

FINANCIAL LITERACY AND FINANCIAL PERFORMANCE OF WOMEN-
OWNED SMALL AND MEDIUM ENTERPRISES IN MANDERA COUNTY,
KENYA

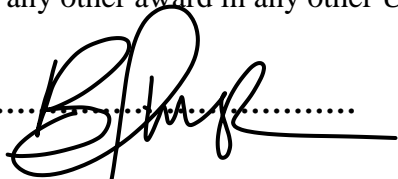
BASHIR SAMOW MAALIM
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**A RESEARCH PROJECT SUBMITTED TO THE SCHOOL OF BUSINESS
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DECLARATION

This research project is my original work and has not been submitted for a degree course or any other award in any other University.

Signed.......... Date 07/03/2022

Bashir Samow Maalim

D53/OL/GAR/32706/2016

Declaration by Supervisor

This project has been submitted for examination with my approval as the university supervisor.

Signed..... Date.....

Dr. Ambrose O. Jagongo (PhD)

Department of Accounting and Finance

School of Business

Kenyatta University

DEDICATION

I would like to dedicate this research to my Mother Safia, for the great moral support that she has offered me throughout the study to see it successful. Through your caring, nurturing, and supportive hands, I have learned the values of hard work, commitment to my cause, and dedication to my dreams. I also dedicate it to all close friends who have contributed in one way or other towards the completion of this study.

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OPERATIONAL DEFINITION OF TERMS

Bookkeeping: refers to keeping proper accounting records. It involves making proper cash book entries and entries to the various books to be kept for proper record keeping of business activities,

Debt Management entails knowledge of loans management, cost computation skills, and debt cost calculation Skills.

Financial Literacy: refers to how individuals comprehend and use fundamental financial principles to plan and manage financial decisions related to investing, saving, keeping of good financial records, financial planning, and debt management. Financial literacy will entail literacy in debt management, literacy in financial planning, and literacy in bookkeeping.

Financial Performance: Refers to how well a firm can use assets and available resources to generate revenues. This study will be measured through the use of net income.

Financial Planning: is the use of financial planning tools like proper record keeping and budgets to forecast and plan for the available resources. It will involve the ability of the women enterprises to prepare a budget, forecast sales, and prudence in spending.

Women-owned SMEs: In the Kenyan context, an SME is defined as non-subsidary, autonomous businesses that employ less than 99 employees, record an annual turnover of less than Kshs. 12M, or has asset valuations of 50 million and below.

ABBREVIATIONS AND ACRONYMS

APA	American Psychological Association
BERR	Business, Enterprise and Regulatory Reform Department
FY	Financial Year
GEM	Global Entrepreneurship Monitor
ILO	International Labor Organization
KCB	Kenya Commercial Bank
KIPPRA	Kenya Institute of Public Policy Research and Analysis.
MSE	Micro-small Enterprises
MSEs	Medium and Small Enterprises
NGOs	Non-Governmental Organizations
SACCOs	Savings and Credit Cooperative Societies
STDEV	Standard Deviation
SMEs	Small and Medium Enterprises
SPSS	Statistical Package for Social Sciences
UNDP	United Nations Development Program

ABSTRACT

Women-owned SMEs in Kenya suffer from constraints that lower their resilience to risk and prevent from growing and attaining economies of scale. Over 60 percent of women-owned small and medium businesses were estimated to fail in years 2013 and 2020 with negative return assets. The study sought to determine the effects of financial literacy on women-owned financial performance in Mandera County. The specific objectives of the study were to examine the effects of bookkeeping literacy, financial planning literacy, and debt management literacy on the financial performance of SMEs of women owned SMEs in Mandera County. The theories utilized in the study include; the Financial Literacy and Behavior Theory, the Accounting Theory, the Motivational Theory of Entrepreneurship, and the Knowledge Spillover Theory. The design used was the descriptive design. The target population of the study was the owners and managers of the women-owned SMEs in Mandera County. A sample size of 385 was assessed using questionnaires. Quantitative analysis was used to analyze data. Analysis techniques involved descriptive statistics and inferential statistics entailing correlation and multiple linear regression.

The study findings established that women-owned SMEs in Mandera County have never prepared any budget in the last five years. Additional study findings established that majority of the women-owned SMEs that prepared budgets, do it annually, while a majority of the women-owned SMEs that prepare budgets, prepare material budgets. Further study findings implied that the female-owned SMEs exhibit to a great extent financial planning literacy. The study established that training on bookkeeping skills influenced to a very great extent the financial performance of female-owned SMEs. The findings also established that access to banking services skills have influenced the financial performance of female-owned SMEs to a very great extent. The study findings also established that the financial performance of the female-owned SMEs in Mandera County was excellent. Additional study findings established that financial literacy significantly impacts financial performance. Study results that showed a favourable connection between financial literacy and financial success, but not a substantial one, concluded. Furthermore, the research results demonstrated that good bookkeeping literacy was linked to both financial well-being and profitability. Results showed that bookkeeping literacy has no meaningful connection to financial success. Policy recommendations are made to the government officials and policy formulators in the county and national governments, mainly the SME regulators to majorly focus on conducting pieces of training on financial literacy to SME entrepreneurs and managers when trying to boost financial performance.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

The significance of financial literacy has been demonstrated by its applications in both developed and developing economies. Another way to put it is that in January of 2008, the U.S. government created a Chairman's Financier Literacy Advisory Council, which was set up to ensure that the whole economy benefitted from better financial education. Financial literacy projects may be found at all stages of development. The country of Indonesia and Ghana, for instance, has put in place efforts to improve financial literacy. Financial literacy includes the information and skills that individuals need for efficient functioning with money and informed decisions concerning their situations and their family.

The requirement for financial literacy amongst businesses and entrepreneurs is becoming an area of focus in both developed and emerging economies (Hilgert & Hogath, 2003). Although not an absolute state, In addition, it gives individuals the ability to effectively respond to personal, social, and economic circumstances that change. A good grasp of finance can determine whether a business will succeed or fail. That is why several nations have set up task groups for the research and evaluation of their people's level of financial literacy (Alessie, Van & Lusardi, 2011).

Several nations across the globe are encouraging financial literacy among SMEs owners as a means of combating poverty (UN, 2003), with Kenya, Tanzania, South Africa, Ghana, Uganda, and Egypt among them (African Development Bank, 2007). The Kenyan Government has made significant efforts via Financial Sector

Deepening (FSD), which teaches individuals how to improve their financial independence. The central bank is concerned about financial literacy and requires that commercial banks disclose their fees to the public so that people may compare and make informed choices. Commercial banks have mostly relied on their marketing efforts, such as market activations, to participate. Furthermore, financial institutions like the Equity Bank and the Kenya Commercial Bank have made a concerted educational campaign that will help Kenyans become more knowledgeable about money. Through its partnership with the MasterCard Foundation, the Equity Group Foundation (EGF) has collaborated with financial knowledge initiatives that equip business owners in Kenya with valuable skills in handling their money.

1.1.1 Financial Literacy

Quartey, Turkson, Abor, and Iddrisu (2017) argued that financial literacy is a mechanism that improves people's awareness of financial products, services, and Concepts aid in making educated choices, keeping the user from stumbling into traps, pointing the user in the direction of further assistance, and taking other measures to increase their financial well-being over the lengthy period. Financial literacy, according to Retap, Abdullah, and Hamali (2016), is a particular kind of knowledge or capacity to use that information, perceived understanding, good financial conduct, and even financial experiences. Mushinza, Sibanda, Maumbe (2019) claimed that financial knowledge is people's ability to process economic information and to decide from an informed point on financing, investment, budgeting, pensions, and debt.

Financial literacy is significant in helping women-owned businesses understand basic budgeting skills, income management, debt management, and bookkeeping skills (Protogerou, Galoghirou & Vonortas, 2017). This requires one to know about, for example, basic financial planning, interest rates, business risks, investment returns, and investment diversification. Therefore, literacy helps entrepreneurs to acknowledge vital financial resources needed in business such as banking products, simple savings concepts, and plans in savings (Akims & Jagongo, 2017). Njanike (2019) indicated that financial literacy advances knowledge and skills on saving skills, debt control and management, control of their investment funds, and proper bookkeeping that increases the creditworthiness of potential borrowers. This helps SMEs in improving their living standards, good financial system, economic expansion, and alleviation of poverty. Leverage over one's financial prospects, more usage of financial services and goods, and less susceptibility to predatory marketing or unethical practices are all part of the advantages of using credit cards (Sitharam & Hoque, 2019).

The study will use financial planning, bookkeeping, and debt management as the proxies of financial literacy. Financial planning entails activities set for by the company for future financial demand forecasts (Lusimbo & Muturi, 2016). Planning aptitudes are extremely basic in expanding deals, profit, and guaranteeing the business runs easily. Debt management is the ability to carry out business transactions within a budget (Njanike, 2019). Many companies require small- and medium-sized enterprises (SMEs) to develop a strategy to assist these smaller businesses to manage their debts, especially those with plenty of indebtedness (World Bank, 2016). bookkeeping is an important accounting procedure that keeps track of all company transactions to expand and advance a firm (Eniola & Entebang,

2017). It involves the process of collecting, summarizing, processing, and reviewing an entity's financial information to run its day-to-day operations and annual statements, taxes are prepared and annual reports are produced. Bookkeeping is an essential skill for SMEs owners because it offers essential decision-making knowledge (Figal-Garone et al., 2015).

1.1.2 Financial Performance

Any business entity operates in a bid to maximize the wealth of the shareholders, which in most instances is measured in monetary terms (Alexandru, Genu & Romanescu, 2008). In the context of finances, financial performance may be described as the outcome of an organization's strategic and operational plans and processes. at a certain period.

The results are expressed as returns or losses (Heremans, 2007). The practice of measuring efficiency and effectiveness is described as performance measurement. Compliance with client criteria is defined as effectiveness, whereas efficiency refers to how the organization's resources are utilized to meet customer expectations. Performance measurements should be selected, applied, and tracked to assess efficiency and effectiveness. Sales, business transaction actions that indicate sales, such as purchases through mobile money services, and access to financial services such as savings and micro-credits (loans) are all examples of SME's financial success (Megananda & Maulana, 2006).

The goal of measuring financial performance is to see how well a company has used its available resources to produce money. A firm's ability to recruit revenue-generating clients is critical to its long-term viability. As a result, it's critical to

assess the firm's current state and performance (Holtari, 2000). The degree of a company's turnover or losses within a particular period is referred to as financial performance. It assesses a company's management's capacity to generate profit by squandering the company's assets. It also demonstrates how effectively an organization's assets are put to work to generate money. Furthermore, it demonstrates an organization's management's effectiveness in generating income from its assets (Khrawish, 2011).

The performance of SMEs can be done either through financial or non-financial measures. Financial measures look at the operations of the organization in monetary terms derived from the financial statements of an organization like statements of comprehensive income and statements of financial position. In the past, it has been suggested that the usage of ratios such as return on equity (ROE) and return on assets (ROA) may be used to evaluate the financial success of a company, while ratios such as costs ratios are used to analyze the operational performance of the company (Otieno, 2009). However, Schayek (2011) notes that the management of SMEs refrains from disclosing information relating to their financial performance. Further, SMEs are not obliged to make their financial documents publicly available, finding it challenging and nearly unattainable to acquire sales and profit statistics for SMEs. Hence, studies have adopted the use of the Likert scale to evaluate performance. Thrikawala (2011) and Watson (2011) state that inquiring for feedback that deduces to the success of the firm is accomplished obliquely, avoiding anything like a straightforward approach to gathering sale and profitability data. However, Zuriekat, Salameh, and Alrawashde (2011) note that SMEs consistently try to incorporate both financial and non-financial measures in their measurement of

performance. The study will adopt the use of the questionnaire in the form of a Likert Scale for data collection.

1.1.3 Financial Literacy and Financial Performance

Small- and medium-sized companies tend to do well financially, which is a relationship that can be shown in previous financial literature (SMEs) (Hilgert & Hogarth, 2003). For example, Bosma and Harding (2006) state that many SMEs are failing, because of their lack of financial literacy, inadequate business acumen, and low financial literacy, and because they hinder entrepreneurship. Most academics believe that businessmen, irrespective of age, continuously participate in resource acquisition, allocation, and use decision-making activities. Such actions virtually and always have financial repercussions and thus enterprises must be given financial knowledge to be successful (Oseifuah, 2010).

According to Drexler et al. (2014), entrepreneurs frequently lack the financial literacy to make the difficult financial decisions they face. This is regrettable because financial literacy among young entrepreneurs adds significantly to their entrepreneurial abilities, according to Oseifuah (2010). Businesses that wish to develop must also be well aware of their finances (Kotzè & Smit, 2008). In case the manager or owner of SMEs are uneducated in terms of their organizational finances, Additionally, due of their lack of financial knowledge, they will be reducing their overall innovation capacity, and this may lead to inadequate competitive capabilities and inability to obtain additional financing for the sake of a misunderstanding.

Therefore, entrepreneurs are out of touch with their financial needs, which affects the probability of access to a range of funding sources that may lead to competitive

abilities and stronger performance. Financial literacy allows you to decide with clarity and confidence. Individuals are also allowed to react efficiently to events that influence their daily financial health and analysis of the overall financial situation, including economic interest rate, financial market collapse, and inflation (Tuffour & Martey, 2019; Bunyaminu et al., 2019).

However, several conclusions suggest that there are doubts as to how financial literacy may enhance a company in the long run, given the perceived dependence on expertise in the validation of SME owners.

The principle of financial literacy is thus questioned as a significant contributor to company performance (Brown, Saunders, & Beresford, 2006). Research in Mandera County Kenya needs to support or show the significance of financial literacy on the success of women in small and medium-sized enterprises. Despite the significance of small businesses in many countries, significant studies so far have concentrated primarily on problems of individual finance and have left a vacuum in the study of the impact of financial literacy on the achievement of small businesses.

1.1.4 Small and Medium Enterprises (SMEs)

Small and Medium Enterprises (SMEs) are defined as non-subsidary, autonomous businesses that employ less than a set percentage of the workforce, according to a 2005 study by the Organisation for Economic Co-operation and Development (OECD), record a lesser than definite annual turnover, or has fewer assets than a defined threshold. The metrics vary across countries.

SMEs have a substantial role in the economy due to reducing unemployment, reducing poverty rates, and encouraging entrepreneurialism, thereby adding to the

gross domestic product (GDP) (Akims & Jagongo, 2017). SMEs' success or failure depends on financial viability (Otieno, 2016). A study done by the World Bank (2016) shows that SMEs are significant in helping economies expand and generate jobs. This is especially true in industrialized countries as well as in emerging ones. Despite the growing popularity and market value of SMEs, the obstacles to business development these enterprises confront make their ability to expand limited. Difficulties in business achievement seem much more extensive than previously (Ombongi & Long, 2018).

As SMEs have seen increasing wealth and growth, Sitharam and Hoque (2019) have found this to be a significant subject of focus all through the countries because of their contribution to the economy including advancement market analysts, business people, states, investment firms, money related foundations, and non-legislative associations. Many SMEs have many benefits, however, it is said that they are both over-represented in the growth rate of businesses and, simultaneously, disproportionately over-represented in the rate of mortality (Protogerou, Galoghirou, & Vonortas, 2017). Mashinza, Sibanda, and Maunde (2019) argued that working capital, marketing capacity, access to financial resources, financial literacy, technical skills and management, access to production resources, especially finance, technology, information and markets, and the availability of business networks are the microeconomic drivers of poor financial performance of women-owned SMEs.

The European Commission (2016) estimates that about 23 million SMEs generated approximately 3.9 trillion USD in added value, and about 90 million people were employed by these firms. The share of SMEs in Romania's economy generated approximately 50% of value-added in 2018, while the EU-28 had a smaller

percentage rise to 57.3% in the same year. SME survival is among the lowest in the world, according to the 2016 Global Entrepreneurship Monitor (GEM) Reports. The United Kingdom's economy depends on SMEs, and they make up the largest sector of the economy (Albuquerque, Quirós & Justino, 2017). The UK economy is made up of 99 percent of small businesses, employing 14,23 million people from an employed population of around 30 million (Njanike, 2019). UK SMEs account for 1.48 trillion sterling (British Pounds) as regards UK revenue and Gross Domestic Product (GDP). Given the limited resources, weak funding, and generally overlooked services (Matias, & Serrasqueiro, 2017), Comparing profitability growth among UK small businesses, which have at least one employee, to that of big UK businesses, there is more than double the amount of profitability increase seen among the small businesses.

Likewise, Singapore's SMEs constitute an essential part of the nation's economy, delivering 47% of GDP and creating 62% of all employment (Protogerou, Galoghirou, & Vonortas, 2017). China has the highest number of SMEs in the world, with more than 10 million companies accounting for 99 percent of all companies. SMEs contribute 60 percent of the volume of industrial production and 40% of the tax collected (Quartey, Turkson, Abor & Iddrisu, 2017).

SMEs account for about 90% of African company operations and contribute more than 50% of African jobs and GDP (Mashinza, Sibanda & Maunde, 2019). SMEs contribute substantially to job growth in developed countries, an average of 70 percent, and about 60 percent to the countries' gross domestic product (Mugo, 2016). SMEs' common concern is their decrease in performance and statistics show that SMEs' failure rate is high on a global scale (Figal-Garone et al., 2015). In South

Africa, it was established that the number of SMEs that fail in their fifth year varies between 50% and 75% and that about 75% of new SMEs do not become established companies (Retap, Abdullah, & Hamali, 2016). Twala and Phaladi (2015) found that obstacles to access to finance by SMEs, increased financial illiteracy level and legal requirements are the main cause of their failure.

While more than half of all new jobs created in 2015, 2016, 2017, and 2018 were generated by the informal sector in Kenya, Kiyai, Namusonge, and Jagongo (2019) assert that 53 percent of new jobs gained in these years were also produced by the informal sector. Many small companies have a part in the overall economic sector in Kenya, as they account for 33% of all value-addition retail and manufacturing (Onyango & Tomecko, 2018). Even though SMEs make up the vast majority of the economy, in the first few months of operation, three out of five firms go out of business (Lusimbo & Muturi, 2016).

Many SMEs operate in many sectors in Mandera County, ranging from health care, hospitality, engineering, and more. There are 15,764 registered SMEs in Mandera County (PPOA, 2017). SMEs help to increase the development of the county via the creation of jobs. Mandera County's SMEs account for nearly 10% of the county's income. approximately 30% of the population of Mandera's inhabitants get their income and revenue from SMEs (County Government of Mandera, 2017). One way to think about the major industries in this category is to list off retail chain distribution, food and beverage retail, open-air marketplaces, animal sales, and more.

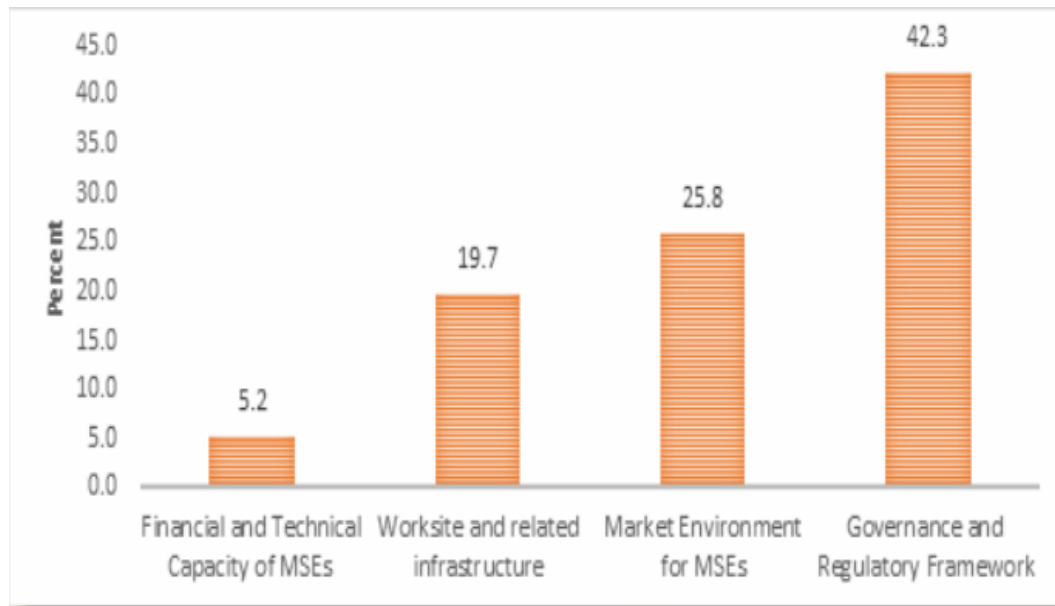


Figure 1.1: Mandera County scores

Source: KIPPA (2021)

Figure 1.1 shows that SMEs in Mandera County has a low financial and technical capacity. This is indicated by the low score for financial and technical capacity. This motivates a study to be carried out on financial literacy and its effect on financial performance in Mandera County.

1.1.5 Women SMEs in Mandera County

Women-owned businesses make a critical commitment to national economies (Otieno, 2016). Researches show that the contribution of women entrepreneurs appears to be higher than that of men entrepreneurs (Ombongi & Long, 2018). Women entrepreneurs are key players in many sectors and contribute to financial developments, creating progressively noticeable growth in developing nations. Progressively, Kenyan-owned women businesses are perceived as assuming a significant task in the exceptional development pace of SMEs in the economy, and subsequently, they have ventured into different generally male commanded sectors

(Mugo, 2016). Haroon and Malik (2018) reported that women entrepreneurs in many countries create jobs, wealth, and innovation. Despite their commitment to the development of the economy, their freedom to lead, get to the capital, and literacy-related to keeping proper books, preparing budgets, and settling on key business decisions which need improvement (Mashinza, Sibanda & Maumbe, 2019).

In Kenya, women own 31.4 percent of SMEs and 47.9 percent were men in SMEs (National Small Enterprise Baseline Survey (NBS), 2016). The outcomes demonstrated that women would in general run organizations related to conventional ladies' jobs, for example, hairdressing, eateries, inns, retail shops, and discount outlets (Otieno, 2016). The majority of women generally run smaller organizations than men and earn less revenue than men, with ladies making an average return on a shilling of Ksh. 4.344 per month compared to 7.627 per month for men (Njanike, 2019). Further, the study shows that 60.7% of unlicensed businesses are operated exclusively by females, while 16.5% were owned by male-female couples (Ombongi & Long, 2018).

Statistics show that the closed female sole proprietors accounted for 54.9 percent, while 11.5 percent were male-female small and medium-sized enterprises, while 33.6 percent of small and medium-sized enterprises closed were male-owned in the years 2012 to 2016 (Magutu, Aduda, & Nyaoga, 2015). Based on these measurements, it is important to create mediation programs that upgrade small and medium-sized firms, prompting a critical decrease in women-owned entrepreneurs' needs, and the continued research shows that the thought and practice of woman business people is an ongoing gap that is under scrutiny since the 1980s, contrasted with that of their male partners (Protogerou, Galoghirou, & Vonortas, 2017).

Small businesses in developing countries are predominantly owned by women (Eniola & Entebang, 2017). Sithuram and Hoque (2019) posited that women set up businesses to meet their fundamental needs or supplement their salaries. Such policies implemented by donor countries resulted in workforce cuts, depletion of salaried workers' purchasing power, and limited job openings. The subsequent impact was felt mostly by women, who have a more noteworthy weight of caring for the family (Sopha & Kwasira, 2016). Many women have competing responsibilities such as their jobs and their families, which may limit their participation in training, advantageous partnerships, development groups and inevitably restrict the scope of businesses of women entrepreneurs (Lusimbo & Muturi, 2016).

In Mandera County, women-owned SMEs are concentrated in agriculture, hawking, consulting services such as lawyers and physicians, manufacturing, retailing in shops, and hotel management (Maalim, 2018). Many small-scale enterprises in this region are privately owned and run by 2 to 30 workers who are mostly members of the immediate family. Mandera county government has realized the importance of financial institutions as they help entrepreneurs in job creation and lift women out of poverty in the county through coaching and financial support. The county has four banks, three in the town of Mandera (National, KCB, and Equity), and an Equity bank in the town of Elwak. There are five licensed SACCOs in the district, with a total of 100 registered members (Maalim, 2018).

The youth and women's funds are just two examples of initiatives by county governments to support small businesses in Mandera County. Furthermore, the County Government has established a trade development fund that is aimed at supporting SMEs in the county. The County government of Mandera has set a side

colossal amount in the budgets to be distributed to SMEs. State, NGOs, and the private sector have also supported a range of initiatives aimed at enhancing the availability of low-cost loans and improving money management to allow women-owned SMEs to manage finance efficiently within their Firms. Notwithstanding all these women-owned SMEs in the county are lagging in terms of their ability to keep proper books of account, insufficient business skills, and poor financial planning. Some of the women-owned SMEs have insufficient knowledge of the products offered in banks and are therefore unable to take advantage of loans available in the banks (Maalim, 2018).

However, SME growth and development in Mandera is affected by many socio-economic factors including age, education, gender roles, and access to funds (Maalim, 2018). Since preference is generally given to educating boys than girls, most female entrepreneurs have low educational levels, and these act as a barrier to accessing further training and business development services (Maalim, 2018). As a result, Women-owned businesses in Mandera are confined to boutique shops, most of which are unable to raise enough income to sustain production, forcing them to leave business early before the harvest stage (Ali & Wambua, 2019).

1.2 Statement of the Problem

Many market participants, including non-governmental organizations, financial institutions, venture capital firms, governments, entrepreneurs, and development economists have been concerned about the financial performance and growth of SMEs (Eniola & Entebang, 2014).

However, there are discrepancies in the impact of financial literacy on SMEs' financial performance. Cole et al. (2011) investigated a financial literacy program aimed to boost saving behavior among Indonesian households and discovered that financial literacy did not influence the population's overall savings behavior. Berge et al. (2011) discovered that financial literacy impacts financial performance in terms of profitability, but only for male entrepreneurs, in a research on a program for microfinance customers in Tanzania conducted by the University of Dar es Salaam entrepreneurship center.

SMEs contribute the greatest share in the growth of the Kenyan Economy. The majority of the women-owned SMEs in Mandera County were unable to report a positive operating income in the years 2014 to 2017 (Maalim, 2018). There was a reported 25% and 33% decline in the operating profits in the women-owned SMEs in years 2016 and 2017 respectively. The reported income from operations by the majority of the Women SMEs owners was on the decline and growth in their products and asset level was alarming. Many of the Women-owned SMEs in the region have encountered challenges in accessing financial information, keeping proper accounting reports, budgeting, managing their income, and sufficient skills in debt management (Ali, 2019). Due to the scarcity of studies in the County related to financial literacy, it is not clear the effect of financial literacy on the Women-owned SMEs' financial performance.

There have been several studies on the impact of financial literacy on the financial performance of SMEs. From a survey of SME company owners in Australia and Singapore, Mazzarol, Reboud, and Clark (2015) investigated the financial

management techniques in small businesses, using data on 289 businesses in 30 different industrial sectors.

It was shown that SMEs who have higher financial literacy are better able to keep an eye on and manage their company finances. A 2011 study conducted by Bruhn and Zia on the impact on young Bosnian and Herzegovinian SMEs found that basic financial and business knowledge improves sales and productivity for companies. A Mabhandanda (2016) looked at the influence of financial literacy on SMEs development in Zimbabwe. The study found that financial planning was not critical in explaining the increase in small- and medium-sized enterprise development. It is unknown if these investigations were performed in the Kenyan setting, creating a vacuum in the current body of knowledge.

In the local scene, Jayantilal (2017) assessed the effects of financial literacy on personal finance management of Bank of Baroda (Kenya) limited employees. The study found that personal savings, personal debt, personal investment, and planning significantly affect personal finance management. The study was not conducted in the SME context thus presenting a contextual gap. Further, a study by Lusimbo and Muturi (2016) studied the financial literacy and growth of small enterprises in Kenya, particularly focusing on Kakamega Central Sub- County, Kenya. The findings were that booking keeps significantly affect the growth of SMEs while debt management was insignificant in explaining unit changes in SMEs' growth. The study was not conducted in the Mandera County context, thus presenting a contextual gap.

The disparities that have been revealed on the influence of financial literacy on the financial performance of SMEs present a conceptual gap that the study is trying to

fill by investigating if financial literacy has any bearing on the financial performance of SMEs. Additionally, none of the studies reviewed has been conducted on the context of women-owned SMEs, thus presenting a contextual gap. In addition, combining the gaps and worsening trends in the performance of female-owned small and medium-sized enterprises has resulted in the necessity for further research, especially in female companies in Mandera County. This research will thus evaluate the financial performance impact of financial literacy on the financial performance of SMEs in Mandera County, Kenya.

1.3 Research Objectives

1.3.1 General Objective

To assess the effect of financial literacy on the financial performance of women-owned SMEs in Mandera County.

1.3.2 Specific Objectives

- i. To examine the effect of bookkeeping literacy on the financial performance of women-owned SMEs in Mandera County.
- ii. To determine the effect of financial planning literacy on the financial performance of women-owned SMEs in Mandera County
- iii. To establish the effect of debt management literacy on the financial performance of women-owned SMEs in Mandera County.

1.4 Research Questions

The study will seek to answer the following questions:

- i. What are the effects of bookkeeping literacy on the financial performance of women-owned SMEs in Mandera County?
- ii. How does financial planning literacy affect the financial performance of women-owned SMEs in Mandera County?
- iii. What are the effects of debt management literacy on the financial performance of women-owned SMEs in Mandera County?

1.5 Significance of the Study

The aftereffects of this examination will help improve the administration of ladies-possessed SMEs and the Mandera government will lay accentuation on the best way to enhance the financial proficiency of SMEs. This examination will incredibly profit female SMEs proprietors as it will feature the advantages that will be acknowledged by securing financial planning, debt management skills, and bookkeeping in improving financial performance.

The policymakers in the national government and the Ministry of Devolution will get pertinent data on the expectations of the women SMEs in respect to improving their financial literacy. The study will present gaps to be filled by both county and national governments in ensuring the growth of the economy as a whole. Further, future experts and academicians will find this study accommodating as it will contribute massively to existing empirical studies on financial literacy and financial performance and give important bits of information to enable them to recognize gaps for extra investigation.

1.6 Scope of the Study

The research is set to take place in Mandera County, Kenya. Data will be obtained from SMEs in Mandera County, operated by registered women-owned SMEs. The respondents chosen for the study would consist of women SME owners or managers. The research will concentrate on four variables: bookkeeping literacy, financial planning literacy, debt management literacy (independent variables), and women-owned SMEs' financial performance (dependent variable). It will analyze the effect of the independent variables (financial literacy) on the predicted variables (women-owned SMEs' financial performance). Operating income data relating to women-owned SMEs will be collected for the period 2015 to 2019 (5 years).

1.7 Limitations of the Study

Some participants will perceive the information as private, sensitive, and reticent, as they may expect that opponents may utilize the data for their gains. In any case, the assurance will be protected by furnishing the respondents with a letter guaranteeing them that the data given will be for educational purposes.

1.8 Organization of the Study

The document is structured as follows; the initial chapter provides the background information relating to the financial performance of SMEs and financial literacy. It also presents the problem of the statement, the general and specific objectives, the scope of the study, the significance, the limitations, and how the limitations will be handled. Chapter two presents all the analyzed theories explaining the predicted and predictor variables. It additionally presents the pictorial view of the interrelationships between variables. Chapter three of the proposal discloses how to

gather, research design to be used, population targeted, tools used, and procedure on data collection. Data analysis and ethical considerations are also presented in Chapter three.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

A thorough analysis of previous research linked to SMEs' financial performance and financial literacy are presented in this chapter. The studies reviewed present the knowledge gaps to be filled. A summary of the empirical literature reviewed is presented in the table and presents the gaps identified and how the current study will fill them. The operationalization of variables concept is presented in a conceptual framework.

2.2 Theoretical Review

Theoretical considerations are discussed in this section. Among these ideas are; Accounting Theory, Financial Literacy, Motivational Theory of Entrepreneurship, Knowledge Spillover Theory, and Behavior Theory.

2.2.1 Behavior Theory

Research has shown that personal financial competence is connected to good financial actions. They studied consumer financial behaviors and literacy issues as part of the national consumer finances survey by Hilgert, Hogarth, and Beverly (2003). They created a four-part index that classified money management practices, including cash flow, debt, investment, and saving techniques. Whenever the outcomes of this indicator are compared with results of financials alphabetism, individuals with better financial practices have higher index values which demonstrate that financial education is connected with financial behavior. Those who are less financially literate rely more on their friends for financial guidance and become less willing to invest in inequities.

The concept of financial literacy and behavior began with the TRA (Fishbein & Ajzen, 1975). The TRA standards allow for behavioral intent to be anticipated by attitudes towards a certain activity and by subjective regulations to determine the actual conduct. conduct and norms are viewed as more positive and the extent of behavioral control is regarded, the stronger the will to perform (Hrubes, Ajzen, & Daigle, 2001). The TRA has been advanced by Ajzen (2008) to the Planned Behavior Theory (TPB). This theory is open to including new predictors but also stipulates that predictors must satisfy extra requirements. This spec, in particular, points out that behavior-specific and conceptually separate predictors should be used, as well as causes and components that are apparent in the behavior must be considered. In addition, it is advisable to experimentally justify the inclusion of any predictors and also to apply to other subjects researched by social scientists.

When these variables are taken into account, financial literacy fulfills the requirements as a result of Ajzen's decision to use you as a prognostic. Financial literacy evaluates a particular structure that has extensively researched psychology, economy, and sociology in the broad area of social science (Hayes, 2012). Financial literacy is a test that evaluates a person's financial understanding (Huston 2010), irrespective of what the original TPB factors measure. Furthermore, as studies have shown, individuals without financial literacy have less self-beneficial financial conduct (Chudry et al., 2011). This theory thus relates with this research because persons with an absence of financial education have less self-efficient financial behavior, which in this context implies the financial performance of the SMEs they manage.

2.2.2 Accounting Theory

Clelland (1961) coined the theory of Accounting. The idea seeks to define accounting as a procedure for supplying the decision-makers concerned with the necessary information. Clelland (1961) shows how businessmen prosper. He argues that successful company owners see profit as a sign of quality and skill. They set their business a personal, but achievable objective and are concerned about how well they perform. In this way, they are aware of all transactions that arise from their company and are thus in a better position to manage the loss. The concept of usefulness in accounting underlines the recording of business transactions for effective corporate decision-making.

Chambers (1964) considered that the kind of information that is helpful to decision-makers is not always the same as the type of information required by shareholders and potential investors of the company. Managers require information to educate them about the impact on future incomes of present choices. Stockholders with effective management control require information to assess relative management efficiency. Accountants, potential investors, and creditors require information to assist them in predicting the company's future path and the likelihood of future financial success.

However, both managers and shareholders are responsible for SME owners. They thus require information to advise them of the impact on future revenue of present choices. Since the theory lays out a formal process whereby a person may make the optimal choice given their subjective probability, it is important to do this study, where SME owners are to choose the most accurate and cost-effective choices to ensure that their businesses are monitored.

2.2.3 Motivational Theory of Entrepreneurship

McClelland's motivational theory of entrepreneurship (1967) attempted to explain why some companies are economically more successful than others. McClelland (1967) sought explanations about the entrepreneurial activities of people who were considered essential to all countries' growth. Furthermore, McClelland (1967) said entrepreneurs are doing things fresh and better and are unpredictably making choices. Enterprises are defined by the desire for accomplishment or a performance orientation, a drive for excellence, progress, and growth.

Through a focus on a specific need, McClelland (1967) was able to question both the then-dominant theory of entrepreneurship and religious entrepreneurial conceptions of the great people and to show that entrepreneurship is learning and that this may be fruitfully fostered. Hilgert et al (2003) have created the Financial Habits Index based on (self-benefit) management behavior, debt management, savings, and investment habits. Financial literacy values have a positive correlation with financial practice scores, according to the results of this study. Finances, in particular, seem to have a role in financial behavior. Although it appears that financial education can improve people's financial behavior, the effects of financial education are not expected to be seen for many years. Financial literacy exams were shown to have a positive impact on customers, leading to improved financial habits and lower risk.

Bemheim, Garrett, and Maki (2001) demonstrated that high school financial management students are likely to keep more of their Middle Ages money than other students. On the contrary, Mandell (2006a) did not demonstrate any positive impact on financial behavior for a well-respected high school personal finance course of

one to five years. The idea is based on financial literacy, which enhances the financial performance of the SME and reflects McClelland (1967)'s claim that entrepreneurship is taught and such learning may be fruitfully promoted. Business people do things in a new, better manner and make risky choices. Corporations with such qualities are economically more successful than others. Individual entrepreneurial activity is seen as essential to the growth of all economies (McClelland, 1967).

2.2.4 Knowledge Spillover Theory

Zoltan et al. presented knowledge spillover theory (2008). The idea suggests that new creatures of knowledge use information endogenously. This implies that information leaks are generated from knowledge resources and that such leaks are significantly related to entrepreneurship. R&D operations are "premeditated investments in new expertise" performed by businesses that attempt to maximize revenues, whereby knowledge adds to the company's overall goal of generating growth via endogenous means (Aghion & Howitt, 1992).

An endogenous investment in new knowledge creates a set of technical opportunities. In addition to enabling technical development, information provides an opportunity for third-party enterprises, which are frequently enterprise startups (Shane 2001). This happens via intra-temporary spillovers of knowledge. Entrepreneurship thus includes the arbitration of possibilities (Kirzner 1973) while new possibilities were created, incumbent companies did not make use of them (Schumpeter 1934).

This theory is linked to the research because the transfer of information, which comes from the knowledge stock, creates a strong connection between this waste and business activity, may enhance the financial performance of SME's financial literature. Knowledge creates possibilities for third-party businesses (Jaffe et al. 1993; Thompson & Fox-Kean 2005). (Shane 2001). Knowledge may thus provide possibilities for SMEs.

2.3 Empirical Review

The discussion here refers to relevant empirical research that complements the study variables which are bookkeeping, debt management, financial behavior, financial planning, and financial performance.

2.3.1 Literacy in Bookkeeping and Financial Performance

Lusimbo and Muturi (2016) investigated financial literacy and small business development in Kenya, focusing on the Kakamega central Sub- County. The research looked at two variables: debt management literacy and record-keeping literacy, which were employed as indicators of financial literacy. The development of micro-small businesses was the dependent variable.

The descriptive data provided revealed that the MSE managers had a poor degree of record-keeping literacy. Despite the limited sample size, the research did not provide inferential statistics or regress factors. Because it was conducted in a small population (sub-county) and only descriptive data were analyzed, the research had a scope and methodological deficit. The current study will carry out a study in the whole County of Mandera and the dependent variable will be the financial performance of SMEs

The Nigerian researchers Adejare and Abdul-Rahamon (2016) found that maintaining accounting records is positively associated with small-scale businesses. The results of this study included using descriptive methods, including personal interviews and questionnaires, for data gathering. A variety of techniques were used to examine the gathered data.. Tables and percentages were the descriptive statistics used. A chi-square and variance analytics (ANOVA) test was used to evaluate data using the STATA R^2 of 0.8974, which suggested that the degree of accounting recordkeeping could account for 89.7% of the difference in financial results. As a result of the results of this study, it is determined that maintaining an accounting record has a definite beneficial connection with small-scale business performance. In making decisions that have a big impact on smaller businesses, it is essential to have access to accurate accounting data. The study findings were based on SMEs in Nigeria and Chi-square method was used. The current study will be carried on the financial performance of women-owned SMEs in Mandera, Kenya, and SPSS version 24 will be used.

Dawuda, (2016) in his examination of an appraisal of money-related records keeping conduct of small and medium organizations in Ghana discovered that the absence of instruction and significant expense of recruiting qualified staff made it exceptionally hard for the proprietors to keep appropriate books of records. Some SMEs proprietors are oblivious of the benefit of keeping legitimate monetary records and have discernment that it is an exercise in futility and assets to make fund and bookkeeping division with qualified staff thinking about the size of their tasks. This might be valid for organizations that are not creating a lot of income. It could be contended from this proof; the volume and estimation of exchanges can impact the records-keeping conduct of SME proprietors. The study used primary data which

was appropriate as per the problem investigated. The current study will present the nature and strengths amongst variables

Kamau (2016) examined the impact of financial records in the central business area in Nairobi County on SMEs. The study established the relationship between accounting systems, SMEs have kept accounting records efficiently and successfully. For Nairobi's micro-enterprises in the city's downtown, the researchers used a descriptive research approach. In Nairobi's Central Business District, 391 SMEs were sampled for the research. A review of the results was focused on regression analyses as well as descriptive statistics. The outcome showed that an income plus spending account is critical regarding financial statements. To be prosperous, SMEs' income and expenses account in the county of Nairobi need to be properly prepared to minimize the likelihood of poor financial outcomes for SMEs. It was also found to contribute to improved financial results by enhancing the management and planning of transactions and sales lines. In the final analysis, the number of SMEs produce a financial statement that provides concrete information on an enterprise's financial health and recent performance. Diagnostic checks and the intensity and nature of the bookkeeping connection and financial performance factor; operating profit was not achieved. The current study will perform diagnostic testing and analyze regression.

2.3.2 Literacy in Financial Planning and Financial Performance

Non-profit health organizations in Kiambu County, Kenya, tested the effect of financial planning methods on their financial performance with Kang'aru and Tirimba (2018) documenting it. To begin, the researchers set out to find out whether having more financial resources would improve the financial health of the nonprofits

in Kiambu County. A descriptive survey method was adopted for this research. This whole research included participants from 108 different nonprofit healthcare facilities located in Kiambu County, Kenya. The information in this study was based on the results of an unstructured questionnaire given to subjects in the field. The results showed that financial performance was affected positively and significantly by the management of working capital and inventory, budgeting practice, and cash planning. The financial performance of NGOs context was the focus while financial performance of SMEs would be the current context of the report.

Orendo and Muturi (2017) studied the impact of financial planning on non-governmental organizations' financial performance. USAID's case study funded multinational nongovernmental organizations in Kenya. The research methodology used in the study was based on the presentation of concepts. The target population was 112. The study used the method of census inquiry, as no sampling was needed. Questionnaires were used to gather data for the study. SPSS was used to do statistical analysis on the data, and descriptive and inferential statistics were also used. The study found that budgeting, funding practices, and financial forecasting influence financial performance. The study of regression defined the coefficients of regression of the three variables as; -0.033 for budgeting, -0.160 for funding procedure, and 0.0524 for financial forecasting. This demonstrated financial forecasting was the most significant indicator of financial results among the three variables. It is recommended that based on the research findings; To advance our participation in budgeting, all departments must be engaged. Departmental budgets will be organized and then consolidated into one annual budget. The study findings were based on Ngos' businesses. The current study will investigate SMEs' financial performance using operating income as the proxy.

In Nakuru, specifically at Egerton University, Akuno, Kubasu, Mwathi, (2017) investigation seeks to find out the impact that financial literacy has on workers. Kenya on personal financial decision making. The focus of the study was to identify the relationship between financial planning skills and personal financial choices, as well as to discover if financial attitudes affected those decisions. The study followed the analysis method of a descriptive survey. A total of 320 respondents were selected using sample determination tables. Data were gathered primarily through a standardized questionnaire. The research found that the ability to handle finances was a key factor in one's own financial choices, whereas having the right attitude towards money had little impact. As demonstrated, there is a strong correlation between having a high level of financial literacy and making better financial choices. The study posed a qualitative and conceptual difference in that the variable that relied on analysis was about personal financial decisions. The present study will help to fill the vacuum by investigating the finances of SMEs.

To support the development of SMEs, Mabhandu (2016) examined the effect of financial illiteracy on SMEs, even if there are numerous interventions to help them. Using a qualitative research method, the researcher conducted an in-depth examination of documents, focused group discussion, interview, and questionnaire. This study found many factors, including inadequate financial education and planning, as well as numerous others, including subpar decision making, inadequate business information, insufficient financial education and planning, deficient budgeting skills, and inadequate non-business behavior, all, worked to hinder sound management, sound budgeting, proficient decision making, and ideal conduct. This research showed that entrepreneurs had very poor levels of financial literacy, and that affects their businesses' management. Other negative circumstances also

exacerbated the condition of Zimbabwean small- and medium-sized businesses. Financial planning had little role in explaining the rise in SME development, according to the inferential study. To assist SMEs companies to be around for a long time, it is thus recommended that governments, businesses, banks, financial assistance organizations, and individual citizens all engage in financial literacy initiatives. While this study will evaluate financial success by utilizing net income, in the past researchers have used several qualitative metrics to examine SME development.

2.3.3 Literacy in Debt Management and Financial Performance

Obuya (2017) analyzed debt funding options and financial results of Ghana's micro and small businesses. The study was on a critical literature review of MSE debt funding alternative and financial performance. The debt financing option has been evaluated for review in terms of long-term and short-term loans as well as trade credit. While financial performance was assessed with gross profit margin and asset return, current ratio. The approach used in the research was a review of numerous publications, papers, and related earlier studies in which predictive analysis, associative, descriptive, and quantitative were adopted. Trade credit is related to the liquidation of firms and default payments therefore detrimental impact on financial results was noted. Short-term loans have an unfavorable and substantial impact on the profitability of a company that measures asset returns. Lengthy debt-dependent companies will almost certainly result in higher capital costs and failure. Total debt is a predictor of non-performance on MSEs, as it has a negative impact on both asset return and gross profit margin. The research centered on MSEs in Ghana while the present report centered on SMEs in Kenya.

Using a case study of Bank of Baroda Kenya's limited employees, Jayantilal (2017) examined how personal financial management is impacted by financial literacy. The dependent variable indicators were personal savings, personal investment, and personal debt while the indicators of independent variable financial literacy were financial literacy scores. The study found that financial literacy affects employees' management of personal finance which leads to improved personal investment, more savings diversifications, and a lower percentage of the debt. The study presented a piece of knowledge and the contextual gap in that it concentrated on personal finance while the current study will concentrate on SMEs' financial performance.

According to Addaney, Awuah, and Afriyie (2016), assessing the performance of small-scale businesses and managing debt in Ghana's Kumasi metropolitan was done. Each of the small-scale companies was interviewed and a total of 120 entities participated. The outcome indicated the majority of small-scale companies lack deep information on debt management issues. Based on the research results, the main causes of small-enterprise indebt inadequate business counsel, inadequate understanding of business, and inadequate record-keeping practices. Therefore, the study advises that small companies need to employ financial professionals to assist them to manage their businesses through meticulous record-keeping. It is also asserting that companies with low- and medium-sized budgets should be careful about incurring more expenses because doing so would create financial pressure, which may negatively impact the company. The research did not check the diagnostic methods, the correlation, and the examination of inferences. The current study will test and perform correlation and inferential analysis of the diagnostic tests.

Lusimbo and Muturi (2016) studied whether Kenya's MSEs grew as a result of having more financial literacy. The study found that, although MSE managers understood debt management literacy, they failed to fully comprehend the impact of interest rate and inflation on loans. Financial illiteracy on part of managers may be a leading indicator of poor development. The study presents a scope gap in that it was done in a small population (sub-county) and that the results may not be generalized and applied in the whole county.

2.4 Summary of Literature and Research Gaps

Table 2.1: Summary of Literature Review and Research Gap

Authors	Context and Focus	Major Findings	Gaps Identified	Gaps to be filled
Kang'aru, & Tirimba (2018)	Financially sound non-profit healthcare facilities in Kiambu County, Kenya saw the improved financial performance as a result of sound financial planning methods.	Financial performance improved primarily as a result of the working capital and inventory management, cash planning, and budgeting methods examined in this research.	The study only focused on one aspect of financial literacy, financial planning, thus presenting a conceptual gap. The financial performance context was based on NGOs resulting in a gap in context.	The present research will entail the financial literacy aspects that include; literacy in bookkeeping, debt management, and financial planning. Additionally, the current study context will be SMEs' financial performance.
Matewo (2018)	Small company success in Ethiopia is tied to accounting records in a very relevant way.	To the extent that the book of accounts was maintained, the research showed that business measurement methods used by MSEs correctly reflected the productivity of their enterprises.	The study only focused on one aspect of financial literacy, bookkeeping resulting in conceptual gaps. The reviewed study concentrated on MSEs resulting contextual gaps.	The present research will entail the financial literacy aspects that include; literacy in bookkeeping, debt management, and financial planning. Additionally, in the current study, SMEs' performance will be evaluated in the current review.
Jayantilal (2017)	Financial literacy on personal finance management	Financial literacy affects employees' management of personal finance, which leads to improved personal investment, more savings diversifications, and a lower percentage of the debt.	The dependent variable indicators were personal savings, personal investment, and personal debt. These indicators were different from the indicators of financial performance employed in the study resulting in conceptual gaps.	Current research will entail the financial literacy aspects that include; literacy in bookkeeping, debt management, and financial planning and relate them to financial performance. Additionally, the current study will concentrate on SMEs' financial performance through

				net income as the proxies.
Obuya (2017)	Assessed understanding of Ghanaian SMEs' financial position, and gains from the use of debt financing.	There is an inverse correlation between short-term loans and asset return calculations that use asset return as a measurement.	Financial literacy has not been shown to affect financial success, which is why there is a conceptual gap in the findings. This paper looks at MSEs financial results in Ghana, showing a disconnect between context and MSE performance.	The current study shall focus on SMEs' financial performance in the Kenyan context.
Akuno, Kubasu, Mwathi, (2017)	Employees at Egerton University were studied to see how financial literacy affected their individual financial choices in Nakuru County, Kenya	Based on available research, the presence of financial literacy seems to be associated with a substantial increase in individual financial choices.	The study presented a contextual and conceptual gap (personal financial decisions were the predicted variable).	Focusing on SMEs' financial results will be the main emphasis
Lusimbo and Muturi (2016)	The development of small businesses in Kenya, particularly those in the financial sector,	MSE management failed to grasp the link between interest rate and inflation and loan debt levels and that they were not keen on the purchasing terms and conditions indicated in a particular loan.	The study presents a scope gap in that it was done in a small population (sub-county).	This research will not only carry out a study in all the sub-counties of Mandera but also inferential statistics will be provided.
Adejare and Abdul-Rahamon (2016)	The impact of accounting record maintenance on small businesses in Nigeria was studied experimentally	This study found that maintaining an accounting record has a favorable correlation to small-scale business success.	The study findings were based on SMEs in Nigeria presenting a conceptual gap. Additionally, the Chi-square method was used presenting a	This study will concentrate on n financial performance of Businesses (women-owned SMEs) in Kenya. Additionally, inferential statistics entailing

			methodological gap.	correlation and multiple linear regression will be employed.
Addaney, Awuah and Afriyie (2016)	In Ghana's Kumasi city, management of debt and small-scale business efficiency were studied. A total of 120 small companies were contacted and interviewed.	According to the findings, the most common causes of indebtedness among small businesses are a lack of guidance on the kind of business and money, as well as a failure to understand the type of business.	The study did not test the diagnostic tests, correlation, and inferential analysis resulting in gaps in the methodological approach.	The present investigation will test the diagnostic tests and carry out correlation and inferential analysis.
Dawuda, (2016)	Examination an appraisal of money related records keeping conduct of SMEs organizations in Ghana	Found absence of instruction and significant expense of recruiting qualified staff made it exceptionally hard for the proprietors to keep appropriate books of records.	The study did not relate financial literacy with financial performance resulting in conceptual gaps. The study employed descriptive statistics resulting in gaps in the methodological approach.	The goal of this research is to undertake an empirical investigation to see how financial literacy affects financial success. Additionally, inferential statistics entailing correlation and multiple linear regression will be employed.
Lusimbo (2016)	Kenyan small business development and financial literacy	The descriptive statistics presented evidenced that was low levels of record-keeping literacy portrayed by MSE managers.	The study did not present the inferential statistics and variables were not regressed despite a small population used.	The current study will not only carry out a study in the whole County of Mandera but also present inferential statistics to address the evident gaps presented.
Kamau (2016)	The impact of accounting records on the financial success of SMEs in Nairobi County's core	Revenue and expenditure accounts play a major influence in ledger accounts, according to the	The study concentrated on one aspect of financial literacy, bookkeeping, thus presenting a conceptual gap.	The present investigation will entail the financial literacy aspects that include; literacy in bookkeeping, debt management,

	business area was investigated.	findings. Revenue and expense accounts in Nairobi County must be prepared properly for ledger accounts to be effective, limiting the possibilities of poor financial outcomes for SMEs.		and financial planning.
Mabhandu, (2016)	This paper explores the consequences of financial illiteracy despite a plethora of initiatives designed to support the development of small businesses.	The research found that many elements, including lack of financial knowledge and preparation, poor managerial abilities, budgeting problems, inadequate company information, questionable decision making, and an absence of non-business conduct, contributed to the difficulties entrepreneurs face.	The study measured different aspects of SMEs' growth using qualitative measures presenting a methodological gap.	Inferential statistics entailing correlation and multiple linear regression will be employed in the current study.

Source: Summary of Research Gap (2020)

2.5 Conceptual Framework

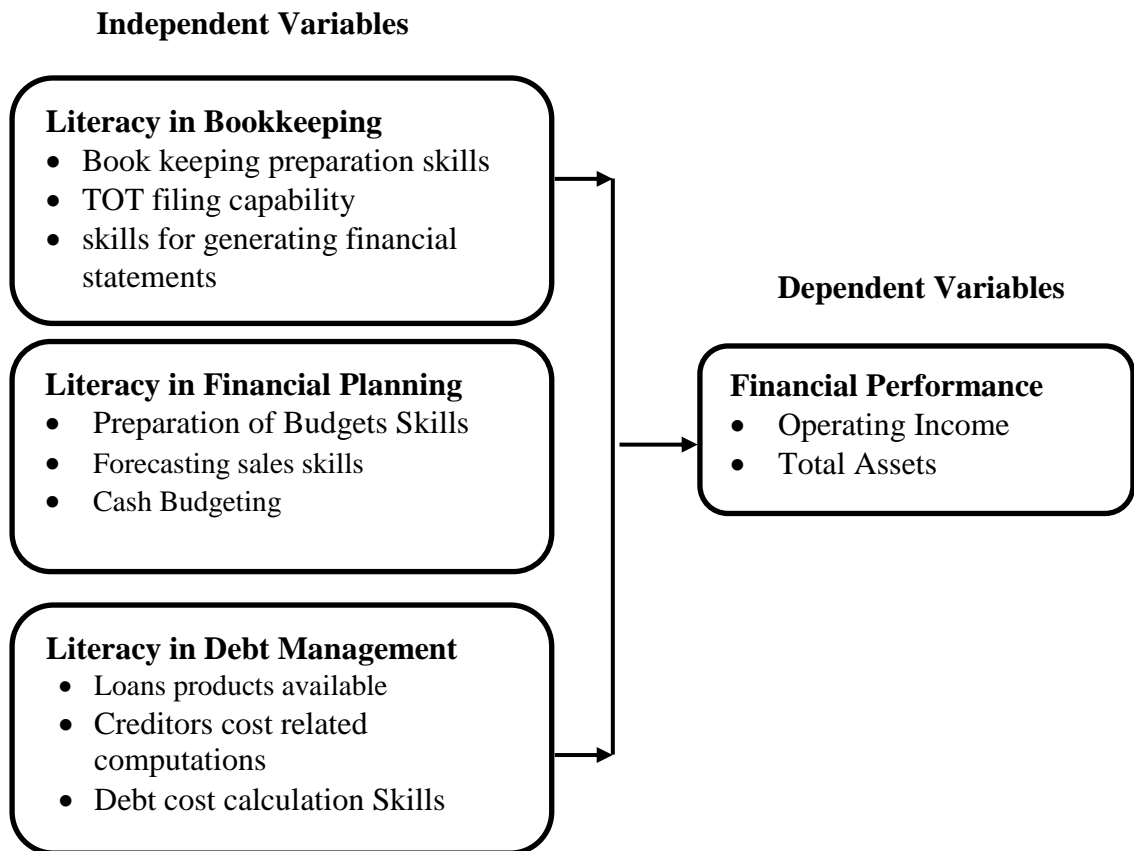


Figure 2.1: Conceptual Framework

Source: Researcher (2021)

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

The approach used to conduct the analysis is discussed in this chapter. This includes the design of the study, target population, the tools used to collect data, the technique used to collect data, the method of data analysis, and the presentation.

3.2 Research Design

A system showing how the examination target will be accomplished is known as a research design (Orodho, 2004). A Research design is a key arrangement that addresses the exploration investigations with insignificant deviations. In this study, the descriptive research design was utilized. Descriptive research aims at giving solutions to research problems and this study aims at getting solutions from the research problem (Mugenda & Mugenda, 2013). Descriptive design is mainly the description of the characteristics of a respondent and therefore appropriate for the current research since it sought to examine the effect of financial literacy on the financial performance of SMEs in Mandera County, Kenya.

3.3 Empirical Model

A multiple regression model was used to establish the relationship between the independent variables and dependent variables. This model is shown below: $Y_t = \beta_{0i} + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$. Where; Y_i =Financial performance, X_1 = Literacy on Bookkeeping, X_2 = Literacy in financial planning, X_3 = Literacy in debt management, and ε = Error term.

The moderation effect on the relationship between financial literacy and financial performance was tested using the two models presented above. The test for moderation involves determining whether the p-value for the interaction term is statistically significant. If the p-value for the interaction variable is significant such that $p < 0.05$ then reject the null hypothesis.

3.4 Operationalization of Variables

Operationalization of a variable means finding a measurable, quantifiable, and valid index for the study variables. This is relevant especially for subjective factors, effort-dependent, or abstract since they are not easily measurable Trochim & Donnelly (2007). The variables in this study, including the components of independent, moderating, and dependent variables were operationalized as set out in table 3.1.

Table 3.1: Operationalization of Variables

Variables	Nature	Operationalization	Indicators	Measurement	Hypothesized direction
Financial Performance	Dependent	Ability to budget for operating income and total assets	<ul style="list-style-type: none"> • Operating Income • Total Assets 	Questionnaire, 5-point Likert scale	None
Literacy in Bookkeeping	Independent variable	Presentation and bookkeeping skills	<ul style="list-style-type: none"> • Book keeping preparation skills • TOT filing capability • skills for generating financial statements 	Questionnaire, 5-point Likert scale	Positive
Literacy in Financial Planning	Independent variable	Skills in budgeting and sales forecasting	<ul style="list-style-type: none"> • Preparation of Budgets Skills • Forecasting sales skills • Cash Budgeting 	Questionnaire, 5-point Likert scale	positive
Literacy in Debt Management	Independent variable	Availability of loan products, creditor cost, and debt cost calculation	<ul style="list-style-type: none"> • Loans products available • Creditors cost-related computations • Debt cost calculation Skills 	Questionnaire, 5-point Likert scale	positive

Source:

Author

(2021)

3.5 Target Population

Even though there are 15,764 registered SMEs in Mandera County, the population of female-owned SMEs in Mandera County is however unknown. The study analysis was conducted across all six sub-counties in Mandera County, which include; Laffey, Mandera East, Mandera North, Banisa, Mandera South, and Mandera West. The respondents were the managers or owners of the women-owned SMEs.

3.6 Sampling Technique and Sample Size

As a group, those individuals within the entire population who can reflect the collective whole are referred to as samples (Mugenda & Mugenda, 2019). In the present research, we used a non-probability sampling method known as snowball sampling. The population and sample populations were both unknown. The approach used in this experiment is known as a sampling method. It consists of randomly selecting existing participants to provide samples to be used in a research study (Biernacki & Woldorf, 1981). A randomized, exponential non-discriminating snowball sampling method was employed. The success of each new recommendation eventually resulted in even more referrals, and so produced a larger sample of participants.

The population of women SME owners/managers in Mandera County was unknown, thus, the sample size of the respondents in the interview guide was administered and was computed using the formula for unknown populations as suggested by Cochran (1977). The Cochran formula is:

$$n_0 = \frac{Z^2 pq}{e^2}$$

Where;

Z = z-value shown in the Z table

e = The required level of accuracy (margin of error)

p = The approximated percentage of the populace that has the quality in question

q = 1 – p

The Z value obtained was 1.96, the percentage of the populace exhibiting the characteristic in question (p) was 50% and the desired precision level was 5%. Thus, the sample size derived is 385.

3.7 Data Collection Instruments

A questionnaire was chosen as the principal tool for primary data collection. The use of questionnaires (Appendix II) in data collection is an important method, as it offers well-thought-out responses with considerable freedom to express their opinions and ideas and encourages successful research on large samples. The questions included in the study were closed-ended questionnaires. The data collected was cross-sectional, a consistent period was used to gather data from numerous different units of analysis.

3.8 Data Collection Procedures

The researcher obtained the NACOSTI certifications after the university's data collection approval. The researcher gathered data on face-to-face sessions through the administration of the questionnaires. In any given study, the researcher personally visited the sampled areas and introduce himself to the respondents and gave a clear explanation of the present study's aim and significance, and administered the test instruments by considering the ethical concerns associated with the research.

3.9 Validity and Reliability of the Research Instruments

3.9.1 Validity of the Research Instruments

The validity of a research instrument is defined by its capacity to provide the results for what it is intended to. The validity will determine if the respondents perceive questions as intended by the researcher in the research instruments (Kothari, 2013). To ascertain the validity of the content, the researcher prepared research tools and seek expert advice from the experts, mainly the supervisors who guided the conduct of the study. Based on their advice and comments, the content and impressions of the research instruments were improved where the questionnaires were reframed to suit the study after which the researcher proceeded with data collection. The researcher also performed the KMO and Bartlett's tests of the variables emanating from the responses of the participants of the pilot test to ensure criterion validity.

3.9.2 Reliability of the Research Instruments

To evaluate the inter-item consistency of three, four, or five-point Likert scales, the researcher employed the Cronbach Alpha test, which is commonly used to evaluate excellent internal consistency with a cut-off value of 0.7 (Kothari, 2013).

3.9.3 Piloting

Piloting involves early tests of a few subject items in the investigative instruments (Crossman, 2019). It ensures consistency in the test instruments is achieved by revising them based on the pilot study results. The population, and subsequently the sample of the study is currently undetermined. According to Julious (2005), the “rule of 12” recommends getting pilot study results on average values and variability, researchers will need to recruit at least 12 individuals. Thus, 12 respondents were enlisted for the study’s pilot test. The pilot respondents were from the Lafey sub-county which was not included in the actual study but had similar characteristics to the target population to pre-test the research tools before embarking on the actual study to inform the researcher of any necessary adjustments to be made. A representative of 12 questionnaires was given to the selected individuals to test the reliability, relevance, and accuracy of the items or questions in the questionnaire. Any ambiguity in the questions was corrected before the actual data collection took place.

3.10 Data Analysis and Presentation

The analysis of data refers to the method of sorting data into different patterns. Once the researcher collects the data, the completeness of the questionnaires will be checked to make sure that valuable information has been acquired and that the vague

and illogical data have been adequately cleaned and interpreted. The answers of the participants were organized, coded, and analyzed using the SPSS statistical analysis software, as reflected in the questionnaires. This provided the basis for a clear, simple, and understandable way of summing up the results. After that, we compiled descriptive and inferential data and tabulated the findings as well as gave percentages. Multiple linear regression analysis and correlation studies were used in the research, with inference using the information in the data. To answer this question, we utilized correlation analysis. Researchers utilized a linear regression model to analyze the connection between study variables using a multiple linear regression model. This model is shown below:

$$Y_t = \beta_{0i} + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

Where;

Y_i =Financial performance

X_1 = Literacy on Bookkeeping

X_2 = Literacy in financial planning

X_3 = Literacy in debt management

ε = Error term

In the model, β_0 = the constant term while the coefficient $\beta_i = 1 \dots 3$ will be used to measure the ratio of change in the dependent variable per unit change in the independent variable, and ε is the error term accounted for other factors affecting financial performance excluded in the model. P-values were used to interpret data.

When the P-value is <0.05 , the predictor variable was assumed to be significant to determine the change in the predicted variable, otherwise, when P-value was more than 0.05, the particular variable will not have any significant effect on the predicted variable.

3.11 Diagnostic Tests

Normality, multi-collinearity, auto-correlation, and heteroscedasticity are all used to conduct the initial data analysis. The following methods are used: Normality, multi-collinearity, auto-correlation, and heteroscedasticity to determine whether the study's model is suitable for addressing the research goals, and to prove or disprove the assumption of the classical linear regression model, as well as to satisfy the needs of the linear regression model in general.

3.11.1 Normality test

This assessment compares the normalcy measurement methods with the conventional graphical evaluation methods. The null hypothesis states that the sample distribution is normal. The distribution of scores from a test with positive values must be non-normal and has a zero mean and constant variance of 1. Standardization will be done for the variables that violate the condition of normality.

3.11.4 Multicollinearity test

Multicollinearity means that in the regression model, every correlation is precise, among some explanatory variables. Where independent variables are multicollinear, predictive power is overlapped or shared. Thus, if multicollinearity becomes fine, Regression coefficients and standard errors are unknown for the independent variables (Gujarati, 2014).

Multicollinearity causes important factors to be rendered meaningless because P-values rise, which makes significant t-statistics lose significance. This model with several covariance structures is therefore expected to fail to recognize important variables as inconsequential ones. This research aims to find out if there is a direct connection between two or more variables, such as the strength of the relationship or linear association. The correlation coefficient may have values ranging from -1 to +1, as seen in the Pearson correlation matrix. The correlation coefficient is equal to 1 if the connection between the two variables is perfect; 0 if it is imperfect. No correlation between two variables exists, and the correlation coefficient is equal to zero (Bedru & Seid, 2015). Furthermore, as noted by Brooks (2008), in no practical work, zero correlation among explanatory variables occurs. Thus, even though there is any suggestion of the presence of zero correlation among the explanatory variables, the accuracy is not greatly affected by that. Dropping strongly correlated variables solves the multicollinearity problem (Ahmad & Bashir, 2013).

The Variance Inflation Factors (VIF) statistics and Tolerance statistics can be used to ascertain multi-collinearity. The general guideline in statistics is that tolerance levels should be higher than 0,1 and VIF values less than 10 and greater than 1 to satisfy multicollinearity requirements. The variable not compliant with normality and multicollinearity will be normalized as a solution to correct multicollinearity.

3.12 Ethical Consideration

The researcher pursued a data collection letter approval from the Kenyatta University, graduate school. Likewise, permission from the National Commission for Science, Technology, and Innovation (NACOSTI) to carry out the survey was sought. It will also be pertinent for the researcher to get respondents' consent before

their involvement in the research. Respondents were made aware of the fact that their involvement in the research is voluntary and they will be free to withdraw from the participation at any stage during the study. Confidentiality and anonymity of the information from the participants were ensured throughout the study period. The participants were informed that the responses they give will be used for no other purposes than the study. This ensured that they give honest and truthful responses.

3.13 Validity and Reliability Results

A pilot study was conducted reliability and validity tests done to unravel if the study's data collection tool is valid and reliable. Twelve respondents were enlisted for the study's pilot test, the respondents participating in the pilot test will be from the Lafey sub-county.

3.13.1 Tests for Validity

Table 3.2: Validity Test for Literacy in Financial Planning

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.508
	Approx. Chi-Square	38.632
Bartlett's Test of Sphericity	Df	21
	Sig.	.011

Source: Field Data (2021)

The KMO value was 0.508, which indicated that the variable literacy in financial planning was valid since the value was above 0.5. Bartlett's significance level was 0.011 which was less than 0.05 further supporting the validity findings.

Table 3.3: Validity Test for Literacy in Bookkeeping

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.713
	Approx. Chi-Square	53.677
Bartlett's Test of Sphericity	Df	21
	Sig.	.000

Source: Field Data (2021)

The KMO value was 0.713, which indicated that the variable literacy in bookkeeping was valid since the value was above 0.5. Bartlett's significance level was 0.000, which was less than 0.05, further supporting the validity findings.

Table 3.4: Validity Test for Literacy in Debt Management

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.460
	Approx. Chi-Square	36.380
Bartlett's Test of Sphericity	Df	15
	Sig.	.002

Source: Field Data (2021)

The KMO value was 0.416, which indicated that the variable literacy in debt management was not valid since the value was below 0.5. However, Bartlett's test of sphericity significance level was 0.002, which was less than 0.05, which indicated that the variable literacy in debt management was valid. Because Bartlett's test of sphericity indicated validity, thus the variable is valid.

3.13.2 Tests for Reliability

Table 3.5: Reliability for Literacy in Financial Planning

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.873	.865	6

Source: Field Data (2021)

The Cronbach's alpha derived from the reliability test is 0.873, which indicates that the variable literacy in financial planning is reliable since the Cronbach's alpha value obtained is above 0.7.

Table 3.6: Reliability for Literacy in Bookkeeping

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.954	.959	4

Source: Field Data (2021)

The Cronbach's alpha derived from the reliability test is 0.954, which indicates that the variable literacy in bookkeeping is reliable since the Cronbach's alpha value obtained is above 0.7.

Table 3.7: Reliability for Literacy in Debt Management

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.751	.740	4

Source: Field Data (2021)

The Cronbach's alpha derived from the reliability test is 0.751, which indicates that the variable literacy in debt management is reliable since the Cronbach's alpha value obtained is above 0.7.

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND INTERPRETATION

4.1 Introduction

The current chapter highlights the data analysis, interpretation, and discussion of the findings. It is classified into five sections, which entail; the study response rate, the respondents' and firm characteristics, descriptive statistics, inferential statistics, and discussion of the research findings.

4.2 Response Rate

The response rate in a survey study refers to the percentage of total answers received relative to the number of respondents that were targeted. The conclusion rate is often known as the return rate, and it is stated in a percentage form. This study's response rate is shown in Table 4.1.

Table 4.1: Study Response Rate

Response	Frequency	Percentage
Returned	317	82.34%
Unreturned	068	17.66%
Total	385	100%

Source: Field Data (2021)

The owners/managers of female-owned SMEs in Mandera County were sent 385 questionnaires, according to Table 4.1. According to the results, 317 answers with sufficient information were produced and returned from the 385 questionnaires sent to the target respondents, resulting in an overall study response rate of 82.34 percent. This is in line with According to Mugenda & Mugenda (2010), the presence of a 70% response rate makes a study acceptable for analysis, and a conclusion may be drawn from it.

4.3 Respondents Background and Firm Characteristics

The research set out to determine the respondents' background and firm characteristics of all the 385 women-owned SMEs in Mandera County and owners/managers of the female-owned SMEs in Mandera County. Highlighted are the respondents' background and firm characteristics derived from the Part A of this study's questionnaire, which included; age, education qualifications, duration of SME's operations, and the number of employees.

4.3.1 Age of the Sampled Respondents

The study asked the target sample that they provide their age. This was done to see whether age has anything to do with one's sense of financial literacy and performance. Displayed in Figure 4.2 are the findings.

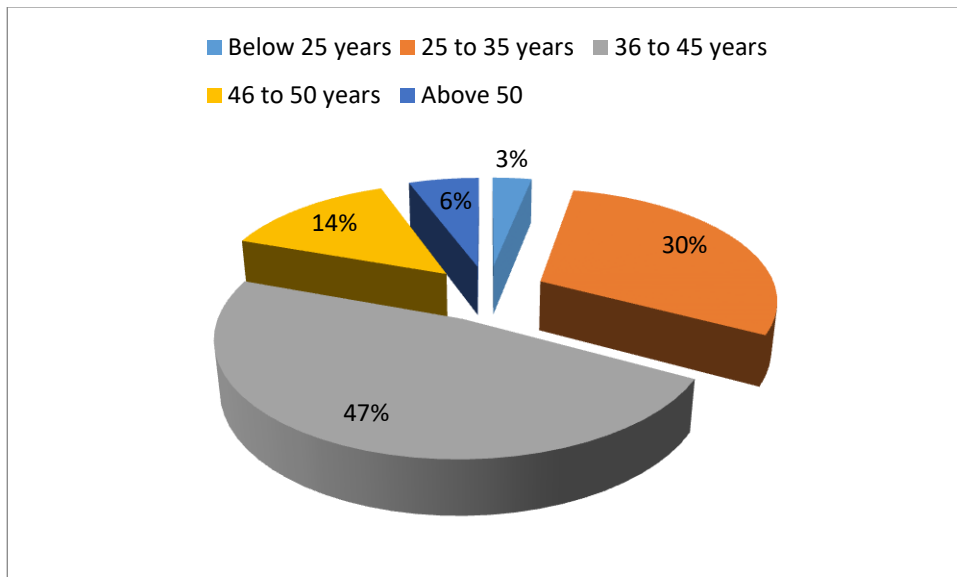


Figure 4.1: Age of the Sampled Respondents

Source: Field Data (2021)

Figure 4.1 demonstrates the various ages of the owners/managers of the female-owned SMEs in Mandera County. The highest proportion of the respondents, that constitutes 47%, were in ages ranging from 36 to 45 years. Respondents that were aged between 25 and 35 years constituted a proportion of 30%, the proportion of those aged between 46 and 50 years was 14%, while those who were in the age of above 50 years constituted a proportion of 6%. The least proportion of the respondents were those aged below 25 years, which was 3%. The even spread in the number of respondents in accordance to age is an indication of a lack of bias. Additionally, the older that the respondents are, they are more likely to have information on financial literacy and financial performance because they are more likely to have engaged in entrepreneurship longer.

4.3.2 Education Qualifications

The study participants were asked to reveal their education qualifications. This was to determine if education qualifications have any bearing on the perception of financial literacy and financial performance. Results are shown in Figure 4.2.

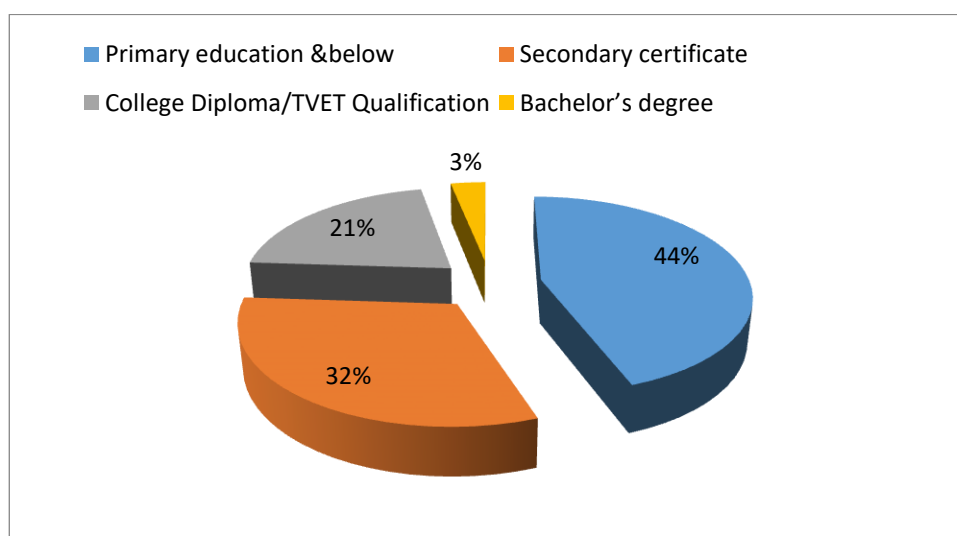


Figure 4.2: Educational Qualifications

Source: Field Data (2021)

Figure 4.2 demonstrates the various educational qualifications of the study respondents. The highest proportion of the respondents, which constitutes 44%, had attained the highest educational qualification was primary school education and below. Respondents that had attained secondary school education qualifications constituted a proportion of 32%, proportion of those whose highest qualification was a college diploma or TVET qualification was 21%, while those who had attained a bachelor's degree constituted a proportion of 3%. The even spread in the number of respondents in accordance to education qualifications is an indication of a lack of bias. Additionally, respondents who have attained higher education qualifications are more likely to be financially literate.

4.3.3 Duration of Operation

The target sample was asked how long their respective SMEs have been in operation. This was to determine if the duration of operation has any bearing on the perception of financial literacy and financial performance. The findings are displayed in Figure 4.3.

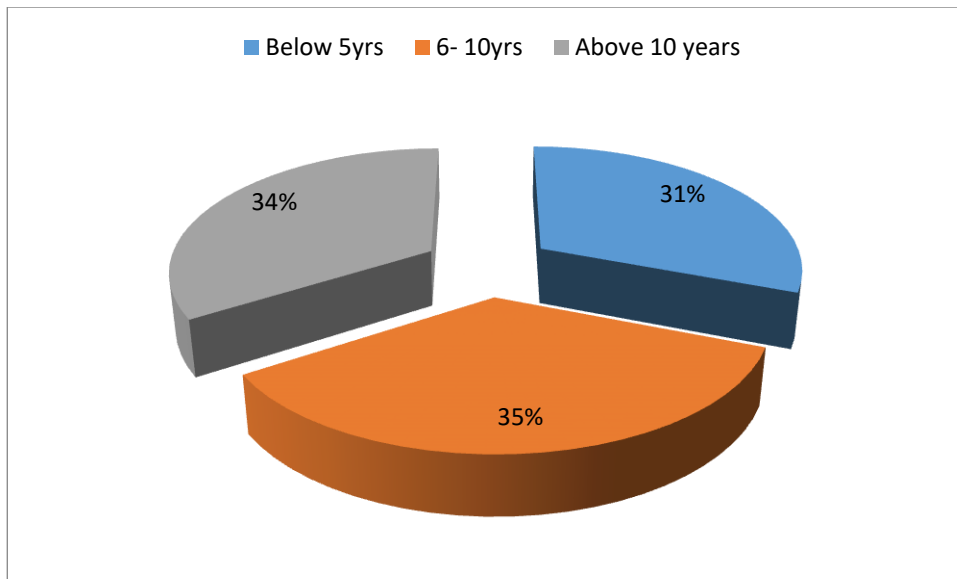


Figure 4.3: Duration of Operation

Source: Field Data (2021)

Figure 4.2 demonstrates the duration of operations of the female-owned SMEs in Mandera County. The highest proportion of the SMEs, which constitutes 35%, had operated for periods of between 6 to 10 years. SMEs that had operated for over 10 years constituted a proportion of 34%, while the SMEs who had operated for below 5 years constituted a proportion of 31%. The even spread in the SMEs following the duration of the operation is an indication of a lack of bias. Additionally, the longer the SME has been in operation, the more likely they are to have information on financial literacy and financial performance.

4.3.4 Number of Employees

The target sample was asked to state the range of the number of employees of the respective SMEs that they are currently engaged in. This was to determine if they can be classified as SMEs. In Kenya, the Micro and Small Enterprises Act of 2012 gives guidelines on the classification of SMEs. It guides that micro-enterprises are

enterprises with less than 10 employees. Small enterprises, on the other hand, are enterprises that have a workforce of between 10 to 49 employees. Medium enterprises were not covered by the Act, however, a survey by the Kenya National Bureau of Statistics (KNBS) outlines that they should employ 50 to 99 employees. Figure 4.4 summarizes the results.

Figure 4.4 exhibits that the highest proportion of SMEs had the number of employees 1 to 10 employees which were 58%. The proportion of SMEs that had between 10 and 30 employees was 36%, while the proportion of the SMEs that had between 31 and 50 employees was 5%. The least proportion of the SMEs, which was 1%, had between 51 and 99 employees. The uneven distribution of annual turnover is an indication of bias and that the firms were not randomly distributed. However, Mandera County being a marginalized County is most likely to have micro-enterprises as opposed to SMEs. The study findings displayed in Figure 4.1 display that 58% of the firms sampled were micro-enterprises, 41% were small enterprises, and 1% were medium enterprises.

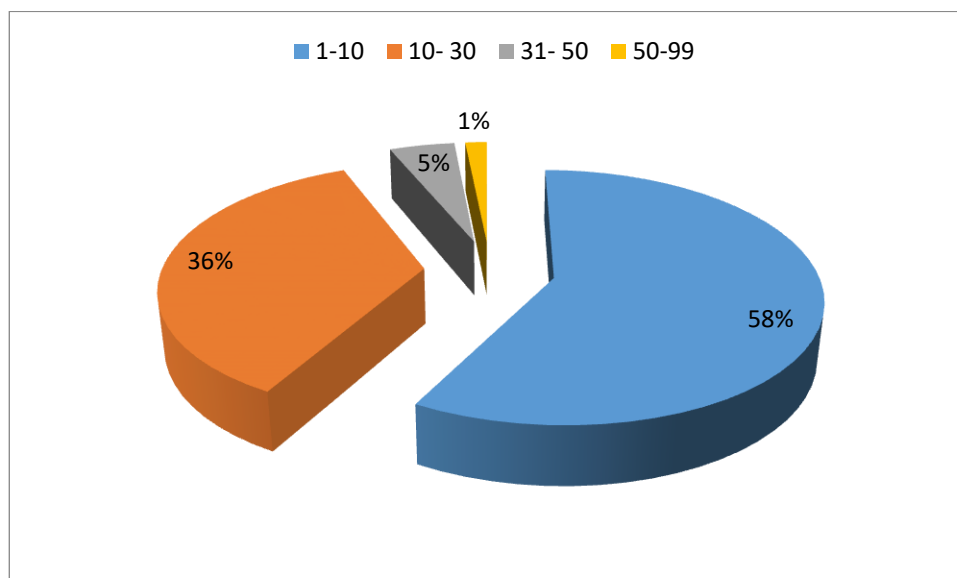


Figure 4.4: Number of Employees

Source: Field Data (2021)

4.4 Descriptive Statistics

The study decided on cross-sectional descriptive research because it enables results to be generalized, analyzed, and variables related. The financial literacy components of the research included; literacy in financial planning, literacy in bookkeeping, and literacy in debt management. Additionally, financial performance was the study's response variable.

4.4.1 Literacy in Financial Planning

The respondents were asked to state whether the respective SMEs they are engaged in had prepared any budget. The findings are presented in Figure 4.5.

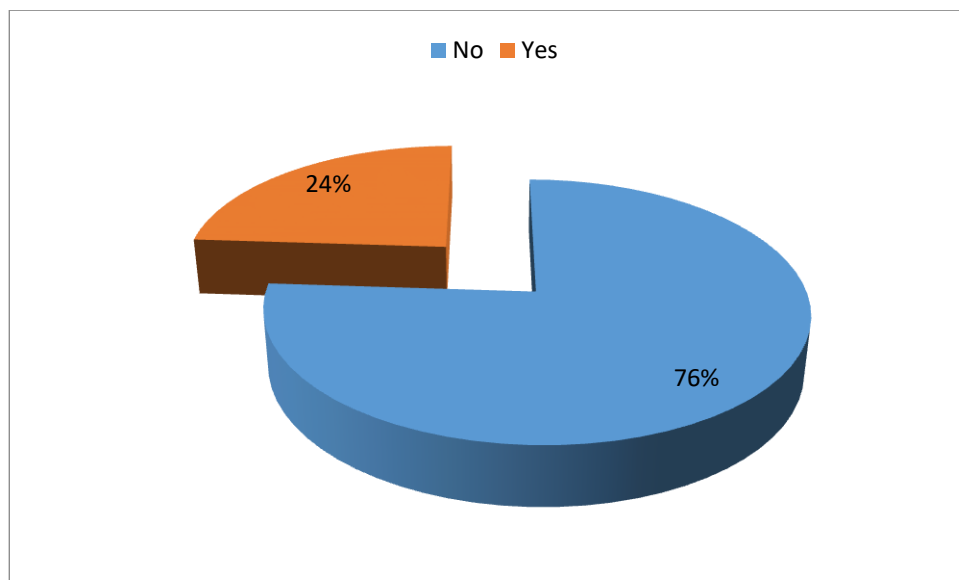


Figure 4.5: Budget Preparation

Source: Field Data (2021)

Figure 4.5 displays that 76% of the women-owned SMEs in Mandera County have never prepared any budget in the last five years. However, 24% of the women-owned SMEs in Mandera County have prepared a budget in the last five years.

The owners/managers of the female-owned SMEs in Mandera County that had prepared a budget in the last five years were asked how frequently they prepared the budgets. The findings are presented in Figure 4.6. The study findings established that the biggest proportion of the women-owned SMEs that prepare budgets, which is 51%, do it annually. The proportion of those who prepared their budgets semi-annually and monthly constituted 20% each. The least proportion of the women-owned SMEs who prepare budgets, which is 9%, prepared their budgets every week.

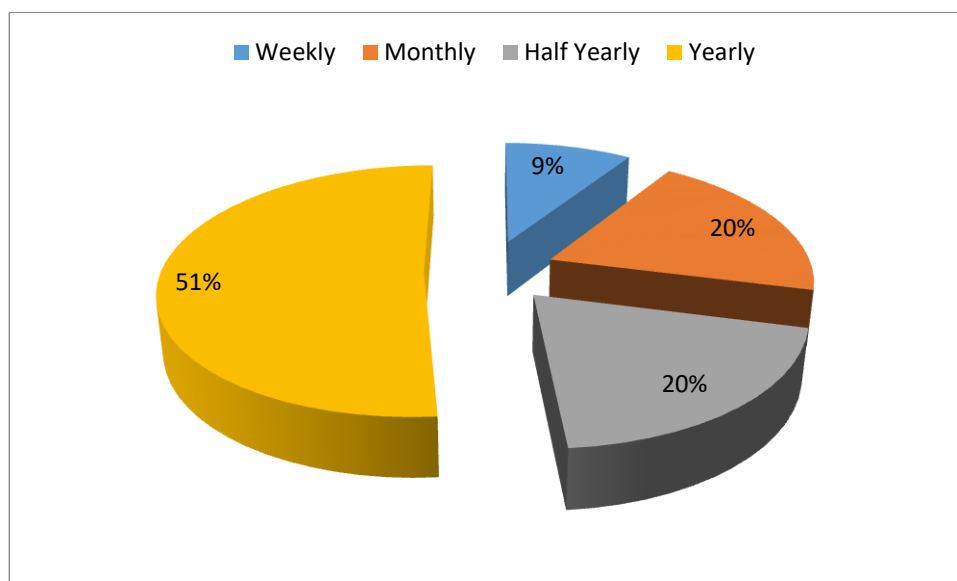


Figure 4.6: Frequency of Budget Preparation

Source: Field Data (2021)

The owners/managers of the female-owned SMEs in Mandera County that had prepared a budget in the last five years were further asked to state the forms of budgets they prepared. The findings are presented in Figure 4.7.

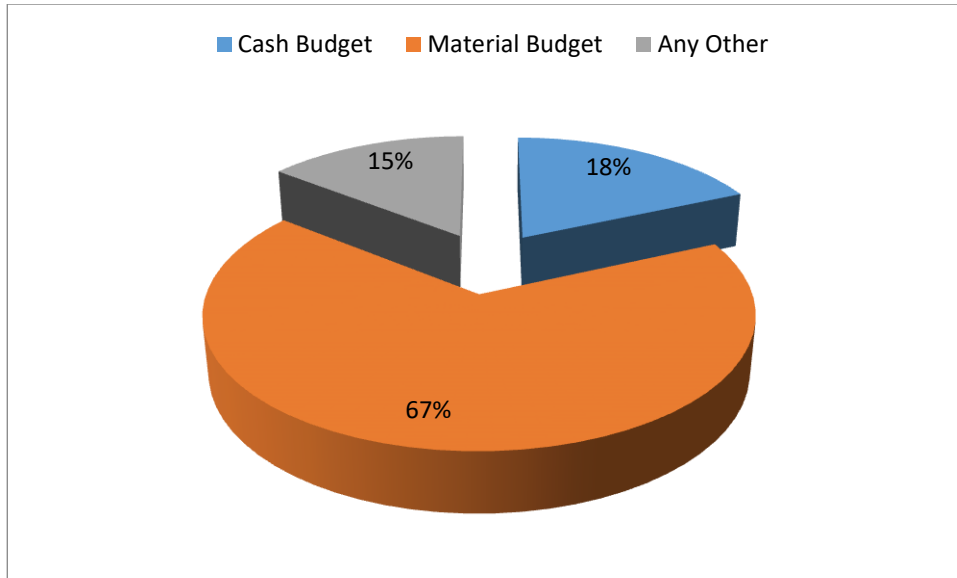


Figure 4.7: Forms of Budgets Prepared

Source: Field Data (2021)

The study findings established that the biggest proportion of the women-owned SMEs that prepare budgets, which is 67%, prepare material budgets, while the proportion of those who prepared cash budgets was 18%. The least proportion of the women-owned SMEs that prepare budgets, which is 15%, prepared other types of budgets, which included; production, overheads, and personnel budgets.

The respondents were asked to rate the attributes of literacy in financial planning exhibited in their respective SMEs. An ordinal measurement scale was utilized to measure the variable through a five-point Likert scale to quantify the respondent's view towards literacy in financial planning present in their respective women-owned SMEs. Consequently, literacy in financial planning descriptive statistics was derived, and the outcomes are summarized in Table 4.2.

Table 4.2 displays that owners or managers of the female-owned SMEs in Mandera County to a great extent possess skills to prepare budgets help them reduce

expenditures occasioned by impulse among other factors. This is because the attribute exhibits a mean of 3.4259 and 1.46208 Standard Deviation (STDEV). It is further displayed that owners/managers of the female-owned SMEs to a great extent can forecast sales, a skill that aids in increasing the amount of fixed capital available. The attribute has a mean of 3.4032 and a STDEV of 1.48216. The owners/managers of the female-owned SMEs to a great extent can forecast sales skills that aid in avoiding cash deficit surprises. The attribute has a mean of 3.7792 and STDEV of 1.21247. Additionally, the owners/managers of the female-owned SMEs to a great had the amount spent daily in the business being based on the plans. The attribute has a mean of 3.7066 and STDEV of 1.34036.

Table 4.2: Literacy in Financial Planning Descriptive Statistics

	N	Mean	Std. Deviation
To what extent do you possess skills to prepare a budget to help me reduce expenditures, such as impulse buying	317	3.4259	1.46208
To what extent do you have the ability to forecast sales skills that aid in increasing the amount of fixed capital available	315	3.4032	1.48216
To what extent do you have the ability to forecast sales skills that aid in avoiding cash deficit surprises	317	3.7792	1.21247
To what extent does the amount spend daily in the business based on the plans	317	3.7066	1.34036
To what extent does cash planning generally aid in specifying low-risk preservation of money	317	3.6151	1.29146
To what extent does cash budgeting aid in increasing the operating income	316	3.6424	1.34116
Composite Mean		3.5954	1.35495
Valid N (listwise)	314		

Source: Field Data (2021)

The owners/managers of the female-owned SMEs to a great extent practice cash planning, which generally aids in specifying low-risk preservation of money. The attribute has a mean of 3.6151 and a STDEV of 1.29146. Finally, Table 4.2 exhibits that the owners/managers of the female-owned SMEs to a great extent practice cash budgeting, which aids in increasing the operating income. The attribute has a mean of 3.6424 and a STDEV of 1.34116. The overall attributes had a 3.5954 composite mean and a composite STDEV of 1.35495. It gives an implication that the respective female-owned SMEs exhibit to a great extent financial planning literacy as one of the aspects of financial literacy.

4.4.2 Literacy in Bookkeeping

The respondents were asked to state to what extent training on bookkeeping skills, for instance, training on decisive interpretation of information from transactions, influenced the financial performance of their respective SMEs. The findings are presented in Figure 4.8.

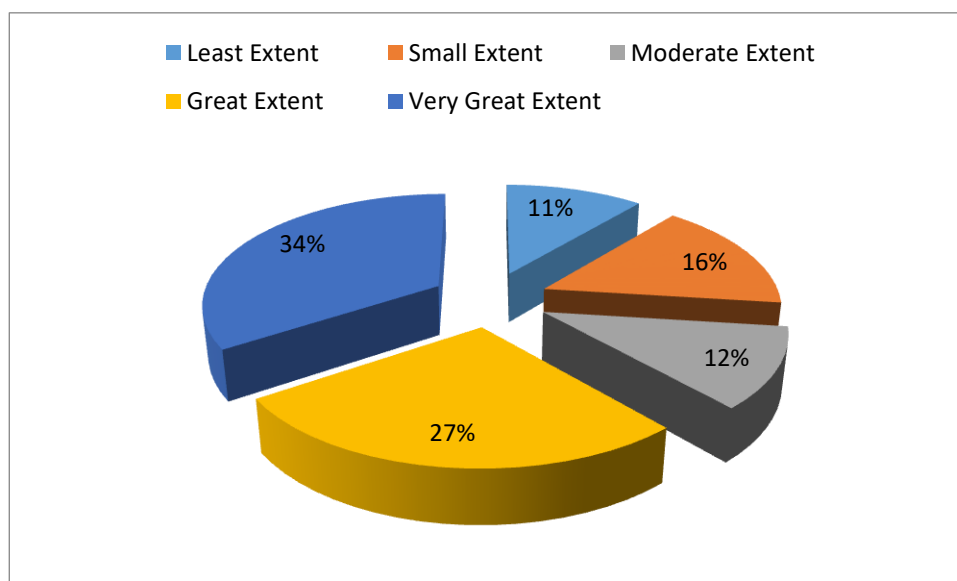


Figure 4.8: Bookkeeping Training

Source: Field Data (2021)

The highest proportion of the owners/managers of the female-owned SMEs in Mandera County, which constituted 34%, opined that training on bookkeeping skills, for instance, training on decisive interpretation of information from transactions, influenced to a very great extent the financial performance of their respective SMEs. 27%, 16%, 12%, and 11% of the owners/managers of the female-owned SMEs in Mandera County opined that bookkeeping training influenced SME financial performance to; a great extent, a small extent, a moderate extent, and the least extent respectively. A mean of 3.5778 and a STDEV of 1.38560 implies that generally, training on bookkeeping skills influences to a great extent the financial performance of women-owned SMEs in Mandera County.

The respondents were asked to rate the attributes of literacy in bookkeeping exhibited in their respective SMEs. An ordinal measurement scale was utilized to measure the variable through a five-point Likert scale to quantify the respondent's view towards literacy in bookkeeping present in their respective women-owned SMEs. Consequently, literacy in bookkeeping descriptive statistics was derived, and the outcomes are summarized in Table 4.3.

Table 4.3: Literacy in Bookkeeping Descriptive Statistics

	N	Mean	Std. Deviation
To what extent have bookkeeping skills equipped you to ascertain profits earned or losses sustained by the business.	316	3.5696	1.53836
To what extent do bookkeeping skills equip you with forecasting skills necessary for setting projections and goals of the business.	317	3.7508	1.25702

To what extent have you obtained the necessary educational background in accounting professions that aids in proper record keeping	317	3.4732	1.46372
Bookkeeping has given you the abilities required to produce financial statements for use by governments, creditors, and suppliers.	317	3.8801	1.20053
Composite Mean		3.6684	1.36490
Valid N (listwise)	316		

Source: Field Data (2021)

Table 4.3 displays that owners/managers of the female-owned SMEs in Mandera County to a great extent possess bookkeeping skills that equip them in ascertaining profits earned or losses sustained by the business. This is because the attribute exhibits a mean of 3.5696 and 1.53836 STDEV. It is further displayed that owners/managers of the female-owned SMEs to a great extent possess bookkeeping skills that have equipped them with forecasting skills necessary for setting projections and goals of the SMEs. The attribute has a mean of 3.7508 and a STDEV of 1.25702. Additionally, the owners/managers of the female-owned SMEs to a great extent have obtained the necessary educational background on accounting professions that aids in proper record keeping. The attribute has a mean of 3.4732 and STDEV of 1.46372.

The owners/managers of the female-owned SMEs to a great extent possess bookkeeping which has equipped them with the necessary skills for generating financial statements needed by the government, supplies, creditors, among other stakeholders. The attribute has a mean of 3.8801 and a STDEV of 1.20053. The overall attributes had a 3.6684 composite mean and a composite STDEV of 1.36490.

It gives an implication that the respective female-owned SMEs exhibit to a great extent bookkeeping literacy as one of the aspects of financial literacy.

4.4.3 Literacy in Debt Management

The respondents were asked to state to what extent access to banking services skills such as effective use of services such as cheques and credit cards have influenced the financial performance of their respective SMEs for the past five years. The findings are presented in Figure 4.9.

The highest proportion of the owners/managers of the female-owned SMEs in Mandera County, which constituted 41%, opined that access to banking services skills such as effective use of services such as cheques and credit cards has influenced the financial performance of their respective SMEs for the past five years to a very great extent. 28%, 14%, 14%, and 3% of the owners/managers of the female-owned SMEs in Mandera County opined that access to banking services skills influenced SME financial performance to; to a great extent, a small extent, a moderate extent, and the least extent respectively. A mean of 3.8924 and a STDEV of 1.18233 implies that generally, access to banking services skills influence to a great extent the financial performance of women-owned SMEs in Mandera County.

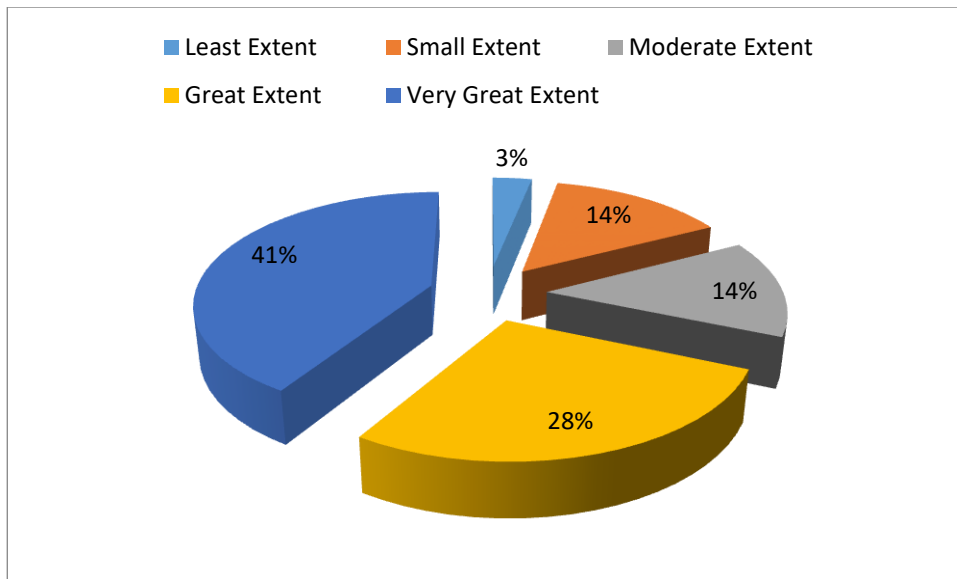


Figure 4.9: Access to Banking Services

Source: Field Data (2021)

The respondents were asked to rate the attributes of literacy in debt management exhibited in their respective SMEs. An ordinal measurement scale was utilized to measure the variable through a five-point Likert scale to quantify the respondent’s view towards literacy in debt management present in their respective women-owned SMEs. Consequently, literacy in debt management descriptive statistics was derived, and the outcomes are summarized in Table 4.4.

Table 4.4: Literacy in Debt Management Descriptive Statistics

	N	Mean	Std. Deviation
To what extent has access to banking services skills aided in securing loans for businesses expansion	315	4.0476	1.10915
To what extent has access to debt management skills equipped you with necessary skills for day-to-day credit affairs	315	4.0190	1.20229
To what extent has to access to cost computation skills equipped you with necessary skills for exploring banking facilities such as overdraft to help my business out of cash flow problems.	316	4.0506	1.00663

To what extent has debt cost calculation skills enabled your business to flourish	316	3.8006	1.14980
Composite Mean		3.9795	1.11697
Valid N (listwise)	314		

Source: Field Data (2021)

Table 4.4 displays that owners/managers of the female-owned SMEs in Mandera County to a very great extent possess access to banking services skills that aid in securing loans for businesses expansion. This is because the attribute exhibits a mean of 4.0476 and 1.10915 STDEV. It is further displayed that owners/managers of the female-owned SMEs to a very great extent possess access to debt management skills that equip them with necessary skills for day-to-day credit affairs. The attribute has a mean of 4.0190 and a STDEV of 1.20229. Additionally, the owners/managers of the female-owned SMEs to a very great extent possess access to cost computation skills that equip them with necessary skills for exploring banking facilities such as overdraft to aid the SMEs out of cash flow problems. The attribute has a mean of 4.0506 and STDEV of 1.00663.

The owners/managers of the female-owned SMEs to a great extent possess debt cost calculation skills that enable their SMEs to flourish. The attribute has a mean of 3.8006 and a STDEV of 1.14980. The overall attributes had a 3.9795 composite mean and a composite STDEV of 1.11697. It gives an implication that the respective female-owned SMEs exhibit to a great extent debt management literacy as one of the aspects of financial literacy.

4.4.4 Financial Performance

The respondents were asked to generally rate the performance of their respective SMEs in the last five years. The findings are presented in Figure 4.10.

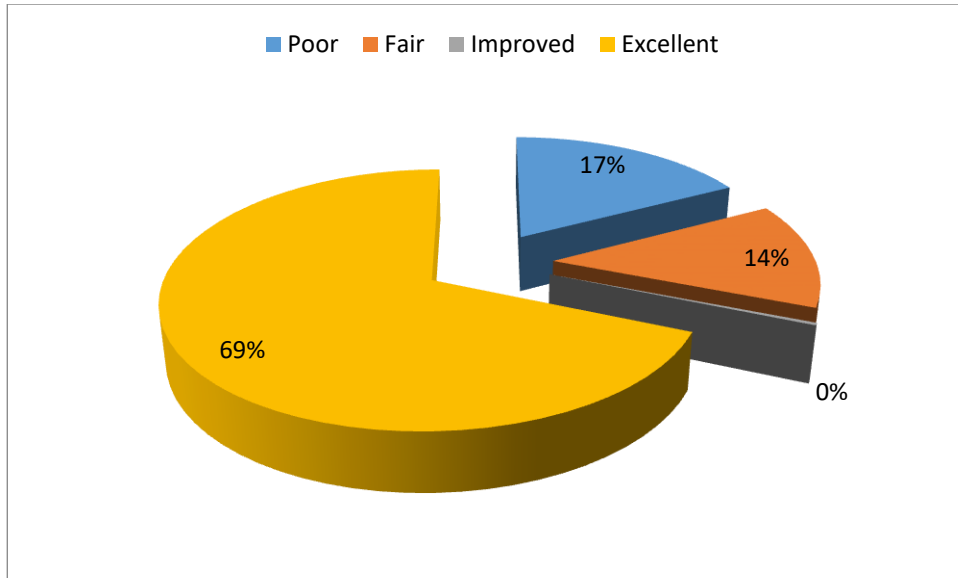


Figure 4.10: Performance Rating

Source: Field Data (2021)

The highest proportion of the owners/managers of the female-owned SMEs in Mandera County, which was 69%, rated the financial performance of the respective SMEs that they are engaged in as excellent. Further, 17% and 14% of the respondents rated the performance of their respective SMEs as poor and fair respectively. However, 0% of the owners/managers of the female-owned SMEs in Mandera County rated the financial performance of their respective SMEs.

The respondents were further asked to indicate the operating income levels of their respective SMEs for the previous year. The findings are presented in Figure 4.11.

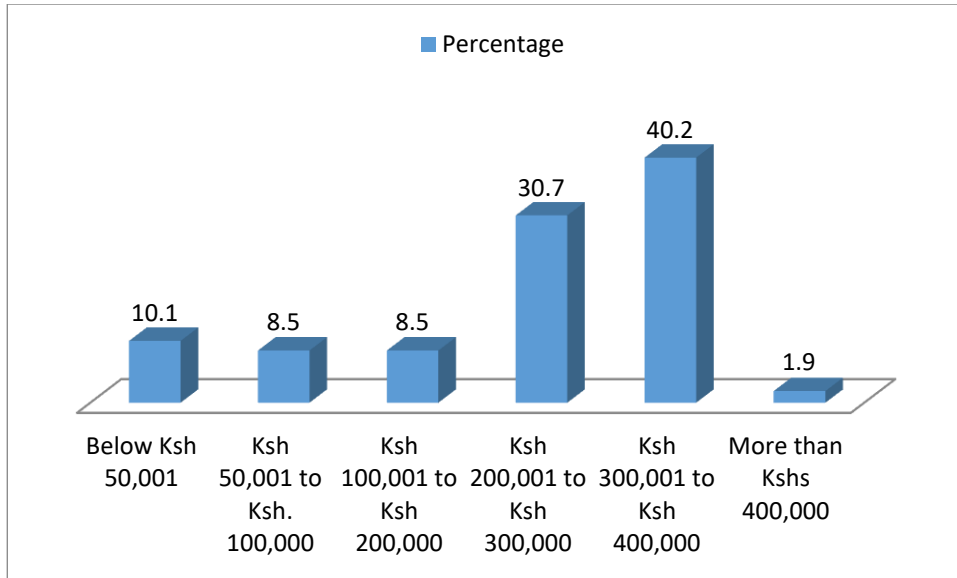


Figure 4.11: Operating Income Levels

Source: Field Data (2021)

The highest proportions of the female-owned SMEs in Mandera County, which was 40.2%, had operating income levels of between KES 300,001 to KES 400,000. 30.7%, 10.1%, 8.5%, and 8.5% had operating income levels of KES 200,001 to KES 300,000, below KES 50,000, KES 50,001 to KES 100,000, and KES 100,001 to KES 200,000. The lowest proportions of the female-owned SMEs in Mandera County, which was 1.9%, had operating income levels of above KES 400,000.

The respondents were finally asked to indicate the total asset levels of their respective SMEs for the previous year. The findings are presented in Figure 4.12.

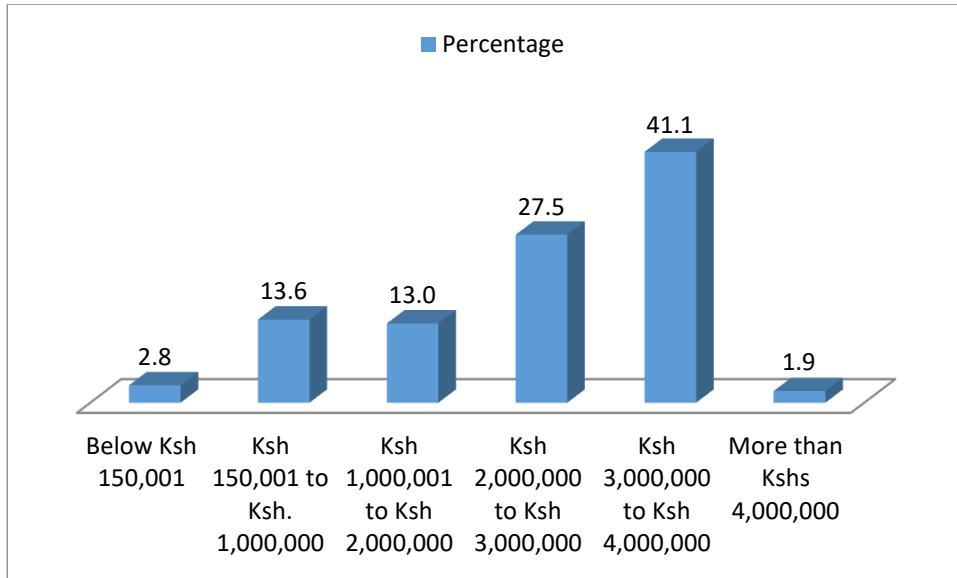


Figure 4.12: Total Asset Levels

Source: Field Data (2021)

The highest proportions of the female-owned SMEs in Mandera County, which was 41.1%, had total asset levels of between KES 3,000,001 to KES 4,000,000. 27.5%, 13.6%, 13.0%, and 2.8% had total asset levels of KES 2,000,001 to KES 3,000,000, KES 150,001 to KES 1,000,000, KES 1,000,001 to KES 2,000,000, and below KES 150,001. The lowest proportions of the female-owned SMEs in Mandera County, which was 1.9%, had total asset levels of above KES 4,000,000.

4.5 Diagnostic Tests

To guarantee the Best Linear Unbiased Estimators, diagnostic tests were performed before performing linear regression (BLUE). Normality, homoscedasticity, multicollinearity, and autocorrelation tests were among the diagnostic tests used in this research. The Shapiro Wilk test was used to determine normality, and the Kolmogorov-Smirnov test was used as a compliment. The Breusch-Pagan homoscedasticity test was used. Using VIF and Tolerance” tests, a test for

multicollinearity of data was performed. The test on autocorrelation will be conducted by using the Durbin-Watson statistic.

4.5.1 Normality Test

Table 4.12 highlights the normality testing of all variables considered in the investigation.

Table 4.5: Normality Test

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Fin_Perf	.185	316	.000	.878	316	.000
Fin_Plan_Lit	.261	316	.000	.858	316	.000
Book_Keep_Lit	.178	316	.000	.873	316	.000
Debt_Mgt_Lit	.196	316	.000	.855	316	.000

a. Lilliefors Significance Correction

Source: Field Data (2021)

Table 4.5 exhibits that the significance values of both Kolmogorov-Sminorv and Shapiro-Wilk tests of all the variables are less than the α (0.05). Hence, the data series of the variables are not normally distributed. The remedy for the non-normality of data is standardization. Thus, the data series of all the variables were standardized as a remedy for rectifying the non-normality of distribution.

4.5.2 Test for Homoscedasticity

Table 4.6 highlights homoscedasticity testing of all predictor variables used in this investigation. The Breusch-Pagan test was carried out. No Breusch-Pagan heteroscedasticity test is available in SPSS. There is, however, an indirect method. The unstandardized and standardized waste was stored and transformed by squaring the resulting variable with all independent study variables. The subsequent outcome of the Variance analysis is the Breusch-Pagan test.

Table 4.6: Test for Homoscedasticity

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	126.550	3	42.183	16.467	.000 ^p
	Residual	799.272	312	2.562		
	Total	925.822	315			

a. Dependent Variable: RES_1_SQ

b. Predictors: (Constant), Debt_Mgt_Lit, Book_Keep_Lit, Fin_Plan_Lit

Source: Field Data (2021)

Since the significance value obtained in the findings presented in Table 4.6 (0.000), is less than the α (0.05), all predictor variables in the data series are heteroscedastic. Robust standard failures were utilized to remedy heteroscedasticity as a technique to achieve unequal standard errors of the OLS coefficient.

4.5.3 Test for Multicollinearity

Results on the multicollinearity testing of data performed using the inflation factors of tolerances and variance (VIF) are shown in "Table 4.7.

Table 4.7: Multicollinearity Statistics

Model		Collinearity Statistics	
		Tolerance	VIF
1	Fin_Plan_Lit	.294	3.403
	Book_Keep_Lit	.296	3.383
	Debt_Mgt_Lit	.985	1.016

a. Dependent Variable: Fin_Perf

Source: Field Data (2021)

The results in Table 4.7 show that the value of tolerance for the predictor variables used in the research exceeds 0.1 when the VIF value is below 10 and above 1. Therefore, the predictor variables used in the research are not multi-collinearity.

4.6 Inferential Statistics

Determining the direction, connection, and intensity of the link among the predictor variable and the response value using inferential statistics. This section includes the inferential statistics used throughout the research, which included correlation and many linear regression analyzes. The attributes constituting the various predictor variables that were of the ordinal scale of measurement specifically utilizing the 5-point Likert scale were summarized to create a whole variable. Additionally, the classifications of firm performance attribute that included operating income levels and total assets were also summarized to create a whole financial performance variable. The attributes were summarized by estimating the median value of all the attributes.

4.6.1 Correlation Analysis

Whereas the Pearson correlation measures the linear connection among continuous variables, Spearman correlation is typically employed to assess interactions involving ordinal variables (Hauke & Kossowski, 2011). Therefore, the current study utilized the Spearman correlation coefficient. Two-tailed tests were used in the present research, with a 95 percent Confidence Interval being used. Table 4.9 contains the results.

The results in Table 4.9 show that financial planning and bookkeeping literacy are strongly associated with access to credit, with a 5% significance level. The mentioned predictor variables all have a positive significant correlation with financial performance. This is because their significance values ($\gamma = 0.478$, $P=0.000<0.05$; $\gamma = 0.647$, $P=0.000<0.05$) are all positive and are also less than the α

(0.05). However, literacy in debt management does not have a significant correlation with financial performance ($\gamma = 0.036$, $P=0.527>0.05$).

Table 4.9: Correlation Analysis

			Fin_Perf	Fin_Plan_Lit	Book_Keep_Lit	Debt_Mgt_Lit
Spearman's rho	Fin_Perf	Correlation Coefficient	1.000	.478**	.647**	.036
		Sig. (2-tailed)	.	.000	.000	.527
	Fin_Plan_Lit	Correlation Coefficient	.478**	1.000	.775**	.071
		Sig. (2-tailed)	.000	.	.000	.206
	Book_Keep_Lit	Correlation Coefficient	.647**	.775**	1.000	-.010
		Sig. (2-tailed)	.000	.000	.	.859
	Debt_Mgt_Lit	Correlation Coefficient	.036	.071	-.010	1.000
		Sig. (2-tailed)	.527	.206	.859	.

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

Source: Field Data (2021)

4.6.2 Multiple Linear Regression Analysis

A multivariate model of linear regression assessed the cause-and-effect connection between predictor variables used in the research and response variable. Since all the variables employed in the study were not normally distributed as exhibited by the Shapiro-Wilk and Kolmogorov-Sminorv tests displayed in Table 4.5, as a means of correcting non-normality of distribution, the data series were normalized. All of the predictor variables' data series are heteroscedastic. The predictor variables employed

in the current study did not adhere to the condition of homoscedasticity when the Breusch Pagan test was utilized as displayed in Table 4.6. As a result, heteroscedasticity was addressed using robust standard errors, which is a method for obtaining impartial standard errors of OLS coefficients under heteroscedasticity. A 5% significance threshold was used in the regression analysis. The results produced in the study were compared to the significant significance threshold shown by the Analysis of Variance and Models Coefficient. Additionally, the F-Value and T Statistic obtained in the study were compared against the critical values.

Table 4.10: Tests of Between-Subjects Effects

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	140.006 ^a	3	46.669	83.130	.000
Intercept	.001	1	.001	.001	.970
ZFin_Plan_Lit	.112	1	.112	.199	.656
ZBook_Keep_Lit	45.006	1	45.006	80.168	.000
ZDebt_Mgt_Lit	.057	1	.057	.102	.749
Error	175.155	312	.561		
Total	315.164	316			
Corrected Total	315.161	315			

a. R Squared = .444 (Adjusted R Squared = .439)
 Dependent Variable: Zscore(Fin_Perf)

Source: Field Data (2021)

The determination coefficient (R Squared) shows variances in the response variable as a result of changes in the forecast variables" in the research model. The findings in Table 4.10 show the R squared value of 0.444. This discovery shows that the financial literacy model results in 44.4% of financial performance variations. Other variables not included in the model explained 55.6% of changes in financial performance.

Additionally, Table 4.10 exhibits that the significance value obtained in the corrected model (0.000) is less than the critical value employed in the study of 0.05.

Consequently, this implies that the model entailing financial literacy significantly predicts financial performance. Additionally, the critical F-Value is 2.63345525, and the F-Value obtained in this study (83.130), is greater than the critical value. This also implies that the model entailing financial literacy significantly predicts financial performance.

Table 4.11: Parametre Estimates with Robust Standard Errors

Parameter	B	Robust Std. Error ^a	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	-.002	.042	-.037	.970	-.085	.082
ZFin_Plan_Lit	-.035	.085	-.408	.683	-.202	.133
ZBook_Keep_Lit	.695	.081	8.619	.000	.536	.853
ZDebt_Mgt_Lit	.014	.037	.366	.715	-.060	.087

a. HC3 method

Dependent Variable: Zscore(Fin_Perf)

Source: Field Data (2021)

The findings in Table 4.11 showcase that only literacy in bookkeeping has a significant relationship with financial performance. This is because its significance value ($P=0.000 < 0.05$) is less than the critical significance value employed in the study of 0.05. Additionally, the T critical value for the analysis when a two-tailed test is utilized is ± 1.9675 . The T values of literacy in bookkeeping ($T=8.619$) fall out of the range of ± 1.9675 . This implies that literacy in bookkeeping significantly impacts financial performance. However, Table 4.11 also exhibits that literacy in financial planning and literacy in debt management does not have a significant relationship with financial performance. This is because their significance values ($P=0.683 > 0.05$; $P=0.715 > 0.05$) are greater than the critical significance value employed in the study of 0.05. Additionally, their T values ($T=-0.037$; 0.366) lie within the range of ± 1.9675 . This implies that literacy in financial planning and

literacy in debt management does not significantly impact financial performance.

From the findings, the following model was thus developed;

$$Y = -0.002 + 0.695X_1$$

Where;

Y = Financial Performance

X₁ = Literacy in Bookkeeping

The model implies that when there is no literacy in bookkeeping, the financial performance of -0.002 is exhibited. Subsequently, when literacy in bookkeeping increases by one unit, there is an increase in financial performance by 0.695 units.

4.6 Interpretation and Discussion of Findings

This research endeavored to discover the relationship between financial literacy and financial performance by female-owned SMEs in Mandera County, Kenya. This research additionally sought to unravel the effect of; literacy in financial planning, literacy in bookkeeping, and literacy in debt management, on financial performance by female-owned SMEs in Mandera County, Kenya. The study's variables were not normally distributed as exhibited by the Shapiro-Wilk and Kolmogorov-Sminorv tests in Table 4.5. As a result, the variable data series were normalized as a means of correcting non-normality in the distribution. The predictor variables employed in the current study did not adhere to the condition of homoscedasticity when the Breusch Pagan test was utilized as displayed in Table 4.6. Therefore, "robust standard errors, which is a technique used to obtain unbiased standard errors of OLS coefficients under heteroscedasticity, were utilized as a remedy for heteroscedasticity.

The study findings established that women-owned SMEs in Mandera County have never prepared any budget in the last five years. Additional study findings established that majority of the women-owned SMEs that prepared budgets, do it annually, while the majority of the women-owned SMEs that prepare budgets, prepare material budgets. Further study findings implied that the female-owned SMEs exhibit to a great extent financial planning literacy. The majority of the owners/managers of the female-owned SMEs in Mandera County opined that training on bookkeeping skills influenced to a very great extent the financial performance of their respective SMEs. Additionally, the female-owned SMEs in Mandera County exhibit to a great extent bookkeeping literacy. The majority of the owners/managers of the female-owned SMEs in Mandera County also opined that access to banking services skills have influenced the financial performance of their respective SMEs for the past five years to a very great extent. The female-owned SMEs in Mandera County exhibit to a great extent debt management literacy. Finally, the majority of the owners/managers of the female-owned SMEs in Mandera County rated the financial performance of the respective SMEs that they are engaged in as excellent.

4.6.1 Financial Literacy and Financial Performance

The current study findings established that the model entailing financial literacy explains to a great extent financial performance by having a co-efficient of determination of 44.4%. Further findings were that the model entailing financial literacy significantly predicted financial performance.

The current study finding is in tandem with the financial literacy and behavior theory which implies that those individuals with a lack of financial literacy possess

less self-beneficial financial behavior that entails financial performance of SMEs they are running. The current study findings are also congruent to the accounting theory which implies that SMEs owners are expected not only to monitor their business transactions but also to make the most accurate decisions that would bring profit to their enterprises. Additionally, the current study findings are similar to the motivational theory of entrepreneurship, which implies that financial literacy improves the SME's financial performance because entrepreneurship is learned and that such learning can be encouraged fruitfully; entrepreneurs do things in a new and better way and make decisions under uncertainty and societies with entrepreneurs with such characteristics are more economically successful than others are. Further, the study findings are parallel to the knowledge spillover theory which intimates that the knowledge spill over comes from the stock of knowledge and promotes a strong relationship between such spill over and entrepreneurial activity, and consequently, financial literacy can improve SME financial performance.

The current study findings are in tandem with the assertion by Alessie, Van, and Lusardi (2011) that though it might not be an absolute state, financial literacy enables individuals to be able to respond effectively to ever-changing personal, social and economic circumstances and thus financial literacy is a major determinant of the firm's success or failure. The current study findings are in addition congruent to Bosma and Harding (2006) statement that many SMEs firms fail because they lack financial literacy, insufficient business acuity, as well as poor financial literacy, that undermines entrepreneurial activity. Oseifuah (2010) opined that regardless of the age of the entrepreneurs, they are consistently engaged in decision-making activities concerning resource procurement, allocation

and utilization and such activities almost and always have financial consequences and thus, to be effective, entrepreneurs must be imparted with financial knowledge. This is parallel to the current study findings.

According to Drexler, Fischer, and Schoar (2014), entrepreneurs often lack the adequate financial literacy to manage the complicated financial choices they confront. This is regrettable, since financial literacy among young entrepreneurs adds significantly to their entrepreneurial abilities, according to Oseifuah (2010). Entrepreneurs that wish to develop must be confident in their finances and well-informed (Kotzè & Smit, 2008). This is in line with the results of the present research.

Kotzè & Smit, (2008) posited that if the owners or managers of SMEs are illiterate concerning their organizational finances, the financial knowledge of their firms will also be lacking and this will lead to reduction in innovation that can transform into competitive capability, unable to access different sources of financing provision due to non-awareness and this attitude will lead to possible failures of SMEs. Entrepreneurs suffer from lack of financial literacy and such deficiency undermines the probability of accessing different sources of financing that can result into competitive capability and firm superior performance. In agreement with the recent research results, this is happening alongside them.

Bunyaminu, Tuffour, and Barnor (2019) and Tuffour and Martey (2019) stated that financial literacy enables one to make a decision with a form of assurance and certainty and it also aids individuals to respond competently to changes that affect their everyday financial well-being and analyse general financial conditions such as inflation, collapse of financial

markets, interest rates of the economy, among others, which may affect their business. This is in tandem with the current study findings.

Mazzarol, Reboud, and Clark (2015) examined the financial management practices in SMEs from a study of 289 small business owner-managers across 30 industry sectors in Australia and Singapore. The study findings exhibited that SMEs with higher financial literacy have greater capacity to monitor and control the financial the performance of their businesses. The results of the study match those of the present research.

Bruhn and Zia (2011) conducted a study on the impact of business and financial literacy for young SMEs in Bosnia and Herzegovina and established that baseline knowledge and information conveyed in the financial training act as complements in increasing the productivity and sales of a business. Mabhanda (2016) also explored the impact of financial literacy on SMEs growth in Zimbabwe. The findings indicated that financial planning was insignificant in explaining the changes in SME growth. These study findings are congruent to the current study finding.

Jayantilal (2017) assessed the effects of financial literacy on personal finance management of Bank of Baroda (Kenya) limited employees. The study found that personal savings, personal debt, personal investment, and planning significantly affect personal finance management. Further, a study by Lusimbo and Muturi (2016) studied the financial literacy and growth of small enterprises in Kenya, particularly focusing on Kakamega Central Sub-county, Kenya. The findings were that booking keeping significant affects the growth of SMEs while debt management was

insignificant in explaining unit changes in SMEs' growth. The study findings are congruent to the current study findings.

However, the assertion by Brown, Saunders, and Beresford (2006) is not congruent to the current study findings. The authors indicate that there is still doubt about the extent to which financial literacy can provide long-term improvement in business due to the perceived reliance on experience in validating SMEs entrepreneurs and thus, the premise of financial literacy being the major contributor to business performance has been doubted.

4.6.2 Literacy in Financial Planning and Financial Performance

The study findings highlighted that literacy in financial planning has a positive significant correlation to financial performance. However, it did not have a significant relationship with financial performance. In Kiambu County, Kenya, Kang'aru and Tirimba (2018) studied the impact of financial planning practices on the financial performance of non-profit health organizations. The results showed that financial performance was affected positively and significantly by budgeting practices, cash planning, inventory management, and working capital management. Orendo and Muturi (2017) studied the impact of financial planning on non-governmental organizations' financial performance. The study found that budgeting, funding practices, and financial forecasting influence financial performance. The study findings are not in tandem with the current study findings.

Akuno, Kubasu, Mwathi, (2017) examined the impact of financial literacy among employees of Egerton University, Nakuru County, Kenya on personal

financial decision making. The study also specifically sought to determine the effect of financial planning abilities on personal financial decisions. The study findings revealed that financial planning was important in determining personal financial decisions. The study finding is not in tandem with the current study findings.

4.6.3 Literacy in Bookkeeping and Financial Performance

The study findings highlighted that literacy in bookkeeping has both a positive significant correlation and relationship with financial performance. Adejare and Abdul-Rahamon (2016) empirically investigated the effect of accounting records keeping on Small scale enterprises in Nigeria and established that the degree of accounting recordkeeping explains to a large extent financial results and that there is a clear positive relationship between keeping accounting records and small-scale enterprise success. Kamau (2016) studied the influence of accounting records on the financial performance of small and medium enterprises in central business district in Nairobi County. The study established the relationship between accounting systems, the way SMEs have managed accounting records, and their financial performance. Further, a study by Lusimbo and Muturi (2016) studied the financial literacy and growth of small enterprises in Kenya, particularly focusing on Kakamega Central Sub-county, Kenya. The findings were that booking keeps significantly affect the growth of SMEs while debt management was insignificant in explaining unit changes in SMEs' growth. These study findings are congruent to the current study findings.

4.6.4 Literacy in Debt Management and Financial Performance

The study findings displayed that literacy in bookkeeping has neither a positive significant correlation nor a relationship with financial performance. A study by Lusimbo and Muturi (2016) studied the financial literacy and growth of small enterprises in Kenya, particularly focusing on Kakamega Central Sub-county, Kenya. The findings were that booking keeping significant affects the growth of SMEs while debt management was insignificant in explaining unit changes in SMEs' growth. The study finding is congruent to the current study findings. However, Obuya (2017) analyzed debt funding options and financial results of Ghana's micro and small businesses and established a negative and significant relationship between short-term loans and total debt on financial performance of enterprises. The study finding is not in tandem with the current study findings.

CHAPTER FIVE: SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

5.1 Introduction

The section details the summary of the study findings, offers conclusions together with recommendations to policymakers and practitioners. Additionally, the research limitations and further research suggestions are also outlined.

5.2 Summary of the Study

The current study endeavored to discover the relationship between financial literacy and financial performance of female-owned SMEs in Mandera County, Kenya. The current study also specifically sought to unravel the effect of; literacy in financial planning, literacy in bookkeeping, and literacy in debt management on the financial performance of female-owned SMEs in Mandera County, Kenya. Thus, the data analysis of gathered data and interpretation of the study's findings were done in line with the aforementioned broad and specific objectives.

The study employed the use of descriptive, correlation, and multiple linear regression analyses. The descriptive statistics established that women-owned SMEs in Mandera County have never prepared any budget in the last five years. Additional study findings established that majority of the women-owned SMEs that prepared budgets, do it annually, while a majority of the women-owned SMEs that prepare budgets, prepare material budgets. Further study findings implied that the female-owned SMEs exhibit to a great extent financial planning literacy. The study established that training on bookkeeping skills influenced to a very great extent the financial performance of female-owned SMEs. Additionally, the female-owned

SMEs in Mandera County exhibit to a great extent bookkeeping literacy. The findings also established that access to banking services skills have influenced the financial performance of female-owned SMEs to a very great extent. The female-owned SMEs in Mandera County exhibit to a great extent debt management literacy. Finally, the financial performance of the female-owned SMEs in Mandera County was excellent.

5.2.1 Financial Literacy and Financial Performance

This research endeavored to discover the relationship between financial literacy and financial performance by female-owned SMEs in Mandera County, Kenya. The current study findings established that the model entailing financial literacy explains to a great extent financial performance. Further findings were that the model entailing financial literacy significantly predicted financial performance.

5.2.2 Literacy in Financial Planning and Financial Performance

This research sought to unravel the effect of literacy in financial planning on the financial performance of female-owned SMEs in Mandera County, Kenya. The current study findings highlighted that literacy in financial planning has a positive significant association with financial performance. However, it did not have a significant relationship with financial performance.

5.2.3 Literacy in Bookkeeping and Financial Performance

This research sought to unravel the effect of literacy in bookkeeping on the financial performance of female-owned SMEs in Mandera County, Kenya. The study findings highlighted that literacy in bookkeeping has both a positive significant association and relationship with financial performance.

5.2.4 Literacy in Debt Management and Financial Performance

This research sought to unravel the effect of literacy in debt management on the financial performance of female-owned SMEs in Mandera County, Kenya. The study findings displayed that literacy in bookkeeping has neither a positive significant association nor a relationship with financial performance.

5.3 Conclusions of the Study

In this section, the conclusion of the research is given. The conclusion is given in line with the study's broad objective and specific objectives. This research endeavored to discover the relationship between financial literacy and financial performance by female-owned SMEs in Mandera County, Kenya. This research additionally sought to unravel the effect of; literacy in financial planning, literacy in bookkeeping, and literacy in debt management, on financial performance by female-owned SMEs in Mandera County, Kenya.

5.3.1 Financial Literacy and Financial Performance

This research endeavored to discover the relationship between financial literacy and financial performance by female-owned SMEs in Mandera County, Kenya. The current study concluded that financial strategy significantly impacts financial performance.

The current study conclusion is in tandem with the financial literacy and behavior theory which implies that those individuals with a lack of financial literacy possess less self-beneficial financial behavior that entails financial performance of SMEs they are running. The current study conclusion is also congruent to the accounting theory which implies that SMEs owners are expected not only to monitor their

business transactions but also to make the most accurate decisions that would bring profit to their enterprises. Additionally, the current study conclusion is similar to the motivational theory of entrepreneurship, which implies that financial literacy improves the SME's financial performance because entrepreneurship is learned and that such learning can be encouraged fruitfully; entrepreneurs do things in a new and better way and make decisions under uncertainty and societies with entrepreneurs with such characteristics are more economically successful than others are. Further, the study conclusion is parallel to the knowledge spillover theory which intimates that the knowledge spill over comes from the stock of knowledge and promotes a strong relationship between such spill over and entrepreneurial activity, and consequently, financial literacy can improve SME financial performance.

The current study conclusion is in tandem with the conclusions by Alessie, Van, and Lusardi (2011) that though it might not be an absolute state, financial literacy enables individuals to be able to respond effectively to ever-changing personal, social and economic circumstances and thus financial literacy is a major determinant of the firm's success or failure. The current study conclusion is in addition congruent to Bosma and Harding (2006) conclusion that many SMEs firms fail because they lack financial literacy, insufficient business acuity, as well as poor financial literacy, that undermines entrepreneurial activity.

However, the conclusion by Brown, Saunders, and Beresford (2006) is not congruent to the current study conclusion. The authors conclude that there is still doubt about the extent to which financial literacy can provide long-term improvement in business due to the perceived reliance on experience in validating

SMEs entrepreneurs and thus, the premise of financial literacy being the major contributor to business performance has been doubted.

5.3.2 Literacy in Financial Planning and Financial Performance

This research sought to unravel the effect of literacy in financial planning on the financial performance of female-owned SMEs in Mandera County, Kenya. The current study concluded that literacy in financial planning has a positive significant association with financial performance but does not have a significant relationship with financial performance.

The study conclusion is not in tandem with Kang'aru and Tirimba's (2018) conclusion that financial performance was affected positively and significantly by budgeting practices, cash planning, inventory management, and working capital management. Orendo and Muturi (2017) concluded that budgeting, funding practices, and financial forecasting influence financial performance. The conclusion is not in tandem with the current study conclusion.

5.3.3 Literacy in Bookkeeping and Financial Performance

This research sought to unravel the effect of literacy in bookkeeping on the financial performance of female-owned SMEs in Mandera County, Kenya. The study concluded that literacy in bookkeeping has both a positive significant association and relationship with financial performance.

The conclusion by Adejare and Abdul-Rahamon (2016) that the degree of accounting recordkeeping explains to a large extent financial results and that there is a clear positive relationship between keeping accounting records and small-scale enterprise success is in tandem with the current study conclusion. Further, the

conclusion by Kamau's (2016) conclusion is that there is a relationship between accounting systems and the way SMEs have managed accounting records with their financial performance. Additionally, the conclusion by Lusimbo and Muturi (2016) that booking keeps significantly affects the growth of SMEs is congruent to the current study conclusion.

5.3.4 Literacy in Debt Management and Financial Performance

This research sought to unravel the effect of literacy in debt management on the financial performance of female-owned SMEs in Mandera County, Kenya. The study concluded that literacy in bookkeeping has neither a positive significant association nor a relationship with financial performance.

The conclusion by Lusimbo and Muturi (2016) that debt management was insignificant in explaining unit changes in SMEs' growth is congruent to the current study conclusion. However, Obuya's (2017) conclusion is that there is a negative and significant relationship between short-term loans and total debt on financial performance of enterprises. The conclusion is not in tandem with the current study conclusion.

5.4 Recommendations of the Study

The results of the study will help to inform future research in the area of financial literacy and performance. The results of the study will be used as a reference for future academics interested in financial literacy and performance.

Policy recommendations are made to the government officials and policy formulators in the county and national governments, mainly the SME regulator, the Micro, and Small Enterprises Authority, the Ministry of Trade and Industrialization,

in particular, the Department of Trade, the Ministry of Public Service, Youth and Gender Affairs, and the Treasury, that since it has been established that financial literacy has a significant influence on the financial performance of SMEs, the policymakers should majorly focus on conducting pieces of training on financial literacy to SME entrepreneurs and managers when trying to boost financial performance. The recommendation will guide the relevant government ministries and Regulators are mainly responsible for developing practices and policies to support the financial success of SMEs, who are responsible for most of the economy.

The finding of the study that financial literacy, in particular literacy in bookkeeping, has a significant influence on financial performance generates recommendations to the SME practitioners and consultants to mainly focus on literacy on bookkeeping when crafting strategies to increase the financial performance.

5.5 Recommendations for Further Study

Policymakers must examine the relationship between financial literacy and financial success in the SMEs sector, the county, and national governments, mainly the SME regulator, the Micro, and Small Enterprises Authority, the Ministry of Trade and Industrialization, in particular, the Department of Trade, the Ministry of Public Service, Youth, and Gender Affairs, and the Treasury the SME practitioners and consultants. However, the current study was carried out in the SMEs (SMEs) context and the same study could be replicated across other sectors in the economy to establish if the current study findings will hold. The research has been carried out solely in the Kenyan environment, additional studies may be performed out of the

Kenyan context, in the African or worldwide settings to determine if the present study results will be present.

The study only considered the financial literacy aspects entailing literacy in financial planning, literacy in bookkeeping, and literacy in debt management. A study can be conducted to include other financial literacy aspects. Further studies can be conducted to ascertain if there are factors that have a moderating, intervening, and mediating effect on the relationship between financial literacy and financial performance.

The study utilized primary data only, and future research using secondary data may be performed. This may supplement or critique the study's result. The statistical analysis techniques in the present research included descriptive statistics, multiple linear regression, and examination of correlations. For example, additional statistical analysis methods should be included in future trials, including cluster analysis, discriminatory analysis, granger causation, component analysis, etc.

5.6 Limitations of the Study

This research has only been performed in the Kenyan SME sector owing to time and financial limitations that do not indicate clearly what the present results are if further sectors of the economy have also been included in the study. In addition, there would be more uncertainty if comparable research were repeated in other nations. Though primary data sources were primarily explored in research using questionnaires, significant difficulties such as failure to reply or misunderstanding of the questionnaire survey were experienced. While this made data collection difficult, it also limited the data's use because raw data could not be used. Thus, the input had

to be entered into SPSS to give rise to a synchronized data set that could be collected, analyzed, and inferences formed. the time needed to assemble the information, and delay in syncing the data.

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APPENDICES

Appendix I: Introduction Letter

Bashir Maalim,

P.O.BOX 111, Mandera.

Tel No. 0727 444 556

Email: bashir.mualim@gmail.com

Dear Respondent,

RE: Research Questionnaire

This is to consider introducing you to study research that is based on academia. The research topic is; to examine the effect of financial literacy on the financial performance of women-owned SMEs in Mandera County.

I kindly ask you to complete my academic research by filling in the attached questionnaire. It is for academic purposes only, and any information provided must be treated with strict privacy; the information should be provided as accurately as possible.

Thank you in advance

Bashir Maalim

Appendix II: Questionnaire

This questionnaire is collecting information that will be used to analyze the influence of financial literacy on the financial performance of women-owned SMEs in Mandera County. You are kindly requested that where brackets are shown please tick inside the bracket to your relevant answer.

Section A: Background information

1. Indicate your age category

Below 25 years 25 to 35 years 36 to 45 years

46 to 50 years Above 50

2. Indicate your highest level of education attained

Bachelor's degree College Diploma

Secondary certificate Primary education & below

3. How long is this business in existence?

Below 5yrs

6- 10yrs

Above 10 years

4. How many employees do you have?

1-10

10- 30

31- 50

50-99

Section B: Financial Planning and Financial Performance

5. For the past five years have you prepared any budget(s)

No Yes

If yes how frequent have you been preparing the budgets

- Weekly []
- Monthly []
- Half Yearly []
- Yearly []

6. Indicate the forms of budgets prepared

Cash Budget []

Material Budget []

Any Other.....

Indicate your level of agreement with the following statements relating to the financial planning of your small and medium enterprise for the past five years.

1 = Least Extent, 2 = Small Extent, 3 = Moderate Extent, 4 = Great Extent, 5 = Very Great Extent

	Statements	1	2	3	4	5
7	To what extent do you possess skills to prepare a budget to help me reduce expenditures, such as impulse buying					
8	To what extent do you have the ability to forecast sales skills that aid in increasing the amount of fixed capital available					
9	To what extent do you have the ability to forecast sales skills that aid in avoiding cash deficit surprises					
10	To what extent does the amount spend daily in the business based on the plans					
11	To what extent does cash planning generally aid in specifying low-risk preservation of money					
12	To what extent does cash budgeting aid in increasing the operating					

income						
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Section C: Literacy in Bookkeeping and Financial Performance

13. For the past five years, to what extent would you say training on bookkeeping skills, for instance, training on decisive interpretation of information from transactions, influenced the financial performance of your small and medium enterprise.

- To a very greater extent []
- Greater extent []
- To a moderate extent []
- Little extent []
- Very little extent []

Indicate your level of agreement with the following statements relating to the bookkeeping skills of your small and medium enterprise for the past five years.

1 = Least Extent, 2 = Small Extent, 3 = Moderate Extent, 4 = Great Extent, 5 = Very Great Extent

	Statements	1	2	3	4	5
14	To what extent have bookkeeping skills equipped you to ascertain profits earned or losses sustained by the business.					
15	To what extent do bookkeeping skills equip you with forecasting skills necessary for setting projections and goals of the business.					
16	To what extent have you obtained the necessary educational background in accounting professions that aids in proper record keeping					

17	To what extent has bookkeeping equipped you with the necessary skills for generating financial statements needed by the government, suppliers, creditors					
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Section E: Literacy in Debt Management and Financial Performance

19. For the past five years, to what extent would you consider access to banking services skills such as effective use of services such as cheques and credit cards have influenced the financial performance of your small and medium enterprise.

- To a very greater extent []
- Greater extent []
- To a moderate extent []
- Little extent []
- Very little extent []

20. Indicate your level of agreement with the following statements relating to the influence of literacy in debt management on the financial performance of your small and medium enterprise for the past five years.

1 = Least Extent, 2 = Small Extent, 3 = Moderate Extent, 4 = Great Extent, 5 = Very Great Extent

	Statements	1	2	3	4	5
20	To what extent has access to banking services skills aided in securing loans for businesses expansion					

21	To what extent has access to debt management skills equipped you with necessary skills for day-to-day credit affairs					
22	To what extent has to access to cost computation skills equipped you with necessary skills for exploring banking facilities such as overdraft to help my business out of cash flow problems.					
23	To what extent has debt cost calculation skills enabled your business to flourish					

Section D: Financial performance

25. Generally, how would you rate the performance of the SME in the last five years?

Excellent

Improved

Fair

Poor

26. Indicate the operating income levels for the previous year

Below Ksh 50,001

Ksh 50,001 to Ksh. 100,000

Ksh 100,001 to Ksh 200,000

Ksh 200,001 to Ksh 300,000

Ksh 300,001 to Ksh 400,000

More than Kshs 400,000

27. Indicate the total assets levels for the previous year

Below Ksh 150,001

Ksh 150,001 to Ksh. 1,000,000

Ksh 1,000,001 to Ksh 2,000,000 []

Ksh 2,000,000 to Ksh 3,000,000 []

Ksh 3,000,000 to Ksh 4,000,000 []

More than Kshs 4,000,000 []

Appendix III: The Work Plan

Tasks	Jan 2019 – June 2020	August 2020 – January 2021	February 2021	March 2021	April 2021
Writing proposal					
Defense					
Revising instruments					
NACOSTI application					
Data collection, report writing, and submission					

Appendix IV: Research Budget

Activity	Amount (KSh)
Travelling Expenses	7,000.00
Data Search	7,000.00
Typesetting & Printing of Documents	14,000.00
Photocopying	10,000.00
Data Analysing costs	30,000.00
Data collection facilitation	7,500.00
Other Costs	10,000.00
TOTAL	85,500.00

Source: Researcher (2021)

Appendix V: NACOSTI Permit