The current issue and full text archive of this journal is available on Emerald Insight at:
https://www.emerald.com/insight/2615-9821.htm

Asian Journal of Economics and Banking

Does financial experience of women owners of micro businesses promote microfinance lending and their continued existence in rural Uganda?

George Okello Candiya Bongomin
Faculty of Graduate Studies and Research & Finance Department, Makerere University Business School, Kampala, Uganda
Frederick Semukono
Applied Statistics and Management Science Department, Makerere University Business School, Kampala, Uganda
Joseph Baleke Yiga Lubega
Finance Department, Ndejje University, Kampala, Uganda, and
Pierre Yourougou
Institut National Polytechnique Felix Houphouet-Boigny, Yamoussoukro, Cote d'Ivoire

Received 17 January 2024
Revised 9 June 2024
7 October 2024
21 November 2024
Accepted 31 December 2024

Abstract

Purpose – Financial experience is very important in today's dynamic world of constant globalization with the upsurge in sophisticated financial products entering the financial markets, especially in developing countries. This is because it helps the illiterate unbanked poor women owners of micro businesses to make wise financial judgments and options guided by psychology and cognition. This paper aims to ascertain how financial experience can promote microfinance lending and the continued existence of women micro businesses in rural Uganda through an intervening role.

Design/methodology/approach – The paper employs a structural equation model through SmartPLS software to ascertain how financial experience can promote microfinance lending and the continued existence of women micro businesses in rural Uganda through an intervening role.

Findings – The empirical findings from this study indicated that financial experience, as a significant and positive mediator, improves microfinance lending and the continued existence of women micro businesses in rural Uganda.

Research limitations/implications – Owing to the geographical ambit of the current study and sample source from only one developing country, future studies may collect data from other regions of the world for comparative analysis to give more insights on the role of financial experience in rural financial markets.

JEL Classification — Q01, Q55, Q57, Q58JEL, C11, C58, G21, O16

The authors would like to thank the anonymous reviewers for their exceptional and constructive comments and the editors for the attention and feedback given to this manuscript, which has helped to significantly improve it to a publishable standard. The corresponding author also acknowledges great support from Professor Issouf Soumare and the excellent academic environment at the Laboratory for Financial Engineering at FSA, Laval University, Quebec City, Canada.

Funding: The authors declare that no funds, grants or other support were received during the preparation of this manuscript.

Author contributions: All efforts of the authors who contributed to this manuscript, especially the corresponding author, are greatly acknowledged. All authors read and approved the final manuscript.

Asian Journal of Economics and Banking
Emerald Publishing Limited
e-ISSN: 2633-7991
p-ISSN: 2615-9821
DOI 10.1108/AJEB-01-2024-0008

Practical implications – The government of Uganda should promote financial literacy to enhance the financial experience of women owners of micro businesses to help them make better financial judgements in the rural financial markets. This may increase microfinance lending and the continued existence of vibrant women micro businesses in rural areas. As a result, this could lead to the creation of more jobs for the ever-growing younger population in Uganda.

Originality/value – This study is motivated by the lack of understanding and experience about key financial concepts among more than 3.5 billion adults, mostly women. It applies the Experiential Learning Theory grounded in psychology and cognition to show how the financial experience of women who run micro businesses derived from repeated retrieval of knowledge and reflection, can help them to make sound financial judgments to become financially included by rural-based microfinance institutions. Learning-by-doing allows women owners of micro businesses to repetitively take prudent saving, borrowing and investment selections that help them to generate income to meet timely loan repayment to access more microcredit for the continued existence. This is inadequate in the current theory of microfinance lending in rural financial markets.

Keywords Financial experience, Women micro businesses, Cognitive skills, Overindebtedness, Microfinance lending, Experiential learning theory

Paper type Research paper

1. Introduction

Although the Bank of Uganda during the Maya Declaration held in Mexico in the year 2011 pledged to increase the percentage of formally financially included women in Uganda from 54% in 2018 to 75% by 2022, the majority, especially those running micro businesses still lack access to affordable financial services. Only about 4% of the rural women running micro businesses in Uganda have access to formal credit (FinScope Topline Survey, 2018). Across the world, the latest statistics further confirm that women continue to lag behind men in access to financial services with access among women standing at only 7% since 2011. This situation is worst in sub-Saharan Africa where over 80% of the adults remain unbanked and underserved by formal financial institutions (Demirgüç-Kunt *et al.*, 2020).

Therefore, in order to achieve the Maya Declaration and the United Nations' Sustainable Development Goal of universal financial inclusion by the year 2030 to empower and transform the lives of the poor, especially the women who live in rural areas, microfinance has come into existence to offer small loans to poor women through the group lending model to reduce delinquency (World Bank, 2020; Yunus, 2007). Noteworthy, the microfinance institutions prefer to serve women because they are low-risk borrowers as compared to men. Thus, the women are provided with small loans to start micro businesses to generate income to cater for households, financial needs (Kabeer, 2001).

In contrast, while the microfinance institutions have offered small loans to the women through joint liability group lending, high rates of default in repayment and overindebtedness have been reported among women borrowers in developing countries (Rostamkalaei and Freel, 2017). The high default rate and overindebtedness among the women borrowers are partly explained by the inability to make better loan choices and investment decisions.

As highlighted by Mitchell and Lusardi (2015), most individuals may suffer from indebtedness since they do not have experience with borrowings and investment activities in the financial market. In tandem, the microfinance women borrowers have to first get the necessary skills and experiences with microcredit for it to contribute to their business successes prior to getting the microfinance loan (Mokhtar and Ashhari, 2015).

It is widely acknowledged that individuals like the women owners of micro businesses who always use saving accounts, debts and engage in several financial transactions, can carefully consider interest rates, avoid risks and compare available financing alternatives in the financial markets (Bucher-Koenen *et al.*, 2016). Actually, the women owners of micro businesses who have experience with risk diversification, can opt to invest in businesses that are less risky to generate more profits.

Relatedly, Moreira Costa *et al.* (2021) show that financial experience can improve the financial knowledge and build decision-making skills of individuals such as the women who run micro businesses. The highly exposed women owners of micro businesses who transact in the financial markets tend to constantly save, opt for low-cost borrowings, put money in high return investment and use advantageous financial contracts (Bottazzi and Lusardi, 2016).

Moreover, beyond other aspects within the financial market, scholars such as Klapper *et al.* (2015) note that financially experienced women who run micro businesses will always save, choose better borrowing sources and use loans for high return investments with less chance of making financial mistakes. Accordingly, these women remain more secure because they do not pay penalties on loan default and never often suffer from investment risk since they make better financial decisions and choices in the financial market (Kaiser and Menkhoff, 2017).

Researchers have argued that highly exposed women owners of micro businesses who are more financially knowledgeable and skilled, can make important and better financial judgments to build financially stable micro businesses because they can borrow and invest at low costs while avoiding indebtedness (Lusardi and de Bassa Scheresberg, 2013). Furthermore, Lusardi and Mitchell (2014) highlight that the women owners of micro businesses who borrow money from a single source and pay all balances on loans in full at the end of the loan period have better opportunities to borrow higher loan amounts from the microfinance institutions.

Lusardi and Mitchell (2023) contend that financially experienced women owners of micro businesses who are more likely to save money at a financial institution and capable of handling financial hardships and emergencies, can borrow at low interest rates from any financial sources to help their businesses to flourish. A high level of financial experience helps the women who run micro businesses to avoid high indebtedness, burdensome credit options and foster savings and better investments selection.

Profoundly, a recent global survey by Hasler and Lusardi (2017) revealed that over 77% of adults, particularly women in developing countries do not understand key financial concepts with limited experience. More so, although studies have examined the role of financial experience globally, limited country-focused empirical evidence exist to investigate whether financial experience promotes microfinance lending and the continued existence of women micro businesses through an intervening role. Contentiously, studies like Bucher-Koenen *et al.* (2016), Fonseca *et al.* (2012), Seligman (2012) have indicated persistent gender gap in financial experience with women scoring poorly than men in financial literacy questions.

Taking into account the above justifications, this paper aims to ascertain how financial experience can promote microfinance lending and the continued existence of women micro businesses in rural Uganda through an intervening role. Indeed, learning from personal financial experiences can affect the financial judgements and options of the women who run micro businesses over time.

This study is unique in nature because it integrates the financial experience of women who run micro businesses grounded in Experiential Learning Theory with microfinance lending to ultimately illustrate how learning-by-doing derived from dialectics of action, reflection and experience, and abstraction determine the continued existence of micro businesses. This could be helpful to the women who run micro businesses to acquire financial sophistication that allow them to repetitively make better saving, borrowing and investment judgments and selections to remain viable clients within the financial markets in developing countries such as Uganda.

This paper is structured as follows: Section 2 covers the theoretical foundation. Section 3 presents a detailed literature review and hypotheses development. Section 4 lays out our research methodology. Section 5 illustrates the study findings. Section 6 dwells on the discussion. Section 7 concludes the findings. Section 8 highlights the policy implications. Section 9 states the study limitations and future research directions.

2. Theoretical foundation

2.1 Experiential learning theory and microfinance lending

The Experiential Learning Theory by Kolb (1984) states that "learning is the process whereby knowledge is created through the transformation of experience." This theory focuses on the premise that the best way to learn things is to actually have experience. This theory shows that the dynamic view of learning is derived from the learning cycle compelled by the resolution of the dual dialectics of action, reflection and experience, and abstraction. The theory argues that experiencing, reflecting, thinking and acting upon an experience can assist individuals to realize diverse goals in all areas of life guided by psychology and cognition (Kolb *et al.*, 1971). In view of that, since the process of learning from experience is ubiquitous and present in human activity everywhere all the time that individuals can apply to realize diverse goals in all areas of life, financial consumers like the women who run micro businesses can use experiences to attain their financial goals. Notwithstanding the current weaknesses of this theory, learning-by-doing can aid microcredit women borrowers in the financial markets to acquire new ideas, attitudes, practices and greater financial sophistication by repetitively making better loan judgments and selections. Nino-Zarazua and Copestake (2008) discovered that financial decisions to save and borrow in the financial markets were reinforced by first-hand experience among individuals in different financial structures in rural Mexico. By integrating financial experience with cognitive knowledge acquired through financial literacy, microfinance women borrowers who run micro businesses can make the right financial judgments and debt selections in the financial markets.

3. Literature review and hypotheses development

3.1 Intervening role of financial experience between microfinance lending and continued existence of women micro businesses

Klapper *et al.* (2015) show that individuals, such as women owners of micro businesses who own and regularly use financial products such as savings account and credits, have more understanding and increased experience in basic financial concepts.

Chen *et al.* (2023) state that financial knowledge and behavior acquired from financial experience can facilitate individuals including the women who run micro businesses to astutely make use of credit. Women with high level of debt literacy and financial experience are not exposed to risk of high-cost borrowing and debt problems that can result from default and delinquency.

Lusardi and Tufano (2015) contend that the women owners of micro businesses, who understand credit terms and are responsive on the loan amount that they have to settle up with the microfinance institutions with the overall interest and principal amounts, can make better loan selections and investment decisions.

Additionally, financial experience as an alternative to financial literacy, can enable individuals like the women who run micro businesses to learn financial behavior so as to make better financial judgments and selections when offered financial services by microfinance institutions (Johnson and Sherraden, 2007).

As a result, women owners of micro businesses who participate in computing compound interest and interest rates on loans can take bold decisions to save and borrow from the microfinance institutions since they have prior and more concrete understandings and familiarities with their savings growing with the microfinance institutions (Lusardi and Mitchell, 2014).

Danes (2006) further states that financially experienced women who run micro businesses can borrow loans from the microfinance institutions and use it for investments in diversified businesses because they are risk averse. Significantly, women owners of micro businesses who get early personal financial experiences that entail managing savings' account and borrowing can contribute to their understanding of saving money, investment and confidence in making financial judgments as they borrow from the microfinance institutions.

Similarly, financial consumers such as the women owners of micro businesses who are aware of the full range of interest rates, credit terms, know their credit risk profile, understand their personal situation and decide suitable credit preferences can avoid being manipulated by lenders (Hilgert *et al.*, 2003).

Building on evidence that financial experience play a critical role in enabling women borrowers to make better financial judgements, Liu *et al.* (2023) discovered that financial experience gained from financial knowledge increased formal credit needs among 290 small and micro enterprises in China's Jiangsu and Shandong provinces. Financial experience and knowledge enabled them to select better lines of credit, which increased productivity and revenue streams. Lusardi and Tufano (2015) also found that Americans with low levels of debt literacy and financial experiences were likely to encounter high-cost borrowing and debt problems.

Timely repayment of microfinance loans as a result of financial experience can increase access to microcredit by the women who run micro businesses. This leads to financial inclusion of the poor women since they can constantly access savings and loans provided by microfinance institutions. Thus, based on the above extant literature we hypothesize that:

H1. Financial experience promotes microfinance lending and the continued existence of women micro businesses in rural Uganda through an intervening role.

3.2 Financial experience and continued existence of women microenterprises

The vulnerable individuals such as the poor women and lowly educated need financial experience, knowledge and skills to efficiently use complex financial services like the highly priced credit that are offered in the financial markets, especially by fictitious financial institutions in developing countries (Lusardi, 2019).

According to Lusardi and Mitchell (2009), vulnerable individuals with low levels of education should have experience in calculating compound interest on savings and simple interest rates on loans provided by financial institutions like the microfinance to avoid abuse and manipulation. This helps them to demand low-interest rate microfinance loans that they can invest to make a profit for continued existence.

Besides, possession of personal financial experience, which allows the women who run micro businesses to deal with basic financial products, and financial knowledge and skills acquired through financial literacy programs can facilitate them to make smart financial decisions that can increase savings and borrowing from the microfinance institutions to smooth operations (Miller *et al.*, 2015).

Furthermore, the women owners of micro businesses who are financially experienced and savvy always have less probability of defaulting on their loan repayment. This reduces loan delinquency and increases lending by the microfinance institutions to them to use it for productive investments to survive (Lusardi and Mitchell, 2014).

Sina (2012) also argues that the women micro business owners with high financial experience can make wise investment decisions and planning that can allow them to re-invest to generate more income to survive. In fact, the women owners of micro businesses who own savings accounts, practice good credit and cash flow management, pay all bills on time, save regularly and invest money, can participate efficiently in the financial markets and prosper into the future.

Sohn *et al.* (2012) confirmed that adolescents who had bank accounts demonstrated higher levels of financial experience than those who did not have bank accounts in the 2006 Korean National Financial Literacy Test Survey. This indicates that having prior familiarity and experience in operating a bank account helped them to prudently manage personal finances. Therefore, based on the above extant literature we hypothesize that:

H2. Financial experience promotes the continued existence of women micro businesses in rural Uganda.

3.3 Financial experience and microfinance lending

Financial experience refers to having practical knowledge and familiarity in dealing with financial matters such as savings, credit, investments and risks. According to Safitri and Kartawinata (2020), financial experience is an event related to finance that someone has felt, lived and borne both as old and new events. This can be linked to applying for credit, planning for investments and other activities within the financial markets. Therefore, individuals like the women owners of micro businesses with sufficient financial experience can behave more wisely in managing their finances than those who are financially inexperienced.

Ameliawati and Setiyani (2018) observe that individuals like the women owners of micro businesses who have strong financial experience can confidently make better financial decisions and choices before consuming financial products offered by financial institutions such as microfinance. Financial experience makes it possible for them to carefully evaluate the available credit with its associated interest rate and compare it with other alternative sources to opt for better borrowing. This helps them to use credit with friendly interest rate that enable them to make timely repayments in order to gain access to future borrowings for growth.

More broadly, individuals like the women micro business owners who have experience in dealing with checking account and credit always pay all bills on time and may not borrow money from several sources (Hilgert *et al*., 2003). Borrowing money from only one source with limited numbers of loans can help the women who run micro businesses to avoid overindebtedness. Financial experience instills in them better loan management behavior, which enables them to have timely loan repayment schedules (Lusardi, 2009).

Wholly, it can be construed that having practical knowledge about credit, savings and investments can increase access to financial services by the women who run micro businesses from the microfinance institutions since they can borrow at low interest rates and favorable repayment terms. They achieve this by weighing various sources of loans, interest rates and collateral requirements before selecting a better option guided by their financial experiences.

Raza *et al*. (2023) found that prior financial experience in access to credit gained from financial education and practice significantly and positively affected access to loans among rice farmers in Pakistan. This was determined by previous loan rejection experience, interest rate, loan amount to borrow and repayment plan that helped them to opt for better sources of credit. The farmers who had experience with access to high credit had more opportunities to get credit from the Food Security and Agricultural Credit Scheme as compared to the ones who had no past credit access experience.

Babajide *et al*. (2023) further discovered that financial experience gained from practice, attitude, behaviors and skills derived from financial knowledge and capability were impactful on business sustainability among small business owners in Nigeria. Informed credit decisions made by the owners of small businesses who exhibited better debt management skills improved the earnings from their businesses.

Within the East African region, Ismail (2022) showed that experience in running business, making wise debt choices and adoption of innovation among individuals who run micro businesses resulted in increased sustainability of the businesses used in the sample in Tanzania. As a result, based on the above extant literature we hypothesize that:

H3. Financial experience promotes microfinance lending to women micro businesses in rural Uganda.

3.4 Microfinance inclusion and continued existence of women micro businesses

Mahmood *et al*. (2014) refer to a woman entrepreneur as one who starts a new or invests in pre-existing micro-enterprise. On the other hand, in Uganda, a "micro enterprise" is an enterprise employing up to four people, with an annual sales or revenue turnover and total assets not exceeding Uganda shillings 10 million (Uganda Investment Authority, 2008).

Financial inclusion is defined as "the process of ensuring access to appropriate financial products and services needed by all sections of the society in general and vulnerable groups such as weaker sections and low income groups in particular at an affordable cost in a fair and transparent manner by mainstream institutional players" (Chakrabarty, 2011).

Microfinance refers to the financial services provided to low-income individuals or groups who are typically excluded from traditional banking (FINCA International, 2021). Most microfinance institutions offer microcredit that is used as startup capital and savings, payments and insurance to its rural clients, especially the women who operate micro businesses (Caramela, 2018; Kagan, 2018).

Studies show that rural women are excluded from the formal financial system because of the problem of information asymmetry that results in loan repayment default due to adverse selection and moral hazard in the absence of physical collateral (Wang and Li, 2023; Akerlof, 1970). Ultimately, microfinance institutions have played a great role in promoting financial inclusion in rural areas by offering microcredit to women who have been formally excluded to economically empower them to attain livelihood (Milana and Ashta, 2020; Lopez and Winkler, 2018). By and large, the microfinance lends to the rural women through a joint liability model backed by social capital to replace the absence of physical capital that is used as collateral to cover loan loss resulting from adverse selection and moral hazard.

From the public policy perspective, the sustainability of the microfinance institutions is the responsibility of both its staff and clients to reduce defaults in loan repayment. The clients through peer evaluation and monitoring should ensure that all members in the joint liability group meet timely repayments. Additionally, good loan collection practices should be instituted by the microfinance institutions to ensure respect for the clients. Microfinance institutions should practice a humane loan collection policy supported by effective regulations, efficient credit bureau and culture that uphold fulfilling debt repayment obligations. This can reduce adverse selection and moral hazard and the overall delinquency level of microfinance institutions (López-Sánchez, 2022).

The microfinance institutions offer microcredit to poor women who run micro businesses through group-based lending because they lack access to formal banking services due to the absence of physical collateral. Therefore, social collateral cultivated through social capital derived from the group members replace physical collateral to ease the delinquency problem in the process of lending to them (Garmaise and Gabriel, 2010).

Khan *et al.* (2022) also indicate that the microfinance institutions enable female entrepreneurs to generate additional income, assets and savings that they can use for household consumption and re-investment in micro businesses. When the women who run micro businesses obtain microloans in the initial year, their productivity, income and longevity increase in the long term (Cole and Sokolyk, 2018).

Argumentatively, since the microfinance institutions opt to socially serve poor women, the microcredit offered provides self-employment and transgenerational entrepreneurship to lift them out of poverty (Armendaŕiz and Labie, 2011; Collins *et al.*, 2009). The provision of microcredit by the microfinance institutions to solve their lack of finance compels them to work hard and make more profits to flourish (Hartarska and Nadolnyak, 2008).

Generally, the microloans obtained by the poor women from the microfinance institutions allow them to startup micro businesses, accumulate assets, expand, increase the income and manage risk. This drives the businesses to attain survival paradigm shifts over time (Islam, 2016; Singh, 2015; McIntosh *et al.*, 2011).

More recently, Yemelyanov *et al.* (2020) using randomly selected firms from Ukraine revealed a direct effect of microcredit received from microfinance on asset growth. On the contrary, Fajnzylber *et al.* (2006) show that the use of microloans does not accelerate the growth of Mexican microenterprises. Therefore, based on the above extant literature we hypothesize that:

H4. Microfinance lending promotes the continued existence of women micro businesses in rural Uganda.

4. Methodology

4.1 Participants and data collection process

This study involved women who run micro businesses located in rural Uganda. The data were collected from women micro businesses situated in the northern part of Uganda that use microfinance institutions as a source of finance. This is justified by the fact that more than 80% of the population in Uganda lives in rural areas with limited or no formal banking services (Financial Sector Deepening Uganda, 2023). The data were collected from 395 participants selected from the women who run micro businesses and conduct daily banking activities with the microfinance institutions. These women were identified through the microfinance daily loan management records at their different branches. The semi-structured questionnaires were administered to the participants by research assistants to collect the required data for this study. The data were collected in a period of 60 days from the selected participants.

4.2 SmartPLS mediation test

We used multivariate partial least squares in SmartPLS to establish how financial experience can promote microfinance lending and the continued existence of women micro businesses in rural Uganda through an intervening role. The SmartPLS was used because it is more superior to methods such as the Covariance-Based and Bayesian analysis. This approach is also suitable because it can be used to construct the measurement and structural models using both small and large samples (Hair *et al.*, 2014). The measurement model was constructed to establish convergent validity and discriminant validity. The association between the manifest variables and latent constructs is determined by the reliability, composite reliability (CR), average variance extracted (AVE) and factor loadings (Hair *et al.*, 2018). The reliability, CR and AVE must satisfy the rule of thumb and cut-off points set by Nunnally and Bernstein (1994), Bagozzi and Yi (1988), Field (2005), Fornell and Larcker (1981). Additionally, a structural model was built to show the inter relationships between the different variables through different paths (Hair *et al.*, 2022). The structural model depicted the direct and indirect effects of the independent variable and mediator on the dependent variable (Baron and Kenny, 1986).

5. Results

5.1 Measurement model

The results of the measurement model analysis indicated that eight manifest constructs loaded well on the latent variable of microfinance lending and seven items were dropped in the final analysis. More so, the results of the measurement model analysis showed that three manifest constructs loaded well on the latent variable of financial experience and sixteen other manifest constructs were dropped in the final analysis. The results of the measurement model analysis also revealed that three manifest constructs loaded well on the variable of continued existence and thirteen other manifest constructs were dropped in the final analysis. The results revealed that the reliability, CR, factor loadings and inter-item correlation figures met the set rule of thumb as indicated in Tables 1–4.

Table 1. Convergent validity

Latent constructs and manifest variables	Loadings	Cronbach's alpha (α)	rho_A	CR	AVE	R^2
Financial Exp		0.830	0.845	0.722	0.671	0.344
FE13	0.727***					
FE16	0.786***					
FE8	0.517***					
Microfinance lending		0.867	0.876	0.897	0.525	
MA1	0.714***					
MA12	0.812***					
MA13	0.831***					
MA2	0.633***					
MA3	0.792***					
MA6	0.598***					
MA7	0.595***					
MA8	0.774***					
Continued existence		0.862	0.875	0.915	0.782	0.431
SW12	0.825***					
SW7	0.939***					
SW8	0.886***					

Note(s): ***$p < 0.0001$; Legends: Financial Exp – financial experience
Source(s): Authors' own work

Table 2. Discriminant validity based on Fornell–Larcker criterion

Latent constructs and manifest variables	Financial Exp	Microfinance lending	Continued existence
Financial Exp	0.887***		
Microfinance lending	0.587***	0.725***	
Continued existence	0.462***	0.649***	0.884***

Note(s): ***$p < 0.0001$; Legends: Financial Exp – financial experience
Source(s): Authors' own work

Table 3. Factor loadings and cross loadings

Latent constructs and manifest variables	Financial Exp	Microfinance lending	Continued existence
Financial Exp			
FE13	0.727***	0.466	0.307
FE16	0.786***	0.477	0.365
FE8	0.517***	0.212	0.285
Microfinance lending			
MA1	0.450	0.714***	0.465
MA12	0.459	0.812***	0.405
MA13	0.487	0.831***	0.508
MA2	0.218	0.633***	0.645
MA3	0.410	0.792***	0.557
MA6	0.418	0.598***	0.345
MA7	0.444	0.595***	0.248
MA8	0.513	0.774***	0.513
Continued existence			
SW12	0.460	0.490	0.825***
SW7	0.447	0.644	0.939***
SW8	0.324	0.576	0.886***

Note(s): ***$p < 0.0001$; Legends: Financial Exp – financial experience
Source(s): Authors' own work

5.2 Structural equation model

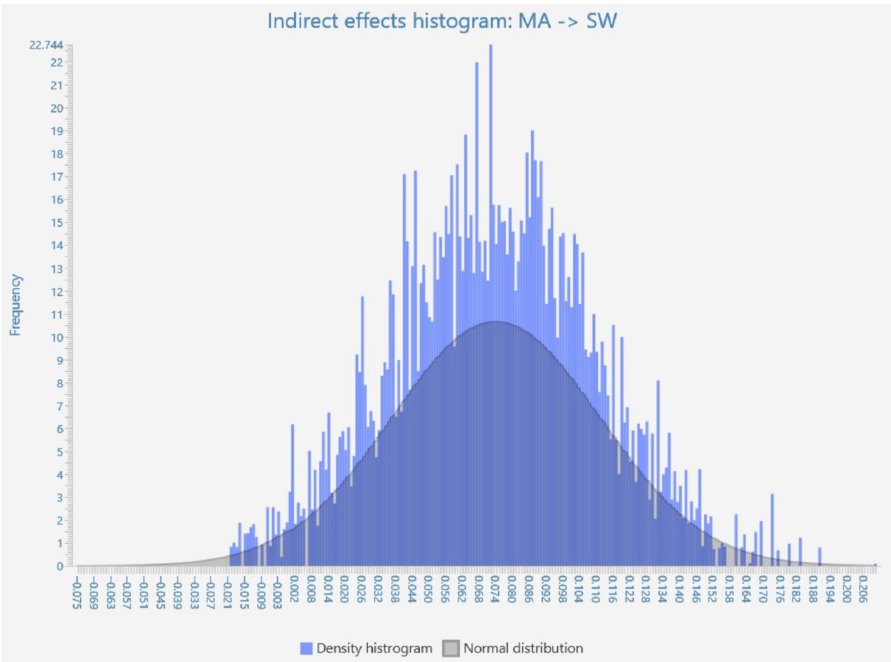
5.2.1 Indirect effect. The results from this study support hypothesis (H1) as the indirect effect of financial experience between microfinance lending and the continued existence of women micro businesses is positive and significant ($\beta = 0.173$; $p < 0.005$). There is a 17% point increase in the variable of the continued existence of women micro businesses when an arrow is drawn from microfinance lending through financial experience. This means that microfinance lending exerts both direct and indirect effects on the continued existence of women micro businesses. The provision of microfinance services promote the continued existence of women micro businesses and some effects partially go through financial experiences to boost credit decisions of the women owners of the micro businesses. Accordingly, microfinance lending can promote the continued existence of women micro businesses in the presence of financial experiences among the women owners in rural Uganda. The overall structural model indicated that both financial experience and microfinance lending explain 43% of the disparity in the continued existence of women micro businesses in rural Uganda. The significance of the indirect and direct effects are indicated in Figures 1–6.

5.2.2 Direct effect. We also tested three other direct hypotheses that were derived under this study. The findings are indicated in Table 5.

Table 4. Factor loadings significant for manifest variables

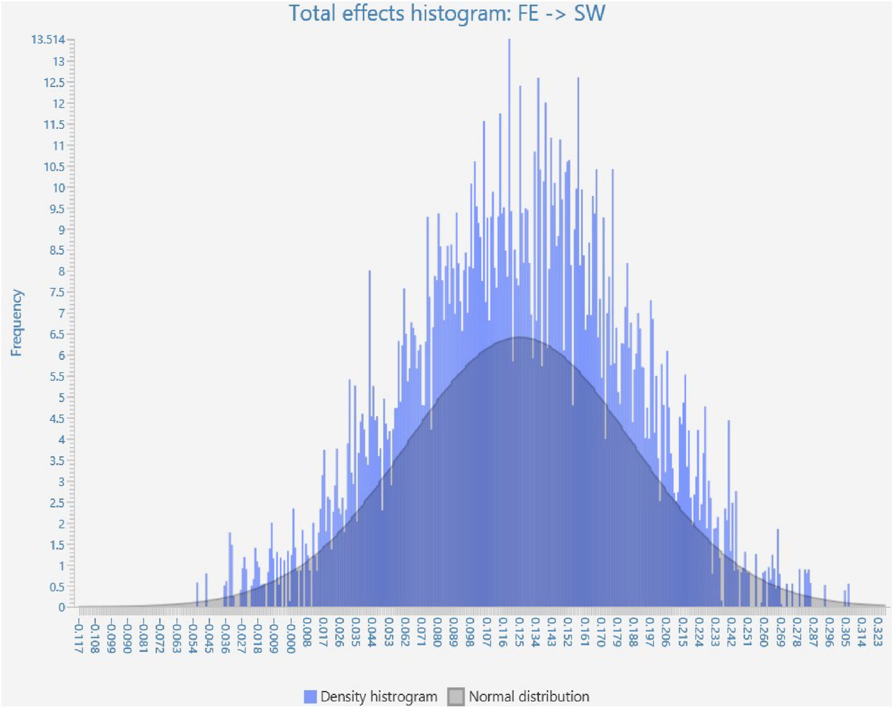
Latent constructs and manifest variables	Loadings	SE	*t*-values	*p*-values	VIF
Financial Exp					
FE13	0.727***	0.055	13.116	0.000	1.089
FE16	0.786***	0.039	19.983	0.000	1.123
FE8	0.517***	0.089	5.813	0.000	1.055
Microfinance lending					
MA1	0.714***	0.038	18.627	0.000	1.987
MA12	0.812***	0.028	29.369	0.000	2.897
MA13	0.831***	0.023	36.581	0.000	2.938
MA2	0.633***	0.046	13.747	0.000	1.858
MA3	0.792***	0.030	26.669	0.000	2.730
MA6	0.598***	0.043	13.937	0.000	1.571
MA7	0.595***	0.051	11.735	0.000	1.658
MA8	0.774***	0.027	28.950	0.000	1.991
Continued existence					
SW12	0.825***	0.026	32.152	0.000	1.842
SW7	0.939***	0.009	103.153	0.000	2.346
SW8	0.886***	0.020	45.207	0.000	2.623

Note(s): ***$p < 0.0001$; Legends: Financial Exp – financial experience
Source(s): Authors' own work



Source(s): Authors' own work

Figure 1. Indirect effect of microfinance inclusion on the continued existence



Source(s): Authors' own work

Figure 2. Direct effect of financial experience on the continued existence

The results from this study support hypothesis (H2) as the direct effect of financial experience on the continued existence of women micro businesses is positive and significant ($\beta = 0.125$; $p < 0.005$). This means that financially experienced women who run micro businesses can make informed judgments to borrow low-cost credit, which they can pay without incurring additional debt.

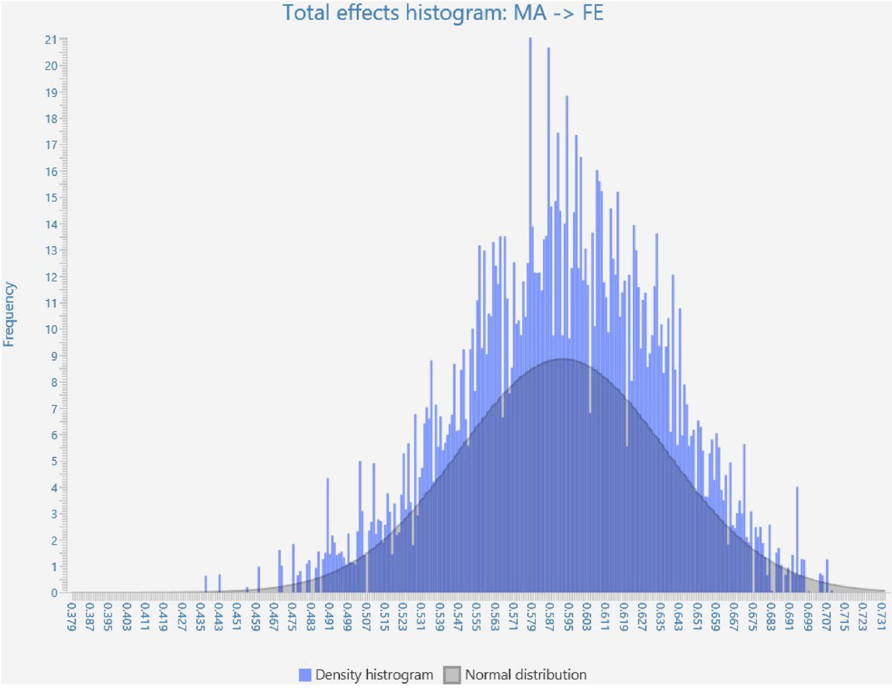
The results from this study further support hypothesis (H3) since the direct effect of financial experience on microfinance lending is positive and significant ($\beta = 0.587$; $p < 0.0001$). This means that financially literate women who run micro businesses can borrow from only one source in order to avoid over-indebtedness to remain loyal to the microfinance institutions.

Finally, the results from this study support hypothesis (H4) since the direct effect of microfinance lending on the continued existence of women micro businesses is positive and significant ($\beta = 0.649$; $p < 0.0001$). This means that provision of suitable micro credit to women who run micro businesses can allow them to invest and generate revenue to repay the loan and invest more in their business ventures.

6. Discussion

6.1 Intervening role of financial experience between microfinance lending and continued existence of women micro businesses

The results from this study revealed that the indirect effect of financial experience between microfinance lending and continued existence of women micro businesses is positive and significant. This study corroborates with the work of Liu *et al.* (2023) who found that financial



Source(s): Authors' own work

Figure 3. Direct effect of financial experience on microfinance lending

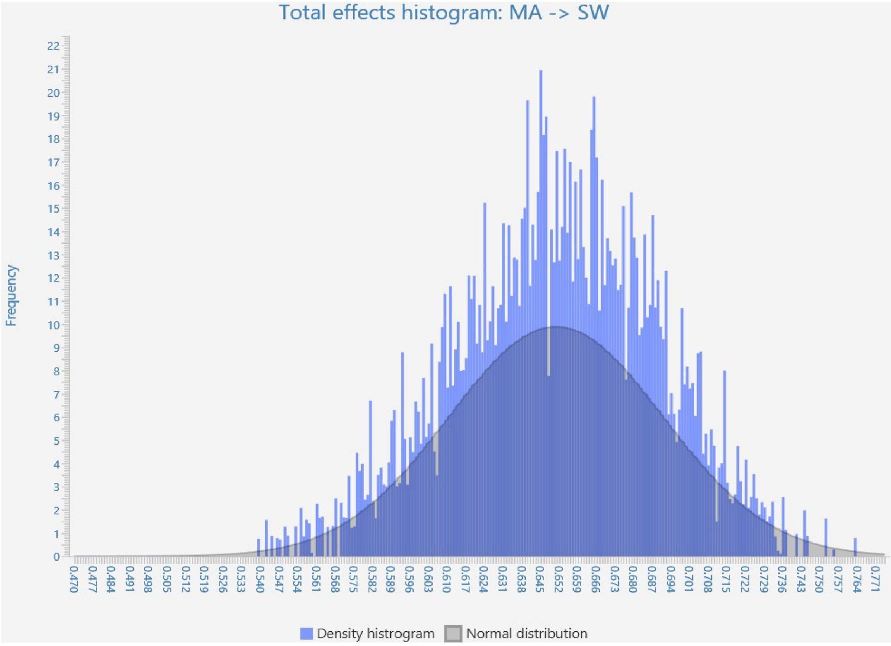
experience gained from financial knowledge increased formal credit needs among 290 small and micro enterprises in China's Jiangsu and Shandong provinces. Financial experience and knowledge enabled them to select better lines of credit, which increased productivity and revenue streams.

According to Chen *et al*. (2023), financial knowledge and behavior acquired from financial experience can facilitate individuals including the women who run micro businesses to astutely make use of credit. Women with high levels of debt literacy and financial experience are not exposed to the risk of high-cost borrowing and debt problems that can result from default and delinquency.

Lusardi and Tufano (2015) also argue that the women owners of micro businesses, who understand credit terms and are responsive to the loan amount that they have to settle up with the microfinance institutions with the overall interest and principal amounts, can make better loan selections and investment decisions.

Similarly, Lusardi and Mitchell (2014) observe that the women owners of micro businesses who participate in computing compound interest and interest rates on loans can take bold decisions to save and borrow from the microfinance institutions since they have prior and more concrete understandings and familiarities with their savings growing with the microfinance institutions. Indeed, women owners of micro businesses who get early personal financial experiences that entail managing savings' account and borrowing can contribute to their understanding of saving money, investment and confidence in making financial judgments as they borrow from the microfinance institutions.

Hilgert *et al*. (2003) show that financial consumers such as the women owners of micro businesses who are aware of a full range of interest rates, credit terms, know their credit risk



Source(s): Authors' own work

Figure 4. Direct effect of microfinance lending on the continued existence

profile, understand their personal situation and decide suitable credit preferences can avoid being manipulated by lenders.

Therefore, we can suggest that learning-by-doing can help consumers of microcredit within the financial markets to acquire new ideas, attitudes, practices and greater financial sophistication by repetitively making better decisions and choices about loans. The combination of experience together with cognitive knowledge acquired through financial literacy can help poor micro borrowers to make wise financial judgments and debt selections to promote efficiency in the financial markets.

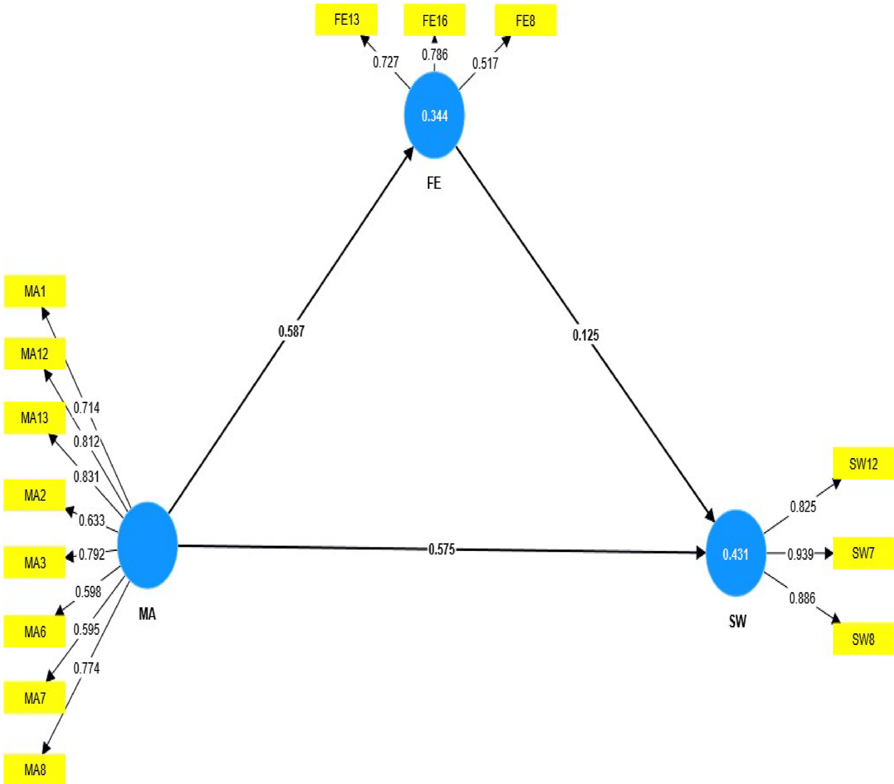
6.2 Financial experience and continued existence of women micro businesses

The results from this study showed that the direct effect of financial experience on the continued existence of women micro businesses is positive and significant.

Miller *et al.* (2015) state that possession of personal financial experience, which allows the women who run micro businesses to deal with basic financial products and financial knowledge and skills acquired through financial literacy programs, can facilitate them to make smart financial decisions that can increase savings and borrowing from the microfinance institutions to smooth operations.

Lusardi and Mitchell (2009) further argue that vulnerable individuals with low levels of education should have experience in calculating compound interest on savings and simple interest rates on loans provided by financial institutions like the microfinance to avoid abuse and manipulation. This helps them to demand low-interest rate microfinance loans that they can invest to make a profit for continued existence.

Additionally, women owners of micro businesses who are financially experienced and savvy always have less probability of defaulting on their loan repayment. This reduces loan



Source(s): Authors' own work

Figure 5. PLS-SEM algorithms with direct and indirect effects

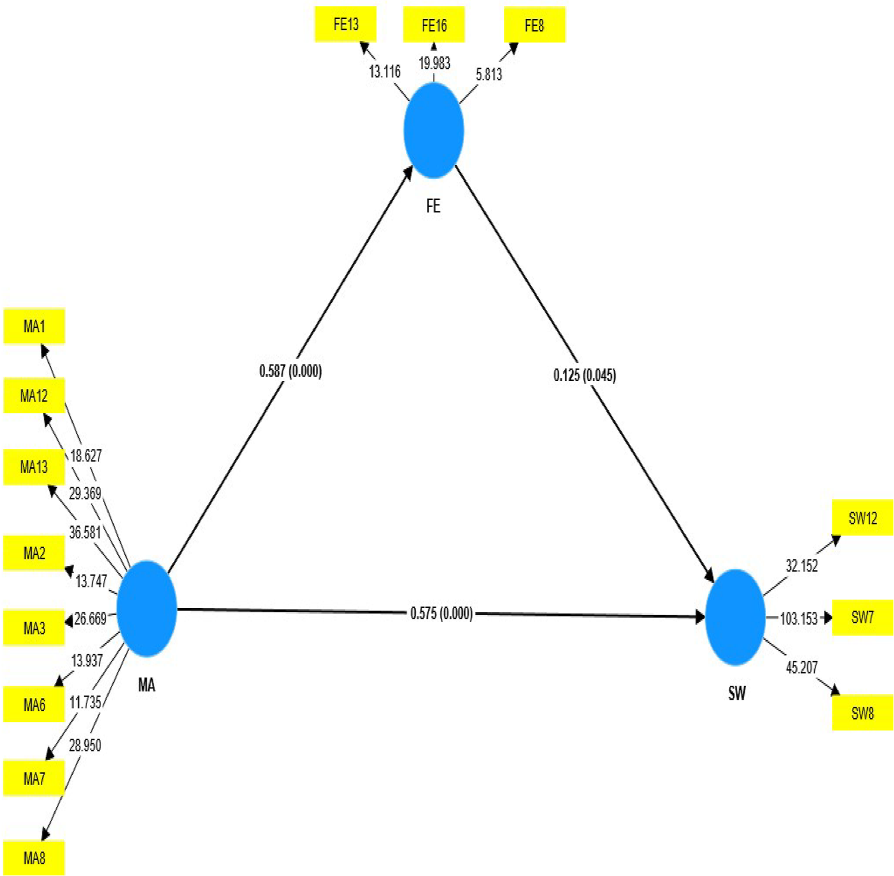
delinquency and increases lending by the microfinance institutions to them to use it for productive investments to survive (Lusardi and Mitchell, 2014).

This study agrees with Sohn *et al.* (2012) established that adolescents who had bank accounts demonstrated higher levels of financial experience than those who did not have bank accounts in the 2006 Korean National Financial Literacy Test Survey. This indicates that having prior familiarity and experience in operating a bank account helped them to prudently manage personal finances.

Thus, we can argue that having financial experience early enough in life at a younger age could be a better strategy for building the financial experiences of individuals, especially in under developed financial markets where consumers are exposed to complex financial products and risks.

6.3 Financial experience and microfinance lending

The results from this study further indicated that the direct effect of financial experience on microfinance lending is positive and significant. This finding is in line with Babajide *et al.* (2023) who discovered that financial experience gained from practice, attitude, behaviors and skills derived from financial knowledge and capability were impactful on business sustainability among small business owners in Nigeria. Informed credit decisions made by the owners of small businesses who exhibited better debt management skills improved the



Source(s): Authors' own work

Figure 6. PLS-SEM algorithms with *t*-values and *p*-values

Table 5. Results of hypotheses testing

Hypothesized path	Path coeff	*SE*	*t*-value	*p*-value	2.5% LL	97.5% UL
MA → FE → SW	0.173	0.037	1.959	0.005	0.000	0.147
FE → SW	0.125	0.062	2.009	0.045	0.000	0.243
FE → MA	0.587	0.045	13.023	0.000	0.483	0.664
MA → SW	0.649	0.040	16.079	0.000	0.558	0.719

Note(s): $^{***}p < 0.0001$; $^{**}p < 0.05$; Legends: MA – microfinance lending; FE – financial experience; SW – continued existence
Source(s): Authors' own work

earnings from their businesses. Ismail (2022) also showed that experience in running a business, making wise debt choices and adoption of innovation among individuals who run micro businesses resulted in increased sustainability of the businesses used in the sample in Tanzania.

Ameliawati and Setiyani (2018) suggest that individuals like the women owners of micro businesses who have strong financial experience can confidently make better financial decisions and choices before consuming financial products offered by financial institutions such as the microfinance.

Hilgert *et al*. (2003) also attest to the fact that individuals like the women micro business owners who have experience in dealing with checking account and credit always pay all bills on time and may not borrow money from several sources.

More so, Lusardi and Mitchell (2009) observe that individuals who constantly participate in many financial transactions that necessitate careful consideration of interest rates and comparisons of alternative sources of credit make better choices on loans offered by financial institutions such as the microfinance. This helps them to use loans with friendly interest rates, hence timely repayment and access to more future loans from the microfinance.

In view of that, it is worthwhile mentioning that having practical knowledge about credit, savings and investment can increase access to microcredit by women micro businesses from the microfinance institution since they can borrow at low interest rate and favorable repayment terms. They achieve this by weighing various sources of loans, interest rates and collateral requirements before selecting a better option. This means that individuals should be encouraged to participate in financial activities to become familiar with financial concepts within the financial markets, especially in developing countries.

6.4 Microfinance lending and continued existence of women micro businesses

The results from this study showed that the direct effect of microfinance lending on the continued existence of women micro businesses is positive and significant. This result corresponds to Yemelyanov *et al*. (2020) who found that randomly selected firms from Ukraine revealed a direct effect of microcredit received from microfinance on assets growth although Fajnzylber *et al*. (2006) showed that the use of microloans did not accelerate the growth of microenterprises in Mexico.

Milana and Ashta (2020) indicate that the microfinance institutions promote financial inclusion in rural areas by offering microcredit to women who have been formally excluded to economically empower them to attain livelihood through micro businesses.

Khan *et al*. (2022) contend that the microfinance institutions facilitate female entrepreneurs to generate additional income, assets and savings that they can use for household consumption and re-investment in micro businesses. The microloans received by the women in the initial year increase their productivity, income and longevity in the long term.

Islam (2016) also indicates that the microloans obtained by poor women from microfinance institutions allow them to startup micro businesses, accumulate assets, expand, increase income and manage risk. This drives progress into the future through shifts in the continued existence paradigm over time.

Hence, we can state that the provision of microcredit to poor women offers them self-employment and transgenerational entrepreneurship to lift them out of poverty. This makes them work hard and make more profits to flourish (Armendáriz and Labie, 2011).

7. Conclusions

First, the results from this study support hypothesis (H1) since the indirect effect of financial experience between microfinance lending and the continued existence of women micro businesses is positive and significant. Timely repayment of microloans as a result of financial experience can increase access to microcredit by the women who run micro businesses from the microfinance institutions, hence, financial inclusion.

Second, the results from this study support hypothesis (H2) because the direct effect of financial experience on the continued existence of women micro businesses is positive and significant. Financial experience gained through familiarity with dealings in the financial markets can help individuals like the women who run micro businesses to make prudent investment decisions and planning to generate more earnings for the continued existence over time.

Third, the results from this study further support hypothesis (H3) since the direct effect of financial experience on microfinance lending is positive and significant. The women who run micro businesses with sufficient financial experience can behave more wisely in managing their finances than those who are financially inexperienced.

In conclusion, the results from this study support hypothesis (H4) since the direct effect of microfinance lending on the continued existence of women micro businesses is positive and significant. The provision of microcredit to women micro businesses based on social lending strengthens their bonding that offer the basis for monitoring and selection of credit-worthy members. This builds a better lending relationship between women and microfinance institutions, which increases the availability of microcredit for investments.

8. Policy implications

The government of Uganda should promote financial literacy to enhance the financial experience of women owners of micro businesses to help them make better financial judgements in the rural financial markets. This may increase microfinance lending and the continued existence of vibrant women micro businesses in the rural areas. As a result, this could lead to the creation of more jobs for the ever-growing younger population in Uganda.

The government of Uganda through schools should encourage parents to introduce children to savings to help to mold and build their financial experiences. This can offer early childhood financial exposure that can be useful in the future. Thus, repeated exposure to finances at an early stage can help them to make sophisticated and wise financial decisions as they start dealing with financial institutions as they grow into adulthood.

Besides, the government of Uganda should ensure that financial education is conducted in colleges and universities to advance financial capability among young adults. Equipping them with the necessary financial knowledge and skills to participate effectively in the complex financial marketplace could be useful as they progress with life.

More so, the government of Uganda can encourage partnerships with academic and learning institutions to develop customized financial literacy curriculum and modules that suit the financial learning needs of women micro businesses. This can help them to acquire financial knowledge to supplement their financial experiences to make informed financial judgments to be financially included by the microfinance institutions in order to grow their businesses.

The women micro business owners can also conduct interactive learning sessions among the existing women groups to pass-on basic financial knowledge and skills to their colleagues based on personal experience. This may also help them to stay informed about the current activities within the financial markets while running small businesses. The interactive sessions can help to promote access to finance for investment from the microfinance institutions and other prospective financial service providers in rural areas.

The microfinance institutions can also arrange for training sessions on loan management and sharing of ideas about savings and borrowings among the different women groups in rural areas. This can give them knowledge and skills on how to manage microloans and ensure timely repayment.

The government of Uganda through different business development institutions can also organize routine business mentorship through radio talk shows and information exchange sessions and trade shows for the business communities. This can offer a platform for business owners to share their financial experiences with others so that they may replicate them to succeed.

The government of Uganda can also advocate for the use of teachable moments to provide entrepreneurs with knowledge and skills in dealing with financial matters. For example, practical sessions on debt management and counseling can be conducted among business groups to equip them with better business and money management skills and experience.

9. Study limitations and future research

Owing to the geographical ambit of the current study and sample source from only one developing country, future studies may collect data from other regions of the world for comparative analysis to give more insights into the role of financial experience in rural financial markets. While the results from this study were significant and tenable through the use of SmartPLS, the use of Bayesian analysis was not adopted in this study. Future studies may adopt and use the Bayesian analysis.

References

Akerlof, G. (1970), "The market for 'lemons': quality uncertainty and the market mechanism", *Quarterly Journal of Economics*, Vol. 84 No. 3, pp. 488-500, doi: 10.2307/1879431.

Ameliawati, M. and Setiyani, R. (2018), "The influence of financial attitude, financial socialization and financial experience to financial management behavior with financial literacy as the mediation variable", *KnE Social Sciences*, Vol. 3 No. 10, pp. 811-832, doi: 10.18502/kss.v3i10.3174.

Armendáriz, B. and Labie, M. (2011), "The handbook of microfinance", World Scientific, Toh Tuck Link, Singapore.

Babajide, A., Osabuohien, E., Tunji-Olayeni, P., Falola, H., Amodu, L., Olokoyo, F., Adegboye, F. and Ehikioya, B. (2023), "Financial literacy, financial capabilities, and sustainable business model practice among small business owners in Nigeria", *Journal of Sustainable Finance and Investment*, Vol. 13 No. 4, pp. 1670-1692, doi: 10.1080/20430795.2021.1962663.

Bagozzi, R.P. and Yi, Y. (1988), "On the evaluation of structural equation model", *Journal of the Academy of Marketing Science*, Vol. 16 No. 1, pp. 74-94, doi: 10.1007/bf02723327.

Baron, R.M. and Kenny, D.A. (1986), "The moderator-mediator variable distinction in social psychological research: conceptual, strategic and statistical considerations", *Journal of Personality and Social Psychology*, Vol. 51 No. 6, pp. 1173-1182, doi: 10.1037//0022-3514.51.6.1173.

Bottazzi, L. and Lusardi, A. (2016), "Gender differences in financial literacy: evidence from pisa data in Italy", Working Paper, Global Financial Literacy Excellence Center (GFLEC), Washington DC.

Bucher-Koenen, T., Alessie, R., Lusardi, A. and Van Rooij, M. (2016), *Women, Confidence, and Financial Literacy*, European Investment Bank, Luxembourg.

Caramela, S. (2018), "Microfinance: what it is and why it matters", Business News Daily, Retrieved 16 February 2019.

Chakrabarty, K.C. (2011), "Keynote address on financial inclusion", Mumbai, September, 2011.

Chen, F., Yu, Di. and Sun, Z. (2023), "Investigating the associations of consumer financial Knowledge and financial behaviors of credit card use", *Heliyon*, Vol. 9 No. 1, pp. 1-13, doi: 10.1016/j.heliyon.2022.e12713.

Cole, R.A. and Sokolyk, T. (2018), "Debt financing, survival, and growth of start-up firms", *Journal of Corporate Finance*, Vol. 50, pp. 609-625, doi: 10.1016/j.jcorpfin.2017.10.013.

Collins, D., Morduch, J., Rutherford, S. and Ruthven, O. (2009), *Portfolios of the Poor: How the World's Poor Live on $2 a Day*, Princeton University Press, Princeton.

Danes, S.M. (2006), "Tensions within family business-owning couples over time", *Stress, Trauma, and Crisis*, Vol. 9 Nos 3-4, pp. 227-246, doi: 10.1080/15434610600854244.

Demirgüç-Kunt, A., Klapper, L., Singer, D., Ansar, S. and Hess, J. (2020), "The Global Findex Database 2017: measuring financial inclusion and opportunities to expand access to and use of financial services", *The World Bank Economic Review*, Vol. 34 No. Supplement_1, pp. S2-S8, doi: 10.1093/wber/lhz013.

Fajnzylber, P., Maloney, W. and Rojas, G.M. (2006), "Microenterprise dynamics in developing countries: how similar are they to those in the industrialized world? Evidence from Mexico", *The World Bank Economic Review*, Vol. 20 No. 3, pp. 389-419, doi: 10.1093/wber/lhl005.

Field, A. (2005), *Discovering Statistics Using SPSS*, Sage, London.

Financial Sector Deepening Uganda (2023), *Beyond Financial Inclusion: Annual Report, 2023*, Kampala, Uganda.

FINCA International (2021), *What Is Microfinance?*, FINCA International, Washington D.C., Retrieved 9 April 2021.

FinScope (2018), *Topline Findings Summary Report on Access to Financial Services, Financial Sector Deepening Uganda*, Kampala.

Fonseca, N.A., Rung, J., Brazma, A. and Marioni, J.C. (2012), "Tools for mapping high-throughput sequencing data", *Bioinformatics*, Vol. 28 No. 24, pp. 3169-3177, doi: 10.1093/bioinformatics/bts605.

Fornell, C. and Larcker, D.F. (1981), "Evaluating structural equation models with unobservable variables and measurement error", *Journal of Marketing Research*, Vol. 18 No. 1, pp. 39-50, doi: 10.2307/3151312.

Garmaise, M.J. and Gabriel, N. (2010), "Information, the cost of credit, and operational efficiency: an empirical study of microfinance", *Review of Financial Studies*, Vol. 23, pp. 2560-2590.

Hair, J.F., Jr, Hult, G.T.M., Ringle, C.M. and Sarstedt, M. (2014), *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*, Sage, Los Angeles, CA.

Hair, J.F., Sarstedt, M., Ringle, C.M. and Gudergan, S.P. (2018), *Advanced Issues in Partial Least Squares Structural Equation Modeling*, SAGE Publications, Thousand Oaks.

Hair, J.F., Hult, G.T.M., Ringle, C.M. and Sarstedt, M. (2022), "A primer on partial least squares structural equation modeling (PLS-SEM)", Book Chapter January, 2022, Sage, Thousand Oaks, CA, doi: 10.1007/978-3-030-80519-7.

Hartarska, V. and Nadolnyak, D. (2008), "An impact analysis of microfinance in Bosnia and Herzegovina", *World Development*, Vol. 36 No. 12, pp. 2605-2619, doi: 10.1016/j.worlddev.2008.01.015.

Hasler, A. and Lusardi, A. (2017), *The Gender Gap in Financial Literacy: A Global Perspective. Global Financial Literacy Excellence Center*, The George Washington University School of Business, Washington D.C., pp. 2-16.

Hilgert, M.A., Hogarth, J.M. and Beverly, S.G. (2003), "Household financial management: the connection between knowledge and behavior", *Federal Reserve Bulletin*, Vol. 89, p. 309.

Islam, K.A. (2016), "Impact of micro-financing on women empowerment in Bangladesh", *The Millennium University Journal*, Vol. 1 No. 1, pp. 1-18.

Ismail, J.I. (2022), "Entrepreneurs' competencies and sustainability of small and medium Enterprises in Tanzania. A mediating effect of entrepreneurial innovations", *Cogent Business and Management*, Vol. 9 No. 1, pp. 1-22, doi: 10.1080/23311975.2022.2111036.

Johnson, E. and Sherraden, M.S. (2007), "From financial literacy to financial capability among youth", *Journal of Sociology and Social Welfare*, Vol. 34 No. 3, pp. 119-146, doi: 10.15453/0191-5096.3276.

Kabeer, N. (2001), "Conflicts over credit: re-evaluating the empowerment potential of loans to Women in rural Bangladesh", *World Development*, Vol. 29 No. 1, pp. 63-84, doi: 10.1016/s0305-750x(00)00081-4.

Kagan, J. (2018), *Microfinance*, Investopedia, New York City, Retrieved 16 February 2019.

Kaiser, T. and Menkhoff, L. (2017), "Does financial education impact financial literacy and financial behavior, and if so, when?", *The World Bank Economic Review*, Vol. 31 No. 3, pp. 611-630, doi: 10.1093/wber/lhx018.

Khan, S.T., Bhat, M.A. and Sangmi, M.U. (2022), "Can microfinance-backed entrepreneurship be a holistic empowerment tool for women? Empirical evidence from Kashmir Valley, India", *Journal of Business and Socio-economic Development*, Vol. 2 No. 2, pp. 117-136, doi: 10.1108/JBSED-07-2021-0097.

Klapper, L., Lusardi, A. and Van Oudheusden, P. (2015), Financial literacy around the world. In Standard and Poor's Ratings Services Global Financial Literacy Survey (GFLEC working paper).

Kolb, D.A. (1984), *Experiential Learning: Experience as the Source of Learning and Development*, Prentice-Hall, Englewood Cliffs, NJ.

Kolb, D.A., Rubin, I.M. and McIntyre, J. (Eds) (1971), *Organizational Psychology: an Experiential Approach*, Prentice Hall, Englewood Cliffs, NJ.

Liu, M., Hu, Y., Li, C. and Wang, S. (2023), "The influence of financial knowledge on the credit Behaviour of small and micro enterprises: the knowledge-based view", *Journal of Knowledge Management*, Vol. 27 No. 1, pp. 208-229, doi: 10.1108/JKM-12-2021-0934.

Lopez, T. and Winkler, A. (2018), "The challenge of rural financial inclusion – evidence from Microfinance", *Applied Economics*, Vol. 50 No. 14, pp. 1555-1577, doi: 10.1080/00036846.2017.1368990.

López-Sánchez, P., Urquía-Grande, E., Del Campo, C. and Cancer, A.L. (2022), "Delving into the determinants of default risk in savings groups: empirical evidence from Ecuador", *European Journal of Development Research*, Vol. 34 No. 6, pp. 2625-2650, doi: 10.1057/s41287-021-00480-3.

Lusardi, A. (Ed.) (2009), *Overcoming the Saving Slump: How to Increase the Effectiveness of Financial Education and Saving Programs*, University of Chicago Press.

Lusardi, A. (2019), "Financial literacy and the need for financial education: evidence and implications", *Swiss Journal of Economics and Statistics*, Vol. 155 No. 1, pp. 1-8, doi: 10.1186/s41937-019-0027-5.

Lusardi, A. and de Bassa Scheresberg, C. (2013), Financial literacy and high-cost borrowing in the United States, NBER Working Paper n. 18969, April.

Lusardi, A. and Mitchell, O.S. (2009), How ordinary consumers make complex economic decisions: financial literacy and retirement readiness, NBER Working Paper No. 15350.

Lusardi, A. and Mitchell, O.S. (2014), "The economic importance of financial literacy", *Journal of Economic Literature*, Vol. 52 No. 1, pp. 5-44, doi: 10.1257/jel.52.1.5.

Lusardi, A. and Mitchell, O.S. (2023), "The importance of financial literacy: opening a new field", *The Journal of Economic Perspectives*, Vol. 37 No. 4, pp. 137-154, doi: 10.1257/jep.37.4.137.

Lusardi, A. and Tufano, P. (2015), "Debt literacy, financial experiences, and over indebtedness", *Journal of Pension Economics and Finance*, Vol. 14 No. 4, pp. 332-328, doi: 10.1017/S1474747215000232.

Mahmood, S., Hussain, J. and Matlay, H.Z. (2014), "Optimal microfinance loan size and poverty reduction amongst female entrepreneurs in Pakistan", *Journal of Small Business and Enterprise Development*, Vol. 21 No. 2, pp. 231-249, doi: 10.1108/jsbed-03-2014-0043.

McIntosh, C., Villaran, G. and Wydick, B. (2011), "Microfinance and home improvement: using retrospective panel data to measure program effects on fundamental events", *World Development*, Vol. 39 No. 6, pp. 922-937, doi: 10.1016/j.worlddev.2011.03.001.

Milana, C. and Ashta, A. (2020), "Microfinance and financial inclusion: challenges and opportunities", *Strategic Change*, Vol. 29 No. 3, pp. 257-266, doi: 10.1002/jsc.2339.

Miller, M., Reichelstein, J., Salas, C. and Zia, B. (2015), "Can you help someone become financially capable? A meta-analysis of the literature", *The World Bank Research Observer*, Vol. 30 No. 2, pp. 220-246, doi: 10.1093/wbro/lkv009.

Mitchell, O.S. and Lusardi, A. (2015), "Financial literacy and economic outcomes: evidence and policy implications", *The journal of retirement*, Vol. 3 No. 1, pp. 107-114, doi: 10.3905/jor.2015.3.1.107.

Mokhtar, S.H. and Ashhari, Z.M. (2015), "Issues and challenges of microcredit programmes in Malaysia", *Asian Social Science*, Vol. 11 No. 26, pp. 191-195, doi: 10.5539/ass.v11n26p191.

Moreira Costa, V., De Sá Teixeira, N.A., Cordeiro Santos, A. and Santos, E. (2021), "When more is less in financial decision-making: financial literacy magnifies framing effects", *Psychological Research*, Vol. 85 No. 5, pp. 2036-2046, doi: 10.1007/s00426-020-01372-7.

Nino-Zarazua, M.M. and Copestake, J. (2008), "Financial inclusion, vulnerability and mental models: from physical access to effective use of financial services in a low-income area of Mexico City", *Savings and Development*, Vol. 32, No. 4, pp. 353-379.

Nunnally, J.C. and Bernstein, I.H. (1994), *Psychometric Theory*, 3rd ed., McGraw-Hill, New York, NY.

Raza, A., Tong, G., Sikandar, F., Erokhin, V. and Tong, Z. (2023), "Financial literacy and credit accessibility of rice farmers in Pakistan: analysis for Central Punjab and Khyber Pakhtunkhwa regions", *Sustainability*, Vol. 15 No. 4, pp. 1-24, doi: 10.3390/su15042963.

Rostamkalaei, A. and Freel, M. (2017), "Business advice and lending in small firms", *Environment and Planning C: Politics and Space*, Vol. 35 No. 3, pp. 537-555, doi: 10.1177/0263774x16665620.

Safitri, A. and Kartawinata, B.R. (2020), "Pengaruh financial socialization dan financial experience Terhadap financial management behavior", *Jurnal Ilmu Keuangan Dan Perbankan (JIKA)*, Vol. 9 No. 2, pp. 157-170, doi: 10.34010/jika.v9i2.2987.

Seligman, M.E. (2012), *Positive Psychology in Practice*, John Wiley & Sons, Hoboken, NJ.

Sina, P.G. (2012), "Analisis literasi ekonomi", *Jurnal Economia*, Vol. 8 No. 2, pp. 135-143.

Singh, S. (2015), "The effects of microfinance programs on women members in traditional societies", *Gender, Place and Culture*, Vol. 22 No. 2, pp. 222-238, doi: 10.1080/0966369x.2013.855627.

Sohn, S.H., Joo, S.H., Grable, J.E., Lee, S. and Kim, M. (2012), "Adolescents' financial literacy: the role of financial socialization agents, financial experiences, and money attitudes in shaping financial literacy among South Korean youth", *Journal of Adolescence*, Vol. 35 No. 4, pp. 969-980, doi: 10.1016/j.adolescence.2012.02.002.

Uganda Investment Authority (2008), *Small and Medium Enterprises (SMEs) Business Guide*, Uganda Investment Authority (UIA), Kampala, Uganda.

Wang, J. and Li, R. (2023), "Asymmetric information in peer-to-peer lending: empirical evidence from China", *Finance Research Letters*, Vol. 51, 103452, doi: 10.1016/j.frl.2022.103452.

World Bank (2020), *Global Economic Prospects*, The World Bank Publications, Washington D.C, available at: https://www.worldbank.org/en/publication/globaleconomic-prospects

Yemelyanov, O., Petrushka, T., Symak, A., Trevoho, O., Turylo, A., Kurylo, O., Danchak, L., Symak, D. and Lesyk, L. (2020), "Microcredits for sustainable development of small Ukrainian enterprises: efficiency, accessibility, and government contribution", *Sustainability*, Vol. 12 No. 15, pp. 1-32, doi: 10.3390/su12156184.

Yunus, M. (2007), *Creating a World without Poverty: Social Business and the Future of Capitalism*, Public Affairs, New York.

Further reading

Ajzen, I. (1991), "The theory of planned behavior", *Organizational Behavior and Human Decision Processes*, Vol. 50 No. 2, pp. 179-211, doi: 10.1016/0749-5978(91)90020-t.

Churchill, G.A. and Iacobucci, D. (2004), *Marketing Research: Methodological Foundations*, 9th ed., Thomson South-Western Ohio.

De Vellis, R.F. (2003), *Scale Development: Theory and Applications*, 2nd ed., Sage, Thousand Oaks.

Field, A.P. (2009), *Discovering Statistics Using SPSS*, Sage, London.

Johns, R. (2010), "Likert items and scales", available at:Survey Question Bank website: http://www.surveynet.ac.uk/sqb/datacollection/likertfactsheet.pdf

Karlan, D.S. (2007), “Social connections and group banking”, *Economic Journal*, Vol. 117 No. 517, pp. F52-F84, doi: 10.1111/j.1468-0297.2007.02015.x.

Kotlikoff, L.J. and Bernheim, B.D. (2001), *Household Financial Planning and Financial Literacy*, MIT Press, Cambridge: MA, pp. 427-478.

Likert, R. (1932), “A technique for the measurement of attitudes”, *Archives of Psychology*, Vol. 140 No. 1, pp. 44-53, (the original article).

Lusardi, A. and Tufano, P. (2009), “Teach workers about the peril of debt”, *Harvard Business Review*, Vol. 87 No. 11, pp. 22-24.

Nunnally, J.C. (1978), *Psychometric Theory*, McGraw-Hill, New York.

Podsakoff, P.M., MacKenzie, S.B., Paine, J.B. and Bachrach, D.G. (2000), “Organizational Citizenship behavior: a critical review of the theoretical and empirical literature and suggestions for future research”, *Journal of Management*, Vol. 26 No. 3, pp. 513-563, doi: 10.1177/014920630002600307.

Podsakoff, P.M., MacKenzie, S.B., Lee, J.Y. and Podsakoff, N.P. (2003), “Common method biases in behavioral research: a critical review of the literature and recommended remedies”, *Journal of Applied Psychology*, Vol. 88 No. 5, pp. 879-903, doi: 10.1037/0021-9010.88.5.879.

Sekaran, U. (2003), *Research Methods for Business: A Skill Building Approach*, John Wiley & Sons, New York.

Spector, P.E. (2006), “Method variance in organizational research: truth or urban legend?”, *Organizational Research Methods*, Vol. 9 No. 2, pp. 221-232, doi: 10.1177/1094428105284955.

Tourangeau, R., Rips, L.J. and Rasinski, K. (2000), *The Psychology of Survey Response*, Cambridge University Press, Cambridge.

Uganda Bureau of Statistics (2010/2011), *The Census of Business Establishment in Uganda*, UBOS, Department of Statistics and Demography, Kampala.

About the authors

George Okello Candiya Bongomin holds a Ph.D. in Finance, M.Sc. (Accounting and Finance) and Bachelor’s degree in Commerce Accounting from Makerere University, Kampala, Uganda. He is based at the Faculty of Graduate Studies and Research and Finance Department, Faculty of Commerce, Makerere University Business School, Kampala Uganda, and is International Financial Inclusion Scholar and Poverty Consultant with many institutions. Currently, he is Visiting Professor and Scholar at the Laboratory for Financial Engineering at Laval University, University of Regina, Canada, and State University of New York, New York, U.S. He is also Member of the Centre for Global Finance at SOAS University of London. He is Principal Investigator on MUBS and Bank of Uganda Joint Research Collaboration on Digital Financial Services and Financial Inclusion in Uganda. George is also Regional Associate Editor for Journal of Comparative International Management (JCIM), Canada, and Editorial Board Member of the Africa Journal of Management, Canada. His research interests are in financial inclusion, artificial intelligence/machine learning and financial services, digital financial services, microfinance, behavioral finance, entrepreneurship, banking and finance practice, institutional economics, financial consumer protection, ESG (Environmental, Social and Governance), green finance/climate change financing and business psychology. George Okello Candiya Bongomin is the corresponding author and can be contacted at: abaikol3@yahoo.co.uk

Frederick Semukono, MBA., holds a Master of Business Administration (Accounting and Finance), Bachelor of Commerce degree from Makerere University, Kampala, Uganda. He is a Senior Lecturer and Acting Director of Quality Assurance at Makerere University Business School (MUBS). He previously served as Head of Department of Management, Dean of Faculty of Management, Dean of Faculty of Vocational and Distance Education and Director of Quality Assurance at MUBS. He has also been the Chairman of the MUBS Contracts Committee, Irregularities committee and Visitation Committee. He has taught quantitative methods, business statistics and financial management courses at both undergraduate and postgraduate levels for over 25 years. His research interests are in the areas of finance, digital financial services, crowd funding, rural finance, banking and finance practice, MSMEs, operations management, management science and quality assurance.

Joseph Baleke Yiga Lubega., holds a Ph.D. in Business Administration from Mbarara University of Science and Technology, MBA Finance and B.Com Accounting from Makerere University. He is also a member of the Certified Public Accountants of Uganda (CPA-U) and Certified Public Accountants of Kenya (CPA-K). Currently, he is Dean and Associate Professor at UCCSAT University and Lecturer at Ndejje University Kampala, Uganda. His research interests are in trade finance, public sector accounting, auditing, financial management, microfinance, computerized accounting system and financial accounting.

Pierre Yourougou, Ph.D., is Deputy Executive Director of the Institut National Polytechnique Félix Houphouet-Boigny de Yamoussoukro, Cote d'Ivoire and Professor of Finance Practice Emeritus at the Martin J. Whitman School of Management, Syracuse University, New York, USA. He holds a Ph.D. in Banking and Finance from New York University's Stern School of Business. He is the founding director and executive secretary of the Africa Business and Entrepreneurship Research Society and his research interests include development finance, banking, finance practice, rural finance and international business.