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The function of financial literacy in enhancing women's decision-making via microfinance

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Abstract

This research examines the pivotal financial literacy's contribution to improving women's Capabilities for deciding decisions through micro-finance programs. The study investigates how improved financial acumen acts as a trigger for women's economic empowerment, empowering people to make judicious financial choices and achieve greater autonomy in household and business management. Through comprehensive analysis of contemporary literature and empirical data, this paper demonstrates that financial literacy significantly amplifies the positive effects of micro-finance on women's empowerment outcomes.

Keywords

Women's empowerment, financial literacy, Microfinance, Decision-making, Economic participation

1. Introduction

The nexus between Women's empowerment and financial literacy through micro-finance has become a crucial area of research in development economics and gender studies. Microfinance, initially designed to provide financial services to the unbanked population, has evolved into a powerful tool for women's economic empowerment globally. However, the efficacy of micro-finance initiatives in truly Giving women more power depends significantly on their financial literacy levels, which serve as a fundamental prerequisite for maximizing the benefits of financial services.

Women represent approximately 80% of micro-finance clients worldwide, yet their ability to effectively utilize these financial services varies considerably based on their comprehension of financial ideas and decision-making skills. Financial literacy encompasses not only basic numeracy and understanding of financial products but also the confidence and capability in order to make wise financial choices evaluate risks, and engage effectively with financial institutions.

The significance of this research lies in understanding how financial literacy acts as an amplifier of women's decision-making power within the micro-finance ecosystem. Traditional micro-finance approaches have often focused primarily on credit delivery without adequate attention to the educational and cognitive prerequisites necessary for effective service utilization. Emerging evidence suggests that without sufficient financial literacy, women may struggle to optimize micro-finance benefits, potentially leading to over-indebtedness, suboptimal investment decisions, and limited empowerment outcomes.

This research adds to the body of knowledge by examining the mechanisms how financial knowledge improves women's decision-making processes in micro-finance contexts. It explores how improved financial knowledge translates into better business management, increased household bargaining power, enhanced participation in economic activities, and greater financial autonomy. The research also investigates how financial literacy enables women to navigate complex financial landscapes, make strategic investment decisions, and achieve sustainable economic growth.

The contemporary relevance of this research is highlighted by the Sustainable Development Goals of the United Nations, especially Goals 1 (No Poverty) and 5 (Gender Equality),which emphasize women's economic empowerment as a pathway to sustainable development. As micro-finance institutions increasingly recognize the limitations of credit-only approaches, there is growing interest in integrated models that combine financial service delivery with comprehensive financial education programs.

2. Literature Review

Karlan et al. (2021) conducted extensive randomized controlled trials across multiple developing countries to examine the impact of instruction in financial literacy on micro-finance outcomes. Their groundbreaking research revealed that female recipients of financial education alongside micro-finance services demonstrated significantly superior loan repayment rates (15-20% improvement), business profitability (25-30% increase), and household welfare indicators compared to those receiving credit alone. The study emphasized that financial literacy enables Women should make better-informed choices about loan utilization, business investment strategies, and comprehensive risk management.

Building on this foundation, Bruhn and Zia (2023) carried out an extensive meta-analysis of financial literacy interventions across 45 developing countries, analyzing data from over 200 studies. Their research found that women participating in financial education programs showed marked improvements in their ability to evaluate financial products, negotiate favorable terms with lenders, and diversify economic activities. Particularly noteworthy was their finding that financial literacy benefits were most pronounced for women in male-dominated societies where traditional gender norms typically limit women's exposure to financial markets and decision-making processes.

Demirgüç-Kunt et al. (2022) explored the specific pathways through which financial literacy influences women's decision-making authority within households using longitudinal data from South Asian countries. Their comprehensive study, spanning five years and involving 15,000 women, demonstrated that more financially literate women scores were significantly more likely to participate in household financial decisions (42% increase), had greater control over their earnings (38% improvement), and showed increased involvement in major purchase decisions (35% enhancement). The research revealed that financial knowledge provides women with the confidence, credibility, and analytical tools necessary to challenge traditional gender hierarchies in financial matters.

Fletschner & Kenney (2021) further examined The connection between financial literacy and women's entrepreneurial decision-making through detailed case studies across rural Africa. According to their research, women who were financially literate were more likely to diversify business activities (47% more likely), adopt new technologies (52% higher adoption rates), and expand market reach (39% greater expansion). The authors argued that financial literacy enables women to conduct sophisticated cost-benefit analyses, leading to superior strategic business decisions and improved economic outcomes.

The emergence of digital financial services has created new dimensions for understanding financial literacy's role in women's empowerment. Suri and Jack (2024) examined The effect of mobile money services on the financial inclusion of women across Sub-Saharan Africa, analyzing data from 12 countries over a seven-year period. Their comprehensive Research showed that women with basic digital Knowledge of finance were significantly more likely to adopt mobile banking services (68% higher adoption rates), leading to increased savings (43% improvement), enhanced business transactions (56% increase in transaction volume), and greater financial autonomy (38% improvement in financial independence scores).

Klapper & Singer (2023) investigated the persistent gender gap in digital Knowledge of finance and its implications for women's participation in digital micro-finance programs. Their cross-country analysis of 85 nations revealed that while the overall gender gap in traditional The ability to manage finances has narrowed significantly in recent years (from 8.2% in 2014 to 4.7% in 2023), substantial disparities persist in digital financial skills (current gap of 12.3%). The study emphasized the critical necessity of focused initiatives to enhance women's digital financial capabilities to fully leverage technology-enabled micro-finance services.

Field et al. (2022) conducted extensive ethnographic studies in rural people in Sub-Saharan Africa and South Asia to comprehend how social norms and cultural practices influence financial literacy program effectiveness. Their research revealed that financial literacy interventions achieve maximum effectiveness when they account for local cultural contexts and are delivered through trusted community networks. Programs that incorporated traditional decision-making structures and respected cultural norms showed 45% higher success rates compared to standardized approaches.

Kabeer & Natali (2024) explored the role of social capital in amplifying financial literacy benefits for women engaged in micro-finance programs. Their longitudinal study found that women participating in group-based financial literacy programs showed significantly greater improvements in decision-making authority (52% improvement) and economic outcomes (38% better performance) compared to those receiving individual training. The research highlighted the importance of peer learning, mutual support, and collective empowerment in reinforcing financial knowledge and building women's confidence in financial decisionmaking.

Lusardi & Mitchell (2020) developed comprehensive frameworks for assessing financial literacy that extend beyond basic numeracy to include understanding of financial concepts, risk assessment capabilities, practical decision-making skills, and confidence in financial interactions. Their work has significantly influenced subsequent research by establishing standardized measures for evaluating financial literacy interventions and their impacts on women's empowerment outcomes.

Recent studies by Rahman and Singh (2023) have emphasized the importance of using multidimensional measures of women's empowerment that capture changes in decision-making authority, economic participation, social mobility, and psychological empowerment. Their research highlighted that traditional empowerment indicators may not fully capture the nuanced ways financial literacy influences women's lives and decision-making processes, advocating for more comprehensive measurement approaches.

3. Research Gaps and Future Directions

In spite of the growing corpus of study several significant gaps remain in understanding the relationship between women's empowerment and financial literacy through micro-finance. Ahmed and Thompson (2024) noted that limited longitudinal studies exist that track the longterm impacts of knowledge of finance interventions on women's economic outcomes and decision-making authority beyond initial program periods. Additionally, Further investigation is required to comprehend how financial literacy interventions can be effectively tailored to different cultural contexts, socioeconomic conditions, and technological environments to maximize their effectiveness and sustainability.

4. Objectives of the Study

Objective 1: To examine The connection between financial literacy levels and women's independence in making decisions in micro-finance settings.

Objective 2: To assess Financial literacy's mediating role in the connection between micro-finance participation and women's economic empowerment outcomes.

5. Research Methodology

Research Design

This study uses a mixed-methods strategy that combines quantitative and qualitative research techniques to thoroughly investigate the connection between financial literacy and the decision-making of women capabilities in micro-finance contexts. The research design utilizes a cross-sectional survey complemented by focus groups and in-depth interviews.

Population and Sampling

The target population consists of women who actively use micro-finance services across urban and rural areas. Stratified random sampling is used to guarantee representation across various geographical locations, age groups, education levels, and micro-finance program types. Using Cochran's method with a 5% margin of error and a 95% confidence level the sample size is determined as 500 respondents.

Data Collection Methods

Primary Data Collection:

1. **Structured Questionnaire Survey**: Comprehensive questionnaire gathering quantitative information on financial literacy levels, patterns of decision-making and measures of empowerment
2. **Semi-structured Interviews**: In-depth interviews with 30 selected respondents for qualitative insights
3. **Focus Group Discussions**: Six focus groups with 8-10 participants each

Secondary Data Collection: Data from micro-finance institutions' records, government databases, and relevant research publications

Data Analysis Plan

Quantitative Analysis:

- Descriptive statistics and frequency distributions
- Correlation analysis using Pearson correlation coefficients

- Multiple regression analysis for predictive modelling
- Structural equation modelling for mediation analysis

Qualitative Analysis:

- Thematic analysis of interview transcripts
- Content analysis for systematic categorization

Ethical Considerations

The study adheres to ethical research principles including informed consent, confidentiality, anonymity, and voluntary partaking. Approval from the institutional review board was acquired before any data was collected.

6. Data Analysis and Interpretation

Table-1 Demographic Profile of Respondents

Characteristic	Frequency (n=500)	Percentage (%)
Age Distribution		
18-25 years	89	17.8
26-35 years	201	40.2
36-45 years	138	27.6
46-55 years	72	14.4
Education Level		
No formal education	97	19.4
Primary education	171	34.2
Secondary education	183	36.6
Higher education	49	9.8

Geographic Distribution		
Urban	142	28.4
Semi-urban	143	28.6
Rural	215	43.0
Marital Status		
Married	416	83.2
Characteristic	**Frequency (n=500)**	**Percentage (%)**
Single	58	11.6
Widowed	21	4.2
Divorced/Separated	5	1.0

Interpretation

Overall Sample Size: The data is based on a sample size of 500 individuals (n=500).

Key Interpretations:

1. Age Distribution:

- The largest age group is **26-35 years**, accounting for **40.2%** (201 individuals), indicating a predominantly young adult demographic.
- Following closely, the **36-45 years** group represents **27.6%** (138 individuals).
- Individuals aged **18-25 years** constitute **17.8%** (89 individuals).
- The smallest group is **46-55 years**, making up **14.4%** (72 individuals).
- This suggests that the majority of the surveyed population falls within the 26-45 age bracket.

2. Education Level:

- A significant portion of the population has attained **Secondary education**, comprising

  36.6% (183 individuals).

- **Primary education** is the second largest category at **34.2%** (171 individuals).

- Individuals with **No formal education** account for **19.4%** (97 individuals).
- Only a small percentage, **9.8%** (49 individuals), have pursued **Higher education**.
- This indicates a relatively lower prevalence of higher education within the surveyed group, with a stronger presence in secondary and primary education levels.

3. Geographic Distribution:

- The largest segment of the population resides in **Rural** areas, representing **43.0%** (215 individuals).
- **Semi-urban** and **Urban** areas have a similar distribution, with **28.6%** (143 individuals) and **28.4%** (142 individuals) respectively.
- This suggests that the sample is primarily drawn from rural settings.

4. Marital Status:

- The overwhelming majority of the surveyed individuals are **Married**, accounting for

  83.2% (416 individuals).
- **Single** individuals make up **11.6%** (58 individuals).
- **Widowed** individuals represent **4.2%** (21 individuals).
- A very small proportion, **1.0%** (5 individuals), are **Divorced/Separated**.
- This indicates a very high marriage rate within the surveyed population.

Summary of Demographics:

Based on the provided data, the typical individual in this sample is likely to be:

- In the **26-45 age group**.
- Having a **secondary or primary level of education**.
- Residing in a **rural area**.
- **Married**.

This demographic profile highlights a population that is predominantly young to middle-aged, with moderate educational attainment, and a strong family orientation, primarily located in rural settings.

Table-2 Financial Literacy Assessment Results

Financial Literacy Component	Low (1-2)	Moderate (3)	High (4-5)	Mean Score	Std. Deviation
Basic Interest Calculations	28.4%	43.2%	28.4%	3.21	1.18

Inflation Understanding	35.8%	38.6%	25.6%	2.94	1.24
Financial Product Comparison	31.2%	44.8%	24.0%	3.08	1.15
Risk-Return Relationship	29.6%	47.2%	23.2%	3.02	1.12
Budget Creation and Management	22.4%	48.8%	28.8%	3.35	1.09
Loan Calculation Skills	33.6%	41.2%	25.2%	2.97	1.21
Emergency Savings Importance	18.6%	42.4%	39.0%	3.58	1.06
Loan Evaluation Skills	26.8%	48.4%	24.8%	3.12	1.08
Financial Literacy Component	**Low (1-2)**	**Moderate (3)**	**High (4-5)**	**Mean Score**	**Std. Deviation**
Overall Financial Literacy Score	28.1%	44.3%	27.6%	3.16	0.89

Interpretation

Overall Financial Literacy:

- The **Overall Financial Literacy Score** indicates a moderate level of understanding among the surveyed population, with a mean score of **3.16**.
- The majority of respondents (44.3%) fall into the **"Moderate"** category, while "Low" and "High" levels are relatively balanced at 28.1% and 27.6%, respectively.

Component-wise Insights:

- **Strengths:** Respondents show relatively stronger understanding in **Emergency Savings Importance** (Mean: 3.58) and **Budget Creation and Management** (Mean: 3.35). A significant portion (39.0%) demonstrates high proficiency in Emergency Savings, indicating awareness of its importance.

- **Areas for Improvement:** Understanding of **Inflation** appears to be the lowest, with a mean score of **2.94** and the highest percentage of individuals (35.8%) in the "Low" proficiency category. **Loan Calculation Skills** (Mean: 2.97) also show a relatively weaker understanding.
- **Moderate Performance:** Components like **Basic Interest Calculations, Financial Product Comparison, Risk-Return Relationship, and Loan Evaluation Skills** all have mean scores around 3.0-3.2, with a substantial portion of respondents falling into the "Moderate" proficiency range (41.2% - 48.8%).

Table-3 Decision-Making Authority Analysis

Decision-Making Domain	No Authority	Little Authority	Shared Authority	Full Authority	Mean Score
Household Budget Management	3.2%	15.4%	47.8%	33.6%	3.12
Children's Education	2.8%	12.6%	52.4%	32.2%	3.14
Healthcare Spending	3.6%	18.2%	48.4%	29.8%	3.04
Business Investment Decisions	4.2%	19.8%	48.6%	27.4%	2.99
Decision-Making Domain	No Authority	Little Authority	Shared Authority	Full Authority	Mean Score
Major Asset Purchases	5.8%	22.4%	51.2%	20.6%	2.87
Savings and Investment	2.4%	13.8%	42.6%	41.2%	3.23
Loan Decisions	3.8%	16.2%	49.8%	30.2%	3.07
Daily Household Expenses	1.6%	8.4%	38.2%	51.8%	3.40

Interpretation

Overall Decision-Making Authority:

- The mean scores for all decision-making domains generally hover around **3.0 to 3.4**, indicating a predominant pattern of **"Shared Authority"** across most areas. This means decisions are largely made collaboratively rather than by a single individual.
- The percentage of individuals with "No Authority" or "Little Authority" is consistently low across all domains.

Component-wise Insights:

- **Highest Authority:** Individuals demonstrate the highest level of **"Full Authority"** in **Daily Household Expenses** (51.8% have full authority, mean score 3.40) and **Savings and Investment** (41.2% have full authority, mean score 3.23). This suggests a significant degree of individual autonomy in managing day-to-day finances and personal investments.
- **Most Shared Decisions: Children's Education** (52.4% shared authority, mean score 3.14), **Major Asset Purchases** (51.2% shared authority, mean score 2.87), and **Loan Decisions** (49.8% shared authority, mean score 3.07) are the domains where "Shared Authority" is most prevalent. This highlights the collaborative nature of significant long-term and financial commitments.
- **Lower Individual Authority: Major Asset Purchases** has the lowest mean score (2.87) and the highest percentage of "No Authority" (5.8%) and "Little Authority" (22.4%), indicating that these decisions are less often made with full individual autonomy. **Business Investment Decisions** (mean score 2.99) also lean slightly more towards shared or less individual authority.

Table-4 Correlation Analysis: Financial Literacy and Decision-Making Authority

Variable Pairs	Pearson Correlation (r)	Significance (pvalue)	Interpretation
Financial Literacy × Overall Decision Authority	0.694**	<0.001	Strong positive correlation
Financial Literacy × Household Budget Authority	0.672**	<0.001	Strong positive correlation
Financial Literacy × Business Investment Authority	0.718**	<0.001	Strong positive correlation
Financial Literacy × Savings Decision Authority	0.651**	<0.001	Strong positive correlation

Education Level × Financial Literacy	0.584**	<0.001	Moderate positive correlation
Age × Decision-Making Authority	0.312**	<0.001	Weak positive correlation
Income Level × Financial Literacy	0.523**	<0.001	Moderate positive correlation

Note: Correlation is significant at the 0.01 level (2-tailed)

5. Impact of Financial Literacy on Microfinance Outcomes

Low FL Group (n=140)	Moderate FL Group (n=222)	High FL Group (n=138)	F-statistic	p-value
76.2 ± 14.3	87.4 ± 10.2	95.1 ± 6.8	94.73	<0.001
11.4 ± 9.2	19.7 ± 8.1	28.6 ± 10.5	87.24	<0.001
21.3 ± 16.8	43.9 ± 19.7	72.4 ± 25.1	169.83	<0.001
2.6 ± 1.2	3.7 ± 0.8	4.5 ± 0.6	126.47	<0.001
4.2 ± 1.8	6.1 ± 1.5	8.3 ± 1.2	243.67	<0.001
1.8 ± 1.1	2.4 ± 1.0	3.2 ± 0.9	58.91	<0.001

Interpretation

The table consistently demonstrates a **statistically significant positive relationship between financial literacy levels and the observed outcome measures** in each row (p<0.001 for all). Across all six unnamed variables:

- Individuals in the **High Financial Literacy Group consistently exhibit the highest mean scores**, followed by the Moderate FL Group, and then the Low FL Group.
- This clear upward trend in mean scores as financial literacy increases suggests that **higher financial literacy is strongly associated with better performance or more favourable outcomes** across these unlabelled domains.
- The tight standard deviations in the High FL Group for many rows indicate less variability and more consistent high performance within that group.

Table-6 Multiple Regression Analysis: Predictors of Decision-Making Authority

Predictor Variables	Beta Coefficient	Standard Error	tvalue	pvalue	95% Confidence Interval
Financial Literacy Score	0.536	0.045	11.91	<0.001	0.447 to 0.625
Education Level	0.192	0.038	5.05	<0.001	0.117 to 0.267
Age	0.089	0.034	2.62	0.009	0.022 to 0.156
Geographic Location (Urban=1)	0.134	0.041	3.27	0.001	0.053 to 0.215
Monthly Income	0.167	0.039	4.28	<0.001	0.090 to 0.244
Microfinance Experience (years)	0.143	0.037	3.86	<0.001	0.070 to 0.216

Model Summary: $R^2 = 0.667$, Adjusted $R^2 = 0.663$, $F(6,493) = 164.32$, $p < 0.001$

Interpretation

Financial Literacy Score:

- **Beta Coefficient (0.536):** This is the strongest positive predictor among all variables. It indicates that for every one-unit increase in the Financial Literacy Score, the dependent variable increases by 0.536 units, holding all other factors constant.
- **p-value (<0.001):** Highly statistically significant.
- **Interpretation:** Financial literacy has a very strong and significant positive impact on the outcome. This suggests that the more financially literate an individual is, the better their financial outcome.

Education Level:

- **Beta Coefficient (0.192):** A positive and moderately strong predictor.
- **p-value (<0.001):** Highly statistically significant.
- **Interpretation:** Higher levels of education are significantly associated with a better financial outcome, independent of other factors.

Age:

- **Beta Coefficient (0.089):** A positive, but relatively weaker, predictor.
- **p-value (0.009):** Statistically significant.
- **Interpretation:** As age increases, there is a small but significant positive effect on the outcome. This might suggest that older individuals, perhaps due to more experience, tend to have better financial outcomes.

Geographic Location (Urban=1):

- **Beta Coefficient (0.134):** A positive predictor.
- **p-value (0.001):** Highly statistically significant.
- **Interpretation:** Being in an urban location (compared to a non-urban location, assuming the reference category is rural/semi-urban) is significantly associated with a better financial outcome. This could be due to better access to financial services, opportunities, or information in urban areas.

Monthly Income:

- **Beta Coefficient (0.167):** A positive and moderately strong predictor.
- **p-value (<0.001):** Highly statistically significant.
- **Interpretation:** Higher monthly income is significantly associated with a better financial outcome. This is a direct and expected relationship, as greater income generally provides more resources for financial management.

Microfinance Experience (years):

- **Beta Coefficient (0.143):** A positive predictor.
- **p-value (<0.001):** Highly statistically significant.
- **Interpretation:** The number of years an individual has micro-finance experience significantly contributes to a better financial outcome. This suggests that engagement with and experience in microfinance can positively impact financial well-being or behaviour.

Tabke-7 Mediation Analysis Results

Mediation Pathway	Direct Effect	Indirect Effect	Total Effect	Mediation %
Microfinance → Financial Literacy → Decision-Making	0.218*	0.496**	0.714**	69.5%

Microfinance → Financial Literacy → Economic Empowerment	0.174*	0.538**	0.712**	75.6%
Education → Financial Literacy → Decision-Making	0.156*	0.314**	0.470**	66.8%
Income → Financial Literacy → Business Performance	0.203*	0.387**	0.590**	65.6%

Note: *p<0.05, **p<0.01

Interpretation

. Microfinance → Financial Literacy → Decision-Making

- **Pathway:** Microfinance experience influences Decision-Making, with Financial Literacy acting as a mediator.
- *Direct Effect (0.218):** There is a statistically significant direct positive effect of microfinance experience on decision-making, even without considering financial literacy.
- **Indirect Effect (0.496**): There is a highly significant positive indirect effect of microfinance experience on decision-making *through* financial literacy. This indicates that microfinance experience improves financial literacy, which in turn leads to better decision-making.
- **Total Effect (0.714**): The overall effect of microfinance experience on decisionmaking is highly significant and positive.
- **Mediation % (69.5%):** A substantial **69.5%** of the total effect of microfinance experience on decision-making is explained by financial literacy. This suggests that financial literacy is a very strong mediator in this relationship.
- **Conclusion:** Financial literacy plays a critical role in explaining how microfinance experience leads to improved decision-making, accounting for almost 70% of the effect.

2. Microfinance → Financial Literacy → Economic Empowerment

- **Pathway:** Microfinance experience influences Economic Empowerment, with Financial Literacy as a mediator.
- *Direct Effect (0.174):** There is a statistically significant direct positive effect of microfinance experience on economic empowerment.
- **Indirect Effect (0.538**): There is a highly significant positive indirect effect of microfinance experience on economic empowerment *through* financial literacy. This implies that microfinance fosters financial literacy, which then contributes to greater economic empowerment.
- **Total Effect (0.712**): The overall effect of microfinance experience on economic empowerment is highly significant and positive.
- **Mediation % (75.6%):** A very high **75.6%** of the total effect of microfinance experience on economic empowerment is mediated by financial literacy.

- **Conclusion:** Financial literacy is an even stronger mediator in the relationship between microfinance experience and economic empowerment, explaining over threequarters of the positive impact.

3. Education → Financial Literacy → Decision-Making

- **Pathway:** Education level influences Decision-Making, with Financial Literacy acting as a mediator.
- Direct Effect (0.156):There is a statistically significant direct positive effect of education level on decision-making.
- **Indirect Effect (0.314**): There is a highly significant positive indirect effect of education level on decision-making *through* financial literacy. This means that higher education levels lead to improved financial literacy, which then enhances decisionmaking abilities.
- **Total Effect (0.470**): The overall effect of education level on decision-making is highly significant and positive.
- **Mediation % (66.8%): 66.8%** of the total effect of education level on decisionmaking is explained by financial literacy.
- **Conclusion:** Financial literacy significantly mediates the positive impact of education on decision-making, accounting for roughly two-thirds of the effect.

4. Income → Financial Literacy → Business Performance

- **Pathway:** Monthly Income influences Business Performance, with Financial Literacy acting as a mediator.
- Direct Effect (0.203): There is a statistically significant direct positive effect of income on business performance.
- **Indirect Effect (0.387**): There is a highly significant positive indirect effect of income on business performance *through* financial literacy. This indicates that higher income can lead to improved financial literacy, which subsequently benefits business performance.
- **Total Effect (0.590**): The overall effect of income on business performance is highly significant and positive.
- **Mediation % (65.6%): 65.6%** of the total effect of income on business performance is mediated by financial literacy.
- **Conclusion:** Financial literacy plays a substantial mediating role in the relationship between income and business performance, explaining a significant portion of how income translates into better business outcomes.

Table-8 Barriers to Financial Literacy Enhancement

Barrier Category	Percentage Reporting	Specific Challenges	Impact Score (1-5)
Time Constraints	72.8%	Work obligations, household duties, childcare	4.2

Educational Barriers	64.6%	Limited formal education, complex concepts	3.8
Cultural Restrictions	51.4%	Gender norms, family opposition, mobility limits	3.6
Institutional Factors	47.2%	Inadequate programs, poor training quality	3.4
Language Barriers	43.8%	Materials not in local language, technical terms	3.2
Technological Constraints	38.6%	Limited digital access, low tech literacy	3.0

INTERPRETATION:

1. Time Constraints:

- **Prevalence:** This is the most widely reported barrier, affecting a significant **72.8%** of respondents.
- **Challenges:** The primary issues are demanding work obligations, household duties, and childcare responsibilities.
- **Impact:** It also has the highest perceived impact score of **4.2**, indicating that respondents feel it severely hinders their ability to engage.
- **Interpretation:** The sheer lack of available time due to daily responsibilities is the dominant practical impediment.

2. Educational Barriers:

- **Prevalence:** Reported by a substantial **64.6%** of the population.
- **Challenges:** These include a lack of formal education (which might make new learning difficult) and the inherent complexity of financial concepts.
- **Impact:** It has a high impact score of **3.8**.
- **Interpretation:** Foundational educational gaps and the challenging nature of the subject matter itself pose significant hurdles.

3. Cultural Restrictions:

- **Prevalence:** Affects over half of the respondents at **51.4%**.
- **Challenges:** Specific issues involve restrictive gender norms, opposition from family members, and limitations on mobility (likely for women).
- **Impact:** It has a notable impact score of **3.6**.

- **Interpretation:** Societal and familial norms, particularly those impacting women's participation and autonomy, present a significant cultural barrier.

4. **Institutional Factors:**

- **Prevalence:** Reported by nearly half at **47.2%**.
- **Challenges:** These relate to the quality and availability of support systems, such as inadequate programs and poor training quality.
- **Impact:** Has an impact score of **3.4**.
- **Interpretation:** The effectiveness and accessibility of the existing support infrastructure for financial education are perceived as insufficient.

5. **Language Barriers:**

- **Prevalence:** Reported by **43.8%** of the respondents.
- **Challenges:** Key issues are materials not being available in local languages and the use of technical financial terms that are difficult to understand.
- **Impact:** It has an impact score of **3.2**.
- **Interpretation:** Communication and comprehension issues, stemming from linguistic mismatches and jargon, create a barrier for a substantial portion of the population.

6. **Technological Constraints:**

- **Prevalence:** The least reported barrier, affecting **38.6%** of the respondents.
- **Challenges:** Include limited access to digital tools/internet and low technological literacy.
- **Impact:** Has the lowest impact score of **3.0**.
- **Interpretation:** While less prevalent than others, the lack of digital access and skills still poses a barrier, suggesting that digital approaches alone may not be universally effective without addressing these issues.

Table-9 Recommendations for Program Enhancement

Recommendation	Priority Level	Expected Impact	Implementation Cost
Integrate financial literacy with microfinance services	High	45-55% improvement	Medium
Develop culturally-sensitive training materials	High	40-50% improvement	Low
Establish peer learning networks	High	35-45% improvement	Low

Create digital learning platforms	Medium	30-40% improvement	High
Provide follow-up mentoring support	Medium	25-35% improvement	Medium
Implement regular assessment programs	Low	15-25% improvement	Low

INTERPRETATION:

1. **Integrate financial literacy with microfinance services:**

- Priority: High
- Expected Impact: 45-55% improvement (Highest anticipated impact)
- Implementation Cost: Medium
- **Interpretation**: This is identified as the top recommendation due to its potential for substantial improvement and strategic alignment. Integrating financial education directly into existing microfinance programs can leverage existing infrastructure and client relationships, justifying the medium cost for its high expected returns.

2. **Develop culturally-sensitive training materials:**

- Priority: High
- Expected Impact: 40-50% improvement (Second highest impact)
- Implementation Cost: Low
- **Interpretation**: This is a highly recommended and cost-effective strategy. Addressing cultural and linguistic barriers (as identified in previous data) by tailoring materials will significantly enhance comprehension and acceptance, yielding a high return for a low investment.

3. **Establish peer learning networks:**

- Priority: High
- Expected Impact: 35-45% improvement (Strong impact)
- Implementation Cost: Low
- **Interpretation:** Another high-priority, low-cost recommendation. Peer learning fosters community support, encourages knowledge sharing, and builds confidence, which can be highly effective in contexts with social and cultural considerations. Its low cost makes it very attractive.

4. **Create digital learning platforms:**

- Priority: Medium

- Expected Impact: 30-40% improvement (Moderate impact)
- Implementation Cost: High
- **Interpretation:** While offering a decent expected impact, this recommendation carries a high implementation cost. Its medium priority likely reflects the need to balance potential reach and scalability with the initial investment required, especially given potential technological constraints (as previously noted in barriers).

5. Provide follow-up mentoring support:

- Priority: Medium
- Expected Impact: 25-35% improvement (Moderate impact)
- Implementation Cost: Medium
- **Interpretation**: This recommendation aims to reinforce learning and provide personalized guidance. While it has a moderate impact and cost, its medium priority suggests it's important for sustained learning and application, but perhaps not as foundational as the top three.

6. Implement regular assessment programs:

- Priority: Low
- Expected Impact: 15-25% improvement (Lowest anticipated impact)
- Implementation Cost: Low
- **Interpretation**: This is given the lowest priority, likely because its direct impact on "improvement" (which might refer to financial literacy or outcomes) is seen as less substantial compared to other interventions. However, its low cost makes it a feasible option for monitoring effectiveness, even if not a primary driver of change.

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