PERCEPTIONS OF AGENCY BANKING, FINANCIAL LITERACY, AND FINANCIAL INCLUSION OF SMALL AND MEDIUM-SIZED ENTERPRISES IN BUNGOMA COUNTY, KENYA.

BY

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MASTER OF SCIENCE IN COMMERCE (FINANCE)

KCA UNIVERSITY

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A RESEARCH DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF SCIENCE IN COMMERCE (FINANCE OPTION) IN THE SCHOOL OF BUSINESS AT KCA UNIVERSITY

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DECLARATION

I declare that this dissertation is my original work and has not been previously published or submitted elsewhere for award of a degree. I also declare that this contains no material written or published by other people except where due reference is made and author duly acknowledged.

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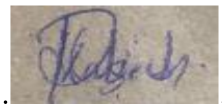
Sign…………  …………… Date: …………**10^{th}/10/2025**…………………

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Dr. Salome Musau

ABSTRACT

The main aim of the study was to examine the relationship between small and medium-sized enterprises' (SMEs) perceptions of agency banking, financial literacy, and financial inclusion in Bungoma County, Kenya. The general objective was to assess how agency banking and financial literacy influence SMEs' financial inclusion. The study was guided by five specific objectives: to examine the effect of agency banking perceived accessibility on financial inclusion, to determine the effect of perceived cost of agency banking services on financial inclusion, to establish perceived liquidity of agency banking on financial inclusion of SMEs, assessing the effect of perceived security of agency banking services on financial inclusion, and examining the role of financial literacy in influencing financial inclusion of SMEs in Bungoma County. A descriptive research design was adopted, and primary data was collected from SMEs owners and managers using structured questionnaires. A pilot study was conducted to evaluate the reliability and validity of the research questionnaire. The target population was 22,450 SMEs, of which a sample of 393 respondents was selected through cluster and stratified random sampling. 357 usable questionnaires were returned, yielding a response rate of 90.8%. Data was analyzed using descriptive statistics, Pearson correlation, and multiple regression analysis. SPSS software version 26 was used for data analysis. All five null hypotheses were rejected, indicating that agency banking dimensions and financial literacy both independently and interactively significantly influence the financial inclusion of SMEs in Bungoma County. Overall, the study concludes that financial inclusion among SMEs in Bungoma County is largely shaped by agency accessibility, liquidity, cost of services, security, and financial literacy, while the role of cost remains marginal. The study recommends strengthening liquidity management, enhancing security measures, expanding accessibility of agency outlets, rationalizing transaction costs, and promoting continuous financial literacy programs for SMEs to deepen financial inclusion in the county.

Key Words: Agency Banking, SMEs, Financial Inclusion, Agency Accessibility, Security, Liquidity, Service Costs, and Financial Literacy.

DEDICATION

I dedicate this work to my father, Blasio Wambunya, who has inspired and supported me throughout my academic journey. He has been a constant reminder that determination and hard work pay off. I would also like to extend this dedication to my son, Godswill Blasio, my daughter Gabriella Hazel, and my wife Clarice Nafula for encouraging me not to despair. May the almighty God bless you!

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I would like to take this opportunity to express my sincere gratitude to my Supervisor, Dr. Salome Musau, for sacrificing her effort, time, and guidance in dissertation writing with enriching comments, corrections, ideas, and suggestions that contributed to the success of this dissertation.

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OPERATIONAL DEFINITION OF TERMS

Account services: Range of activities related to managing customer accounts provided by banking agents. Measured by the number and types of account services offered (Lauer, Dias & Tarazi, 2021).

Agency Banking: Model where banks partner with third-party retail outlets to offer basic banking services. Measured by the number of active agency banking outlets in Bungoma County (Githae, Muturi & Oluoch, 2023).

Agency accessibility: Physical distribution and reach of agency banking services across Bungoma County. Measured by the number of agency banking outlets per square kilometer or per administrative unit (Munyiri & Njeru, 2020).

Agent Liquidity: Ability of banking agents to maintain adequate cash reserves to meet customer withdrawal demands. Measured by the average daily cash balance maintained by agents.

Bill payment and utility services: The Process of accepting and processing payments from customers for bills and utility services through an authorized banking agent. Measured by the volume and value of bill payments Llewellyn-Jones & Kazan, 2022).

Cost of Services: Expenses associated with accessing and using financial services through agency banking. Measured by average transaction fees for agency banking services (Mas, 2020).

Financial Inclusion: Availability and equality of opportunities to access financial services, particularly for underserved or excluded populations. Measured by the percentage of SMEs in Bungoma County with active bank accounts (Akudugu, 2021).

Financial Services: Products and services offered by financial institutions. Measured by the range of financial products available through agency banking (Muthiora, 2022).

Funds transfer and cash deposit: The Act of moving money between accounts or accepting physical cash from customers to be credited to their bank accounts. Measured by the volume and value of transfers and deposits processed monthly (Nganga & Mwachofi, 2023).

Loan services offered through banking: Provision of credit-related services by banking agents on behalf of the parent bank. Measured by the number and value of loans processed through agency banking channels (Saunders, Lewis & Thornhill, 2019).

Role of customer onboarding and account opening services: The process of registering new customers and initiating their banking relationship is conducted by banking agents. Measured by the number of new accounts opened through agency banking channels.

Small and Medium-sized Enterprises (SMEs): Businesses that maintain revenues, assets, or number of employees below certain thresholds. Measured by the number of registered SMEs in Bungoma County meeting the national classification criteria (Beck & Cull, 2021).

Security: Secured transaction systems and collateral mechanisms for SMEs in areas with limited banking access. It is measured by the number of secured transactions processed as well as the value of collateral registered through agency banking channels (Radcliffe, 2021).

ABBREVIATIONS AND ACRONYMS

AfDB: African Development Bank

AFI: Alliance for Financial Inclusion

ATM: Automated Teller Machine

CBK: Central Bank of Kenya

CGAP: Consultative Group to Assist the Poor

GDP: Gross Domestic Product

GPFI: Global Partnership for Financial Inclusion

IFC: International Finance Corporation

KBA: Kenya Bankers Association

KNBS: Kenya National Bureau of Statistics

M-Pesa: Mobile Money Transfer Service in Kenya

NGO: Non-Governmental Organization

SMEs: Small and Medium-sized Enterprises

UN: United Nations

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Small and medium-sized enterprises (SMEs) are vital drivers of global economic development, fostering innovation, employment, and growth. Globally, SMEs represent over 90% of all firms, SMEs account for approximately 70% of total employment, and contribute around 50% to GDP (World Bank, 2023). However, financial inclusion remains a significant challenge, with SMEs facing a substantial financing gap estimated at $5.7 trillion in 2025, equivalent to 19% of global GDP or 1.5 times the current level of SME lending. Access to credit and other services for SMEs lags, particularly in emerging markets where only about 20-30% of SMEs have access to formal finance. Globally, agency banking has emerged as a key strategy to enhance SME financial inclusion, particularly in regions with limited banking infrastructure.

In Brazil, agency banking has extended credit and savings services to rural SMEs, reducing reliance on informal finance (World Bank, 2022). In India, the Business Correspondent model has increased SME access to financial products by 20%, promoting entrepreneurship in underserved areas (Llewellyn-Jones & Kazan, 2022). In Nigeria, the Central Bank's agency banking framework has lowered operational costs, enabling SMEs to access digital payments and credit (Fowowe, 2017). These examples underscore agency banking's role in bridging financial access gaps for SMEs worldwide, though the global SME banking market is projected to reach $1.72 trillion in 2025, with over 78% of SMEs adopting digital-only banking solutions.

The challenge of financial exclusion has drawn considerable attention from researchers and policymakers across the globe (Alliance for Financial Inclusion, 2019; Han & Melecky, 2013). Within BRICS economies, nearly half of the financially excluded population resides, with India and China accounting for 32%, Brazil for 2.4%, South Africa for 0.5%, and Russia for less than 0.5% (Demirguc-Kunt et al., 2018). Gender disparities further deepen the issue for instance, only 43% of women aged 15 and above in India are financially included. Borrowing from formal institutions is also limited: in 2014, just 6% of India's population accessed credit from banks, compared to 10% across other BRICS nations. Infrastructure gaps persist as well; in 2014, India had only 18 ATMs per 100,000 adults, far below South Africa's 65 and Russia's 180. Additionally, only 10% of Indian adults used ATM cards for payments, compared to 40% in South Africa. Formal saving and borrowing practices remain weak, with just over half (53%) of adults maintaining accounts with recognized financial institutions (Reserve Bank of India, 2015).

In Sub-Saharan Africa, financial inclusion has witnessed remarkable progress in recent decades, although significant disparities remain. Scholars from developing regions, such as sub-Saharan Africa (SSA), generally agree that financial inclusion represents a critical foundation for global development (Morgan & Pontines, 2018; Xu & Sun, 2022). Despite this consensus, considerable regional inequalities remain, with African countries encountering far greater obstacles in expanding financial access compared to OECD nations.

In Nigeria, the Central Bank's agent banking framework has reduced operational costs for banks, enabling SMEs to access digital payments and credit (Fowowe, 2017). Nonetheless, access remains uneven: only 11% of Nigerian SMEs surveyed had access to bank loans, with collateral requirements and high interest rates acting as major hindrances (Fowowe, 2017). In Ghana, 38% of SMEs utilized bank loans, but access was largely influenced by firm size and asset structure (Abor & Biekpe, 2006). In Mozambique, 78% of SMEs maintained bank accounts, yet only 20% accessed bank credit, showing a persistent gap between financial access and full inclusion (Osano & Languitone, 2016).

Financial inclusion has largely been driven by mobile money and digital innovations, but SMEs continue to face persistent barriers. The share of adults in SSA with a bank or mobile money account grew from 34% in 2014 to 58% in 2024, according to the World Bank's Global Findex 2025. Deposit accounts per 100 adults increased by over 40% from 2013 to 2019, with Fintech companies expanding to 1,263 active firms in 2024 (up from 450 in 2020). However, SME financial inclusion remains suboptimal; for instance, only about 20-30% of SMEs in SSA access formal credit, with a financing gap exceeding $400 billion annually. Studies indicate that financial inclusion positively impacts SME stability and participation in global value chains, yet factors like high costs, limited literacy, and infrastructure gaps hinder progress. In Nigeria, the Central Bank's agency banking framework has helped most SMEs tap into financial services that were initially beyond their reach; the policy reduced operation costs for both banks and businesses. It has been critical in empowering SMEs through access to digital payment systems, credit, and savings products.

The peculiarity of the problem is that it happens to involve financial inclusion on the African continent, although with great variations across countries. Using a sample of SMEs in Nigeria, for instance, Fowowe (2017) concludes that only 11% of the SMEs surveyed have access to bank loans, collateral requirements and high interest rates act as major hindrances. Abor and Biekpe (2006) also realized in Ghana that 38% of the SMEs utilized bank loans, though access was greatly influenced by firm size and asset structure. Osano and Languitone (2016) have demonstrated in Mozambique that while 78% of SMEs maintain bank accounts, only 20% of them access bank credit, and there is an even greater gap between basic financial services and full inclusion.

In Tanzania, SMEs also play a crucial role in driving economic growth and creating employment opportunities. According to the World Bank (2021), SMEs in Tanzania contribute about 27% to the country's GDP and employ approximately 20% of the workforce. However, like in many developing countries, financial inclusion remains a significant challenge for these enterprises. A study by Kihiyo et al. (2020) highlights that only 18% of Tanzanian SMEs have access to formal financial services, with the majority relying on informal lending sources due to high collateral requirements and limited access to credit. The government, in collaboration with various financial institutions, has introduced several initiatives to bridge this gap, including the promotion of mobile banking and digital financial services. However, the uptake remains slow, with many SMEs still unable to fully benefit from these innovations. Addressing these challenges is critical for Tanzania to unlock the full potential of its SME sector and ensure sustained economic growth.

Kenya is widely recognized as a continental leader in financial inclusion, driven primarily by innovations such as M-Pesa and the regulatory support of the Central Bank of Kenya (CBK). The CBK's FinAccess Household Survey (2021) reported that financial inclusion in Kenya expanded to 83% of the adult population, up from 26.7% in 2006. Agency banking, introduced by the CBK in 2010, has become an important complement to mobile banking, allowing licensed bank agents to provide services such as cash deposits, withdrawals, bill payments, and microcredit. As of 2022, Kenya had more than 80,000 active bank agents serving millions of customers across both rural and urban areas.

SMEs in Kenya account for approximately 99.6% of businesses, contributing significantly to GDP and employment. However, financial inclusion stands at 84.8% for adults in 2024, with SMEs facing acute challenges: Kenya has over 7.4 million MSMEs employing 14.9 million people, yet only 28% access formal credit, highlighting persistent exclusion (KNBS, 2023; Financial Sector Deepening Kenya, 2022). This study focuses on Bungoma County due to its diverse SME landscape (retail, services, manufacturing and agriculture) and its mix of urban and rural areas, which reflect Kenya's broader financial inclusion challenges. With SMEs contributing 35% to the county's GDP but only 28% engaging with formal financial services, Bungoma offers a representative setting to explore agency banking's impact, providing insights applicable to similar regions (KNBS, 2023). Recent value chain assessments in Bungoma indicate that SMEs in sectors like agriculture and manufacturing struggle with financing gaps, exacerbating reliance on informal sources (Kenya Industrial Research and Development Institute, 2025).

According to the World Bank (2022), access to affordable, reliable, and secure financial services enables households and enterprises to smooth consumption, invest in education, expand businesses, and build resilience against economic shocks. In many developing economies, small and medium-sized enterprises (SMEs) play a critical role in driving employment and economic growth, yet they face persistent challenges in accessing formal financial services. This has heightened the need for inclusive financial systems that bridge the gap between the underserved populations and formal financial institutions.

Financial inclusion is generally assessed using several different dimensions: access, which is the presence of financial services and outlets; usage, which is the level of using financial products by individuals or SMEs; and quality, which is the suitability, affordability, and safety of financial services (Demirgüç-Kunt et al., 2018). Financial inclusion in the case of SMEs may be evaluated by credit accessibility, number of transactions, saving habits, and effectiveness of using various financial products. Nevertheless, even with the potential positives, SMEs in Bungoma County still encounter some obstacles like high transaction costs, lack of liquidity at agency outlets, security and fraud concerns, which do not support the efficient adoption of agency banking services.

Finally, financial inclusion increases access to various financial services including payments, savings, loans, and insurance that contributes to economic participation and stability (Babajide et al., 2015; Asongu et al., 2020). According to the World Bank (2018), such services provided in a cost-effective, dependable, and sustainable manner are the key to ensuring long-term financial empowerment of both individual citizens and businesses.

In the case of SMEs, financial services continue to play an important role in growth, creation of employment and sustainability. Nevertheless, against the backdrop of the growth of agency banking, a significant number of SMEs remain excluded on the grounds of agency accessibility factors, agent liquidity constraints, high transaction costs, and security issues at times. Furthermore, levels of financial literacy differ considerably among SME owners, and it affects their capacity to use the services of the agency bank successfully in the case of credit, savings, and business transactions.

In counties like Bungoma, where agriculture and small-scale trade are their main economic activities, the SMEs have distinct financial inclusion barriers as opposed to their urban counterparts. The effectiveness of agency banking in those situations is therefore not only contingent on its availability, but also on how the SMEs view its reliability, accessibility and affordability, as well as their ability to navigate financial products.

It is against this backdrop that the present study examines the perceptions of agency banking specifically liquidity, agency accessibility, security, and cost of services alongside the role of financial literacy, in influencing the financial inclusion of SMEs in Bungoma County, Kenya.

By situating the study in a rural Kenyan context, it does not only contribute to the body of knowledge on financial intermediation but also provides practical insights for policymakers, financial institutions, and SME owners seeking to enhance inclusive growth through agency banking.

1.1.1 Financial Inclusion

Financial inclusion is the extent to which all groups of people, especially low-income groups and other financially excluded segments of society, have access to and use financial services. These may include a wide range of financial products and services such as savings accounts, credit, insurance, and payment systems. Financial inclusion is also very instrumental to SMEs, especially in areas like Bungoma County, in ensuring business eminence and robustness through proper cash flow management, access to credit, and financial risk management, according to Barasa (2023).

The concept of financial inclusion can be deduced using various indicators. Physical access has been one of the key drivers, measuring how conveniently people and businesses can access the location of banks and their services. It encompasses many networks; bank branches, ATMs, and agency banking points, indispensable in most communities when the infrastructure for banking services is underdeveloped. In Bungoma County, Agency banking will be highly instrumental to financial inclusion in the pursuit of access to the people's basic essential services.

Usage of financial services is defined as the level of activity with which businesses and individuals utilize financial products. This includes various indicators of the number of active accounts, utilization of loans, and the level of adoption of payment systems. In the case of SMEs, the valuation of usage of services will provide insight into integration within the formal financial system and reliance on the different available financial products.

Other critical measures concern the affordability of financial services, which are associated with the costs of attaining financial products. The costs include bank charges, interest rates on loans, and transaction costs. Affordable financial services are very vital in ensuring that SMEs can enter or participate in the financial system without prohibitive costs, according to Nganga & Mwachofi (2023). Therefore, it could influence the level to which SMEs would engage themselves in, and benefit from, financial services. The quality of financial services means the effectiveness and reliability of financial products. The quality comprises transaction security, efficiency in service provision, and the level of customer satisfaction. High-quality services form a necessary dimension of confidence and, therefore, an incentive for the use of formal channels by SMEs (World Bank, 2021). Evaluation of quality helps assure the perspective that such financial services meet the demands of SMEs and, accordingly, improve their financial positions.

Specific indicators of financial inclusion were targeted in this study to appreciate their impact on the SMEs in Bungoma County. The study focused on access to financial services, particularly through agency banking, which is very instrumental in reaching the unserved areas. Usage of financial services was assessed to ascertain the level of utilization of SMEs as far as various financial products are concerned. Affordability was measured on the element of whether the cost of financial services is within the means of SMEs. Additionally, the service provided should be efficient and reliable.

These instruments were part of the conceptual framework and subsequently integrated into the questionnaire to comprehensively capture the impact of financial inclusion on SMEs in the region. In this regard, financial inclusion was operationalized in terms of the availability and frequency of access to financial services, the quality of the products, their affordability, and the extent of financial literacy by the SME owners. This in turn helped formulate methodologies that specifically aimed in increasing SME involvement in the financial system for the overall betterment of financial inclusion conditions.

1.1.2 Agency Banking

Agency banking is the latest innovation in the financial system, designed to bridge the gap between formal financial institutions and underprivileged communities. In simple terms, it is a model of banks creating alliance with third-party retail outlets in the delivery of basic banking services in areas where it is not economically feasible or viable to set up traditional bank branches. This has been a rather effective strategy to extend the reach of financial services in locations where traditional banking infrastructures are non-existent, leading to greater financial inclusion for active and small and medium-sized enterprises. Since its introduction in Kenya in 2010, Agency Banking has grown by leaps and bounds. From just a few hundred agents at the end of 2022, their number grew to over 80,000 sure signs of the model's broad acceptance and efficacy in reaching those unreached corners of the country. Growth at this rate has led to a manifold increase in the accessibility of financial services, particularly for SMEs operating in remote and rural areas.

Agency banking, among other useful features, provides service coverage over a wide geographical area including areas which are usually out of the reach of the bank. The use of local retail outlets as agents of banking ensures that financial services are made available in disparate and sometimes far-flung areas (Munoru, 2022). Agency banking is applicable where there is limited access to conventional banking institutions. Its geographical reach enables SMEs located within these areas to access critical financial services that they would otherwise not have access to. This expanded access has the consequence of enhancing the inclusion of SMEs into the formal financial system and enhancing their growth and stability by providing them with access to various banking facilities. Agency banking is the latest innovation in the financial system, designed to bridge the gap between formal financial institutions and underprivileged communities. In simple terms, it is a model of banks creating alliance with third party retail outlets in the delivery of basic banking services in areas where it is not economically feasible or viable to set up traditional bank branches. This has been a rather effective strategy to extend the reach of financial services in locations where traditional banking infrastructures are non-existent, leading to greater financial inclusion for active and small and medium-sized enterprises. Since its introduction in Kenya in 2010, Agency Banking has grown by leaps and bounds. From just a few hundred agents at the end of 2022, their number grew to over 80,000 sure signs of the model's broad acceptance and efficacy in reaching those unreached corners of the country. Growth at this rate has led to a manifold increase in the accessibility of financial services, particularly for SMEs operating in remote and rural areas.

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Liquidity management is another critical aspect of agency banking that greatly affects SMEs. The model provides the capability to deposit and withdraw cash at local agent points, saving the business the time it would spend traveling to bank branches, probably located far away. This advantage becomes very important to an SME operating in a rural or underserved area, where efficient liquidity management means the ability to operate daily. Agency banking helps mitigate some of the risks in handling large amounts of cash, which may be vulnerable to theft or loss, by allowing local cash handling. It also supports effective cash flow management that will keep SMEs stable in terms of their finances and operational efficiency. This proximity to banking services is core for SMEs to meet their financial needs and invest in growth, devoid of the extra cost of traveling and logistics challenges.

Security is a core issue from the perspective of agency banking. The integrity of the transactions cannot be compromised; thus, agency banking inculcates security features that provide a hedge against fraud and other risks. It includes advanced fraud detection systems, encryption technologies, and secure transaction protocols. Reliability in this regard refers to the assurance of security, which is especially critical for those SMEs operating in areas where there is limited banking infrastructure, hence there is every concern about cash handling and transaction security. The quality of security practices develops trust and persuades SMEs to use banking services more confidently. Agency banking creates a much safer environment for SMEs by reducing their risks in financial transactions, thus creating inclusivity within the financial ecosystem (Onyango et al., 2022).

The cost of financial services through agency banking is an important factor that SMEs consider. The cost in terms of fees, which are levied on these services, might influence their affordability and access. The cost of banking services has often been a big influence in the decision of the SME to participate in the formal financial system within regions with small margins. Banks have to balance service costs with accessible and affordable financial services. Addressing the cost-related barriers is an important way to ensure that agency banking plays its role in promoting financial inclusion and, in turn, supports the development of SMEs (Mutua & Oyugi, 2022).

Agency banking, therefore, plays a strategic role in developing financial inclusion through the extension of banking services to poorly reached areas, through effective liquidity management, effective security, and consideration of the cost of services. This model has been instrumental, especially in areas where conventional banking structures are underdeveloped. Agency banking provides easy access to financial services, hence facilitating the inclusion of SMEs within the formal financial setup for stability and growth. Full appreciation of the influence of agency banking on each of these dimensions is important for assessing its efficacy and realizing areas that need further improvement.

1.1.3 Financial Literacy

Financial literacy is defined as the knowledge, skill, and confidence of an individual to make sound financial decisions efficiently in relation to their resources. It refers to the knowledge of financial concepts, products, and risks, as well as the ability to apply that knowledge in multiple real-life financial situations (Lusardi & Mitchell, 2014). In the case of SMEs, the financial literacy of owners or managers is critical to the success and sustainability of their enterprises. Financial literacy among SME owners in developing countries varies from very low to adequately high. Most SME owners have limited familiarity with financial concepts like cash flow and profit margins. They find themselves struggling with the more complex ones, like investment strategies, risk management, and long-term financial planning. This financial literacy gap may have implications for SMEs in prudent financial decision making, access to suitable financial products, and efficient resource management, according to Adomako (2016).

Eniola & Entebang (2017) suggest that owners of SMEs with a higher level of financial literacy tend to make better decisions regarding their financing options, cash flow management decisions, and investment opportunities. These owners tend to have good record-keeping systems, sound business plans, and can explain their financial needs to a potential lender or investor with relative ease. This differs from the owners of SMEs with lower financial literacy levels who experience challenges in maintaining financial records, understanding the terms and conditions for granting credit facilities and assessing the impact of the decisions made on behalf of the business over the long run.

Most studies on financial literacy among SME owners are narrowed on selected topics which involve basic financial principles, knowledge of different banking channels as a source of financial services and products, financial statement interpretation, options for business finance, and financial decision making (Fatoki, 2014). Other studies have looked at areas like awareness of digital financial services among SME owners and self-efficacy in using technology to complete monetary transactions.

Through these dimensions of financial literacy, research can provide detailed information on the current state of financial knowledge possessed by SME owners. This would be very useful in identifying the various areas in which financial education and support are needed in promoting the activities of SMEs towards improving the use of banking services and financial inclusion (Drexler, 2014). Studies on financial literacy training and programs targeted at SME owners show a positive impact on enterprise performance and financial decision-making. Practical skills they often provide involve budgeting, cash flow, and financial statement interpretation. Other related areas might include risk management, investment strategies, and the effective use of digital financial solutions. Higher financial literacy levels for SME owners will enable them to comprehend the complex economy and make better decisions, ultimately fostering the growth and sustainability of their businesses

1.1.4 Financial Inclusion of Small and Medium-Sized Enterprises

Small and medium scale enterprises are very important in Kenya, and it takes up about 99.6% of all the entities that are involved in the economy by providing a great proportion of jobs that build up the country yearly. These span from agriculture and manufacturing to service and technology enterprises. These enterprises are the lifeblood of local economies and drivers of innovation. However, despite these economic contributions, access to formal financial services by SMEs in Kenya remains a challenge; something which, by far, limits their potential contribution and, in turn, the overall development of the economy.

Recent data from the Central Bank of Kenya showed that less than half of SMEs in the country accessed formal credit facilities. This financial exclusion is even more pronounced in rural areas and among smaller enterprises, a fact constituting a major barrier to their growth and sustainability. In Bungoma County, this is no different from the national scene, as recent research conducted by the County Government in 2023 has shown that only a negligible portion of SMEs in the area have access to formal banking services. Most of them survive on informal financial mechanisms or operate completely outside the formal finance systems to the detriment of their heavy investment, hedging against risks, and complete integration within the formal economy.

This kind of financial exclusion is multi-dimensional, emanating from structural aspects of the financial sector and inherent peculiarities in SMEs themselves. Most SMEs cannot afford or provide collateral, as required by traditional banks in applying for loans. Besides, unclear property rights and challenges of non-traditional assets normally prevalent in rural areas make this a problem. A recent and comprehensive study done by Financial Sector Deepening-FSD Kenya (2022) reported that most SMEs cited lack of collateral as the most significant deterrent to accessing formal credit. This may be considered a wake-up call to think outside the box regarding possible innovations in credit assessment and risk management that do not necessarily always insist on collateral requirements.

Besides, high transaction costs in serving small businesses, combined with perceived high risks, make many financial institutions reluctant to extend services to this sector. The highly relative costs of due diligence, loan processing, and monitoring for small loans make it unattractive for banks to have SMEs as clients due to the high costs concerning the potential return that will be derived from such a transaction (Beck & Cull, 2021). Most SMEs are also informal and thus have limited financial records and irregular cash flows, complicating credit assessment and heightening perceived risk from this segment.

So far, the introduction of agency banking has proved promising, since it offers a possible route to financial inclusion for SMEs in their effort to surmount some of the above-mentioned challenges. According to the Kenya Bankers Association, the number of bank agents has grown from just a few hundred in 2010 to over 80,000 countrywide by the end of 2022. This has greatly increased access to financial services, with most retail banking transactions being closer to SMEs.

Agency banking brings various benefits for SME financial inclusion. First, agency banking reduces the physical distance between SMEs and access points of financial services. The reduction in distance decreases transaction costs and the time spent by SMEs in accessing services. Operating hours of many agents are more flexible compared to traditional bank branches, hence more suitable for the needs of SME owners. Moreover, the dispersal of the agents in the area would engender trust and familiarity that may cause more SMEs, which hitherto are apprehensive, to interact with mainstream banks (Githae, 2023). However, its implication on SME financial inclusion remains understudied, especially in countries like Bungoma. While this is positive regarding increased access to agency banking services, there are still questions about whether increased access is translating into meaningful financial inclusion for SMEs. Other issues that surround the range of services offered through agents, their capacity to deal with SME requirements, and how agency banking dovetails with other financial inclusion efforts merit further investigation.

This study tries to fill the knowledge gap that exists in the literature on the effectiveness of agency banking on SME financial inclusion in Bungoma County. Recent data from the Central Bank of Kenya (2022) indicates that while the outlets for agency banking in Kenya have grown by 71% between 2017 and 2021, the proportion of SMEs reaching formal credit within that period stands at a low of only 8%. This disparity indicates that the recent rapid expansion of agency banking has not naturally translated into proportionate gains in improving financial inclusion for SMEs. Agency banking services focused on during this study included: bill payment and utility services, funds transfer and cash deposit, account services, customer onboarding, and loan services. These aspects are particularly important because, according to a survey by FSD Kenya (2021), 63% of the SMEs in rural counties such as Bungoma interact mainly with the formal financial system through agency banking services. According to the Kenya National Bureau of

Statistics (2023), SMEs in Bungoma County contribute 35% to the county's GDP; however, only 28% of these enterprises have access to formal credit facilities. This underlines the possible economic dividend that increasing financial inclusion in the region may provide. The study, therefore, made a critical analysis of these factors to derive useful insights to inform policy and practice that would enhance SME financial inclusion. Details of how agency banking influences SME financial inclusion in Bungoma County could, therefore, be instructive in other regions within Kenya, if not in other developing countries, facing such challenges in SME financial inclusion.

1.2 Statement of the Problem

Financial inclusion remains a critical challenge for small and medium-sized enterprises (SMEs) in Kenya, and particularly in Bungoma County, where access to affordable and reliable financial services is significantly constrained. Despite SMEs being recognized as the backbone of economic development, contributing 35% to Bungoma County's GDP and employing most of the population (KNBS, 2023), only 28% of these enterprises access formal credit facilities. This low level of financial inclusion reveals a persistent gap between SMEs' economic contribution and their access to financial resources, limiting their growth, competitiveness, and sustainability.

While national and regional initiatives such as agency banking, mobile money innovations, and government-led financial inclusion strategies have been implemented, their effectiveness in addressing SME exclusion remains limited. For instance, although Kenya had over 80,000 agency banking outlets by 2022 (CBK, 2022), access to credit among SMEs in rural counties such as Bungoma has grown marginally, with only 8% reporting improved access over the past five years (FSD Kenya, 2021). This suggests that despite the infrastructural growth of financial service delivery models, financial inclusion outcomes for SMEs remain suboptimal.

This is further complicated by structural obstacles like high collateral requirements, stringent loan terms, limited geographical reach of financial institutions, high costs of services, and security concerns. Studies by Mwangi and Nyambura (2021) identify these factors as critical constraints in SME inclusion; however, their relative impact in Bungoma County is under-researched. Consequently, SMEs remain highly dependent on informal sources of finance, including chama groups, suppliers' credit, and family contributions, which are unreliable and unable to support expansion or innovation.

The lack of financial inclusion among SMEs has significant implications for the overall economic development of Bungoma County. SMEs lacking access to affordable credit or savings products find it challenging to scale operations, invest in technology, or meet working capital requirements. Consequently, they are limited in their capacity to generate employment, contribute to household incomes, and spur regional economic development. As Omolo and Wambua (2024) note, financial exclusion of SMEs continues to perpetuate poverty cycles, compromises entrepreneurial potential, and diminishes overall resilience to economic shocks.

While much of the literature focuses on financial inclusion at the household level or in urban settings, there is a neglect of recognizing the distinctive challenges facing rural SMEs. While research in counties like Bungoma has indicated that 63% of SMEs engage with formal financial systems through agency banking (FSD Kenya, 2021), there remain usage gaps. Additionally, the role of factors like security perceptions, agent liquidity, and service affordability that directly influence SMEs' willingness and ability to engage with formal finance remains under-researched. Therefore, the main issue is that financial inclusion among SMEs in Bungoma County is still far below optimal levels, despite the growth of agency banking and other financial innovations. Without a better understanding of what drives SME inclusion, especially at the intersection of agency banking and SME financial needs. Policymakers and financial institutions risk continuing to implement one-size-fits-all interventions that fail to account for localized constraints. Therefore, this study aims to explore the determinants of SME financial inclusion in Bungoma County, focusing on the agency banking role and SMEs' perceptions of its effectiveness, to inform more strategic approaches for inclusive growth.

1.3 Objectives of the Study

The study investigated the relationship between perceptions of agency banking and financial inclusion among small and medium-sized enterprises in Bungoma County, Kenya. This research was informed by the need to understand how SMEs' perceptions of agency banking characteristics influenced their uptake and usage of financial services, thereby contributing to their growth and sustainability.

1.3.1 General Objective

The main objective of this study was to establish the effects of the perceptions of agency banking, financial literacy, and financial inclusion on SMEs in Bungoma County, Kenya.

1.3.2 Specific Objectives

The study was guided by the following specific objectives:

i) To examine the effect of agency banking perceived accessibility on the financial inclusion of small and medium-sized enterprises within Bungoma County, Kenya.

ii) To examine the effect of the perceived cost of agency banking services on the financial inclusion of SMEs in Bungoma County, Kenya.

iii) To establish the influence of perceived liquidity of agency banking services on the financial inclusion of SMEs in Bungoma County, Kenya.

iv) To determine the effect of perceived security of agency banking services on the financial inclusion of SMEs in Bungoma County, Kenya.

v) To examine the moderating effect of financial literacy on the relationship between the perceptions of agency banking and financial inclusion of SMEs in Bungoma County, Kenya.

1.4 Research Hypotheses

The following null hypotheses were tested during this study:

H_{01}: Perceived agency accessibility has no significant effect on the financial inclusion of small and medium-sized enterprises within Bungoma County, Kenya.

H_{02}: Perceived cost of agency banking services has no significant effect on the financial inclusion of small and medium-sized enterprises in Bungoma County, Kenya.

H_{03}: Perceived liquidity of agency banking has no significant effect on the financial inclusion of small and medium-sized enterprises in Bungoma County, Kenya.

H_{04}: Perceived security of agency banking has no significant effect on the financial inclusion of small and medium-sized enterprises in Bungoma County, Kenya.

H_{05}: Financial literacy does not significantly moderate the relationship between perceptions of agency banking and the financial inclusion of small and medium-sized enterprises in Bungoma County, Kenya.

1.5 Justification of the Study

The following factors made our Survey on Agency Banking and Financial Inclusion of Micro, Small, and Medium Scale Enterprise (SMEs) in Bungoma County, Kenya, significant: First, small and medium enterprises (SMEs) are the main pillars of the Kenyan economy, playing a vital role in job creation, income generation, and economic advancement. The accessibility of formal financial services, however, limited the ability of many SMEs to expand and stay viable, despite their significance to the economy. To address this gap, my study sought to explore the implications of the agency banking-a comparatively new form of financial service provision-on financial inclusion among SMEs.

With the introduction of agency banking, Kenya has recorded momentum particularly in underserved areas like Bungoma County. Agency banking could substantially increase financial accessibility to SMEs that might otherwise not access traditional banking infrastructure due to geographical factors or social-economic factors. Through the analysis of the role of agency banking, this research had provided important understanding on whether this model was an efficient way of enhancing the financial inclusion of SMEs thus playing a significant role in combating an important development issue in Kenya.

The results of the study were also used in the existing body of literature on financial inclusion, offering context-specific insight into the potential and limitations of agency banking in rural and semi-urban locations. These insights enable policymakers and financial institutions to design specific interventions that align with the aim of improving financial inclusion of SMEs, thus promoting inclusive growth. In addition, the research described certain recommendations which would be applied to improve the regulatory framework of agency banking to make sure that the needs of SMEs are met effectively.

Lastly, the timeliness of this study has become even more critical as the role of technology has continued to gain relevance in the provision of financial services. It was essential to learn about how agency banking utilized digital innovations to access SMEs on behalf of stakeholders seeking to leverage financial technologies to achieve wider financial inclusion objectives. Consequently, the study not only filled a major gap in the field of SME financing but also contributed to the national agenda of enhancing financial inclusion with innovative banking products.

1.6 Significance of the Study

The findings of this research are expected to have both theoretical and practical implications on a wide range of stakeholders. It will the most benefit Small and Medium-Sized Enterprises (SMEs), which the study reflects by investigating how their understanding of agency banking and financial literacy influences financial inclusion. Proximity to bank branches, high transaction costs, and accessing credit on stringent conditions are only a few of the underlying issues that SMEs face when seeking affordable and reliable financial services. The research will empower the SMEs with effective information on how to utilize the agency banking outlets in a bid to improve their financial inclusion and business performance by highlighting their perception towards agency banking in relation to access, liquidity, security, and affordability.

The study will also be of interest to commercial banks and other financial institutions; the conclusion will indicate how SMEs perceive agency banking services and their predictors of adoption and continuance. Such insights will enable banks to strengthen their agency banking designs and improve customer experience by involving areas like trust, service reliability, and affordability. When banks align their offering with the needs and expectations of SMEs, they can diversify their client base, create more financial activity, and enhance the long-term viability of the agency banking model.

The research will be useful to policy makers such as the Central Bank of Kenya, the National Treasury because it will provide empirical data on how agency banking can be employed to drive SME financial inclusion. Findings can inform policy guidelines and regulations to improve the operating conditions of agency banking, consumer protection, and inclusive financial systems. In addition, the evidence produced will inform continuous financial sector reforms to bridge the divide between the formal banking system and underserved populations, particularly in rural and semi-urban communities, including the Bungoma.

1.7 Scope of the Study

This study aimed at examining agency banking perceptions, financial literacy, and their synergistic effects on financial inclusion of SMEs in Bungoma County, Kenya. Dependent variable centered on financial inclusion namely perceptions of SMEs to access, liquidity, security and price of agency banking services and how perceptions influence access, use and benefit of formal financial systems. The paper in question was successful in capturing the SME-level experience directly influencing inclusion outcomes by considering perceptions of agency banking rather than its structural features.

The study was restricted to Bungoma County due to its unique socio-economic environment, prevalent livelihood reliance on SMEs, and the rising adoption of agency banking services. Bungoma County offers a rich contextual context because it supports a variety of SMEs around urban settlements and in peri-urban and rural zones, where agency banking has been implemented to supplement the more traditional systems of financial service provision. This localized targeting enabled an in-depth insight into how SMEs perceive and mobilize agency banking to meet their financial inclusion requirements in various regions of the country.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter details the existing body of literature on the concept of agency banking and its role in financial inclusion of SMEs in Kenya. It identified the theoretical frameworks underlying this study and ascertained empirical evidence from recent research studies that tested various hypotheses concerning different aspects of agency banking, including geographic reach, affordability of financial services, technological innovation, and agency liquidity. It also highlighted the gap in existing literature, suggested a conceptual framework, and outlined the operationalization of variables for the study.

2.2 Theoretical Review

The theoretical frameworks that grounded this study are presented in this section.

2.2.1 Theory of Planned Behavior

The Theory of Planned Behavior (TPB), proposed by Ajzen (1991), extends the Theory of Reasoned Action to include perceived behavioral control as an additional determinant of intention and actual behavior. The theory posits that the three interrelated factors that guide an individual's behavior are attitude toward the behavior, subjective norms, and perceived behavioral control. Attitude is the extent to which a person has a favorable or unfavorable evaluation of the behavior; subjective norms pertain to the perceived social pressure to perform or not perform the behavior; and perceived behavioral control refers to the individual's sense of ease or difficulty in performing the behavior, which is closely related to the concept of self-efficacy and resources available.

In relation to agency banking and financial inclusion among SMEs, TPB provides a valuable framework to explain the roles of entrepreneurs' perceptions and attitudes in influencing their financial behaviors. For example, if SME owners see agency banking as reliable, accessible, secure, and affordable, they are more likely to use it as part of their business financial practices. Conversely, negative attitudes such as lack of security, concealed charges, or liquidity issues at agency outlets may deter usage despite availability of service. Subjective norms also play a significant role, with business owners frequently depending on peer recommendations and community acceptance when considering whether to adopt financial innovations. If other SMEs in their networks are active users of agency banking, it provides social proof, affecting adoption decisions.

Perceived behavioral control is equally important and is associated with whether SMEs believe they have the requisite financial literacy, resources, and confidence to effectively utilize agency banking. Entrepreneurs who are financially literate may feel capable of navigating transactions, interpreting service charges, and ensuring security, thereby increasing the sense of control over outcomes. In contrast, those with limited financial knowledge may find agency banking complex and risky, resulting in underutilization despite its potential benefits.

By applying the TPB, this study acknowledges that the adoption and use of agency banking services by SMEs is not merely a matter of access or availability but is shaped significantly by perceptions and attitudes. Understanding these attitudinal dimensions offers insights into why some SMEs embrace agency banking as a tool for financial inclusion, while others continue to be excluded. This theoretical lens is thus crucial in linking the constructs of perceived accessibility, perceived liquidity, perceived security, and cost of services to the moderating effect of financial literacy on financial inclusion outcomes.

2.2.2 Transaction Cost Theory

The Transaction Cost Theory looks at the costs involved in economic exchanges, focusing specifically on the costs involved in the processes of information search, negotiation, and enforcement of contracts. First articulated by Ronald Coase in 1937 and later elaborated on by Oliver Williamson in the 1970s, this theory argues that firms and markets are organized in a manner that minimizes these transaction costs, which in turn increases overall efficiency in economic systems. By effectively organizing these transactions, businesses can reduce the resources expended on acquiring information, negotiating agreements, and enforcing contracts, which can ultimately lead to more efficient market operations.

The concepts of Transaction Cost Theory as applied to agency banking perception services offer insights into how these services can assist in reducing the transaction costs experienced by small and medium-sized enterprises (SMEs). Agency banking perception can be seen as a critical mechanism to increase the accessibility of financial services, thereby simplifying the various financial transactions that SMEs engage in. By providing services including fund transfers, cash deposits, and withdrawals through banking agents, agency banking perception is intended to facilitate smooth management of cash flows and to secure financial transactions.

Research by Kinyua and Munene (2022) exemplifies the profound influence of agency banking perception on the transaction costs of financial operations for SMEs. Their findings suggest that agency banking perception can effectively decrease transaction costs and allow SMEs to manage their financial activities more efficiently. The study emphasizes that by minimizing costs associated with financial transactions, agency banking perception empowers SMEs to allocate their resources more judiciously, ultimately leading to improved financial status and security.

In addition, a study by Kihara and Mburu (2023) examined the impact of agency banking perception on transaction costs among SMEs in Kenya. Their research showed that the ease of accessing banking services through local agents is significantly reducing the time and effort involved in financial dealings. This not only increases the efficiency of cash flow management but also reduces the risks associated with holding and transferring cash. The findings support the notion that agency banking perception successfully reduces transaction costs, which in turn enables SMEs to interact more fully with the formal financial system.

Furthermore, another comprehensive analysis by Abdi et al. (2023) explored the role of agency banking perception in lowering operational costs for SMEs across different regions. Their study found that adopting agency banking perception services resulted in a significant reduction in the direct costs of financial transactions, including travel costs and time spent on banking activities. By delivering localized access to banking services, agency banking perception enables SMEs to manage financial transactions in a cost-effective manner, enabling better cash management and improving overall financial security.

2.2.3 Financial Intermediation Theory

The Financial Intermediation Theory, proposed by Gurley and Shaw (1960) and subsequently enhanced by Levine (1997), suggests that financial intermediaries play a vital role in bridging the gap between surplus and deficit economic units. By mobilizing savings, lowering transaction costs, and addressing information asymmetry, intermediaries like banks, microfinance institutions, and agency outlets improve the efficiency of financial markets and facilitate economic participation. Within the context of small and medium-sized enterprises (SMEs), this theory underscores how intermediaries support business growth and long-term sustainability by providing much-needed liquidity, facilitating credit access, and promoting resource allocation.

Agency banking is a practical implementation of this theory. Through agents, financial institutions decentralize services, lower operational costs, and expand banking access to previously unbanked populations, including SMEs. This structural expansion creates opportunities for enterprises to save securely, access credit conveniently, and transact with lower costs. However, the capacity of financial intermediation to fully achieve these outcomes depends not only on the existence of intermediaries but also on the attitude of SMEs towards the use of agency banking services.

The attitudinal dimensions matter because of the trust, perceptions of risk, and the willingness of SMEs to embrace innovation directly affect the level of utilization. For example, while intermediaries may provide affordable credit and digital platforms, SMEs who are suspicious of security of agents, fear fraud, or lack financial literacy may underutilize these services. Conversely, SMEs with positive innovation and institutional trust are more likely to utilize agency banking for business financing, liquidity management, and long-term planning. Thus, the financial intermediation process is influenced not only by institutional supply but also by the behavioral willingness of SMEs to interact with intermediaries.

Empirical studies reinforce this attitudinal factor. In a study of rural Ghana, Akudugu (2021) found that perceptions of trustworthiness and security among SMEs determined whether agency banking improved financial inclusion. Similarly, Githae et al. (2023) found that Kenyan SMEs that showed openness towards intermediary services experienced higher gains in access to credit and improved financial performance than those remaining hesitant. In this context, our findings imply that financial intermediation theory must be expanded when applied to SMEs to include the psychological and perceptual barriers that affect adoption.

In this study, the Financial Intermediation Theory offers a valuable framework for understanding the role of agency banking in promoting financial inclusion among SMEs in Kenya. However, its application also recognizes that SMEs' attitudes shaped by trust, risk perceptions, and financial literacy serve as central determinants of whether intermediated services translate into actual usages and inclusive growth.

2.2.4 Financial Inclusion Theory

The Financial Inclusion Theory, formally introduced by Chakrabarty (2014), is a cornerstone in understanding the role of financial services in economic development and inequality reduction. This theory highlights the need to make financial services accessible to everyone, especially those from marginalized and disadvantaged backgrounds. The main objective of financial inclusion is to bring these underrepresented groups into the formal financial system, thus targeting various barriers that prevent them from participating, including geographical constraints, high service costs, and a lack of financial literacy.

Financial inclusion is seen as an essential gateway to economic stability and growth. By ensuring that marginalized populations have access to essential financial services, including savings accounts, credit facilities, and insurance products, the theory posits that individuals can better manage their financial resources and improve their overall economic standing. This integration promotes a more equitable distribution of resources, ultimately leading to poverty reduction and increased economic resilience.

Recent studies have examined the implications of financial inclusion on economic development. For example, the study by Mwangi et al. (2022) focused on the role of financial inclusion in supporting small and medium-sized enterprises (SMEs) in Kenya. Their findings suggest that greater access to financial services greatly improves the operational capacity of SMEs, allowing them to invest in growth opportunities, innovate, and contribute to local economic development. This aligns with the tenets of Financial Inclusion Theory, underscoring the importance of access to financial services in empowering marginalized businesses to operate in competitive markets.

Additionally, a detailed analysis by Otieno and Nyaga (2023) focused on how mobile banking solutions affect financial inclusion among rural populations in East Africa. Their study revealed that mobile banking lowered barriers to access significantly, enabling individuals from distant areas to interact with financial institutions without having to physically travel. The convenience and affordability of mobile banking services not only increased financial participation but also promoted better financial literacy among the users, addressing another critical barrier highlighted by Financial Inclusion Theory.

Furthermore, research by Okwiri and Ochieng (2023) examined the relationship between financial inclusion and social equity, emphasizing that inclusive financial systems can contribute to lower income inequality and enhanced social cohesion. Their findings suggest that the inclusion of marginalized groups in the financial system through financial inclusion efforts can lead to improved economic stability, supporting a more balanced economic landscape.

2.3 Empirical Review

The empirical review played a crucial role in research by synthesizing and critiquing the existing literature on the topic of interest. In the context of this study, the empirical review aimed to establish the link between the various components of agency banking that formed the independent variables and their impact on the financial inclusion of small and medium-sized enterprises (SMEs), which was the dependent variable. By examining the findings and limitations of previous studies, the empirical review helped to identify the research gaps that this study sought to address.

2.3.1 Agency Banking Perceived Accessibility and Financial Inclusion

The role of agency accessibility in facilitating financial inclusion through agency banking has emerged as a vital topic in contemporary research, especially with respect to small and medium-sized enterprises (SMEs). Expanding the reach of banking agents to traditionally underserved regions, such as rural areas, is critical to improve financial inclusion. This expansion helps to dismantle the physical barriers that have long prevented SMEs from accessing formal financial services.

A study by Munyiri and Njeru (2020) in Kenya emphasizes the positive effect of geographical reach on financial inclusion among SMEs. The results show that when agents are near SMEs, these businesses have better access to banking services. This saves time and costs for traveling long distances to formal bank branches, which are usually concentrated in urban areas. However, this research also indicated that the geographical influence was somewhat limited as it did not fully address the differences between how the urban and rural areas are served by agency banking. In urban areas, the availability of agents may be higher, offering more convenient access to financial services, while rural SMEs continue to face significant barriers.

Mwiya et al. (2019) took a closer look at agency banking in Zambia and observed similar benefits. Their research showed that the expansion of agent networks into rural areas positively impacted financial inclusion for SMEs. By positioning agents in areas with high concentrations of SMEs, financial institutions were able to significantly improve access to finance. This approach is especially beneficial in areas where formal banking infrastructure is minimal or non-existent. However, despite the improvements noted, the study did not address the challenges of maintaining a balanced distribution of agents in different geographical settings. The presence of agents in rural areas may enhance inclusion but without adequate planning, coverage disparities may continue, leaving some areas underserved.

Akudugu (2021) conducted a study in Ghana and found that agents disproportionately were located in urban centers, limiting the reach and effectiveness of agency banking in rural communities. The study concluded that for agency banking to truly improve financial inclusion, a more equitable distribution of banking agents between urban and rural areas is necessary. Rural SMEs, which are typically more isolated and encounter greater obstacles to accessing financial services, continue to be underserved when agents are concentrated in urban areas. This geographical imbalance is one of the key issues that need to be addressed if the full potential of agency banking is to be realised.

This current study contributes to the ongoing research by focusing specifically on the impact of agency accessibility on the financial inclusion of SMEs in Bungoma County, Kenya. The region faces distinctive geographical challenges, with some areas being densely populated and others more remote and sparsely inhabited. In addressing these challenges, this study will seek to both explore the opportunities and limitations of the current agent network in Bungoma County. This study will evaluate the impact of agent locations within the financial ecosystem on the ability of SMEs to access basic banking services, including loans, savings accounts, and payment systems. It will also analyze whether there are significant differences in financial inclusion between SMEs located in urban centers and those in rural areas. Additionally, this research will focus on the strategies used by financial institutions in expanding their agent networks and the challenges they encounter in ensuring an adequate geographical footprint of services.

Furthermore, this study will consider the influence of the geographical distribution of agents on not only the physical access to banking services but also on the broader issue of service utilization. Simply having agents in underserved areas is not enough; it is crucial that SMEs are aware of, and trust, these services. Therefore, this research will also examine the factors affecting access to agency banking services among SMEs in Bungoma County, especially in rural areas where trust in formal financial institutions may be lower.

2.3.2 Cost of Services and Financial Inclusion

The cost of financial services in agency banking has become a critical factor affecting the financial inclusion of small and medium-sized enterprises (SMEs). For many SMEs, who often have limited financial resources, the costs associated with accessing formal financial services can be a daily hurdle. Several recent studies have looked at the correlation between the cost of services provided by agency banking and how these costs influence the ability of SMEs to engage with formal financial products.

Githae et al. (2023) conducted a study in the Western region of Kenya, where they observed that high transaction and account maintenance fees in agency banking significantly impede the financial inclusion of SMEs. The research showed that many small enterprises, already struggling with financial resources, were deterred from utilizing agency banking services due to the high costs assessed. For instance, transaction costs for making payments or transferring funds through agents could accumulate rapidly, especially for SMEs undertaking frequent transactions. The maintenance fees charged to keep accounts active also imposed a financial strain. The study concluded that the high cost of these services effectively restricted SMEs access to much needed banking facilities, diminishing their overall financial inclusion.

Similarly, a study by Nganga and Mwachofi (2023) emphasized the importance of liquidity management in shaping the cost and accessibility of agency banking services. Their research showed that low agent liquidity and the inability of agents to make adequate cash on demand caused higher fees for customers. When agents struggled to maintain enough liquidity, the cost of transactions often increased, which in turn slowed down the accessibility of these services for SMEs. The authors argued that by addressing liquidity issues among agents, it would reduce transaction costs, facilitating greater affordability and accessibility of financial services. Improving liquidity may also encourage a more efficient agency banking system to facilitate broader financial inclusion for SMEs, especially in underserved areas where there are fewer formal bank branches.

On the other hand, Ozili (2023) examined how integrating digital financial services and agency banking might help reduce some of the cost barriers experienced by SMEs. His study in Nigeria found that the combination of agency banking with digital platforms, such as mobile money or online banking, significantly reduced the cost of transactions for SMEs. Digital financial services often have lower operating costs compared to traditional banking methods, as they do not require physical infrastructure or the same level of human resources. As a result, fees for transactions, account management, and other banking services were lowered. This reduction in costs enabled a greater number of SMEs to access formal financial services, enhancing their financial inclusion. Ozili's research underscores the potential of digital technology to make agency banking cheaper and more efficient, particularly for small businesses in cash-based economies.

This study seeks to extend these findings by assessing the cost-related barriers to financial inclusion for SMEs within Bungoma County, Kenya. Specifically, it will explore the influence of the cost of agency banking services, including transaction fees, account maintenance charges, and the impact of agent liquidity, on the financial inclusion of SMEs in the region. While some past studies have offered valuable insights into the relationship between cost and financial inclusion, there remains much that can be learned about the interplay of these factors in various geographical and economic contexts. In Bungoma County, where many SMEs are in rural or semi-urban areas, the cost of accessing financial services may be even more pronounced owing to the limited availability of alternative banking options.

By focusing on the financial burdens associated with agency banking, this research aims to identify potential strategies for making such services more affordable and accessible for SMEs. For example, lowering transaction costs or waiving certain account maintenance fees could help small businesses access the financial services they need to grow and thrive. Additionally, addressing liquidity issues within the agent network could help ensure that SMEs have reliable access to cash, further promoting their inclusion in the formal financial system.

Ultimately, the study will add to the broader conversation about how to promote financial inclusion for SMEs in Kenya and beyond. By analyzing the unique cost-related challenges experienced by

SMEs in Bungoma County, this research will provide actionable recommendations for policymakers, financial institutions, and other stakeholders interested in designing a more inclusive financial system.

2.3.3 Security and Financial Inclusion

Security is one of the critical factors driving the uptake of financial services, especially agency banking, which has emerged as an essential means of promoting financial inclusion for the small and medium-sized enterprises (SMEs). The safety of financial transactions and protection of sensitive information are instrumental factors in assessing whether SMEs feel confident transacting with agency banking services. In recent years, several studies have explored the relationship between security measures and the financial inclusion of SME. Perceiving security can incentivize or impede the use of these services.

Muthiora (2022), in an in-depth study conducted to understand the role of agency banking in promoting financial inclusion in urban and peri-urban areas. The research found that perceived transaction security was among the main factors that determined whether SMEs would engage with agency banking. SMEs were more likely to subscribe to agency banking services if they believed that robust security arrangements, including advanced authentication methods and comprehensive transaction verification processes, were in place, according to the findings. This suggests that the security measures offered by agency banking institutions, such as encryption of transaction data and secure log-in protocols, is instrumental in influencing the trust that SMEs place in these financial services.

Lauer et al. (2021) adopted a more extensive approach to the topic by exploring risk management and mitigation strategies in agency banking across multiple developing countries.

Their findings reveal the importance of implementing comprehensive security practices to foster trust among SME clients. They pointed out that fraud detection systems, data protection protocols, and continuous monitoring of financial activities were fundamental to minimizing risks. Furthermore, Lauer et al. emphasized the necessity of continued training for agency banking agents. The agents, who are intermediaries between banks and clients, must remain informed about emerging security threats, and be equipped to address them effectively. For SMEs, having well-trained agents who can provide reassurance and guidance on security features enhances their confidence in using agency banking services. Additionally, the initiative showed the importance of educating SME clients about security features like two-factor authentication, encrypted communications, and secure PIN management to alleviate concerns and promote broader adoption of financial services through agency banking.

Mas and Radcliffe (2021) offered additional insights into how security concerns can sometimes create an initial barrier to the uptake of mobile payment systems, such as agency banking, among SMEs in Kenya. Their research observed that many SMEs were reluctant to adopt mobile payment systems because of fears over the safety of their transactions and the potential of fraud. However, they also noted that as SMEs grew more accustomed to technology and as security measures were implemented, these concerns gradually faded. The adoption of robust security protocols, including biometric verification, end-to-end encryption, and securely alerting transactions, was instrumental in enhancing the acceptability of mobile payments and agency banking services among SMEs. Mas and Radcliffe's research shows that while security concerns can be an initial hurdle, these can be mitigated through both technological progress and extensive user education, ultimately leading to increased financial inclusion for SMEs.

This current study aims to build upon these findings by investigating the impact of security measures and perceptions on financial inclusion of SMEs through agency banking in Bungoma County, Kenya. In particular, it will examine the specific security concerns that are prevalent in the region and the extent to which existing security measures address these issues. SMEs in rural or semi-urban areas, such as Bungoma, may experience different security challenges than their counterparts in more urbanized areas. Factors such as availability of reliable internet connectivity, ability of local agents to implement and manage security protocols, and level of trust in digital financial systems are all important considerations that could impact the uptake of agency banking services by SMEs.

Moreover, this study will assess the strategies employed by agency banking institutions in establishing trust and confidence among SME clients. For example, how well are agents trained in responding to security breaches? Are SMEs adequately informed about the security features available to them, such as the use of secure PINs or real-time transaction monitoring? Additionally, the study will examine whether SMEs in Bungoma County know about and are satisfied with the current security measures implemented, or if there are gaps where improvements are required to boost their confidence in using these services.

2.3.4 Agent Liquidity Management and Financial Inclusion

Agent liquidity management plays a critical role in improving financial inclusion for small and medium-sized enterprises (SMEs) through agency banking. Recent studies have focused on the implications of effective liquidity management in the availability and quality of financial services accessible to SMEs, emphasizing the need for adequate cash reserves to satisfy customer demands.

Bersudskaya and McCaffrey (2022) have carried out studies on agent network management in the context of digital finance, such as agency banking, in various developing countries.

Their study revealed that one of the most significant barriers to ensuring accessible and reliable financial services for SMEs is the inability of agents to have sufficient liquidity to meet customer withdrawals. The researchers stressed the importance of strategic approaches to liquidity management and robust support systems to ensure the sustainable functioning of agent networks. This highlights a critical intersection between liquidity management and the effective delivery of financial services, as insufficient cash reserves can lead to significant service disruptions.
Building on this foundation, Ochieng and Ouma (2023) examined the implications of agent liquidity management on financial inclusion, specifically in Western Kenya, which includes Bungoma County. Their findings indicated that the overall lack of liquid cash supplies among agents meant service interruptions, extended waiting times, and increased costs for SMEs seeking to access and utilize financial services. The authors demonstrate the urgency for improving agent liquidity management systems, suggesting the establishment of mechanisms such as lines of liquidity, cash-in-transit services, and effective management of agent networks. These strategies are critical to ensure that agents can meet the cash demands of their customers in a timely manner, thereby enabling a smoother financial transaction experience for SMEs.

Moreover, findings by Nganga and Mwachofi (2023), in Nairobi, Kenya, further supported the significance of liquidity support for agents in maintaining financial service provision. They noted that financial institutions that provided liquidity assistance and training for their agents were better positioned to provide consistent services to SMEs. This approach not only ensured the availability of cash when needed but also improved the operational capacity of agents that, in turn, contributed to better financial inclusion for SMEs in the region. The authors posited that the integration of agent liquidity management into the wider agency banking strategy is imperative to improve the sustainability and efficiency of these financial services.

These studies together underscore the significance of agent liquidity management in advancing financial inclusion among SMEs. When agents possess sufficient liquidity, they can react effectively to customer needs with minimal disruptions to service, leading to better customer satisfaction. This is especially important in rural or semi-urban areas, where access to traditional banking services might be limited, and agency banking can provide a lifeline for SMEs seeking financial support.

To build on these findings, this study will explore the specific liquidity challenges faced by agents in Bungoma County and their impact on the financial inclusion of SMEs. It will explore the existing liquidity management strategies in place among the agents and evaluate their successes in ensuring reliable service delivery. Additionally, the study will investigate potential areas for improvement regarding liquidity management, such as partnerships with financial institutions to obtain lines of liquidity or the implementation of cash management technology to streamline operations.

2.3.5 Financial Literacy and Its Moderating Effect on Financial Inclusion

The issue of financial literacy has become one of the key Moderating Variable in the relationship between agency banking and SME financial inclusion. Indeed, several recent studies have sought to explore how financial knowledge, literacy training, and the efficiency of financial education programs are affecting the impact of agency banking on financial inclusion for SMEs.

A study done in the context of Kenya, by Mutua and Kamau (2022), on how financial knowledge plays a role in enriching the use of agency banking services for SMEs found that the greater the financial knowledge for SMEs, the wider the scope of agency banking services they are likely to use, accompanied by more informed financial decisions. Basic knowledge of financial concepts and products was also found to be a critical moderator of the link between the availability of agency banking and the actual use thereof by the SMEs.

In this regard, literacy training has been explored in a study conducted by Ochieng et al. (2023) that sought to understand how financial education programs affected the use of agency banking services by SMEs in rural Kenya. They found that owners/managers trained in financial literacy were more confident in using agency banking services. Similarly, through agency banking, they gained more confidence in accessing credit facilities. However, the study also established that such training programs demonstrated varying effectiveness regarding design and delivery methodologies.

In terms of the effectiveness of the programs, a multi-countywide study undertaken by Njoroge and Waweru (2024), in counties such as Bungoma County, explored the effectiveness of various financial literacy programs in SME financial inclusion. Their findings revealed that those programs which bridged the gap between theoretical knowledge and practical application of agency banking services are more effective in improving financial decision making and usage of financial products by SMEs. The research suggested that the programs on financial literacy should be built around the needs and contexts of SMEs in each region.

However, Kibet and Mugo (2023) realized that while financial literacy had generally a positive moderating impact on the relationship between agency banking has and financial inclusion in SME, its impact was uneven across all the dimensions of financial services. In their study in Western Kenya, it was found that the impact of financial literacy on the moderating influence was stronger than the impact of savings behavior and credit utilization on insurance take-up using agency banking channels.

This study complemented these findings through an investigation of how financial literacy is and special attention was given to financial knowledge, literacy training and effectiveness of financial programs as related to financial inclusion for SMEs in Bungoma County. This study will identify the unique financial literacy needs of SMEs within the region, the effectiveness of the existing financial education initiatives, and ways through which the impacts of agency banking can be increased with enhancements in financial literacy.

2.4 Research Gap

The literature has so far contributed to the understanding of various dimensions of agency banking and their integrated impact on SME financial inclusion. Nonetheless, several gaps still exist that this study will try to fill. While previous studies have examined the influence of agent network distribution on financial inclusion, scant research has been conducted on challenges and strategies concerning maintaining a balanced coverage across both urban and rural areas within one county, such as Bungoma County. This literature gap suggests that there is room for further nuance on agency accessibility effect on SME financial inclusion across different regional settings.

While the literature has generally focused on past discussions of service costs and their impact on financial inclusion, it has not deeply explored how agent liquidity management is interrelated with the integration of digital financial services to jointly drive affordability for SMEs in agency banking. Critical analysis of these factors in concert could carry significant insights into strategies that pursue the cost-effectiveness of agency banking services.

Thirdly, literature on how the integration of traditional banking with agency banking services has affected the financial inclusion of SMEs in rural and deprived areas is scant, especially regarding Kenya. Indeed, Llewellyn-Jones & Kazan (2022), Ndung'u et al. (2022), and Sahay et al. (2022) have noted this shortage. Identification of this gap can therefore inform the creation of more holistic technological solutions to improve SME financial inclusion.

Finally, most studies have investigated one aspect of agency banking influencing financial inclusion, but a holistic exploration that incorporates the different elements under agency accessibility, cost of services, technological innovations, and agent liquidity management, and their combined effect on SME financial inclusion for a particular setting of a county, is still lacking in literature. The dynamics of these interlinked factors go in a way that their holistic understanding may prove quite useful for policy planners and financial institutions.

By addressing these gaps, this study developed a more nuanced and context-specific understanding of how these various aspects of agency banking impact the financial inclusion of SMEs in Bungoma County, Kenya. The findings will be added to the voluminous literature that exists on strategies for financial inclusion and serve to inform policies, practices, and interventions that can be undertaken to improve SME access to and utilization of formal financial services.

2.5 Summary of Literature Review

This chapter has reviewed theoretical, conceptual, and empirical literature relating to the relationship between small and medium-sized enterprises' (SMEs) perceptions of agency banking and their financial inclusion. The review began by discussing the importance of financial inclusion as a developmental tool that enables SMEs to access formal financial services such as savings, credit, payments, and insurance, thereby enhancing business growth and economic participation.

It further emphasized agency banking as an innovation that extends financial services to previously underserved populations through third-party agents, effectively bridging the gap between financial institutions and remote or informal enterprises.

From a theoretical standpoint, the study was anchored on the Financial Intermediation Theory, Financial Inclusion Theory, Transaction Cost Theory, and Theory of Planned Behavior (TPB). These theories collectively explain how perceptions, attitudes, and infrastructural factors influence SMEs' decisions to adopt agency banking services. Specifically, the Financial Intermediation Theory underscores the role of intermediaries in reducing transaction costs and information asymmetry, Financial Inclusion Theory highlights understanding the role of financial services in economic development and inequality reduction, while TPB explains behavioral intention as shaped by attitudes, subjective norms, and perceived control. Together, these theories provide a robust framework for understanding the determinants of financial inclusion in the context of agency banking.

Empirical literature has shown that several constructs influence SMEs' adoption and use of agency banking services. Perceived accessibility has been found to enhance financial inclusion by reducing physical and logistical barriers to financial services. Studies across Kenya, Nigeria, and Ghana consistently report that a wider network of agents encourages SMEs to open and use accounts more regularly. Perceived cost remains a critical determinant, as high transaction charges, withdrawal fees, and commission rates often discourage SMEs from using agency banking channels. Conversely, affordable and transparent pricing structures motivate higher adoption rates. Perceived liquidity, the availability of sufficient float or cash at agent outlets, has been highlighted as a major trust factor that determines the reliability of agency services. Perceived security is another significant predictor, as SMEs prefer platforms that ensure the safety of funds and transactions, with fraud prevention and confidentiality being essential considerations. Finally, financial literacy has been identified as both a direct and moderating factor, empowering SMEs to make informed financial decisions, interpret risks, and maximize the benefits of agency banking.

Despite the growing body of research, gaps remain in understanding how these factors interact, particularly within county-level contexts such as Bungoma, where SMEs face unique infrastructural and informational challenges. Most prior studies have focused on individual determinants of financial inclusion without integrating financial literacy as a moderating variable in the agency banking framework. Additionally, limited empirical evidence exists on how the combined perceptions of accessibility, cost, liquidity, and security jointly influence SME financial inclusion.

Therefore, this study addressed these gaps by examining the collective and individual effects of agency banking perceptions accessibility, cost, liquidity, and security on the financial inclusion of SMEs in Bungoma County, while incorporating financial literacy as a moderating factor. The findings provide both theoretical and policy insights into how financial institutions and policymakers can leverage agency banking to strengthen financial inclusion and support SME growth in Kenya.

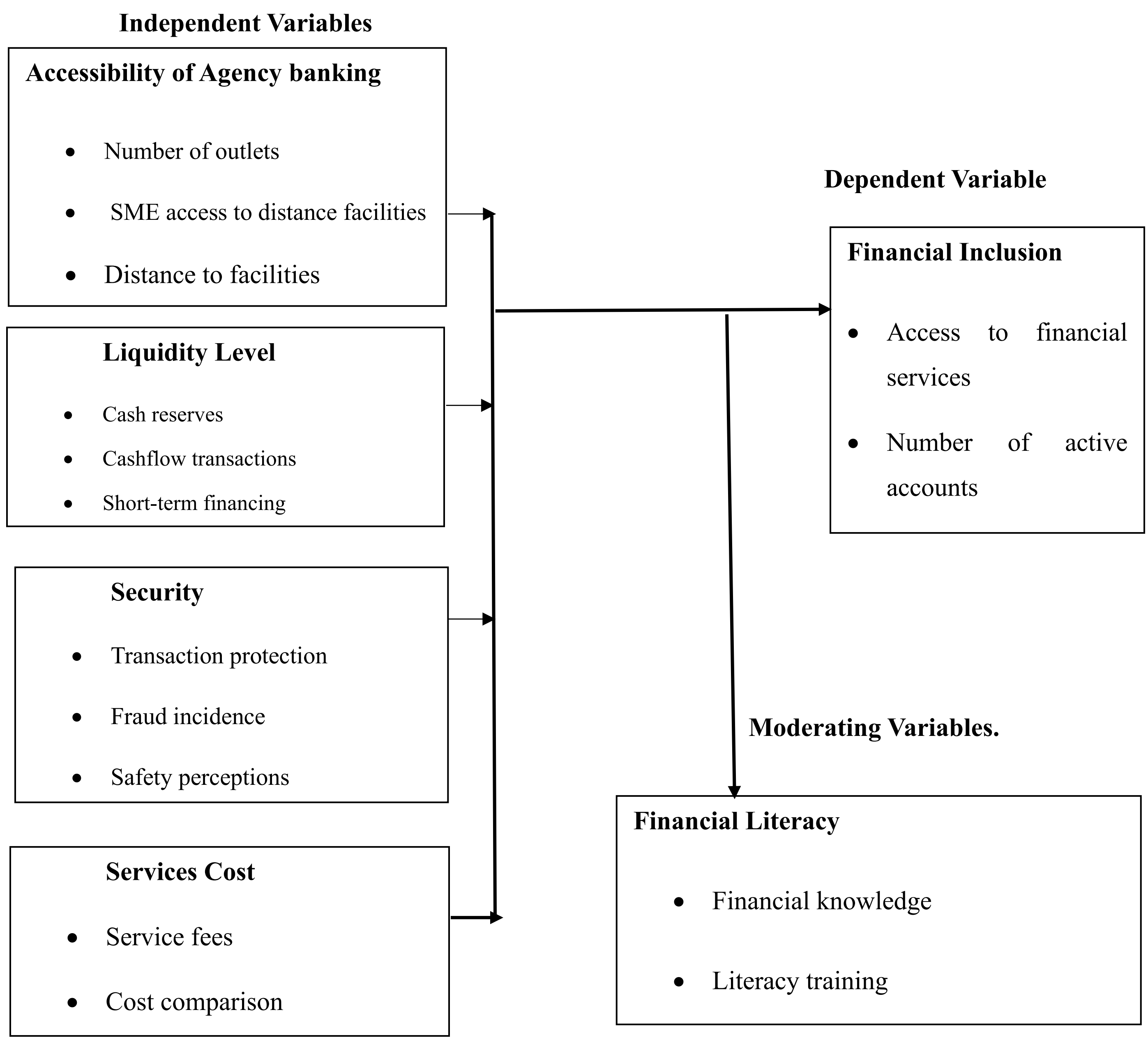
2.6 Conceptual Framework

This study adopts a conceptual framework that examines the relationship between perceptions of agency banking, financial literacy and financial inclusion of small and medium-sized enterprises (SMEs) in Bungoma County, Kenya, focusing on two key indicators of financial inclusion: access (measured by the percentage of SMEs with active bank accounts through agency banking) and usage (measured by the frequency and volume of transactions, such as deposits, withdrawals, and credit applications). The four independent variables agency accessibility, liquidity levels, security, and service costs are hypothesized to influence these indicators, with financial literacy acting as a moderating variable.

Studies indicate that agency accessibility allows business owners to save on time since they do not have to travel long distances to transact in traditional banking halls. Liquidity levels ensure reliable fund availability, increasing transaction frequency and credit access, particularly for retail SMEs (Githae *et al.,* 2023). Security measures build trust, encouraging consistent usage among SMEs handling high-value transactions (Mutua & Kamau, 2023). Affordable service costs reduce financial barriers, promoting both access and usage across SME sizes (Mwangi & Nyambura, 2021). Financial literacy moderates these relationships by enhancing SMEs' ability to navigate and utilize agency banking services effectively, as evidenced by increased loan uptake among trained SMEs (Ochieng & Ouma, 2023). The framework, illustrated in Figure 1, guides the study in assessing how these factors collectively shape SME financial inclusion in Bungoma County.

FIGURE 1

Conceptual Framework



Source: Researcher (2025)

2.7 Operationalization of the variables

TABLE 1

Operationalization of the Variables

Type of Variable	**Variable**	**Indicators**	**Level of Measurement**	**Tools of analysis**
Dependent	Financial Inclusion	• Access to financial services • Number of active accounts	Pilot study, closed-ended questionnaire, Ordinal using a 5-point Likert Scale	Descriptive & regression analysis.
Independent	Accessibility of Agency Banking	• Number of outlets • SME access • Distance to facilities	Pilot study, closed-ended questionnaire, Ordinal using a 5-point Likert Scale	Descriptive & regression analysis.
Independent	Liquidity Level	• Cash reserves • Cash flow transactions • Short-term financing	Pilot study, closed-ended questionnaire, Ordinal using a 5-point Likert Scale	Descriptive & regression analysis.
Independent	Security	• Transaction protection	Pilot study, closed-ended questionnaire,	Descriptive & regression analysis.

		• Fraud incidence • Safety perceptions	Ordinal using a 5-point Likert Scale	
Independent	Services Cost	• Service fees • Cost Comparison	Pilot study, closed-ended questionnaire, Ordinal using a 5-point Likert Scale	Descriptive & regression analysis.
Moderating	Financial Literacy	• Financial knowledge • Literacy training	Pilot study, closed-ended questionnaire, Ordinal using a 5-point Likert Scale	Descriptive & regression analysis.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter outlines the methodology used to investigate the influence of agency banking on financial inclusion of small and medium-sized enterprises (SMEs) in Bungoma County, Kenya. It covers research design, target population, sample size and sampling procedure, data collection instruments, validity and reliability, data collection procedure, data analysis and presentation, and ethical considerations.

3.2 Research Philosophy

The design of this study aligns with a positivist philosophy, as it supported the nature of the research questions, objectives, and the method of measuring quantitative data. According to Creswell and Creswell (2018), positivism assumes that reality is objective and measurable; therefore, hypotheses could be tested, and causal relationships could be established. This method was very relevant to the study of the effect of agency banking on SME financial inclusion because it allows the researcher to empirically gather data, analyze the data statistically and come to an objective conclusion. The positivist nature of the approach enabled the generalization of findings, a key component for the contribution to policy and practice in the broader context of financial inclusion strategies for SMEs. However, this could not fully reveal the complexity of experiences and perceptions that people had about financial inclusion. The study consisted of descriptive elements that provided context to the quantitative results.

3.3 Research Design

The study was designed using a descriptive research design. Descriptive research refers to any systematic effort to describe nature, behavior, or characteristics of the population or phenomenon being studied. This design is in line with Saunders et al. (2019) as it aims to provide a detailed understanding of the contribution of several constituent parts of agency banking during the financial incorporation of SMEs in Bungoma County, Kenya. The descriptive research design was the preferred research design as it enabled the researcher to get thorough insights on the state of play amongst the SME financial inclusion through agency banking, the challenges and opportunities, and the perceived value of agency banking services. As such, it allowed for the determination of patterns, trends, and relationships between the independent variables (components of agency banking) and the dependent variable (financial inclusion) in the context of Bungoma County.

3.4 Target Population

The target population that this research dealt with was 22,450 small and medium-sized enterprises operating in Bungoma County, Kenya. The unit of analysis was administrators of these SMEs, which included CEOs or owners. According to the Bungoma County Government Licensing Department (2023), there were approximately 22,450 registered SMEs in Bungoma County, categorized as indicated in Table 2.

TABLE 2

Target Population

Sub-County	Micro Enterprises	Small Enterprises	Medium Enterprises	Total
Bumula	2,450	400	150	3,000
Kabuchai	2,100	350	100	2,550
Kanduyi	3,500	600	200	4,300
Kimilili	2,300	380	120	2,800
Mt Elgon	1,800	300	80	2,180
Sirisia	2,000	330	90	2,420
Tongaren	2,100	350	100	2,550
Webuye East	1,600	270	80	1,950
Webuye West	1,600	270	80	1,950
Total	**19,450**	**3,250**	**1,000**	**22,450**

Source: Bungoma County Government Licensing Department (2023)

3.5 Sample Size and Sampling Procedure

Given that the target population was known, the study used cluster sampling. In this sampling technique, the population was divided into distinct groups or clusters, often based on geographic or organizational criteria. In this study, the clusters were defined by sub-counties within Bungoma County. The procedure involved selecting a sample of these clusters and then collecting data from all SMEs within the chosen clusters. The sample size was determined using the Yamane formula:

$$n = \frac{N}{(1+N(e)^2}$$

Where: n = sample size

N = population size (22,450)

e = margin of error (0.05)

$$n = 22{,}450 / (1 + 22{,}450(0.05)^2)$$

$$n = 393$$

Stratified random sampling was used to ensure proportional representation across sub-counties and enterprise sizes. Within each stratum, simple random sampling was employed to select the specific SMEs to participate in the study.

TABLE 3

Sample Size Distribution

Sub-County	Micro	Small	Medium	Total
Bumula	28	7	1	36
Kabuchai	24	6	1	31
Kanduyi	62	15	3	80
Kimilili	35	9	1	45
Mt Elgon	20	5	1	26
Sirisia	22	6	1	29
Tongaren	26	7	1	34
Webuye East	38	10	2	50
Webuye West	46	12	4	62
Total	301	77	15	393

3.6 Data Collection Procedure

The research design was to gather primary data using closed-ended questionnaires. Questionnaires were distributed to owners and managers of SMEs who are engaged in the targeted industries. These participants were selected based on their direct participation in decision-making and day-to-day operations, offering valuable insights that align with the study's objectives. The questionnaires were distributed on paper or online, depending on each participant's preference. Respondent questionnaires were supported by instructions to ensure the process ran smoothly and was completed promptly.

Finally, before administration of the questionnaires, the researcher obtained informed consent from all the participants to ensure that they were aware of and understood the purpose of the study, that their participation was voluntary, and they were guaranteed confidentiality and privacy. The closed-ended questionnaires were entered correctly and arranged for future analysis. Intellectual Integrity ensured that the data collected was accurate and complete, and it was therefore the responsibility of the researcher to uphold the integrity of the investigation.

3.7 Pilot Testing

A pilot study was undertaken to test the utility of the research instrument and data collection procedures. In this pilot test, the questionnaire was administered to a further sample of 39 SMEs, which was 10% of the initial sample size from Kakamega County. It is worth noting that these 39 SMEs were not part of the core research investigation to ensure the independence of the pilot findings. Objectives of the pilot study was checking clarity and comprehensiveness of the items of the questionnaire, determining any problems existing during data collection, estimating the average time of respondents to fill in the questionnaire, and assessing validity and reliability of the research tool. The responses and findings from this pilot study yielded important information that led to necessary changes in the questionnaire and means of data collection. These adjustments ultimately contributed to the overall effectiveness of the final study, ensuring that the research results were robust and reliable.

3.8 Validity and Reliability

In the following, the reliability and validity of this study were reviewed.

3.8.1 Validity

Validity refers to how accurately an instrument measures what it is meant to measure. Rather, it is an inherent part of the truth value of the output of a study that is typically assumed to be a faithful representation of real-life phenomena. In this study, a series of strict measures will be used to ensure validity. Content validity that: the questionnaire is validated by experts in finance and SME development to ensure that the constructs are adequately covered. Thus, it ensures the instrument captures everything that matters for the research topic. Factor analysis is used to test the construct validity or whether the instrument measures what it claims to measure. This statistical process established the relationship between the items of the instrument and the latent variables for which they were constructed.

3.8.2 Reliability

Reliability refers to the consistency or stability over a specified time of the measure a given instrument produces. It provides information about whether a similar outcome would come up when the instrument is used again under the same circumstances. In this study, reliability was measured in several ways. The Alpha is a coefficient of Cronbach used to measure the Internal Consistency of each scale in the questionnaire. Cronbach's coefficient was assumed to be acceptable when a = 0.7 or higher, implying that items within each scale are consistently measuring a common construct. In addition, test-retest reliability, i.e., the consistency of the measures over time, was analyzed by presenting the questionnaire twice to a subsample of the pilot study participants, with a two-week gap between administrations. Stability was calculated as a correlation between the two sets of responses.

3.9 Diagnostic Tests

These tests were conducted to confirm that the assumptions of linear regression, such as normality and linearity, were satisfied.

3.9.1 Normality Test

Normality, data follows a normal distribution, forming a main assumption of regression analysis. It can be evaluated by monitoring the skewness that marks the extent of quality distribution deviating from normal symmetry. Zero value shows that the distribution is symmetrical, and a strong skew indicates more values and negative values reveals large values. Multiple regression analysis assumes that the data is normally distributed. To verify this assumption, the normality of the residuals was assessed using both the Kolmogorov–Smirnov and Shapiro–Wilk tests.

3.9.2 Multicollinearity

Multicollinearity refers to the idea that independent variables are not linearly correlated when performing regression modeling. The Variance Inflation Factor (VIF) was used to examine the data for multicollinearity and determine if the expected regression coefficients were exaggerated when the predictor variables were not highly correlated. If the VIF value is not less than 10, this shows a significant occurrence of multicollinearity (Black & Babine, 2019).

3.9.3 Heteroscedasticity

For a regression model to be valid, the variance of the error terms must remain uniform, a condition known as homoscedasticity. When this assumption is violated, heteroscedasticity occurs, which can lead to biased standard errors and unreliable significance tests if not corrected (Gujarati, 2003).

The Breusch-Pagan test was employed to assess whether the error variances were constant. Under the null hypothesis, the error variance is assumed to be constant.

3.10 Data Analysis

Data analysis in this study was done in a series of steps in a systematic way to make sure the data collected was accurately interpreted and responded to the research purposes. Since the questionnaires were closed-ended, the analysis was largely quantitative, with the statistical techniques used to draw meaningful conclusions from the data. Firstly, data analysis which involved cleaning and preparation of the data by examining the questionnaires for completeness and validity. Incomplete or inconsistent responses were pursued to ensure data integrity. Descriptive statistics were then calculated after data preparation, to provide an overview of sample demographics and key variables. Descriptive statistics (means, medians, standard deviation, and frequencies) were employed to summarize data to characterize the trend and distribution of the dataset.

Following the descriptive analysis, which summarized and presented the essential characteristics of the dataset, inferential statistics were used to further analyze the hypotheses examined and explore the relationships between the variables. Descriptive analysis gave us a shallow level of understanding through the calculation of measures of central tendency, which encompassed Mean, Median and Mode, providing a basic picture as to the values around which the data points were clustered. In addition, measures of dispersion, such as range, variance, and standard deviation, represented the spread and variability of the data. Frequency distributions report frequencies for many values or value ranges. Moreover, the study operated using inferential statistics that were geared towards testing hypotheses and evaluating the strength and direction of relationships between the variables. This included using statistical tests of various types to generalize the population from sample data, enabling us to further examine the relationships and impacts in the context of the study.

Given this, the statistical analysis for this study was done using regression analysis, contingent on the nature of variables and specific research questions being addressed. Then, factor analysis was applied to check on construct validity and that the items were appropriate for the variables they sought to measure. The two-step process, as suggested by Baron and Kenny (1986), was adopted to test the relationship between the dependent variable, the Financial Inclusion of SMEs (Y), and the independent variables of X1 to X4, further moderated by financial literacy, Z.

First, the direct effects of the independent variables on the dependent variable were assessed through a multiple regression model, represented by Equation 3.1:

$$Y = \beta0 + \beta1X1 + \beta2X2 + \beta3X3 + \beta4X4 + \beta5Z + \beta6X1 * Z + \beta7X2 * Z + \beta8X3 * Z + \beta9X4 * Z + \epsilon$$ ………… equation 3.1

Where:

- $Y = Financial\ Inclusion$
- $X1 = Agency\ Accessibility$
- $X2 = Liquidity\ Level$
- $X3 = Security$
- $X4 = Services\ Cost$
- $Z = Financial\ Literacy\ (moderator)$
- $X1 * Z, X2 * Z, X3 * and\ X4 * Z$ are interactions

In this model, Y represents the Financial Inclusion of SMEs, X_1 to X4 are the independent variables under consideration, and ϵ denotes the error term. Each coefficient (β_1) represents the direct influence of the respective independent variable on financial inclusion.

3.11 Ethical Consideration

The research study was designed and conducted strictly under the observance of ethical principles for the protection of the rights and welfare of the respondents. Consent was sought from all respondents before engaging them in the study, using informed consent that provided all the details of the purpose and objectives of the study, procedures involved, foreseen risks and benefits, and clarified that participation was voluntary. Participation was left solely to the discretion of the respondents, who had the right to withdraw from the study at any time without penalty. Confidentiality and anonymity of participants were maintained throughout the research process.

Collected data was treated as confidential and used solely for research purposes. Every possible conflict of interest was disclosed to the participants and relevant authorities. The study sought approval from the appropriate ethics committee or institutional review board before commencement. Care was taken in reporting the findings to avoid misrepresentation or biased results. The research was carried out following all the local and national guidelines that covered research on human subjects.

CHAPTER FOUR: DATA ANALYSIS AND PRESENTATION

4.1 Introduction

This chapter presents the analysis and interpretation of the data collected from the respondents. The results are organized into descriptive and inferential sections, with an emphasis on understanding the characteristics of the sample and addressing the study's objectives. The chapter begins with a detailed descriptive analysis, focusing on the demographics and other key variables, followed by inferential statistics to test the study hypotheses.

4.2 Response Rate

The study targeted a total of 393 respondents, of whom 357 completed and returned the questionnaires. This represents a response rate of 90.8%, which is considered high and acceptable for data analysis (Mugenda & Mugenda, 2003). The high response rate can be attributed to effective follow-ups and engagement strategies used during data collection. Table 4 presents the response rate of the study.

TABLE 4

Response Rate

Category	Frequency	Percentage (%)
Targeted Respondents	393	100.0
Responses Received	357	90.8
Non-Responses	**36**	**9.2**

Source: Research Data (2025)

The response rate of 90.8% is sufficient to ensure that the findings of this study are representative of the target population. According to Fincham (2008), a response rate above 70% is considered adequate for making reliable conclusions in social science research. The small proportion of non-responses (9.2%) may be attributed to time constraints and the unavailability of some respondents. However, the high completion rate suggests minimal non-response bias, thus enhancing the reliability of the findings.

4.3 Descriptive Analysis

4.3.1 Gender of the Respondents

This study sought to examine the gender distribution of the respondents involved in the study to understand the gender representation in SMEs.

TABLE 5

Gender of the Respondents

Gender	Frequency	Percent
Male	240	67.2
Female	117	32.8
Total	**357**	**100.0**

Source: Research data (2025)

The analysis indicates that 67.2% of the respondents were male, while 32.8% were female. This suggests that male participants predominantly represent SMEs, possibly reflecting broader trends in SME leadership and ownership. According to Beck and Cull (2021), such gender disparities are common in developing economies where male ownership dominates formal enterprise registration and financial engagement.

4.3.2 Age of the Respondents

This study sought to establish the age distribution of the respondents to assess the generational involvement in SME operations.

TABLE 6

Age of the Respondents

Age Bracket	Frequency	Percent
18-25	42	11.8
26-35	98	27.5
36-45	79	22.1
46-55	138	38.7
Total	357	100.0

Source: Research data (2025)

The results show that most respondents (38.7%) were aged between 46 and 55 years, followed by 27.5% in the 26–35 age bracket. The age groups 36–45 and 18–25 accounted for 22.1% and 11.8%, respectively. These findings imply that SMEs are primarily managed or owned by individuals in their mid-career to late-career stages, emphasizing experience as a critical factor in SME leadership. This aligns with the observations by Mwiya et al. (2019), who noted that SME ownership in Sub-Saharan Africa is typically concentrated among individuals with greater career and business experience.

4.3.3 Role of the Respondents at the SME

This study sought to determine the roles of respondents within the SME to understand the distribution of managerial and ownership responsibilities.

TABLE 7

Role of the Respondents at the SME

Role	Frequency	Percent
Owner	78	21.8
Manager	179	50.1
Both the Owner and Manager	99	27.7
Other	1	0.3
Total	357	100.0

Source: Research data (2025)

The analysis indicates that 50.1% of respondents were managers, while 21.8% were owners, and 27.7% served as both owners and managers. This suggests that SMEs often employ distinct management roles, though a significant number of owner-managers highlight the dual responsibilities in SME operations. Githae et al. (2023) observed similar trends in Kenyan SMEs, where owner-managers often dominate the leadership structure due to resource constraints and limited labor specialization.

4.3.4 Type of SME

This study sought to classify the SMEs by their size to determine the prevalence of micro, small, and medium enterprises.

TABLE 8

Type of SME

Type of SME	Frequency	Percent
Microenterprise (1-9 Employees)	139	38.9
Small Enterprise (10-49 Employees)	147	41.2
Medium Enterprise (50-249 Employees)	71	19.9
Total	**357**	**100.0**

Source: Research data (2025)

The results reveal that 41.2% of the SMEs were classified as small enterprises, followed by 38.9% as micro enterprises, and 19.9% as medium enterprises. This distribution shows the dominance of smaller-sized SMEs, reflecting their critical role in the local economy. Akudugu (2021) similarly reported that micro and small enterprises make up most formal businesses in rural economies, serving as key engines of informal employment and local service provision.

4.3.5 Industry of the SME

This study sought to identify the primary industries in which the SMEs operated to explore sectoral representation.

TABLE 9

Industry of the SME

Industry	Frequency	Percent
Agriculture	71	19.9
Retail	154	43.1
Services	132	37.0
Total	**357**	**100.0**

Source: Research data (2025)

The analysis indicates that 43.1% of SMEs operated in the retail sector, followed by 37.0% in services and 19.9% in agriculture. This distribution highlights the retail sector's dominance while emphasizing agriculture's significance as a critical contributor to SME activities. As noted by Otieno and Nyaga (2023), the concentration of SMEs in retail and services is typical in semi-urban counties, where consumer markets are more developed and agribusinesses remain largely informal.

4.3.6 Years of Operation

This study sought to determine the years of operation of the SMEs to assess their longevity and stability.

TABLE 10

Years of Operation

Years of Operation	Frequency	Percent
Less than 1 Year	2	0.6
1-3 Years	100	28.0
4-6 Years	196	54.9
7-10 Years	59	16.5
Total	**357**	**100.0**

Source: Research data (2025)

The findings indicate that 54.9% of the SMEs had been in operation for 4–6 years, while 28.0% had been active for 1–3 years, and 16.5% had operated for 7–10 years. Only 0.6% had been in operation for less than a year. This suggests that most SMEs have reached a stage of relative stability, contributing to the sustainability of their operations. These results are in line with the findings of Ochieng and Ouma (2023), who linked SME operational longevity with increased credit access and stable agency banking utilization.

4.3.7 Agency Accessibility

This section outlines the responses of study participants concerning the accessibility of agency banking, with results displayed in Table 11.

TABLE 11

Agency Accessibility

Statement	N	Mean	Std. Deviation
There are enough agency banking points near my business.	357	4.07	0.942
Agency banking services are easily accessible from my business location.	357	4.08	0.917
The distribution of agency banking points in my area is adequate.	357	4.10	0.977
I can easily find an agency banking point when I need financial services.	357	4.12	0.935
Agency banking has improved access to financial services in my area.	357	4.04	0.968
The location of agency banking points is convenient for my business operations.	357	4.04	0.968
Agency banking has reduced the time I spend traveling to access financial services.	357	3.67	1.150
The number of agency banking points in my area has increased over time.	357	4.06	0.962
Agency banking points are well distributed across both urban and rural areas in my region.	357	3.91	0.998
The agency accessibility meets the needs of my business.	357	4.13	0.982

Source: Research data (2025)

The responses reflect a generally positive view of agency banking's agency accessibility. Participants agreed that there are enough agency banking points near their businesses (M = 4.07, SD = 0.942) and that these services are easily accessible from their locations (M = 4.08, SD = 0.917). They also confirmed that the distribution of agency banking points in their areas is adequate (M = 4.10, SD = 0.977) and that finding a point when needed is straightforward (M = 4.12, SD =

0.935). Respondents noted that agency banking has improved access to financial services in their areas (M = 4.04, SD = 0.968) and that the locations are convenient for their business operations (M = 4.04, SD = 0.968). Additionally, they agreed that the number of agency banking points has increased over time (M = 4.06, SD = 0.962) and that the overall agency accessibility meets their business needs (M = 4.13, SD = 0.982). The distribution across urban and rural areas was viewed positively (M = 3.91, SD = 0.998), though slightly less strongly. However, the perception that agency banking has reduced travel time was less pronounced (M = 3.67, SD = 1.150), suggesting some variability in this benefit. In summary, participants expressed strong satisfaction with the accessibility, convenience, and distribution of agency banking, with travel time reduction as a potential area for enhancement. These findings are supported by Munyiri and Njeru (2020), who emphasized that expanded agent proximity significantly enhances SME engagement in formal financial systems, particularly in rural counties.

4.3.8 Agency Liquidity Level

This section details participants' responses regarding liquidity levels at agency banking points, as presented in Table 12.

TABLE 12

Agency Liquidity Level

Statement	N	Mean	Std. Deviation
Agency banking points always have enough cash to meet my withdrawal needs.	357	4.01	1.070
I can deposit any amount of money at agency banking points without issues.	357	3.80	1.152
Agency banking points rarely run out of cash during business hours.	357	4.00	0.957
The liquidity management at agency banking points is efficient.	357	3.99	1.044

I have never been turned away due to a lack of cash at an agency banking point.	357	3.92	1.155
Agency banking points can handle large transactions for my business when needed.	357	3.90	1.103
The cash flow management at agency banking points meets my business needs.	357	3.71	1.193
Agency banking points maintain consistent liquidity throughout the month.	357	3.93	1.062
I trust that the Agency Banking Points will have sufficient funds for my transactions.	357	3.67	1.235
The liquidity level at agency banking points has improved over time.	357	3.59	1.230

Source: Research data (2025)

Participants generally agreed with statements about liquidity at agency banking points. They confirmed that these points always have enough cash for withdrawals (M = 4.01, SD = 1.070) and rarely run out during business hours (M = 4.00, SD = 0.957). Efficient liquidity management was acknowledged (M = 3.99, SD = 1.044), and participants agreed they had not been turned away due to cash shortages (M = 3.92, SD = 1.155). They also noted that agency banking points can handle large transactions when needed (M = 3.90, SD = 1.103) and maintain consistent liquidity throughout the month (M = 3.93, SD = 1.062). The ability to deposit any amount without issues was rated moderately (M = 3.80, SD = 1.152), while cash flow management meeting business needs scored slightly lower (M = 3.71, SD = 1.193). Trust in sufficient funds for transactions (M = 3.67, SD = 1.235) and improvements in liquidity over time (M = 3.59, SD = 1.230) received the least agreement, indicating some uncertainty or mixed experiences. Overall, agency banking points are perceived as maintaining adequate liquidity, with slight concerns around trust, cash flow management, and long-term improvement. These results are consistent with Bersudskaya and McCaffrey (2022), who identified liquidity constraints as a persistent challenge in agent networks serving rural SMEs.

4.3.9 Agency Security

This section examines participants' responses regarding the security of agency banking services, summarized in Table 13.

TABLE 13

Agency Security

Statement	N	Mean	Std. Deviation
I feel my money is safe when using agency banking services.	357	3.77	1.194
Agency banking transactions are secure and protected from fraud.	357	3.81	1.197
The authentication process for agency banking transactions is reliable.	357	4.19	0.859
I trust the confidentiality of my financial information with agency banking.	357	3.88	1.056
Agency banking points have adequate security measures in place.	357	4.02	0.991
I have never experienced any security issues while using agency banking services.	357	3.78	1.173
The security measures for agency banking are continuously improving.	357	3.40	1.342
Agency banking provides secure alternatives to carrying cash for my business.	357	3.33	1.329
I am confident in the security protocols used for agency banking transactions.	357	4.06	0.944
The security level of agency banking meets the needs of my business.	357	4.16	0.918

Source: Research data (2025)

Participants showed agreement across multiple aspects of agency banking security. They strongly agreed that the authentication process is reliable (M = 4.19, SD = 0.859) and that the security level meets their business needs (M = 4.16, SD = 0.918). Confidence in security protocols was also high (M = 4.06, SD = 0.944), and respondents agreed that agency banking points have adequate security measures (M = 4.02, SD = 0.991). Trust in the confidentiality of financial information was positive (M = 3.88, SD = 1.056), as was the perception that transactions are secure and protected from fraud (M = 3.81, SD = 1.197). Participants felt their money was safe (M = 3.77, SD = 1.194) and largely reported no security issues (M = 3.78, SD = 1.173). However, agreement was weaker regarding continuous improvements in security measures (M = 3.40, SD = 1.342) and agency banking as a secure alternative to carrying cash (M = 3.33, SD = 1.329), suggesting some reservations in these areas. Overall, while core security features are well regarded, perceptions of ongoing improvements and alternatives to cash handling indicate room for growth. These concerns mirror the findings by Lauer et al. (2021), who highlighted the importance of continuous agent training and system upgrades to maintain trust and secure participation in agency-based financial services.

4.3.10 Agency Services Cost

This section presents participants' responses regarding the cost of agency banking services, detailed in Table 14.

TABLE 14

Agency Services Cost

Statement	N	Mean	Std. Deviation
The fees for agency banking services are reasonable.	357	4.00	0.958
Agency banking offers cost-effective financial services for my business.	357	3.95	1.033
The cost of agency banking services is lower than traditional banking services.	357	4.08	0.910
The pricing structure for agency banking services is transparent.	357	3.75	1.238
Agency banking has reduced the overall cost of accessing financial services for my business.	357	3.49	1.273
The cost of agency banking services is proportional to the quality of services provided.	357	3.76	1.179

Agency banking offers competitive rates for financial transactions.	357	4.16	0.899
The cost of agency banking services does not hinder my business operations.	357	4.11	0.983
Agency banking provides value for money in terms of financial services.	357	4.02	0.960
The cost of agency banking services has remained stable over time.	357	4.01	0.977

Participants expressed a positive stance on the cost of agency banking services. They strongly agreed that agency banking offers competitive rates for transactions (M = 4.16, SD = 0.899) and that costs do not hinder business operations (M = 4.11, SD = 0.983). They also confirmed that the cost is lower than traditional banking services (M = 4.08, SD = 0.910) and provide value for money (M = 4.02, SD = 0.960). Fees were deemed reasonable (M = 4.00, SD = 0.958), and cost stability over time was acknowledged (M = 4.01, SD = 0.977). Respondents viewed the services as cost-effective (M = 3.95, SD = 1.033), though the agreement was slightly lower for the proportionality of costs to service quality (M = 3.76, SD = 1.179) and pricing transparency (M = 3.75, SD = 1.238). The perception that agency banking has reduced overall financial access costs was the least agreed upon (M = 3.49, SD = 1.273), indicating mixed views. In summary, participants appreciate the affordability and competitiveness of agency banking, with pricing transparency and overall cost reduction as areas for potential improvement. These observations are supported by Nganga and Mwachofi (2023), who argued that while SMEs appreciate the affordability of agent services, hidden costs and inconsistent fee structures can still limit full financial integration.

4.5 Inferential Statistics

4.5.1 Diagnostic Tests

Diagnostic tests are essential in verifying that assumptions underlying the statistical models used in the data analysis are indeed valid. The following are the diagnostic tests to be considered:

4.5.1.1 Normality Test

The normality of the residuals was assessed using both the Kolmogorov–Smirnov and Shapiro–Wilk tests. The hypotheses were formulated as follows:

H_0: The residuals are normally distributed.

H_1: The residuals are not normally distributed.

The results are summarized in Table 15.

TABLE 15

Test for Normality

Variable	**Kolmogorov–Smirnov**			**Shapiro–Wilk**		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Predicted Value	.038	357	.200*	.993	357	.088

The Kolmogorov-Smirnov test returned a significance value of p = .200, while the Shapiro-Wilk test produced a significance value of p = .088. Since both significance values are greater than the 0.05 threshold, the null hypothesis could not be rejected. This means that the residuals of the regression model were normally distributed.

Consequently, the assumption of normality required for multiple regression analysis was satisfied, validating the appropriateness of using parametric statistical methods for further analysis in this study.

4.5.1.2 Multicollinearity Test

The Variance Inflation Factor (VIF) was employed to assess multicollinearity among the independent variables. VIF values quantify how much the variance of a regression coefficient is inflated due to multicollinearity in the model. Table 16 presents the VIF results for the research variables.

TABLE 16

Variance Inflation Factor (VIF) for Research Variables

Variable	VIF	1/VIF
Financial Literacy	1.36	0.735
Agency Accessibility	1.50	0.667
Services Cost	1.37	0.730
Liquidity Level	1.52	0.658
Security	1.78	0.562

The VIF values for all variables are below the commonly accepted threshold of 10, indicating that multicollinearity is not a significant issue. Furthermore, the tolerance values (1/VIF) are all above 0.1, further supporting the absence of severe multicollinearity. These findings confirm that the dataset is suitable for regression analysis, ensuring the reliability of the estimated coefficients and the overall model interpretation.

4.5.1.3 Heteroscedasticity Test

To verify whether the assumption of constant variance of error terms (homoscedasticity) holds, the Breusch-Pagan test was employed. Heteroscedasticity, if present, can lead to inefficient estimates and affect the reliability of hypothesis testing in regression analysis. The test involves regressing the squared residuals of the model on the independent variables to assess whether the variance of the residuals depends on the values of the predictors.

TABLE 17

Breusch-Pagan Test for Heteroscedasticity

Test Statistic	Value	Df	p-value	Decision
LM Statistic	6.842	4	0.144	Fail to Reject H_0
F-Statistic	1.695	(4,352)	0.150	Fail to Reject H_0

Source: Researcher's Data (2025)

As shown in Table 17, the results of the test revealed that the Lagrange Multiplier (LM) statistic was 6.842 with 4 degrees of freedom and a p-value of 0.144, while the F-statistic was 1.695 with (4, 352) degrees of freedom and a p-value of 0.150. In both cases, the p-values are greater than the 0.05 significance level. This means that the null hypothesis of homoscedasticity could not be rejected.

Based on these findings, the study concludes that the error terms in the regression model exhibit constant variance, confirming that heteroscedasticity is not a concern and the regression estimates are both efficient and reliable.

4.5.2 Correlation Analysis

The correlation analysis was conducted to examine the strength and direction of the relationships between agency banking factors (accessibility, liquidity, security, and service cost), financial literacy, and financial inclusion. The results, presented in Table 18, indicate that all correlation coefficients were positive and statistically significant at the 1% level ($p < 0.01$), suggesting that improvements in agency banking dimensions and financial literacy are associated with higher levels of financial inclusion among SMEs in Bungoma County.

The findings reveal that agency accessibility is strongly and positively correlated with financial inclusion ($r = 0.601$, $p < 0.01$). This implies that the wider and easier accessibility of agency outlets, the greater the participation of SMEs in formal financial systems. Similarly, agency liquidity level demonstrates a significant positive relationship with financial inclusion ($r = 0.614$, $p < 0.01$), meaning that when agents maintain adequate float and cash, SMEs gain confidence and are more likely to use agency services.

Agency security was also found to have a strong positive correlation with financial inclusion ($r = 0.632$, $p < 0.01$), the second highest among the agency banking factors. This suggests that when SMEs perceive agency banking as safe and reliable, they are more willing to engage with these services. Agency services cost, though comparatively lower in strength, still showed a positive and significant correlation with financial inclusion ($r = 0.567$, $p < 0.01$), indicating that affordable and transparent service charges remain an important determinant of SMEs' adoption of agency banking.

Finally, the results establish that financial literacy has the strongest positive correlation with financial inclusion ($r = 0.648$, $p < 0.01$). This underscores the critical role of knowledge, awareness, and financial management skills in enabling SMEs to effectively utilize agency banking channels.

TABLE 18

Correlation Analysis

Variable	**1**	**2**	**3**	**4**	**5**	**6**
1.Agency Accessibility						
2. Agency Liquidity Level	.507**					
3. Agency Security	.552**	.703**				
4. Agency Services Cost	.598**	.523**	.594**			
5. Financial Inclusion	.601**	.614**	.632**	.567**		
6. Financial Literacy (Moderating Variable)	.569**	.582**	.559**	.601**	.648**	

Overall, the correlation analysis demonstrates that all four dimensions of agency banking accessibility, liquidity, security, and cost, alongside financial literacy, are positively and significantly related to financial inclusion. Among these, financial literacy and agency security emerge as the most influential factors shaping SMEs' participation in the financial system.

4.5.3 Regression Analysis

The results of the regression analysis provide important insights into the determinants of financial inclusion among SMEs in Bungoma County. The model summary Table 19 shows an R value of 0.799, which indicates a strong correlation between independent variables and financial inclusion. The R Square value of 0.638 suggests that 63.8% of the variance in financial inclusion is explained by the combined effect of agency liquidity level, agency security, agency services cost, accessibility, financial literacy, and interaction terms. After adjusting for the number of predictors, the Adjusted R Square stands at 0.624, confirming the robustness of the model. The relatively small standard error of the estimate (0.29410) further affirms that the predictors reliably estimate the dependent variable.

TABLE 19

Model Summary

Model	R	R^2	Adjusted R^2	Std. Error of the Estimate
1	.799[a]	.638	.624	.29410

The ANOVA results Table 20 reveal that the regression model is statistically significant, $F(9, 347) = 86.36$, $p < .001$. This confirms that the independent variables, when considered together, are strong predictors of financial inclusion among SMEs. In other words, variations in financial inclusion can be reliably explained by the examined agency banking factors and financial literacy.

TABLE 20

ANOVA Results

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	67.134	9	7.459	86.36	< .001[b]
Residual	38.112	347	0.110		
Total	105.246	356			

The coefficients in Table 21 provide deeper insights into the relative influence of each predictor. Agency accessibility emerged as a significant factor ($\beta = .182$, $p < .001$), indicating that improved proximity and convenience of agency outlets enhance SME participation in financial systems. Similarly, agency liquidity level significantly predicted financial inclusion ($\beta = .231$, $p = .001$). This finding suggests that outlets with adequate float capacity and consistent cash availability build confidence among SMEs, thereby encouraging regular use of agency services.

Agency security also demonstrated a strong and positive effect ($\beta = .311$, $p < .001$), highlighting that trust, safety, and protection from fraud are critical enablers of financial inclusion. This implies that SMEs are more willing to transact when agency outlets guarantee transaction safety. In addition, agency service costs significantly influenced financial inclusion ($\beta = .154$, $p = .002$). Lower and transparent charges improve affordability and allow SMEs to engage more frequently with financial services.

Financial literacy stood out as an independent and powerful predictor ($\beta = .336$, $p < .001$). SME owners with higher levels of financial literacy are more likely to understand and trust the benefits of agency banking, leading to greater adoption of financial services. This shows the importance of financial awareness programs in enhancing inclusion.

TABLE 21

Regression Coefficients Predicting Financial Inclusion

Predictor	B	SE	β	T	p
(Constant)	-0.842	0.915	–	-0.920	.038
Agency Accessibility	0.212	0.059	0.182	3.593	<.001
Agency Liquidity Level	0.295	0.084	0.231	3.512	.001
Agency Security	0.367	0.073	0.311	5.027	<.001
Agency Services Cost	0.188	0.061	0.154	3.082	.002
Financial Literacy	0.426	0.077	0.336	5.545	<0.001
Accessibility × Z	0.147	0.049	0.121	2.999	.003
Liquidity × Z	0.132	0.042	0.109	3.143	.002
Security × Z	0.218	0.069	0.182	3.159	.002
Services Cost × Z	0.151	0.047	0.124	3.213	.001

Note. Z= Financial Literacy
Dependent variable: Financial Inclusion.

The moderating role of financial literacy is also notable. The interaction between accessibility and financial literacy (β = .121, p = .003) shows that financial literacy enhances the impact of accessibility on financial inclusion, meaning literate SMEs are better able to utilize nearby outlets. The interaction between liquidity and financial literacy (β = .109, p = .002) reveals that knowledgeable SMEs maximize the benefits of well-funded outlets. Similarly, the interaction between security and financial literacy (β = .182, p = .002) indicates that financially literate SMEs place stronger value on secure transactions. Finally, the interaction between service cost and financial literacy (β = .124, p = .001) shows that financially aware SMEs are more responsive to cost reductions, making agency banking more effective as a financial inclusion tool.

Overall, the findings demonstrate that agency banking factors accessibility, liquidity, security, and service costs, play a significant role in advancing the financial inclusion of SMEs in Bungoma County. Moreover, financial literacy not only has a direct effect but also moderates the relationships between agency banking perceptions and financial inclusion, strengthening their impact. This suggests that without adequate financial literacy, the full potential of agency banking in fostering inclusion may not be realized.

The overall fitted regression model derived from the analysis is expressed as:

$$\mathrm{Y} = -0.842 + 0.212X_1 + 0.295X_2 + 0.367X_3 + 0.188X_4 + 0.426Z + 0.147(X_1Z) + 0.132(X_2Z) + 0.218(X_3Z) + 0.151(X_4Z) + \varepsilon$$

Where:

- $Y = Financial\ Inclusion$
- $X1 = Agency\ Accessibility$
- $X2 = Liquidity\ Level$
- $X3 = Security$
- $X4 = Services\ Cost$
- $Z = Financial\ Literacy\ (moderator)$
- $X1 * Z, X2 * Z, X3 * and\ X4 * Z$ are interactions

4.6 Hypothesis Testing

The study tested five null hypotheses to determine the influence of agency banking perceptions and financial literacy on financial inclusion among SMEs in Bungoma County.

The first hypothesis **H_{01}:** shows that perceived agency accessibility has no significant effect on financial inclusion. Regression results indicated that agency accessibility had a significant positive predictor of financial inclusion ($\beta = .182$, $t = 3.593$, $p < .001$). This suggests that greater access of agency outlets increases SME participation in formal financial services. Therefore, H_{01} was rejected.

The second hypothesis **H_{02}:** proposed that the perceived cost of agency banking services has no significant effect on financial inclusion. Findings revealed a significant positive effect of service cost on financial inclusion ($\beta = .154$, $t = 3.082$, $p = .002$). This implies that lowering agency service costs enhances financial inclusion by making financial services more affordable for SMEs. Hence, H_{02} was rejected.

The third hypothesis **H_{03}:** stated that the perceived liquidity of agency banking has no significant effect on financial inclusion. The regression results showed that agency liquidity significantly influenced financial inclusion ($\beta = .231$, $t = 3.512$, $p = .001$). This means that outlets with sufficient liquidity strengthen SMEs' trust and improve access to financial services. Therefore, H_{03} was rejected.

The fourth hypothesis **H_{04}:** suggested that the perceived security of agency banking has no significant effect on financial inclusion. Results demonstrated that security had a strong and significant positive effect ($\beta = .311$, $t = 5.027$, $p < .001$). This indicates that secure agency outlets build user confidence, which directly enhances financial inclusion. Accordingly, H_{04} was rejected.

Finally, the fifth hypothesis **H_{05}:** posited that financial literacy does not significantly moderate the relationship between agency banking perceptions and financial inclusion. However, the results confirmed significant moderating effects of financial literacy across all agency banking dimensions: accessibility × literacy ($\beta = .121$, $p = .003$), liquidity × literacy ($\beta = .109$, $p = .002$), security × literacy ($\beta = .182$, $p = .002$), and service cost × literacy ($\beta = .124$, $p = .001$). These findings demonstrate that financial literacy strengthens the positive effects of agency banking perceptions on financial inclusion. Consequently, H_{05} was rejected.

In summary, all five null hypotheses were rejected, indicating that agency banking dimensions and financial literacy both independently and interactively significantly influence the financial inclusion of SMEs in Bungoma County.

TABLE 22

Hypothesis Results Summary

Hypothesis	Statement	β	p-value	Decision on H_0
H_{01}	Perceived agency accessibility has no significant effect on the financial inclusion of SMEs in Bungoma County, Kenya.	.182	< .001	Rejected
H_{02}	The perceived cost of agency banking services has no significant effect on the financial inclusion of SMEs in Bungoma County, Kenya.	.154	.002	Rejected
H_{03}	Perceived liquidity of agency banking has no significant effect on the	.231	.001	Rejected

Hypothesis	Statement	β	p-value	Decision on H_0
	financial inclusion of SMEs in Bungoma County, Kenya.			
H_{04}	Perceived security of agency banking has no significant effect on the financial inclusion of SMEs in Bungoma County, Kenya.	.311	< .001	Rejected
H_{05}	Financial literacy does not significantly moderate the relationship between perceptions of agency banking and the financial inclusion of SMEs in Bungoma County, Kenya.	.336	<.001	Rejected

Source: Researcher, 2025

The results summarized in Table 22 confirm that all four independent variables have a statistically significant effect on financial inclusion. These findings indicate that enhancing accessibility, liquidity, security, affordability, and financial knowledge surrounding agency banking services can meaningfully improve access to financial services for SMEs in Bungoma County.

4.7 Discussion Findings

The study set out to examine the effect of agency banking on the financial inclusion of small and medium-sized enterprises (SMEs) in Bungoma County, Kenya, with financial literacy assessed as a moderating factor. The discussion of the findings is presented in relation to the study hypotheses and existing literature.

The first hypothesis tested whether the perceived accessibility of agency banking significantly affects the financial inclusion of SMEs. Regression results revealed a positive and significant relationship ($\beta = .182$, $p < .001$). This implies that SMEs are more likely to adopt agency banking when outlets are widely accessible within their business operating areas. Geographical accessibility reduces the cost and time of accessing financial services, which encourages SMEs to participate in the formal financial system. These findings resonate with Mwangi (2020), who observed that the spatial distribution of financial outlets increases convenience and promotes usage among marginalized business groups. Thus, greater agency network coverage enhances inclusion by bridging the gap between SMEs and mainstream financial institutions.

The second hypothesis examined the effect of the perceived cost of agency banking services on financial inclusion. Results showed a positive and significant effect ($\beta = .154$, $p = .002$), suggesting that affordable transaction fees and charges are critical determinants of SME participation in agency banking. High costs often discourage usage, while fair pricing motivates adoption. This aligns with Okello and Muturi (2021), who found that affordability remains a strong predictor of financial service uptake among SMEs in developing economies. Reducing transactional costs therefore enhances affordability and contributes to financial inclusion.

The third hypothesis tested whether the perceived liquidity of agency banking has a significant effect on financial inclusion. Findings indicated that liquidity had a strong positive and significant effect ($\beta = .231$, $p = .001$). This demonstrates that SMEs depend heavily on the availability of adequate cash and float at agency outlets to conduct transactions smoothly. Consistent liquidity builds trust, reduces transaction failures, and sustains SME reliance on agency services. This is in line with Wanjohi (2020), who emphasized that liquidity is a core determinant of customer satisfaction and continued engagement with agency banking outlets.

The fourth hypothesis investigated whether the perceived security of agency banking affects financial inclusion. The regression results have established a significant positive effect ($\beta = .311$, $p < .001$), indicating that SMEs are more willing to adopt agency banking when transactions are viewed as safe and reliable. Security concerns such as fraud protection, data confidentiality, and safeguarding funds play a central role in building SME confidence in financial systems. This supports Muriithi (2022), who argued that perceived safety is indispensable in driving adoption of branchless and digital banking models. Strengthened security systems, therefore, are essential in promoting SME participation in agency banking.

The final hypothesis assessed the moderating effect of financial literacy on the relationship between perceptions of agency banking and financial inclusion. Results demonstrated that financial literacy significantly moderated the relationships, with interaction effects ranging from $\beta = .109$ to $\beta = .182$ and p-values between .001 and .003. This finding suggests that SMEs with higher levels of financial knowledge are better equipped to maximize the benefits of agency banking by making informed financial decisions. These results support Nanziri and Leibbrandt (2018), who noted that financial literacy enables individuals and businesses to evaluate risks, interpret financial information, and optimize service usage, thereby enhancing inclusion. Policies aimed at improving financial literacy could therefore strengthen the effectiveness of agency banking in promoting SME financial inclusion.

Overall, the study demonstrates that perceived agency accessibility, cost, liquidity, and security of agency banking significantly influence the financial inclusion of SMEs. Moreover, financial literacy enhances these effects by enabling SMEs to fully utilize agency banking services. These findings highlight the need for integrated strategies that expand agency networks, lower service costs, ensure adequate liquidity, strengthen security, and promote financial literacy to enhance SME participation in Kenya’s financial system.

CHAPTER FIVE: SUMMARY, DISCUSSIONS, AND CONCLUSIONS

5.1 Introduction

This chapter presents the summary of the study, the conclusions drawn from the research findings, recommendations based on these conclusions, the limitations encountered during the study, and suggestions for further areas of study. The study sought to examine the factors influencing financial inclusion for small and medium-sized enterprises (SMEs) in Bungoma County, Kenya.

5.2 Summary of the Study

This study sought to examine the determinants of financial inclusion among small and medium-sized enterprises (SMEs) in Bungoma County, Kenya, with a particular focus on the role of agency banking and financial literacy. The research was guided by five specific objectives corresponding to five hypotheses, which were tested through regression analysis using data collected from 357 SME respondents. The findings are summarized below in line with each research objective.

Objective One: To examine the effect of agency banking perceived accessibility on the financial inclusion of SMEs in Bungoma County.

The study found that perceived accessibility of agency banking had a positive and statistically significant effect on financial inclusion ($\beta = 0.182$, $p < 0.001$). This implies that the easier it is for SMEs to access agency outlets through proximity, flexible operating hours, and convenient locations, the higher their likelihood of engaging in formal financial systems. Consequently, the null hypothesis **(H_{01})** stating that perceived accessibility of agency banking has no significant effect on financial inclusion was rejected. The findings emphasize that accessibility remains a crucial determinant of inclusion, as it minimizes physical and operational barriers for SMEs.

Objective Two: To examine the effect of the perceived cost of agency banking services on the financial inclusion of SMEs in Bungoma County.

Results indicated that perceived cost significantly influenced financial inclusion ($\beta = 0.154$, $p = 0.002$). Affordable and transparent transaction fees were found to encourage SMEs to adopt and frequently use agency banking services, while high costs discouraged participation. Thus, the null hypothesis **(H_{02})** that perceived service cost has no significant effect on financial inclusion was rejected. These findings suggest that cost considerations remain a major determinant of SME participation, highlighting the importance of maintaining competitive pricing structures to promote financial inclusion.

Objective Three: To establish the influence of perceived liquidity of agency outlets on the financial inclusion of SMEs in Bungoma County.

The findings revealed that perceived liquidity level had a significant positive effect on financial inclusion ($\beta = 0.231$, $p = 0.001$). SMEs demonstrated greater confidence and willingness to transact where agency outlets maintained adequate float and cash reserves, ensuring smooth and reliable service delivery. The null hypothesis **(H_{03})**, which proposed that liquidity of agency outlets has no significant influence on financial inclusion, was therefore rejected. This underscores the importance of consistent liquidity management as a trust-building mechanism in agency banking operations.

Objective Four: To determine the effect of perceived security of agency banking services on the financial inclusion of SMEs in Bungoma County.

The regression results showed that perceived security had a strong positive and significant effect on financial inclusion ($\beta = 0.311$, $p < 0.001$). SMEs prioritized secure transactions, data privacy, and fraud prevention when deciding whether to engage with agency outlets. As a result, the null hypothesis **(H_{04})** stating that perceived security has no significant effect on financial inclusion was rejected. The findings confirm that security assurance enhances trust and fosters greater utilization of agency banking services among SMEs.

Objective Five: To examine the moderating effect of financial literacy on the relationship between the perceptions of agency banking and the financial inclusion of SMEs in Bungoma County.

Financial literacy was found to have both a direct and moderating effect on financial inclusion. The direct influence was significant ($\beta = 0.336$, $p < 0.001$), indicating that financially literate SME owners were more likely to use and benefit from agency banking services. Furthermore, the interaction effects were also significant across all dimensions' accessibility ($\beta = 0.121$, $p = 0.003$), liquidity ($\beta = 0.109$, $p = 0.002$), security ($\beta = 0.182$, $p = 0.002$), and cost ($\beta = 0.124$, $p = 0.001$). These results demonstrate that financial literacy strengthens the relationship between agency banking factors and financial inclusion. Consequently, the null hypothesis **(H_{05})** that financial literacy does not significantly moderate the relationship between perceptions of agency banking and financial inclusion was rejected.

Overall, the study concluded that the combined effect of agency accessibility, liquidity, security, cost, and financial literacy explains approximately 63.8% of the variation in financial inclusion among SMEs ($R^2 = 0.638$). The results affirm that both structural enablers (such as accessibility, liquidity, and security) and behavioral capabilities (such as financial literacy) play complementary roles in driving SME participation in the formal financial ecosystem.

The study established that agency banking plays a significant role in enhancing financial inclusion for SMEs in Bungoma County. Accessibility, affordability, liquidity, and security were shown to be critical determinants, while financial literacy strengthened these effects, enabling SMEs to fully benefit from agency banking services. These findings show that financial inclusion is multidimensional, shaped by both structural enablers and behavioral capabilities, and highlight the importance of integrated interventions that expand agency banking services while simultaneously building financial literacy.

5.3 Conclusion of the Study

This section presents conclusions drawn from the study based on the four specific research objectives. These conclusions are grounded in the statistical findings and aligned with the theoretical and empirical literature reviewed in earlier chapters.

5.3.1 The Perceived Accessibility of Agency Banking Services on the Financial Inclusion of SMEs

The study revealed that the perceived accessibility of agency banking services has a significant positive influence on the financial inclusion of SMEs in Bungoma County. Easy access to agency outlets in terms of location, proximity, and flexible operating hours encourages SMEs to transact more frequently and adopt formal financial services. For many enterprises operating in rural and semi-urban areas, the convenience of nearby agency outlets reduces travel costs, time constraints, and logistical challenges that would otherwise hinder their engagement with the financial system.

This finding aligns with the Financial Intermediation Theory, which emphasizes that reducing physical and operational barriers enhances the efficiency of financial markets by lowering transaction frictions. Empirical evidence from Wanjohi (2021) similarly showed that the geographical spread and accessibility of agency outlets significantly improve SMEs' financial participation in Kenya, particularly in counties where formal bank branches are limited.

The conclusion drawn is that accessibility is a critical determinant of financial inclusion through agency banking. When SMEs perceive agency outlets as conveniently located and reliable, they are more likely to deepen their financial engagement. Therefore, policymakers and financial institutions should prioritize expanding the spatial reach of agency banking, extending operational hours, and leveraging technology to improve service convenience. Such efforts will ensure that SMEs, particularly those in remote regions, can easily access formal financial services and sustain their participation in the financial system.

5.3.3 Effect of Perceived Agency Liquidity Level on Financial Inclusion

The study established that agency liquidity level has a statistically significant positive effect on the financial inclusion of SMEs in Bungoma County. This finding implies that the ability of agency banking outlets to maintain sufficient cash flow and liquidity reserves is a critical determinant of their capacity to meet the financial needs of SMEs. When agents are adequately liquid, SMEs are more likely to access timely deposits, withdrawals, and credit-related services, thereby enhancing their participation in the formal financial system. Conversely, limited liquidity often results in transaction delays and erodes SMEs' confidence in agency banking services.

These results align with Financial Intermediation Theory, which emphasizes the role of financial intermediaries in bridging gaps between savers and borrowers by ensuring the smooth availability of funds. Empirically, the findings corroborate studies such as Mwangi (2021), which found that liquidity constraints within agency banking models reduce customer trust and limit the depth of financial inclusion, particularly in rural and SME-dominated areas.

The implication is that ensuring adequate liquidity at agency outlets not only strengthens SMEs' trust in financial services but also increases their reliance on agency banking as a viable alternative to traditional banking channels. Therefore, financial institutions must prioritize liquidity management strategies, such as float balancing, provision of emergency credit lines, and digital liquidity monitoring, to guarantee consistent service delivery and enhance inclusion.

5.3.4 Effect of Perceived Agency Security on Financial Inclusion

The study revealed that agency security plays a significant role in promoting financial inclusion of SMEs in Bungoma County. Respondents highlighted that they prefer agency outlets that demonstrate strong security measures, such as safe handling of cash, reliable transaction systems, and measures to prevent fraud. Where agencies were perceived as insecure, SMEs expressed reluctance to use them, fearing risks such as loss of money, fraudulent activities, or unauthorized access to financial information.

The findings are consistent with Financial Intermediation Theory, which emphasizes trust as a foundational condition for using financial intermediaries. Trust in the system ensures continued participation but may not by itself expand the level of inclusion. The relatively weaker agreement on issues such as ongoing security improvements and cashless alternatives points to possible reservations among SMEs, particularly regarding how dynamic or responsive agency security systems are. Mutua and Kamau (2023) also noted that SMEs are more likely to remain passive users of services unless security innovation is coupled with clear communication and evidence of evolving safeguards.

The findings further showed that enhanced security builds trust and confidence, encouraging SMEs to adopt and consistently use agency banking services. On the other hand, insecurity undermines confidence and discourages business owners from fully engaging in agency banking, which limits their financial participation. This implies that financial institutions and agents must prioritize safeguarding customer transactions and maintaining transparency to strengthen the role of agency banking in advancing financial inclusion for SMEs.

5.3.5 The Perceived Cost of Agency Banking Services on Financial Inclusion of SMEs

The study found that the perceived cost of agency banking services significantly influences the extent to which SMEs embrace financial inclusion. Respondents indicated that while agency banking provides convenience, the charges associated with transactions such as withdrawals, deposits, and transfers can discourage frequent use. For many small businesses operating on tight margins, even seemingly small costs add up over time and affect their willingness to utilize agency services.

However, the results also showed that when the costs are viewed as fair and proportional to the convenience offered, SMEs are more likely to adopt agency banking as a regular financial practice. Lower charges were linked to increased usage, while higher or unclear fees created hesitation and reduced trust in the system. This demonstrates that affordability is a central factor in determining whether SMEs perceive agency banking as a sustainable and accessible option for their financial needs.

The implication is that expanding banking alone is insufficient for meaningful financial inclusion without simultaneous investment in SME capacity building. Financial institutions, NGOs, and government actors should prioritize training programs, especially those tailored to small business contexts. Digital literacy, budgeting skills, and basic accounting can all be incorporated into outreach efforts. When SMEs are both aware and capable, they are more likely to derive long-term value from agency banking and transition into full participants in the financial system.

5.4 Recommendations of the Study

Based on the findings and conclusions of the study, the following recommendations are made to enhance financial inclusion among SMEs in Bungoma County:

i) Expanding Accessibility of Agency Outlets

Financial institutions should expand the geographical reach and operational accessibility of agency banking outlets, especially in underserved and rural areas of Bungoma County. Increasing the density of outlets, extending operating hours, and introducing mobile or digital-enabled agents will improve convenience and reduce barriers to access. Greater accessibility will ensure SMEs can reliably reach financial services close to their business locations, thereby strengthening financial inclusion.

ii) Enhance Liquidity Capacity of Agents

Commercial banks and other financial institutions should ensure that agency outlets are adequately resourced with cash to meet the daily demands of SMEs. This can be achieved through regular monitoring, improved float management systems, and timely replenishment support. Sufficient liquidity will minimize transaction disruptions and strengthen SMEs' trust in agency banking.

iii) Review and Rationalize Transaction Costs

Banks and policymakers should consider reviewing agency banking charges to make them more affordable for SMEs. Simplified and transparent pricing models would encourage more frequent use of agency services. Offering incentives such as reduced charges for bulk transactions or loyalty programs could further enhance adoption.

iv) Strengthening Security Measures in Agency Banking

To address concerns about fraud and safety, financial institutions should invest in advanced security technologies such as biometric verification, secure PIN systems, and real-time fraud detection. Training agents to handle transactions with integrity and transparency will also improve SME confidence in agency banking.

v) Enhance Financial Awareness among SMEs

Continuous financial literacy programs targeting SME owners should be rolled out to sensitize them about the benefits of agency banking, the cost structures, and available security measures. Improved awareness will empower SMEs to make informed decisions and fully embrace financial services.

5.5 Areas for Further Research

This study has opened several avenues from which further research can be pursued to its logical conclusion. Further studies can be done to establish how digital financial services, apart from agency banking, affect the financial inclusion of SMEs in rural Kenya. Also, comparison studies between different regions in Kenya might be important in providing information about how different locations are adopting agency banking. Finally, longitudinal studies that follow up on the long-term effects of agency banking on SMEs' growth and performance would give valuable insights into how sustainable agency banking is as a financial inclusion tool.

5.6 Limitations of the study

This study was limited by several factors. Accessing SME owners, especially those in remote areas, presented challenges that could affect data completeness. To address this, the study employed multiple data collection methods, including online and in-person surveys, to reach a broader audience and enhance response rates. Time constraints also impacted on the number of responses and the level of detail provided. To mitigate this, the study planned for ample time to administer the questionnaires and follow up with participants to ensure a thorough collection of data.

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APPENDIX I: Letter of Introduction

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BOARD OF POSTGRADUATE STUDIES

KCAU/BPS/2025 *Date: Wednesday, January 08, 2025*

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

RE: BLASIO JOEL KATIECH-REG NO: 23/01098

It is my distinct pleasure to introduce to you Blasio Joel Katiech who is a student in our institution pursuing a Master of Science in Commerce- Finance degree in the School of Business.

Blasio is conducting a research on a topic titled: *"Agency banking and financial inclusion of Small and Medium- Sized Enterprises in Bungoma County, Kenya"* which is part of the requirements of the program he is pursuing. The research as well as the data procured thereof shall be used for academic purposes only.

Any assistance accorded to him is highly appreciated.

In case of further inquiry, do not hesitate to contact the undersigned.

Yours faithfully,

DR. JACKSON NDOLO
DIRECTOR, BOARD OF POST GRADUATE STUDIES

APPENDIX II: Questionnaire:

Section A: Demographic Information

Please tick (√) the appropriate box:

1. Gender: [ ] Male [ ] Female
2. Age bracket: [ ] 18-25 [ ] 26-35 [ ] 36-45 [ ] 46-55 [ ] Above 55
3. Role at the SME: [ ] Owner [ ] Manager [ ] Both owner and manager [ ] Other (please specify): _________
4. Type of SME: [ ] Microenterprise (1-9 employees) [ ] Small enterprise (10-49 employees) [ ] Medium enterprise (50-249 employees)
5. Industry of the SME: [ ] Agriculture [ ] Manufacturing [ ] Retail [ ] Services [ ] Technology [ ] Other (please specify): _________
6. Years of operation: [ ] Less than 1 year [ ] 1-3 years [ ] 4-6 years [ ] 7-10 years [ ] More than 10 years

Section B: Independent Variables

Please indicate your level of agreement with the following statements using the scale: 1 - Strongly Disagree, 2 - Disagree, 3 - Neutral, 4 - Agree, 5 - Strongly Agree, using a tick (√)

i) Agency Accessibility:

Statement	1	2	3	4	5
There are enough agency banking points near my business.					
Agency banking services are easily accessible from my business location.					
The distribution of agency banking points in my area is adequate.					
I can easily find an agency banking point when I need financial services.					
Agency banking has improved access to financial services in my area.					
The location of agency banking points is convenient for my business operations.					
Agency banking has reduced the time I spend traveling to access financial services.					
The number of agency banking points in my area has increased over time.					

Agency banking points are well distributed across both urban and rural areas in my region.					
The agency accessibility meets the needs of my business.					

ii) Agency Liquidity Level

Statement	1	2	3	4	5
Agency banking points always have enough cash to meet my withdrawal needs.					
I can deposit any amount of money at agency banking points without issues.					
Agency banking points rarely run out of cash during business hours.					
The liquidity management at agency banking points is efficient.					
I have never been turned away due to a lack of cash at an agency banking point.					
Agency banking points can handle large transactions for my business when needed.					
The cash flow management at agency banking points meets my business needs.					
Agency banking points maintain consistent liquidity throughout the month.					
I trust that the agency banking points will have sufficient funds for my transactions.					
The liquidity level at agency banking points has improved over time.					

iii) Agency Security

Statement	**1**	**2**	**3**	**4**	**5**
I feel my money is safe when using agency banking services.					
Agency banking transactions are secure and protected from fraud.					

The authentication process for agency banking transactions is reliable.					
I trust the confidentiality of my financial information with agency banking.					
Agency banking points have adequate security measures in place.					
I have never experienced any security issues while using agency banking services.					
The security measures for agency banking are continuously improving.					
Agency banking provides secure alternatives to carrying cash for my business.					
I am confident in the security protocols used for agency banking transactions.					
The security level of agency banking meets the needs of my business.					

iv) Agency Services Cost

Statement	1	2	3	4	5
The fees for agency banking services are reasonable.					
Agency banking offers cost-effective financial services for my business.					
The cost of agency banking services is lower than traditional banking services.					
The pricing structure for agency banking services is transparent.					
Agency banking has reduced the overall cost of accessing financial services for my business.					
The cost of agency banking services is proportional to the quality of services provided.					
Agency banking offers competitive rates for financial transactions.					
The cost of agency banking services does not hinder my business operations.					
Agency banking provides value for money in terms of financial services.					
The cost of agency banking services has remained stable over time.					

Section C: Dependent Variable (Financial Inclusion)

Please indicate your level of agreement with the following statements using the scale: 1 - Strongly Disagree, 2 - Disagree, 3 - Neutral, 4 - Agree, 5 - Strongly Agree, using a tick (√)

Statement	1	2	3	4	5
Agency banking has increased my access to formal financial services.					
I use agency banking services frequently for my business transactions.					
Agency banking has made it easier for me to save money for my business.					
I can easily access credit facilities through agency banking.					
Agency banking has improved my ability to manage business finances.					
I feel more financially included since the introduction of agency banking.					
Agency banking has reduced my reliance on informal financial services.					
I can perform a wide range of financial transactions through agency banking.					
Agency banking has increased my confidence in using formal financial services.					
Overall, agency banking has positively impacted the financial inclusion of my business.					

Section E: Moderating Variable (Financial Literacy)

Please indicate your level of agreement with the following statements using the scale: 1 - Strongly Disagree, 2 - Disagree, 3 - Neutral, 4 - Agree, 5 - Strongly Agree, using a tick (√)

Statement	1	2	3	4	5
I understand basic financial concepts like interest rates and budgeting.					
I can effectively interpret my business's financial statements.					
I am knowledgeable about the different financial products available for my business.					
I understand how to separate personal and business finances.					
I can effectively track and manage my business cash flow.					
I have received formal training in financial management.					

I regularly attend financial literacy workshops or seminars.					
I participate in financial training programs offered by banks.					
I seek professional advice to improve my financial knowledge.					
I use available resources to enhance my understanding of financial services.					

Thank you for your participation in this survey.