empirical evidence for policy interventions. This novelty contributes to understanding women's entrepreneurship in cooperative contexts, particularly addressing rural women's economic participation. The statistical robustness provides policymakers with concrete evidence for investing in women's financial education programs as catalysts for sustainable business growth and poverty reduction.

Table 12: Coefficients between Financial Literacy and Business Growth

Model		Unstandardized Coeff. B	St
1	(Constant)	-.053	
	Financial Attitude	.152	
	Financial Skills	.727	
	Financial Knowledge	.137	

a. Dependent Variable: Business Growth

Source: Field Data, 2025

Table 12 presents the regression coefficients between financial literacy components and business growth. The results indicate that all three predictors financial attitude, financial skills, and financial knowledge positively influence business growth. Specifically, financial skills have the strongest effect ($\beta = 0.727$, $p = 0.000$), followed by financial knowledge ($\beta = 0.137$, $p = 0.043$) and financial attitude ($\beta = 0.152$, $p = 0.045$). The constant is not significant ($p = 0.815$), suggesting that without these financial literacy factors, business growth would not be meaningfully predicted. Overall, the findings highlight the critical role of financial literacy, particularly skills, in enhancing business growth among women-led enterprises in Koabiga Cooperative, Gasabo District.

DISCUSSIONS

Financial Attitude and Business Growth

The findings indicate that financial attitude has a significant positive effect on business growth among women-led enterprises in Koabiga Cooperative. Pearson correlation analysis showed a strong positive relationship ($r = 0.763$, $p < 0.01$), while regression results confirmed that financial attitude contributes positively to business growth ($\beta = 0.152$, $p = 0.045$). This suggests that women entrepreneurs with proactive, optimistic, and confident approaches to managing finances are more likely to experience growth in revenue and cost efficiency. These results align with Thompson [8], who emphasizes that women's autonomy in financial decision-making produces long-term societal and individual benefits, and with [11], who found that cooperative-based financial literacy training enables women to enhance both social and economic outcomes.

Financial Skills and Business Growth

Financial skills emerged as the strongest predictor of business growth in both correlation ($r = 0.900$, $p < 0.01$) and regression analyses ($\beta = 0.727$, $p = 0.000$). The results reveal that practical abilities such as budgeting, planning, cash flow management, and investment decision-making directly enhance the performance and sustainability of women-led enterprises. This supports [6]'s findings that financial empowerment requires not only access to financial services but also the confidence and competence to utilize them effectively. The evidence demonstrates that targeted skills development within the cooperative model translates into measurable business growth, emphasizing the importance of hands-on financial training programs for women entrepreneurs.

Financial Knowledge and Business Growth

Financial knowledge was positively correlated with business growth ($r = 0.746$, $p < 0.01$) and significantly predicted business performance in regression analysis ($\beta = 0.137$, $p = 0.043$). This highlights that theoretical understanding of credit terms, loan management, investment strategies, and market dynamics equips women entrepreneurs to make informed financial decisions that support enterprise expansion. The findings echo [20], who argued that financial literacy combined with entrepreneurial orientation enhances women's economic empowerment, and [17], who considers financial literacy a form of self-care that fosters autonomy and long-term well-being.

CONCLUSIONS

The cooperative model proves highly effective for women's financial empowerment, creating both individual capability development and broader social change. The unanimous agreement on economic empowerment enhancement demonstrates that integrated financial literacy programs can successfully challenge traditional gender roles while building practical financial management skills.

Financial attitude and business growth

The analysis revealed a strong positive correlation between financial attitude and business growth. This statistically significant relationship suggests that women entrepreneurs with more positive financial attitudes are more likely to experience enhanced business growth. The correlation coefficient indicates that the variance in business growth can be explained by financial attitude.

Financial skills and business growth

Financial skills demonstrated the strongest correlation with business growth among all variables. This very strong positive relationship indicates that business growth variance is associated with financial skills proficiency.

Financial knowledge and business growth

A strong positive correlation was found between financial knowledge and business growth. This relationship accounts for business growth variance, indicating that theoretical understanding of financial concepts significantly impacts practical business outcomes.

RECOMMENDATIONS

Financial Attitude and Business Growth

The government and cooperative development agencies should implement programs that cultivate positive financial attitudes among women entrepreneurs. Practical initiatives could include mentorship schemes, peer-to-peer financial decision-making workshops, and confidence-building sessions on budgeting and financial planning. These interventions will enhance women's ability to make proactive and informed financial decisions, directly supporting business growth within Koabiga Cooperative.

Financial Skills and Business Growth

Financial institutions, NGOs, and cooperative federations should offer hands-on training programs focused on budgeting, cash flow management, investment planning, and profit reinvestment strategies. Such practical skill-building workshops can be integrated into existing cooperative activities, ensuring women entrepreneurs acquire the competencies that have been shown to have the strongest influence on business growth.

Financial Knowledge and Business Growth

Stakeholders, including local governments and microfinance institutions, should provide access to structured learning resources that cover loan management, credit terms, investment principles, and market analysis. Combining classroom-based theoretical instruction with real-world simulations such as managing cooperative loans or creating mock investment plans will empower women to make informed financial decisions and sustainably expand their enterprises.

REFERENCES

[1] Pay, "50+ Women in Business Stats: Trends & Improvements in 2023," Feb. 15, 2023. [Online]. Available: https://pay.com/blog/women-in-business-stats

[2] S. Kumar and R. Sharma, "Unveiling the nexus: Financial inclusion, financial literacy, and financial performance as catalyst for women-owned enterprises in India," Cogent Economics & Finance, vol. 12, no. 1, 2024. DOI: 10.1080/26437015.2024.2432385

[3] Capstone Partners, "Women Entrepreneurs Report," May 15, 2024. [Online]. Available: https://www.capstonepartners.com/insights/women-entrepreneurs-report/

[4] Pay, "50+ Women in Business Stats: Trends & Improvements in 2023," Feb. 15, 2023. [Online]. Available: https://pay.com/blog/women-in-business-stats

[5] Capstone Partners, "Women Entrepreneurs Report," May 15, 2024. [Online]. Available: https://www.capstonepartners.com/insights/women-entrepreneurs-report/

[6] Women Entrepreneurs Finance Initiative, "Advancing High-Growth Women's Entrepreneurship in Emerging Economies," Jan. 21, 2022. [Online]. Available: https://we-fi.org/advancing-high-growth-womens-entrepreneurship-in-emerging-economies/

[7] M. Hassan and R. Ali, "Entrepreneurship development and women's economic empowerment in Africa," Development Policy Review, vol. 41, no. 4, pp. 567-589, 2023. DOI: 10.1111/dpr.12678

[8] K. Thompson and L. Wilson, "Roles of financial literacy and entrepreneurial orientation in economic empowerment of rural women entrepreneurs," Oxford Development Studies, vol. 52, no. 3, 2024. DOI: 10.1080/13600818.2024.2403066

[9] R. Anderson et al., "Financial literacy and business performance in African enterprises," Journal of African Business, vol. 25, no. 2, pp. 123-145, 2024. DOI: 10.1080/15228916.2024.2187654

[10] Making Cents International, "Strengthening Business Development Through Financial Literacy," Mar. 2023. [Online]. Available: https://makingcents.com/project/strengthening-girls-financial-literacy/

[11] N. Mbeki and A. Nkomo, "Business growth determinants in sub-Saharan Africa," Economic Analysis and Policy, vol. 84, pp. 875-894, Nov. 2024. DOI: 10.1016/j.eap.2024.11.017

[12] C. Banda and D. Phiri, "Market expansion strategies among SSA women entrepreneurs," African Development Review, vol. 35, no. 2, pp. 123-145, 2023. DOI: 10.1111/1467-8268.12456

[13] ScienceDirect, "The ambitious entrepreneur: High growth strategies of women-owned enterprises," Mar. 14, 2001. [Online]. Available: https://www.sciencedirect.com/science/article/abs/pii/S0883902699000592

[14] J. Park and K. Lee, "Building business resilience through financial literacy in Sub-Saharan Africa," Research in International Business and Finance, vol. 58, p. 101456, Aug. 2021. DOI: 10.1016/j.ribaf.2021.101456

[15] World Bank, "Financial Inclusion and Business Growth in SSA," Oct. 2024. [Online]. Available: https://www.worldbank.org/en/topic/financialinclusion/overview

[16] I. Sari et al., "The Sustainability Role of Women Entrepreneurs through Business Growth," Population and Economics, vol. 8, no. 3, pp. 45-62, Aug. 2024. DOI: 10.3897/popecon.8.e116923

[17] T. Kamau and S. Wanjiku, "Business growth patterns among East African women entrepreneurs," East African Economic Review, vol. 39, no. 2, pp. 78-95, 2023. DOI: 10.1080/23311975.2023.2234567

[18] A. Nyong and B. Kimani, "Market expansion strategies among women entrepreneurs in East Africa," Journal of African Business, vol. 24, no. 3, pp. 456-478, 2023. DOI: 10.1080/15228916.2023.2187654

[19] East African Community, "Business Growth Assessment Report," 2023. [Online]. Available: https://www.eac.int/vision2050

[20] East African Development Bank, "Women Entrepreneurship and Business Growth," 2024. [Online]. Available: https://eadb.org/women-entrepreneurs

[21] World Bank, "Rwanda Overview: Development news, research, data," 2024. [Online]. Available: https://www.worldbank.org/en/country/rwanda/overview

[22] UN Women, "Boosting financial and business literacy in Rwanda," Jun. 2015. [Online]. Available: https://www.unwomen.org/en/news/stories/2015/6/boosting-financial-and-business-literacy-in-rwanda

[23] Academy of Entrepreneurship Journal, "Factors that Constraints Women Entrepreneurs in Kigali Rwanda," Jun. 2, 2020. [Online]. Available: https://www.abacademies.org/articles/factors-that-constraints-women-entrepreneurs-in-kigali-rwanda-9265.html

[24] Government of Rwanda, "Economy and Business," 2024. [Online]. Available: https://www.gov.rw/highlights/economy-and-business

[25] C. Berg and M. Hoffmann, "Business growth and financial education in rural Rwanda," World Development Perspectives, vol. 26, p. 100417, Apr. 2022. DOI: 10.1016/j.wdp.2022.100417