MAKERERE UNIVERSITY

MAKERERE UNIVERSITY BUSINESS SCHOOL

MANAGEMENT COMPETENCE, FINANCIAL LITERACY AND FINANCIAL INCLUSION OF VILLAGE SAVINGS AND LOANS (VSLAS) IN RURAL ARUA DISTRICT

BY

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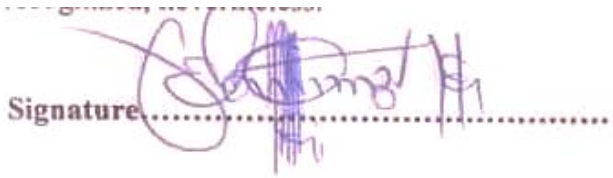
A DISSERTATION SUBMITTED TO THE MAKERERE UNIVERSITY BUSINESS SCHOOL (FACULTY OF GRADUATE STUDIES AND RESEARCH) IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF DEGREE OF MASTER OF BUSINESS ADMINISTRATION OF MAKERER UNIVERSITY

PLAN A

JULY, 2025

DECLARATION

To the best of my knowledge, this is original work, which has never been published or submitted for a degree at any other university. All cited sources, both published and unpublished, have been recognized, nevertheless.



Signature..... **Date**.....24/07/2025

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2020/HD10/20779U

APPROVAL

We hereby confirm that this research report has been submitted for examination with our approval as supervisors of the University.

Signature..... Date.....

Dr. Isaac Newton Kayongo

Signature..... Date.....

Mr. Tabani Robert

DEDICATION

To all my Bosco family composed of my lovely wife Candiru Harriet, my mother Esther Ogaru, my children Bright Jerome Saviour, Lucky Jonathan, Ansline Jerry, Patience Joan Trinity, Never Gloria and Brilliant Jesse Prosper. My siblings Asindu Samson, Atizuyo Gladys, Mambo Ronald, Akua Innocent, Sida Juliet and Ayikoru Kezzy.

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TABLE OF CONTENTS

DECLARATION i
APPROVAL ii
DEDICATION iii
ACKNOWLEDGEMENT iv
LIST OF ABBREVATIONS AND ACRONYMS viii
ABSTRACT ix
CHAPTER ONE 1
INTRODUCTION 1
1.0 Introduction 1
1.1 Background of the study 1
1.2 problem Statement 1
1.3 The Purpose of the research 4
1.4 Objectives of the study 5
1.5 Research questions 5
1.6 Scope of the study 5
1.6.1 Conceptual scope 5
1.6.2 Geographical Scope 5
1.6.3 Time Range 5
1.7 Significance of the study 6
1.8 Conceptual framework 7
CHAPTER TWO 8
LITERATURE REVIEW 8
2.0 Introduction 8
2.1 Theoretical review 8
2.2 Conceptual review 9
2.2.1 Management competence 9
2.2.2 Financial literacy 10
2.2.3 Financial inclusion 11
2.3 Empirical Literature Review 12
2.3.1 Management competence and financial inclusion among VSLA members 12

2.3.2 Financial literacy and financial inclusion of VSLA members 15
2.3.3 Managerial competence, financial literacy and financial inclusion among VSLA 17
2.4 Conclusion 19
CHAPTER THREE 20
METHODOLOGY 20
3.0 Introduction 20
3.1 Research design 20
3.2 The study population 20
3.3 Sample size and sampling technique 21
3.4 Data Sources 21
3.4.1 Primary sources 22
3.5 Data collection tools 22
3.5.1 Questionnaire 22
3.5.2 Interviews guide 22
3.6 Reliability and Validity 22
3.6.1 Reliability 22
3.6.2 Validity 23
3.7 Measurement of variables 24
3.7.1 Management Competence 24
3.7.2 Financial literacy 24
3.7.3 Financial inclusion 24
3.8 Data collection procedure 25
3.9 Data analysis 25
3.10 Ethical Considerations 25
CHAPTER FOUR 27
PRESENTATION, ANALYSIS AND INTERPRETATION OF FINDINGS 27
4.0 Introduction 27
4.1 Response Rate 27
4.2 Demographic characteristics of respondents 27
4.3 Correlation analysis 29
4.3.1 Management competence and financial inclusion 30

4.3.2 Financial literacy and financial inclusion 30
4.4 Regression Analysis 31
CHAPTER FIVE 34
DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS 34
5.0 Introduction 34
5.1 Discussion of Findings 34
5.1.1 Management competence and financial inclusion 34
5.1.2 Financial literacy and financial inclusion 36
5.1.3 Managerial competence and financial literacy in the area of financial inclusion 36
5.2 Conclusion 39
5.3 Recommendations 40
5.4 Study restrictions 41
5.5 Areas for further study 41
REFERENCES 43
APPENDICES 47
i) Questionnaire 47
ii) Interview Guide 50

LIST OF ABBREVATIONS AND ACRONYMS

ATMs	Automated Teller Machines
ATF	Access to Finance Services
BOU	Bank of Uganda
CARE	Cooperative Association and Relief Everywhere
CBOs	Community Based Organizations
DCDO	District Community Development Office
FI	Financial Inclusion
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome
LDC	Less developed countries
MPI	Multidimensional Poverty Index
PEAP	Poverty Eradication Action Plan
PROFIRA	Financial Inclusion Project in Rural Areas
ROSCA	Revolving Savings and Loan Association
SACCOS	Savings and Credit Cooperatives
SGD	Sustainable Development Goals
SPSS	Statistical Package for Social Scientists
UBOS	Uganda Bureau of Statistics
UNDP	United Nations Development Programs
VSLA	Village Savings and Credit Unions

ABSTRACT

The study aimed at establishing the relationship between management competence, financial literacy, and financial inclusion of members of Voluntary Savings Associations (VSLA) in Arua Rural District, . The study employed cross-sectional research design to gather both qualitative and quantitative data using interview guide and questionnaires that was self-administered respectively. There were 450 VSLA members in the Arua District that made up the research population. Using the sampling distribution table provided by Krejcie & Morgan (1970), a sample size of 207 VSLA members was determined. The study employed a linear regression model to ascertain the link between the variables and Pearson's correlation to ascertain the relationship between managerial competence, financial literacy, and financial inclusion. Quantitative data were analyzed using SPSS version 20.

The study's conclusions demonstrated a significant positive relationship between managerial abilities and financial inclusion. Ultimately, the research demonstrated that overall management competency and financial literacy predicted 24.1% (adjusted R2 = 0.241) of the variance in financial inclusion among VSLAs in Arua District and explained variance in financial inclusion. Additionally, the results showed a strong positive correlation between financial inclusion and financial literacy.

The study makes two recommendations: first, the Ugandan government should be more proactive in promoting financial inclusion and financial literacy among VSLAs, particularly in the Arua district; second, VSLA actors such as CBOs and Micro Finance Support Centers should pay attention to the financial literacy of the new VSLA members. The beneficiaries must be made more aware of the financial inclusion programs. A financial inclusion policy should be developed by VSLA management as well, with the goal of making sure that their services and goods are affordable, easily navigable, high-quality, and accessible to borrowers. For members to complete their financial obligations, the management of VSLAs must implement automated systems or online mobile services transactions 24 hours to promote accessibility and usage of VSLA services. Further research is encouraged in establishing other factors influencing financial inclusion other than Management Competence and Financial Literacy.

CHAPTER ONE
INTRODUCTION

1.0 Introduction

This chapter covers the background of the study, problem statement, purpose, objectives, research questions, research hypotheses, scope, significance and conceptual framework.

1.1 Background of the study

Financial inclusion refers to the availability and accessibility of affordable financial services such as savings, credit, insurance, and payment systems to all individuals and businesses, particularly the underserved and marginalized groups. The global focus on financial inclusion (FI) has intensified in recent years, driven by the realization that limited access to financial services among the poor hinders global development (GPFI, 2011). Empirical evidence increasingly supports the view that financial development and inclusion play a pivotal role in poverty reduction and improved economic performance (Zins & Weill, 2016). Defined as the availability and usage of financial services, financial inclusion is widely regarded as a key tool for poverty alleviation and broader economic prosperity (Kim et al., 2018).

The United Nations has acknowledged the importance of financial inclusion by incorporating it into the Sustainable Development Goals (SDGs). Specifically, FI is directly linked to SDGs 1 (No Poverty), 2 (Zero Hunger), 5 (Gender Equality), 8 (Decent Work and Economic Growth), and 9 (Industry, Innovation, and Infrastructure) (Kandpal, 2020). Through mechanisms such as increased capital mobility, investment opportunities, enhanced financial stability, and savings promotion, financial inclusion contributes to sustainable economic growth (Klapper, El-Zoghbi, & Hess, 2016). It also improves individuals' capacity to plan financially, manage shocks, and achieve long-term economic stability (Klapper et al., 2013; Furtado, 2018; Honohan, 2014; Kar et al., 2014).

The evolution of financial inclusion initiatives has shifted over time from Virtual Savings and Loan Associations (VSLAs) to microcredit, with microfinance becoming the dominant approach. In Africa, the level of financial inclusion significantly influences economic activity, growth, and development. Sub-Saharan Africa presents a mixed picture, with varying levels of access across regions. For instance, while parts of West, Southern, and Eastern Africa show relatively high financial inclusion, Central Africa lags behind. According to Demirgüç-Kunt and Klapper (2018), only 11% of adults in Central Africa hold a financial account, compared to the regional average of 27%. Eastern Africa, particularly Kenya, has seen a surge in financial inclusion through mobile money systems.

The VSLA model, pioneered by CARE International in Niger in 1991, has since expanded to over 61 countries across Africa, Asia, and Latin America, reaching more than six million participants (VSL Associates, 2015). CARE currently serves nearly 2.3 million people globally, primarily in Africa (Allen & Panett, 2010; Hendrick & Chidiae, 2011). The 2012 World Vision Report highlights the dual economic and social benefits of VSLAs, particularly in transforming the lives of impoverished rural populations.

The model supports the empowerment of economically disadvantaged groups especially women by promoting savings and borrowing behaviors. It is grounded in the theory that the poorest individuals, particularly women, benefit more from building financial assets through savings groups than from relying on debt (Hendrick & Chidiae, 2011). The primary goal is to enhance self-confidence and encourage saving habits as a pathway to sustainable development. CARE introduced the VSLA approach in Uganda in 1998 to improve access to financial services. By 2000, the methodology had gained widespread acceptance across the country. The Village Savings and Loan Association (VSLA) model is based on the Revolving Savings and Credit Association (ROSCA) concept, where small groups pool resources to

create a shared fund from which members can borrow. This approach is self-sustaining and easily replicable, making it suitable for remote areas.

While VSLAs have the potential to increase access to financial services, questions remain regarding their long-term impact on loan availability, savings, income, food security, consumption, education, and empowerment. There is also concern that wealthier members may dominate the groups, potentially excluding the most vulnerable. The West Nile and Arua districts have long implemented the VSLA approach. With a maximum of 30 members per group, Arua District currently has 18 fully registered VSLA groups comprising 450 village savings and credit associations (Arua CDO, 2021). While VSLAs are effective tools for promoting financial access and community cohesion, challenges such as low financial literacy and inadequate money management skills hinder their full potential. Research indicates that financial literacy and managerial competence significantly influence financial inclusion. In Uganda and other developing countries, these factors moderate financial behavior and business outcomes (Mutlu & Özer, 2021). Xiao and Porto (2017) further demonstrate that financial literacy, behavior, and capability mediate the relationship between financial education and financial satisfaction.

This study is guided by Human Capital Theory (Hellriegel et al., 2013) and Behavioral Economic Theory (Atkinson et al., 2005), which emphasize the role of individual knowledge, skills, and decision-making in economic outcomes. These theories underpin the understanding that improving managerial competence and financial literacy enhances individuals' ability to engage effectively in financial systems. Despite the growing body of literature on financial inclusion and VSLAs, there is a lack of empirical studies that examine the combined effect of managerial competence and financial literacy on financial inclusion in the context of rural Uganda , particularly in the Arua District . While previous studies have explored the role of VSLAs in promoting financial access and community development, few

have analyzed how individual-level factors such as financial literacy and managerial skills contribute to the effectiveness of VSLAs in enhancing financial inclusion. therefore this prompted the researcher to find out how managerial skills, financial literacy and financial inclusion of VSLA members are related. It targeted registered VSLA members in Arua Rural District.

1.2 Problem Statement

Financial inclusion is still far from being realized in Uganda, despite all of the initiatives made to support it, particularly in the Arua District. This is because, as of 2021, the DCDO, or District Community Development Office, conducted a financial classification and documented it in an annual report and submitted it to the city council (dcdo/ad/05/2021), from which they found that only 45% of respondents had access to microfinance from the expected 90%. This indicates that there is still low financial inclusion even though VSLAs are crucial in fostering financial inclusion because of their increased acceptability among the underprivileged and their operational flexibility to guarantee their clients' comfort levels. While VSLAs have shown potential in bridging the financial access gap, their impact may be limited by underlying challenges such as low levels of managerial competence and poor financial literacy among members. However, there is limited understanding of how these factors interact and influence financial inclusion outcomes within the VSLA framework in rural Arua District. This prompted the researcher to examine the relationship between managerial competence, financial literacy, and financial inclusion among registered VSLA members in rural Arua District, Uganda..

1.3 The Purpose of the research

The aim of the study was to find out how managerial skills, financial literacy and financial inclusion of VSLA members are related. It targeted registered VSLA members in Arua Rural District.

1.4 Objectives of the study

i. To find out the relationship between managerial competence and financial inclusion among registered members of VSLA in rural areas of Arua district.

ii. To find out the relationship between financial literacy and financial inclusion among registered members of VSLA in rural areas of Arua district.

iii. To find out the relationship between managerial competencies and financial literacy on financial inclusion among registered VSLA members in rural areas of Arua District.

1.5 Research questions

i. What is the relationship between managerial competence and financial inclusion among VSLA registered members in rural areas of Arua District.

ii.What is the relationship between financial literacy and financial inclusion among VSLA registered members in rural areas of Arua District.

iii.What are the combined effects of managerial competencies and financial literacy on financial inclusion among VSLA registered members in rural areas of Arua District.

1.6 Scope of the study

Three areas of consideration were taken here.

1.6.1 Conceptual scope

The study focused on the relationship between managerial competence, financial literacy and financial inclusion**.**

1.6.2 Geographical Scope

The study was conducted among selected VSLA registered members in the rural areas of Arua district as they were less considered in the research in relation to other districts in Uganda.

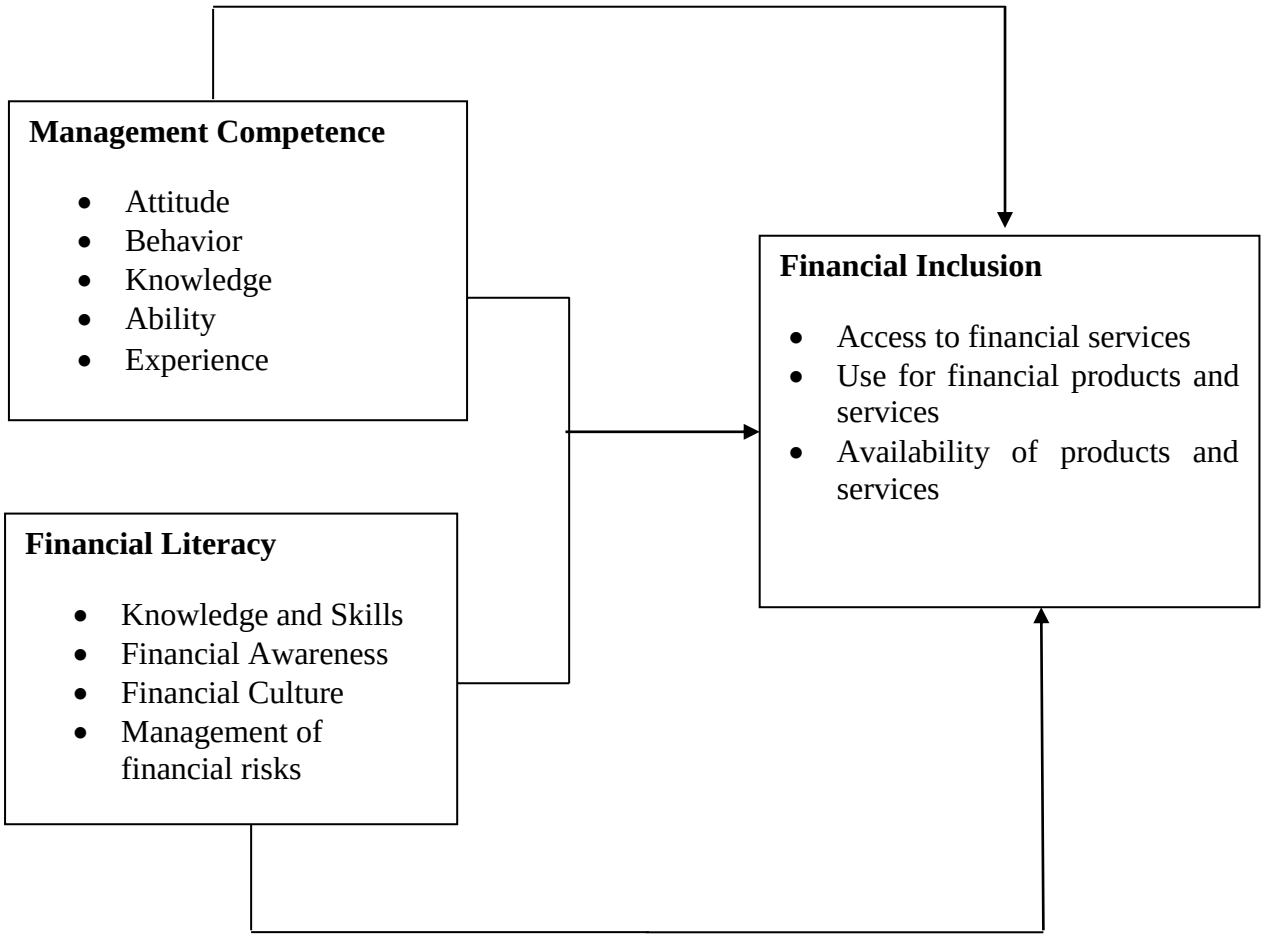
1.6.3 Time Range

The study covered the period from February 2020 to August 2024, but also considered the period from 2021 to 2024, when the problem of financial inclusion was more pronounced among rural communities in Arua District.

1.7 Significance of the study

1) For policy makers, these findings will help develop favorable policies that support management practices that lead to increased financial inclusion among rural communities in Uganda.
2) To managers of VSLAs, the findings will help provide a model that will be used for building strategies for financial inclusion among the communities in Arua district.
3) The study will contribute to the body of knowledge on the link between the variables examined in this study for the benefit of future researchers.
4) The knowledge gained will help in addressing a gap that was not addressed by earlier researchers.
5) The study also partially fulfills the prerequisites for the award of Makerere University's Degree of Master of Business Administration .

1.8Conceptual framework



Source: Adopted from Hellriegel et al, (2013), Atkinson et al (2005) and Subbarao, (2009).

The model conceptualizes that managerial competence in the form of supervisory ability and organizational ability leads to financial inclusion through access to banking, the capacity to save, and financial goods and services. Additionally, it is thought that financial inclusion is a result of financial literacy, which is demonstrated by the aforementioned characteristics and shows up as understanding of banking services, financial decision-making, and financial use. The model also shows that financial inclusion is a result of the interaction between managerial competences and financial literacy.

CHAPTER TWO
LITERATURE REVIEW

2.0 Introduction

It focuses on studies done by different academics on financial inclusion, financial literacy, and management abilities. The relationship between the variables this study looked into is also described in this section.

2.1 Theoretical review

This study was guided by two theories; The Finance Growth Nexus Theory and The Theory of Information Asymmetry. The Finance-Growth Nexus Theory illustrates the connection between the financial and real economies by arguing against the assumptions of perfect knowledge, a frictionless system, and mobile resources. It was first put forth by Walter Bagehot in 1873 and illustrates how changes in the money market impact capital spillovers in an economy as individuals look for the most worthwhile and profitable uses for their money. In essence, loanable money stimulates the economy. There is a multiplier impact when credit expands. This theory provides as a platform for identifying the variables that influence financial inclusion among those working in the unorganized sector and highlights the necessity to offer financial resources where it is most needed. It also underscores the role financial institutions play in bridging the financial inclusion gap by creatively engaging the marginalized in the conversation. In essence, this is what financial inclusion is all about. Thus, the idea provides a foundation for both the demand for legislation to encourage financial inclusion and the rationale for it.

Inefficient market outcomes can result from an imbalance between buyers and sellers, according to George Akerlof's 1970 paper "The Market for Lemons: Quality Uncertainty and the Market Mechanism," which developed the theory of asymmetric information.. The 1970s and 1980s saw the development of this theory. The concept clarifies the reasons for the failure of some attempts at financial inclusion, in particular the concealment of crucial

information that strengthens the public's mistrust of financial institutions. Financial inclusion attempts can be thwarted by a borrower's current circumstances being kept secret, such as their income and job status.

2.2 Conceptual review

The main concepts in this study were managerial competence, financial literacy and financial inclusion

2.2.1 Management competence

According to this study, management competence is the capacity that people, organizations, and groups have to plan ahead, save money, respond to financial shocks, and work toward achieving economic stability and the eradication of poverty. Clement et al. (2018) believe that in order for clients to optimize the financial resources that have been made available to them, they need to have improved access to markets and instruction in certain production and firm management tactics.

Both the management group and the individuals involved must be financially sound (World Bank, 2014). Financial capability and literacy are distinct concepts, despite their similarities and frequent overlap. While financial competence is more comprehensive and includes attitudes and behaviors related to finance (World Bank 2014) or the effort and ability to plan financial matters (Shankar 2013), financial literacy focuses on knowledge and skills (OECD 2014). Research on financial capability is still in its early stages, though. Nonetheless, there is mounting proof that there is a favorable correlation between financial inclusion and financial capacity. Potocki and Cierpiał-Wolan (2019) found a positive relationship between financial inclusion and financial capability for Polish rural populations. However, in this study, it was found that most members of the VSLA group have financial capacity.

According to Kyereboah and Biekpe (2016), poorly managed businesses face more sustainability-related problems than well-managed ones. To put it another way, a key factor

influencing how well a company performs is its management. According to the World Economic Forum (2018), increased managerial oversight and understanding of the variables influencing the supply and demand side of financial inclusion are necessary for the long-term acceptance and use of financial services that improve well-being. According to the current investigation's findings, the majority of VSLA groups showed evidence of efficient management control.

2.2.2 Financial literacy

Financial literacy, according to Ryan (2017), is the culmination of an investor's or consumer's understanding of financial concepts and products, their capacity to identify opportunities and risks in the financial market, their judgment regarding which sources to consult for advice, and their aptitude for making rational decisions that facilitate financial improvement..

Kepha (2020) asserts that participants in training programs for microfinance have a higher chance of maintaining a perfect repayment history than non-trained consumers. They argue that this is because clients who acquire financial inclusion through sales training see an average sixteen percent increase in business performance. But the conclusions don't apply to the outcomes of other businesses, such shifts in headcount and profit margins.According to the current study's findings, achieving financial inclusion requires VSLA groups and members to be financially literate.

2.2.3 Financial inclusion

Financial inclusion, according to the World Bank (2017), is the proportion of people and organizations that use financial services, such as credit, insurance, savings accounts, payments, and transactions. However, the World Bank and scholars point out that while some people would rather not save money, others would rather not use credit (Johnston & Murdoch 2017).Certain individuals are not eligible for credit facilities due to their lack of creditworthiness. It is not always the case that one cannot acquire financial services just because they are not used. One of the main pillars of economic development is financial inclusion, or the degree to which people have access to beneficial financial products that fit their needs at a reasonable cost (Demirgüç-Kunt et al. 2022). Financial products from physical banks and other establishments, along with digital-only services like mobile money and other fintech businesses, can assist clients in managing their emergency funds and formally saving, borrowing, and making payments. Formal financial services can be beneficial to households, but in order to use them properly, people need to be informed about the risks and costs involved.

According to Reza et al. (2020), there are several benefits linked to using financial services, such as increased savings, a decrease in crime, more effective wage payments, a decrease in fraud and administrative inefficiencies, a higher percentage of women entering the workforce, and higher agricultural yields for farmers. Furthermore, the use of both formal and informal financial services has a major impact on account holders' ability to absorb unfavorable economic shocks by encouraging greater savings and streamlining the interchange of money and risk for consumers with others (Pomeranz and Kast, 2022).

2.3 Empirical Literature Review

This section contains the results of numerous academics in the subject of managerial competency, financial inclusion and financial literacy.

2.3.1 Management competence and financial inclusion among VSLA members

Machirori (2012) notes that managerial competence refers to a set of individual behaviors that should be adopted in a position where the functions of that position are well understood. Managerial competence also refers to a set of behaviors that give employees the ability to demonstrate effectiveness in a specific task they perform as part of their job (Darrol 2013). Managerial competencies are a set of related skills, attitudes and knowledge that influence a person's work and that are linked to success in the workplace (Mitchelmore and Rowley,\ 2010; Nieman and Nieuwenhuizen\ 2019). In this sense, financial inclusion of VSLA members will result from VSLA group leaders possessing the necessary knowledge, abilities, and access to VSLA operations.

A significant obstacle to increasing financial inclusion in developing nations, according to Bongomin et al. (2017), is a lack of knowledge and comprehension, particularly among lower-class households. These households are less likely to use financial products and services if they are not familiar with them. In order for people to manage their finances and make use of financial services and products, they must be financially literate. Increasing the financial literacy of low-income households can help them become more financially literate, enabling them to assess financial products and choose the best ones for their needsThe aforementioned makes it abundantly evident that managerial competency is one of the most crucial factors in guaranteeing the attainment of financial inclusion for VSLA members.According to Okello et al. (2015), Mindra and Moya (2017), and Okello et al. (2020), financial knowledge has a significant influence on financial inclusion. With more education, one might gain varying opinions on investing hazards.. Financial literacy can be measured by posing simple questions regarding interest rates, bond coupon rates, inflation,

and risk diversification. A person with financial literacy is able to handle money very effectively, and someone with financial understanding is more skilled in financial problems (Rai et al., 2019).

Morgan & Trinh (2019) define financial behavior as the act of making or influencing financial decisions and actions. A person's well-being and financial situation can be negatively affected by various financial behaviors, including not calculating future expenses, choosing financial products without market research and skipping payments. A meta-analysis of research by Bongomin et al. (2017) and the results show that behavior has no appreciable effect on financial inclusion. A study by Okello et al. (2015) and Okello et al. (2020) states that the level of financial inclusion is affected or affected by financial behavior.

The use of financial products and services by low-income households in developing nations is directly correlated with their attitude toward these financial institutions and products, according to Bongomin et al. (2017). In fact, a lack of knowledge about the significance of creating mechanisms to boost consumer trust and protection, like savings insurance, can lower the demand for financial products by low-income households. Because behavioral changes can be influenced by changes in attitudes, using financial services can help people's wellbeing and quality of life (Mindra & Moya 2017). According to research by Bongomin et al. (2017), attitudes play a major and positive role in increasing financial inclusion in Uganda, especially regarding attitudes as part of financial literacy. However, research by Mindra and Moya (2017) shows that attitude has no discernible impact on financial inclusion.

The literature review to date shows that managerial choices regarding resources and market failures affect the financial success of a firm or individual (Chye et al., 2015; Turyahebwa, 2013). For example, Opler and Titman (2014) argue that the actions of the management team determine how effectively resources are used. Pablos (2016) further argues that the ability to

use the resources available to a company determines its performance more effectively than having better resources. In a similar vein, Enders (2014) noted that good management is the reason behind firm disparities. According to Dittmar and Mahrt-Smith (2017), companies with superior management produce nearly twice as much revenue as those with subpar management.

According to the results of a survey done by Chye et al. (2017), the operations of the majority of financial institutions that failed were mostly related to the managers' skill. The results align with the findings of Brown et al. (2014), who discovered that companies with superior governance yield higher returns for shareholders and are more profitable and valuable than those with inferior governance. According to Jay (2010), managerial efficacy and knowledge have a significant influence on financial performance. Because management can often exercise more control over operating expenses than over revenues, the company can maintain a low operating expense ratio and increase profitability.

According to Martina et al. (2017), people cannot be separated from their knowledge, abilities or values in the same way that they can be separated from their material possessions. This makes management competence distinctive. Furthermore, Seubert et al. (2018) pointed out that effective direction rather than material assets and financial capital is the foundation of sustainable competitive advantage. intellectual capital. This advantage evolves over time and is not easily imitated.

Autonomous managers are driven to take initiative and make choices on their own (Frese et al, 2019). Being autonomous makes one want to show their uniqueness at work and dislike following directions from superiors. Business managers sometimes do not acquire specific training in marketing, bookkeeping, or business plan development. For this reason, in order to

succeed, individuals must rely on experience and build their knowledge base on their own (Minniti & Bygrave, 2017).

2.3.2 Financial literacy and financial inclusion of VSLA members

Due to the global financial and economic agenda, financial literacy has recently acquired popularity (Williams and Satchell 2011; Postmus et al. 2013). Financial literacy, according to Fernandes et al. (2014), is the ability to choose financial products and services with knowledge. Understanding the language of finance is essential to improving financial education. Worthington (2016) defines financial literacy as the ability to make judgments about one's spending, saving and budgeting across all domains.Huston (2010) incorporated financial knowledge as an input to simulate the need for financial education and explain differences in financial success. Wang et al. (2020) found that taking out personal and unsecured loans is more likely when one lacks financial literacy. Higher financial literacy is linked to a greater inclination to save favorably and a lower inclination to borrow from unapproved sources, according to Lyons and Kass-Hanna (2019). People with a strong understanding of finance are better equipped to assess different financial services and products and control their financial risks. Furthermore, there is a significantly lower likelihood of financial institution involvement among those who are economically challenged.

According to research, both individual and organizational financial literacy is necessary for sound financial management and financial innovations (Usama & Yusoff, 2019). Financial literacy, according to Know-how (2014), is the best use of financial resources for company performance through the adoption of financial knowledge, competencies, and corporate culture. Numerous studies have linked economic education to financial inclusion. For example, Cheppekemoni (2017) repeatedly states that financial accounting statistics, coin

budgeting, saving behavior, inventory management, and ongoing capital management are just a few of the economic ideas that may be taught to people through monetary literacy.

Financial inclusion is directly correlated with economic literacy and knowledge of financial products, as research by Fernandes (2015) states.Furthermore, Khadijah and Wan (2019) contend that the primary factor promoting financial inclusion is financial literacy. Furthermore, Gallery, Newton, and Palm (2011) argue that economic inclusion as a financial approach supports financial decision-making. Empirical evidence suggests that a person's business literacy significantly affects their capacity to run a company (Mashizha, Sibanda & Maumbe 2019). This suggests that the level of financial literacy correlates with an individual's capacity to manage their finances and reduce risks, and vice versa. Financial literacy and SME performance have been found to be correlated linearly (Odetayo, Sajuyigbe & Adeyemi, 2020b; Usama & Yusoff, 2019; Védomí, 2014). Furthermore, according to Lusardi and Mitchell (2014), there is a strong relationship between financial literacy and both the success of SMEs and the ethical financial conduct of their owners. Financial literacy according to Sajuyigbe et al. (2017), is a tool for sensible financial decisions. Disney and Gathergood (2013) deduce that economic statistics provide a valuable foundation for the general prosperity and financial inclusion of small and medium-sized enterprises. Therefore, it is anticipated that financial inclusion and SME performance will be impacted by financial literacy.

Hussain et al. (2018) looked into the connection between business owners' use of financial services and their level of education. They discovered that a firm's capacity to expand and raise capital is positively impacted by financial literacy. With the exception of the Internet, Shen et al. (2019) discovered a statistically significant correlation between financial literacy and the usage of digital financial products.

2.3.3 Managerial competence, financial literacy and financial inclusion among VSLA members

According to Rai et al. (2019), fostering positive financial attitudes among citizens of the country is crucial to promoting financial inclusion among the younger generation. This is in addition to the fact that financial attitudes are based on people's perceptions of economic and non-economic factors as well as the results of particular decision-making behaviors. A survey question about preferences for living for the now and spending money is "Financial Attitude regarding Long-Term Financial Planning, including Aspects of Individual Time Preference and the Desire to Plan Savings." According to Morgan and Trinh (2019), this has a tendency to promote actions that can result in decreased resilience and financial well-being.

According to Bongomin et al. (2017), financial literacy programs and interventions that encourage the use of financial products like insurance and savings accounts can support tube promotion efforts by raising awareness and knowledge of financial products and the consequences of behavior. In developing nations, the majority of the population lacks access to financial services. According to Bongomin et al. (2017), financial literacy training can improve financial knowledge that affects how poor people manage their finances. Bongomin et al. (2017) claim that behavior has a significant positive impact on financial inclusion. In addition, financial behavior influences financial inclusion, as demonstrated by Potrich et al. (2016), Srividya and Susana (2016), and Santini et al. (2019).

Zins et al. (2016) examined the variables affecting financial inclusion in Africa. The study discovered that affluent, educated males with excellent managerial abilities are supportive of financial inclusion, based on data from 37 African nations in the World Bank's Global Findex database. Additionally, the study discovered that the factors influencing informal finance were different from those influencing formal finance and that financial inclusion was more strongly influenced by income and literacy levels. Some of the findings of Zins et al. (2016)

were validated by Sanderson et al. (2018), who looked at the variables impacting financial inclusion in Zimbabwe. They discovered that financial knowledge, the paperwork needed to obtain a bank account, income, and money management all had a positive correlation with financial inclusion.

Financial literacy (FL) supports financial planning and helps in making prudent financial decisions, argues Ramakrishna (2020). Mitchell (2014) argues that people in good financial situations were more adept at budgeting and debt management. People who have financial literacy are, according to Lusardi et al. better informed about how to earn, spend, invest and save money. (Kandpal, 2020). Similarly, Grohmann et al. (2017) discovered a link between greater levels of financial literacy and FI and the growth in bank branches in both urban and rural locations. Academics generally agree that in order to attain financial inclusion (FI), better financial capabilities and financial literacy are required.However, according to Atkinson and Messy (2013), the primary cause of falling FI levels in any nation. They proposed that in order to raise the FI level, governments should provide incentives for banks and other financial institutions to hold training sessions. Okello et al. (2020) have also utilized financial literacy as a link between FI and social networks. The substantial consequences of FL's direct and indirect effects on FI show how important a role FL plays in FI.

Shibia and Kieya (2016) investigated how an individual's financial literacy and management skills influenced their choice of financial strand in Kenya. This study made use of cross-sectional survey data from a Fin Access study conducted between 2009 and 2013. Multinomial probit regression was used in the study to accomplish its goals. The findings showed that financial management and literacy are positively correlated with financial inclusion. It has been found that the explanation of access to different financial strands is highly impacted by control variables, including age, income, gender, and education.

2.4Conclusion

The literature research of the variables indicates a relationship between financial literacy and financial inclusion, however despite their apparent complementarity, management competency has not gotten as much attention as financial literacy. The majority of authors and researchers have also shown that two important barriers to global financial inclusion are poor money management and low financial literacy. The researcher's finding that VSLAs in the Arua district had not given these studies as much thought served as the impetus for this investigation. This piqued the interest of the researcher, who then proceeded to collect data for the study, add to the body of literature, and try to validate the results.

CHAPTER THREE
METHODOLOGY

3.0 Introduction

The research methodologies are presented in this section. This covers variables such as validity and reliability, variable measurement, research procedure, data processing, sample size, sampling methodology, data sources, data collection device, and expected constraints.

3.1 Research design

A cross-sectional survey methodology was used in the research. Due to limited time and available resources, a cross-sectional design was chosen as it allows data to be collected at a single point in time, thus minimizing cost and time (Saunders, 2007). By building the skills needed to conduct quality research, cross-sectional research greatly aids the researcher's learning process. Both quantitative and qualitative methods were used in the study because the former is useful for characterizing the nature of the relationship between the variables under study, while the latter is the best choice when a comprehensive and in-depth analysis is required. This required the use of a triangulation or mixed methodology technique in the study, allowing the researcher to compare results from the two paradigms.

3.2 The study population

The population consisted of VSLA group members and leaders from the Arua District, where a total of 18 registered VSLA groups were identified, each with an average of 25 members (as not all had the maximum 30 members), resulting in a total population of 450 members and approximately 90 leaders. A sample of 207 participants was selected using a combination of simple random and purposive sampling techniques, based on Krejcie and Morgan’s (1970) sampling framework. The average number of members from each of the 18 VSLA organizations was taken into consideration by the researcher for this investigation**.** Because nine of the eighteen VSLA groups had fewer than thirty members, the researcher decided to examine an average of twenty-five individuals from each of the eighteen groups in order to

reach a choice. As a result, the study population consisted of 18 groups times 25 individuals, or 450 Arua District VSLA members in total. There were at least five leaders in each group, or ninety in total.

Table 3.1: Showing population of the study

S/N	Category	Accessible population	Sample size	Sampling techniques
1	VSLA members	450	207	Simple random/Purposive
	Total	**450**	**207**	

Source: Adapted and modified from the CDO's Office report (2023) and using Krejcie and Morgan's (1970) approach of sample selection.

3.3 Sample size and sampling technique

Krejci and Morgan's (1970) sample size chart served as selection criteria for the 207 VSLA members who comprised the sample.. The researcher used purposive sampling and basic random sample techniques to make sure each group was represented. Participants in the simple random sample procedure were asked to select whether or not to support the predicted number of responders for each group by means of a ballot. The VSLA members were chosen using this method. This was due to the researcher's intention to remove prejudice.For the VSLA group leaders who served as the key informants, purposeful sampling was used. This group was selected with the idea that they would have greater expertise and understanding regarding their respective VSLA groups.

3.3.1 Unit of Analysis

The unit of analysis of the study were the VSLA members and leaders from the Arua District

3.3.2 Unity of Inquiry

The unit of inquiry were the registered VSLA members and leaders from the Arua District

3.4 Data Sources

The researcher used primary data source.

3.4.1 Primary sources

Primary data was collected directly from Arua District VSLA members. This was administered using structured questionnaires.

3.5 Data collection tools

3.5.1 Questionnaire

To make it easier for the respondents to complete the questionnaire, a five-point Likert scale was used, with 1 denoting severely disagree, 2 disagree, 3 uncertain, 4 agree, and 5 strongly agree. Each closed-ended question on the questionnaire had predefined response alternatives and was tailored to a particular study goal.

3.5.2 Interviews guide

The selected key informants, who were the trainers and VSLA leaders of at least ten VSLA groups, were specifically provided the interview guide, which contained both structured and semi-structured questions. This was carried out to confirm the data acquired via surveys. The questions asked for specific details regarding financial inclusion, financial literacy, and managerial proficiency. Particular information about financial inclusion, financial literacy, and managerial skill was requested in the questions. The qualitative data was analyzed by content analysis.

3.6 Reliability and Validity

3.6.1 Reliability

Reliability is a key indicator of bias-freeness in data gathering tools. Prior to administering the instrument, the researcher conducted a test-retest analysis on a subset of ten respondents, selected from a minimum of ten VSLA groups (who were later excluded from the study).For this study, Using the Statistical Package for Social Scientists (SPSS), Cronbach's coefficient alpha was computed to show how reliable the data was. If the coefficient of the instrument is 0.70 or more, it is regarded as dependable. The following table presents the results:

Table 3.2: Reliability statistics

Variables	Cronbach's Alpha	Number of items
Management competence	.835	07
Financial literacy	.807	07
Financial Inclusion	.779	07

Source: Primary data

From the above Table 3.2, the results show that all items had Cronbach's alpha coefficient greater than 0.7 as a threshold. This means that the instruments used were consistent and reliable (Amin, 2005).

3.6.2 Validity

The researcher created the instrument, tested it on specialists, reviewed it with supervisors, and offered justifications for changes before it was put into use. The parts of the instrument that were determined to be unnecessary were eliminated. It follows that a content analysis was conducted in order to calculate the content validity index (CVI). Data collecting can begin with a content validity index (CVI) of 0.70, as stated by Amin (2005). Therefore, it was hypothesized that a CVI closer to one would have greater validity. The following formula was used to calculate the above:

$$CVI = \frac{\text{The total number of items considered relevant}}{\text{Total number of items in the questionnaire}} * 100$$

The results are presented below:

Table 3.3: Validity of the instrument

Variable	Content Validity index	Total number of items valid (K)	Total number of Items (N)
Management Competence	0.777	07	9
Financial Literacy	0.875	07	8

Financial Inclusion	1.000	07	7
	0.88		

Source: Primary data (2024)

This pretest gave a value of 0.88 and according to Mugenda and Mugenda (2003), a CVI of equal or above 0.7 was preferred and hence acceptable.

3.7 Measurement of variables

Both nominal and ordinal measures were used to measure the variables (Mugenda & Mugenda, 2009). The respondents' demographics were measured using a nominal scale, whereas the dependent and independent variables were measured using an ordinal scale using a five-point Likert scale.

3.7.1 Management Competence

According to Hellriegel et al. (2013), "management competencies" are collections of abilities, actions, attitudes, and experiences that an individual requires in order to be successful in a variety of managing roles and organizational environments. It was measured using the frameworks of behavior, attitude, knowledge, skills, and experience. According to Stein (2017), managers should possess a skill set that combines interpersonal aptitudes like empathy and trust with the ability to serve as role models for innovative problem-solving in challenging circumstances.

3.7.2 Financial literacy

Financial literacy was assessed using financial knowledge and skills, financial awareness, financial culture, and risk management skills based on the measurement paradigm developed by Atkinson et al. (2005).

3.7.3 Financial inclusion

Access to financial services is especially important for the poor since it allows them to save, invest, and use credit (Subbarao, 2009). Three measures were used in this study to measure

financial inclusion: access to financial services, consumption of financial products and services, and availability of financial products and services.

3.8 Data collection procedure

The researcher applied to the Arua district authorities, particularly the office of the Chief Administrative Officer, for further permission to collect data after receiving permission to do so from Makerere University Business School. Two research assistants who were trained by the researcher helped distribute the questionnaires to the respondents. The researcher not only gave the respondents an interview guide, but also acted as a facilitator to steer the conversation in the direction of achieving the goals of the study.

3.9 Data analysis

Using the statistical program for social scientists (SPSS) version 20, the questionnaires that were given to respondents were collected, coded, and subjected to frequency tables and correlation analyses. Both inferential statistics were used to analyze the output., such as regression and correlations, and descriptive statistics, which included percentages, frequencies, standard deviations, and means. The content and topic analysis approach was used to organize and group qualitative interview material into themes.

3.10 Ethical Considerations

It was the researcher's responsibility to make sure the study was carried out honestly and ethically. In order to ensure a seamless data collection process, the researcher made sure to secure authorization from the appropriate authorities before to visiting the field (CAO Arua District and Makerere University Business School). The researcher gave respondents the assurance that the information they provided would be kept confidential and utilized only for the study. The researcher also gave the responders an explanation of the study's purpose. Before being invited to voluntarily participate in the research process, participants were fully told about the nature of the study, its advantages, and dangers. They were also treated with

the highest respect. Participants were kept safe and anonymous, no personal information was ever disclosed without the consent of the individuals involved, and precautions were taken to keep them from harm.

CHAPTER FOUR

PRESENTATION, ANALYSIS AND INTERPRETATION OF FINDINGS

4.0 Introduction

This chapter includes presentations, analysis and interpretation of findings. The study demonstrated the relationship between managerial competencies, financial literacy and financial inclusion of registered VSLA members in rural areas of Arua District.

4.1 Response Rate

The researcher sent surveys to 207 participants, and a total of 194 accurately completed and returned their questionnaires, corresponding to a response rate of approximately 93.7%, suitable for deriving reliable and legitimate findings. As suggested by Amin (2005) who noted that a response rate of 70% and above was appropriate for such a study.

4.2 Demographic characteristics of respondents

Respondent demographic characteristics consisted of respondent characteristics that included gender, marital status, age group, education level, and length of stay in the group. Table 4.1: Demographic characteristics of respondents

Age bracket of the respondents		Frequency	Percent	Cumulative Percent
Valid	20 - 29 years	35	18.0	18.0
	30 - 39 years	81	41.8	59.8
	40 – 49 years	35	18.0	77.8
	50 years above	43	22.2	100.0
	Total	194	100.0	
Gender of respondents		Frequency	Percent	Cumulative Percent
Valid	Male	83	42.8	42.8
	Female	111	57.2	100.0
	Total	194	100.0	
Marital status		Frequency	Percent	Cumulative Percent
Valid	Single	32	16.5	16.5
	Married	124	63.9	80.4
	Divorced	17	8.8	89.2
	Widowed	21	10.8	100.0
	Total	194	100.0	
Number of years in group		Frequency	Percent	Cumulative Percent
Valid	Less than 3 years	37	19.1	19.1
	3-6 years	77	39.7	58.8
	7-10 years	75	38.7	97.4

	More than 10 years	5	2.6	100.0
	Total	194	100.0	

Education level of respondents		Frequency	Percent	Cumulative Percent
Valid	Primary	41	21.1	21.1
	Secondary	28	14.4	35.6
	Certificate	73	37.6	73.2
	Diploma	40	20.6	93.8
	Degree	12	6.2	100.0
	Total	194	100.0	

Source: Primary data (2024)

To determine the age dynamics of the group, respondents were asked to state their age. According to the findings in Table 4.1, 18.0% of respondents were aged 20-29, 41.8% were in the age range of 30-39, 18.0% were aged 40-49 and 22.2% were over 50 flight. Findings show that the majority of respondents were between the ages of 30 and 39, indicating that a significant portion of the older population uses VSLA as a way to make money for most VSLA organizations.

According to table 4.1, 42.8% of respondents were men and 57.2% of respondents were women. The study was predominately female. This suggests that, compared to their male counterparts in the research area, women participate in more VSLA activities. Nevertheless, as the study was gender-neutral, this had no bearing on its conclusions.

According to Table 4.1, 63.9% of the population was married, 16.5% was single, 10.8% was widowed, and 8.8% was divorced. This suggests that the study was dominated by responsible and mature married respondents, indicating that married people participate in VSLA activities more often than single people.

From Table 4.1, 39.7% of the respondents had been in the group for three to six years, 38.7% for seven to ten years, 19.1% for less than three years, and 2.6% for more than ten years, according to Table 4.1.It follows that the majority of responders have prior VSLA activity experience.

According to Table 4.1, 36.6% of the respondents had completed up to a certificate program, 21.1% had completed primary school, 20.6% had earned a diploma, 14.4% had completed secondary school, and 6.2% had earned a degree. According to this education profile, the respondents were able to read the material, understand it, and provide an answer.

4.3 Correlation analysis

Pearson's correlation coefficient was used to analyze the relationship between financial inclusion, the dependent variable, and managerial competence and financial literacy, the independent factors.

Using this method, the researcher looks into the relationship between shifts in financial inclusion and shifts in managerial competency and financial literacy. The Pearson's correlation coefficient was used to quantify the degree of association between the study variables. The direction and intensity of a linear relationship between two variables is described by Pearson's product-moment correlation coefficient, or R. R, or Pearson's correlation coefficient, is a number between +1 and -1. There is no association between the two variables when the value is 0. A positive correlation is one in which the rises of one variable are accompanied by the increases of the other, and is represented by a value larger than 0. Anything less than zero is a number.

Table 4.3: Pearson correlation analysis (Summary)

		Management competence	Financial literacy	Financial inclusion
Management competence	Pearson Correlation	1	.192**	**.487****

	Sig. (2-tailed)		.007	.000
	N	194	194	194
Financial literacy	Pearson Correlation	.192**	1	**.200****
	Sig. (2-tailed)	.007		.005
	N	194	194	194
Financial inclusion	Pearson Correlation	.487**	.200**	1
	Sig. (2-tailed)	.000	.005	
	N	194	194	194

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

Source: Data Analysis, (2024)

4.3.1 Management competence and financial inclusion

Finding the relationship between managerial abilities and financial inclusion among registered VSLA members in rural Arua District was the main goal of the study. A statistically significant positive association (r =.487**, p<0.01) has been observed between financial inclusion and management skill, as presented in Table 4.3.. This suggests that the shift in financial inclusion is related to the shift in managerial competencies.Several exchanges during the course of interviews with eight group leaders demonstrated how crucial sound management of both individual and group finances was to the VSLAs' inclusiveness and the advancement of their members. As an illustration, a group leader in Vurra Sub County said:

"Because our group managers are competent and manage our funds well, the group members are able to learn from them to also manage their individual funds very well".

4.3.2 Financial literacy and financial inclusion

Determining the connection between financial inclusion and financial literacy among VSLA members who have registered in the Arua Rural District was the study's second goal. Table 4.3 demonstrates a substantial positive correlation between financial literacy and financial

inclusion (r = 0.200**, p<0.01). This implies that there was a relationship between shifts in financial literacy and financial inclusion.

There is a strong positive correlation between financial literacy and financial inclusion, as evidenced by the group leaders surveyed who noted that: “Financial literacy was a big factor in financial inclusion, as knowledge of financial services and products influenced ignorance and illiteracy. For example, two of the leaders of the Logiri Sub County groups stated that:

> *“Financial Literacy training had helped many of their group members especially those who didn’t go far with their education to learn financial management at individual level and has made them to have access to financial services and products.”*

4.4 Regression Analysis

The study's main goal, to determine how managerial skill and financial literacy affected financial inclusion among VSLAs in Arua District, was accomplished by regression analysis. It was discovered that financial literacy and managerial experience could account for disparities in financial inclusion. Table 4.4 following provides a summary of the findings. About 24.1% (adjusted R2 = 0.241) of the variance in financial inclusion may be explained by the degree of freedom.

Table 4.4: Regression coefficient

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig. .000	**Collinearity Statistics**	
		B	Std. Error	Beta			Tolerance	**VIF**
1	(Constant)	1.494	.331		4.511			

Management competence	.450	.062	.466	7.285	.000	.900	1.111
Financial literacy	.116	.067	.111	1.733	.085	.900	1.111

A. Dependent variable: Financial inclusion

Model summary

Model	R	R Square	**Adjusted R Square**	Std. Error of the Estimate
1	.499[a]	.249	**.241**	.429

a. Predictors: (Constant), Financial literacy, Management competence

A predictive model of the study variables would look like below; Y = C + β1MCC + β2FLV ± e Where β1 and β2 are regression coefficients, Y is financial inclusion, MCC is managerial competence, FLV is financial literacy, c is a constant and e is standard error. Y = 1.494 + 0.466 MCC + 0.111 FLV ± 0.429.

The results presented in Table 4.4 show that management competency among VSLAs in Arua District boosted financial inclusion significantly (beta = 0.466, p value = 0.000; p < 0.01). Thus, changes in managerial skill could lead to changes in financial inclusion. Furthermore, the results showed that financial literacy had a less substantial positive impact on financial inclusion (beta = 0.111, p = 0.000; P < 0.01). This suggests that changes in financial literacy may have an effect on changes in financial inclusion.. There were notable variations (p = 0.000, p < 0.01). The researcher can draw the conclusion that management competency and financial literacy account for the change in the financial inclusion of VSLA members in the Arua district based on statistical evidence. The model summary indicates that 24.1% (adjusted R2=0.241) of the variance in financial inclusion among VSLAs in Arua District was predicted by the investigated variables. It suggests that, in addition to management

competency and financial literacy, there are other characteristics that contribute to the explanation of the 75.9% of financial inclusion that were not addressed in this study.

The regression model displayed in Table 4.4 was then executed in order to determine the variance inflation factor (VIF) and tolerance values for a multi-co linearity test. The results of the multi-collinearity test show that there is no collinearity problem with the model. The tolerance value should be greater than 0.1 and the VIF should be less than 10, in accordance with the statistical norm. It is evident from the preceding table that the VIF is less than 10 and the tolerance value of 0.900 is more than 0.1. Furthermore, the VIF of 1.111 for the two independent variables is the same, demonstrating a high level of correlation between them. Consequently, the instruments used for the two independent variables showed a great deal of resemblance.

CHAPTER FIVE
DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

The research results from Chapter 4 are reviewed in this chapter, along with the study's limitations, conclusions, and suggestions for additional research.

5.1 Discussion of Findings

Based on the study objectives and research questions, the discussion of findings that follows focuses on the predictive value of managerial competencies and financial literacy on financial inclusion in Arua District.

5.1.1 Management competence and financial inclusion

The Pearson correlation coefficient revealed a strong positive relationship between managerial competence and financial inclusion , indicating that changes in managerial skills are closely associated with changes in the level of financial inclusion. Furthermore, regression analysis confirmed a significant and positive association , suggesting that managerial competence accounts for a substantial portion of the variation in financial inclusion among VSLA members. These findings align with Human Capital Theory , which posits that investments in individual capabilities such as leadership, decision-making, and organizational skills lead to improved economic outcomes (Hellriegel et al., 2013).

The results suggest that VSLAs can enhance financial inclusion by improving members' skills, attitudes, and experiences in managing financial resources. This is achieved through easy access to funds , accurate record-keeping , and efficient distribution of group resources . According to the researcher's observations, most VSLAs in the study area demonstrated strong leadership , transparent financial practices , and effective group management , all of which contribute to increased access to financial services for members. VSLA members

reported confidence in managing their finances and saving regularly, largely due to the competent leadership exhibited by group leaders.

These findings are consistent with the assertion by Clement et al. (2018) that improved market access and business training , particularly in financial and managerial practices, is essential for clients to effectively utilize available financial resources. Similarly, Potocki and Cierpiał-Wolan (2019) found a positive relationship between managerial capacity and financial inclusion in rural Poland, reinforcing the idea that organizational capabilities significantly influence financial outcomes.

The findings also support the view of Kyereboah and Biekpe (2016) that poorly managed institutions face greater sustainability challenges than those with strong management systems. This underscores the role of management as a critical determinant of organizational performance, regardless of the sector, as noted by Stokes and Oiry (2012) . They argue that effective organizational performance is a direct reflection of the competence and decision-making ability of its leadership.

Furthermore, the World Economic Forum (2018) emphasizes that for financial services to be adopted and used sustainably, there must be strong managerial oversight and an understanding of the supply and demand dynamics of financial inclusion. This aligns with the current study's findings, which show that competent leadership and group management are key enablers of financial inclusion in VSLA groups.

Finally, the results support the World Bank (2014) argument that financial inclusion is not sustainable unless both the management team and individual members demonstrate financial acumen . While financial literacy and financial competence are often used interchangeably, they are distinct concepts. Financial literacy refers to the knowledge and skills related to financial matters, whereas financial competence encompasses a broader set of behaviors,

attitudes, and motivations in managing financial resources (World Bank, 2014; Shankar, 2013). This distinction is important in understanding how both group-level and individual-level variables contribute to financial inclusion.

5.1.2 Financial literacy and financial inclusion

The Pearson correlation coefficient revealed a positive and significant relationship between financial literacy and financial inclusion , indicating that changes in financial literacy levels are closely associated with changes in financial inclusion. Regression analysis further confirmed a strong and positive association , suggesting that financial literacy explains a significant portion of the variation in financial inclusion among VSLA members. This implies that VSLAs that provide financial literacy education and guidance to members when accessing and using financial services are more likely to see increased usage of formal financial services , thereby enhancing financial inclusion.

Participants who demonstrated higher levels of financial literacy were better able to evaluate different financial products and services , manage borrowed funds effectively , engage in responsible saving behaviors , and make informed financial decisions . These findings align with Behavioral Economic Theory (Atkinson et al., 2005), which emphasizes how individuals' knowledge, attitudes, and decision-making behaviors influence their financial outcomes. According to this theory, improved financial literacy enhances individuals' perceived control over financial decisions , leading to more rational and informed financial behavior .

According to Riyana (2017) , financial literacy involves an individual's understanding of financial concepts and products, their ability to identify financial opportunities and risks, and their capacity to make informed decisions and seek assistance when necessary. The findings

of this study support this definition, as participants who exhibited higher financial literacy were more confident and capable in navigating financial systems.

These results are consistent with De Bassa Scheresberg (2018) and Van Rooij et al. (2017) , who found that financially literate individuals are more likely to use formal financial services and participate in financial markets due to their greater understanding of financial systems , familiarity with financial culture , and ability to manage financial risks . This supports the Human Capital Theory (Hellriegel et al., 2013), which posits that individuals with higher levels of knowledge and skills such as financial literacy are better equipped to make decisions that improve their economic outcomes and participation in financial systems. Similarly, Lyons and Kass-Hanna (2019) used Global Findex data to examine the relationship between financial literacy and financial inclusion in the MENA region. They found that social and economic vulnerabilities moderate the relationship between financial literacy and inclusion, with financial literacy contributing to greater inclusion among marginalized groups , particularly younger individuals, by reducing reliance on informal credit systems.

In line with these findings, Kepha (2020) found that microfinance clients who participate in financial literacy training are more likely to maintain a good repayment history and experience improved business performance , with an average increase of 16% in sales outcomes. While the current study also found that financial literacy contributes to better financial inclusion, it did not measure specific business outcomes such as profit margins or employment changes, limiting direct comparisons.

5.1.3 Managerial competence and financial literacy in the area of financial inclusion

The findings presented in Model Table 4.4 demonstrate that the combination of managerial competence and financial literacy significantly predicts financial inclusion among VSLA members in Arua District. While both variables contribute to explaining variations in

financial inclusion, the results also indicate that financial literacy and managerial competence are not the sole determinants of financial inclusion. Other socio-economic, institutional, and contextual factors also play a role in shaping access to and usage of financial services.

These findings align with Shibia and Kieyi (2016) , who investigated how financial decisions in Kenya are influenced by levels of managerial competence and financial literacy. Using cross-sectional survey data from the FinAccess study (2009–2013), they found that individuals with higher managerial and financial capabilities were more likely to engage in formal financial systems. This supports Human Capital Theory (Hellriegel et al., 2013), which posits that investments in individual knowledge and skills such as leadership, planning, and decision-making lead to improved economic outcomes, including greater financial inclusion.

Similarly, Ramakrishna (2020) argues that financial literacy and managerial skills enable individuals to make sound financial plans and decisions , reinforcing the idea that capability development is central to financial empowerment. This is consistent with Behavioral Economic Theory (Atkinson et al., 2005), which emphasizes how individual knowledge, attitudes, and behaviors influence financial outcomes. According to this theory, when individuals possess the competence and confidence to manage financial resources effectively, they are more likely to engage with formal financial systems.

Mitchell (2014) further supports this view, finding that individuals in stable financial situations are more proficient in budgeting and debt management , which are key indicators of both financial literacy and managerial capability . Lusardi et al. (as cited in Kandpal, 2020) assert that financially literate individuals possess greater knowledge of how to earn, spend, invest, and save money , which enhances their ability to participate in formal financial systems.

In a related study, Grohmann et al. (2017) found that higher levels of financial literacy and managerial competence are associated with greater financial inclusion , particularly in areas where bank branch expansion has occurred in both urban and rural settings. This suggests that financial capability not only enhances individual behavior but also interacts with institutional access to amplify inclusion outcomes.

Academics globally argue that enhancing financial capabilities and literacy leads to increased financial inclusion (Zins & Weill, 2016). Zins et al. (2016) conducted a study across 37 African countries using data from the World Bank's Global Findex database and found that wealthier, more educated men with leadership skills tend to have higher levels of financial inclusion. The study also revealed that the factors influencing informal finance differ from those affecting formal finance , with income level and literacy having a stronger influence on formal financial inclusion.

These findings are supported by Sanderson et al. (2018) , who found that income, financial literacy , and management skills are positively correlated with financial inclusion. They also noted that procedural barriers , such as the documentation required to open bank accounts, disproportionately affect individuals with lower financial literacy, thus reinforcing the need for targeted financial education programs..

5.2 Conclusion

The study's research, debate, and conclusions led to the following conclusions.

The study established that managerial competence is a significant predictor of financial inclusion. This indicates that among VSLA members in Arua District, financial inclusion is

positively influenced by managerial competence, which encompasses positive attitudes , effective management behaviors , as well as knowledge, skills, and experience in financial management . Strong leadership and organizational capabilities within VSLA groups enhance access to and usage of financial services, thereby promoting inclusion.

Additionally, the study found that financial literacy encompassing knowledge and skills , financial awareness , financial culture , and risk management also significantly predicts financial inclusion. This suggests that when VSLA members demonstrate greater understanding of financial matters, exhibit sound financial behaviors, and possess the ability to manage financial risks, their level of engagement with formal financial systems improves.

Furthermore, the combined influence of managerial competence and financial literacy including dimensions such as attitudes , management behavior , knowledge , skills , experience , financial awareness , financial culture , and risk management was found to explain a substantial portion of financial inclusion outcomes. This implies that when these competencies and literacies are effectively applied, they contribute to positive changes in financial inclusion among VSLA members in Arua District..

5.3 Recommendations

The study's conclusions have led to the following suggestions being made:

Increased beneficiary awareness of the financial inclusion initiatives is necessary. Sensitization to the financial inclusion techniques is essential, as it allows VSLAs to educate members about the initiatives and help them make informed decisions.

In order to strengthen their commercial activities, VSLA actors such as CBOs and Micro Finance Support Centers should pay attention to the financial literacy of the new VSLA members and help them become financially literate and included.

A financial inclusion policy should be developed by VSLA management, with an emphasis on how to make their services and products more affordable, accessible, high-quality, and user-friendly for borrowers.

To encourage accessibility and use of VSLA services, the administration of VSLA groups in the Arua area should implement automated systems or online mobile services that allow members to complete their financial transactions around-the-clock.

5.4 Study Limitations

The researcher encountered difficulties in obtaining information from certain VSLA organizations due to concerns that non-members would learn of the group's private information. However, this problem was overcome by explaining to the group members the nature and of the aim of the study.

The time constraints the researcher experienced stemmed from the fact that many VSLA members were engaged in agricultural operations throughout the data collection period. The restriction was overcome by locating their homes with the help of VSLA Community Based Trainers.

5.5Areas for further study

- Research is required to investigate the various factors, such as family interference, initial money, financial innovation, and socioeconomic level, that influence financial inclusion in addition to management competence and financial literacy.
- Since financial literacy plays a significant role in financial inclusion for VSLA members in the Arua district, a comprehensive study on the subject is necessary.

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APPENDICES

MAKERERE UNIVERSITY
MAKERERE UNIVERSITY BUSINESS SCHOOL

i) Questionnaire

Dear respondent,

I am Endreonzi Bosco, a Makerere University student studying in partial fulfillment of MBA requirements at Makerere University. The topic of the study is the relationship between managerial competence, financial literacy and financial inclusion of VSLA members: the case of registered members of Village Savings and Loan Association (VSLA) in rural areas of Arua District, Uganda. You have been identified as the best informant to assist you in this study, please take a few minutes out of your busy schedule to complete this questionnaire. Responses will be used purely for academic research. Your frank and honest answers are greatly appreciated and will be treated with the utmost confidentiality.

Section 1: Personal background information

Age: 20-29 years ☐ 30-39years ☐ 40-49years ☐ 50years and above ☐

Gender: Male ☐ Female ☐

Marital status: Single ☐ Married ☐ Divorced ☐ Widowed ☐

Number of years in group

Less than 3years ☐ 3-6years ☐ 7-10years ☐ More than 10years ☐

Highest education attained

Primary ☐ Secondary ☐ Certificate ☐ Diploma ☐ Degree ☐

Others specify…….

MANAGEMENT COMPETENCE

The following statements relate to the competence of VSLA management. Please read each statement carefully and rate them using the scale below. Strongly Disagree (SD) = 1, Disagree (D) = 2, Not Sure (NS) = 3, Agree (A) = 4, Strongly Agree (SA) = 5.

S/N	Items	SD	D	NS	A	SA
	MANAGEMENT COMPETENCE					
MC1	There is good management in our VSLA	1	2	3	4	5
MC2	There is easy access to funds in our VSLA					
MC3	The good leadership behaviour shown by our VSLA group leaders enables members to save without reservation	1	2	3	4	5
MC4	Good management of group savings influences easy access to funds among VSLA members in our group	1	2	3	4	5
MC5	The members in our VSLA group have the skills of managing their funds	1	2	3	4	5
MC6	Good financial record keeping influences access to financial services among VSLA members in our group	1	2	3	4	5
MC7	The group members have ability to manage their funds	1	2	3	4	5

FINANCIAL LITERACY

The following statements relate to Village Savings and Loans (VSLA) financial literacy. Please read each statement carefully and rate them using the scale below. Strongly Disagree (SD) = 1, Disagree (D) = 2, Not Sure (NS) = 3, Agree (A) = 4, Strongly Agree (SA) = 5.

S/N	Items	SD	D	NS	A	SA
	FINANCIAL LITERACY					
FL1	Knowledge of financial management allows members to make better use of borrowed money	1	2	3	4	5
FL2	Financial education empowers members to engage in positive saving behaviors	1	2	3	4	5
FL3	Financial skills help VSLA members in our group evaluate various financial products and services	1	2	3	4	5
FL4	Financial awareness affects access to finance and individual growth in a group	1	2	3	4	5
FL5	Financial literacy training helps VSLA members better understand the productive use of money	1	2	3	4	5
FL6	Knowledge of financial management helps VSLA members make the right decisions when choosing financial products and services	1	2	3	4	5
FL7	Knowledge of financial management helps VSLA members manage financial risks	1	2	3	4	5

FINANCIAL INCLUSION

The following statements relate to the financial inclusion of Village Savings and Loans (VSLA) members. Please read each statement carefully and rate them using the scale below.

Strongly Disagree (SD) = 1, Disagree (D) = 2, Not Sure (NS) = 3, Agree (A) = 4, Strongly Agree (SA) = 5.

S/N	Items	SD	D	NS	A	SA
FIN1	There is a high level of access to finance among VSLA members in Arua district	1	2	3	4	5
FIN2	I have easy access to financial services from our VSLA	1	2	3	4	5
FIN3	I have easy access to financial products from our VSLA	1	2	3	4	5
FIN4	I am able to use the financial products and services of our VSLA	1	2	3	4	5
FIN5	All financial products and services are available on our VSLA	1	2	3	4	5
FIN6	Access to financial services has enabled members to achieve income equality	1	2	3	4	5
FIN7	The financial services and products are affordable to all members	1	2	3	4	5

Thank you

ii) Interview Guide

1) Title

2) Working experience

3) How do you think financial management knowledge affects access to financial services among registered members of Village Savings and Loan Association (VSLA) in rural areas of Arua District?

……
……

4 How do you think financial skills and knowledge training helps the utilization of financial products and services among the registered members of Village Savings and Loan Association (VSLA) in rural areas of Arua District?

……
……

5. How can members of the registered Village Savings and Loan Association (VSLA) in rural Arua district benefit from financial management knowledge and training in using available goods and services?

……
……

6.Any other views?

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……