

**INFLUENCE OF BUSINESS TRAINING AND FINANCIAL  
LITERACY ON LOAN REPAYMENT IN DEVOLVED FUND  
PROGRAMMES BY WOMEN ENTREPRENEURS IN HOMABAY  
COUNTY, KENYA**

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## DECLARATION

This research is my original work and has not been submitted for the award of a degree in any university or for any other award from an institution of higher learning

Signature .....

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## **DEDICATION**

I dedicate the research project to my beloved brother Jared Oluoch, my sister Beatrice Oluoch, my father Johnson Oluoch and the rest of my family, my schoolmates and friends.

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## **LIST OF ABBREVIATIONS AND ACRONYMS**

<b>AFAWA</b>	Affirmative Finance Action for Women in Africa
<b>AGPO</b>	Access to 30 per cent of Government Procurement Opportunities
<b>CBK</b>	Central Bank of Kenya
<b>FLF</b>	Financial Literacy Framework
<b>HCT</b>	Human Capital Theory
<b>KNBS</b>	Kenya National Bureau of Statistics
<b>MFIs</b>	Microfinance Institutions
<b>MSEs</b>	Micro and Small Enterprises
<b>MSMEs</b>	Micro, Small and Medium Enterprises
<b>NCC</b>	Nairobi City County
<b>NGAAF</b>	National Government Affirmative Action Fund
<b>SPSS</b>	Statistical Packages for Social Sciences
<b>WEF</b>	Women Enterprise Fund
<b>We-Fi</b>	Women Entrepreneurs Finance Initiative

## OPERATIONAL DEFINITION OF TERMS

Book Keeping Skills	Ability to correctly document and track income, expenses, assets, liabilities, and other financial transactions using appropriate accounting methods and tools.
Budgeting skills	The capacity to create, implement, and manage a financial plan that shows the sources of income, expenses, goals to save, and strategies for debt repayment.
Business Training	Interventions designed to provide participants with the necessary information to improve their business-related competencies and increase their understanding of fundamental business principles.
Credit management Skills	The competencies to assess creditworthiness, make informed credit decisions, monitor and control credit usage, and effectively manage debt obligations.
Devolved Fund Programme	The allocation and management of funds at the county level in a devolved system of government.
Financial Literacy	Capability of individuals to comprehend and effectively apply financial information and concepts.
Formal schooling	Education received through accredited educational institutions.
Interest servicing	Regular and timely payment of interest charges on loans or credit facilities.
Loan Default	The failure to meet the legal obligation of a loan.
Loan Repayment	Timely and complete fulfillment of financial obligations by borrowers.
Off-the-job training	Structured training programs, workshops, courses, or educational activities that are conducted away from the workplace and aim to enhance job-related competencies.

On-the-job training

The process of gaining job-related competencies through practical experience, guidance from supervisors, and learning by doing within the work environment.

## ABSTRACT

Over the years, women entrepreneurs have immensely contributed to a nation's economic development and growth. However, they face a number of challenges including discrimination, finance inaccessibility, loan default, inadequate training in entrepreneurship, and inexperience. Women-oriented microfinance institutions have emerged to leverage women entrepreneurs from the discrimination and funds inaccessibility challenges. However, women entrepreneurs in Kenya still register high levels of loan default. This study assessed how business training and financial literacy influenced loan repayment among Homabay women entrepreneurs engaging in devolved funds programmes. Financial Literacy Framework and the Human Capital Theory guided the study. Data was collected from 397 licensed women entrepreneurs using a structured questionnaire through person-to-person interview. The study adopted descriptive and inferential statistics to analyze the data. A multiple linear regression approach was used to establish the influence of financial literacy and business training on loan repayment. The study sent out 397 questionnaires, but only 359 were completely responded to, giving a 90.43 per cent response rate. The study observed that majority of women entrepreneurs participating in the devolved funds programmes in Homabay County were financial literates, had attained a business training, and were aware of loan repayment. The study found a positive correlation between business training and loan repayment, with a correlation coefficient of 0.839. Additionally, it identified a strong positive relationship between financial literacy and loan repayment, with a coefficient of 0.805. The regression analysis revealed that a unit increase in financial literacy would enhance loan repayment by 0.389 among women entrepreneurs. Similarly, a unit increase in business training would boost loan repayment by 0.571. These coefficients were statistically significant at the 5 per cent level. The study concluded that financial literacy and business training are significant contributors of loan repayment in devolved funds programmes by women entrepreneurs in Homabay County. The study recommends that business training sessions and financial literacy campaigns should be offered to women entrepreneurs to enhance their loans repayment rate.

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background Information

Women entrepreneurship contributes greatly to a nation's economic growth. Ocholah et al. (2013) explained that women entrepreneurship enhances families' livelihood and contributes to the accrual of national wealth. According to the International Labour Organization (ILO, 2021), women entrepreneurs have profoundly impacted the landscape of entrepreneurship by bringing forth innovative ideas, generating significant energy and capital resources for their nations, creating jobs, and fostering additional opportunities for suppliers and related business connections. This has made female entrepreneurs a substantial contributor to economic growth, and a creator of employment opportunities. Siwadi and Mhangami (2011) asserted that women in entrepreneurship are gaining prominence in both regional and international economies, particularly with a notable rise in women-owned businesses within the service sector. For instance, in Australia and Canada, women constitute approximately 50 per cent of new business start-ups each year (ILO, 2021). This has made most countries spearhead women's economic and political empowerment in the last few decades.

Women entrepreneurs face several challenges despite the crucial role they play in shaping a country's economic and industrial future. The key challenges confronting women entrepreneurs in Africa include discrimination, limited access to financial resources, difficulties in timely loan repayment, insufficient training, and inexperience (Omonywa & Muturi, 2015). These obstacles have resulted in a lower level of business performance among women entrepreneurs in comparison to their male counterparts (Omonywa & Muturi, 2015). Females participating in entrepreneurial activities face

gender-related discrimination. Kevehazi (2017) and Olarewaju and Fernando (2020) indicated that gender discrimination in entrepreneurship is a global problem.

In Africa, women have restricted access to resources including credit, educational opportunities, and training support compared to their male counterparts, which adversely affects their entrepreneurial potential (Mashapure et al., 2022). Bakhtiari et al. (2020) elaborated that the cost of finance and its accessibility are the critical constraints within the business environment. Morsy (2020) noted that the availability of finance to women is significantly limited on a global scale. The gender gap in access to financial accounts stands at 9 per cent in developing countries, and the difference in average earnings between men and women is 18 per cent (Omonywa & Muturi, 2015). In credit facilities, women face credit approval and credit condition challenges. According to Asiedu et al. (2012) loan approval and interest rate discrimination towards women-owned businesses arise from insufficient collateral. Women are requested higher collaterals and charged higher interest rates than men due to limited and less reliable information about female-owned businesses (McCracken et al., 2015). These challenges limit women-owned enterprises from upscaling the complex business environment. Over time, African women were discriminated against in the education cycle. However, this discrimination is long overdue and a new form of illiteracy (financial illiteracy) is kicking in. As exposed in Mutai (2015), despite women entrepreneurs having access to information, some are less equipped to process the information.

Credit default significantly impacts numerous female borrowers, particularly in the Kenyan context (Kamanza, 2014). The default in credit among women entrepreneurs is attributed to business failures, societal gender roles, and the diversion of loan funds to other critical needs. The credit default among women borrowers has made the credit

facilities to be skeptical about the women's entrepreneur ability, and they are considered high risk borrowers (Omonywa & Muturi, 2015). To address some of these challenges, local and national governments of developing countries such as Kenya, and large financing institutions like the African Development Bank and the World Bank at large, have developed financing initiatives oriented towards women entrepreneurship (Mwobobia, 2012). The Women Entrepreneurs Finance Initiative (We-Fi) was developed by the World Bank to encourage women's entrepreneurship by breaking the barrier to financial access for women entrepreneurs (World Bank, 2017). The Affirmative Finance Action for Women in Africa (AFAWA) developed by the African Development Bank (AfDB) also aims to solve the financial discrimination that women in business face in Africa (African Development Bank-AFDB, 2019). In Kenya, the Women Enterprise Fund (WEF), *Uwezo* Fund, National Government Affirmative Action Fund (NGAAF), and Access to 30 per cent of Government Procurement Opportunities (AGPO) were established and implemented to empower women entrepreneurship (Ministry of Public Service and Gender, 2020).

County governments in Kenya have also created interventions to empower women. Examples include diversification and modernization of Agriculture, Livestock and Fisheries in Kisii and Garissa Counties, County Business Centers in Kwale County, and the Biashara Fund in Kiambu County (Ministry of Public Service and Gender, 2020). Counties have also introduced devolved fund programmes to empower women entrepreneurs. Counties partner with the WEF and *Uwezo* Funds to provide various women empowerment initiatives aimed at enabling women to access credit, have financial support for their businesses, and participate in economic activities (Ministry of Public Service and Gender, 2020). These partnerships are part of the broader effort

by Kenya's devolved units to address gender inequality in entrepreneurship and promote the economic empowerment of women.

Despite the existence of these county-linked initiatives, loan repayment remains a critical challenge, especially for women entrepreneurs. The Micro and Small Enterprises (MSEs) sector in Kenya records high loan default rates, particularly among women-owned businesses. The Central Bank of Kenya (CBK, 2023) reported that the MSE loan default rate rose from 42.8 per cent in October 2022 to 60.7 per cent in June 2023. The default rate rose from 55.0 per cent in October 2022 to 62.3 per cent in June 2023 among female-owned businesses (CBK, 2023). This upward trajectory of loan default especially among female-owned businesses points to systematic issues such as inadequate business training and low levels of financial literacy.

### **1.1.1 Business Training, Financial Literacy and Loan Repayment in Kenya**

Business training is a multifaceted process that involves learning skills, knowledge and attitudes to achieve a business goal (Agbeko et al., 2017). Business training equips entrepreneurs with the necessary skills and knowledge in financial management to run business effectively. Financial literacy is the knowledge and ability to understand financial components and skills such as budgeting, investing, borrowing, taxation, and personal financial management (Ally et al., 2023). Through financial literacy, an entrepreneur can make informed decisions on budgeting, saving, borrowing, and investing. In Kenya, the lack of adequate business training and financial literacy among women entrepreneurs has been linked to poor loan repayment patterns and unsustainable business practices (Mutua et al., 2022).

The national government and county governments have developed initiatives to support women entrepreneurs through funding and capacity-building programs. Many counties

have launched their empowerment funds and partnerships to support women-led businesses. For instance, Kericho County partnered with Kenya Industrial Estates and the Stanbic Bank to provide women entrepreneurs with financial literacy training, business planning support, and access to affordable credit (Stanbic Holdings Plc, 2023). The Nairobi City County (NCC) government also developed the Nairobi Empowerment Fund to offer loans and grants to women and youth groups (NCC, 2024). Additionally, Kimabuu County runs the Biashara Fund which supports small businesses including those led by women (Mbugua & Kosimbei, 2019).

### **1.1.2 Business Training, Financial Literacy, and Loan Repayment in Homabay County**

Homabay County is a largely rural region with a population dependent on fishing and small-scale businesses for livelihood. According to the Kenya National Bureau of Statistics (KNBS) (2020), Homabay County has approximately 182,900 Micro Small and Medium Enterprises (MSMEs), with approximately 47,406 women participating in county-partnership fund programs including WEF and *Uwezo* Fund. Despite their active participation, women entrepreneurs in Homabay County face high loan default rates. As of 2019, the repayment rate under the *Uwezo* Fund in Homabay stood at just 22 per cent (*Uwezo*, 2019). In comparison, the relative loan repayment rate for the Biashara Fund in Kiambu County stood at 32 per cent, with a high default rate of 68 per cent (Mbugua and Kosimbei, 2019). Lack of business empowerment training programs are cited as the main cause of the low repayment rate. Ngigi (2017) also found that the average repayment rate for the *Uwezo* Fund in NCC is 31 per cent compared to the 34 per cent in Kericho County. These counties stand in contrast to other counties like Homabay, where the loan repayment rate is significantly lower. The low repayment rate may be attributed to insufficient financial literacy and lack of comprehensive

business training, which limits the capacity of women to manage loans effectively. The gap underscores the need for localized research to assess how business training and financial literacy affect loan repayment behaviour among women entrepreneurs in this context.

## **1.2 Statement of the Problem**

Women entrepreneurs contribute significantly to economic development by enhancing economic growth and creating jobs. Despite this contribution, women face numerous challenges that affect their entrepreneurship capacity, financing and growth (World Bank, 2017). Default in loan servicing and repayment remains a predominant challenge to the entrepreneurs (Mutua et al., 2022). Timely loan servicing and repayment helps in maintaining a strong credit score and improving borrowing credibility. However, in Kenya default on their loans by either paying less than the due amount, missing the payment schedule or making late payments is common among entrepreneurs (CBK, 2023). As of October 2022, the loan default rate among MSEs was 42.8 per cent. In June 2023, the rate rose sharply to 60.7 per cent, with defaults being high among female business owners (CBK, 2023). Homabay County reports one of the lowest loan repayment rates in the County, with *Uwezo* Fund recovery at only 22 per cent in 2019 (*Uwezo*, 2019). This is despite the availability of business training and financial literacy programs such as the Launch and Grow programme promoted by the Women for Africa Foundation, the African Women's Entrepreneurship Program (AWEP), the Gender and Entrepreneurship Together (GET Ahead) promoted by the International Labour Organization (ILO, 2017). Whether low levels of financial literacy, insufficient business training is linked to the poor repayment behavior is the empirical question.

Existing studies have examined the relationship between women's entrepreneurship and loan default in different contexts. Andriamahery and Qamruzzaman (2022) found that

financing accessibility and technical knowledge were essential in women's empowerment and entrepreneurship sustainability. Agbeko et al. (2017) established that training did significantly affect loan repayment rates in Ghana, but had a limited focus on microfinance institutions. Ally et al. (2023) established that financial education, location of the MFIs, and high interest rates negatively influenced the rate of loan repayment among women in business in Kinondoni Municipality in Dar Es Salaam, Tanzania. None of the above studies has linked business training, and financial literacy to loan repayment within the devolved funds programmes in Kenya. It is based on these conceptual and contextual gaps that this study explored how business training and financial literacy influence loan repayment by women entrepreneurs in devolved fund programmes in Homabay County in Kenya.

### **1.3 Research Questions**

- i. How does business training influence loan repayment among women entrepreneurs participating in devolved funds programmes in Homabay County?
- ii. To what extent does financial literacy influence loan repayment among women entrepreneurs participating in devolved funds programmes in Homabay County?

### **1.4 Study Objectives**

The general objective was to explore the influence of business training and financial literacy on loan repayment among women entrepreneurs in devolved funds programmes in Homabay County.

#### **1.4.1 Specific Objectives of the Study**

- i. To examine the influence of business training on loan repayment among women entrepreneurs participating in devolved funds programmes in Homabay County.
- ii. To determine the influence of financial literacy on loan repayment among women entrepreneurs participating in devolved funds programmes in Homabay County.

#### **1.5 Significance of the Study**

Through the study, women entrepreneurs would understand and appreciate the essential role of business training and financial literacy in financial decision-making and business management. They would gain insights on seeking and prioritizing relevant training opportunities that enhance their financial and business management skills. They would also build stronger financial foundations for their businesses.

The study's findings would inform institutions offering business and financial training to assess and enhance the effectiveness of their training programmes by tailoring their training programmes to the needs of women entrepreneurs. Additionally, the institutions would improve the quality and relevance of their training to adequately equip women entrepreneurs with the necessary skills for business success.

The study findings provided evidence to managers of devolved funds to guide the refinement of policy frameworks, and training programmes to mitigate risks associated with lending to improve loan repayment rates.

#### **1.6 Scope of the Study**

The research was conducted on a sample of women entrepreneurs from Homabay County. Homabay County was chosen as the study's area because it is primarily rural, and a large number of women work in small businesses. The county has also benefited

from WEF and the *Uwezo* Fund. The study targeted women who had obtained loans from these funds in Homabay County.

### **1.7 Organization of the Study**

This study is organized into five chapters. Chapter One introduces the study and presents the background of the problem, the statement of the problem, the research questions and objectives, the significance, and the scope. Chapter two is on the literature review and covers both empirical and theoretical literature relating to the study variables. The third chapter is on the methodology used to conduct the study. The chapter presents the research design used, the empirical model, the definition and measurement of variables, the target population, the sample size and sampling procedure, data types and sources, the pilot study, the method for data collection, the preparation of data, and the data analysis. In chapter four, findings and their discussion are presented along with results from various tests. The chapter reported the demographic characteristics of the study population, the descriptive analyses of the study variables, and inferential analyses. Chapter Five presented a summary of the study, the conclusions and policy implications of findings and suggestions for additional areas for research.

## CHAPTER TWO

### LITERATURE REVIEW

#### 2.1 Introduction

This chapter presents a review of theories and past studies that are relevant to the problem and objectives of the study on loan repayment.

#### 2.2 Theoretical Literature Review

The two theories that guided the study are the Financial Literacy Framework and the Human Capital Theory.

##### 2.2.1 Financial Literacy Framework (FLF)

Świecka (2019) elaborated that financial literacy is divided into four distinct components including financial knowledge, skills, attitude, and behaviour. The framework posits that for an individual to make rational financial decisions, they must first have the technical know-how of financial management in different circumstances (financial knowledge), use the knowledge and understanding to manage both anticipated and unpredictable money-oriented situations (financial skills), be ready at all the time for the economic knowledge and skills application to various financial situations (financial attitude), and adopt certain behaviours in the financial market (financial behaviour).

The current study is anchored on the financial knowledge and behaviour components of the framework. The financial knowledge aspects focus on how an individual or an organisation in the financial market can save and spend, plan and budget, and make informed decisions (Świecka et al., 2019). The financial behaviour aspects focus on how individuals or organisations can save, budget, exhibit entrepreneurial behaviour

and work ethics, and express empathy, charity and compassionate behaviours (Świecka et al., 2019). In the spectra of this framework, an entrepreneur needs to first learn how to plan, budget, spend and save their entrepreneurial outcome for them to comply with entrepreneurial ethics. Therefore, the framework implies that entrepreneurs should have the basic financial knowledge of financial planning, budgeting, spending and saving to make excellent financial decisions on entrepreneurial activities such as prompt loan repayment, which is an entrepreneurial ethic.

### **2.2.2 Human Capital Theory**

Human Capital Theory (HCT) is a concept that elaborates on how education and training are important in the labour force and human abilities. The theory was developed by Becker (1962) and advanced by Rosen (1976). It elaborated that people have skills and abilities that are improvable through education and training (Becker, 1962). These skills and abilities form the central nerve of the human capital. Goode (1959) describes this concept as the collection of attitudes, aptitudes, skills, knowledge and other acquirable personalities that enhance production capabilities. In the same line, Becker (1962) defined human capital as the idea that expands the real income in the future through investments in individuals. Therefore, human capital can be gained through on and off-the-job training and formal schooling.

This study is anchored on the education and training aspects of the theory to improve the knowledge and ability of an individual. In this perspective, the theory encourages investment in training, education and other human capital forms to enhance the productivity potential of an individual. In relation to this study, business training and financial literacy are forms of human capital development initiatives that can enhance women entrepreneurs' capacity in the business environment, thus positively influencing their capabilities to manage finances and repay loans. Therefore, the theory implies that

entrepreneurs who receive business training and improve their knowledge of financial matters is in a position to understand the essence of work ethics and generate sufficient skills to sustain their business and loan repayments.

### **2.3 Empirical Literature Review**

Ochillo (2009) examined the factors that affected how small-scale entrepreneurs repay their loans in the Eastlands region of Nairobi in Kenya. Data was collected from the urban region small-scale entrepreneurs, utilised probit regression for analysis and found that loan administration, the entrepreneurs' age, the attitude towards repayment of loans, and the performance of business significantly impacted the outcome of how these entrepreneurs repay their loans. Additionally, the study found that delays in loan issuance, insufficient supervision and lack of technical advice on sound business practices adversely affected loan repayment. The study recommended that loan repayment among small-scale entrepreneurs is improvable through business diversification, proper use of credit, expanding market access for SME products, timely loan processing, adequate supervision, and fostering positive attitudes towards repayment among entrepreneurs. However, the study did not evaluate business training and financial literacy on loan repayment, thus creating a conceptual gap.

Vu et al. (2015) used a Randomized Control Trial (RCT) to investigate how gender and business training affected the entrepreneurial ability of females in Vietnam. The study assessed the economic and social advantages of offering this training to female clients of the Tao Yeu May (TYM). Data was gathered from a sample of 600 participants using various methods including focus group discussions, direct interviews, behavioural games, and post-treatment surveys. Findings ascertained that gender and business training had a significant and positive effect on knowledge, uptake of new business practices, and a subsequent increase in profits. The study further established that

women participating in business training express a higher affinity to new business practices. Additionally, the study revealed that female borrowers who received business training demonstrated stronger internal locus of control, reduced interpersonal conflict, and greater involvement in decision-making. However, the study did not link business training to loan repayment, thus creating a contextual gap that this study addressed.

Omonywa and Muturi (2015) explored the factors that affected how women entrepreneurs repaid their loans in Kisii County in Kenya. The target group for the study were 400 entrepreneurs affiliated with the Kenya Women Finance Trust from which 80 respondents were selected through a stratified random sampling. The findings showed that market knowledge had a significant and positive impact on the repayment of loans. However, business training improved the loan repayment abilities of women entrepreneurs. These findings suggest that business training enhances women's understanding of market dynamics and credit management. However, the study did not evaluate the concept in the context of devolved funds, thus creating a contextual gap.

Ngigi (2017) assessed how the performance of women-owned businesses is influenced by training in budgeting, saving, debt management, and banks' products and services in Kasarani Constituency in NCC in Kenya. Using a sample of 97 respondents and Spearman rank-order correlation coefficient as data analysis, the study found that budgeting, banks' services and products, debt management and saving skills training influence women-owned businesses' financial performance. Further, the study showed that financial training is crucial in improving the progress of women-owned enterprises including loan repayment. However, the study focused on a constituency in the urban area, making the findings ungeneralizable to rural counties in Kenya, thus creating a contextual gap.

Agbeko et al. (2017) investigated how training and monitoring affected the repayment rate of loans in Ghana. The study used a longitudinal survey to gather data from 229 clients of UniCredit Ghana Limited MFI. Findings revealed that while training did not demonstrate a significant impact on loan repayment rates, client monitoring was found to have a significant influence on such rates. However, the study did not capture business training aspects, thus creating a conceptual gap that this study fulfilled.

James and Jane (2018) assessed the functions of microfinance institutions in promoting women's entrepreneurship in Uganda using data collected from 50 female clients of Pride Microfinance Limited in the Rubaga division in Kampala. The study analysed the data both qualitatively and quantitatively and established that the majority of the clients had obtained loans and expressed benefits derived from the training sessions on bookkeeping, credit management, marketing and customer care services. The study found that through the training session, the female entrepreneurs were able to make payments, transfer money, get business capital, and save money, aspects that are essential in entrepreneurship development. The findings imply that inadequate business education and training would result in loan repayment default for both female and male entrepreneurs. However, the study did not evaluate the concept in the devolved funds context, thus creating a contextual gap.

Bourlès et al. (2018) investigated the distribution of business training and its impact on borrower behaviour, specifically evaluating how business training affects microcredit repayment. The study analysed data on 365 business microcredit borrowers from Créa-Sol's database for the period between May 2008 and May 2011, using a bivariate probit model and a bivariate mixed model for the analysis. The study established that business training positively impacted the survival duration of loans, thereby demonstrating the efficacy of business training in extending the longevity of repayments. However, the

study did not evaluate this concept among women entrepreneurs, thus creating a contextual gap that this study fulfilled.

Mbugua and Kosimbei (2019) assessed the impact of credit amount, existing regulations, borrowing procedures, and group leadership on loan repayment of Biashara Fund in Kiambu County, Kenya. From a sample of 274, the study revealed a relationship between group leadership and loan repayment and a link between loan size and repayment capacity. The study also showed that the entrepreneurs had limited knowledge of loan regulations, suggesting the need for comprehensive business training to enhance their understanding of credit management policies. However, the study did not show the link between business training and loan repayment, thus creating a conceptual gap that this study fulfilled.

Tumba et al. (2022) examined how females' level of literacy in finance affected their business performance in Nigeria. The survey involved 247 female entrepreneurs in the North-Eastern region of Nigeria. Data collected was analysed using path modeling-structural equation. The study established that cash forecasting, financial education, and bookkeeping significantly affected female entrepreneurs' business performance. The study findings imply that financial literacy specifically financial education is critical to the success of women's entrepreneurship. However, the study did not evaluate the impact of financial education on loan repayment, thus creating a conceptual gap that this study fulfilled.

Andriamahery and Qamruzzaman (2022) evaluated how to finance accessibility, technical capability, and literacy in finance affected the progress of business women in Dhaka City in Bangladesh using data from 950 SMEs owned by women. Analysis through multivariate regression analysis and structural equation modelling found that

financing accessibility and technical knowledge expansion are essential in women's entrepreneurship sustainability and women empowerment. However, this study did not link financial accessibility and technical knowledge to loan repayment, thus creating a conceptual gap that this study addressed.

Ally et al. (2023) assessed the economic, social and institutional factors that affected how women in business repay their loans in Kinondoni Municipality in Dar Es Salaam region in Tanzania. Through simple and purposive sampling, 60 respondents and 8 key informants were selected from the employees of the Association for Social Advancement (ASA) International. The study utilised questionnaires, focus group discussions, interviews and documentary review to collect data. The study revealed that financial education/financial literacy, economic instability, repayment frequencies, education, moral hazards, family size, borrower characteristics, interest rates, and location of the MFIs influenced loan repayment rates among women entrepreneurs. However, the study did not evaluate the impact of business training, thus creating a conceptual gap that this study addressed.

## **2.4 Overview of Literature**

The study was anchored on the FLF by Świecka (2019) and HCT by Becker (1962). FLF hypothesized that an entrepreneur should have the financial knowledge to plan, budget, spend and save for them to make excellent financial decisions such as repaying their loans. The HCT hypothesized that training and education are forms of human capital development that enhances the capacity of an entrepreneur to manage finances and repay loans.

The evidence from past studies on women's entrepreneurship and loan repayment shows that business training is essential to women entrepreneurs as it improves their

entrepreneurial ability (Bourlès et al., 2018; Vu et al., 2015; Andriamahery & Qamruzzaman, 2022). Although entrepreneurial ability improvement encompasses efficient credit management, the studies did not link the improvement to devolved fund programs, thus creating a conceptual gap that this study fulfilled. Other studies like Tumba et al. (2022), James and Jane (2018), Agbeko et al. (2017), and Ally et al. (2023) showed that literacy in finance is critical to the success of women entrepreneurship, and elaborated that through financial education enable women entrepreneurs to understand business metrics like bookkeeping and credit management that are essential in entrepreneurship development. Although these studies proved that financial literacy among women entrepreneurs is essential in loan repayment, they do not consider the loan repayment aspect in the context of devolved fund programs, thus, creating a contextual gap that the study fulfilled. The available studies conducted in Kenya such as Ochillo (2009), Omonywa and Muturi (2015), Mbugua and Kosimbei (2019), and Ngigi (2017) showed that business training and financial literacy had a significant and positive effect on repayment of loans among women who engaged in entrepreneurship and participated in government funding programs. These studies evaluated this concept in Nairobi City, Kisii, and Kiambu Counties, and established that women's ability to repay loans is affected by different determinants. The different determinants limit the generalization of the findings to other counties in Kenya, thus creating a contextual gap that this study fulfilled. This study addressed these gaps by exploring how business training and financial literacy influenced the repayment of *Uwezo* and WEF loans among women entrepreneurs in Homabay County.

## **CHAPTER THREE**

### **METHODOLOGY**

#### **3.1 Introduction**

This chapter describes the approach the study adopted in the research process. It outlines the conceptual framework, model specification, variables description and measurement, the target population, location, and sampling technique. Data type, sources and instruments, pilot of the instrument, method for collecting data, data preparation and analysis are also presented.

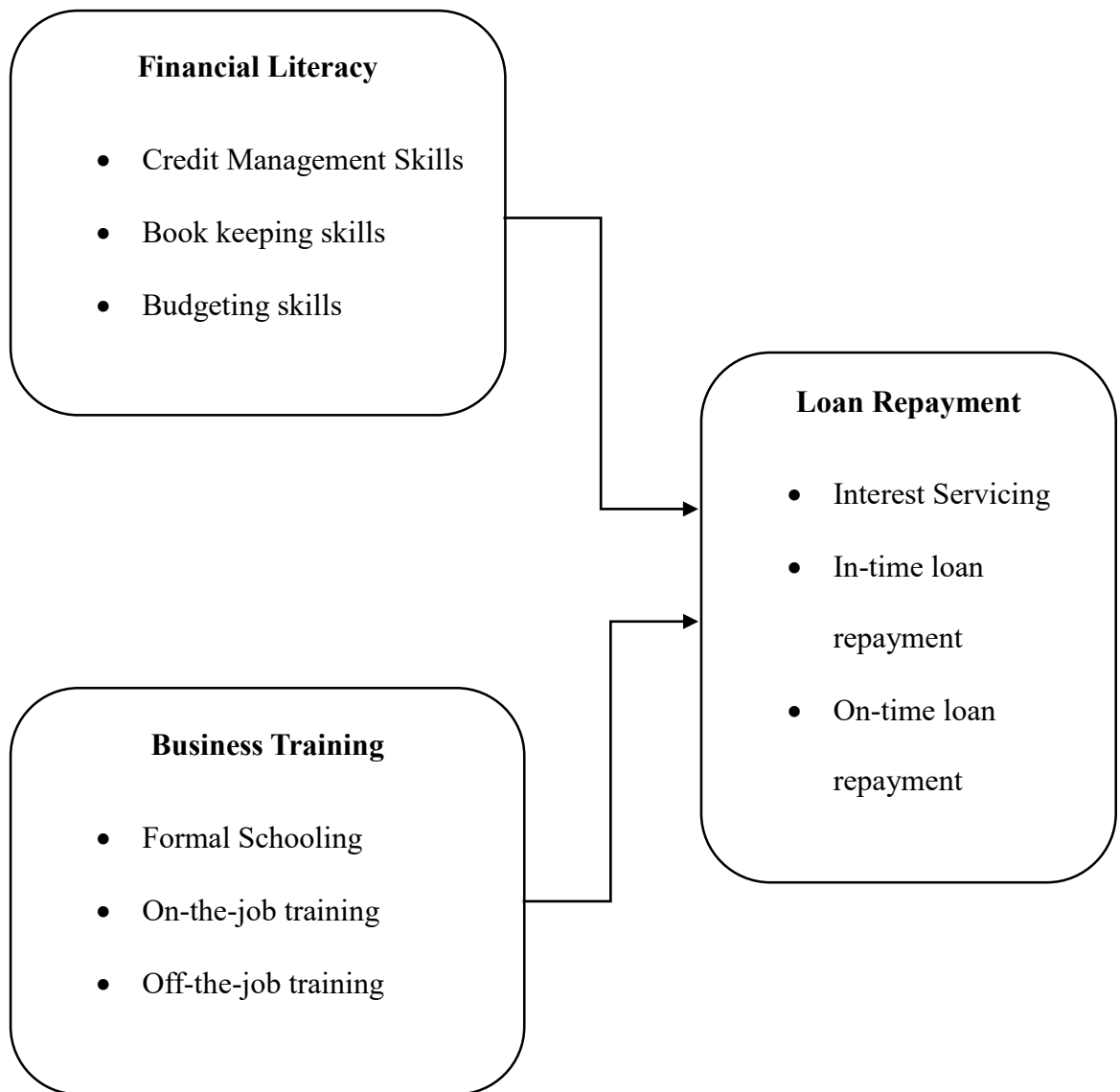
#### **3.2 Research Design**

The study adopted a quantitative research design. This approach facilitated the collection and analysis of numerical data that are crucial for exploring the relationships between business training, financial literacy, and loan repayment (Borgstede & Scholz, 2021). The study gathered quantitative data on the extent of business training offered, financial literacy level, and loan repayment behaviours. A descriptive design was used within the quantitative method. The researcher observed and collected data from the study population without interference, and focused on the examination of various aspects of business training, financial literacy, and loan repayment (Siedlecki, 2020). A survey was used to collect data from the target population. Specifically, from a diverse sample of women entrepreneurs participating in devolved funds programmes in Homabay County during the study period.

#### **3.3 Conceptual Framework**

The analysis of this study's problem was based on FLF and HCT. The FLF explains that financial literacy comprises of four elements including financial knowledge, skills,

attitude, and behavior, and that knowledge has to occur before the occurrence of a behavior (Świecka, 2019). In this perspective, learning has to take place for a behavior to be adopted, and learning requires training. The HCT explains individuals hold skills and abilities that are improvable through education and training (Becker, 1962). The theory encourages investments in human capital to increase productivity. In this perspective, financial literacy is a form of human capital that needs investment (business training) to increase productivity (loan repayment). These theories show an association between financial literacy, business training, and loan repayment. The reviewed literatures also portray this association and identify various determinants of loan repayment. The common determinants identified include credit management, bookkeeping, and budgeting. The financial literacy framework also documents these determinants as aspects of financial knowledge. Therefore, the conceptual framework was as follows:



**Figure 3.1: Conceptual Framework**

The study examined financial literacy through the lens of credit management skills, bookkeeping skills, and budgeting skills. Credit management skills involved ability of women entrepreneurs to handle credit, understand interest rates, and make informed borrowing decisions. Bookkeeping skills determined the proficiency of the women entrepreneurs in maintaining accurate financial records and tracking transactions.

Budgeting skills involved the women entrepreneurs' capability to create and adhere to business financial plans.

Business training was evaluated from on and off-the-job trainings and formal schooling perspectives. Formal schooling assessed the effect of academic education on females' entrepreneurial practices and financial management. On and off-the-job training focused on the practical skills and knowledge acquired through specialized training and hands-on-experiences sessions. This approach to evaluating business training captured the diverse educational background and training experiences of women entrepreneurs.

Loan repayment was assessed through the dimensions of interest servicing, in-time loan repayment and on-time loan repayment. Interest servicing captured how women entrepreneurs manage loan interest payments that reflects their understanding of financial obligations and debt servicing commitment. In-time and on-time loan repayment captured the punctuality and consistency of loan repayment, which reflects the women entrepreneurs' financial discipline and liquid management practices.

### **3.4 Model Specification**

The study aggregated the sub-variables into a composite variable using the averaging method of aggregation. The association between the composite variables was analyzed through an ordinary least squares framework and an empirical model was developed. The model equation is demonstrated in equation 3.1.

The empirical model is founded on the theoretical underpinnings of the Financial Literacy Framework and the Human Capital Theory. These theories emphasize the role of financial literacy and business training in shaping people's capacity and behaviour to meet financial obligations. The model elaborates that financial literacy and business training influence loan repayment behaviour among women entrepreneurs.

*Loan Repayment*

$$= \beta_0 + \beta_1 \text{Financial Literacy} + \beta_2 \text{Business Training} + \varepsilon \dots \dots \dots (3.1)$$

Where:  $\beta_0$  is the Model Intercept;  $\beta_1$  and  $\beta_2$  are the Coefficients; and  $\varepsilon$  is the Error term.

The model is based on theoretical and empirical gaps identified in the literature, and was appropriate for estimating the effect size and direction of the effect of independent variables on the dependent variable.

**3.5 Description and Measurement of Variables**

The study had two independent variables; business training and financial literacy, and a dependent variable; loan repayment.

**Table 3.1 Variables’ definition and measurement**

<b>Variables</b>	<b>Definition</b>	<b>Measurement</b>
Financial Literacy	Refers to the knowledge of credit management, bookkeeping and budgeting within a business setup.	A composite index based on the average standardized scores from 12 Likert-scale items (1-Strongly Disagree to 5-Strongly Agree) assessing credit management, bookkeeping and budgeting.
Business Training	Refers to the recipient of either formal or informal education on business management.	A composite index based on the average standardized scores from 12 Likert-scale items evaluating formal schooling, on-the-job training and off-the-job training.
Loan Repayment	Refers to the per centage of the loan amount that has been repaid.	A composite index of responses to 12 Likert-scale items measuring interest servicing, in-time loan repayment and on-time loan repayment behaviours.

### 3.6 Study Location and Target Population

The research was carried out in Homabay County, one of the 47 counties in Kenya. Fishing and mixed farming are the main economic activities for county residents, while business is a complementary economic activity. The county has a geographical coverage of 3154.7 square kilometres and inhabitants of approximately 1,131,950 with a total of 262,036 households (KNBS, 2020). According to the KNBS (2020), the population in the county consist of 592,367 females, 539,560 males, and 23 intersexes. There are eight sub-counties including Suba South, Sub North, Homabay Town, Rangwe, Ndhiwa, Rachuonyo North, Rachuonyo East and Rachuonyo South (Appendix 2).

The study targeted women entrepreneurs in Homabay County, which has approximately 182,900 MSMEs, out of which 134,400 are unlicensed and 48,500 licensed (KNBS, 2016). According to WEF (2019), 47,406 women participate in the devolved funds within Homabay County. Therefore, this study targeted 47,406 women entrepreneurs in Homabay County whose distribution by sub-county was as follows:

**Table 3.2 Homabay County women entrepreneurs' distribution per sub-county**

<b>Sub-County</b>	<b>No. of licensed women entrepreneurs</b>	<b>Proportion of women entrepreneurs</b>
Homabay Town	6,099	12.87%
Rangwe	4,026	8.49%
Ndhiwa	5,769	12.17%
Rachuonyo East	4,967	10.48%
Rachuonyo South	9,530	20.10%
Rachuonyo North	6,075	12.81%
Suba North	7,641	16.12%
Suba South	3,299	6.96%
<b>Total</b>	<b>47,406</b>	<b>100.00%</b>

Source: Women Enterprise Fund (2019)

### 3.7 Sample Size and Sampling Procedure

This study adopted the Yamae (1973) formula to estimate required number of women entrepreneurs to be included in the study. The Yamae (1973) formula is captured in equation 3.2.

$$n = N / (1 + N(e^2)) \dots \dots \dots (3.2)$$

In the formula, we assume a 95 per cent confidence level and a precision level (e) of 0.05, with N representing the total units in the target population. Substituting for these elements in the formula gave a sample size of 397.

The sample size was distributed proportionally in each sub-county as shown in Table 3.3.

**Table 3.3 Distribution of the Sample Size to the per sub-counties**

Sub-County	Proportion of women entrepreneurs	No. of licensed women entrepreneurs
Homabay Town	12.87%	51
Rangwe	8.49%	34
Ndhiwa	12.17%	48
Rachuonyo East	10.48%	42
Rachuonyo South	20.10%	80
Rachuonyo North	12.81%	51
Suba North	16.12%	64
Suba South	6.96%	28
<b>Total</b>	<b>100.0%</b>	<b>397</b>

Source: Research 2024

The study drew the sample from the target population using the purposive sampling technique. Purposive sampling specifies who should be recruited to the study as per certain criteria (Yang & Banamah, 2014). The entrepreneur must have acquired a loan from the devolved fund within Homabay County to be recruited to the study. Therefore, the purposive sampling ensured only women entrepreneurs with loan histories from the targeted funds took part in the study.

### **3.8 Data Type, Sources and Instrument**

The study collected primary data from sampled women entrepreneurs who have a loan history with devolved funds. The data was collected using a structured questionnaire that had three parts: demographic information, business training and financial literacy, and loan repayment. The structured questionnaire attached in Appendix 1, enabled standardization of responses from the respondents, consistency and accuracy of data collected (Cheung, 2014).

### **3.9 Pilot Study**

Pilot research was conducted among 40 women entrepreneurs (10% of sample) in the Homabay Town sub-county. The 10 per cent sample for pilot study is consistent with Hertzog's (2008) recommendation on the pilot test. The selected women entrepreneurs must have had a loan from the targeted funds. Responses from the 40 women entrepreneurs were evaluated for validity and reliability on the structured questionnaires' accuracy and consistency (Srinivasan & Lohith, 2017). Validity was established through content validity to ascertain the magnitude at which the structured questionnaire covers the variables under investigation and aspects of the study's research problem and objectives (Srinivasan & Lohith, 2017). Reliability tests were based on the Cronbach's alpha. The Cronbach's alpha methodology was implemented by clustering the responses per sub-variable and then correlating the sub-variables under each variable. Variables with a correlation of 0.7 and above were considered reliable, while those below 0.7 were considered unreliable (Srinivasan & Lohith, 2017).

### **3.10 Data Collection**

The structured questionnaires were administered through a person-to-person interview technique. This technique was the most appropriate for overcoming literacy barriers as

the study involved women entrepreneurs who might have limited literacy levels, which could hinder their ability to complete a self-administered questionnaire. The technique was also useful in enabling the researcher to clarify any ambiguities in the questionnaire that enhanced the accuracy of the responses (Allred & Ross-Davis, 2010).

### **3.11 Preparing for Data Analysis**

Immediately after collecting data, editing process by checking the questionnaires to detect and correct errors, inconsistencies, and missing values was done. After this, data cleaning was done and incomplete questionnaires were omitted. The edited and cleaned data was then entered and coded in SPSS for analysis.

### **3.12 Data Analysis**

The study conducted data analysis using descriptive and inferential statistics to quantify the relationship among business training, financial literacy, and loan repayment. Descriptive statistics used included mean, frequencies and standard deviation of the study variables, which were necessary for providing a foundational understanding of the data before conducting inferential analyses. Inferential statistics encompassed correlation and regression analyses. The correlation analysis evaluated both the magnitude and direction of the relationship among business training, financial literacy, and loan repayment. Regression analysis estimated a multiple linear regression model that estimates the influence of business training and financial literacy on loan repayment.

#### **3.12.1 Diagnostic Test**

The study conducted homoscedasticity and multicollinearity tests to determine whether the regression analyses obey the homoscedasticity and no multicollinearity assumptions of Ordinary Least Squares (OLS). The homoscedasticity test was conducted through

the Breusch-Pagan test, while multicollinearity was conducted through Variance Inflation Factor (VIF) test.

## CHAPTER FOUR

### FINDINGS AND DISCUSSIONS

#### 4.1 Introduction

The chapter reports and discusses the findings. The chapter begins with a presentation of demographic aspects of the study population, which includes the women entrepreneurs' level of education, business location in terms of sub-county, the operational years of the business, and the annual revenue. This is followed by descriptive statistics on the mean and standard deviation of financial literacy, business training and loan repayment. It also includes normality test and correlation analysis. The chapter ends with inferential analyses that test whether financial literacy and business training influence loan repayment. The inferential analyses are based on regression results

#### 4.2 Reliability Test Results based on Pilot Study data

A reliability test was performed to verify the consistency and dependability of the structured questionnaire to determine if it could generate stable and consistent responses. Cronbach's alpha was used to evaluate how well the individual items in a scale correlate with each other and contribute to a cohesive overall measurement. Results are presented in Table 4.1.

**Table 4.1 Reliability Results**

Variable	No. of Items	Cronbach's Alpha	Recommendation
Financial Literacy	12	0.939	Reliable
Business Training	12	0.942	Reliable
Loan Repayment	12	0.957	Reliable

Source: Computation from Research Data (2024)

Table 4.1 shows that the Cronbach's Alpha for all variables was above 0.7, which indicates a good internal consistency. This good internal consistency implies that the questionnaire was reliable for measuring financial literacy, business training and loan repayment.

### 4.3 Response Rate per Sub-County

The response rate is the fraction of the target sample that was reached and fully participated in the survey (Holtom et al., 2022). Table 4.2 below shows the response rate per sub-county.

**Table 4.2 Response Rate per Sub-County**

<b>Sub-County</b>	<b>Questionnaires Distributed</b>	<b>Questionnaires Duly filled</b>	<b>Response Rate</b>
Homabay Town	51	51	100.00%
Ndhiwa	48	41	85.42%
Rachuonyo East	42	40	95.24%
Rachuonyo North	51	45	88.24%
Rachuonyo South	80	78	97.50%
Rangwe	34	34	100.00%
Suba North	64	43	67.19%
Suba South	28	27	96.43%
<b>Total</b>	<b>397</b>	<b>359</b>	<b>90.43%</b>

Source: Computations from Research Data (2024)

Table 4.2 shows that out of the sample of 397, 359 were reached and completely responded to the survey, representing a 90.43 per cent response rate. This rate is satisfactory for a survey according to Sataloff and Vontela (2021) citing the acceptable range to be between 45 per cent and 75 per cent

#### 4.4 Demographic Characteristics of the Study Population

The analyses of the demographic factors were essential for understanding the study population in terms of the focus variables and determining whether the findings are generalizable to other populations in a different region. The demographic information was analyzed using frequency and per centages as captured in Table 4.3.

**Table 4.3 Summary of Demographic Characteristics of the Sample**

<b>Demographic Characteristics</b>	<b>Frequency</b>	<b>Per centage (%)</b>
<b>Level of Education</b>		
College/Certificate/Diploma	109	30.4%
No formal education	32	8.9%
Postgraduate	36	10.0%
Primary education	27	7.5%
Secondary education	52	14.5%
Undergraduate	103	28.7%
<b>Experience in Business</b>		
1-5 years	173	48.2%
6-10 years	101	28.1%
Above 10 years	31	8.6%
Below 1 year	54	15.0%
<b>Annual Revenue of the Business</b>		
10,000 - 50,000	147	40.9%
50,001 - 100,000	97	27.0%
Above 100,000	47	13.1%
Below 10,000	68	18.9%

Source: Computations from Research Data (2024)

In the level of education category, 109 (30.4 per cent) of the respondents showed that they had a college or diploma certificate, 32 (8.9 per cent) had no formal education, 36 (10.0 per cent) were postgraduate individuals, 27 (7.5 per cent) had KCPE certificate, 52 (14.5 per cent) had KCSE certificate, and 103 (28.7 per cent) had undergraduate certificates. This suggests that the majority of the women entrepreneurs participating in devolved funds programmes in Homabay County have at least a college education and essential understanding to follow instructions on how to manage business finances.

Concerning experience, 173 (48.2 per cent) of the women entrepreneurs have been operational for between 1 and 5 years, 101 (28.1 per cent) have been operational for between 6 and 10 years, 31 (8.6 per cent) have been operational for above 10 years, and 54 (15.0 per cent) have been operational for less than a year. This suggests that the majority of women entrepreneurs have operated businesses for long enough to qualify for loans at the devolved funds programmes. This demonstrated that most women entrepreneurs participating in devolved funds have sufficient experience to qualify for loans

Table 4.3 also showed that 147 (40.9 per cent) of the women entrepreneurs have an annual turnover of between Kshs. 10,000 and 50,000, 97 (27.0 per cent) had an annual turnover of between Kshs. 50,001 and 100,000, 47 (13.1 per cent) had an annual turnover of above 100,000 shillings, and 68 (18.9 per cent) had an annual turnover of below 10,000 shillings. This suggests that the majority of the women entrepreneurs were generating income of above 10,000 shillings. This demonstrates that most women entrepreneurs participating in devolved funds programmes in Homabay County generate substantial income to borrow and repay loans.

## **4.5 Descriptive Analysis of Variables**

### **4.5.1 Descriptive Statistics**

Descriptive analysis was performed to provide an insight into the distribution and characteristics on the collected data of the key study variables: financial literacy, business training and loan repayment. This study examined measures of mean and standard deviation to offer insights into the central tendencies, variability and overall appropriateness of the data for inferential analyses. These measures are captured in Table 4.4.

**Table 4.4 Summary of Descriptive Statistics**

	<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>
<b>Financial Literacy</b>			
Credit Management Skills	359	3.9032	.78982
Bookkeeping Skills	359	3.9777	.84181
Budgeting Skill	359	4.0063	.77347
Financial Literacy	359	3.9624	.8017
<b>Business Training</b>			
Formal Schooling	359	3.7688	.99149
On-the-Job Training	359	3.9673	.78535
Off-the-Job Training	359	3.8983	.83237
Business Training	359	3.8781	.86974
<b>Loan Repayment</b>			
Interest Servicing	359	3.8983	.85227
In-Time Loan Repayment	359	4.0230	.72635
On-Time Loan Repayment	359	3.9290	.79179
Loan Repayment	359	3.9501	.79014

Source: Computation from Research Data (2024).

Table 4.4 shows that credit management skills had an average of 3.9032 and deviance of 0.78982, implying that most women entrepreneurs had credit management skills. The bookkeeping skills had a mean of 3.9777 and a dispersion of 0.84181, indicating that the majority of women entrepreneurs can record their business transactions into organized accounts. The budgeting skills had an average of 4.0063 and a deviation of 0.77347, suggesting that most women entrepreneurs are capable of preparing their spending plans. The financial literacy had a mean of 3.9624 and a dispersion of 0.8017, suggesting that most women entrepreneurs participating in devolved funds programmes in Homabay County had the knowledge of credit management, bookkeeping and budgeting within the business setup.

Formal schooling had an average of 3.7688 and a dispersion of 0.99149, on-the-job training had a mean of 3.9673 and a dispersion of 0.78535, and off-the-job training had a mean of 3.8983 and a dispersion of 0.83237. Business training had an average of

3.8781 and a deviation of 0.86974. These statistics suggests that the majority of women entrepreneurs participating in the fund's programmes had adequate training in business management.

In the loan repayment category, interest servicing had a mean of 3.8983 with a dispersion of 0.85227, in-time repayment of loans had a mean of 4.0230 with a centrality of 0.72635, and on-time repayment of loans had a mean of 3.9290 with a dispersion of 0.79179. The loan repayment had a mean of 3.9501 with a dispersion of 0.79014. these indicate that most women entrepreneurs are aware of their loan repayment mandates.

The descriptive measures show that all the variables had a consistent sample size, which ensures robustness in the inferential analyses. The mean values of all the variables are relatively close to 4 on a 5-point scale, which suggests that the respondents exhibit favourable levels of financial literacy, business training, and loan repayment. The standard deviations of all variables are below 1.0, suggesting limited variability that reflects the homogeneity of the data.

#### **4.5.2 Normality Test Results**

The study tested the skewness and kurtosis of the composite variables of financial literacy, business training and loan repayment to evaluate the normal distribution. Skewness points to the degree of asymmetry in distribution, whereas kurtosis assesses the sharpness of the distribution's peak (Kim, 2013). The analysis was conducted and captured in Table 4.5.

**Table 4.5 Skewness and Kurtosis of the Independent and Dependent Variables**

	N	Skewness		Kurtosis	
		Statistic	Std. Error	Statistic	Std. Error
Financial Literacy	359	-1.299	.129	1.985	.257
Business Training	359	-1.231	.129	1.578	.257
Loan Repayment	359	-1.488	.129	2.937	.257

Source: Computation from Research Data (2024)

Table 4.5 indicates financial literacy as slightly negatively skewed with a value of -1.299 and a kurtosis value of 1.985, business training was also negatively skewed with a value of -1.231 and a kurtosis value of 1.578, and loan repayment was also negatively skewed with a value of -1.488 and a kurtosis value of 2.937. The values show that all the variables met the threshold for normal distribution as put forth by Bryne (2011). According to Bryne (2011), normal distribution is achieved when the skewness falls between -2 and +2, and kurtosis falls within the range of -7 and +7. The skewness statistics satisfies the cut-offs for normally distributed data. Similarly, all the variable's kurtosis statistics satisfies the rule of thumb for normal distribution (Bryne, 2011). The normal distribution in all the variables ensures that the subsequent regression analysis is appropriately applied to draw generalizable conclusions.

#### **4.5.3 Correlation of the Study Variables**

Pearson's correlation analysis was conducted to evaluate the strength of the pairwise relationship between variables (Schober et al., 2018). Pearson's correlation approach assesses the linear association between normally distributed variables (Schober et al., 2018). The results are captured in Table 4.6.

**Table 4.6 Pearson's Correlation Analysis Results**

		<b>Financial Literacy</b>	<b>Business Training</b>	<b>Loan Repayment</b>
Financial Literacy	Pearson Correlation	1		
	Sig. (2-tailed)			
Business Training	Pearson Correlation	.809**	1	
	Sig. (2-tailed)	<.001		
Loan Repayment	Pearson Correlation	.805**	.839**	1
	Sig. (2-tailed)	<.001	<.001	

Source: Computations from Research Data (2024)

Table 4.6 shows that financial literacy and loan repayment are highly correlated with a coefficient of 0.805 ( $p = 0.001$ ). Business training and loan repayment were also highly correlated with a coefficient of 0.839 ( $p = 0.001$ ). Financial literacy and business training were also highly correlated with a coefficient of 0.809 ( $p = 0.001$ ). These coefficients signal that these variables were strongly and positively correlated (Schober et al., 2018). This association suggests that an improvement in either financial literacy or business training would result in a corresponding improvement in loan repayment among women entrepreneurs participating in devolved funds in Homabay County.

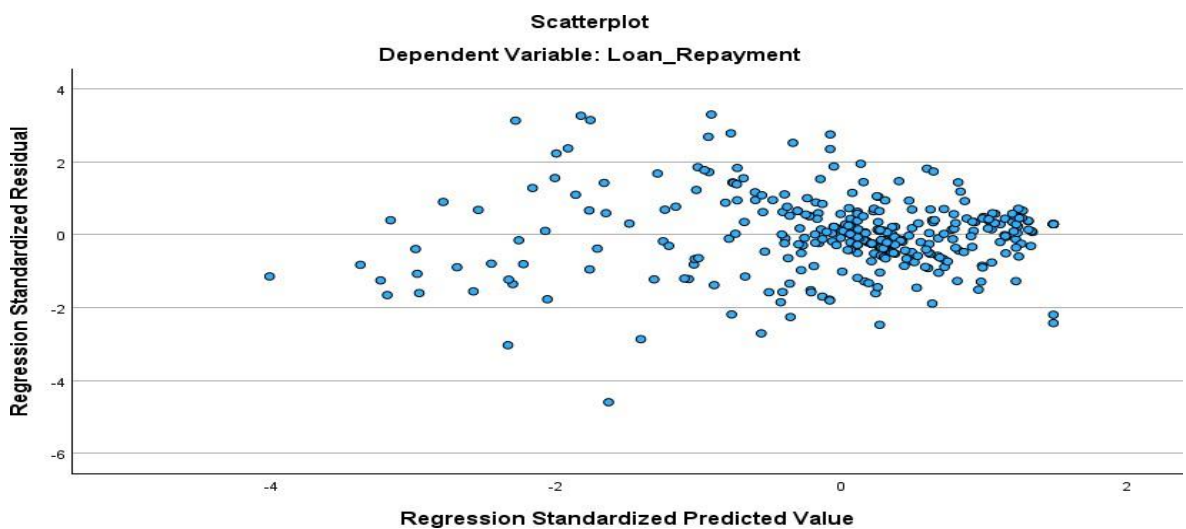
The strong positive association between financial literacy and business training suggest a strong linear connection between these variables. This strong linear relationship is beneficial for understanding the combined contribution of these variables on loan repayment. The strong and statistically significant correlation among the variables suggests a meaningful relationship, which provides a solid basis for regression analysis. Therefore, the statistics in the descriptive analyses suggest that the data is apposite for inferential examination.

## 4.6 Regression Results

Regression analysis was done to determine whether business training and financial literacy influenced the repayment of loans among women entrepreneurs participating in devolved funds programmes in Homabay County.

### 4.6.1 Homoscedasticity Test Results

The study tested for homoscedasticity by plotting regression residuals against the predicted values of loan repayment from the regression model. The plot is captured in Figure 4.1 below.



**Figure 4.1 Homoscedasticity Plot**

Figure 4.1 displays that the spread of residuals was wider for lower predicted values and narrow for higher predicted values, visualizing a cone-shaped pattern, which suggests that the variance of residuals reduces as the predicted values increase, signaling heteroscedasticity (Romeo et al., 2023). The overall distribution is dispersed, which implies that heteroscedasticity may not be a significant concern. However, there is a need for further exploration. Therefore, a further test based on the Breusch-Pagan method was conducted under the null hypothesis of equal variance in the residuals (Halunga et al., 2017). The test results are reported in Table 4.7.

**Table 4.7 Breusch-Pagan Test Results**

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	196.860	2	98.430	26.216	<.101 <sub>b</sub>
	Residual	1336.643	356	3.755		
	Total	1533.503	358			

Source: Computation from Research Data (2024)

According to Halunga et al. (2017), the null hypothesis of homoscedastic residuals is rejected only if the the significance level (0.05) is greater than the Breusch-Pagan test's p-value. As shown in Table 4.7, the p-value is greater than the significance level. The null hypothesis of homoscedasticity. Therefore, the Breusch-Pagan's test results confirm homoscedasticity in the regression model.

#### **4.6.2 Multicollinearity Test Results**

The VIF test was used rule out multicollinearity in the model. The test evaluates whether the high correlation between financial literacy and business training could cause unreliability of the coefficient estimates, interpretability loss to the regression coefficients, and loss of statistical power of the predictors in the regression model (Vatcheva et al., 2016). For this analysis, the study assumed that financial literacy and business training were not correlated (Weeraratne, 2016). Through VIF, the study measured the extent of inflation of the variance of the estimated regression coefficient of the independent variables (Shrestha, 2020). The results are captured in Table 4.8.

**Table 4.8 VIF Test Results**

	<b>Standardized Coefficients</b>	<b>Tolerance</b>	<b>VIF</b>
<b>Financial Literacy</b>	.365	.345	2.901
<b>Business Training</b>	.543	.345	2.901

Source: Computation from Research Data (2024).

Shrestha (2020) indicates that  $VIF = 1$ , signifies zero correlation, a VIF of more than 1 but less than 5 signifies moderate correlation, but a VIF of between 5 and 10 indicates a high correlation. Test results in Table 4.8 show that the VIF for financial literacy and business training is 2.901, which is higher than 1 but lower than 5, signifying a moderate correlation as per Shrestha's (2020) thresholds. Tay (2017) explains that zero correlation and moderate correlation have insignificant influence on the outcomes in the regression model. Therefore, the moderate correlation between financial literacy and business training has insignificant influence and, hence, does not warrant statistical remedy.

#### **4.6.3 Influence of Financial Literacy and Business Training on Loan Repayment**

The study used multiple linear regression model to determine how financial literacy and business training influenced the repayment of loans among women entrepreneurs participating in devolved funds in Homabay County. The study regressed loan repayment on financial literacy and business training. The results are reported in Table 4.9.

**Table 4.9 Summary of Regression Results**

<b>Model Component</b>	<b>Value</b>	
<b>Model Summary</b>		
Multiple R	0.865	
R Square	0.748	
Adjusted R Square	0.746	
Std. Error of the Estimate	0.46766	
<b>ANOVA</b>		
F-statistic	527.911	
Significance (p-value)	0.001	
<b>Coefficients</b>		
<b>Predictor Variables</b>	<b>Unstandardized Coefficients (B)</b>	<b>P-value</b>
Financial Literacy	0.368	0.001
Business Training	0.540	0.001
Constant	0	

Source: Computation from Research Data (2024).

The coefficient of determination (R-Square) examined how financial literacy and business training had a significant influence on the repayment of loans. Table 4.9 shows that financial literacy and business training could explain approximately 74.8 per cent of changes in loan repayment. However, this per centage is reduced to 74.6 per cent when the adjusted R square is used. Although adjusted R squared is more stable and less volatile compared to R squared, R-squared is imperative as it determines whether a relationship is spurious (Chen & Qi, 2023).

The ANOVA results confirmed that the regression model is statistically significant. The statistics in Table 4.9 demonstrates that the F-statistic had a p-value of 0.001, which confirms the model's significance at one per cent level of significance. This finding demonstrates that financial literacy and business training meaningfully contribute to the variance in loan repayment (Chen & Qi, 2023).

The first research objective was to examine how business training influenced the repayment of loans among women entrepreneurs participating in devolved funds programmes in Homabay County. Statistics in Table 4.9 show that an increase in the

average of the mean of standardized scores of formal schooling, on-the-job training, and off-the-job training would increase loan repayment by 0.540 units. This influence is statistically significant with a p-value of 0.001. This implies that there is strong evidence that business training in terms of formal schooling, on-the-job training, and off-the-job training contributed to better loan repayment behaviours. This outcome aligns with Bourlès et al. (2018) who established that business training had both direct and indirect effects on loan repayment in France, and Karlan and Valdivia (2010) who also demonstrated that business training improves businesses, which enhances the entrepreneurs' capability to repay their loans. However, the discovery is inconsistent with Agbeko et al. (2017) who found that business training failed to improve loan repayment rates among microfinance debtors in Ghana.

The second research objective was to evaluate how financial literacy influenced the repayment of loans among women entrepreneurs participating in devolved funds programmes in Homabay County. Statistics in Table 4.10 show that an increase in the average of the mean of the standardized scores of credit management, bookkeeping, and budgeting would result in a 0.368 increase in the average of the mean of the standardized scores of interest servicing, in-time loan repayment, and on-time loan repayment, which is significant at 5% level of significance. This finding is consistent with Nyamboga et al. (2014) who showed that financial education encouraged Small and Medium Enterprises (SMEs) to go for loans and repay them on schedule. Similarly, Supriyadi, Saifi and Endang Np (2024) demonstrated that financial literacy significantly influenced business performance and repayment of loans among Micro, Small and Medium Enterprises (MSMEs). Additionally, the finding is consistent with Baidoo et al. (2020) who demonstrated that financially literate individuals had a higher likelihood of repaying loans they received compared to their counterparts who are less

financially literate. However, the finding is inconsistent with Wanjiku and Muturi (2015) who established a negative and statistically significant relationship between financial literacy and repayment of loans in Kenya.

The outcomes of this study are consistent with expectations from the theoretical framework and empirical literature. The financial knowledge and behaviour components of the financial literacy framework suggest that financial knowledge/literacy is essential for making informed financial decisions and entrepreneurial ethics (Świecka et al., 2019). The Human Capital Theory, which underpinned this study, argues that entrepreneurs who receive business training and improve their financial literacy are in a position to sustain their businesses (Becker, 1962).

## CHAPTER FIVE

### SUMMARY, CONCLUSION AND POLICY IMPLICATION

#### 5.1 Introduction

The chapter provides a summary and conclusion of the study based on the research findings. It also presents the policy implications of the results and offers suggestions for future research.

#### 5.2 Summary of the Study

Women entrepreneurship is a key driver of a nation's economic development by providing employment opportunities, generating income for women and youths, and providing revenues to the government in the form of business taxes. Despite this important role, women entrepreneurs in developed and developing countries face numerous challenges including discrimination, limited access to financial resources, difficulties in timely loan repayment, insufficient training and inexperience in business management that have affected their entrepreneurial capacity. Default in loan servicing and repayment is predominant among the MSEs operated and managed by women in Kenya. Although timely loan servicing and repayment are essential in maintaining a good credit score, women entrepreneurs in Kenya are either paying their loans late, defaulting in serving the loan interest or paying less amount than the interest due (CBK, 2023). This trend necessitated an exploration of how business training and literacy in finance influenced the repayment of loans among women in business who are participating in devolved funds programmes in Homabay County. Although numerous studies including Andriamahery and Qamruzzaman (2022), Agbek et al. (2017), Ally et al. (2023) and Ngigi (2017) have been conducted in focusing on women's

entrepreneurship and loan default, the concept of devolved funds programmes had not been addressed, presenting a contextual gap.

The study focused on determining how business training and literacy in financial matters influenced the repayment of loans among women entrepreneurs participating in devolved funds programmes in Homabay County in Kenya. The study explored two precise purposes: (i) how business training influenced the repayment of loans among women entrepreneurs participating in devolved funds programmes in Homabay County, and (ii) how financial literacy influenced the repayment of loans among women entrepreneurs participating in devolved funds programmes in Homabay County.

The study was grounded on the financial literacy framework and human capital theory. This study used a descriptive design anchored on a quantitative research approach. The study sampled 397 licensed women entrepreneurs in Homabay County and used a structured questionnaire to collect data on credit management, bookkeeping, budgeting, formal schooling, on-the-job training, off-the-job training, interest servicing, in-time loan repayment, and on-time loan repayment aspects. The collected data was prepared for inferential analysis by averaging the means of the standardized scores of credit management, bookkeeping and budgeting to form financial literacy. Averaging the means of the standardized scores of formal schooling, on-the-job training, and off-the-job training to form business training. Averaging the means of the standardized scores of interest servicing, in-time loan repayment, and on-time loan repayment to form loan repayment. The study analyzed the data using descriptive statistics and regression.

Findings showed that a unit growth in the standardized composite score of formal schooling, on-the-job training, and off-the-job training corresponds to a 0.540 increase in the standardized composite score of interest servicing, in-time loan repayment, and

on-time loan repayment. This coefficient was significant at a 5 per cent level of significance. Further, an increase in the standardized composite score of credit management, bookkeeping and budgeting led to a 0.368 increase in the standardized composite score of interest servicing, in-time and on-time repayment of loans. The results p-value was 0.001, signaling that the coefficient is statistically significant, suggesting that financial literacy had a significant and positive influence on the repayment of loans. Therefore, when the financial literacy of women entrepreneurs is enhanced, their loan repayment rate will improve.

### **5.3 Conclusion**

The study made two conclusions based on the research questions. First, business training significantly increases repayment of loans from devolved programmes by women entrepreneurs in Homabay County. The analysis established that an increase in standardized business training scores that comprises of formal schooling, on-the-job, and off-the- job training leads to an increase in the repayment of loans, at the 5 per cent level of significance. Secondly financial literacy significantly increases repayment of loans from devolved funds programmes among women entrepreneurs in Homabay County. Standardized financial literacy scores comprising of credit management, bookkeeping and budgeting leads to increases in standardized composite score of interest servicing, in-time loan repayment, and on-time loan repayment.

### **5.4 Policy Implications of the Findings**

The study suggests that devolved fund managers should collaborate with training institutions to develop, implement and offer business training programs or sessions that are personalized to the training needs of women entrepreneurs. Training should cover business management, financial planning, and strategic decision-making. The results

showed that an increase in business training resulted in an improvement in loan repayment. Therefore, ensuring that women entrepreneurs receive adequate business skills in bookkeeping, credit management and budgeting would equip them to manage their finances and businesses effectively.

Further, county governments and financial institutions should establish widespread financial literacy campaigns targeting women entrepreneurs. These be on; interest rates, loan terms, debt management, and financial planning. This study showed that an increase in financial literacy would increase loan repayment among women entrepreneurs. Therefore, ensuring the women entrepreneurs have better financial knowledge would improve loan repayment rate.

### **5.5 Suggestions for Further Research**

This study concludes that business training and financial literacy account for about 75 per cent of the variations in loan repayment among women entrepreneurs in devolved funds programmes in Homabay County. Other factors such as business performance, household and social obligations, credit conditions, and financial discipline could contribute to the remaining 25 per cent. Future studies could explore how these additional factors influence loan repayment. Capturing these factors would enhance the understanding of loan repayment dynamics beyond business training and financial literacy. More research could also focus on how digital financial literacy including knowledge and use of mobile banking and digital payment systems could influence loan repayment.

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## APPENDICES

### Appendix 1: Structured Questionnaire

I am JOSEPH OCHIENG' OLUOCH, a postgraduate student of the Kenyatta University, conducting a study on the Influence of Business Training and Financial Literacy on Loan Repayment among Women Entrepreneurs Participating in Devolved Fund Programmes in Homabay County, Kenya. You have been selected as a key respondent to this study, and your participation is voluntary. Your responses will be kept strictly confidential and used solely for academic purposes.

Before proceeding to fill the questionnaire, please indicate whether you agree to participate. Yes, I agree to participate [        ]

No, I do not wish to participate [   ]

If you agree to participate kindly proceed to the questionnaire.

### Section A: Demographic Information

1. Highest Level of Education

No formal education [   ]      Primary education [   ]      Secondary  
education [   ]

College/Certificate/Diploma [   ]      Undergraduate [   ]      Postgraduate [   ]

2. In which sub-county is your business located?

Homa-bay town [   ]      Ndhiwa [   ]      Rangwe [   ]      Rachuonyo North [   ]

Rachuonyo South [   ]      Rachuonyo East [   ]      Suba North [   ]      Suba South  
[   ]

3. Number of years the business has been operational

Below 1 year [   ]      1 – 5 years [   ]      6 – 10 years [   ]      Above 10 [   ]

4. Annual revenue of the business in Kshs

Below Kshs 10,000 [ ]      10,000 – 50,000 [ ]      50,001 – 100,000 [ ]

Above 100,000 [ ]

**Section B: Financial Literacy and Business Training**

In this section, put a tick (✓) on the box that best describes your level of agreement with the corresponding statement.

**Financial Literacy**

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
<b>Credit Management skills</b>					
I am familiar with credit terms like interest rates, loan terms, collateral requirements, and repayment schedules.					
I regularly review my credit reports and statements to monitor my credit usage and identify any discrepancies or errors.					
I have developed a budget specifically for managing my credit and debt obligations.					
I am comfortable negotiating credit terms, such as interest rates or repayment schedules,					

with lenders or financial institutions.					
<b>Bookkeeping skills</b>					
I maintain accurate and up-to-date records of my business's financial transactions.					
I have a systematic method for organizing and categorizing income and expenses in my business records.					
I understand the importance of separating personal and business finances in my bookkeeping practices.					
I track and record all relevant business expenses to ensure proper deductions and financial reporting.					
<b>Budgeting skills</b>					
I create a budget for my business that outlines my expected income and expenses.					
I track my actual income and expenses against my budget to monitor financial performance.					

I am able to identify areas of overspending or potential cost savings through budget analysis.					
I prioritize and allocate funds based on the goals and objectives of my business.					

### **Business Training**

<b>Statement</b>	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly Agree</b>
<b>Formal Schooling</b>					
I have completed a business-related course or program as part of my formal education.					
I have received specialized training or certification in a specific business field.					
I have attended workshops or seminars focused on business skills and strategies.					
I have received formal training in business management or entrepreneurship.					
<b>On-the-job training</b>					

I have gained practical experience in most aspects of my business					
I have supervisors who provide valuable guidance and support in the business					
I have learnt majority of the business management aspects through learning by doing					
The exposure I get while in the business has helped learn a lot in business					
<b>Off-the-job training</b>					
The courses offered away from the work environment are efficient in business management					
The business training programs and workshops I have attended have helped me in the daily operations of my business					
The educational activities offered away from the work environment have been					

instrumental in the performance of my business					
The training program conducted outside the business environment are sufficient for business practical skills and technique development					

### Section C: Loan Repayment

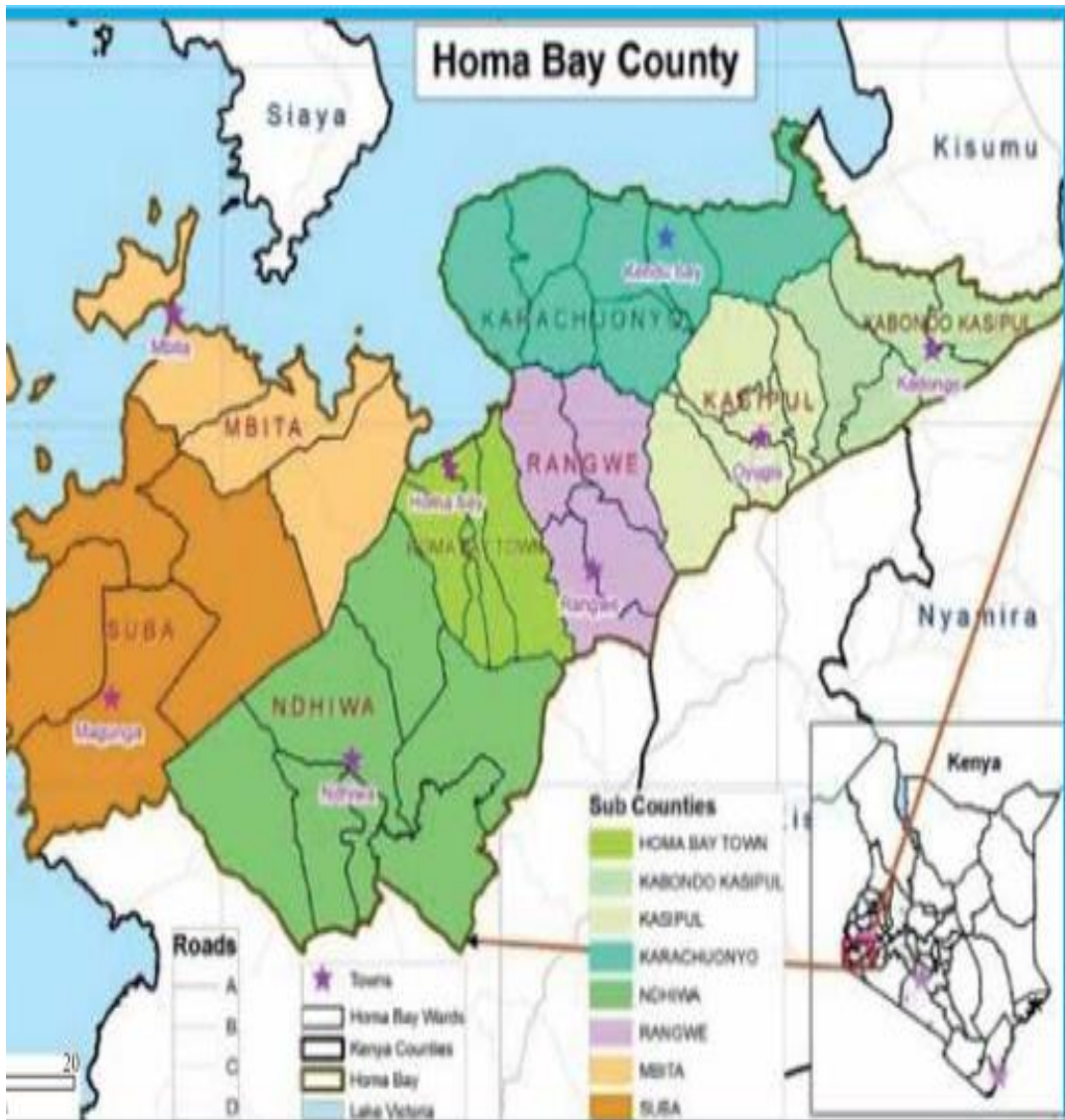
Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
<b>Interest Servicing</b>					
I regularly monitor and manage the interest accrued on my business debts.					
I have a clear understanding of the interest rates and terms associated with my business loans.					
I make timely interest payments on my business loans or credit facilities.					
I stay informed about changes in interest rates or market					

conditions that may affect my business loans.					
<b>In-time loan repayment</b>					
I proactively monitor and manage my loan repayment schedule to avoid late or missed payments.					
I have a clear understanding of the repayment terms and deadlines associated with my business loans.					
I prioritize loan repayment as a key financial obligation for my business.					
I consistently make loan repayments on time according to the agreed-upon schedule.					
<b>On-time loan repayment</b>					
I consistently repay my business loans on or before the agreed-upon due dates.					
I proactively manage and monitor my loan repayment schedule to ensure on-time payments.					

I maintain a well-organized system for tracking loan repayment deadlines and ensuring they are met.				
I allocate sufficient funds in my business budget specifically for on-time loan repayments.				

The End: Thank you for taking time to complete this questionnaire. Your contributions are highly appreciated.

Appendix 2: Homabay County division into the Sub-Counties



### Appendix 3: Summary of Data for the Total Respondents in the Survey

#### Financial Literacy

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
<b>Credit Management skills</b>					
I am familiar with credit terms like interest rates, loan terms, collateral requirements, and repayment schedules.	17	19	25	234	104
I regularly review my credit reports and statements to monitor my credit usage and identify any discrepancies or errors.	15	20	61	211	94
I have developed a budget specifically for managing my credit and debt obligations.	18	25	50	211	95
I am comfortable negotiating credit terms, such as interest rates or repayment schedules, with lenders or financial institutions.	17	31	38	216	96
<b>Bookkeeping skills</b>					

I maintain accurate and up-to-date records of my business's financial transactions.	18	23	41	205	113
I have a systematic method for organizing and categorizing income and expenses in my business records.	20	21	42	212	106
I understand the importance of separating personal and business finances in my bookkeeping practices.	13	20	25	221	120
I track and record all relevant business expenses to ensure proper deductions and financial reporting.	14	26	31	221	108
<b>Budgeting skills</b>					
I create a budget for my business that outlines my expected income and expenses.	16	22	37	219	105
I track my actual income and expenses against my budget to monitor financial performance.	12	28	32	219	108
I am able to identify areas of overspending or potential cost	11	19	31	224	114

savings through budget analysis.					
I prioritize and allocate funds based on the goals and objectives of my business.	10	24	31	218	116

### Business Training

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
<b>Formal Schooling</b>					
I have completed a business-related course or program as part of my formal education.	26	46	35	212	82
I have received specialized training or certification in a specific business field.	34	46	34	186	100
I have attended workshops or seminars focused on business skills and strategies.	19	38	24	219	99
I have received formal training in business management or entrepreneurship.	27	40	22	212	98
<b>On-the-job training</b>					

I have gained practical experience in most aspects of my business	19	23	16	232	105
I have supervisors who provide valuable guidance and support in the business	23	49	37	200	90
I have learnt majority of the business management aspects through learning by doing	12	20	30	234	103
The exposure I get while in the business has helped learn a lot in business	14	16	13	221	136
<b>Off-the-job training</b>					
The courses offered away from the work environment are efficient in business management	12	30	37	233	88
The business training programs and workshops I have attended have helped me in the daily operations of my business	17	23	22	235	102
The educational activities offered away from the work environment have been	12	31	41	211	103

instrumental in the performance of my business					
The training program conducted outside the business environment are sufficient for business practical skills and technique development	18	30	45	217	88


### Loan Repayment


Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
<b>Interest Servicing</b>					
I regularly monitor and manage the interest accrued on my business debts.	19	19	33	255	75
I have a clear understanding of the interest rates and terms associated with my business loans.	22	23	29	243	84
I make timely interest payments on my business loans or credit facilities.	17	28	36	228	88
I stay informed about changes in interest rates or market	14	20	30	243	93

conditions that may affect my business loans.					
<b>In-time loan repayment</b>					
I proactively monitor and manage my loan repayment schedule to avoid late or missed payments.	11	22	28	240	99
I have a clear understanding of the repayment terms and deadlines associated with my business loans.	5	18	20	258	97
I prioritize loan repayment as a key financial obligation for my business.	6	25	22	242	103
I consistently make loan repayments on time according to the agreed-upon schedule.	9	26	34	239	91
<b>On-time loan repayment</b>					
I consistently repay my business loans on or before the agreed-upon due dates.	13	28	50	225	84
I proactively manage and monitor my loan repayment schedule to ensure on-time payments.	12	19	31	241	94

I maintain a well-organized system for tracking loan repayment deadlines and ensuring they are met.	11	26	35	236	92
I allocate sufficient funds in my business budget specifically for on-time loan repayments.”	10	28	49	220	93


## Appendix 4: Research Permit from NACOSTI

  
REPUBLIC OF KENYA

  
NATIONAL COMMISSION FOR  
SCIENCE, TECHNOLOGY & INNOVATION

Ref No: **716039** Date of Issue: **26/November/2024**

**RESEARCH LICENSE**



This is to Certify that Mr., Joseph OCHIENG Oluoch of Kenyatta University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Hombay on the topic: **INFLUENCE OF BUSINESS TRAINING AND FINANCIAL LITERACY ON LOAN REPAYMENT AMONG WOMEN ENTREPRENEURS PARTICIPATING IN DEVOLVED FUND PROGRAMMES IN HOMA-BAY COUNTY, KENYA** for the period ending : **26/November/2025.**

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## Appendix 5: Regression Output from SPSS

File Edit View Data Transform Insert Format Analyze Graphs Utilities Extensions Window Help

Output

- Regression
  - Title
  - Notes
  - Variables Entered/Removed
  - Model Summary
  - ANOVA
  - Coefficients
  - Residuals Statistics
  - Charts
  - Title
  - \*resid by \*zpr

**Regression**

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	Business_Training, Financial_Literacy <sup>b</sup>		Enter

a. Dependent Variable: Loan\_Repayment  
b. All requested variables entered.

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.865 <sup>a</sup>	.748	.746	.46766

a. Predictors: (Constant), Business\_Training, Financial\_Literacy  
b. Dependent Variable: Loan\_Repayment

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	230.919	2	115.459	527.911	<.001 <sup>b</sup>
	Residual	77.861	356	.219		
	Total	308.780	358			

a. Dependent Variable: Loan\_Repayment  
b. Predictors: (Constant), Business\_Training, Financial\_Literacy

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		

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Output

- Regression
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  - Charts
  - Title
  - \*resid by \*zpr

a. Dependent Variable: Loan\_Repayment  
b. Predictors: (Constant), Business\_Training, Financial\_Literacy

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1	(Constant)	2.208E-15	.025	.000	1.000
	Financial_Literacy	.374	.046	.368	<.001
	Business_Training	.548	.046	.540	11.943

a. Dependent Variable: Loan\_Repayment

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	-3.2193	1.1932	.0000	.80313	359
Residual	-2.14969	1.54385	.00000	.46636	359
Std. Predicted Value	-4.008	1.486	.000	1.000	359
Std. Residual	-4.597	3.301	.000	.997	359

a. Dependent Variable: Loan\_Repayment

**Charts**

**Scatterplot**  
Dependent Variable: Loan\_Repayment

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