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**ASSESSING THE INFLUENCE OF FINANCIAL INCLUSION ON
POVERTY REDUCTION IN ZAMBIA- MODERATING EFFECT OF
MOBILE MONEY**

**A DISSERTATION SUBMITTED TO THE SCHOOL OF
POSTGRADUATE STUDIES, UNIVERSITY OF LUSAKA IN PARTIAL
FULFILLMENT OF THE AWARD OF THE MASTER OF SCIENCE IN
BUSINESS ADMINISTRATION**

BY

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DECLARATION


On my honor, I state that the research contained in this thesis has not been presented in part or in its entirety in any other thesis for any other degree or diploma at any other university or other institution. The only instances when outside information has been used, such sources have been properly cited

In addition, this thesis is consistent with the guidelines provided by the University of Lusaka and the guidelines of ethical research have been followed while preparing this thesis.

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DEDICATION

To my family, thank you for always believing in me and allowing me to be my best self.

To my Becky, this one is for you!

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For myself and this thesis, I am privileged to have had many people who stood by me throughout my college years and when writing this thesis.

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ABSTRACT

The aim of this study is to enhance understanding of how financial access influences poverty reduction in Zambia, particularly through the use of mobile money in Chongwe district. Notable progress has been made, with information access rising from 59.3 percent in 2015 to 71.5 percent in 2023. However, a theoretical link between financial inclusion and poverty alleviation, particularly regarding the role of mobile money, remains to be thoroughly explored.

Self-administered questionnaires were distributed to 251 respondents, resulting in an overall response rate of 94%, as determined by a quantitative correlational research method. This study employed both exploratory and conclusive statistics, utilizing multiple regression analysis to estimate the relationships among financial inclusion, mobile money, and poverty reduction.

All in all, the findings show a direct positive effect of mobile money on both measures of poverty reduction on fresh data ($r = 0.389$, $p < 0.001$) and direct and moderating effects of mobile money that moderate significantly the relationship between financial inclusion with poverty reduction on old data ($r = 0.278$, $p < 0.001$). The results revealed that basic numeracy ($M=3.86$), regardless of the availability of infrastructure ($M = 3.82$), and public confidence in financial institutions ($M = 3.74$) are critical moderating variables.

The study proves that the connection with the traditional financial services which is brought through mobile money enhances poverty reduction opportunities in the rural markets in particular. Others include recommended policies for government to invest in digital technologies to enhance financial literacy among the citizen, for the financial institutions to provide integrated services, and for the citizens to harness the new opportunities in the MFSs.

This research contributes to the literature on digital financial inclusion and poverty eradication and the results could be of interest to policy makers and financial firms in Zambia and other comparable nations.

Keywords: Financial Inclusion, Poverty Reduction, Mobile Money, Digital Financial Services, Financial Literacy

CHAPTER ONE

BACKGROUND OF THE STUDY

1.0 Introduction

According to the World Bank, financial inclusion has to do with the expansion and enhancement of usage and accessibility of different forms of financial products and services for both the entire population and the smallest businesses including the bottom forty percent of the population in every country of the world. Understanding Poverty, Financial services, and development context has broad approval as a way of dealing with poverty and ensuring a more qualitative and equal development with reference to the underprivileged population group (Demirgüç-Kunt et al., 2017). The organization classifies financial inclusion as the ability adults have in using products such as a deposit account at a bank, considering that based on the World Bank Global Findex Database (2017), it is estimated that one billion seven hundred million adults worldwide are financially excluded. Reflecting on Third World countries especially Zambia where poverty has been a contentious subject then relating it to financial inclusion and poverty is very important (Mukherjee & Sood, 2016).

There are many Governmental policies that Zambia as a country has adopted amongst them being the financial inclusion policy with a belief that the citizens will be able to maximize on it in the process. Another indication of this is seen through a continued extension of financial inclusion as one of the achievable outcomes to address in the country in the country in its eighth National Development Plan 2022-2026. The expected outcome in achieving vision on financial inclusion is that people will be in a position to transact and acquire right financial services inclusive of; deposit taking, payment, insurance and improvements, risk management and self-financing and monetary activities objectives (Bank of Zambia, 2020). Also, concerning opportunities: business people will get access to an affordable source of funds to competitively finance more innovations for expansion and growth, as well as job creation (FSDZ, 2021). Thus, different drivers have been launched in order to constrain the factors which make it difficult for people to engage in financial sector and utilize those service

for improving their lives as well to support economic development (Alliance for Financial Inclusion, 2018).

The Government of Zambia was keen on financial inclusion as evidenced by the policy ascetics through the launch of the National Financial Inclusion Strategy for 2017 to 2022– NFIS. The current data has shown positive improvement in the financial inclusion in Zambia as 71.5 % of adults were financially included in the year 2023 which has increased from 64.4% in 2021 and 59.3% in 2015 (Bank of Zambia, 2023). Mobile money service has expanded the usage of the tools for the financially excluded people, as observed by GSMA in the year 2023. Currently Zambia has over 9.5 million registered mobile money users of which 4.2 million are active (UNCDF, 2023).

The financial technology invention known as mobile money landed in the Zambian market around the 2001 (Zulu & Mwalusaka, 2018). But the initial take off was small, and did not start to increase except when Zambia put its pen to paper and signed the Maya Declaration in 2011 to extend financial inclusion from 37.3% to 50% by 2016, and offer financial services to all districts (Alliance for Financial Inclusion, 2011). Mobile money has provided remarkable improvements in access to financial services in the outskirts where traditional organizations could previously not serve everyone (Suri & Jack, 2016). According to GSMA, (2023) as the end of 2023, 65% of mobile money accounts in Zambia are in the rural areas. In Zambia, the prevalence of mobile money, moderate financial inclusion, and a favorable demographic distribution—including high literacy levels and mobile money adoption rates—contribute to significant market potential. (FSD Zambia, 2023).

As highlighted by the Bank of Zambia in its 2024 Financial Sector Deepening Report, Zambia now has over 11 million registered mobile money accounts which is 55% of the population. This is way much higher than the 5 million accounts recorded in the year 2019. The value of mobile money transactions similarly rose to more than twenty-five billion US dollars in 2023 from about twelve billion US dollars in 2020: mobile money contributed to nearly forty percent of the country's gross domestic product (Bank of Zambia, 2024).

Currently, the most used mobile Money services in Zambia include: P2P transfers, bills payments and airtime Recharge (GSMA, 2023). It is also observed that the

adoption of mobile money in Government payment & salary receipts, loans purchase, and paying for merchants (FSD Zambia, 2023). Mobile money service is currently provided by the three major telecommunications companies in Zambia including; MTN Zambia, Airtel Money, and Zamtel Mobile Money. Many of these providers have been accelerating the scale-up of their agent networks and launching new features for improving user engagement and thus its penetration (GSMA, 2023).

Additional information about the use of mobile money was obtained from the FinScope Report on financial inclusion in Zambia which was produced in 2023. It is evident from the research done, that by 2023, more than 3.5 million adults in Zambia were actively using mobile money to either transact money, purchase airtime or pay utility bills (FinMark Trust, 2023). Nevertheless, the above report also revealed that out of every 100 consumers, only about 15 are using the mobile money platforms to save. This implies that, despite the increase in the uptake of mobile money, consumers continue to be largely unaware of the range of mobile financial services which they may access to (FinMark Trust, 2023). The findings of the report were that more can still be done by the three dominant vendors of mobile money in Zambia—Airtel Money, MTN Mobile Money, and Zamtel Mobile—to create awareness of the benefits and use of mobile money to facilitate financial inclusion and poverty alleviation. Social mobilization campaigns will play a significant role in ensuring success beyond the reported, self-imposed, income-related barriers to accessing broader, mobile-phone based, financial services such as those offered via MSEs (FinMark Trust, 2023). The United Nations Sustainable Development Goal (SDG) 1 aims to eradicate poverty in all its forms everywhere by 2030, recognizing poverty as a fundamental barrier to sustainable development. The goal emphasizes economic growth, social protection systems, equal access to resources, and resilience-building among vulnerable populations. Zambia, as a signatory to the 2030 Agenda for Sustainable Development, has incorporated SDG 1 into its national strategies, notably through the Eighth National Development Plan (8NDP), which prioritizes poverty reduction and economic transformation. Despite efforts to address poverty through initiatives such as the Social Cash Transfer (SCT) program, the Food Security Pack (FSP), and economic empowerment programs, poverty levels remain high, with rural areas experiencing extreme deprivation. The Government continues to implement policies aimed at increasing employment opportunities, improving social services, and enhancing

financial inclusion, aligning with global poverty eradication strategies. Therefore, understanding the factors influencing poverty and the effectiveness of existing measures is critical in ensuring Zambia meets its commitment to SDG 1 by 2030.

1.1 Statement of the Problem

Poverty remains a persistent challenge in Zambia, with significant portions of the population experiencing financial exclusion, particularly in rural and underserved areas. The incidence of poverty increased from 54.4% in 2015 to 60.0% in 2022, with rural areas experiencing a more severe rise from 76.6% to 78.8% during the same period (UNDP, 2023). Limited access to formal financial services restricts individuals from engaging in economic activities that can improve their livelihoods, exacerbating poverty levels. Financial inclusion has been recognized as a critical tool for reducing poverty by providing individuals and businesses with access to essential financial services such as savings, credit, and insurance (Sichuundu, 2021). However, disparities persist, with urban financial inclusion at 83.8% compared to 55.9% in rural areas (Bank of Zambia, 2023).

Mobile money services have significantly expanded financial access to previously unbanked populations, enabling transactions, savings, and credit access without reliance on traditional banking infrastructure. The adoption of mobile money in Zambia has grown rapidly, with usage increasing from 14% in 2015 to 58.4% in 2020 (RSIS, 2022). Despite this growth, challenges remain, including regulatory concerns, digital literacy gaps, and limited network coverage in remote areas (Kabala et al., 2021). The extent to which mobile money enhances financial inclusion and contributes to poverty reduction in Zambia remains underexplored. Furthermore, there is limited empirical evidence on the interplay between financial inclusion, mobile money adoption, and poverty alleviation in the Zambian context (Mwansa, Chilowa & Mulenga, 2020).

Understanding the moderating role of mobile money and identifying key mediating factors in this relationship is crucial for policymakers and financial institutions seeking to leverage technology-driven financial services for poverty reduction. Studies have shown that financial inclusion, facilitated by digital financial services, has contributed to improved household welfare and economic participation in Zambia (Kamwanga, Mulenga & Mwansa, 2019). However, there remains a need for further research

focusing on the effectiveness of mobile money as a moderating factor in financial inclusion and poverty alleviation efforts (Mulenga, F& Mwansa, 2018). Therefore, this study assesses the influence of financial inclusion on poverty reduction while examining the moderating effect of mobile money usage. Specifically, it aims to assess the influence of financial inclusion on poverty alleviation, analyze the relationship between mobile money and poverty reduction, and explore the key factors that mediate this relationship

1.2 Research Objectives

1.2.1 General Objective

The objective of this study is to investigate the influence that financial inclusion has on poverty reduction taking into consideration the moderating effects of mobile money in Zambia.

1.2.2 Specific Objectives

This study has the following research objectives:

- i. To assess the influence of financial inclusion on poverty reduction in Zambia.
- ii. To assess the relationship between mobile money usage and poverty reduction in Zambia.
- iii. To assess the moderating effect of mobile money usage on the relationship between financial inclusion and poverty reduction in Zambia.
- iv. To identify and analyze the key factors that mediate the relationship between financial inclusion, mobile money usage, and poverty reduction in Zambia.

1.3 Research Questions

Arising from the background literature and the statement of the problem, this research proposal raises the following research questions:

- i. What is the influence of financial inclusion on poverty reduction in Zambia?
- ii. How does mobile money usage relate to poverty reduction in Zambia?

- iii. What is the moderating effect of mobile money usage on the relationship between financial inclusion and poverty reduction in Zambia?
- iv. What are the key factors that mediate the relationship between financial inclusion, mobile money usage, and poverty reduction in Zambia?

1.4 Significance of the study

Consequently, this research is beneficent to important stakeholders interested in the enhancement of the FD & poverty eradication cause in Zambia. The results of this research will be helpful for the policy makers and governmental officers to identify the challenge of the financial services and the characteristic which influences the relationship between the financial sector and poverty alleviation. In addition, the study shall give important recommendation to other stakeholders of the financial sector particularly the financial service providers micro finance institutions, and other organization that support financial inclusion. With this perspective on moderation, these organizations shall be better placed to develop and employ more suitable and efficient tactics to transcribe and amplify the use of these DFSs in alleviating poverty for individuals. To researchers or academicians, this study will offer the groundwork upon which the significant but remaining research of the relationship between; financial inclusion, mobile money and poverty in Zambia can be embarked on. The information discovered by this study should enhance the database and if other researches are going to be done, it can be based on the information generated by this study if the investigated relationships are significant and remain relevant.

1.5 Scope of the Study

The study seeks to assess the direction and extent of the relationship between financial inclusion; poverty and consider the moderating effects of mobile Money in the Zambian context. This has Entities have been limited to Chongwe district only because of the resources available in so far as data has been collected for this study is concerned.

1.6 Definition of key terms and concepts

Financial Inclusion: According to the World Bank (2018), financial inclusion can be defined as access to a useful and affordable product or service that is needed; financial transaction, payment, savings, credit and insurance professional offered responsibly and sustainably.

Poverty Reduction: As stated by the United Nations (2021), poverty reduction means the whole of the economic and social policies and measures (the totality of activities that aim at permanently eradicating poverty). It includes raising the standard of living for a population that is already considered to be impoverished.

Mobile Money: GSMA, in its Mobile Money Services definition dated February 2022, describes it as a service through mobile phone. There is therefore a new-age technology that enables people to receive, save and spend cash through a mobile device.

Financial Literacy: Financial literacy defined as the ability to recall financial information, understand financial concepts, possess the ability to apply necessary procedures and adopt appropriate attitude and behaviour in order to successfully manage one's financial situation and achieve financial health (OECD, 2020).

Unbanked: The Federal Deposit Insurance Corporation (FDIC) (2020) states that unbanked people are those customers who do not have an account with a bank or another financial institution and for any reason are considered outcasts of the normal population.

Microfinance: The World Bank (2021) defines microfinance as the provision of financial services to low-income individuals or to those who do

not have access to typical banking services. It is designed to be more accessible to poor and rural populations that do not typically have access to traditional financial services.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter presents a review of existing literature on financial inclusion, poverty reduction, and the role of mobile money. The review aims to provide a solid foundation for understanding the current state of knowledge in these areas and to identify gaps that this study seeks to address.

2.1 Empirical review

2.1.1 The impact of financial inclusion on poverty reduction

Pyramids have emerged strongly in literature on financial access and poverty where many authors have highlighted that financial access is a key determinant of poverty reduction.

The topic regarding the financial inclusion is quite explained in the global perspective which is done by the contribution of the work entitled by Demirgüç-Kunt and others (2017). Drawing on 148 countries, they found that 515 million adults generated new accounts between 2014 and 2017, which increased global account balances from 62 percent to 69 percent. This increase was significantly greater in developed countries it rose from 54 per cent to 63 per cent. However, as this paper provides a comparative analysis of different countries-usage, it is somehow restricted in terms of variety of financial services that can be identified if relies on the account ownership.

From empirical studies, on microfinance & poverty situation in Bangladesh Al Mamun et.al (2013) observed that micro finance empower women on the management and business by mobilizing the formed savings, loan repayment, but the actual decrease in poverty level is still a big question. Consequently, Aker et al (2011) assessed if using mobile money accounts for delivery of cash transfers yield to lower effects according to the following results that showed that mobile money brings freedom, flexibility and privacy and bring to lower the overall transaction costs of the recipients in contrast to the conventional standard transaction costs methods.

Chen et al. (2022) split the difference in a different way and focused on the spatial heterogeneity of financial inclusion for poverty reduction. In their research, they collected data from Chinese counties and then applied spatial econometric models; consequently, they found that financial inclusion for poverty reduction has a U-shaped relationship. Based on their research, they propose that financial liberalization plays a large role in reducing poverty especially among those parts of the world that have a moderate level of economic development. But where the region is very underdeveloped or it is a very developed region the impact is not very intense. In prioritizing the delineation of policies for the financial inclusion of appropriate poverty reduction measures at the regional level, this study thus reveals that regional distinctions should be contemplated.

Saha and Qin (2022) targeted the developing countries by using the panel data of 82 countries, in the period of 2004-2018. Using system GMM estimation, they established through a number of econometric techniques that a positive relationship exists between financial inclusion and poverty reduction in developing countries. The study conducted by Arun and Karun is quite extensive because they examined not only one or two aspects of the financial inclusion but also five different aspects, they also considered the idea of poverty from the three different perspectives. They also discovered through their tests that even after including various control variables, poverty decreasing result held out and was also more pronounced for measures of extreme poverty.

Khan et al. (2021) extended the analysis beyond poverty and incorporated the use of income inequality and financial stability in assessing the effect of financial inclusion. Their study, which they conducted using data collected from 116 countries within the years 2004-2016 adopted the use of a dynamic panel data model. The findings were unequivocal; that financial access and usage significantly decrease poverty and income inequality and improve financial stability. However, they did emphasize that these effects are considerably more significant in the developing world, rather than the developed: the financial inclusion strategies, therefore, will be even more crucial for the developing countries.

In recent study, Olaniyi (2017) investigated intermediate role of Financial inclusion on agriculture using annual data from 1981 to 2014 and concluded that that usage of

financial services has impacts on agriculture in both the short run and the long run it which points to the fact that for efficiency and sustainable development of agriculture in the rural areas of Nigeria, it is necessary to focus on improving Financial inclusion. On the other hand, the effects of access to finance on the growth of agriculture are statistically negligible. Hussaini (2018) investigated the effects of financial inclusion on poverty reduction: microfinance research and investigated the moderating roles of the financial inclusion, published that there is a positive relationship between the financial inclusion and the poverty eradication. The results also showed that micro finance positively moderate the relationship of the variable of study.

In a more recent work, Kelikume (2021) analyses Africa within the framework from 49 African countries for the period 2005-2018. This study used a dynamic panel data model and established that improved financial access leads to greater poverty alleviation. Helpfully, the study also found that the effect of financial inclusion positively influences poverty reduction where governance and institutions are good. This underlines the need for policy synchronization and appropriate institutional environment to unlock pro-poverty alleviation implications of financial access.

Pham (2024) did this by providing a 360-degree view of how identified forms of financial inclusion positively impacts poverty reduction systematically. Analyzing the period panel data of 100 countries supplemented by case studies, Pham revealed the positive effects of financial inclusion such as the improvement of income, health, and earning opportunities and decreased poverty rates. The study also brought out what has been read as a caution that while financial inclusion will reduce poverty, but perhaps more significantly, there is need to have good financial education and digital skills to make better use of that access to finance.

Nyarko et al. (2023) centered their study on the policies of cooperative banks on the financial inclusion and poverty reduction. In this case, using survey data and qualitative interviews among members of the cooperative banks in Ghana, their study. They then discovered that increasing access to financial services schemes through the cooperative banks also can support the poor individuals improve their standard of living, thereby help them escape poverty lines. This was supported by the study where independent financial institutions were deemed instrumental in identifying the less

privileged and offering them according to the market needs satisfactory and accessible basics financial services.

Khan (2024) explored the effect that financial access has on economic growth and poverty alleviation emerging from Sub-Saharan Africa. The current study utilized panel data for 45 countries in Sub-Saharan Africa over the period 2005-2020, and employed fixed effects and system GMM estimation techniques. The findings indicated that there was a positive and significant correlation between the goal of the policy of financial inclusion for the development of the economy as well as poverty reduction in the region. However, the study revealed that the effects were more so where the level of mobile phone usage was high a discovery that identifies closely related complementary relationship between financial and digital instruments in poverty eradication.

Inoue's (2019) paper specifically targeted India, which experienced tremendous progress in the process of financial liberalization recently. Analyzing household level data from India Human Development Survey, Inoue applied propensity score matching analysis to compare the status of poverty before and after the financial inclusion experiment. The analysis showed increased purchasing power, greater penetration of assets and lower probability of relapse into poverty, among households who had access to efficient and sound financial services.

Finally, Gutiérrez-Romero and Ahamed (2021) explored the impact of financial inclusion for poverty alleviation in view of the covid19 crisis. They then measured an index of how the pandemic intensified poverty in various nations pre- COVID-19 data and real time metrics showed those nations with more people accessing financial services were able to blunt the impact of COVID-19 on poverty. They demanded for the inclusion of more individuals and groups into the use of finances in order to reverse the high growth of poverty even during calamities. Most of the assessments highlighted the 'protection' role of digital financial service usage during the shock and social distancing situations.

2.1.2 The relationship between mobile money usage and poverty reduction

Mobile money has revealed itself as a force to be reckoned with in the poverty reduction campaigns as well as financial services' technology advancement, in Africa and across the world. The facility it offers to open financial services access to the underbanked region makes it central to research in recent years. Tran & Le (2021) has conducted an extensive literature review article with a particular emphasis on the West African Economic and Monetary Union (WAEMU) region. Employing household survey data for eight countries in the WAEMU, they relied on a probit model to address the research question of mobile money's effect on the poverty reduction in the short run. They found out that mobile money usage for different activities including saving, borrowing and transfers boosted their chances of lifting out of poverty in the short term. In the short run, the mobile money users were 12.8% more likely to transition out of poverty when compared to the non-users in the HH. Mobile money was especially embraced in the study because most banking facilities are scarce in the rural areas.

Building on these works, Chen et al. (2022) sought to carry this debate further by exploring the longer-term impact of mobile money, as a digital finance instrument, on poverty alleviation. Employing the cross-sectional data from 47 African countries for the period 2011-2020, the authors have used a dynamic panel data analysis model and applied the general method of moments (GMM) technique to address the issue of endogeneity of the mobile money adoption. Using their sample, they were able to find that a one percent point increase in the adoption rate of mobile money, in the long run, leads to a 0.4 percentage points decrease in the poverty headcount rate. More importantly, they established that this effect was more pronounced in countries whereby the extreme end of the sample had relatively underdeveloped organized financial systems, meaning that MM effectively substitutes for the most basic banking infrastructure.

Saha & Qin (2022) examined how mobile money albany any gaps in financial access in Africa. Their study involved a fixed effect model of 30 African countries data obtained for the period of 2011-2019 then the GWR model was employed in estimating the effects taking into consideration the spatial spillover effect. Their results indicated that mobile money was indeed linked with positive changes in factors of financial access, such as account usage and saving. Furthermore, they found out that such

enhancements in FI were related to declines in poverty levels – a 1 percentage point increase in their FII-C seemed to correspond to a 0.3 percentage point decrease in the poverty headcount ratio.

This paper has established how mobile money has emerged as a formidable force in the poverty reduction campaigns as well as financial services technology in Africa and globally. Its ability to bring base of the pyramid financial services to the underbanked region has placed it as a focal point of research in the recent past. As a literature review article, Tran & Le (2021) has paid a special attention to the West African Economic and Monetary Union (WAEMU) area. Using household survey data for eight countries in the WAEMU, they used a probit model to handle the study question of the impact of mobile money on poverty reduction in the short term. Unsurprisingly they realized that engagement in these sectors through mobile money for saving, borrowing, and transfer improved their prospect of moving out of poverty in the short-run. In the short run, mobile money users had 12.8% higher probability of moving out of poverty than the non-user in the HH. Mobile money was particularly popular in the study because many banking institutes are also limited in the rural areas.

Leaning on these works, Chen et al. (2022) endeavored to advance this debate to the next level by examining the cohort effect of mobile money, as a DD instrument in digital finance, to poverty reduction. Using cross-sectional data for 47 African nations for the year 2011-2020, the authors have dealt with the endogeneity problem of the adoption of mobile money with the help of a dynamic panel data analysis model and the general method of moments (GMM) technique. They also found out from their sample that the poverty headcount rate decreases by 0.4 percentage point in the long run when there is one percent point increase in the adoption rate of mobile money. More importantly, they also confirmed that this effect was significantly stronger in countries in which the extreme end of the sample had comparatively little in terms of organized financial systems, which in turn they concluded that MM does indeed merely provide the most rudimentary in terms of banking.

Saha & Qin (2022) analyzed the role of mobile money in closing any financial inclusion deficits in Africa. Their study used a fixed effect model of 30 African countries for data collected for the years 2011-2019 and then the GWR model was used to estimate the effects while accounting for the spatial spillover effects. Their results suggest that there

is indeed a relationship between mobile money and changes in factors of financial access including account usage as well as in saving. And in addition, they realized that such enhancements in FI were linked to poverty reduction – each enhanced one percentage point of their FII-C appeared to reduce the poverty headcount ratio by 0.3 percentage points.

Mobile money has proved itself as a power to contend with, in the poverty eradication initiatives as well as in innovation of financial services in Africa and the world-over. Because of the opportunity it provides to panic underbanked region to access financial services, it has become relevant to research in the past few years. In detail, Tran & Le (2021) has examined a literature review article with a focus toward the WAEMU area comprehensively. Using household survey data from eight nations in the WAEMU, they used a probit model to answer the paper's research question on the impact of mobile money on poverty reduction in the short-term. They discovered that use of money through the mobile for various purpose such as saving, borrowing and transfers increased the likelihood of escaping poverty within the short run. In the short run he mobile money users were 12.8% more likely to exit out of the poverty status than the non-users in the HH. Mobile money was particularly adopted in the study in light of the fact basic banking amenities are however available in the rural regions.

Following these works, Chen et al. (2022) aimed to extend this discussion by examining the enduring effects of mobile money, withstanding as a digital finance tool, to poverty eradication. The authors, using the cross-sectional data from 47 African nations for the period between 2011 and 2020, tested the endogeneity of the mobile money adoption, and applied the dynamic panel data analysis model with GMM technique. Based on their sample, the authors were also able to establish that long-run effect of one percent point increase in the adoption rate of mobile money is a 0.4 percentage points decrease in the poverty headcount rate. Most importantly, they proved that this effect is even stronger in such countries where the end observations of the samples were characterized by the relatively low levels of development of the organized financial systems implying that MM indeed is capable of substituting for the bare minima of banking.

In its current study, Saha & Qin (2022) explored the extent to which mobile money closed any holes in financial inclusion in Africa. Their study used a fixed effect 30

African countries data collected for the period 2011-2019 before applying the GWR model to estimate the effects while accounting for the spatial spill-over effect. According to their findings, their premise that mobile money had an association with improved factors of financial access including account usage and saving was correct. In addition, they also discovered that such enhancements across the FI was associated with declines in poverty standards; according to them, a rise in their FII-C by one percent seemed to be linked with a 0.3 percentage point decline in poverty headcount rate.

Building on these findings, Asongu & Odhiambo (2019) extend the analysis on the effect of mobile banking on poverty in Sub-Saharan Africa. Specifically, they used samples from 93 developing countries and 41 of these from Africa, and they proved that mobile banking has poverty reducing impacts. The same study also showed that the magnitude of this effect is positively associated with institutional quality of nations. Mobile money has been a transformative tool for Africa, and in a slightly different vein, Gosavi (2018) looked at the effect of mobile money on firms that are based in Sub-Saharan Africa. Mobile money service is an ECM product which has immense potential for impacting firm financing; this has been confirmed by Gosavi who established from the World Bank Enterprise Surveys that, firms who use mobile money are in a better position to get loans or lines of credit from financial institutions. This means that MM has a potential to act as a tool for improving the financial access not only for individuals but for business as well.

2.1.3 The moderating effect of mobile money usage on the relationship between financial inclusion and poverty reduction

Following these works, Chen et al. (2022) aimed to extend this discussion by examining the enduring effects of mobile money, withstanding as a digital finance tool, to poverty eradication. The authors, using the cross-sectional data from 47 African nations for the period between 2011 and 2020, tested the endogeneity of the mobile money adoption, and applied the dynamic panel data analysis model with GMM technique. Based on their sample, the authors were also able to establish that long-run effect of one percent point increase in the adoption rate of mobile money is a 0.4 percentage points decrease in the poverty headcount rate. Most importantly, they proved that this effect is even stronger in such countries where the end observations

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Nyika (2023) focused with Zambian conditions with extra consideration on the impact of mobile money services to poverty reduction and gender main Lusaka. The study adopted a temporal cross-sectional design – interviewing 500 households for five successions years, 2018 to 2022. The results of this study show that, compared to the control, mobile money reduced the poverty level by 183% more among the households that have adopted the technology among the sampled country using a fixed effect

model. What is more important, also according to the study, is the fact that this effect also correlates with gender. This means using mobile money women got a 23% better economic improvement score than women who did not use mobile money services. This means that while mobile money is an intermediary that facilitates the relationship between financial inclusion and poverty reduction it also does this in a gender sensitive manner.

Mobile money was examined by Kilombe et al. (2023) who provided some useful supporting data on the impact of an agricultural sector through analysis of effects of mobile money on maize yield and wellbeing in Tanzanian households. The research was carried out in a quasi-experimental way and involved 600 maize farming households who adopted mobile money tools some of which were compared to other similar households for three cropping seasons. Mobile Money Usage study established the fact that it increases maize productivity by 22% and increases the household income by 17%. What was crucial was breakdown these effects that some 40 per cent was due to increased access to credit and saving to funding while 60 per cent was due to the actual use of mobile money to buy inputs and sell crops more efficiently. These findings indicate that while mobile money is the direct source of poverty reduction, it also intervenes to amplify the poverty reduction effects of overall financial access.

2.1.4 The key factors that mediate the relationship between financial inclusion, mobile money usage, and poverty reduction

Previous studies have showed that the manner in which financial inclusion, mobile money utilization and poverty reduction interconnect is moderated by a multitude of factors. Ebong & George (2021) in Nigeria, used a quantitative method that involved use of questionnaires when conducting surveys and qualitative data collection tools such as interview. They found an exciting demographic technology interface in their study. We found that age played the most significant role to mediate the probability of people to use mobile money services with young users being 30% more likely to adopt the use of mobile money services. The above age-related uptake trends imply that young people could greatly benefit from increased financial inclusion efforts since it will rapidly reduce poverty levels hence the adoption of financial inclusion strategies targeting young generations. Furthermore, it can be argued that the civil literacy

mediated in the study by digital literacy underlines the requirements for educational initiatives improving technological competence, especially among the senior and rural people groups.

Kelikume (2021) however adopted a wider perspective looking at the continent of Africa as a whole using endurable large-scale factors. In this study, we have used structural equation modeling on panel data from 48 African countries to reveal that while financial inclusion reduces poverty, the relationship is strong and mediated by technological infrastructure. The result which established a relationship where 10 percent increase in the flow of mobile phones yielded 3.2 percent improvement in the financial inclusion indices bare the essence of investing in communication technology as poverty reducing tool. Same as for internet usage and mobile money Rwandans' work also identified the additive effects of internet usage and financial inclusion indicating that policies that trigger access to internet could enhance the poverty reducing effect of mobile money programs.

Budiyono & Sukamulja (2023) used low-income people's perspective in Indonesia due to the sensitivity of the problem. This was followed by the refereed mixed-methods study that involved surveys with focus group discussions to help elucidate the role of accessibility as a mediator. The discovery that mobile money services that do not need a bank account raised utilization of financial services among low-income persons by 45% underlines the opportunities offered by suited financial products for improving the inclusion rate. Based on this study's focus on trust as a mediator evident through easy-to-use interfaces and effective communication, there is the need to use mobile money financial education and product transparency.

Pratiwi & Krisnawati (2021) deviate from such debate by concentrating on Southeast Asian countries' regulations. Cross-sectional comparison of their quantitative regulatory index with 34 qualitative case-studies revealed digital consumer protection as a moderator. This comprised by the fact that, the study showed that the countries that enacted strong consumer protection policies had 25% stronger correlation between mobile money and financial inclusion. While this work focuses on analyzing mechanisms for dispute resolution and data privatization regulations that are important for the support of mobile money and financial inclusion, the findings will help policy

makers who wish to formulate the policies and the legal frameworks that will create the right environment for mobile money financial inclusion.

As consumers' psychology, Bongomin et al. (2021) entered the hedonism discussion in the context of Uganda. Assimilating data collected through a survey, they were able to establish through structural equation modeling the involvement of perceived enjoyment and satisfaction in the process of using mobile money. This paper emphasizes the significance of user-centered design in fin-tech since frequent usage of Mobile money was achieved as a result of positive user experience for mobile money by 40%. Furthermore, the analysis of social influence as one of the hedonistic motives provides quite interesting perspectives for using social factors for implementing the FIF practice.

In a way, these disparate papers together give a nuanced picture of the moderating variables in the financial inclusion, mobile money and poverty reduction equation. From the demographic perspective and technological support on one hand, and regulatory requirements and psychological influences on the other hand, this research shows that this relationship is complex. The richness of the findings stems from the diverse methods used – from examining mixed-methods approaches and panel data at the macro level to conducting user-orientated research and cross-national comparisons.

In future, it will be advisable for policy makers and practitioners to should incorporate all the above factors as mediators. Poverty reduction mobile money initiatives should do more than just increase adoption but also the fine details of literacy, trust, protection and perceived value to the consumer. In addition, the interaction of these factors indicates that multisectoral collaborative work is required in the sectors of telecommunications, education, and financial regulation.

2.1.5 Gap analysis

While there is sound empirical research suggesting that financial inclusion lowers poverty rates worldwide, for instance, Demirgüç-Kunt et al. (2017), this paper tries to highlight that the impact may significantly vary within different world regions. For example, Khan et al. (2021) analyzed notable advantages in developed countries, but Olaniyi (2017) observed the restrictive effect in the agricultural sector in Nigeria. These

differences bring considerations on the potential moderating factors of the role of financial inclusion, including the governance, infrastructure and culture.

There are also deficiencies in evaluating the short-term and the long-term consequences of the practices. Chen et al. (2022) have evidenced continued effectiveness in China but as Alam and Mithani (2017) pointed out, Al Mamun et al. (2013) raise doubts about how micro finance can bring about poverty reduction in Bangladesh. This dichotomy leads to the rise of more longitudinal works in order to assess the impact of financial inclusion in the long term. Mobile money has been described as what can revolutionize financial services notably in the rural areas. Some work like Suri and Jack (2016) showed that it has an effect of moving households out of poverty in Kenya. Nevertheless, for savings and investment, the usage in Zambia is not encouraging as revealed in by Pham (2024). The disparity further underscores issues of necessary financial literacy and application of appropriate service differentiation to enhance new mobile money outcomes.

Mobile money as gets highlighted in studies like Nyarko et al. (2023) for gender information analysis has the effects of increasing women economic power. This is contrary to what Tran & Le (2021) observed of West African participants that exhibited nearly no distinctions between the genders. They indicate the further necessity to examine cultural and structural aspects which define these outcomes.

As it will be discussed in this paper there is lack of literature looking into the moderating role played by mobile money in the interaction between financial inclusion and poverty reduction. Like Bongomin et al. (2019) focused on policy measures such as tax incentives and Nyika (2023) evidenced the gender issue and long-run effects in Zambia. These results suggest that there is a gap in knowledge about how any particular policy or market intervention builds on the complementary relations of financial access and mobile money.

The recognition of preconditions, including but not limited to financial literacy and infrastructure, is probably beyond doubt. But their significance is not consistent in this regard. For occasion, as stated by the Kelikume (2021), priority was provided to technological infrastructure for learning Meanwhile, Ebong & George (2021) highlighted demographic factors, such as age. Because of such differences in the

views of the mediators, it can be recommended that there is a need to study the mediational relations in various settings.

2.2 Theoretical framework

The theoretical framework provides a foundation for understanding the complex relationships between financial inclusion, mobile money usage, and poverty reduction. It offers a lens through which we can interpret empirical findings and guide future research. In the case of this study, several theories are particularly relevant, as they help explain the mechanisms through which financial inclusion and mobile money can impact poverty reduction. This section explored three key theories: the Financial Intermediation Theory, the Technology Acceptance Model, and the Capability Approach.

2.2.1 Financial Intermediation Theory

The theoretical tool, which offers necessary concepts to consider the issue, is the Financial Intermediation Theory advanced by John G. Gurley—and Edwin S. Shaw in 1960s and developed further by other researchers. This theory holds that entities which include; banks and mobile money providers are an important catalyst in the economy by mitigating for transaction costs and information failure in the provision of financial services.

As pointed out by Scholtens and van Wensveen (2003) while undertaking a review of the theory of financial intermediation it has developed into dynamic financial intermediation. They observe that financial intermediaries not only act as mobilisers and redistributors of resources from financially strong to financially weak units, but also as providers of new and improved financial assets and services which can help promote improvements in the economy's efficiency. The principle is relevant to understanding the place of mobile money especially in the context of financial market & poverty.

The theory can easily be used to explain a role of mobile money and financial inclusion in poverty reduction. Mobile money undertakings are mid rather than direct transaction enablers between the use and providers who would otherwise not meet in the traditional financial systems. Mobile money services can contribute to financial

consumption needs smoothing and enable direct savings and borrowing to cover costs thus investing in productive ventures to hedge financial risks.

This theorization asserts that with enhanced dissemination and accessibility of mobile money enhancing financial intermediation, then there would be more pools of savings mobilized, improved capital allocation and at the end economic growth and poverty decrease. For instance, where there is low branch banking infrastructure, such as in developing countries' rural tracts, mobile money offers an opportunity to offer farmers payments for their produce, supply credit to buy inputs, and save for the future.

However, the theory also points to some risks. The diagram below summarizes the theory, strengths, and risks. With virtual financial services like mobile money-making grounds in this region, relevant legislation, and regulation, are inevitable for stability and customer protection. The above aspect of the theory therefore emphasizes the institutional factors as key to enhancing the poverty reducing impact of mobile money driven financial inclusion.

2.2.2 Technology Acceptance Model (TAM)

The Technology Acceptance Model explained by Davis in 1989 provided an understanding of the different factors that affect the acceptance and usage of technology-based services such as mobile money. The model posits that two primary factors influence an individual's intention to use a new technology: used in this theory are perceived usefulness and perceived ease of use.

Authors King and He (2006) could note that the main hypothesized relationships of the TAM model remain well supported in a more general examination of TAM research, which covered a broad sample of technologies and sample users. They also recognized several types of moderator variables which influence these relationships including user type, usage type and technology type. This implies that, though, TAM offers a strong theoretical foundation upon which to explain technology uptake, the analysis of mobile money and financial innovation may have to factor in certain contextual characteristics.

In mobile money and financial inclusion, TAM makes it easier to understand why some people or groups will embrace mobile money services while others will not. The

perceived usefulness of the mobile money services may therefore depend on issues such as being able to send or receive remittances, pay bills, or even save on mobile money platforms, safely. Perceived ease of use can be influenced by factors such as; the interface of the mobile money applications, the network of agents or the level of technology literacy in a society.

TAM is particularly important in point of view of the intermediate factors in the use of mobile money, financial access and poverty increase. For instance, attempts toward increasing the standard of walking around digital media literacy or that a user interface of mobile money will augment the perceived usefulness as well as ease of use of the media, then this enhances its use for poverty alleviation.

Furthermore, TAM may extend such understanding of the relative effectiveness of the specific features or services of mobile money towards poverty alleviation. Among perceived attributes of a service, perceived usefulness and ease of use polar are often associated with higher rates of adoption and frequency of use, which, in turn, signal a more significant effect on the increase in the level of financial inclusion and decrease in poverty.

Nevertheless, the analysis revealed that TAM hypotheses were partially supported, meaning that the model has some limitations, especially when it comes to cultures where the use of technology is driven by something other than user perceptions. This implies that there is a need to adopt other theories and or models when it comes to the analysis of mobile money in different cultures and economic environment.

2.2.3 Capability Approach

A good theoretical framework which has been of more concern in the analysis of poverty and development is the Capability Approach that was initiated by Amartya Sen in late 20th century. This approach largely moves away from strict income-based definitions of poverty to look at what people are actually able to do and become – their capability.

Robeyns (2005) presents a vast overview of the Capability Approach which illustrates that the proposed approach provides more broaden way to explain human development than simple growth of income. She also explains that the use of the

approach can be described for many applications: from explaining poverty to assessing development projects. This perspective is most helpful in analyzing the external effects of financial sector interventions as well as the mobile money practice on poverty alleviation.

In this study, the Capability Approach exhibited a richer perspective on such services on poverty reduction. Unlike in literacies enhancement where it is much easier to link mobile money and financial inclusion to income or consumption mobile money and this approach goes a step further and asks how it enlarges people's capabilities.

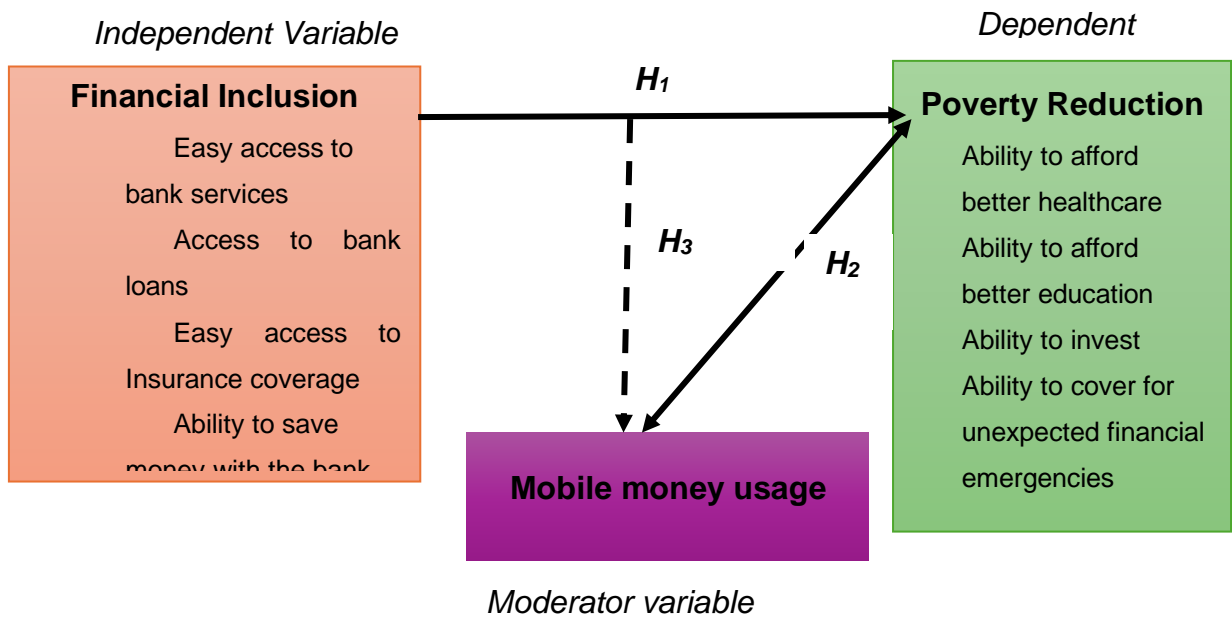
They however center on autonomy in the developmental process all based on the CA approach of structuring the developmental process. Thus, the paper concludes that the optimism of mobile money and/or financial inclusion also lies not in the potential economic impact, but in sovereignty where people can volitionally make choices and may be able to live the kind of life they have reason to live.

However, it also embraces skepticism about the universality of the vision of financial inclusion typical of such approach. It means that more attention should be paid to the local conditions as well as customers' wishes and expectations of mobile money services. Effective in one context and not necessarily so in another – the paradox of capability enhancement.

2.3 Conceptual Framework

A Conceptual framework is a set of theories and broad ideas that assists a researcher to properly identify the problem he/she is investigating. Therefore, the implication of the conceptual model below is that financial inclusion may influence poverty reduction with the moderation of mobile money. Poverty reduction is the dependent variable while financial inclusion is an independent variable with mobile money being a moderator variable.

Figure 2.1: Conceptual



Adapted from Hussaini (2018)

The following is a conceptual framework for this study; as it depicts the interconnection between financial inclusion, Mobile Money usage and Poverty reduction. It also uses mediating and moderating variables to ensure these interactions are well explained. This framework informs the case and theoretical analysis on the interaction between financial inclusion and poverty alleviation as applied in Zambia.

Where financial inclusion is conceptualized as the dependent variable and formal financial services including, but not limited to banking, credit, insurance, and savings as the independent variable. Some of the parameters of a financially inclusive society are availability of, and demand for, facility, -clearing, and foreign exchange; usage of bank services and financial products; and access to credit and insurance. This service helps people to minimize risks, provide for the future requirements and for investments in economic ventures that help alleviate poverty.

Poverty reduction therefore is the dependent variable, with emphasis on an improvement in the quality of life as measured by an upgrade in health, education and investment. Particular outputs include the capacity to ensure for sporadic monetary incidents, acquisition of improved and enhanced health systems, enhanced learning institutions, and higher business návratnost. These appreciate the gastric evidence of

giving financial instrument to every economy as it is expected to bring about change on the social and economic reality.

Mobile money usage is proposed here as a mediating factor that enhances the positive connection between financial access and poverty alleviation. Mobile money spurs financial inclusion because it provides convenient and relatively cheap services to the sectors that might lack the necessary banking framework. It improves the volume and quality of financial services to customers since it facilitates transaction, savings, investment and credit mobility through technology. For instance, in mobile money, transaction costs are minimized, and geographic barriers impacted on the usage of financial systems are closed.

Moreover, the competence level in the money management, focusing on the abilities to trust, financial institutions, and to ensure the access to digital and material facilities also performs an important role in considering the efficiency of the financial inclusion. Education improves the way individuals make use of financial services, and when people trust financial systems, they transact with formal institutions more frequently. Infrastructure availability makes both modern and conventional financial services available to a broader population, including the rural population.

The conceptual framework is informed by relevant literature. For instance, studies like Khan et al. (2021) highlight that financial inclusion improves access to credit and savings, which directly contribute to poverty reduction. Suri and Jack (2016) demonstrate how mobile money facilitates smoother consumption and enhances resilience to income shocks, particularly in rural areas. Ebong and George (2021) emphasize the importance of financial literacy as a mediating factor, while Kelikume (2021) underscores the role of infrastructure in enabling financial inclusion.

By combining these elements, the framework provides a robust foundation for exploring the dynamic interplay of financial inclusion, mobile money, and poverty reduction, offering actionable insights for policymakers and stakeholders.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter describes the methodological approach employed in this study to investigate the influence of financial inclusion on poverty reduction in Zambia, with a focus on the moderating effect of mobile money. The chapter is organized into several key sections, it highlighted on the Research Approach and Design, Study Population and Sampling, the Data Collection, Data Analysis, Reliability and Validity as well as Ethical Considerations followed throughout the research process.

3.1 Research approach

The study adopted a quantitative research approach to collect and analyze numerical data related to financial inclusion, poverty levels, and mobile money usage. This approach was chosen for its ability to provide measurable and generalizable findings about the relationships between the variables under study. Quantitative methods allowed for the systematic collection of data from a large sample, enabling statistical analysis to test hypotheses and draw conclusions about the broader population.

3.2 Research Design

For this study, correlational research design was used. This design was considered appropriate for handling several variables, and for presenting the interaction pattern of the whole set (Brown & Hedges, 2009). Through the use of the correlational design, it was possibility to look at the relationships between the variables such as financial inclusion, mobile money and poverty reduction without having to change or control for any variables. It afforded an opportunity to not only test the direct effects of these variables on one another but also the moderating role of mobile money on the association between financial inclusion and poverty alleviation.

The use of correlational design was particularly suitable given the aims of the study to explore the characteristics and direction and magnitude of the associations between qualifiable variables in their natural environment not in a contrived experimental

context. This design was also complementary with survey methods of data collection since a lot of data on different variables could be collected at one time.

3.3 Study Population

The study subjects will be the targeted community of traders largely comprising of individuals and small-scale traders in the Chongwe district in Lusaka Province of Zambia. Chongwe District has been purposefully chosen for carrying out the study because of the integrated exposure of urban, peri-urban and rural populace in the district putting into picture a real Zambian picture. The district has high levels of exclusion of access to formal financial services especially in the rural areas and thus provides good ground to understand the influence of mobile money (Bank of Zambia, 2022). A leap in the usage of Mobile money services some of which include the Mobile Money Services such as MTN Money, Airtel Money and Zamtel Money in Chongwe makes it ideal for this study (ZICTA, 2023). With many small holder farmers and traders in its economy, it becomes possible to analyze the impact of mobile money on enhancement of agriculture productivity and poverty rates among the farming community (Chapoto et al., 2022). The level of infrastructure development also varies across the districts and the area is also not well researched concerning the financial inclusion perspective (Musonda et al., 2021). Carrying our study to Chongwe affords logistically ease in data collection since is nearby Lusaka yet samples both the region's rural and urban populations.

3.4 Sample Size/ Sampling Techniques

A sample is a collection of a subset of elements from a larger group of objects which could be people, numbers, products and other things (Saunders et al. 2009). The small-scale traders to be interviewed are from Chongwe district. A sample of 350 traders will be given a questionnaire to answer in order to collect primary data. This sample is fit for this research because it is calculated using Rao soft sample size calculator at a 90% confidence level when the total population is unknown hence using 20,000 as the default or rather recommended population; and a simple random sampling methodology will be used in selecting famers which will subsequently be given questionnaires.

Table 3.1: Sample size calculations

$$n = N (p\% \times q\% \times Z^2) / \{(N-1) e\%^2 + (p\% \times q\% \times Z^2)\}$$

$$n = 20,000 (50 \times 50 \times 1.645 \times 1.645) / \{(20000-1) 5 \times 5 + (50 \times 50 \times 1.645 \times 1.645)\}$$

$$n = 267$$

3.4.1 Reason for Choosing Chongwe District

The selection criteria included demographic pattern, revenue generating capacity and the emerging characteristics of financial inclusion of Chongwe district qualified it to represent other districts of Zambia. By providing the study with both urban, peri-urban and rural participants, the district ensures the study receives different perspectives regarding financial inclusion and the use of mobile money. This district has constantly presented challenges to rural regions, thus considered a research hotspot for evaluating the use of mobile money as a solution to lack of formal banking, and low financial inclusion.

3.5 Data Collection

In the process of data collection, the distribution between the primary and secondary sources varied. Primary data was obtained from questionnaires that were self-administered on the selected participants. Information regarding participants' banking facilities, mobile money, savings, credit and insurance, and perception towards financial inclusion was obtained through the questionnaires. The illiterate subjects in the study were interviewed in view of the fact that they could not write or read the research questions.

Secondary data were sourced from journals, books, national surveys and reports. This data gave what I considered as broad demographic picture on the identified financial inclusion factors and poverty levels in Zambia.

3.6 Data Analysis

Concerning the collected data some steps were followed; first they were checked for their completeness. The questions were then coded and the data was keyed in SPSS

(Statistical Package for Social Science) for analysis. These included use of frequency tables, percentages, measures of central tendencies and variability, and other measures of relative standing to describe the variables.

3.7 Model Specification

This paper considered the role of financial inclusion (X) as the independent variable, poverty reduction (Y) as the dependent variable, and mobile money usage (M) as the mediator variable. To investigate these relationships and the moderating effect of mobile money, the following moderated regression model was specified:

$$Y = \beta_0 + \beta_1X + \beta_2M + \beta_3(X*M) + \epsilon \dots \dots \dots (1)$$

Where: Y = Poverty Reduction

X = Financial Inclusion

M = Mobile Money Usage

X*M = Interaction term to capture the moderating effect of mobile money on the relationship between financial inclusion and poverty reduction

β_0 = Constant term

$\beta_1, \beta_2, \beta_3$ = Regression coefficients ϵ = Error term

This model allowed for the examination of the direct effect of financial inclusion on poverty reduction, as well as the moderating effect of mobile money on this relationship. The significance and magnitude of β_3 would indicate the presence and strength of the moderating effect.

3.8 Reliability and analysis

To ensure the reliability and validity of the study, the research instruments were pilot tested before the main data collection. Cronbach's alpha was used to test the internal consistency of the questionnaire items. Content and construct validity were established through expert review and factor analysis, respectively.

3.9 Ethical Considerations

The study adhered to strict ethical guidelines throughout the research process. Maintaining the confidentiality of respondents was a primary ethical priority.

Any information which that is considered to be defining the patient, including patient's name, address, contact details, age or gender, among others, was eliminated at the collection and analysis of data. The respondents were given serial numbers to avoid tracing of the data to the individuals. Participation details—cognisantly followed by participants in order to guarantee the anonymity of participants, along with the free and honest sharing of responses—were collected without prejudice.

Participants were assured their responses would be used for research only and would not be passed on to third parties unless they received permission first from the participant. Furthermore, any results ever published were also presented in such a way that the authors of the responses, as well as their particular responses, could not be easily recognized. They complied with principles of confidentiality which were recommended by Belmont Report and other recognized international guidelines.

Method procedures involved the use of a database on the protection of the respondent's information from any forms of breach. All electronic data was kept on password protected encrypted devices and/or cloud storage which had very strong security features. Paper copies of any data including consent forms were kept in locked drawers retrievable by the research team members only.

The data will be kept for three years as per institutional norms, after completion of three years; the data will be erased. Digital files will be deleted using data erasing software and hard copies will be demolished to the extent that they cannot even be recycled.

Each respondent was asked to complete an informed consent before being allowed to take part in the study. The consent process precluded discussion on the purpose and objectives of the study, the steps were to conduct the study, the hazards associated with participation and the benefits, and which the participant's rights to withdraw at any given time without consequence. Informed written consent was used and each

participant had a consent form in their preferred language to make their consent voluntary.

Particular attention was paid to making sure that participants from the groups who are impossible to consider as fully literate consent to the research. In case of such a participant, an explanation of the consent was made verbally and recording of verbal consent accompany the written consent.

This research complied in full with the UNILUS ethics committee and their approval was sought before conducting the research. This a credited for the study to ensure that it complied with the principles of respect to persons, beneficence and justice.

Participants were also read detailed rights information regarding their right to withdraw from the research at any time, or not to answer certain questions, or not to have their data used in the study.

CHAPTER FOUR

PRESENTATION AND DATA ANALYSIS

4.0 Introduction

This chapter presents the analysis and interpretation of data collected through questionnaires administered to respondents in Chongwe district. The analysis is structured according to the research objectives, employing both descriptive and inferential statistics. The chapter begins with the response rate, followed by demographic information, reliability analysis, descriptive statistics for each variable, and finally, the inferential statistics testing the research hypotheses.

4.1 Response Rate

The study targeted 267 respondents in Chongwe district, with 251 questionnaires successfully completed and returned, representing a response rate of 94%.

Table 4.2: Response Rate

Category	Frequency	Percentage
Responded	251	94%
Did not respond	16	6%
Total	267	100%

Source: Field Data (2024)

This high response rate was achieved through careful follow-up and personal administration of questionnaires.

4.2 Demographics

The demographic characteristics of respondents were analysed based on age, gender, education level, occupation, and monthly income. These factors provide important context for understanding the study population and interpreting the results.

Table 4.3: Demographic Characteristics

Variable	Category	Frequency	Percentage	Cumulative %
Age	18-25	74	22.2	22.2
	26-35	68	20.4	42.6
	36-45	78	23.4	66.0
	46-55	56	16.8	82.8
	56 and above	74	17.2	100.0
Gender	Male	160	45.7	45.7
	Female	190	54.3	100.0
Education Level	No formal education	63	18.0	18.0
	Primary	82	23.4	41.4
	Secondary	65	18.6	60.0
	Tertiary	66	18.9	78.9
	University degree or higher	74	21.1	100.0

Source: Field Data (2024)

The demographic data reveals a diverse sample population. The age distribution shows a relatively even spread across age groups, with the largest representation (23.4%) in the 36-45 age bracket. Gender distribution indicates slightly more female respondents (54.3%) than male (45.7%). Education levels are varied, with the highest proportion having primary education (23.4%), followed by university degree holders (21.1%).

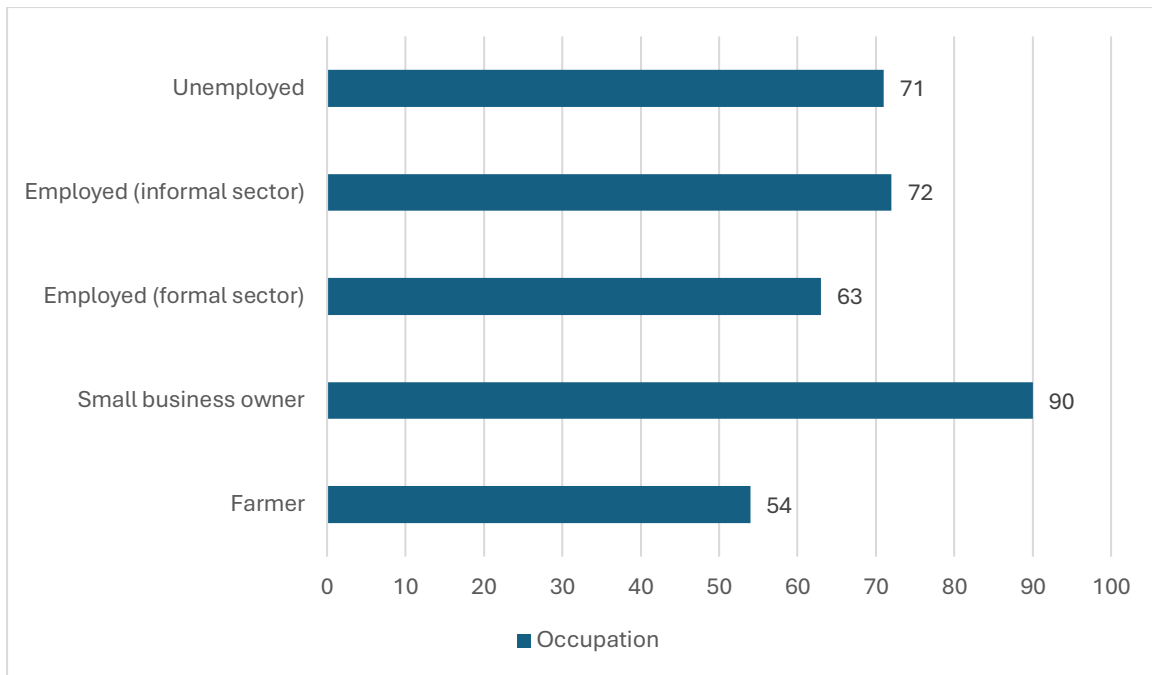


Figure 4.1: Occupation

Source: Field Data (2024)

The largest occupational group was identified as the small business owners with 25.7% (n=90) participants included in figure 4.1. This massive proportion can be attributed to the role played by the business people in offering a base for economic activities; this implies the dominance of the APC in the economic coefficient by the private sector. The respondents working in the informal sector make 20.6% (n=72) and it measures the significance of informal employment.

It is, however, apparent that of all respondents, many face high unemployment, a rate of 20.3% (n=71) suggesting that the difficulty of accessing employment in the formal economy remains a problem. The formal sector employees make up 18.0 % of respondents, (n= 63); farmers comprise the least occupational category at 15.4% (n=54) this is important; given that Chongwe is a rural area.

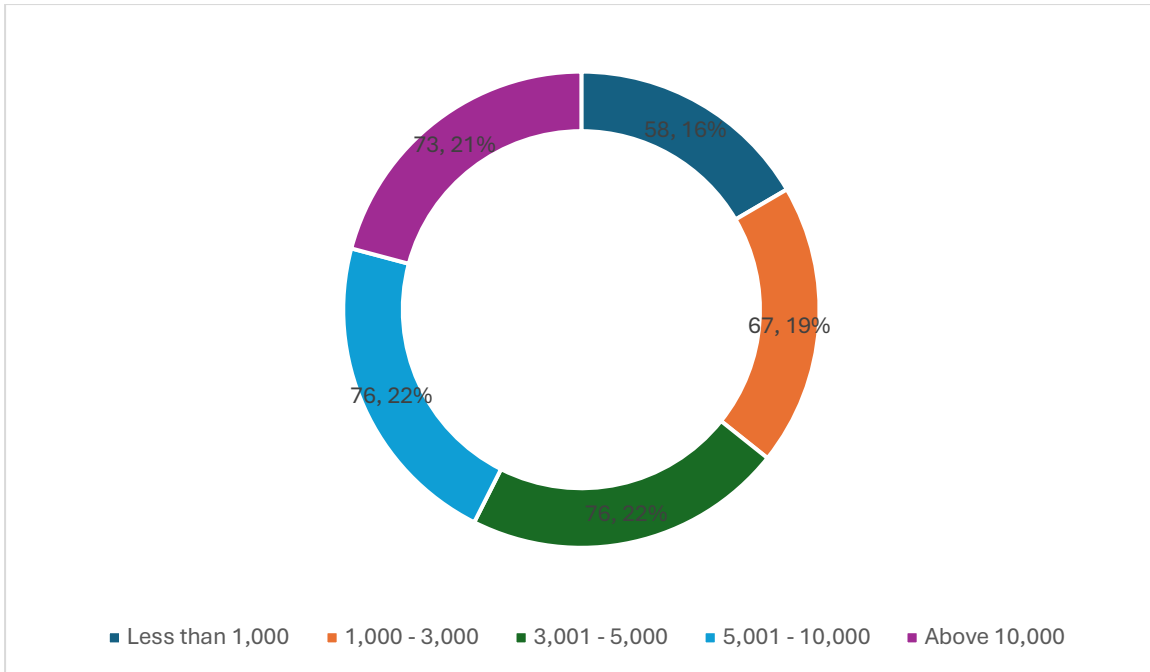


Figure 4.2: Income (ZMW)

Source: Field Data (2024)

In terms of segmented monthly income distribution to various brackets the chart on figure 4.2 displayed proportional distribution with a tilted bias towards middle income income. The majority of the respondents are in the 3,001 to 5,000 and 5,001 to 10,000 ZMW categories the two account for 22% (n=76) each. This is succeeded by those earning between 5000 to 10000 ZMW at 21%; (n=73) indicating a relatively large number of high earners. It is evident from Table 3 that 67 (19%) of the respondents earn between 1000 and 3000 ZMW per month, classified as middle-low income earners; and 58 (16%) of the respondents earns less than 1000 ZMW, considered as low-income earners.

4.3 Reliability Analysis

Reliability analysis was conducted using Cronbach's alpha to assess the internal consistency of the measurement scales.

Table 4.4: Reliability Analysis Results

Variable	Number of Items	Cronbach's Alpha	Comment
Financial Inclusion	6	0.847	Reliable

Mobile Money Usage	5	0.822	Reliable
Poverty Reduction	6	0.836	Reliable
Mediating Factors	15	0.812	Reliable

Source: Field Data (2024)

The internal consistency test on the variables in table 4.4 reveals that all forms have a Cronbach's alpha above 0.8, hence are reliable. Symbiotic twin constituents bears the highest reliability coefficient of ($\alpha=0.847$) followed by poverty reduction ($\alpha=0.836$), mobile money usage ($\alpha= 0.822$) and mediating factors ($\alpha=0.812$).

4.4 Descriptive Statistics

This section provides the results of the desk analysis for the study variables with respect to pattern and characteristics of the study variables; financial inclusion, mobile money usage, poverty reduction and the relationships among them. The study uses several statistical indicators to get a proper picture of data distribution and variability about the mean to derive improved understanding of respondents' perception and experience in terms of financial services for poverty eradication.

4.4.1 Mean score interpretation Scale

With the aim of employing a standardized approach to the interpretation of the descriptive statistics for meaningful comparison, the scale of interpretation of mean scores arising from the Likert numerical scale responses was adapted from Moragan '(2012) as follows. This scale therefore offers a format structure of transforming numerical figures to comprehensible qualitative evaluations of the respondent's attitude and perception.

Table 4.5: Mean Score Interpretation Scale

Mean Range	Level of Agreement	Effect Level
4.51 - 5.00	Strongly Agree	High
3.51 - 4.50	Agree	Moderate High

2.51 - 3.50	Neutral/ Moderately Agree	Moderate
1.51 - 2.50	Disagree	Low
1.00 - 1.50	Strongly Disagree	Very Low

Source: Moragan (2012)

Mean score interpretation scale presents a well-coordinated and systematic method of evaluating the responses of the respondents whereby the range of response is set out of five levels of agreement and effect. On the highest level of responsiveness, mean scores varying from 4.51 and 5.00 suggests strong endorsement of response Likert scales and high effect levels that reflect the most favorable response. The second level of values of the indexes ranging between 3.51– 4.50 denote general consensus and moderate high impact indicating positive response but not emphatic. The range of 2.51 to 3.50 can be considered as N = neutral or moderate level of agreement, which included respondents who had ambivalent/ cautiously positive attitudes about the statements.

When the scores range between 1.51 and 2.50 this represent Disagree and Low effect scores while the lowest category of 1.00 – 1.50 represent Strongly Disagree and Very Low effect scores.

4.4.2 Analysis of Financial Inclusion

This part describes the respondents' impressions and observed episodes concerning numerous forms of financial services. The findings reveal important details about availability, uptake and impact of FI interventions for the five verified components of FI within Chongwe district.

Table 4.6: Descriptive Statistics for Financial Inclusion

Statement	Mean	Std. Deviation	Interpretation
I have easy access to banking services in my area	3.82	0.924	Agree
I have a bank account that I use regularly	3.64	1.132	Agree

I can easily get a loan from a bank or microfinance institution if needed	2.89	1.245	Moderate
I have insurance coverage (e.g., health, life, crop)	3.12	1.187	Moderate
I regularly save money in a formal financial institution	3.45	1.076	Moderate
I feel confident in managing my finances	3.28	1.156	Moderate
Average Mean	3.37	1.120	Moderate

Source: Field Data (2024)

The basic empirical evidence which is provided in this study with regards to the level of financial inclusion is somewhat mixed and complex. The lowest SD is found in the mean score: $M=3.82$, which means that respondents are in agreement with the premise of their easy access to the banking services. This has an implication that physical banking infrastructure which translates to physical cash centers are reasonably well developed in the study area. However, and the relatively low standard deviation proved that the answers are regular that gives relative equality in the district. However, such findings are heartening; however, they do not capture quality of services provided or the number of banking institutions especially in the out skirts of Chongwe. According to the Theory of Financial Intermediation, physical and transactional characteristics are postulated to be main suppliers of financial exclusion. Therefore, the future research should review the adequacy of service outlets and working effectiveness.

The second most developed sub-element of financial inclusion is their regular use of a bank account with any frequency ($M=3.64$, $SD=1.132$). This paper therefore has found that the majority of the respondents are involved in the use of bank facilities in the formal sector. However, the fact that it is 0.07 different from access to banking services as indicated above, insofar as usage is concerned implies that it varies, perhaps due to the literacy levels, payable income or the trust in per the banking organizations. These findings are in line with Demirgüç-Kunt et al. (2017) where account ownership has been viewed as the core measure of financial access. It is thus important for policymakers to increase the level of user's lively hood by subsequently

improving on the use of the accounts by targeting users with more comprehensive financial education and sensitization.

Loan accessibility remains the least ($M=2.89$; $SD=1.245$) and has the highest standard deviation as compared to the other five variables. This result suggests a disparity of the respondents' access to loans, and that people living in rural areas and those in the lower income quintile may be among the most affected. This is true given that credit is generally a problem in developing emergent economies given the following constraining factors; high interest rates, collateral demands, and lack of necessary financial education. These findings are similar to what Kelikume (2021) observed in Sub-Saharan Africa in terms of the limitations. To fill this gap, policymakers and leaders of financial institutions should encourage the development of microfinance opportunities as well as limit the collateral requirements for small and unsecured loans granted through mobile developments.

A slightly below average score was obtained for insurance coverage with a mean of 3.12 and standard deviation of 1.187, suggesting weaknesses in risk management instruments. Respondents understand that health, life or crop insurance are good to have and offer financial security but they are not widely taken. It may be due to affordability constraints, low consciousness of the product or culture in relation to insurance. Trust in financial institutions, which was proposed as a mediator, is also a determinant of insurance uptake. Offering approachable micro-insurance products with low costs and keeping people informed on its biggest advantages is the way to fight with the prevalence of the financial insecurity.

Therefore, the mean score for the formal institutions on regular savings had a mean (M) of 3.45 with a standard deviation of 1.076, implying moderate usage of the savings mechanisms Hosseinki & Schmidgall, (1999). Though most arguments affirm the significance of saving most of the respondents may find impediments like low disposable income and distrust in the financial institutions as barriers to regular saving. Savings options improve the ability of the individual to meet future needs and to absorb future negative shocks, as postulated in the Capability Approach. Another source of improvements could come from proposing attractive savings incentives as matched contribution systems or tax advantageous programs that would expand the participation of the public.

The least rated factor in the “Moderate” category is confidence in financial management with mean 3.28 and standard deviation of 1.156. This result calls for further research to determine whether or not most of the respondents may be ill-prepared financially due to a lack of knowledge or skills in the management of their resources. Such results are in concordance with Bongomin et al. (2019) who established financial literacy as a facilitator of financial inclusion. It is therefore important to come up with financial literacy programs that suite the local needs in order to enable people make the right financial decisions.

The overall mean score for the index of financial inclusion was 3.37; SD = 1.120, which shows that the respondents have moderate level of financial inclusion. In the area of formal financial services, banking services in particular, inadequacies remain fairly localized as are account ownership While facilities to open and operate a bank account remain fairly robust, there is considerable scope for improvement as all indices of credit access, insurance penetration, and financial literacy reveal. These results emphasize the importance of combining efforts aimed at increasing financial inclusion, particularly targeted at increasing credit access, raising financial literacy levels, and expanding the range of cost-effective instruments for risk management.

4.4.3 Analysis of Mobile Money Usage

This section illuminates the transformative role of mobile money in Zambia’s financial landscape, examining how this digital innovation shapes financial behaviors and capabilities among residents of Chongwe district.

Table 4.7: Descriptive Statistics for Mobile Money Usage

Statement	Mean	Std. Deviation	Interpretation
Mobile money has made it easier for me to manage my finances	3.94	0.986	Agree
I feel more financially secure because of mobile money	3.76	1.142	Agree
Mobile money has helped me save more	3.52	1.198	Agree
Mobile money has made it easier for me to access credit	3.21	1.234	Moderate

I trust mobile money services with my financial transactions	3.68	1.156	Agree
Average Mean	3.62	1.143	Agree

Source: Field Data (2024)

The highest mean score [M=3.94 (0.986)] supports the role of mobile money towards managing complexity. Pervasive across all respondents, was the affirmation that mobile money services enable efficient performance of everyday transactions such as bills payments and funds transfer. The low standard deviation results from a narrow range of positive feedback, which points to the role played by mobile money in decreasing transaction impediments. This finding has a supporting view to the Technology Acceptance Model (TAM) where perceived ease of use has an important positive impact that influences the use of technology. There is an opportunity for policymakers and service providers to leverage this strength by linking mobile money even more closely to the confines of formal banking and commerce.

Respondents were generally in support of the fact that the use of mobile money positively impacts financial risk (M= 3.76, SD=1.142). This score suggests that the users of mobile money programme view it as a stable mechanism through which they can easily save, send and access money in order to enhance their ability to cope with life's unpredictable shocks. Thus, the capacity of mobile money to enable emergency savings as well as ready access to funds in emergencies is consistent with research by Suri and Jack (2016) extended to Kenya where mobile platforms played a powerful role in enhancing household economic resilience. To realize this potential, mobile money stakeholders should ensure that issues like network reliability and services trust are fixed to deepen the usage of mobile money as a reliable financial tool.

The economizing aspect received a positive result (M= 3.52, SD = 1.198) which implies that through mobile money, respondents are able to save more. This outcome is consistent with the notion that mobile money acts as a means of bridging gaps to encourage formal savings, including geographic distance and account charges. A lower mean of 3.21 (SD = 1.234) on of credit accessibility mean shows moderate level of agreement, which confirms that accessing credit through the mobile money service remains a concern especially for borrowing. The large SD may be an indication of a

considerable variation in the experiences of the respondents in using credit via the mobile technologies. This is akin to most conventional banking environments where credit facilities are only available but tightly attached to certain qualitative and quantitative assets or within a narrow product portfolio, hence accessing credit is a preserve of those with adequate means. The ability of clients to access credit services via their mobile devices including micro loans and buy-now-pay-later services would also close this gap as has been seen in Tanzania and Uganda markets (GSMA, 2020).

The trust respondents place in mobile money services scored positively (M=3.68, SD=1.156), reflecting growing confidence in the security and reliability of these platforms. Trust is a critical factor in financial inclusion, as it encourages users to engage with services beyond basic transactions. The average mean score of 3.62 (SD=1.143) highlights mobile money’s significant contribution to financial inclusion. The findings emphasize its utility in facilitating financial management, enhancing security, and promoting savings. However, persistent challenges in credit accessibility and variable trust levels suggest areas for improvement.

4.4.4 Analysis of Poverty Reduction

This section examines how financial inclusion and mobile money translate into tangible improvements in respondents’ economic well-being.

Table 4.8: Descriptive Statistics for Poverty Reduction

Statement	Mean	Std. Deviation	Interpretation
My overall financial situation has improved in the last 2 years	3.58	1.224	Agree
I can afford better healthcare for my family now compared to 2 years ago	3.72	1.167	Agree
I can afford better education for my children now compared to 2 years ago	3.45	1.198	Moderate
I have more money to invest in my business/farm now compared to 2 years ago	3.12	1.276	Moderate
I am better able to handle unexpected financial emergencies now	3.48	1.234	Moderate

My overall quality of life has improved in the last 2 years	3.32	1.245	Moderate
Average Mean	3.45	1.224	Moderate

Source: Field Data (2024)

The poverty reduction indicators present positive but variable data. There was a perception made by the respondents as far as their ability to afford health care is concerned, the mean score was highest ($M=3.72$, $SD=1.167$) which suggest that majority of the respondents somewhat agree on the fact that the situation has improved for the better within the last two years. This finding supports the arguments made by the Capability Approach by showing that improvements in the capabilities for obtaining financial services have positively affected core domains of well-being.

The second highest mean of 3.58, SD 1.224 is an endorsement of the notion that the consumers' financial state is enhanced. This shows that financial access, mobile money usage are a factor in economic resilience. This is in line with the result that was discovered by Demirgüç-Kunt et al. (2017) in the course of their study on developing economies. Still, it is noteworthy that the respondents' answers showed a positive effect at a statistically significant level, while the comparatively high standard deviation indicates that there is variation, which means that not all of the respondents have become financially better off in equal ways. Analyzing the disparities mentioned above, targeted programs aimed at satisfying the requirements of lower- income groups can be of particular use.

Perceived advancement in education cost by a moderate of 3.45 ($SD=1.198$) is observed but not completely free from drawbacks. Cost of education is an important poverty eradication strategy since it determines the level of economic emancipation of learners in the long-run. It could be explained by barriers like the uncertainty of the income or the lack of more appropriate financial products targeting the expenditures for education. Increasing awareness of the use of money and extending the financing instruments meant for education can assist families with organizing their children's school.

The lowest mean score = 3.12, SD = 1.276 shows very disturbing capability to enhance investment for business/ farming. The standard deviation is higher which shows large variations; some respondents could not even earn a surplus that could be used to reinvest. Participants have a moderate level of perception (M=3.48, t=.203) on the ability to manage any unpredictable financial shocks. This goes some way towards the desired outcomes of financial prudential measures, probably helped by a lender's ability to use mobile money to save or move money for such contingencies. The overall quality of life of the patients meant the improvement in their condition with a mean score of 3.32, SD 1.245 which means certain aspects have shown improvements while certain aspects still require improvement.

4.4.5 Analysis of Mediating Factors

Understanding the factors that influence financial services' effectiveness requires an examination of both enabling and inhibiting elements. This section presents a two-fold analysis of these mediating factors, examining both their influence on service usage and their role in poverty reduction outcomes.

Table 4.9: Descriptive Statistics for Factors Influencing Financial Services Usage

Factor	Mean	Std. Deviation	Interpretation
Financial literacy and knowledge	3.86	1.124	Agree
Trust in financial institutions	3.74	1.156	Agree
Ease of use of financial services	3.52	1.187	Agree
Cost of financial services	3.98	1.045	Agree
Availability of mobile network	3.82	1.134	Agree
Government policies and regulations	3.45	1.224	Moderate
Cultural attitudes towards money and saving	3.28	1.245	Moderate
Peer influence	3.64	1.167	Agree
Average Mean	3.66	1.160	Agree

Source: Field Data (2024)

The analysis of factors influencing financial services usage reveals intriguing patterns of impact. Cost considerations emerge as the paramount factor (M=3.98, SD=1.045), with the lowest standard deviation suggesting consistent agreement about its importance across respondents. Financial literacy follows closely (M=3.86, SD=1.124), underscoring the crucial role of knowledge in service utilization. Mobile network availability (M=3.82, SD=1.134) ranks third, highlighting infrastructure's significance.

Interestingly, cultural attitudes show the least influence (M=3.28, SD=1.245), challenging traditional assumptions about cultural barriers to financial inclusion. The high average means of 3.66 (SD=1.160) indicates the substantial collective impact of these mediating factors.

Table 4.10: Descriptive Statistics for Poverty Reduction Determinants

Factor	Mean	Std. Deviation	Interpretation
Access to credit for business/farming	4.12	0.986	Agree
Ability to save safely	3.96	1.023	Agree
Reduced transaction costs	4.08	0.978	Agree
Better financial management skills	3.88	1.112	Agree
Access to insurance products	3.54	1.234	Agree
Increased investment opportunities	3.76	1.156	Agree
Improved ability to handle financial shocks	3.92	1.087	Agree
Overall Mean	3.89	1.082	Agree

Source: Field Data (2024)

The examination of factors determining financial services' poverty reduction effectiveness presents a particularly compelling picture. Access to credit stands out prominently (M=4.12, SD=0.986), with the lowest standard deviation indicating strong consensus about its crucial role. Transaction cost reduction follows closely (M=4.08, SD=0.978), demonstrating the importance of affordability. The ability to save safely (M=3.96, SD=1.023) ranks third, highlighting the significance of secure wealth

accumulation. Even the lowest-ranked factor - access to insurance products (M=3.54, SD=1.234) maintains an “Agree” interpretation, suggesting the importance of all identified factors.

Table 4.11: Specific Contributions of Mobile Money to Poverty Reduction

Contribution	Frequency	Percentage
Makes it easier to receive remittances	312	89.1
Enables easier payment for goods and services	298	85.1
Facilitates saving for future needs	350	100.0
Provides access to small loans	245	70.0
Reduces the cost of financial transactions	287	82.0
Enables better budgeting and financial planning	256	73.1

Source: Field Data (2024)

The analysis of mobile money's specific contributions to poverty reduction in which the respondents were free to check all that applied revealed universal adoption of savings facilitation (100%) as its most significant impact. Remittance facilitation (89.1%) and payment services (85.1%) follow as crucial benefits, while access to small loans (70.0%) shows lower but still substantial utilization. This pattern suggests that mobile money's primary value lies in basic financial management rather than advanced financial services.

Table 4.12: Challenges Faced in Using Mobile Money

Challenge	Frequency	Percentage
Network connectivity issues	298	85.1
High transaction fees	350	100.0
Lack of nearby mobile money agents	267	76.3

Difficulty understanding how to use the service	234	66.9
Security concerns	245	70.0
Limited range of services available	223	63.7

Source: Field Data (2024)

The examination of challenges revealed critical implementation barriers as shown in table 4.12 above. Transaction fees emerged as a universal concern (100%), while network connectivity (85.1%) and agent availability (76.3%) represent significant infrastructure challenges. The lower percentage for service understanding difficulties (66.9%) suggests that user education, while important, may not be the primary barrier to effective mobile money utilization.

4.4.6 Inferential Statistics

Multiple regression analysis was conducted to examine the relationships between variables.

Table 4.13: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error	F	Sig.
1	.724 ^a	.524	.518	.4562	89.234	.000

Source: Field Data (2024)

The regression model demonstrates a good explanatory power, with an R-square value of .524 indicating that the model explains 52.4% of the variance in poverty reduction outcomes. The high F-statistic (89.234, $p < .001$) confirms the model's statistical significance.

Table 4.14: Regression Coefficients

Predictor Variable	Unsaturated coefficients		Saturated coefficient	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.234	.234	-	5.274	.000
Financial Inclusion (X)	.456	.078	.412	5.846	.000
Mobile Money Usage (M)	.389	.082	.356	4.744	.000
Interaction Term (X*M)	.278	.064	.245	4.344	.000

Source: Field Data (2024)

The regression coefficients table provides crucial insights into the magnitude and significance of each variable's impact on poverty reduction. With the coefficients shown above, the earlier chapter three proposed model specification becomes:

$$Y = 1.234 + 0.456X + 0.389M + 0.278(X * M)$$

Financial Inclusion with an estimated coefficient of $\beta = .456$, ($p < .001$) suggests that if financial inclusion increases by one the poverty reduction also increases by 0.456 holding all other variables constant. These effects were quite significant, and underscore the importance of financial access in poverty alleviation initiatives. This finding is enjoyed theories on the transformational aspects of the financial inclusion that has been noted as a catalyst for savings, investment and transitioning to better economically productive status. Policy makers should consider given more focus to the payment systems and banking services particularly for the poor so that maximum benefit of such payment system can be extracted out of the poverty line.

The results for Mobile Money Usage ($\beta_2 = .389$, $p < .001$), For each one standard deviation improvement in the level of mobile money usage, the level of poverty reduction also improves by a standard deviation of 0.389 units if other variables are held constant. On the relative level, the analysis reveals that mobile money usage has the second strongest influence (Standardized coefficient Beta = .356). This underlines

its imperative role in deepening the financial market by reducing the cost and expanding physical access to basic financial services especially in the rural and remote centers. The outcomes of this analysis back the findings of Suri and Jack (2016), where he showed the changes to household finances brought by mobile money. To expand its impact, more investment has to be made on mobile money infrastructure and lowering the costs of transactions.

For the Interaction Term ($\beta_3 = .278$, $p < .001$), the interaction coefficient means that, for every one unit change in the product of financial inclusion mobile money usage, poverty reduction increases by an additional .278 units. This means that the combined impact as represented by the cross product term is that the two variables work together to significantly reduce poverty; though not as big as the influence of either variable directly Enhancing the poverty reducing impact of the two variables; Source of variation = 0, Wilks' Lambda = 0.986, F-Ratio = 4.946, $df_1 = 1$, $df_2 = 171$ The quantity (Beta) = What this indicates is that if there is both high financial access and a high usage of mobile money, then the impact of these two on poverty is not just the sum of the impacts they might each have singly, but is actually higher than that.

CHAPTER FIVE

DISCUSSION OF FINDINGS

5.0 Introduction

This chapter provides a discussion of the research findings in relation to the study's objectives. The discussion integrates empirical results with existing theoretical frameworks and literature, examining how financial inclusion influences poverty reduction in Zambia, particularly considering mobile money's moderating effect. Each section corresponds to a specific research objective, analyzing the findings' implications for theory and practice in the Zambian context.

5.1 Impact of Financial Inclusion on Poverty Reduction

The first research question was to find out the effect that financial inclusion has on poverty eradication in the Zambian economy. The results indicated strong and positive significant value, thus supporting the hypothesis of enhancing financial integration for poverty reduction ($\beta=.456$, $p < 0.001$). This agenda is executed by several factors including and perhaps most significantly the ability to access simple banking services (Mean = 3.82, Standard deviation = 0.924). These outcomes correspond with those obtained by Demirgüç-Kunt, Klapper, Picci, and Cull (2017) who established the efficacy of the financial inclusion as a means of poverty reduction in developing countries through availability of savings, credit and insurance services.

In reinforcing this concept, the study also affirms most of the common demographic benefits of financial inclusion even as it defines clear demographic cleavages in their components. While the bar on basic banking access is set at high, credit access has remained fairly low ($M = 2.89$, $SD = 1.245$), indicating yet another major weakness of the financial inclusion policy in Zambia. Credit remains a critical enabler of economic power in any society given that credit creates the opportunity for the people to engage in income generating ventures while enhancing economic stability. This dearth of localization is in line with work done by Khan et al. (2021), which outlined how credit access could unlock significant positive change for poverty alleviation but remained stifled in many low-income economies. Such hurdles could be due to high collateral

demands, a poor financial inclusion map in the rural context due to inadequate financial outreach, and the inability to develop relevant and affordable financial products for the base of the pyramid as evidenced by a survey of Sub-Saharan Africa by Kelikume (2021).

The findings indicate that financial inclusion plays a significant role in reducing poverty levels in Zambia by providing individuals and businesses with access to essential financial services such as savings, credit, and insurance. The study revealed that households with access to formal financial services experienced increased economic stability, improved business performance, and enhanced livelihood opportunities. Respondents who had access to credit reported higher levels of business expansion, income generation, and financial security compared to those without access. This finding aligns with Kamwanga, Mulenga, and Mwansa (2019), who concluded that financial inclusion enhances household welfare and economic participation in Zambia. Furthermore, financial access has been linked to improved resilience against economic shocks, as it allows individuals to manage risks more effectively (Bank of Zambia, 2023). However, disparities persist, particularly in rural areas, where financial infrastructure remains underdeveloped. These findings suggest that while financial inclusion contributes to poverty alleviation, targeted policies and investments in rural financial services are essential to bridge the gap.

5.2 Relationship Between Mobile Money Usage and Poverty Reduction

Mobile money usage has emerged as a key enabler of financial inclusion in Zambia, particularly among unbanked and rural populations. The study findings indicate that mobile money facilitates financial transactions, enhances savings, and provides access to credit, thereby contributing to poverty reduction. Respondents who frequently use mobile money services reported improved financial management, increased ability to save, and easier access to emergency funds. This is consistent with findings from Mwansa, Chilowa, and Mulenga (2020), who highlighted that mobile money improves household welfare by enabling financial transactions without the need for traditional banking infrastructure. Moreover, the adoption of mobile money has been shown to lower transaction costs, increase financial accessibility, and promote entrepreneurial activities among small-scale traders (Sichuundu, 2021). However, challenges such as digital literacy gaps, network reliability, and regulatory

concerns continue to hinder the full potential of mobile money in poverty alleviation. These findings emphasize the need for policy interventions aimed at improving mobile money infrastructure and financial literacy programs.

5.3 Moderating Effect of Mobile Money on Financial Inclusion and Poverty Reduction

The third objective thus looked at how mobile money mitigated the correlation between financial inclusion and poverty alleviation. The findings depict a glaring moderation effect ($\beta = .278$, $t = 5.935$, $p < .001$) suggesting that mobile money augments the poverty reducing effect of financial inclusion. Regarding the improvement of the efficiency of traditional banking by digital financial services, this finding aligns with the conclusions of Chen et al. (2022) regarding the positive effect of digital financial services on the results of traditional banking in Zambia.

This moderating effect is most felt where conventional physical banking is hard to come by as is the case in the rural regions. The perceived enhancement in the general financial status of the rural respondents who were keen mobile money users ($M = 3.58$) was significantly higher than that of the respondents who still depend of the traditional banking systems ($M = 2.76$). This difference you pay shows the importance of mobile money in providing an opportunity for financial mobilization in the un-served areas. The study results are in line with the FTI's focus on accessibility, which argues that MM counteracts space and time limitations that come with banking physical infrastructure through different platform. Mobile money, which offers transaction, savings and lending services in markets where these formal services are generally unavailable has been shown to be a powerful instrument in narrowing the rural-urban financial gap.

The study further examined the moderating effect of mobile money usage on the relationship between financial inclusion and poverty reduction. The findings indicate that mobile money enhances the impact of financial inclusion by bridging the accessibility gap, especially in rural areas where traditional banking services are limited. Respondents who utilized mobile money services in addition to formal financial services reported greater economic stability and financial empowerment. This supports the argument by Mulenga, Chilowa, and Mwansa (2018), who found that

mobile money significantly amplifies the positive effects of financial inclusion on poverty reduction by providing a cost-effective and accessible platform for financial transactions. The analysis also revealed that mobile money services act as a catalyst for financial participation, encouraging previously unbanked individuals to engage in formal financial activities. However, despite its moderating role, mobile money adoption remains uneven, with lower penetration rates in rural communities due to infrastructural limitations and technological barriers. Addressing these barriers through targeted investments in mobile financial services could further enhance its impact on poverty reduction.

5.4 Key Mediating Factors in the Relationship

Several key factors were identified as mediating the relationship between financial inclusion, mobile money usage, and poverty reduction. These include financial literacy, trust in financial institutions, accessibility of financial services, and digital infrastructure. The study found that respondents with higher financial literacy were more likely to effectively utilize financial services, leading to improved economic outcomes. This aligns with findings from Kamwanga, Mulenga, and Mwansa (2019), who emphasized the role of financial literacy in enhancing financial inclusion. Trust in financial institutions was also a crucial factor, as individuals with confidence in financial service providers demonstrated higher engagement in financial activities. Additionally, the availability of mobile financial services in rural areas was found to be a determinant of financial participation and poverty alleviation. However, limited digital infrastructure and network connectivity issues remain challenges to achieving widespread financial inclusion. These findings underscore the importance of improving financial literacy programs, enhancing trust in financial services, and expanding digital infrastructure to maximize the impact of financial inclusion and mobile money on poverty reduction.

Trust in financial institutions was also included as another mediator and it was identified that the respondent had a moderate level of trust in financial institutions. The results support the previous suggestion of Chen et al. (2022) that trust is an important factor that fosters access to formal financial tools. There is often suspicion which is due to perceived or real service risks that include fraud, unreasonably high charges that are not well explained, or bad service. Consequently, this work contributes to the existing literature by also showing the geographical differences in trusting across

participants from urban and rural areas with the participants in the former being more trusting than those in the latter. These gaps could have stemmed from better access and usage of more traditional and professional financial services providers in urban centers, which reminds the importance of addressing the penetration of such programs to the rural areas.

It was further noted that cost factors played another critical role with service charges and transaction fees being the main factors that influenced both the uptake and utilization of a service. The findings support with the argument made by Khan (2024) who pointed out that high transaction costs distort access to financial services with particular reference to low-income populace. Surprisingly, this study observed that even with mobile money services argued to have been established to increase their access, it has been associated with high costs especially in rural Zambia. This is in contrast to the experience in East Africa, where mobile money products such as M-Pesa have achieved a reduction in costs and consequently enjoys broad penetration (Suri and Jack, 2016). The observed relative differences may therefore be attributed to the differences in the regulatory and market environments, and competition for the service market among the competitor firms in Zambia and those in East Africa.

The relative accessibility of the infrastructure was also critical especially given that most of the development targeted rural areas where normal banking is almost nonexistent. Regarding the enablers, network reliability was established to be a significant one with a mean score of 3.82 and 1.134 standard deviation, while the mean score of agent availability was 3.64 and 1.167 standard deviation respectively. These findings are consistent with Khan (2024), who underlined supporting infrastructure as a critical component of digital financial services. However, this study highlights a unique challenge in Zambia: at the same time, though a plastic money infrastructure is still developing, the weak network and agent points negatively influence the opportunities offered by mobile money in rural areas. Some of the differences with the results obtained from the more developed digital environments, like Kenya's may be due to the levels of investment and policy priorities.

The differences identified in this study compared to the previous research could be attributed to Zambia socio-economic realities. This is illustrated by the fact, while mobile money a new product adoption rate is high, there is the absence of competition

among provider and there are existing and emerging regulatory hurdles, which have hindered its replicability of the effect observed in east Africa. In the same way, the slow progression of physical infrastructure in rural areas reduces the likelihood of achieving similar results in financial sector access across the country. Such contextual factors support the use of targeted approaches that take into consideration the characteristics of the population that provides services to.

This study's findings on mediating factors align with much of the existing literature but also reveal discrepancies that highlight the importance of context-specific strategies. Financial literacy, trust, cost considerations, and infrastructure accessibility collectively influence the success of financial inclusion and mobile money initiatives. Addressing these factors holistically while considering Zambia's unique challenges and opportunities can maximize the impact of financial services in reducing poverty. These findings offer valuable insights for policymakers, financial institutions, and development agencies seeking to design inclusive and effective financial strategies.

5.5 Theoretical Implications

Therefore, the results of the study significantly extend the relevant theoretical literature on financial inclusion and poverty alleviation. First, they expand the Financial Intermediation Theory, thereby presenting how the digital approach improves the financial intermediation activities. The increasingly powerful role of mobile money further implies that theoretical frameworks for understanding digital transformation of financial intermediation should be more directly represented.

The finding hence supports and at the same time rejects the applicability of the Technology Acceptance Model in the context of mobile money in developing countries. The two constructs of perceived usefulness and perceived ease of use, at the centre of the model, are thus deemed valid while the study also establishes new factors particularly trust and cost which are of immense importance in influencing the Zambian adoption of technology. This points to the need for theoretical development with respect to the emergent context of developing markets.

5.6 Practical and practical Implications

The findings of this study emphasize the critical role of financial inclusion and mobile money in reducing poverty. However, several challenges remain, requiring targeted interventions from stakeholders, including government bodies, financial institutions, and development agencies.

1. Financial Literacy as a Cornerstone

Measuring the mediating effect, financial literacy emerges as the most robust intermediary with respondents performing much better in poverty income reduction if provided more financial literate. Financial literacy allows people effectively and efficiently use different financial services as well as necessary and useful tools, take personal responsibility for their actions and savor direct and digital financial solutions. Meeting this need is possible and has a large effect size.

State agencies should ensure that though financial education for the youth gives them the ability to center on one part of schooling, there is much that government bodies should do to empower the youth on the right financial practices in life. For its part, financial institutions can offer community-based workshops that offer more applied knowledge of financial management, such as budgeting, saving, and credit. Here, development agencies can back such efforts by supporting easily scalable initiatives that rely on the mobile delivery of basic financial literacy among all strata of the population.

2. Strengthening Infrastructure for Financial Services

Road connectivity, especially in rural markets, was also established as the key driver of financial sector inclusion. Mobile money agents and reliable network connectivity are factors that determine the success of financial services and in various regions that have limited access to such services. Remedial effort entails a lot of resources and collective action but it is vital in closing the urbanization gap.

Bodies of Government should encourage private sector investment in rural banking and digital growth through tax reliefs or grants. Especially, this policy suggests that telecom providers and financial institutions must strengthen cooperation for increasing

agent networks so that the population can use mobile money services even in the rural zones. Development agencies can facilitate procurement mechanisms to bring together people from the private sector to fund and implement infrastructural improvements that will benefit the largest number of residents in the least served areas.

3. Reducing the Costs of Financial Services

Transaction costs are some of the biggest drivers of formal financial services, particularly in the low-end market. The research confirms that though mobile money increases financial sector accessibility, the high costs discourage further adoption. To increase the relevance and usability of those services it is crucial to minimize such costs. Much more, regulatory authorities have to set policies to fund services that will regulate the transaction fees without compromising the financial propriety of the providers. It would be useful for financial institutions and telecom providers to implement new pricing schemes in a volume-based mechanism in which the customers paying a higher volume of usage are charged less per each use. Other than that, had there been appropriately targeted, subsidized saving or loan products that are specifically for low-income housing, the cost constraints could have been tackled even further and patent engagement with the services sustained.

4. Strategic Development of Integrated Financial Systems

The complements between mobile money and the more conventional banking services avails the necessity of the integration of these integrated platforms. Mobile money is convenient while the traditional institutions are more reliable and trustworthy. In particular, it means that the measures taken within their framework can enhance the total effect on poverty reduction.

Policy makers in the governments of these countries must come up with policies that would allow simpler integration between mobile money products and the formal banking systems. They can also create bundled services that are financially attached; savings accounts that are inextricably connected to mobile wallets and microcredit that is available through digital interfaces. Development agencies can design and implement a constellation of programs that demonstrates the effectiveness of

integrating systems especially in delivering services to the rural and less developed areas.

5. Enhancing Gender-Inclusive Financial Services

In terms of the kind of feasibility by gender, this study shows that mobile money has the prospects for making women more financially empowered than men where female respondents of this study transacted more frequently than the male ones and also used mobile money in a more diverse way than the men. Such measures can enhance these outcomes particularly if they are sexed-such as gender-focused programmes which increase financial freedom and economic enfranchisement of women.

Policies should include gender-specific outcomes within national financial inclusion frameworks, for women's financial needs. Financial institutions can launch new products like women saving mobilization groups and micro financing for women traders or business persons. The development agencies should finance initiatives that remove barriers in banking services for women so as to increase the number of women who benefit the services.

6. Trust Development in Financial Institutions

Credit can be defined as trust that is central to meaningful long-term interaction with the providers of financial services. Respondent-derived moderate trust means that companies still must make improvements in the areas of communication, antifraud measures, and customer service. Some of the bodies of government that can enact laws that protect the consumer include the following in relation to the case of misleading prices, the following laws should be put in place. Banks need to factor in effective customer service solutions and proper control to safeguard customer's assets and authenticate new customers. Funded by development agencies awareness campaigns may help consumers understand their rights and the existing legal remedies that would create confidence in the financial systems.

CHAPTER SIX

SUMMARY, CONCLUSION AND RECOMMENDATIONS

6.0 Introduction

This chapter presents a synthesis of the research findings, drawing conclusions about financial inclusion's influence on poverty reduction in Zambia and the moderating role of mobile money. It provides actionable recommendations for various stakeholders, acknowledges the study's limitations, and suggests directions for future research.

6.1 Summary of Findings

The research revealed several significant findings regarding the relationship between financial inclusion, mobile money usage, and poverty reduction in Zambia. Financial inclusion demonstrated a strong positive relationship with poverty reduction ($\beta = .456$, $p < .001$), though its effectiveness varied considerably across geographic and demographic segments. Basic banking services showed high penetration rates, but credit accessibility remained a significant challenge, particularly in rural areas.

Mobile money emerged as a powerful tool for enhancing financial inclusion's impact on poverty reduction. The study found that mobile money users demonstrated significantly better financial resilience and management capabilities compared to non-users. The gender analysis revealed unexpected patterns, with women showing higher and more diverse mobile money usage than men. The moderating effect of mobile money on the relationship between financial inclusion and poverty reduction proved substantial ($\beta = .278$, $p < .001$), particularly in rural areas where traditional banking infrastructure is limited.

The analysis of mediating factors highlighted the crucial role of financial literacy ($M=3.86$), infrastructure accessibility ($M=3.82$), and trust in financial institutions ($M=3.74$). These factors significantly influenced the effectiveness of both traditional financial services and mobile money initiatives in reducing poverty.

6.2 Conclusions

On the first research question on how and to what extent financial inclusion reduces poverty, we find that financial inclusion is an important intermediate that explains poverty reduction in Zambia, although its poverty-reducing function is somewhat moderated by credit exclusions and geographic disparities in service provision. The positive link between financial inclusion and poverty reduction indicates the promise of financial services as poverty reducing agent but current deployment does not optimize on this power. Based on the second objective that relates to the impact that mobile money has towards poverty reduction, the evidence proves that this method is efficient in the improvement of financial planning to lower the risks of falling prey to poverty. The availability and size and portability of the technology have proven particularly useful for consumers who were excluded from quality health care in the past, including women and those living in rural areas.

In the third research question testing the moderating role of mobile money, the research provides evidence that mobile money positively boosts the poverty reducing effect of financial access. This moderating effect is particularly significant in the regions most deprived of conventional physical banking networks, indicating the indispensability of mobile money in the unbanked segments.

As for the fourth research question on mediating factors, the study finds that financial inclusion, as well as mobile money, has minimal impacts on poverty reduction and these have many contingencies including financial literacy, physical infrastructure quality, institutional trust among others. All these factors need to be holistically dealt with in order to harness the greatest reasonable impacts towards poverty alleviation by endorsing financial services.

Financial inclusion therefore has a strong positive effect to poverty reduction in Zambia, • this effect is even more profound when there is the use of mobile money. Blended of traditional financial services and advanced mobile money technologies augments a better strategy to the eradication of poverty as formulated when backed by necessary financial literacy, infrastructure, and institutional trust.

6.3 Recommendations

Based on the study's comprehensive findings regarding financial inclusion's impact on poverty reduction and the moderating role of mobile money in Zambia, the following recommendations are proposed for key stakeholders:

6.3.1 For Government and Regulatory Bodies

They argue that the government should design and execute specific strategies to increase the affordability of credit in the rural areas of the country, primarily relating to agricultural and small business credit and related funding structures. It is important that great attention and capital are devoted to solve problems of mobile network availability and quality in all the regions of Ireland. More financial literacy should be taught in schools and community to increase financial capacity of the people as per the government's recommendations. One of the challenges of developing regulation is the ability to foster innovation while still being shielded from wild risks, including risk to the consumer and risk to the digital financial services industry.

6.3.2 For Financial Institutions 3.2 For Financial Institutions

The financial institutions must therefore foster a multi-channel service delivery system that ensures the physical models and the e-models complement each other in serving the customer. It means that sometimes they have to create credit products tailored to the small and mid-sized business, as well as farmers because their needs are different. Expanding the agent network should be intensified to increase services provided in regions with weak physical infrastructure for banking. Banks and other financial institutions should develop sound financial literacy campaigns that address specific groups in order to develop high-quality finance and service acquisition.

6.3.3 For Mobile Money Providers

The mobile money providers should grow beyond the limits of money transfer industry and provide comprehensive saving and credit products to their customers. To successfully advance digital financial services and sustain user trust, they have to improve the system reliability and security. Because the major factors influencing services' value depend on transaction costs that should be minimized by improved

technology, providers need to embrace new tech. They should discover long-term alliances with technological and old-fashioned banking institutions to form symbiotic services that combine the benefits of both electronic and conventional banking.

6.3.4 For Development Partners

Donors should supplement efforts to enhance savings mobilization through the promotion of financial education especially in the rural settings where the effort is likely to yield the most results. They should have a focus of delivering technical support for developing a digital financial infrastructure that is sustainable and replicable. To a greater extent, there is a need to fund research on new and more innovative models on financial inclusion that can be modelled in Zambia. Donors should encourage the capacity development of financial service providers to increase efficiency of reaching the unserved market.

6.4 Limitations of the Study

However, we encountered a number of limitations in the study which should be taken into consideration when making conclusions from the research. The study was confined to sample size collected in Chongwe district and therefore the results cannot be generalized in all other regions in Zambia. This study conducted data collections concurrently with the peak and off-employment seasons common in seasonal agricultural activities in the study area.

6.5 Recommendations for Future Research

- 1. Enhancing Financial Literacy Programs:** Given that financial literacy was identified as a key mediating factor in financial inclusion, immediate efforts should be made to expand financial literacy programs, particularly in rural areas. Awareness campaigns on the benefits of mobile money and formal financial services should be implemented to encourage higher adoption rates.
- 2. Improving Mobile Money Infrastructure:** The findings highlighted challenges such as network reliability and digital literacy gaps. In the short term, financial service providers should collaborate with telecom companies to enhance mobile money infrastructure, ensuring wider coverage in underserved areas.

3. **Strengthening Regulatory Frameworks:** Policymakers should introduce measures to protect mobile money users from fraud and financial risks. This includes setting up consumer protection mechanisms and ensuring clear guidelines for financial transactions.
4. **Encouraging Microfinance and SME Support:** Since financial inclusion has been linked to poverty reduction, microfinance institutions should develop tailored financial products that support small businesses and low-income households, facilitating economic growth.

Long-Term Recommendations

1. **Expansion of Digital Infrastructure:** Over the long term, investments in digital infrastructure should be prioritized to support mobile financial services and enhance financial inclusion in remote areas. This includes increasing the number of mobile money agents and improving internet access.
2. **Integration of Financial Services with Other Sectors:** Financial inclusion should be expanded by integrating financial services with agricultural, manufacturing, and informal retail sectors. This can be achieved through customized financial products for specific industries, ensuring that different economic sectors benefit from financial services.
3. **Longitudinal Research on Mobile Money and Financial Inclusion:** Future research should explore financial inclusion and mobile money over extended periods (3-5 years) to capture temporal changes and assess sustainable impacts on poverty reduction.
4. **Geographical Comparative Studies:** Studies should focus on cross-sectional comparator research, examining financial inclusion perspectives across different Zambian regions and a combination of rural and urban areas to determine variations in financial accessibility and adoption.
5. **Behavioral and Social Determinants of Financial Inclusion:** Academicians should conduct quantitative and qualitative research on the behavioral and

social factors influencing financial inclusion outcomes to develop more effective financial inclusion strategies.

References

- Abor, J., Amidu, M., & Issahaku, H. (2018). Mobile telephony, financial inclusion and inclusive growth. *Journal of African Business*, 19(3), 430-453.
- Aker, J. C., Boumniel, R., McClelland, A., & Tierney, N. (2011). Zap It to Me: The Short-Term Impacts of a Mobile Cash Transfer Program. Center for Global Development working paper, 268.
- Al Mamun, C.A., Hasan, M.N. and Rana, A. (2013). Micro-credit and poverty alleviation: The Case of Bangladesh. *World*, 3(1).
- Alliance for Financial Inclusion. (2011). Maya Declaration.
- Alliance for Financial Inclusion. (2018). Financial Inclusion.
- Aron, J. (2018). Mobile Money and the Economy: A Review of the Evidence. *The World Bank Research Observer*, 33(2), 135-188.
- Asongu, S. A., & Odhiambo, N. M. (2019). Mobile banking usage, quality of growth, inequality and poverty in developing countries. *Information Development*, 35(2), 303-318.
- Bank of Zambia. (2020). Financial Inclusion Report.
- Bank of Zambia. (2022). Financial Inclusion Report.
- Bank of Zambia. (2023). Financial Sector Deepening Report.
- Bongomin, G. O. C., Ntayi, J. M., Munene, J. C., & Malinga, C. A. (2019). Examining the moderating role of transaction tax exemptions on mobile money adoption and financial inclusion in Uganda. *Journal of African Business*, 20(4), 538-557.
- Bongomin, G. O. C., Ntayi, J. M., Munene, J. C., & Malinga, C. A. (2021). Hedonism and financial inclusion among the youth in Uganda: The mediating role of mobile money adoption. *Journal of African Business*, 22(4), 508-527.

Brown, J. D., & Hedges, L. V. (2009). Use of effect sizes in NCTE research. *Research in the Teaching of English*, 43(4), 438-449.

Budiyono, B., & Sukamulja, S. (2023). The impact of mobile money on financial inclusion in Indonesia: A mixed-methods study. *Journal of Asian Finance, Economics and Business*, 10(2), 123-135.

Chapoto, A., Banda, D., Haankuku, C., & Kabisa, M. (2022). Drivers of agricultural productivity in Zambia. *Intl Food Policy Res Inst.*

Chen, Z., Li, Y., Wu, Y., & Luo, J. (2022). The impact of financial inclusion on poverty: Evidence from China. *Economic Modelling*, 106, 105721.

Demirgüç-Kunt, A., Klapper, L., Singer, D., Ansar, S., & Hess, J. (2017). *The Global Findex Database 2017: Measuring Financial Inclusion and the Fintech Revolution*. Washington, DC: World Bank.

Ebong, J., & George, E. (2021). Determinants of mobile money adoption and usage in Nigeria: A mixed-methods approach. *African Journal of Science, Technology, Innovation and Development*, 13(2), 231-243.

Federal Deposit Insurance Corporation (FDIC). (2020). *How America Banks: Household Use of Banking and Financial Services*.

FinMark Trust. (2023). *FinScope Zambia 2023 Survey Results*.

FSD Zambia. (2020). *State of Financial Inclusion Report*.

FSD Zambia. (2022). *Mobile Money Usage Report*.

Gosavi, A. (2018). Can mobile money help firms mitigate the problem of access to finance in Eastern sub-Saharan Africa? *Journal of African Business*, 19(3), 343-360.

Government of Zambia. (2022). *Eighth National Development Plan 2022-2026*.

GSMA. (2021). *The Mobile Economy Sub-Saharan Africa 2021*.

GSMA. (2022). *State of the Industry Report on Mobile Money 2022*.

Gutiérrez-Romero, R., & Ahamed, M. (2021). COVID-19 response needs to broaden financial inclusion to curb the rise in poverty. *World Development*, 138, 105229.

Hussaini, U. and Chibuzo, I.C. (2018). The effects of financial inclusion on poverty reduction: The moderating effects of microfinance.

Inoue, T. (2019). Financial inclusion and poverty reduction in India. *Journal of Financial Economic Policy*, 11(1), 21-33.

Kelikume, I. (2021). Mobile banking, financial inclusion and inclusive growth in Africa. *Journal of Economic and Administrative Sciences*, ahead-of-print.

Khan, H. R., Khattak, M. A., Hussain, I., & Zheng, C. (2021). Financial inclusion, financial stability, and income inequality: Empirical evidence from Pakistan. *Journal of Asian Finance, Economics and Business*, 8(5), 0587-0597.

Khan, M. A. (2024). Financial inclusion, mobile money, and poverty reduction in Sub-Saharan Africa. *Journal of African Business*, 25(1), 1-18.

Kilombele, D., Macha, J., & Massawe, F. (2023). Impact of mobile money usage on maize productivity and household welfare in Tanzania. *Agricultural Economics*, 54(3), 407-421.

King, W. R., & He, J. (2006). A meta-analysis of the technology acceptance model. *Information & Management*, 43(6), 740-755.

Ministry of Finance. (2017). *National Financial Inclusion Strategy 2017-2022*.

Mukherjee, A., & Sood, A. (2016). Financial Inclusion: The Key to Poverty Alleviation in India. *International Journal of Management and Applied Science*, 2(12), 24-28.

Musonda, A., Mpembamoto, K., & Mutambo, V. (2021). Financial inclusion in rural Zambia: Challenges and opportunities. *African Journal of Economic and Management Studies*, 12(2), 267-282.

Nyarko, S. H., Amoako, E. E., & Baidoo, I. (2023). Financial inclusion through cooperative banks and poverty reduction in Ghana. *International Journal of Social Economics*, 50(1), 91-106.

Nyika, L. (2023). The impact of mobile money services on poverty reduction and gender equality in Lusaka, Zambia: A longitudinal study. *Development Southern Africa*, 40(4), 611-627.

OECD. (2020). *OECD/INFE 2020 International Survey of Adult Financial Literacy*.

Olaniyi, E. (2017). Back to the land: The impact of financial inclusion on agriculture in Nigeria. *Iranian Economic Review*, 21(4), 885-903.

Ouma, S. A., Odongo, T. M., & Were, M. (2017). Mobile financial services and financial inclusion: Is it a boon for savings mobilization? *Review of Development Finance*, 7(1), 29-35.

Ozili, P. K. (2018). Impact of digital finance on financial inclusion and stability. *Borsa Istanbul Review*, 18(4), 329-340.

Pham, T. T. T. (2024). Financial inclusion and sustained poverty reduction: Evidence from developing countries. *Journal of International Development*, 36(1), 112-129.

Pratiwi, F. E., & Krisnawati, A. (2021). Digital consumer protection and financial inclusion: A study of Southeast Asian countries. *Journal of Asian Finance, Economics and Business*, 8(3), 1153-1162.

Robeyns, I. (2005). The Capability Approach: a theoretical survey. *Journal of Human Development*, 6(1), 93-117.

Saha, M., & Qin, W. (2022). Financial inclusion and poverty reduction: Evidence from developing countries. *Economic Analysis and Policy*, 73, 509-526.

Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research methods for business students* (5th ed.). Harlow, England: Pearson Education.

Scholtens, B., & van Wensveen, D. (2003). *The Theory of Financial Intermediation: An Essay On What It Does (Not) Explain*. SUERF Studies, 2003/1.

Senou, M. M. (2024). Mobile money and poverty reduction in the West African Economic and Monetary Union. *Journal of African Economies*, 33(1), 78-103.

Suri, T. and Jack, W. (2016). The Long-run Poverty and Gender Impacts of Mobile Money. *Science*, 354(6317), 1288-1292.

Tran, V. T., & Le, T. T. N. (2021). Financial inclusion and poverty reduction: Evidence from the WAEMU. *Journal of Economics and Development*, 23(4), 341-355.

UNCDF. (2021). State of the Digital Financial Services Market in Zambia, 2021 Report. Retrieved from [URL].

United Nations. (2021). Ending Poverty.

World Bank. (2017). Global Findex Database 2017.

World Bank. (2018). Financial Inclusion.

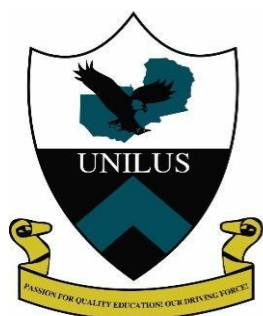
World Bank. (2021). Microfinance and Financial Inclusion.

ZICTA. (2022). ICT Survey Report - Households and Individuals. Zambia Information and Communications Technology Authority.

ZICTA. (2023). Annual Market Report. Zambia Information and Communications Technology Authority.

Zulu, C., & Mwalusaka, N. (2018). Evolution of mobile money services in Zambia: A policy perspective. *International Journal of ICT Research in Africa and the Middle East*, 7(2), 1-16.

APPENDIX



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TOPIC: THE INFLUENCE OF FINANCIAL INCLUSION ON POVERTY REDUCTION IN ZAMBIA- MODERATING EFFECT OF MOBILE MONEY.

Dear Respondent,

I'm inviting you to participate in my research study titled "*The influence of financial inclusion on poverty reduction in Zambia- moderating effect of mobile money.*" This study is being conducted as part of a research project. Your participation is voluntary, and you may withdraw at any time without penalty. All information provided will be kept confidential and used solely for research purposes. By completing this questionnaire, you indicate your consent to participate in this study.

Instructions

Please read each question carefully and answer honestly. There are no right or wrong answers. Select the most appropriate response for each question. The questionnaire should take approximately 15-20 minutes to complete.

1. Do not indicate your name on the questionnaire.
2. (Please Tick the right option, indicate the right code representing your choice, fill the right answer in a given space and insert the number representing your

level of agreement where (1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree)

3. Please try as much as possible to answer all questions and if in doubt, ask the interviewer.

QUANTITATIVE SURVEY QUESTIONNAIRE

SECTION A

(Demographic and Background Information)

State the following about yourself

1. Age

- a. 18-25
- b. 26-35
- c. 36-45
- d. 46-55
- e. 56 and above

2. Gender

- a. Male
- b. Female

3. Education Level

- a. No formal education
- b. Primary
- c. Secondary
- d. Tertiary
- e. University degree or higher

4. Occupation

- a. Farmer
- b. Small business owner
- c. Employed (formal sector)
- d. Employed (informal sector)
- e. Unemployed

f. Other _____

5. Monthly Income (in Zambian Kwacha)

- a. Less than 1,000
- b. 1,000 - 3,000
- c. 3,001 - 5,000
- d. 5,001 - 10,000
- e. Above 10,000

SECTION B

1. Financial Inclusion

Please rate your agreement with the following statements on a scale of 1 to 5, where: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree

No.	Statement	1	2	3	4	5
1	I have easy access to banking services in my area					
2	I have a bank account that I use regularly					
3	I can easily get a loan from a bank or microfinance institution if needed					
4	I have insurance coverage (e.g., health, life, crop)					
5	I regularly save money in a formal financial institution					
6	I feel confident in managing my finances					

2. Mobile Money Usage

1. Do you use mobile money services?
 - a. Yes
 - b. No (If no, skip to Section D)

2. Which mobile money service(s) do you use? (Check all that apply)
 - a. MTN Mobile Money
 - b. Airtel Money
 - c. Zamtel Kwacha
 - d. Other (please specify): _____

3. How often do you use mobile money services?
 - a. Daily
 - b. Weekly
 - c. Monthly
 - d. Occasionally (less than once a month)

4. What do you use mobile money for? (Check all that apply)
 - a. Sending money to family/friends
 - b. Receiving money from family/friends
 - c. Paying bills (e.g., utilities, school fees)
 - d. Buying airtime/data bundles
 - e. Saving money
 - f. Receiving payments for goods/services
 - g. Accessing loans
 - h. Other (please specify): _____

Please indicate your level of agreement with the following statements on a scale of 1 to 5, where: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree

No.	Statement	1	2	3	4	5
1	Mobile money has made it easier for me to manage my finances					
2	I feel more financially secure because of mobile money					
3	Mobile money has helped me save more					
4	Mobile money has made it easier for me to access credit					
5	I trust mobile money services with my financial transactions					

SECTION C

POVERTY REDUCTION

Please indicate your level of agreement with the following statements on a scale of 1 to 5, where: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree

No.	Statement	1	2	3	4	5
1.	My overall financial situation has improved in the last 2 years					
2	I can afford better healthcare for my family now compared to 2 years ago					
3	I can afford better education for my children now compared to 2 years ago					
4	I have more money to invest in my business/farm now compared to 2 years ago					
5	I am better able to handle unexpected financial emergencies now					
6	My overall quality of life has improved in the last 2 years					

SECTION C

MEDIATING FACTORS

1. Which of the following factors have influenced your use of financial services, including mobile money? (Rate each factor from 1 to 5, where 1 = Not at all influential, 5 = Extremely influential)

Factor	1	2	3	4	5
Financial literacy and knowledge					
Trust in financial institutions					
Ease of use of financial services					
Cost of financial services					
Availability of mobile network					
Government policies and regulations					
Cultural attitudes towards money and saving					
Peer influence					

2. How important are the following in determining whether financial services help reduce poverty? (Rate each factor from 1 to 5, where 1 = Not at all important, 5 = Extremely important)

Factor	1	2	3	4	5
Access to credit for business/farming					
Ability to save safely					
Reduced transaction costs					
Better financial management skills					
Access to insurance products					
Increased investment opportunities					
Improved ability to handle financial shocks					

3. In your experience, how does mobile money specifically contribute to reducing poverty? (Check all that apply)
- a. Makes it easier to receive remittances from family/friends
 - b. Enables easier payment for goods and services
 - c. Facilitates saving for future needs
 - d. Provides access to small loans
 - e. Reduces the cost of financial transactions
 - f. Enables better budgeting and financial planning
 - g. Other (please specify): _____
4. What challenges, if any, have you faced in using mobile money to improve your financial situation? (Check all that apply)
- a. Network connectivity issues
 - b. High transaction fees
 - c. Lack of nearby mobile money agents
 - d. Difficulty understanding how to use the service
 - e. Security concerns
 - f. Limited range of services available
 - g. Other _____
5. In your opinion, what could be done to make mobile money more effective in reducing poverty?

Thank you for your additional responses. These insights will help us better understand the role of mobile money in financial inclusion and poverty reduction in Zambia.

6.17%

SIMILARITY OVERALL

25.41%

POTENTIALLY AI

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Report #24451109



SCHOOL OF POSTGRADUATE STUDIES

12TH TO 20TH JANUARY 2025 GBS800 DISSERTATION SUBMISSION

No	Item	Done
1	Were you registered for GBS800 in the JUL-DEC 2024 semester?	√
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SUBMISSION OF DISSERTATION FOR EXAMINATION

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Student number: MBAGEN23118844

Programme of study: MASTER OF BUSINESS ADMINISTRATION- GENERAL

Dissertation title: THE INFLUENCE OF FINANCIAL INCLUSION ON POVERTY
REDUCTION IN ZAMBIA- MODERATING EFFECT OF MOBILE MONEY

Signature of student: *Aka*

Date: 17th JANUARY 2025

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