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**Financial Literacy and Financial Inclusion: A positivist
view of Proprietors of Small and Medium Enterprises in
Fort Portal City, Western Uganda**

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ABSTRACT

Purpose: The study aimed at examining the relationship between financial literacy and financial inclusion among proprietors of SMEs in Fort portal City, Western Uganda.

Methodology: The study was anchored on a positivist paradigm, adopting cross-sectional and correlational designs. One hundred sixty-five proprietors of small and medium enterprises (SMEs) were purposively selected from 297 proprietors of registered SMEs operating in all Divisions of Fort Portal City in Western Uganda. Data were collected using a structured self-administered questionnaire from the proprietors who formed the unit of inquiry per SME. Pearson correlation and standard regression were used as the primary data analysis techniques.

Findings: The study established that financial literacy is significantly positively associated with financial inclusion. Financial literacy accounted for 28% of the variance in financial inclusion among proprietors of SMEs in Fort Portal City.

Unique contribution to theory, practice, and policy: The study uniquely contributes to financial inclusion literature by providing further evidence on the positive relationship between financial literacy and financial inclusion among proprietors of SMEs in Fort Portal city, Western Uganda. The study findings have supported the financial literacy theory of financial inclusion, which assumes that “financial literacy increases people’s willingness to participate in the formal financial sector.” It was recommended that proprietors of small and medium enterprises orient their strategic decisions towards increasing their financial literacy to improve their financial inclusion.

Keywords: *Financial Literacy, Financial Inclusion, SMEs*

1.0 Introduction

Financial inclusion has attracted immense attention globally, with policymakers and researchers advocating for the access and use of financial services among the communities (Eton et al., 2021). Financial inclusion is the access to various financial institutions, products, and services following the needs and abilities of the community to improve public welfare (Lubis et al., 2019). Eton et al. (2021) noted that financial inclusion is the ability of individuals to access and use basic financial services like savings, loans, and insurance, which are designed in a manner that is reasonably convenient, flexible, and reliable. Financial inclusion has taken center stage in economic growth and development to create wealth among citizens of developing countries (Eton et al., 2021). However, the access to and the appropriate use of formal financial services continues to dwindle significantly on the global agenda of developed and developing countries. Over 30% of the world's adult population (about 1.7 billion people) is unbanked, while in Africa, only 63% of the population has access to financial services (World Bank, 2017). For instance, financial inclusion in Indonesia was launched in 2010 by the Bank of Indonesia to expand public access to financial services. However, by 2019, a dramatic 32% of the population had not accessed financial services, and 60% - 70% of MSMEs in Indonesia did not have access to banking (Bire et al., 2019).

The development of SMEs in Uganda is one of the policy agendas of the government to boost economic growth and development (Uganda Investment Authority (UIA), 2019). One of the critical areas of government interventions is increased financial inclusion by creating The Microfinance Support Centre, Uganda, which offers programs that support the growth and expansion of SMEs through access to cheap and affordable finance (Kasozi & Makina 2021). However, In Uganda, demographics denote a decline in formal banking from 20% in 2013 to 11% in 2018 and a 7% increase in the financially excluded during this period (Kasozi & Makina 2021). Moreover, due to limited financial inclusion, there are persistent income inequalities within economies and slower growth among SMEs (Eton et al., 2021). This is because financial inclusion enhances economic growth through broad participation by citizens in various economic activities through numerous startups of small and medium enterprises (SMEs) (Kasozi & Makina 2021). SMEs are of interest in this study due to their significant role in the economic development of Uganda. They (SMEs) dominate much of the country's economy, with 10% active in the manufacturing sector, 33% in commerce, 49% in service, and 8% in other fields (Uganda Investment Authority (UIA), 2019). Furthermore, SMEs contribute approximately 90% to employment in the entire private sector and 80% of manufactured products, thus, accounting for 20% of Uganda's gross domestic product (GDP) (UIA, 2019). Therefore, the continued dwindling of poor financial inclusion among the SMEs in Uganda could pose a significant threat to economic development, especially in developing countries, if not urgently addressed (Bire et al., 2019).

While financial inclusion can act as an engine for the performance of SMEs, existing literature suggests that it depends on the financial literacy of the business community (Bongomin et al. (2016). Financial literacy refers to making informed choices and effective decisions regarding money (Kasozi & Makina, 2021). It includes financial knowledge, attitudes, behaviors, and skills that influence decision-making and apply to real-life processes, resulting in improved financial wellbeing for the individual (Atkinson & Messy, 2011). Kasozi et al., (2021) posited that informed customers make better decisions for themselves and their businesses and support the financial system's effectiveness by demanding more sophisticated financial services, thus improving

financial inclusion. Moreover, financial literacy is beneficial not only for the community but also for financial institutions. It is argued that when people understand the products of the financial institutions, they will be compelled to buy one of their products, such as insurance, loans, and savings (Prete, 2013). Consequently, people who initially kept their money by themselves will deposit their money in the bank (Bire et al., 2019).

Empirical studies have underscored the positive relationship between financial literacy and financial inclusion. Bire et al. (2019) found a positive relationship between financial literacy and financial inclusion in Indonesia. Similarly, Grohmann et al. (2018) observed that financial inclusion is typically addressed by improving the financial infrastructure. Ramakrishnan (2012) further recognized that financial inclusion is a lofty ideal, but financial literacy is the first step towards achieving financial inclusion in India. On the other hand, Kodongo (2018) found a positive relationship between financial regulations, financial literacy, and financial inclusion in Kenya. Sanistasya (2019) established a positive effect of financial literacy and financial inclusion on the performance of small enterprises in East Kalimantan, Indonesia. In the same vein, Morgan and Long (2020) found that financial literacy has a statistically positive effect on financial inclusion. However, although the above scholars reported a positive relationship, Bongomin et al. (2016) found that financial literacy did not directly affect financial inclusion in Uganda.

Theoretically, this study was anchored on the financial literacy theory of financial inclusion coined by Ozili (2020). The theory suggests that financial inclusion should be achieved through education that increases the financial literacy of citizens. Ozili (2020) argues that financial literacy will increase people's willingness to participate in the formal financial sector, thus improving their financial inclusion.

However, despite the widely documented effect of financial literacy on financial inclusion, extant studies exhibit conflicting results. While some studies (Bire et al., 2019; Ramakrishnan, 2012; Kodongo, 2018) found a positive relationship, others (Bongomin et al., 2016) did not find a direct relationship. Moreover, studies used other predictors like social inclusion (Ozili, 2020) and social capital (Bongomin et al., 2016), and financial stability (Morgan & Pontines, 2014), thus ignoring the role of financial literacy. Besides, studies have mainly concentrated on developed countries like India (Ramakrishnan, 2012), Indonesia (Sanistasya, 2019), and Laos (Morgan, 2020), with economic settings and literacy levels different from those in Uganda. Even when scholars like Bongomin et al. (2016) and Eton et al. (2021) concentrated in Uganda, the emphasis was on rural areas, leaving out urban centers where most SMEs are concentrated (UIA, 2019). The above gaps in extant studies indicate that the relationship between financial literacy and financial inclusion is still elusive, hence the urgent need for this study. Therefore, this study set out to examine the relationship between financial literacy and financial inclusion in the context of proprietors of SMEs in Fort Portal city, Western Uganda.

2.0 Theoretical Review

This study was based on the financial literacy theory of financial inclusion. Peterson K Ozili coined this theory in 2020 in an attempt to present new theories that can be used in financial inclusion research and policy debates. The theory argues that financial literacy will increase people's willingness to participate in the formal financial sector (Ozili, 2020). The financial literacy theory is of great relevance to this study. It suggests that; financial literacy can make people aware of

financial products and services available to them. When they become aware of existing financial products and services that can improve their welfare, they will be willing to participate in the formal financial sector by opening a bank account. Secondly, people can take advantage of other benefits in the formal financial sector through increased financial literacy, such as investment and mortgage products. Thirdly, financial literacy can also help people become self-sufficient and can help them have some stability in their personal finance by helping them distinguish between needs and wants, helping them to create and manage a budget, teaching them to save so that they can pay bills when due, and to plan for retirement. Finally, governments with limited public funds or limited tax revenue to fund financial inclusion activities may prefer to use financial literacy as a national financial inclusion strategy since it does not require public funds to educate the population on financial services (Ozili, 2020).

However, the theory is not without limitations. The proponent (Ozili, 2020) himself acknowledges the demerits of the financial literacy theory to include the following. It addresses the ‘willingness’ not ‘capacity’ to participate in the formal financial sector. Financial literacy through education can improve the willingness of people to participate in the formal financial sector, but it does not necessarily improve ‘capacity’ to participate in the formal financial sector, where capacity is measured as having money that can be used to perform one or more transactions. This means that people who do not have money (‘capacity’) cannot actively participate in the financial sector even if they become financially literate. Nevertheless, the financial literacy theory for financial inclusion was found more applicable to this study than not due to its crucial assumption that financial literacy can make people aware of financial products and services available to them (Ozili, 2020), which is the gist of this study.

3.0 Empirical Literature and Hypothesis Development

Financial literacy is a combination of awareness, knowledge, skills, attitude, and behavior necessary to make sound financial decisions and ultimately achieve individual wellbeing (Świecka et al., 2019). On the other hand, financial inclusion is the process by which all households and businesses, regardless of income level, have access to and can effectively use the appropriate financial services they need to improve their lives (World Bank, 2018).

Extant studies report that financial literacy is positively associated with financial inclusion. For instance, Grohmann et al. (2018) assessed whether financial literacy improves financial inclusion. Using cross-country evidence, they observed that while financial inclusion is typically addressed by improving the economic infrastructure, a higher degree of financial literacy also has an apparent beneficial effect. Additionally, Bongomin et al. (2016) examined the mediating role of social capital in financial literacy and financial inclusion relationship in rural Uganda. The researchers observed that social capital is a significant mediator in the relationship between financial literacy and financial inclusion of rural poor in Uganda. However, they established that financial literacy did not directly affect financial inclusion but through full mediation of social capital.

Shen et al. (2018) estimated a formative model which analyzed the effect of financial literacy, digital financial product usage, and Internet usage on financial inclusion in mainland China. They found that improving the financial literacy of residents and popularizing Internet usage can promote the use of digital financial products and achieve the goal of advancing financial inclusion. In the same vein, Ozili (2020) conducted a comprehensive review of the recent evidence on

financial inclusion from all the regions. The key findings in this review indicated that financial inclusion is influenced by the level of financial innovation, poverty levels, the stability of the financial sector, the state of the economy, financial literacy, and regulatory frameworks, which differ across countries. Besides, Sanderson et al. (2018) set out to evaluate determinants of financial inclusion in Zimbabwe. The study established that age, education, financial literacy, income, and internet connectivity positively relate to financial inclusion. The study recommended that the government adopts policies that encourage financial service providers to set up their operations closer to the people or adopt technologies that ensure financial services are more accessible, such as agency and mobile banking.

Using microdata from the 2014 Global Findex and macroeconomic indicators, Lyons and Kass-Hanna (2021) investigated financial inclusion for the Middle East and North Africa (MENA) region. The researchers found that economically vulnerable populations are significantly less likely to be financially included. Households living in MENA countries with higher levels of financial literacy are more likely to be engaged in positive savings behaviors and less likely to be borrowing, especially from informal sources. Relatedly, Singh (2014) examined essential aspects necessary for financial literacy to achieve India's adequate financial and economic stability. The study further discussed the Reserve Bank of India's (RBI) efforts in improving individuals' financial knowledge. The researcher (Singh) established that financial literacy enhances the ability to effectively monitor the financial resources for developing a person's economic security.

From the above review, it can be observed that the availability of empirical literature on financial literacy and financial inclusion is undisputed. However, existing studies have left a lot to be desired, thus widening the current knowledge gap. Studies have yielded mixed findings, with some (Grohmann et al., 2018; Kass-Hanna, 2021; Ozili, 2021) reporting positive effects and others (Bongomin et al., 2016) establishing no direct effect of financial literacy on financial inclusion. Besides, studies covered developed economies such as China (Shen et al., 2018), India (Singh, 2014), Indonesia (Sanistasya, 2019), and Laos (Morgan, 2020). Additionally, studies have also concentrated on other predictors such as age, income, and internet connectivity (Sanderson et al., 2018), social capital (Bongomin et al., 2016), and financial stability Morgan (2014), thus leaving financial literacy-financial inclusion relationship largely unexplored. This study bridged the above gaps by examining the relationship between financial literacy and financial inclusion among SMEs in a developing country in Fort Portal city, Western Uganda. The study, therefore, hypothesized as follows;

H1: Financial Literacy is positively related to financial inclusion

4.0 Methodology

4.1 Research Paradigm, Research Design, Population, and Sample size

The study took a positivist paradigm based on the assumption that reality exists and can be understood, identified, and measured. It is argued that knowledge can be developed objectively without the views of the researcher or participants influencing its development (Park et al., 2020). Furthermore, the study adopted cross-sectional and correlational designs in assessing the relationship between financial literacy and financial inclusion. The study population comprised 297 registered SMEs operating in all Divisions of Fort Portal City in Western Uganda (United Nations Capital Development Fund (UNCDF) Uganda Business Impact Survey, 2020; Uganda

Bureau of Statistics report, 2017). Consequently, a sample of 165 proprietors of SMEs was derived using Krejcie and Morgan's table (Krejcie & Morgan, 1970) and selected using stratified random sampling. Based on their businesses (SMEs) for identification, respondents were categorized by city divisions and then randomly selected from each division using simple random sampling technique. The study purposively selected the proprietors who formed the unit of inquiry from each SME. The study prioritized the owners of the businesses because most SMEs in Uganda are sole proprietors, with the owners making all financial decisions (Uganda Investment Authority (UIA), 2019).

4.2 Measurement of Variables, Data Collection Method, Data Management and Analysis

The study conceptualized financial inclusion in terms of access to financial services, quality, usage of financial services, and welfare, (Aguera, 2015 & Eton et al., 2021). On the other hand, the study examined financial literacy in terms of financial knowledge, skills, attitude, and behavior of the proprietors of SMEs (Nicolini & Haupt, 2019; Eton et al., 2021; Kadoya & Khan, 2020). All Variables were anchored on a five-point Likert scale because respondents understood it quickly, leading to consistent answers. It also enabled the study to create a middle point (neutral position) to cater to scenarios where a respondent(s) was indifferent or had no opinion (Taherdoost, 2019). The Likert scale reduced the likelihood of low reliability resulting from random guessing by respondents (Simms et al., 2019).

The study used a survey method, employing a structured self-administered questionnaire with closed-ended questions for data collection. The self-administered questionnaire was used because it enhances the anonymity of respondents and enables them to respond more freely. Furthermore, surveys cover many respondents, hence greater credibility of the data collected (Rwakihembo, 2020; Ikart, 2019). Following the recommendations of Amin (2005), the study ensured content validity by retaining only constructs that yielded a content validity index (CVI) above 0.7. Fornell and Larcker (1981) noted that construct validity should be established by testing for convergent and discriminant. Consequently, convergent validity was confirmed, given that all constructs had average variance extracted (AVE) above 0.5. Moreover, the square root of the AVE for each construct was higher than the correlations among other constructs, thus confirming discriminant validity (Fornell et al., 1981). Furthermore, the study tested the reliability of the questionnaire to ascertain its internal consistency in measuring the variables. All constructs exhibited alpha values above 0.7, indicating the instrument's reliability (Pallant, 2020).

The study generated frequency distributions and box plots to check for missing values and outliers, respectively (Pallant, 2020). A missing value analysis revealed that missing values were less than 5%, and; a nonsignificant ($p > .05$) Little's missing completely at random (MCAR) test indicated that values were missing completely at random, thus being imputed (Tabachnick & Fidell, 2007). Outliers resulting from errors were removed, while genuine outlying values were changed to less extreme values (Allen and Bennett, 2010). Additionally, exploratory factor analysis (EFA) through principal component analysis (PCA) was conducted to identify clusters of variables and reduce dataset items to a manageable level (Pallant, 2020). The study applied the varimax rotation approach to extract principal components. Moreover, Kaiser Meyer Olkin (KMOs) were above 0.6, and Bartlett's test of sphericity was highly significant ($p < 0.01$) for all constructs, depicting a good model fit to the data (Podsakoff et al., 2012).

Besides, parametric assumptions of normality, homogeneity of variance, linearity, and independence of errors were confirmed, as Tabachnick and Fidell (2007) suggested. Kolmogorov-Smirnov and Shapiro-Wilks test results were nonsignificant ($p > .05$), implying a normal data distribution. Moreover, Levene's test results were nonsignificant ($p > .05$), indicating equality of variance. Also, correlations between the study variables were significant at $p < 0.01$ level, thus confirming linearity among variables (Podsakoff *et al.*, 2012). Accordingly, the study adopted Pearson correlation and regression analysis techniques to test the relationship between financial literacy and financial inclusion. Parametric analytical methods were preferred in this study due to their high statistical power, yielding more reliable results (Pallant, 2020).

5.0 Results

5.1 Background Characteristics

Descriptive results revealed that the majority of the participants were male (63%) aged between 30 and 40 years (71%). Respondents with diploma qualifications were the highest (27%), followed by those with secondary certificates (26%), degrees (20%), and other qualifications (27%). The majority (66%) of the respondents were married and had been in business for more than three years (62%). The above results imply that most SMEs in For Portal city are owned by middle-aged males who are fairly educated, hence effectively running their businesses. The fact that the majority of the proprietors are married indicates their commitment to the operations of their companies to sustain their families. Moreover, due to the proprietors' education and dedication, most SMEs have survived for more than three years.

5.2 Pearson Correlation Results

Table 1: Pearson Correlation Results

		Financial Literacy
Financial Inclusion	Pearson Correlation	.53**
	Sig. (1-tailed)	.00
	N	136

** . Correlation is significant at the 0.01 level (1-tailed).

Source: Primary Data (2022)

The Pearson correlation results indicated a significant appositive relationship between financial literacy and financial inclusion ($r = .53$, $p < .01$). This means that an improvement in financial literacy is associated with an improvement in financial inclusion among the proprietors of SMEs in For Portal city. The Pearson correlation results support the hypothesis that "financial literacy is positively associated with financial inclusion" (H1), as earlier stated in section 3.0.

5.3 Regression Results

The study conducted a standard regression analysis to examine the effect of financial literacy on financial inclusion. This decision followed the need to assess the variance in financial inclusion accounted for by financial literacy. Standard regression analysis results are shown in table 2 below.

Table 2: Results of Standard Regression Analysis

a) Model Summary						
Model	R	R Square	Adjusted R Square	Std. The error of the Estimate		
1	.526 ^a	.277	.269	3.944		
b) ANOVA						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	542.073	1	542.073	34.855	.000 ^b
	Residual	1415.245	164	15.552		
	Total	1957.317	165			
c) Coefficients						
Model		Unstandardized Coefficients Beta	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	-2.075	3.384		-.613	.541
	Financial Literacy	4.962	.841	.526	5.906	.000

Dependent Variable: Financial Inclusion

Source: Primary Data (2022)

The standard regression results showed that financial literacy had a significant effect on financial inclusion ($B=4.96, p<.01$). The results mean that a unit change in financial literacy causes a change in financial inclusion by 4.96 units. Moreover, the results underscored financial literacy as a potent predictor accounting for 28% ($R^2 = .277$) of the variance in financial inclusion among proprietors of SMEs in Fort Portal City.

6.0 Discussion of Results

The study examined the relationship between financial literacy and financial inclusion. The study used Person correlation analysis and standard regression analysis techniques to test for the relationship and causal effects among the variables. The Person correlation analysis indicated a positive association between financial literacy and financial inclusion. The standard regression analysis further confirmed this association. The study established that financial literacy is a strong predictor accounting for 28% of the variance in financial inclusion. The above study findings, therefore, rendered support to hypothesis H1. The study findings show that for one to utilize and

benefit from the existing financial products and services, it depends on their level of financial literacy in terms of their financial knowledge, skills, attitudes, and financial behaviors.

These findings coincide with Singh (2014), who opined that financial literacy enhances the ability to effectively monitor financial resources to develop a person's economic security. Moreover, other empirical studies concretized evidence of a positive association between financial literacy and financial inclusion. For instance, Sanderson et al. (2018) found a positive relationship between financial literacy and financial inclusion in Zimbabwe. Relatedly, while assessing whether financial literacy improves financial inclusion, Grohmann et al. (2018) observed that while financial inclusion can be achieved by improving the economic infrastructure, a higher degree of financial literacy also has an apparent beneficial effect. Furthermore, Shen et al. (2018) found that enhancing residents' financial literacy and popularizing internet usage can promote digital financial products and achieve the goal of advancing financial inclusion in China.

However, the present study findings contradict the findings of Bongomin et al. (2016), who established that financial literacy did not directly affect financial inclusion but through full mediation of social capital. Unfortunately, studies on the relationship between financial literacy and financial inclusion, specifically among proprietors of SMEs in fort Portal city, are scarce. This study provides unique findings that will help researchers and policymakers improve financial inclusion as an engine for economic development.

Conclusion

From the study findings, it can be deduced that financial inclusion among proprietors of SMEs is partly a function of financial literacy. Moreover, the results have indicated that for proprietors of SMEs to embrace the existing financial products and services, they must; 1) have the knowledge and understanding of economic concepts and mechanisms of the economy (financial knowledge), 2) apply the acquired economic knowledge in economic decisions (analyzes, evaluations, choices) (financial skills), 3) have the motivation and readiness to use knowledge and financial skills in various life situations (financial attitudes) and, 4) behave rationally in specific situations in the financial market (financial behavior). The above dimensions of financial literacy in combination exhibited a positive effect on financial inclusion among proprietors of SMEs. With such potent findings, the present study served its purpose.

Recommendations

The study recommends that proprietors of SMEs should strive to acquire financial literacy by attending workshops, going back to school, and consulting financial advisers like Accountants and lawyers before making significant financial decisions. This will enable them to attain the necessary financial knowledge, attitudes, and behaviors to understand the financial services in the market. The business community is further encouraged to embrace the existing financial products and services to improve their economic wellbeing and ensure the survival of their businesses. Furthermore, financial providers should continue sensitizing the public on the available financial services that are cheap, secure, and risk-averse. The Bank of Uganda should monitor the financial institutions' financial literacy initiatives. Besides, the government should provide financial training for SMEs actors to increase financial inclusion.

Theoretical Implication

The present study established a positive association between financial literacy and financial inclusion. This study's findings have thus rendered support to the financial literacy theory of financial inclusion. The present study has exposed the significant role of financial literacy in improving financial inclusion among proprietors of SMEs. Moreover, in line with the study findings, the theory argues that financial literacy will increase people's willingness to participate in the formal financial sector. It suggests that; financial literacy can make people aware of financial products and services available to them. Therefore, with sufficient financial literacy, people can take advantage of other benefits in the formal financial sector, such as investment and mortgage products, thus improving financial inclusion.

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