

MAKERERE UNIVERSITY

MAKERERE UNIVERSITY BUSINESS SCHOOL

FINANCIAL LITERACY, ACCESS TO FINANCE AND FINANCIAL WELL-BEING OF SECONDARY SCHOOL TEACHERS IN KAMPALA CAPITAL CITY.

BY

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DECLARATION

I, **Nuwagaba Justine**, declare that this work is a product of my effort. it has not been submitted anywhere for any award.

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APPROVAL

This dissertation has been submitted with our approval as University Supervisor to the faculty of research and graduate studies for the Master of Business Administration award of Makerere university.

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MR. FRANK KABUYE

DEDICATION

I dedicate this work to the sisters of Our Lady of Good Counsel and my sponsors as a token of appreciation for enabling me to advance in my academic career. May God bless you more.

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I am very grateful to the Almighty God for his favor, guidance, wisdom, and opportunity granted to advance in my academic journey. Special thanks to the sponsors for providing all the facilitation I needed to complete the academic journey. Thanks to my dear biological family for your love and care, my Spiritual family- the sisters of Our Lady of Good Counsel for choosing and allowing me to advance in my academic career.

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An abundance of blessings!

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ABSTRACT

The study aimed to establish the contribution of financial literacy and access to finance on the FWB of secondary school teachers of Kampala Capital City, Uganda. The research agenda adopted a cross-sectional research design and a quantitative research approach. The target population was 5,031 teachers of the secondary schools in Kampala Capital City, Uganda, using convenient sampling and Krejcie and Morgan's (1970) table to select 357 teachers. Data was collected using an online self-administered questionnaire from 307 respondents giving a response rate of 86%. The findings revealed a moderately significant positive correlation between financial literacy and FWB ($r = .548^{**}$, $p<0.01$, financial literacy and access to finance ($r = .503^{**}$, $p<0.01$), and a strong significant positive correlation between access to finance and FWB ($r = .677^{**}$, $p<0.01$). Access to finance partially mediated the relationship between financial literacy and FWB since the effect strength of FL decreased from ($r= .548$, $p <0.01$) to ($r= .277$, $P<0.01$). It was found out that financial literacy and access to finance predicts financial well-being.

The research limitations were embedded in a cross-sectional research design that the researcher adopted, which ignored the longitudinal study approach. Besides, the sample was selected from secondary school teachers, in Kampala Capital City, leaving out other districts in Uganda. The practical implication is an appeal to the government, policymakers, and heads of schools to consider including financial literacy in teachers' training curriculum to widen their exposure to financial matters and diversified mechanisms of increasing returns on borrowed money and investments, and making access to finance more affordable, which will continuously enhance their financial well-being.

The uniqueness of this dissertation was its ability to complement the existing literature by analyzing financial literacy and access to finance from the perspective of teachers' financial well-being. It examined whether improving financial literacy can increase access to finance and improve teachers' financial well-being. Also, it was the first to explore the mediating role of access to finance in the relationship between financial literacy and the financial well-being of teachers in secondary schools in Kampala Capital City, Uganda. Lastly, the study differs from other models because it focused on an individual's financial well-being.

LIST OF ABBREVIATIONS AND ACRONYMS

FWB: Financial Well-Being

SSS: Senior Secondary School

UBOS: Uganda Bureau of Statistics

UNATU: Uganda National Association of Teachers Union

SACCO: Savings and Credit Cooperatives Organization

CHAPTER ONE

INTRODUCTION

1.1 Background to the study

World over, teachers deserve to have financial well-being (FWB). Financial well-being contributes positively to human well-being (Netemeyer, Warmath, Fernandes, Lynch & Lynch, 2018). Achieving FWB contributes to poverty reduction (Iramania & Lutfi, 2020), which is in line with Sustainable Development Goal one; "no poverty" (United Nations, 2015). Lack of adequate financial savings can have adverse effects when unexpected financial emergencies occur that require meeting financial expenses (Bruggen, Hogreve, Holmlund & Kabadayi, 2017). Indeed, with FWB, individuals experience an abundance of quality life without financial worries and uncertainty (Vuren, Fouch, Bernard & Beer, 2018). Financial well-being is crucial for teachers to sustain their current and future financial obligations and meet social life demands (Viac & Fraser, 2020). Irrespective of the benefits of FWB to teachers, teachers' FWB across the world is low. Globally, 78% of teachers are worried about their financial conditions for the economic shock of the pandemic. Similarly, private school teachers' salaries dropped by 50% across sub-Saharan Africa because of Covid 19 income shock (Gallup world poll, 2022).

In Uganda, private and public secondary school teachers are expected to attend full-time learners. Regardless of teachers' dedicated services, 80% of teachers find the remunerations offered unsatisfying (Lwanga et al., 2018). Correspondingly, Muwanguzi (2021) indicates that the education sector has lower employee rewards. Lower rewards are consistent with the growing evidence of teachers' industrial unrests that have persisted since 2011 under the flagship of Uganda National Association Teachers Union (UNATU) demanding a 20-50% pay rise. As a

result, 70% of teachers who borrowed defaulted on loans due to multiple borrowing, and most of these borrowed to meet education and food expenses (Ndagano, 2013). Equally, only 10% of teachers who started businesses to supplement their small salaries saw their survival, while 60% of teachers saw their downfall due to insufficient finances to support the started investments (TMD, 2019). According to Kamwanda, 2022, such is heightened by high inflation and unpredictable cost of living. The teachers' financial stress has been aggravated by the COVID-19 outbreak, rendering 85% of private schools paying teachers partial salaries. In Kampala Capital City, 68% of teachers lost their income due to the lockdown and school closures, reducing teachers' welfare (Economic Policy with Research Centre,2020). The condition of losing salaries implies that during unexpected economic shocks and pandemics, teachers faced financial difficulties that directly caused significant financial stress.

Consequently, teachers whose primary income source was monthly salary relocated from Kampala city because they could not afford to pay rent and buy food due to non-payment. Thus, the financial hardships posed by uncertain circumstances like Covid 19 threaten teachers' financial well-being. Indeed, it is evident that teachers survive in a working environment characterized by unprecedented events (Muwanguzi, Itaaga, Musisi, 2021). Hence, it raises the need to find ways to manage financial resources effectively and cope with financial worries, thereby safeguarding long-term levels of FWB. However, according to Uganda Teacher and School Effectiveness Project report (2019), over 80% of teachers had never received sensitization on salary management. Lack of sensitization implies that Uganda's teachers' education curriculum focuses on enhancing professional competencies and quality education

(MoES, 2019) without considering the financial interventions necessary to meet current and future financial commitments.

From Perkins and Zimmerman's (1995) empowerment theory, relevant competencies are necessary for resource mobilization and usage to achieve financial goals. The study examines that when financial literacy and access to finance are adequate, teachers' FWB could be better. Low FWB could be enhanced by employing financial literacy (Adil et al., 2021) and increasing access to finance (Kara, Zhou & Zhou, 2021). Financial literacy helps make better financial decisions related to budgeting, building savings, investing for wealth creation, and managing debt (Lusardi, Hasler & Yakoboski, 2020). Similarly, access to finance increases the supply of financial resources to exploit growth opportunities and achieve financial goals (Vuren et al., 201). However, analysis of the existing literature on FWB shows limited studies linking financial literacy and access to finance. Most studies on FWB have been based outside Uganda; Ghana (Oquaye, Owusu & Bokpin, 2020), and India (Parvathy & Kumar, 2022), disregarding the role of financial literacy and the mediating effect of access to finance on FWB. Thus, this study examines the contribution of financial literacy and access to finance on the FWB of secondary school teachers in Kampala Capital City, Uganda.

1.2 Statement of the problem

FWB's achievement reduces poverty, enhances personal financial success, promotes living standards, and eliminates the vicious cycle of financial difficulties (Iramania & Lutfia, 2020). Over time, teachers' FWB has been low because 61% of teachers were living on one meal, and 69% had poor housing facilities, contributing negatively to their livelihood (Mukoma, Bwejeme, Kibuka, and Nakayenga, 2018). The continued frustration of teachers' low FWB has resulted in a

change of career for greener pastures and low productivity at the workplace (Muwanguzi,2021. Whereas financial literacy facilitates effective financial planning, budgeting, saving, and investment, access to finance increases the capital necessary for enhancing financial well-being and coping with unexpected events. The state of teachers' financial well-being could be attributed to lack of financial literacy and access to finance. Therefore, this study assessed the contribution of financial literacy and access to finance to the financial well-being of teachers in secondary schools of Kampala Capital City, Uganda.

1.3 Purpose of the study

The study examined the contribution of financial literacy and access to finance on the FWB of secondary school teachers of Kampala Capital City, Uganda.

1.4 Objectives of the study

i. To assess the relationship between financial literacy and financial well-being of secondary school teachers in Kampala Capital City.
ii. To assess the relationship between financial literacy and access to finance of secondary school teachers in Kampala Capital City.
iii. To investigate the relationship between access to finance and the financial well-being of secondary school teachers in Kampala Capital City.
iv. To examine the mediation effect of access to finance in the relationship between financial literacy and financial well-being of secondary school teachers in Kampala Capital City.

1.5 Research questions

i. What is the relationship between financial literacy and financial well-being?
ii. What is the relationship between financial literacy and access to finance?
iii. What is the relationship between access to finance and financial well-being?

iv. What is the mediation effect of access to finance in the relationship between financial literacy and financial well-being?

1.6 Research hypotheses

i. H1: Financial literacy is positively associated with financial well-being.

ii. H2: Financial literacy is positively associated with access to finance.

iii. H3: Access to finance is positively associated with financial well-being.

iv. H4: Access to finance mediates the relationship between financial literacy and financial well-being.

1.7 Scope

1.7.1 Geographical scope.

The study focused on secondary school teachers in Kampala Capital City because of the highest number of teachers compared to other regions in the country.

1.7.2 Content scope

The empowerment theory guided the study by focusing on the relevant interventions to uplift the status of vulnerable groups in society. The focus was on establishing the relationship between financial literacy (IV), access to finance (MV), and financial well-being (DV).

1.8 Significance of the study

i. The study provides essential information to policymakers, regulators, and organizations interested in increasing teachers' financial well-being in Uganda.

ii. The teachers and employers learn how to prepare for unexpected events and attain financial wellness in current and future situations.

iii. The study supplements the literature on financial literacy, access to finance, and teachers' financial well-being.

1.9 Conceptual framework

The conceptual framework has been developed based on the literature reviewed. It shows that access to finance strengthens the relationship between financial literacy and the financial well-being of secondary school teachers in Kampala Capital City, Uganda. The constructs of financial literacy determine the components of access to finance, which eventually affects FWB, as shown below.

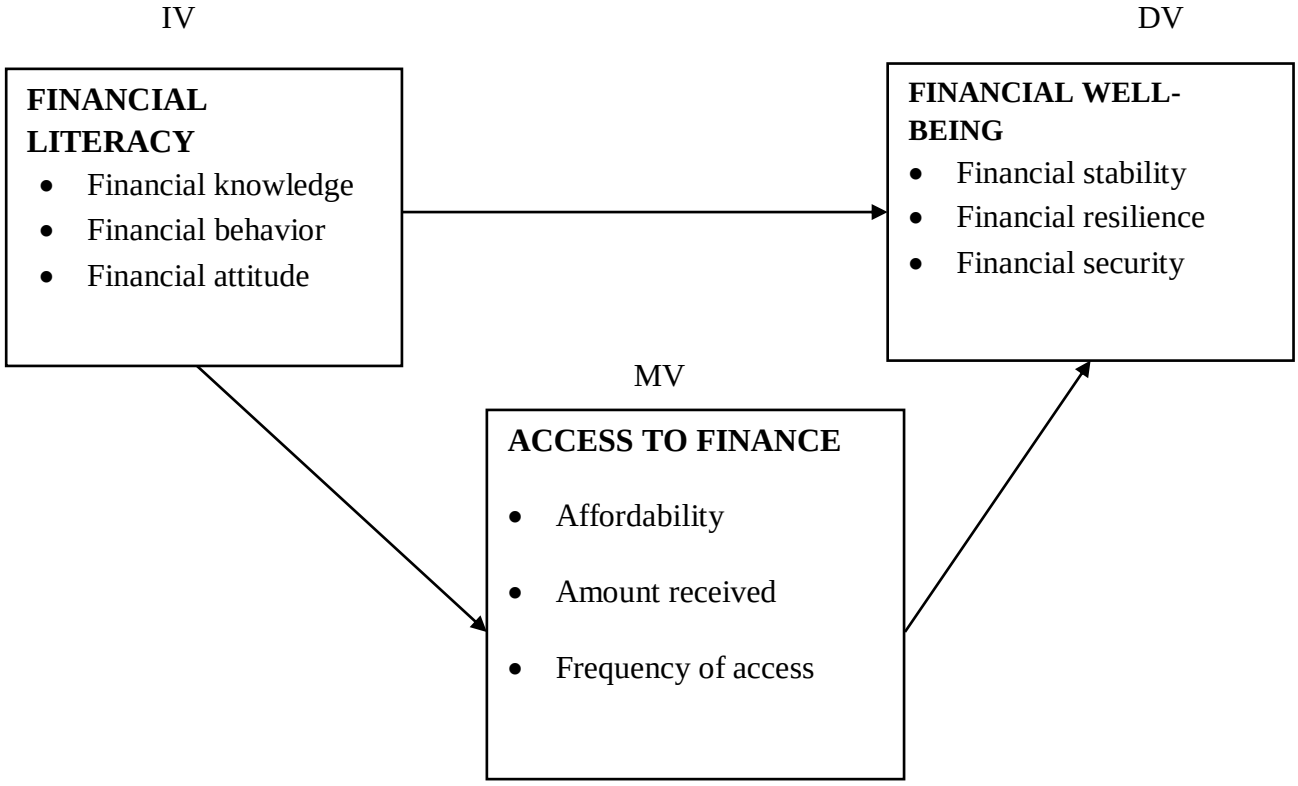


Figure 1: Conceptual framework

Source: Suzan (2020); Nkundabanayanga et al (2014) ;(Parvathy and Kumar 2022); Perkins and Zimmerman, (1995). Adopted from literature reviewed and modified.

CHAPTER TWO

LITERATURE REVIEW

2.0 1ntroduction

This section reviews the literature on financial literacy, access to finance, and financial well-being in the education sector. It details the empirical findings in previous studies giving insights into the relationship between the study variables.

2.1 Theoretical framework

2.1.1 Empowerment theory

This study recognizes the strengths of empowerment theory, which recent studies did not employ. Empowerment theory concerns relevant interventions that enable vulnerable groups (Perkins & Zimmerman, 1995) to gain mastery and greater access to and control over scarce resources to achieve personal goals (Rappaport, 1987). According to Swift and Levin (1987), the theory addresses four aspects; identifying empowerment deficits, increasing awareness, resource mobilization; and systems equity and openness to change. The authors suggest that removing access barriers and increasing individuals' understanding and competencies motivate them to participate actively in decision-making to attain an equal share of valued resources. However, access to resources and the capacity to use them largely depends on the individual's self-perception, perceived competence, mastery of social systems, and specific actions taken to exert influence. Concerning teachers, enhancing their understanding of financial literacy can increase their ability to access and use monetary resources towards increasing growth opportunities.

2.2. Definition of key terms

2.2.1 Financial well-being

Well-being is how people experience more positive than adverse effects. Thus, FWB holds more importance among the dimensions of well-being than emotional, occupational, social, spiritual, and physical aspects (Tov, 2018). Financial well-being has recently gained researchers' attention (Riitsalu & Murakas,2019; Mahdzan *et al*., 2020). According to Fu (2020), FWB has been used interchangeably with financial wellness, economic well-being, income satisfaction, financial satisfaction, financial security and financial health. While Bruggen *et al.* (2017) define FWB as the "perception of being able to sustain current and anticipated desired living standards and financial Freedom," Chatterjee et al. (2019) described it as "how happy and satisfied individuals feel with their finances." Consumer Financial Protection Bureau (2015) defines FWB as having "financial security and freedom of choice to make a prudent financial decision in the present and the future." Financial well-being affects people's socioeconomic status, quality of life, performance, happiness, health, social relationships, and general well-being (Xiao & O'Neill, 2016). Hence, it reflects an individual's ability to control daily finances, absorb financial shocks, and make investments and choices that allow happiness and satisfaction (Collins & Urban, 2019). However, individuals with low FWB feel stressed about their finances and are often worried about meeting their daily expenses (Mahdzan et al., 2020). Though FWB is a relatively new concept (Kempson, 2017), it can be measured objectively, subjectively, or with both approaches (Bruggen et al., 2017). Whereas the subjective measure focuses on how satisfied an individual perceives and feels about the state of their finances (Bruggen et al., 2017), the objective indicators use actual means like income, assets, investment performance, saving levels, and debt ratio of the individual. While Lind et al. (2020) indicated that objective and subjective

measures significantly influence FWB, Riitsalu and Murakas (2019) recognized that subjective measures have a more substantial effect because people with high personal knowledge have higher levels of confidence in managing their finances. This indicate that the individual's happiness and satisfaction change due to variations in feelings, beliefs, values, habits, and preferences. Irrespective of the existing variations on the lack of a universally accepted definition and measurement of FWB, Bruggen et al. (2017) indicate that its conceptualization focuses on the current money management, the expected future financial security, and control over finances. This study will measure FWB using financial stability, financial resilience and financial security as proposed by (Parvathy & Kumar,2022), defined as follows:

Financial stability refers to the" ability of individuals to generate sufficient income to meet one's needs, repay debts, and build assets." Financial security refers to "a mechanism to protect against financial risk" (Kolios, 2021) and the peace of mind felt when individuals are not worried about money. It is achieved when individuals are capable of building assets and actively planning their financial future. Financial resilience (Salignac et al., 2019) refers to the "ability of an individual to access and draw the internal capabilities, acceptable external resources, and support in times of financial adversity."

2.2.2 Financial literacy

Financial literacy is defined as the "ability to make informed judgments and to take effective decisions regarding the use and management of money". According to OECD (2017), financial literacy is "a combination of awareness, knowledge, attitude, and behavior necessary to make sound financial decisions and ultimately achieve individual financial well-being." Prior studies addressed financial literacy synonymously with financial knowledge, which results from financial education (Consumer Financial Protection Bureau, 2015; Ingale & Paluri, 2020).

Nevertheless, financial literacy increases people's awareness of financial products and services, enabling them to make appropriate, well-informed financial decisions (Adil et al., 2021), including planning, saving, borrowing, spending, budgeting, and having diversified investments to achieve financial goal. For Philippas and Avdoulas (2019), it helps predict the future to enhance revenue; Kempson et al. (2017) for understanding the mechanisms that drive people to pursue economically good behavior. Conversely, inadequate financial literacy can result in inappropriate financial behaviors and wrong investment options due to a lack of the ability to compare and evaluate financial products for rightful financial decisions (Te'eni-Harari 2016). Operationalization of financial literacy takes different ways: scholars Susan (2020); Atkinson, Messy, Rabinovich, and Yoong (2021) use knowledge, skill, attitude, and behavior. Shih and Ke (2014) used financial knowledge, investments, financial planning, and taxes. Goyal and Kumar (2021) used knowledge, skills, capability, confidence, motivation, and behavior. Irrespective of the above, this study operationalizes FL using financial knowledge, financial behavior, and financial attitude proposed by (Susan, 2020). These are defined as follows.

Financial knowledge means the ability to understand financial concepts, financial products, and their features. Financial attitude means the tendency to respond positively or negatively toward financial matters (Priyadharsini, 2017). Financial behavior refers to the conduct of an individual about financial issues (Shakirah & Marhaini, 2020).

2.2.3 Access to finance

"Access to finance means the capability to continuously acquire and utilize financial products and services offered by credit institutions and banks" (Birkenmaier & Fu, 2019). For Claessens (2014) Access to finance refers to the availability of a supply of reasonable quality financial services at reasonable costs. Nkundabanyanga, Kasozi, Nalukenge, and Tauriangana (2014)

noted that access to finance involves acquiring external financial resources by individuals and firms to fund their investments. The operationalization of access to finance in the existing literature takes a multi-dimensional approach; Claessens and Tzioumis (2006) used availability, accessibility, adequacy, cost, range, quality, flexibility, and recurrence of financing. Susan (2020) employed welfare, quality, usage, and accessibility. Nkundabanyanga et al. (2014) conceptualized it in terms of the amount received and frequency of access. This study will use cost (Kumar , 2005; Claessens & Tzioumis, 2006; Beck, Demirgüç-Kunt, & Honohan,2009; Wasiuzzaman, 2018; Wasiuzzaman, Abdullah &Vinayan, 2019), amount received and frequency of access (Nkundabanyanga et al., 2014). These measures are defined as follows; Affordability refers to the ability of the borrower to pay the price for the financial products and services including interest rate, fees, charges and commissions charged by financing providers (Claessens & Tzioums, 2006). Amount received means the maximum amount per request while Loan frequency refers to the number of times the loan can be accessed (Claessens & Tzioumis,2006). We now continue to the relationships between the variables in the following order: Financial literacy and Financial Well-Being, Financial literacy and access to finance, Access to finance and financial well-being, and Mediating effect of access to finance between financial literacy and financial well-being.

2. 3 Financial literacy and Financial Well-Being.

Financial literacy helps explore growth opportunities and manage unexpected economic shocks (She et al.,2021). Increasing awareness about financial planning, managing credits, protecting assets, and saving increases financial well-being because individuals can control their finances efficiently (Surendar & Subramanya, 2017). Therefore, without good financial knowledge in managing ordinary transactions, handling risky and uncertain situations becomes even more

difficult. Indeed, Mahdzan et al. (2020) found that during unexpected financial crises, well-educated individuals made decisions that resulted in financial satisfaction, happiness, and general well-being. A similar study by (Iramania & Lutfia, 2020) shows that improving financial literacy reduces impulsive behavior toward spending patterns and increases saving habits, diversified investments, and prudent borrowing that match their needs. Consistent with Son and Park (2019), individuals with low financial literacy are usually inclined to irrational financial decisions and likely to acquire extreme debt levels. Hence, financial literacy fosters a positive financial mindset which motivates people to engage in sustainable ways of wealth creation to overcome post-retirement risks associated with low income and financial distress (Ketkaew et al., 2022).

Contrary, Utkarsh et al. (2020) found that financial literacy was vital for promoting financial behavior, but its effect on FWB remained uncertain. at the national level, Uganda, Orikiriza, (2018) found that enhanced salaries, incentives, stipends and medical insurance increases their job satisfaction, commitment and reduces stress. Similarly, Tumusiime-Mutebile, (2013), employees with serious financial problems at workplaces suffer worry, illness which make them less productive. Based on the above discussion, the relationship between financial literacy and the financial well-being of secondary school teachers remains uninvestigated in Uganda. A hypothesis proposed is that;

H1; Financial literacy relates to the financial well-being of secondary school teachers.

2.4 Financial literacy and access to finance

Financial literacy facilitates the comparison of financial products in financial decision-making about acquisition and utilization. Financial literacy increases awareness about various financing options and support services and the ability to evaluate possible effects on wealth accumulation

decisions (Anshika & Singla, 2021). Similarly, the extent to which managers access formal financing depends on their level of financial literacy in terms of behavior, skills, attitude, and knowledge regarding financial choices on several financial products provided by the financial systems (Susan, 2020). According to Metto (2020), if financial information exceeds the user's knowledge level and available time for learning, the financial decision is perceived as risky and avoided. Therefore, acquiring money in modern times requires individual skills, knowledge, and the right attitude. Consistent with Ketkaew et al. (2022), a lack of financial literacy is often associated with a lack of access to formal financial products or an inability to use them when they are available.

In contrast, Widhiyanto et al., (2018) financial literacy is more than possessing numerical skills and knowledge of the money markets but integrating digital literacy to cope with the rapid change in the financial landscape for more efficient financial management. Relatedly, Egbo, Ezeaku, Igwemeka, & Okeke, 2020) found a lack of financial literacy, collateral, low income, complex administrative process, and high transaction costs limits access to formal finance. Hence, understanding the financial features guides the decision to borrow, evaluating the cost of debt service, choosing the right financial products, and the ability to repay debt (Kappler et al., 2020). Therefore, financial literacy is necessary for eliminating information symmetry when seeking external debt (Hussain, Salia & Karim, 2018). Based on the existing literature, these studies did not ascertain whether enhancing financial literacy education can solve constraints limiting access to finance faced by individuals with low income and financial literacy. This study investigated these relationships in Uganda. We, therefore, hypothesized that;

H2; There is a positive relationship between financial literacy and access to finance of secondary school teachers.

2.5 Access to finance and financial well-being

Previous studies have demonstrated that access to finance fosters innovation, growth opportunities, economic growth, and development, leading to poverty reduction, employment creation, and minimizing income shocks that would limit the enjoyment of life (Bongomin et al., 2017; Birkenmaier & Fu, 2019; Kara, Zhou & Zhou, 2021). A well-developed financial sector with favorable lending conditions enhances information sharing, increases access to external finance necessary for investment improvement and other financial objective. Reducing information asymmetry increases the chances of accessing finances, mostly urban than rural borrowers (Bakhadirov, Pashayev, & Farooq, 2022). Hence, individuals with enough information about the characteristics of financial services make better financial decisions that result in credit management (Harelimana, 2017). Though individuals can obtain finance from various sources including commercial banks, micro finance institutions, money lenders, friends and relatives, growth opportunities are possible when financial constraints do not exist. Therefore, finance accelerates growth and well-being if impending constraints to access and use are removed (Fowowe, 2017). Indeed, financial performance benefits accrue when access to bank loans (Harelimana, 2017), formal and informal credit institutions (Wulandali, Meuwissen, Karmana & Oude-Lansink, 2017) charge low-interest rates, and affordable collateral. The gist of such literature suggests that access to finance might have a relationship with the financial well-being of secondary school teachers in Kampala Capital City, Uganda. It thus is hypothesized that;

H3; There is a positive relationship between access to finance and the financial well-being of secondary school teachers.

2.6 Mediating effect of access to finance between financial literacy and financial well-being.

The efforts of policymakers and financial educators focused on informal financial services could better benefit financial users (Agabalinda & Vilard, 2020). Agabalinda and Vilard (2020) indicate that high levels of financial literacy improve financial well-being through the utilization of informal than formal financial services. Similarly, Limbu and Sato (2019) found that financially literate Americans had access to financial resources and were more satisfied than their counterparts. Equally, teachers' access to credit uplifts their welfare, opening more investment opportunities (Sserunjogi, 2021). Similarly, access to finance improves household income, which contributes to poverty reduction and enhances enjoyment of quality life (Twumasi, 2022). However, recent studies on the Mediation effect of access to finance between study variables are scanty. Based on the discussion above, a mediating effect of access to finance could bridge this gap.

H4; Access to finance mediates secondary school teachers' financial literacy and financial well-being.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This section presents the methodology and methods used to achieve the study purpose and answer the research questions about the factors contributing to teachers' financial well-being. It covers the research design, target population, sample size determination, sampling technique, data collection method, research instrument, data validity, and reliability, measurement of research variables, data analysis technique, ethical considerations, and study limitations.

3.1 Research design

The study used a quantitative cross-sectional research design. A quantitative approach was selected for its simplicity and objectivity when addressing the relationship between study variables. A cross-sectional study design enabled the collection of considerable amounts of data within a short period from a broader population, increasing the possibility of generalizing the findings (Poth & Munce, 2020).

3.2 Study population

The study population comprised 5013 teachers in Kampala Capital City's private and government secondary schools (Directorate of Education and Social Services, 2019). Kampala Capital City has five divisions: Nakawa Division, Makindye Division, Rubaga Division, Kawempe Division, and Central Division, from where secondary school teachers are situated. Hence, secondary school teachers were the unit of analysis and the unit of inquiry, respectively. Secondary school teachers in Kampala Capital City were chosen because they are many compared in to other schools in the country (MoES, 2019; Kampala City Statistical Abstract, 2019) representing 53.3% of secondary school teachers in Uganda.

3.3 Sample size determination

The researcher generated a sample size of 375 teachers using Krejcie and Morgan's table (1970), which indicated that with a population of 5,031 teachers, a sample of 357 is considered representative.

Table 1: Distribution of sample size

Division	N of schools	N of teachers	Sample size	Actual obtained	Response rate (%)
Central Division	20	782	55	307	86.0
Kawempe Division	20	466	33		
Lubaga Division	60	1548	110		
Makindye Division	54	863	61		
Nakawa Division	39	1373	97		
Total	193 (n=127)	**5,031**	**357**		

Source: Directorate of Education and Social Services (2019), Krejcie and Morgan's (1970) table for determining sample size from the population.

3.4 Sampling technique

As of 2019, Kampala Capital City had 193 Secondary schools and 5031 teachers (MoES, 2019; Kampala City Statistical Abstract, 2019). According to Krejcie & Morgan, 1970, this gives a sample of 357 teachers, which is approximately two teachers per school. The researcher used a list of teachers with their telephone contacts from Inspectors of schools in Kampala Capital City and conveniently selected those reachable on social media, where online questionnaires were distributed using Google Forms.

To ease data collection, the researcher used convenient sampling to choose those teachers whose contacts were registered on WhatsApp and who agreed to fill out the questionnaire. Bias could not arise because the researcher had no prior contact with the respondents.

3.5 Data source

The researcher collected primary data from secondary school teachers of Kampala Capital City to get first-hand information. Primary data was corrected using an online self-administered questionnaire. The existing literature, like articles and journals, provided secondary data.

3.6 Data collection procedures.

Primary data was collected from secondary school teachers in Kampala Capital City using an online self-administered questionnaire. The researcher distributed online questionnaires to the respondents using google forms. An introductory profile accompanied the questionnaire to capture respondents' confidence.

3.7 Data Collection Instrument

The questionnaire used in data collection had four sections. Section one captured the social demographic characteristics of teachers who were the respondents. Section two tested teachers' financial literacy, which was the predictor variable. Section three tested access to finance, the mediating variable, and section four tested financial well-being, the dependent variable. The researcher set closed-ended questions according to the study's objectives using a 6-point Likert scale ranging from completely untrue of me (1) to completely true of me (6) Appendix 1. The researcher used this instrument because it was suitable for collecting quantitative data from a significant population. Similarly, the study adopted a 6-point Likert scale to develop measurement scales for the study variables. It enabled respondents to commit to a positive or negative end of the scale without a neutral option, reducing biased responses (Bissonnette, 2004).

3.8 Operationalization and Measurement of Variables.

The conceptual framework's independent variable is financial literacy, the mediating variable is access to finance, and the dependent variable is financial well-being. The study operationalized financial literacy in terms of financial knowledge, attitude, behavior, and skills consistent with (Bongomin, 2017; Susan, 2020). The researcher generated 35 items from the literature to capture the respondents' level of financial literacy. The researcher measured access to finance regarding affordability, the amount received, and loan frequency (Nkundabanyanga et al., 2014; Wasiuzzaman, 2019; Claessens and Tzioumis, 2006). The respondents indicated their level of agreement using 20 items about access to finance. The study measured financial well-being in terms of financial: stability, resilience, and security (Oquaye, 2020; Parvathy and Kumar, 2022). The researcher generated 22 items anchored on a 6 Point Likert scale to capture the financial well-being level among them. The 6-point Likert scale was defined as follows; 1 = completely untrue of me, 2= untrue of me, 3=somewhat true of me, 4= true of me, 5= very true of me, and 6= completely true of me, to measure respondents' views.

Table 2: Study variables and their measurements

Variable	Operational definition	Indicators	Measurement	Sample items scale
Financial literacy	Ability to understand and make rational financial decisions (Worthington, 2013; OECD, 2017)	• Financial knowledge • Financial skills • Financial attitude • Financial behavior (Bongomin et al. 2017; Susan, 2020).	The respondents' mean rank of 9 items is included in the questionnaire on a six-point scale.	• I understand basic financial terms well • I can prepare a personal financial budget

				• I am always interested in financial news and discussions • I spend within my budget
Access to finance	Borrowing from financial providers (Birkenmaier & Fu, 2019)	• Affordability (Claessens & Tzioumis, 2006; Beck, Wasiuzzaman, 2018; Wasiuzzaman, Abdullah &Vinayan, 2019). • Amount received • Frequency on access (Nkundabanyanga et al,2014; Wasiuzzaman, 2019)	The respondents' mean rank of 7 items are included in the questionnaire on a six-point scale	• The minimum loan amount offered by commercial banks is favorable to my needs • The cost of making a journey to the financial providers is low • I find it easy to access credit from commercial banks when the need arises

Financial well-being	Teachers' capacity to meet basic financial needs now and in the future (Bruggen et al., 2017).	• Financial stability • Financial resilience • Financial security (*Oquaye et al, 2020)*	The respondents' the mean rank of 7 items is included in the questionnaire on a six-point scale	• I have the balance of money left over at the end of the month • I am confident about meeting emergency financial needs. • My investments are well diversified

Source; Literature review

3.9 Validity and Reliability testing

3.9.1 Validity

The test for validity was concerned with the instrument giving the actual results of what it claimed to measure (field, 2009). The researcher designed the questionnaire according to the set objectives one by one. The researcher maintained the validity of the questionnaire by giving it to seven research experts to provide their judgment regarding the understandability and appropriateness of the items contained in the questions. The study recorded the responses of the

research experts and obtained the validity index ratio (CVR) using the formula developed by Lawshe (1975) $CVR = \frac{n_e - \frac{N}{2}}{\frac{N}{2}}$

Where n_e Is the number of experts indicating a particular item "essential"? N indicates the total number of experts contacted, which was 7. This study obtained CVR as 0.97, rendering the instrument valid.

3.9.3 Exploratory factor analysis

This is a technique for identifying groups or clusters of variables (Field, 2009). This technique has three main uses: (1) to understand the structure of a set of variables; (2) to construct a questionnaire to measure an underlying variable; and (3) to reduce a data set to a more manageable size while retaining as much of the original information as possible. This research used factor analysis to reduce the data to explain the study constructs better. The constructs used in the variables of the conceptual framework were tested using factor analysis to establish whether they were good measurements. The extraction method used was the principal component analysis, and the rotation method was Varimax with Kaiser Normalization.

To establish the adequacy and suitability of the data for EFA, Kaiser-Meyer-Olkin (KMO) and Bartlett's test were assessed. The rule of thumb is that the KMO value should be above 0.7 and Bartlett's test should be significant ($p < .05$) (Field 2009). The results in table 4 below indicate that there was sampling adequacy and suitability for the researcher to carry out EFA (KMO > .7) and Bartlett's test (p .000).

Table 3: KMO and Bartlett test of sphericity

	Study Variable	Financial literacy	Access to finance	Financial Wellbeing
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.889	.903	.937
Bartlett's Test of Sphericity	Approx. Chi-Square	7283.345	3146.509	3802.244
	Df	561	191	210
	Sig.	.000	0.000	.000

Source: Primary data

A rotated component matrix was used to understand the factor structure of study variables basing on Eigen values above 1.0, item loading of above 0.5 and the total variance explained by the component that make up the variable which should be above 50% (Field, 2009). The results of the rotated component matrix each of the study variable below indicate that all the conditions were met, further suggesting that constructs validity was achieved. The results of the exploratory factor analysis for each study variables are presented below starting with financial literacy, access to finance and financial wellbeing.

3.9.1 Factor Analysis for financial literacy

Results in table 5 below, show that three constructs were appropriate for measuring financial literacy, given that they explained 52.4% of the total variance. The construct financial knowledge explained most, with 25.8% of the variance, financial behaviour followed with 15.9% while financial attitude explained 10.7% of the variance. Also, from the findings financial knowledge and skills construct is the most important (with eigen values of 8.781), followed by financial behaviour with eigen values of 5.395 and financial attitude are not that so important (with eigen values 3.649 respectively).

Table 4: Rotated Component Matrix for financial literacy

	Financial knowledge	Financial behaviour	Financial attitude
I understand basic financial terms well	.781		
I can easily compare financial products	.750		
I am knowledgeable about personal financial management	.744		
I am knowledgeable about the benefits associated with financial products and services	.736		
I am knowledgeable about investment risks	.724		
I can compute interest rates on the borrowed money.	.718		
I can accurately determine benefits and losses from financial products and services	.718		
I can interpret financial statements and reports	.718		
I can evaluate different financial products and services	.707		
I can determine profits and losses from personal financial records	.692		
I can prepare a personal financial budget	.674		
I can forecast personal cashflows for financial decisions	.655		
I can decide which financial services to use	.654		
I have a good understanding of the effects of inflation on my current financial status	.634		
I can plan for future financial needs	.613		
I am financially capable of making good use of financial resources	.584		
I keep a written record of my monthly expenses		.706	
I spend within my budget		.689	
I decide beforehand how my money will be used in the next six months.		.689	
I always gather information before I choose a financial product		.683	
I always plan for life after retiring from my formal employment		.676	
I pay my bills on time		.652	
I set long-term financial goals and endeavor to achieve them		.620	
I check my budget to see how much I have for the next month.		.616	
I compare prices when purchasing a product or service		.606	
I always get financial information from friends		.592	
I save money from every income received to handle financial emergencies		.564	

I feel saving money is more important than spending		.552	
I am always organized with managing money		.504	
I have good attitude towards spending responsibly			.744
I have a good attitude toward saving money			.695
I feel very interested in dealing with financial institutions			.670
I seek information about the operations of financial markets			.591
I am always interested in financial news and discussions			.566
Eigen values	8.781	5.395	3.649
Percentage of Variance	25.827	15.869	10.733
Cumulative Percentage	25.827	41.696	52.429

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 5 iterations.

Source: Primary data

3.9.2 Factor analysis for access to finance

Factor analysis results in table 6 below showed that loan frequency, affordability and amount received explain 57.3% of the variance in access to finance. Of the 57.3%, loan frequency accounts for 22.6%, followed by affordability accounting for 22.4% while amount received explain 12.3%. This confirms the three constructs as measurements of access to finance under the conceptual framework. The findings indicate that loan frequency is the most important measure of access to finance with Eigen values of 4.292 followed by affordability with Eigen values of 4.258 and amount received is the least important with eigen values of 2.336.

Table 5:Rotated component Matrix for access to finance

Items	Loan frequency	Affordability	Amount received
When financially in need, the loan amount received can enable me to acquire more assets	.802		
I consider the loan amount provided can improve my standards of living	.723		
I have several collaterals that permit me to access financial services more often	.679		
I perceive the maximum loan amount offered by financial institutions as favourable to my needs	.664		
When I choose to borrow, the loan amounts received satisfy my credit needs	.588		
I can access a loan repeatedly because of the good relationship with the financial providers	.583		
My financial management history can allow me to always access financial resources when needed.	.517		
I have the capacity to visit financial providers more often because of the surplus amount on my financial statements	.515		
The account maintenance fees charged by the financial institutions are affordable		.762	
The payment penalty charged by financial providers at the end of the payment period is affordable		.760	
Many times, I perceive the loan processing fees charged by financial institutions as affordable		.734	
I perceive the loan repayment terms provided by the financial institutions as favourable.		.725	
I am confident that my monthly earnings can easily service total charges on loan repayment without causing financial stress.		.721	
The interest rate charged on financial services is attractive		.653	
I can comfortably switch from commercial banks to other financial providers because the total cost charged is affordable.		.593	
The lending policies limit me from accessing financial products and services frequently			.757
The financial institutions limit me on the loan amount I can apply			.628

for at a time			
I can easily apply for another loan from a commercial bank when I still have a running one			.624
I can receive the full amount of the loan facility I apply for when the need arises			.513
Eigen values	4.292	4.258	2.336
Percentage of variance	22.592	22.410	12.297
Cumulative percentage	22.592	45.002	57.299

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 5 iterations.

Source: Primary data, 2023

3.9.3 Factor analysis for financial well-being

Table 7 revealed that three constructs were confirmed from the factor analysis results accounting for 60.9% of the variance in financial wellbeing. These are financial stability, financial resilience and financial security. The most important construct is financial stability which explains 21% with eigen values of 4.408 followed by financial resilience explaining 20%, eigen values of 4.198 and financial security accounting for 19.9% with eigen values of 4.174.

Table 6: Rotated Component Matrix for financial wellbeing

Items	stability	resilience	security
I can remain calm when facing financial difficulties	.769		
I manage financial stress levels well	.759		
I can find solutions for complex problems concerning my cash flows.	.702		
I cope with financial shocks well	.666		
I can easily adjust my expenditures in case of need	.612		
I can manage financial pressure with ease	.605		
I am confident about meeting emergency financial needs.	.598		
I implement all my plans in a given month without postponing to another month	.589		
I can enjoy life with my current earnings		.750	

I pay for all expenses with my current income when they fall due.	.730		
My earnings are more than what I spend	.696		
I have the balance of money left over at the end of the month	.681		
I usually pay cash to purchase food and other basic needs instead of using credit	.669		
I feel comfortable with the current financial situation	.607		
I have the things I want in life	.514		
I own adequate properties that can be turned into cash with minimum ease.			.762
I have adequate savings in my account.			.724
I am insured against shocks and uncertainties			.708
My investments are well diversified			.681
I have adequate investments that support my monthly earnings			.671
I invest in assets that have a high potential for returns.			.556
Eigen values	4.408	4.198	4.174
Percentage of variance	20.992	19.990	19.874
Cumulative percentage	20.992	40.982	60.856

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 7 iterations.

Source: Primary data, 2023

3.10 Data Processing, analysis, and presentation techniques

Data collected were cleaned, grouped, coded, and analyzed using Statistical Package for Social Sciences (SPSS) version 26.0. Using descriptive and inferential statistics, the researcher used SPSS to test for variations in the data set. The researcher used Pearson's correlation analysis to test the relationship between study variables, thus achieving objectives 1,2 and 3. The researcher used hierarchical regression to determine the mediating role of access to finance in the relationship between financial literacy and FWB operating Baron and Kenny's (1986) model. According to the model, the researcher must meet four conditions to confirm the presence of the mediation role; firstly, the predictor variable (financial literacy) must have a significant effect on the mediator variable (access to finance). Secondly, the mediator variable (access to finance)

must significantly affect the dependent variable (FWB). Thirdly, the predictor variable (financial literacy) must directly affect the dependent variable (FWB). Finally, the effect of the predictor should not be significant (in case of full mediation) or reduced in strength (in case of partial mediation) after being controlled for the mediator variable.

3.11 Ethical Considerations

The researcher picked an introductory letter from Makerere University Business School approving research processes. The researcher explained the mode of data collection to respondents to gain their consent using social media platforms. The researcher acknowledged all data sources in the literature and prioritized confidentiality for those who accepted to participate in data collection.

3.9.2 Reliability analysis

According to Cronbach 1951, the reliability of a research instrument is gauged when Cronbach's Alpha coefficient is equal to or greater than 0.7. The researcher conducted a pretest of the instrument to check its validity and reliability to generate accurate results. The researcher conducted a mini-survey of 10 questionnaires to check for consistency in the responses before data collection. The results generated in this study showed that all variables met the requirement of 0.7; hence the data instrument was reliable. The study continued since Cronbach's Alpha value was more than 0.7. The study computed the Chronbach Alpha coefficient using SSP version 26, shown in the table below.

Table 7: Reliability analysis

Variable	No of items	Cronbach's Alpha
Financial knowledge	16	0.942
Financial behavior	13	0.871
Financial attitude	6	0.821

Financial Literacy	**35**	**0.923**
Loan frequency	7	0.774
Affordability	7	0.895
Amount received	7	0.837
Access to Finance	**20**	**0.928**
Financial stability	7	0.855
Financial resilience	8	0.893
Financial security	7	0.887
Financial Well-being	22	0.940

Source: Primary data, 2023

CHAPTER FOUR

PRESENTATION, ANALYSIS, AND INTERPRETATION OF RESULTS

4.0 Introduction

Chapter 4 provides the presentation, analysis, and interpretation of findings from the data collected. It presents the response rate, descriptive statistics of the study variables, correlation, and regression analysis of the results based on research objectives:

i. To assess the relationship between financial literacy and financial well-being of secondary school teachers in Kampala Capital City.

ii. To assess the relationship between financial literacy and access to finance of secondary school teachers in Kampala Capital City.

iii. To investigate the relationship between access to finance and the financial well-being of secondary school teachers in Kampala Capital City.

iv. To examine the mediation effect of access to finance in the relationship between financial literacy and financial well-being of secondary school teachers in Kampala Capital City.

4.1 Respondent Characteristics.

The first section of the questionnaire collected data on the demographic characteristics of the sampled respondents. The researcher examined the socio-demographic characteristics of secondary school teachers using frequency and percentage distribution in table 8. The study analyzed respondent characteristics because they were essential before analyzing and interpreting a given social situation that is variably affected by any social condition (Guest, 2011).

Table 8: Showing Respondent Characteristics

Variable N= 307	Description	Frequency	Percent
Gender	Male	194	63.2
	Female	113	36.8
	Total	307	100.0
Age category	Below 20 years	4	1.3
	20-29 Years	102	33.2
	30 – 39 Years	143	46.6
	40 – 49 Years	41	13.4
	Above 50 Years	17	5.5
	Total	307	100.0
Marital status	Single	132	43.0
	Married	175	57.0
	Total	307	100.0
Number of people in your household	1-5	200	65.1
	6-10	86	28.0
	Above 10	21	6.8
	Total	307	100.0
Teaching experience	Less than 10 years	164	53.4
	11-20 years	102	33.2
	21- 30 years	35	11.4
	31- 40 years	6	2.0
	Total	307	100.0
Level of Education	Diploma	27	8.8
	Bachelors' degree	203	66.1
	Masters	72	23.5
	Others	5	1.6
	Total	307	100.0
Monthly earnings category	less than Ugx 500,000	89	29.0
	Ugx 500,000-1,000,000	124	40.4
	Above Ugx 1,000,000	94	30.6
	Total	307	100.0
Source of finance	Commercial Bank	120	39.1
	SACCO	113	36.8
	others specify	74	24.1
	Total	307	100.0

Source: Primary data

The findings in table 8 indicate that the data collected represented both male and female secondary school teachers. According to the results, most of the secondary school teachers in

Kampala Capital City who participated in the study were males, 63.2% (n =194). Most teachers were aged between 30-39 years, 46.4% (n=143). Having most teachers fall between 30 and 39 years implies that youthful teachers are still interested in teaching. Most were married, 57.0 % (n = 175), indicating that most teachers had parental responsibilities requiring stable income to meet financial obligations. Most teachers had 1-5 household members, 65.1% (n=200). This means the majority of the respondents had a high degree of maturity and responsibility. Most teachers had a teaching experience <10 years, 53.4% (n = 164), implying that majority had taught for less than ten years and the information they provided can be trusted in making informed decision. Most teachers had attained a bachelor's degree, 66.1% (n = 203), implying that secondary school teachers were well educated. Additionally, most teachers earned a monthly income between 500,000-1,000,000 Ugandan shillings, 40.4% (n = 124). The result implies that only 40.4% of teachers' earnings were above UGX 500,000; hence 59.6% are most likely to be facing financial distress given the current economic demands.

Relating to alternative sources of finances, the results above indicate that 39.1% (n =120) of teachers use money from commercial banks, and 36.8% (n=113) use SACCO services. In comparison, 24.1% use other sources of finances such as personal savings, friends, and relatives. The outcome means that most secondary school teachers borrow money from commercial banks to meet financial demands.

4.2 Descriptive Statistics

Table 9 below presents the descriptive statistics on financial literacy, access to finance, and FWB, covering the observed data sets minimum, maximum, mean, and standard deviation values. Descriptive statistics check whether the calculated means represent the reality in the observed data set (Field, 2009 & Saunders et al., 2007).

Table 9:Descriptive Statistics

Variables	Min	Max	Mean	Std. Dev
Financial knowledge	2.00	6.00	4.0307	.84254
Financial Attitude	1.00	6.00	3.9792	1.08914
Financial Behaviour	1.00	6.00	3.3543	.82065
Financial Literacy	**1.90**	**5.96**	**3.7881**	**.71191**
Loan frequency	1.00	6.00	3.1099	.91037
Affordability	1.00	6.00	2.9660	.90290
Amount received	1.00	6.00	2.9984	.91287
Access to finance	**1.25**	**6.00**	**3.0248**	**.78908**
Financial stability	1.14	6.00	2.7673	.87179
Financial Resilience	1.00	6.00	3.0741	.87337
Financial Security	1.00	6.00	2.7036	.89057
Financial Wellbeing	**1.16**	**6.00**	**2.8483**	**.77342**

Source: Primary Data 2023.

According to Nkundabanyanga (2014), when variations are small compared to mean values, the calculated mean highly represents the observed data. The researcher computed mean values from data coded from completely untrue of me to completely true of me. The mean value for financial literacy was 3.7881, indicating that most respondents agreed with questions on the scale true of me. The result means that most of the secondary school teachers were financially literate and could compute interest rates on borrowed money and determine profits and losses from personal financial records. The mean value for access to finance was 3.0248, indicating that secondary school teachers averagely accessed finances. The mean value implies that financial institutions limit most teachers on the loan amount they can apply for. Their monthly earnings can averagely service the borrowed money with minimum stress. The mean value for FWB is 2.8483, indicating that secondary school teachers are slightly below the optimal value on the Likert scale. This means that most of the teachers answered questions on FWB relating to untrue of me, therefore, had low FWB. The standard deviation for FL, AC, and FWB was **.**71191, .78908, and

.773421, respectively. Thus, on average, the mean values represented the current reality of teachers' low financial well-being. Equally, the values of standard deviations imply that the observed dataset was not deviating from reality. This means the answers from the respondents did not vary a lot; therefore, based on the results in Table 9, the findings of this study can be used to infer to all secondary school teachers since the data set was well represented.

4.3 Correlation analysis

Correlation analysis aimed to evaluate whether linear relationships existed between predictor variables and the outcome variable. The researcher used Bivariate Pearson Correlation to produce a sample correlation coefficient, *r*, which measures the strength and direction of linear relationships between pairs of continuous variables (Schober, Boer, & Schwarte, 2018) to achieve objectives 1, 2, and 3, as presented below.

Table 10: Pearson's correlations for the study variables

Variables	1	2	3	4	5	6	7	8	9	10	11
1. Financial knowledge	1										
2. Financial Attitude	.678**	1									
3. Financial Behaviour	.189**	.272**	1								
4. Financial Literacy	.813**	.882**	.597**	1							
5. Loan frequency	.270**	.254**	.680**	.497**	1						
6. Affordability	.239**	.225**	.621**	.448**	.718**	1					
7. Amount received	.218**	.171**	.505**	.367**	.629**	.546**	1				
8. Access to finance	.279**	.249**	.693**	.503**	.901**	.868**	.836**	1			
9. Financial stability	.282**	.180**	.502**	.396**	.586**	.525**	.410**	.583**	1		
10. Financial Resilience	.266**	.338**	.564**	.494**	.585**	.546**	.369**	.575**	.606**	1	
11. Financial Security	.359**	.403**	.541**	.555**	.568**	.633**	.441**	.630**	.652**	.728**	1
12. Financial Wellbeing	.344**	.349**	.609**	**.548****	.658**	.645**	.462**	**.677****	.854**	.883**	.903**

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

Source: Primary data, 2023

4.3.1 Relationship between financial literacy and financial well-being of secondary school teachers in Kampala Capital City.

The first objective was to determine the relationship between financial literacy and the financial well-being of secondary school teachers in Kampala Capital City. The correlation result in table 10 reveals a strong positive linear correlation between financial literacy and financial well-being ($r= 0.548^{**}$, $p<0.01$). This implies that any positive change in financial literacy contributes positive variations of 0.548 in financial well-being. This implies that any positive change in financial literacy contributes to positive variations of 0.548 in financial wellbeing. The result means that financially literate teachers live a financially satisfying life and are able to meet financial obligations and deal with financial emergencies. Hence, improving financial literacy, in terms of being knowledgeable about investment risks, positively contributes to secondary school teachers' financial well-being in Kampala Capital City. Thus, hypothesis one, financial literacy is positively associated with financial well-being, was supported and the null hypothesis rejected.

4.3.2 Relationship between financial literacy and access to finance of secondary school teachers in Kampala Capital City.

The second objective established the relationship between financial literacy and access to finance for secondary school teachers in Kampala Capital City. The findings in table 10 show a strong positive linear correlation between financial literacy and access to finance ($r = .503^{**}$, $p<0.01$). The result implies that when financial literacy increase, access to finance is enhanced towards a positive direction. The result implies that when financial literacy increases, financial well-being is enhanced in a positive direction. The result further implies that a positive change in financial literacy contributes to a positive change of .503 in teachers' access to finance. Hence, enhancing financial literacy in terms of in terms of seeking information about financial products brings

about significant improvement in access to finance. Therefore, the hypothesis; *financial literacy is positively associated with access to finance* was supported.

4.3.3 Relationship between access to finance and the financial well-being of secondary school teachers in Kampala Capital City.

The third objective established the relationship between access to finance and FWB of secondary school teachers in the Kampala Capital City. The results in Table 10 show that access to finance and financial well-being are positively strong and significantly related to each other (r = **.677****, p<.0.01). These findings imply that access to finance is sufficient in causing positive variations in financial well-being. Therefore, a positive change in access to finance contributes a significant positive change of .677 in teachers' financial well-being. The analyzed data confirm that as teachers repeatedly access loan facilities, their financial well-being also increases, hence, providing initial evidence in support of the first alternative hypothesis; *access to finance is positively associated with FWB*.

4.4 Regression analysis

Regression analysis predicts an outcome variable from one or several predictor variables (field, 2009). The researcher conducted the regression analysis to determine how financial literacy predicts access to finance and FWB. The results in Table 11 show that financial literacy and access to finance predict financial well-being (β= 28%, 55.3%), respectively. Financial literacy predicts 51.4% of the variance in financial well-being (Adjusted R square = .514). This means that there are other factors which explain the remaining 51.4% of the variance in financial well-being. The confounding factors; gender, age and level of education were mostly used by other studies as control variables, therefore, they were adopted.

According to Kim (2019), multicollinearity exists when the Variance Inflation Factor (VIF) is greater than 5 to 10 and Tolerance is lower than 0.1 to 0.2. Based on the regression analysis in Table 11, there is no multicollinearity, since VIF is lesser than 5 and tolerance is greater than 0.1 and 0.2.

Table 11: Regression analysis

	Unstandardized Coefficients		**Standardized Coefficients**			**Collinearity Statistics**	
Variable	**B**	**Std. Error**	**Beta**	**T**	**Sig.**	Tolerance	VIF
(Constant)	.322	.237		1.358	.176		
Gender	-.025	.067	-.016	-.376	.707	.805	1.242
Age category	-.009	.041	-.010	-.227	.820	.433	2.307
Level of education	-.095	.056	-.073	-1.685	.093	.697	1.435
Financial Literacy	.304	.051	.280	5.971	.000	.618	1.617
Access to finance	.542	.046	.553	11.712	.000	.814	1.229
R=0.722; R2=0.522; Adjusted R2=0.514; Std. Error of the Estimate=0.53915; Model F=65.741; Durbin Watson=2.180							
a. Dependent Variable: Financial Wellbeing							

Source: Primary data, 2023

4.5 Mediation effect of access to finance in the relationship between financial literacy and financial well-being of secondary school teachers in Kampala Capital City.

The study used a hierarchical regression model and med-graph to examine the mediation effect of access to finance in the relationship between financial literacy and financial well-being. The hierarchical regression was used to test the conditions for mediation proposed by Baron and Kenny (1986). Results from Table 12 indicated that four conditions based on Baron and Kenny (1986) were met and acceptable. As the first condition, the independent variable must significantly influence the dependent variable in the first model which was fulfilled. There is a significant relationship between financial literacy and FWB (R= 0.722**, p<000). Secondly,

regression results also showed that access to finance significantly and positively affected FWB of secondary school teachers in Uganda (.553**, p<.000) fulfilling the second condition that the independent variable must significantly influences the mediator in model two.

Third, the mediator must significantly influence the independent variable in the 3rd model. Fourth, Partial mediation occurs when the independent variable's influence on the dependent variable is reduced. The results from hierarchical regression indicated that financial literacy positively contributed to FWB (.556**, P<.000). This means that financial literacy positively contributes to the level of secondary school teachers' FWB; access to finance partially mediates the link between financial literacy and financial well-being since the effect strength of FL decreased from 52.2% to 51.4%. Based on the results in figure 2, the direct path was significant at 0.548, and the indirect path 0.277, was also significant, meaning that the inclusion of the mediator was meaningful. Financial literacy directly influences financial well-being. Also, financial literacy influences financial well-being through access to finance. Further, the findings imply that although access to finance enhances the contribution of financial literacy on FWB, financial literacy alone without access to finance can positively contribute toward the FWB of secondary school teachers in Kampala Capital City.

The Med-graph was used to derive the Sobel Z value, the corresponding P value, significance, and the type of mediation effect of Access to finance in financial literacy and FWB relationship. The results are presented in Table 12 and Figure 2, respectively.

The Sobel test was conducted using Jose's Med-graph to test for the significance of the mediation. We found a significant mediation effect of access to finance between financial literacy and FWB with a Sobel Z-Value of 7.668162 with a p-value of 0.000001, as presented in Figure 2.

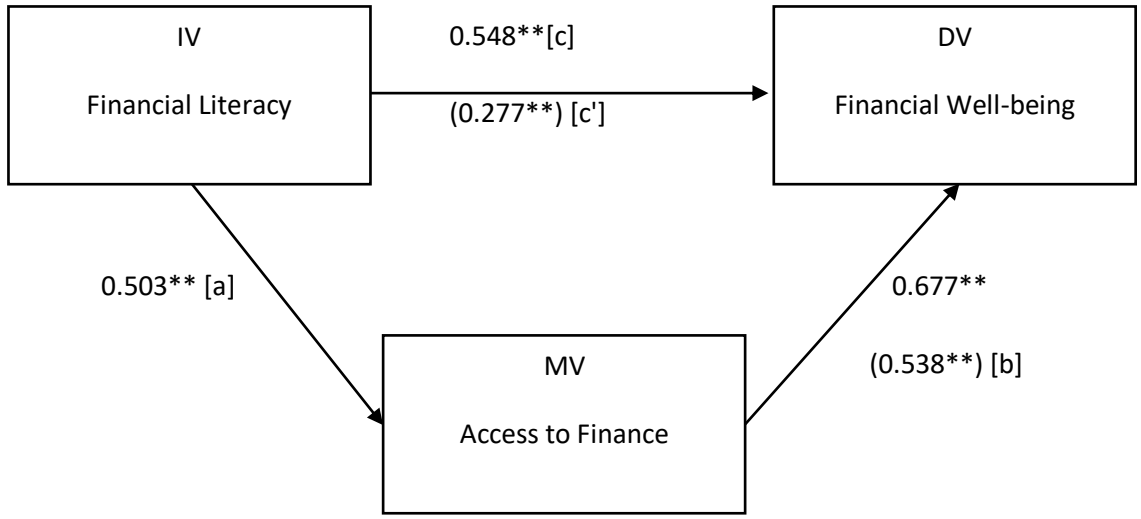
Table 12: Hierarchical regression results

Variable	Model I	Model II	Model III
(Constant)	2.636 **	.467	.322
Gender	-.007	-.007	-.016
Age category	-.004	.066	-.010
Level of education	.084	-.022	-.073
Financial literacy		.556**	.280**
Access to finance			.553**
Model F	0.700	33.003**	65.741**
R	0.083	0.552	0.722
R Square	.007	.304	.522
Adjusted R Square	**-.003**	**.295**	**.514**
Std. Error of the Estimate	.77456	.64942	.53915
Durbin-Watson			2.180

Dependent Variable: Financial Wellbeing

Figure 2: MedGraph - PC: A programme to graphically depict mediation among three variables

Type of mediation		Significant		
Sobel z-value		7.668162	*p* =	<0.000001
95% Symmetrical Confidence interval				
	Lower	0.2189		
	Higher	0.36923		
Unstandardized indirect effect				
	a*b	0.29407		
	Se	0.03835		
Effective Size measures				
Standardized Coefficients				R^2 Measures (Variance)
Total:		0.548		0.299
Direct:		0.277		0.057
Indirect:		0.27		0.242
Indirect to Total ratio		0.493		0.809



CHAPTER FIVE

DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

5.0 Introduction

This chapter discusses the findings, conclusion, recommendations, limitations of the study, and areas for further research.

5.1 Discussion of the findings

The study aimed to determine the relationship between financial literacy and financial well-being, financial literacy and access to finance, access to finance and financial well-being, and the mediating effect of access to finance in the relationship between financial literacy and financial well-being. In this section, the researcher discusses the study results according to the study objectives.

5.1.1 Relationship between financial literacy and financial well-being

The study examined the relationship between financial literacy and financial well-being. The result indicated a positive and significant relationship between financial literacy and access to finance. Thus, hypothesis one (H1) was supported. Our results suggested that FWB is predicted by financial literacy, implying that teachers who are informed about financial matters possess high financial well-being. The result corresponded with Surendar & Subramanya (2017), which indicated that increasing awareness about financial planning, managing credits, protecting assets, and saving increased financial well-being because individuals could control their finances efficiently. In the context of the study, it was established that the more the teachers are financially literate, the higher their financial well-being. Hence, an increase in financial literacy increases financial well-being. Based on this conclusion, financial knowledge, behavior, and attitude facilitate FWB. The results were consistent with Iramania and Lutfia 2020; Son and Park

2019, who revealed that improving financial literacy reduces impulsive behavior toward spending patterns and increases saving habits, diversified investments capable of improving financial wellness. Furthermore, the findings supported the empowerment theory by Perkins and Zimmerman (1995) that for vulnerable groups to effectively utilize the resources available, they must possess competencies that enable them to use such resources effectively. Based on the above discussion, the hypothesis that financial literacy relates to financial well-being was fully supported.

5.1.2 Relationship between financial literacy and access to finance

The findings indicated that financial literacy has a positive and significant relationship with access to finance for secondary school teachers. Thus, H2 was supported. The result meant that access to finance depended upon an individual's ability to gather information and evaluate it to make appropriate choices between financial products to take advantage of the available opportunities. Among financial literacy dimensions, financial behavior was the highest contributor to access to finance. The result implied that secondary school teachers who sought professional advice took appropriate actions when choosing financial products. The result corresponded with Anshika & Singla (2021), who found that financial literacy facilitated the comparison of financial products for financial decision-making, acquisition, and utilization of financial options. Equally, the positive relationship between FL and access to finance is consistent with Ketkaew et al. (2022), who revealed that a lack of financial literacy is often associated with a lack of access to formal financial products or an inability to use them when they are available.

5.1.3 Relationship between access to finance and the financial well-being

The result indicated a positive relationship between access to finance and the financial well-being of secondary school teachers. Hence, the hypothesis was supported. In the context of this study, the findings suggested that secondary school teachers with access to finances increased their financial resources, which they used to improve their financial well-being. The result of H3 indicated a positive and significant correlation between access to finance and FWB, with the highest correlation between loan frequency and FWB. These findings implied that secondary school teachers in Kampala Capital City with increased access to finance also had high FWB. The result corresponded with the findings of (Bongomin et al. 2017; Birkenmaier & Fu, 2019; Kara, Zhou & Zhou, 2021), who suggested that access to finance fostered innovation and growth opportunities, leading to poverty reduction, employment creation, and minimizing income shocks that would limit the enjoyment of life. Hence, as suggested by (Tita & ziakpono, 2017; Demirguç-Kunt et al., 2020), a well-developed financial sector with favorable lending conditions enhances information sharing and increases access to external finance necessary for investment and other financial objectives. Therefore, access to finance accelerates growth and well-being if impending constraints to access and use are removed (Fowowe, 2017).

5.1.4 Mediation effect of access to finance in the relationship between financial literacy and financial well-being.

This study established a partial and significant mediation effect of access to finance in the relationship between financial literacy and the financial well-being of secondary school teachers. Thus, it supported H4. The result implied that financial literacy can directly improve financial well-being, but access to finance also acts as a channel in the association between financial literacy and the financial well-being of secondary school teachers. It was therefore concluded

that secondary school teachers who seek external funding increase the financial resources that enable them to exploit the available opportunities. Generally, exposure to financial institutions allows secondary school teachers to get more information, gain experience understanding financial products and build networks with informed and qualified financial providers. This finding corresponds with Nkundabanyanga et al. (2014), suggesting that access to finance increases the availability of money for investment, stimulating economic growth and reducing income inequality and poverty.

5.2 Conclusions

In the view of the findings, the study concludes that, financial literacy and access to finance are instrumental in improving secondary school teacher's FWB. This suggests that strategies to increase teachers' financial well-being should be directed at enhancing their financial literacy in their study curriculum and increasing avenues for accessing finances at affordable rates.

5.3 Recommendations

The findings showed a relationship between financial literacy, access to finance, FWB well-being, and a partial mediating role of access to finance. The following recommendations are significant for enhancing teachers' financial wellbeing.

- Headteachers, and leaders of associations should emphasize training financial literacy competencies to secondary school teachers through workshops and seminars for proper management of personal finances focusing on the conduct of an individual about financial matters thus empowering them to handle the basics of money management, long term financial commitments and other financial practices.

- MoES should design a wholistic teacher training curriculum with financial management and entrepreneurship courses to equip them with skills to enable them to explore opportunities that would enhance their financial wellbeing
- Government should strengthen teachers' saving groups with more money such that teachers with ability to make long term investments can get financial support from low-rate money lenders.
- Improve access to finance by making financial products more affordable at a subsidized rate, specifically to teachers regarding collateral, interest charges, and penalties. For instance, academic documents can substitute tangible collateral.
- Heads of financial institutions should consider recognizing secondary school teachers who use borrowed money wisely for development and increasing the number of times they can borrow money from commercial banks even when they still have a running loan to motivate them.
- Managers in financial institutions should increase the amount of loan received by secondary school teachers but with proper guidance on investing money for higher returns.
- Money Lenders should sensitize teachers about the available financial investment options, especially those with a high potential for returns unaffected by business cycles. Consideration should focus on investment diversification and asset mix to properly allocate financial resources to minimize risk exposure.
- The government should consider giving children of teachers' loan packages at a lower interest to minimize stress levels among the teachers. And when the teachers' children finish their studies, they begin to repay the balance on their loan.

5.4 Limitations of the Study

1. The researcher conducted the study in Kampala Capital City, Uganda. Therefore, the findings were limited to secondary school teachers working and living in urban rather than rural settings. As such, the results of this study cannot inform us how the studied variables relate to other teachers in Uganda.
2. The study followed a cross-sectional research design that did not capture longitudinal changes that would enhance teachers' financial well-being trends.
3. The study generalized teachers FWB and did not segregate them according to salary differentials (between science and non-science teachers) to ascertain the effect it had on their financial well-being.

5.5 Areas of Further Research

Future research needs to examine the power of the subjective approach in measuring teachers' financial well-being especially a comparative study between private and public secondary school teachers with due respect to their earnings. Also, a study in the rural setting needs consideration for a better comparative analysis. This study explained only 58% of the variance in the financial well-being of secondary school teachers. Therefore, the remaining 42% variance in financial well-being requires more studies to investigate other factors that explain this phenomenon among secondary school teachers in Uganda.

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APPENDICES

Appendix 1: Questionnaire

MAKERERE UNIVERSITY

MAKERERE UNIVERSITY BUSINESS SCHOOL

QUESTIONNAIRE FORM

Dear respondents,

I am a Makerere University Business School student undertaking a research study on financial literacy, access to finance, and financial well-being. The study is academic research and will lead to an award of the degree of master's in business administration from Makerere University upon successful completion. All contributions toward increased understanding of enhancing teachers' financial well-being are significant in this study. This study is purely academic; hence all responses will be treated with maximum confidentiality. Please respond to every question.

SECTION A: Background information

Please tick appropriately in one box.

1. Gender

Male	Female
1	2

2. Age Category

Below 20 years	20-29 Years	30 – 39 Years	40 – 49 Years	50Years and above
1	2	3	4	5

3. Marital status

Single	Married	Other, specify
1	2	3

4. Number of people in your household

1-5	6-10	Above 10
1	2	3

5. Number of years served in the teaching profession

Less than five years	5-10 years	11- 15 years	16- 20years	Above 20 years
1	2	3	4	5

6. Level of education

Diploma	Bachelor's degree	Master's degree	Others (specify)
1	2	3	

7. Monthly earnings category

Less than 500, 000	500,000 -1,000,000	Above 1,000,000
1	2	3

8. What financial institution do you visit when the need for extra finances arises?

Commercial bank	SACCO	Others (specify)
1	2	3

SECTION B: FINANCIAL LITERACY

Kindly evaluate the statements below by ticking the box that best suits your level of agreement.

Financial Knowledge *(*Bongomin et al.*, 2017) adopted and modified*		Completely untrue of me	Un true of me	Somewhat true of me	True of me	Very true of me	Extremely true of me
FK1	I am knowledgeable about investment risks	1	2	3	4	5	6
FK2	I am knowledgeable about the benefits associated with financial products and services	1	2	3	4	5	6
FK3	I can compute interest rates on the borrowed money	1	2	3	4	5	6
FK4	I understand basic financial terms well	1	2	3	4	5	6
FK5	I am knowledgeable about personal financial management	1	2	3	4	5	6
FK6	I have a good understanding of the effects of inflation on my current financial status	1	2	3	4	5	6
FK 7	I can easily compare financial products	1	2	3	4	5	6
FK8	I can prepare a personal financial budget	1	2	3	4	5	6
FK9	I can interpret financial statements and reports	1	2	3	4	5	6
FK10	I can accurately determine benefits and losses from financial products and services	1	2	3	4	5	6
FK11	I can determine profits and losses from personal financial records	1	2	3	4	5	6
FK12	I can evaluate different financial products and services	1	2	3	4	5	6
FK13	I can forecast personal cashflows for financial decisions	1	2	3	4	5	6

FK14	I can plan for future financial needs	1	2	3	4	5	6
FK15	I can decide which financial services to use	1	2	3	4	5	6
FK16	I am financially capable of making good use of financial resources	1	2	3	4	5	6
Financial Attitude (*Bongomin et al., 2017) adopted and modified*							
FA1	I have a good attitude toward saving money	1	2	3	4	5	6
FA2	I have a good attitude toward spending responsibly	1	2	3	4	5	6
FA3	I seek information about the operations of financial markets	1	2	3	4	5	6
FA4	I feel very interested in dealing with financial institutions	1	2	3	4	5	6
FA5	I am always interested in financial news and discussions	1	2	3	4	5	6
FA 6	I tend to live for today and let tomorrow take care of itself	1	2	3	4	5	6
FA7	I feel saving money is more important than spending	1	2	3	4	5	6
FA8	I am always organized with managing money	1	2	3	4	5	6
FA 9	I always get financial information from friends	1	2	3	4	5	6
Financial Behavior (Bongomin et al*., 2017) adopted and modified*							
FB 1	I save money from every income received to handle financial emergencies	1	2	3	4	5	6
FB 2	I decide beforehand how my money will be used in the next six months.	1	2	3	4	5	6
FB 3	I always gather information before I choose a financial product	1	2	3	4	5	6
FB 4	I spend within my budget	1	2	3	4	5	6
FB 5	I always plan for life after retiring from my formal employment	1	2	3	4	5	6
FB 6	I set long-term financial goals and endeavor to achieve them	1	2	3	4	5	6
FB 7	I check my budget to see how much I have for the next month.	1	2	3	4	5	6
FB 8	I pay my bills on time	1	2	3	4	5	6
FB 9	I keep a written record of my monthly income and expenses	1	2	3	4	5	6
FB10	I compare prices when purchasing a product or service	1	2	3	4	5	6

SECTION C: ACCESS TO FINANCE

		Completely untrue of me	Un true of me	Somewhat true of me	True of me	Very true of me	Completely true of me
Affordability (Wasiuzzaman. S, 2019) ***adopted and modified***							
C1	Interest rate charged on financial services is attractive	1	2	3	4	5	6
C2	I am confident that my monthly earnings can easily service total charges on loan repayment without causing financial stress.	1	2	3	4	5	6
C3	Many times, I perceive the loan processing fees charged by financial institutions as affordable	1	2	3	4	5	6

C4	The account maintenance fees charged by the financial institutions are affordable	1	2	3	4	5	6
C5	I perceive the loan repayment terms provided by the financial institutions as favorable.	1	2	3	4	5	6
C6	The payment penalty charged by financial providers at the end of the payment period is affordable	1	2	3	4	5	6
C7	I can comfortably switch from commercial banks to other financial providers because total cost charged is affordable.	1	2	3	4	5	6
The amount received (Nkundabanyanga et al., 2014; Wasiuzzaman. S, 2019*) adopted and modified*							
AR1	I perceive the maximum loan amount offered by financial institutions favorable to my needs	1	2	3	4	5	6
AR2	When I choose to borrow, the loan amounts received satisfy my credit needs	1	2	3	4	5	6
AR3	I can easily apply for another loan when I still have a running one	1	2	3	4	5	6
AR4	I can receive the full amount of the loan facility I apply for when need arises	1	2	3	4	5	6
AR5	The financial institutions limit me on the loan amount I can apply for at a time	1	2	3	4	5	6
AR6	I consider the loan amount provided can improve my standards of living	1	2	3	4	5	6
AR7	When financially in need, the loan amount received can enable me to acquire more assets	1	2	3	4	5	6
Frequency of access (Nkundabanyanga et al., 2014; Wasiuzzaman. S, 2019) *adopted and modified*							
LoF1	I obtain loan facilities more often when I need them	1	2	3	4	5	6
LoF2	I can access a loan repeatedly because of the good relationship with the financial providers	1	2	3	4	5	6
LoF3	I have several collaterals that permit me to access financial services more often	1	2	3	4	5	6
LoF4	I have the capacity to visit financial providers more often because of surplus amount on my financial statements	1	2	3	4	5	6
LoF5	The lending policies limit me from accessing financial products and services frequently	1	2	3	4	5	6
LoF6	My financial management history can allow me to always access financial resources when needed.	1	2	3	4	5	6

SECTION D: FINANCIAL WELL-BEING

Financial stability (*Oquaye et al., 2020) adopted and modified*		Completely untrue of me	Un true of me	Somewhat true of me	True of me	Very true of me	Completely true of me
IA1	I have the things I want in life	1	2	3	4	5	6
IA2	I have the balance of money left over at the end of the month	1	2	3	4	5	6
IA3	I feel comfortable with the current financial situation	1	2	3	4	5	6
IA4	I can enjoy life with my current earnings	1	2	3	4	5	6
IA5	My earnings are more than what I spend	1	2	3	4	5	6
IA6	I pay for expenses with my current income when they fall due.	1	2	3	4	5	6
IA7	I usually pay cash to purchase food and other basic needs instead of using credit	1	2	3	4	5	6
Financial resilience (Nkundabanyanga et al. 2019) adopted and modified							
FR1	I am confident about meeting emergency financial needs.	1	2	3	4	5	6
FR2	I can manage financial pressure with ease	1	2	3	4	5	6
FR3	I implemented all my plans in a given month without postponing to another month	1	2	3	4	5	6
FR4	I can easily adjust my operating expenditures in case of need	1	2	3	4	5	6
FR5	I cope with financial shocks well	1	2	3	4	5	6
FR 6	I can remain calm when facing financial difficulties	1	2	3	4	5	6
FR 7	I manage financial stress levels well	1	2	3	4	5	6
FR 8	I can find solutions for difficult problems concerning my cash flows	1	2	3	4	5	6
Financial security (Ianole-Calin et al., 2020) adopted and modified							
FS 1	I have adequate investments that support my monthly earnings	1	2	3	4	5	6
FS 2	My investments are well diversified	1	2	3	4	5	6
FS 3	I am confident about having a financially comfortable future life	1	2	3	4	5	6
FS 4	I am insured against shocks and uncertainties	1	2	3	4	5	6
FS 5	I own adequate properties that can be turned into cash with minimum ease	1	2	3	4	5	6
FS 6	I have adequate savings in my account	1	2	3	4	5	6
FS 7	I invest in assets that have a high potential for returns	1	2	3	4	5	6

End.

Thank you for your participation.

Table 3.1

Table for Determining Sample Size of a Known Population

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	346
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	354
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	191	1200	291	6000	361
45	40	170	118	400	196	1300	297	7000	364
50	44	180	123	420	201	1400	302	8000	367
55	48	190	127	440	205	1500	306	9000	368
60	52	200	132	460	210	1600	310	10000	370
65	56	210	136	480	214	1700	313	15000	375
70	59	220	140	500	217	1800	317	20000	377
75	63	230	144	550	226	1900	320	30000	379
80	66	240	148	600	234	2000	322	40000	380
85	70	250	152	650	242	2200	327	50000	381
90	73	260	155	700	248	2400	331	75000	382
95	76	270	159	750	254	2600	335	1000000	384

Note: N is Population Size; S is Sample Size *Source: Krejcie & Morgan, 1970*