

**RELATIONSHIP BETWEEN FINANCIAL LITERACY  
AND THE GROWTH OF MICRO AND SMALL  
ENTERPRISES IN KENYA: A CASE OF KAKAMEGA  
CENTRAL SUB- COUNTY.**

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**Relationship between financial literacy and the growth of micro and small enterprises in Kenya: A case of Kakamega Central sub-county.**

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**A Research Project Report Submitted to the Department of Entrepreneurship, Technology Leadership and Management in the College of Human Resource Development in Partial Fulfillment of the Requirements for the Award of the Degree of Master of Science in Entrepreneurship in the Jomo Kenyatta University of Agriculture and Technology.**

**2016**



## **DECLARATION**

This research project is my original work and has not been presented for a degree in any other University.

Signature: ..... Date: .....

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This research project has been submitted for examination with my approval as the University Supervisor.

Signature..... Date .....

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## **DEDICATION**

All praises to the Almighty God, the most gracious, for giving me the strength and determination to complete this study. To my husband, Martin Yamame for his sacrifice, encouragement and support that has seen me through this challenging education path and to our children for their support and understanding during the entire period of my studies.

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## **LIST OF ACRONYMS AND ABBREVIATIONS**

<b>BDS</b>	Business Development Services
<b>FSD</b>	Financial Sector Deepening Initiative
<b>GDP</b>	Gross Domestic Product.
<b>GOK</b>	Government of Kenya.
<b>ICCR</b>	International Committee on Credit Reporting.
<b>KIPPRA</b>	Kenya Institute of Public Policy Research and Analysis.
<b>KRA</b>	Kenya Revenue Authority
<b>MFI</b>	Micro Finance Institution
<b>MSEA</b>	Micro and Small Enterprise Authority
<b>MSE</b>	Micro and Small Enterprises.
<b>NGO</b>	Non Governmental Organizations
<b>PISA</b>	Organization for Economic Cooperation and Development
<b>UNIDO</b>	United Nations Industrial Development Organization
<b>UNCTAD</b>	United Nations Conference on Trade And Development.
<b>USAID</b>	United States Agency for International Development
<b>SPSS</b>	Statistical Package for Social Sciences
<b>WEF</b>	Women Enterprise Fund
<b>YEF</b>	Youth Enterprise Fund.

## DEFINITION OF TERMS

- Micro and Small Enterprises.** Are businesses in both formal and informal sectors classified into farm and non- farm categories employing 1-50 workers (GOK, 2005).
- Financial Literacy** The ability of an individual to use knowledge and skills to manage Financial resources effectively.(USAID,2009).
- Debt literacy** Is a component of financial literacy, and refers to the ability to make simple decisions regarding debt contracts and to apply basic mathematical knowledge about interest compounding to everyday financial choices about loans, credit cards, interest rates, and fees. (Lusardi & Tufano, 2009). It entails knowledge of why borrow, when to borrow, how much to borrow and where to borrow(FSD,2009)
- Budgeting Literacy** Is the possession of skills and knowledge to set financial goals, prepare and use budgets to monitor financial performance of a business ( Nugus, 2006).
- Banking Services Literacy** Is the knowledge and awareness of the various bank instruments, how and why to use money transfer services e- banking and m- banking and ability to understand saving products (FSD,2009).
- Book keeping Literacy** Is the art of recording all money transactions so that the financial position of an entity and its relationship to proprietors and outside persons can be readily ascertained (Larry & Cristopher, 2009). Book keeping involves identification, classification, storage and protection, receipt and transmission, retention and disposal of records for preparation of financial statements. (Ademola *et al.*, 2012).

## **ABSTRACT**

Small Enterprises in Kenya face unique challenges that inhibit their growth and profitability hence diminishing their contribution to sustainable development. Consequently, very few enterprises have made the transition from micro to medium scale. The transition is important because it is when they become medium-sized that growth-oriented MSEs make their most tangible contribution to economic growth and job creation. Although numerous financial education programmes are in place for MSEs limited growth persists, It remains unclear whether MSEs in Kenya have been reached by financial literacy programmes and which factors play a key role in bringing about growth. This study sought to determine the relationship between financial literacy and the growth of MSEs in Kenya. Specific objectives were; to determine the effect of debt management literacy on the growth of MSEs, to establish the effect of budgeting skills on the growth of MSEs, to find out how banking services literacy affects the growth of MSEs and to examine the effect of Book keeping literacy on the growth of MSEs in Kakamega Central Sub County. The study targeted 1300 MSEs registered under the single business permit in Kakamega Central Sub County as of 2015 and adopted descriptive cross sectional survey design. Stratified proportionate sampling technique was used to select respondents where 306 MSEs were selected using Yamane's formula. A structured questionnaire was used to collect primary data while document analysis was used to collect secondary data. Data was analyzed using percentages, frequencies and means using SPSS. The data was presented in form of tables, graphs and pie charts from which statistical inference was made. Chi square test of independence and descriptive statistics were used to determine the relationship between financial literacy and the growth of MSEs. Findings reveal that although MSE managers had a fair knowledge of debt management majority do not understand the effect of inflation and interest rates on loans they borrow and were not comparing terms and conditions before purchasing financial products which could affect their financial decisions of when to borrow, how much and from whom, leading to sub- optimal business performance. Results also indicate that most MSE owners have low level of



budgeting and Book keeping literacy since they do not engage in formal financial planning, budgeting and control and do not keep proper books of account as well as preparation of financial statements which increases their information opacity and may constraint their access to finance. Although most of the respondents appreciate the need to operate bank accounts for their businesses, majority do not effectively utilize existing banking services. Results further indicate that those businesses whose managers have low financial literacy have recorded minimal or no growth over the years. Recommendations made include; organizing financial literacy training programs for MSEs across the county, Incorporating financial education in the school curriculum from Primary level so that individuals are financially informed early in life, Government agencies such as MSEA, WEF, YEF and Uwezo to develop downloadable easy to learn modules that can be downloaded by interested MSEs to reduce information search costs and take advantage of existing technology platforms.



## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 Background of the Study**

Developed and developing economies continue to rely on small businesses to play a key role in triggering and sustaining economic growth and equitable development. Mills and McCarthy (2014) assert that Micro and Small Enterprises (MSEs) employ half of the private sector workforce which ultimately creates 60 to 80 percent net new jobs annually in the USA. United Nations Industrial Development Organization (UNIDO, 1999) estimates that MSEs represent over 90 percent of private business and contribute to more than 50 percent of employment and of gross domestic product (GDP) in most African countries. Abor and Quartey (2010) estimate that 91 percent of formal business entities in South Africa are MSEs which contribute between 52 to 57 percent to the GDP and provide about 61 percent employment. In Kenya like in many countries worldwide, business experts, policy makers and economists concur that MSEs are drivers of economic growth. The Kenya Institute of Public Policy Research and Analysis (KIPPRA) estimates that the MSE sector employs 42 per cent of the working population and accounted for 75 per cent of all modern establishments as at 2011 (KIPPRA, 2012). A healthy MSE sector therefore contributes significantly to the economy through creating employment opportunities, producing large volumes of goods and services, increasing exports and a fertile ground for nurturing innovation and entrepreneurship skills. This implies that for Kenya to realize and sustain double digit economic growth as envisioned in the Kenya Vision 2030 strategy, the performance and competitiveness of MSEs must be increased so as to effectively respond to the challenges of creating productive and sustainable employment opportunities, promoting economic growth, and poverty reduction in the country. This research sought to establish the relationship between financial literacy and the growth of MSEs in Kenya.

Despite the numerous benefits of MSEs worldwide, these enterprises are reported to have both a high birth rate and at the same time high death rate (Turyahebwa, Sunday, & Ssekajugo, 2013; Fatoki, 2014; GOK, 2005; Oluoch, 2014). Studies

indicate that a large number of MSEs do not survive to celebrate their third birthday. This is because they tend to remain small which makes them more vulnerable to failure as a result of simple management mistakes as compared to large enterprises. This means that there is no chance for MSE managers to learn from past mistakes since their capital base remains insufficient to absorb resultant losses. The Sessional paper No 2 of 2005 reports that when compared to other countries, the number of Kenyan firms employing 11-50 persons is relatively small. Micro enterprises find it difficult to graduate into medium and large-scale enterprises, thus creating the “missing middle” phenomenon. Consequently, this has resulted to a weak base for industrial take-off and sustainable development in Kenya (KIPPRA, 2012). The high failure rate has also been attributed to low financial literacy which results to poor planning, limited access to finance and poor financial management (Oluoch, 2014; Agyei, 2014; Njoroge, 2012). Fatoki (2014) concurs with these assertions and also adds that the difficult financial decisions that entrepreneurs make in their personal or business finances could also be a contributing factor.

Mounting evidence reveals that apart from access to capital and an enabling environment, the success of MSEs largely depends on the financial management skills of the managers. Individuals with financial literacy skills tend to make better financial decisions with fewer management mistakes than their counterparts who are financially illiterate (Njoroge, 2014; Fatoki, 2014). Penrose (1959) in her theory of enterprise growth posits that entrepreneurial knowledge, motivation and entrepreneurial activity in terms of fund raising skills and entrepreneurial judgment greatly determine a firm’s growth. Fund raising ability refers to the ability of the owner to raise needed funds for expansion which requires the entrepreneur to create trust in others and persuade them to invest in his venture based on its merits achieved by keeping appropriate business records to show the profitability of the business. Entrepreneurial judgment dictates the quality of decisions made by the owner manager which largely depends on the ability of the owner to gather information, use consultancy and decide when and how to act. Therefore MSE growth depends on how well the owner manager is equipped with the right information to make sound financial decisions in the business.

Atkinson and Messy (2005) define financial literacy as the combination of consumers'/investors' understanding of financial products and concepts and their ability and confidence to appreciate financial risks and opportunities, to make informed choices, to know where to go for help and take other effective actions to improve their financial well-being (Siekei, Wagoki & Kalio, 2013). Fatoki (2014) citing United States Agency for International Development (USAID, 2009) defines a financially literate MSE owner/manager as “someone who knows the most suitable financing and financial management options for his/her business at the various growth stages, knows where to obtain the most suitable products and services and interacts with confidence with the suppliers of these products and services. He/she is familiar with the legal and regulatory framework and his/her rights and recourse options.” Therefore financial literacy is simply the ability of an individual to use knowledge and skills to manage financial resources effectively.

Extant studies further indicate that there is a strong association between financial literacy, the ability to make good financial decisions, household well-being and business survival (Njoroge, 2014; Turyahebwa *et al.*, 2013; Lusardi & Mitchell, 2013; FSD, 2009). Sound financial management is critical to the survival and management of MSEs because financial literacy skills empower and educate investors so that they are able to evaluate financial products and make informed decisions, facilitates proper debt management which improves the credit worthiness of potential borrowers (MasterCard, 2011). A financially literate MSE manager is likely to interact with confidence with financial service providers and make fewer management mistakes than their illiterate counterparts which ultimately results to MSE growth. Financial literacy also builds the risk management skills of individuals. Siekei *et al.*, (2013) argue that financial literacy prepares investors for tough financial times through strategies that mitigate risk such as accumulating savings, diversifying assets, purchasing insurance, avoiding over indebtedness and less vulnerability to fraudulent schemes.

Financially literate customers also help to improve the quality of financial products and stability of financial institutions in the market. Wachira and Kihiu (2012) opine that when financial regulators face an educated customer, they are forced to improve the efficiency and quality of financial services because such consumers demand for more appropriately priced and transparent services, by comparing options, asking the right questions, and negotiating more effectively. Besides, financially literate consumers pose less risk to the financial system due to their responsible use of financial products and services which help to strengthen financial market stability and contribute to increased savings, wider economic growth and development. This view is corroborated by the Pisa (2013) report which asserts that financial literacy is a key life skill. It posits that financially literate consumers make more informed decisions and demand higher quality services, which will encourage competition and innovation in the market. They are also less likely to react to market conditions in unpredictable ways, unlikely to make unfounded complaints and more likely to manage the risks transferred to them effectively which results to a more efficient financial services sector and potentially less costly financial regulatory and supervisory requirements. This helps in reducing government aid and taxation aimed at assisting those who have taken unwise financial decisions or no decision at all.

When faced with scarce resources and multiple competing wants, a financially literate individual is a better planner and prudent resource allocator than the illiterate counterpart. This is supported by Greenspan (2002) who argues that financial literacy equips individuals with the financial knowledge necessary to create household budgets, initiate saving plans, and make strategic investment decisions. Financial literacy knowledge is also important in choosing from among alternative financial products. Wachira and Kihiu (2012) affirm that when clients borrow multiple loans from multiple sources such as MFIs and other formal and informal providers, challenges of managing repayment schedules and ensuring that the credit is used optimally requires specific knowledge and skills about financial management. Quality financial information is also necessary for sound decisions in a business. Ezejiolor, Ezenyirimba and Olise (2014) assert that business decisions with regard to expansion, maintaining a competitive edge and prevention of business failure need to

be supported by quality financial information which needs to be relevant, user friendly and available in a timely manner. They therefore caution that accounting systems that generate the information should be simple in order not to impose unnecessary operative burdens.

Poor book keeping and poor financial management among a majority of MSEs has been attributed to low level of financial literacy especially among the adult population across countries (Lursadi & Mitchel, 2014; FSD, 2009; Fatoki, 2014). Lursadi and Mitchel conducted various studies first with the US adult population of 50 years and above in 2004. The survey revealed that only 34% answered all the financial literacy questions on inflation, compound interest and investment risk correctly despite the fact that at their age they were expected to have made many financial decisions and witnessed at least two periods of high inflation that should have provided them with information on investment risks and interest. These same questions were added to several other U.S. surveys thereafter, including the 2007–2008 National Longitudinal Survey of Youth for young respondents (ages 23–28) (Lusardi, Mitchell, and Curto 2010); the RAND American Life Panel covering all ages (Lusardi and Mitchell 2009); and the 2009 and 2012 National Financial Capability Study (Lusardi and Mitchell 2011d). All the studies revealed a low level of financial literacy among Americans for all groups.

Comparative studies on the three financial literacy questions developed by Lusardi and Mitchel were replicated in 11 countries by various researchers as reported by Lusardi and Mitchel (2014). These studies also found a low level of financial literacy across countries studied. In Netherlands only 44.8% answered the three questions correctly, Germany 53.2%, Japan 27.0%.Australia 42.7%, New Zealand 24.0%, Switzerland 50.1%, Italy 24.9%,Sweden 21.4%,France 30.9,Russia 3.7% and in Romania only 3.8% of the respondents scored correctly on the financial literacy questions. Atkison and Messy (2012) sponsored by Organization for Economic Co-operation and Development (OECD) undertook a financial literacy survey using the three questions developed by Lusardi and Mitchel in 12 countries drawn from Latin America, Africa, West and East Europe and Asia which represented varying

geographical backgrounds and different levels of economic development. Findings confirmed a similar pattern of low level financial literacy as had been reported in the USA. These studies however focused on the numeracy skills of individuals and how these skills affected their financial decisions; no attempt was made to establish how the level of literacy of these individuals affected the performance of their businesses. Fatoki (2014) found that despite financial literacy having a positive correlation with MSE performance, a large majority of Micro entrepreneurs in South Africa had a low level of financial literacy negatively affecting the performance of their businesses. Similarly Agyei (2014) reported a low level of financial literacy among women micro entrepreneurs in Accra Ghana. Given that most MSE owners in Kenya are adults, these statistics could imply that low levels of financial literacy may be one of the major causes of poor performance, stagnation and business failure for a majority of MSEs. People with low levels of financial literacy often make unproductive suboptimal financial decisions. However, by communicating a relevant message on sound money management, financial education can offer these individuals the means to use their scarce financial resources more effectively and to choose the financial services and products that best meet their needs.

The Kenya government and other stakeholders in the financial sector through the Financial Sector Deepening (FSD) initiative identified the gap in financial literacy amongst Kenyans and made effort to educate people to enhance financial freedom and enable individuals to make informed decisions to borrow, save and invest wisely (Mastercard, 2011; FSD,2009). Individual institutions have also mounted elaborate programmes to provide financial education to MSEs notably; Equity Foundation with Mastercard, KCB with Visa international, Faulu and other development partners such as USAID through NGOs such as Winrock International in Kakamega County. Despite these efforts MSE growth is still limited. It's therefore not clear which aspects of financial literacy education lead to more growth. The problem is further compounded by the existence of scanty literature evaluating directly the relationship between financial literacy and MSE growth in Kenya. A vibrant MSE sector is crucial in achieving the development agenda for most counties under the devolved system of governance in Kenya.



## **1.2 Statement of the Problem**

The Asian experience shows that it is mainly the growth-oriented medium-sized MSEs that have a high propensity to apply technology and training to serve specialized niche markets and bring about industrial growth. On the contrary, the MSE sector in Kenya faces unique challenges which inhibit their growth and profitability and hence diminish their ability to contribute effectively to sustainable development. In Kenya the small enterprise sector shows a distinct dual structure, at one extreme there exist a few large modern capital- intensive enterprises, while at the other extreme there are small micro enterprises that are informal, use very simple technologies and serve a limited local market. This structural imbalance exists despite the implementation of MSE promotion programmes for many years hence the “missing middle” phenomena (GOK, 2005). Consequently, this has resulted to a weak base for industrial take-off and sustainable development in Kenya (KIPPRA, 2012). KIPPRA (2012) further reports that although the MSE sector generates up to 75% employment, enterprises with 11-50 workers constitute only 10.6% of the total MSE employment meaning the bulk of the employment is created by the informal sector enterprises that are mainly survivalist with high mortality rate. This poses a challenge for the government to increase the proportion of MSEs that grow to medium scale if Kenya is to achieve the 10% economic growth rate envisioned in the vision 2030 strategy paper.

Although numerous financial education programmes are in place for MSE sector in Kenya in addition to improved access to finance and improved institutional framework, limited growth persists. It remains unclear whether MSEs in Kenya have been reached by financial literacy programmes and which factors play a key role to bring about growth (MasterCard, 2011). Financial institutions focus more on increased product uptake and improved usage so as to make their customers less risky to deal with. NGOs and BDS providers view financial education as part of a more holistic social agenda that offers financial knowledge and skills to improve financial decision-making, social well-being, and general livelihoods. The government looks at financial education as a tool to introduce the public to basic financial concepts and to promote financial inclusion for the unbanked, consumer

protection and awareness so that individuals are less vulnerable to fraudulent schemes. As a result, it is not clear which financial factors play a more significant role in promoting MSE growth.

The problem is further compounded by scanty empirical studies reviewing the relationship between financial literacy and MSE growth. Njoroge (2013) sought to find out the relationship between financial literacy and MSEs success in Nairobi County. The study found a positive relationship between financial literacy and entrepreneurial success. However, respondents were drawn from MSEs with at least 3 employees, at least five years of operation with a turnover of 5 million. This left out micro enterprises with a lower turnover yet they form the bulk of traders in this sector. Siekei *et al.*,(2013) looked at the role of financial literacy on performance of MSE whose managers had undergone the Equity foundation financial literacy training in Njoro district. The findings revealed a positive relationship between the financial literacy training and the performance of the MSEs whose managers had been trained. However, for a conclusive picture, it's necessary to measure the level of literacy of all MSEs so that those that have not been reached by financial education training can be prioritized by future efforts. Consequently, MSEs continue to perform poorly with limited growth despite the numerous financial education programmes in the Kenyan business landscape. This study sought to determine the relationship between financial literacy and the growth of MSEs in Kenya using a case study of Kakamega Central Sub- County to point out the aspects of financial education that have a high impact on MSE growth so as to inform future financial literacy training programs. It was based on four of the six key themes of financial literacy recommended by the Financial Sector Deepening initiative scoping exercise of 2009.

### **1.3 Objectives of the Study**

#### **1.3.1 General Objective**

This study sought to determine the relationship between financial literacy and the growth of micro and small scale enterprises in Kenya.

### **1.3.2 Specific Objectives**

The study addressed the following specific objectives;

1. To determine the effect of debt management literacy on the growth of MSEs in Kakamega Central Sub County.
2. To establish the effect of budgeting literacy on the growth of MSEs in Kakamega Central Sub County.
3. To find out how literacy on banking services affects the growth of MSEs in Kakamega Central Sub County.
4. To examine the effect of Book keeping literacy on the growth of MSEs in Kakamega Central Sub County.

### **1.4 Research Questions.**

1. What is the effect of debt management literacy on the growth of MSE in Kakamega Central Sub County?
2. To what extent does budgeting literacy affect the growth of MSE enterprises in Kakamega Central Sub County?
3. How does literacy on banking services affect the growth of MSEs in Kakamega Central Sub County?
4. What is the effect of Book keeping literacy on the growth of MSE in Kakamega Central Sub County?

### **1.5. Justification of the Study**

This study will greatly benefit MSE owners as it will highlight the benefits that will be realized by acquisition of financial literacy skills to improve the financial management of their businesses so as to improve growth prospects and profitability and their credit rating by financiers. To policy makers, the research will draw attention to areas of policy gaps in financial education that require policy intervention within MSE sector in the county hence enabling the County government of Kakamega to formulate policies that will encourage growth of MSEs to increase employment, economic growth, market competitiveness and technological innovativeness. Future researchers and academicians will also find this study useful

as it will contribute immensely to existing body of knowledge and provide useful insights to enable them identify gaps for further research. Business Development Service providers particularly those operating in Kakamega county will also find the research findings valuable as it will provide insights on which aspects of financial literacy have the highest impact on MSE growth which will inform program design for future financial literacy trainings for the MSE sector in the county.

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

The study covered 1300 MSEs registered by the Revenue Department under the single business permit in Kakamega Central Sub County as at March 2015. It focused on the relationship between financial literacy and the growth of MSEs in Kakamega Central Sub County with respect to four variables namely; debt management, budgeting and control, banking services and record keeping literacy.

### **1.7 Limitations of the Study.**

Due to time and financial constraints, the Study was limited to investigating the relationship between financial literacy and the growth of MSEs in Kakamega Central Sub County only. However for a conclusive picture on the level of financial literacy among MSEs and its impact on their growth, similar studies should be replicated in all counties across the country. Another challenge faced was lack of well documented business records for sales, assets and liabilities in the SMEs surveyed which made it difficult to measure MSE growth on ratio and interval scales hence the researcher had to collect data using ordinal and nominal scales.

## **CHAPTER TWO**

### **LITERATURE REVIEW.**

#### **2.1. Introduction.**

This chapter introduces the theoretical background of the study, displays the conceptual framework of the study and provides an empirical review focusing on financial literacy and the growth of MSE's; It also provides a critique of the existing literature relevant to the study, presents the chapter summary bringing to light the research gaps identified.

#### **2.2. Theoretical Framework**

##### **2.2.1. Enterprise Growth Theories**

Enterprise growth, its drivers and limits have been studied by various scholars. This review presents important contributions to explain this concept.

##### **a) Resource Based View theory.**

Edith Penrose (1959) posits that knowledge, motivation and entrepreneurial talent are the main determinants of a firm's growth. She suggests that enterprises consist of a bundle of internal and external resources which helps it to achieve competitive advantage. Penrose places the entrepreneur at the heart of a firm's growth and posits that growth comes from how the owner perceives productive opportunities for the firm. Consequently growth will be restricted by the extent to which a firm does not see opportunities for expansion, is unwilling to act upon them, or is unable to respond to them (McKaskill, 2010). While organizational size and complexity may limit growth, she argues that firms would simply reorganize to manage the next stage of growth. She opines that large firms have an advantage in pursuing growth compared to small firms due to economies of size, ability to find new avenues for investment and the accumulated knowledge within the firm. Growth of the firm is also advanced by the rate at which new managerial talent is absorbed and integrated into the existing management team as this provides a wider bandwidth to finding new opportunities. Penrose also points out that decision making can inhibit growth if all decisions have to be taken by senior management. To achieve faster growth decisions must be pushed

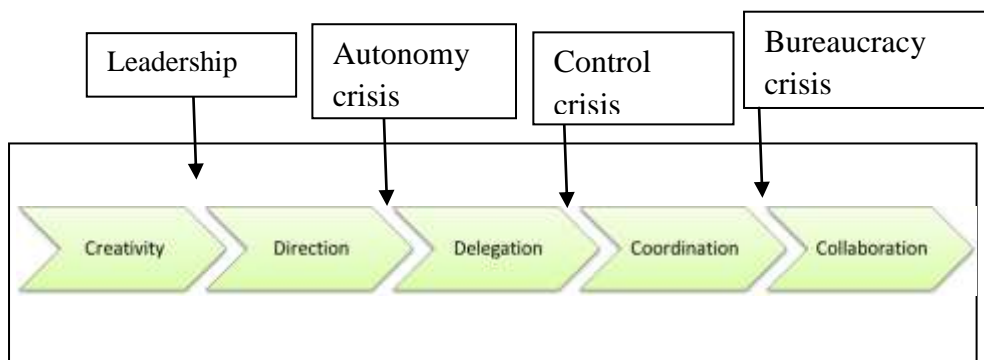
down within the organization and a strong culture developed to guide employees in decision making to overcome managerial limit to growth.

Penrose further posits that, all other things being equal, growth comes from entrepreneurial activity in terms of entrepreneurial versatility, fund raising ingenuity, entrepreneurial ambition and entrepreneurial judgment. Entrepreneurial versatility is the way in which an entrepreneur creates ways in which new products can be brought to market or new geographic markets pursued. Fund raising ingenuity refers to the ability of the owner to raise needed funds for expansion by creating trust in others and persuading them of the merits of his venture. Entrepreneurial ambition is the motivation of the owner towards growth. Whereas some desire growth because it enables them to better deliver their products and services to the market, others seek growth for personal recognition as the founder of a business empire. Entrepreneurial judgment refers to the quality of decision making of the owner. Some people make more mistakes than others in business decision making, therefore quality business decisions are made by owner managers with a strong inclination in common sense, self confidence, and have the ability to gather information, use consultants and decide when and how to act.

The Resource based view theory therefore proposed that it is the entrepreneur's view of the future and its possible opportunities that most determine the shape of the company over time and that MSE growth depends on how well the owner manager is equipped with the right information to make sound decisions in the business, is able to seize and pursue opportunities and can create trust in others and convince them to invest in his venture. This study suggests that financial literacy education can improve the growth of MSEs by improving the ability of the entrepreneur to make sound financial decisions, raise the required capital and put in place appropriate financial performance measurement systems to monitor and measure performance of the business and take corrective action.

## b) Stages of Growth Theory.

This theory was developed by Larry Greiner (1972) who posits that enterprises move through five distinguishable stages of growth. Each phase contains a relatively calm period of growth (evolution) that ends with a management crisis (revolution) (Gupta *et al.*, 2013; Mckaskill, 2010). These phases of growth are creativity, direction, delegation, coordination, and collaboration (Figure 2.1).



**Figure 2 1: Phases and Crises of Growth ( Gupta *et al.*, 2013)**

At creativity the enterprise is born, products and services to be offered to the market are developed, long working hours and moderate salaries. Direction stage is characterized by sustained growth and good management. At delegation stage, the organization is decentralized, organization structures put in place. Most responsibilities are assigned to line managers and employees. Coordination phase brings in formal systems with clear flow of authority and headquarter is established for better coordination of activities. Collaboration phase marks the peak of growth which is characterized by strong interpersonal relationships and teamwork. The enterprise largely invests in capacity building through workshops, conferences and training.

Greiner argued that growth (evolution) proceeded until a crisis (revolution) occurred. Each crisis is followed by a different management style. As the business grows, communication becomes increasingly formalized as communication lines become longer. Customer service quality falls as new customers don't have the advantage of personal links with the founders. Problems escalate with the second location and now daily face-to-face

communication is not possible. External shareholders and/or external directors force more transparent decision making and thus the entrepreneur can no longer make decisions unilaterally. Larger numbers of staff, customers and other stakeholders now depend on the business for their livelihood. Greiner concurs with Penrose that for there to be growth each level of complexity must usher in a new management style. Most entrepreneurs fail to appreciate the fact that at each level of complexity their businesses must be managed differently hence they are not able to make the transition or don't want to. Consequently they stagnate and eventually fail.

### c) **Churchill and Lewis Model**

Applying the findings of Greiner to the small entrepreneurial business situation, Churchill and Lewis (1983) developed a model. They posit that an enterprise can have five stages of growth as depicted below (Figure 2.2).



**Figure 2 2: Stages of an enterprise growth (Churchill and Lewis 1983)**

Existence is the first stage, of the entrepreneurial venture. Here, the enterprise struggles to establish its processes and works without a formal structure in place. The owner of the enterprise takes close supervision of each and every business activity. At the second stage, which is survival, the business grows and the entrepreneur feels the need to have additional capital to expand the business. Since the business activity is growing, he/she prefers to add family members or known people as partners to expand the business. The main aim of the enterprise is to reach the breakeven point so that adequate cash flow can be maintained to meet day-to-day requirements of repair and replacements.



At the third stage of success, the enterprise begins to earn profits. They have enough capital to either invest in further business opportunity or continue with the same pace of growth. At this stage, the enterprise may take up team building and people development as some of their focus areas; however, these initiatives are driven by personal values and vision of the entrepreneur. At the takeoff stage, the focus is on further growth, expansion, and seeking new opportunities. The organization becomes more formal in nature, and work is properly defined and delegated. Finally, at the resource maturity stage, the firm graduates to a company and gives more emphasis on quality control, financial control, and creating a niche market. The Churchill and Lewis model shows that there are many choices open to the business as it grows larger and more complex, including the choice to limit the growth and/or to sell the business. The three theories of growth allude to the fact that the owner's aspirations, goals, entrepreneurial skills and willingness to delegate, become key factors in attaining the growth of the business. This very much supports the assertion that the financial literacy skills of the owner are a key factor in the growth of the firm.

### **2.2.2 The Dual –Process Theory.**

This theory posits that financial decisions can be driven by both intuitive and cognitive processes which mean that financial literacy may not always yield optimal financial decisions. The Dual Process Financial literacy theory argues that the behavior of people with a high level of financial literacy might depend on the prevalence of the two thinking styles: intuition (system 1) and cognition (system 2) (Lusardi & Mitchell, 2011; Glaser & Walther, 2013). Intuition is the ability to acquire knowledge without inference or the use of reason. Intuition provides views, understandings, judgments, or beliefs that cannot be empirically verified or rationally justified. Taylor (1981) as cited by Chan and Park (2013) asserts that individuals who rely on intuition prefer to use mental short cuts as they make decisions which tend to be largely influenced by their emotions. Glaser and Walther (2013) point out that the positive effect of financial literacy on reasonable investment decisions is diminished by a high prevalence of intuition. Therefore, increased use of intuition results to sub optimal investment decisions.

Cognition on the other hand is the process by which the sensory input is transformed, reduced, elaborated, stored, recovered, and used. Cognition is the mental processing that includes the comprehending, calculating, reasoning, problem solving and decision making (Chan, & Park 2013). High cognition individuals enjoy thinking, are analytical and are better at retaining information and more likely to search out new information. They are more likely to be influenced by a relevant message and not by irrelevant information such as endorser's appearance or use of humor (Chan & Park, 2013). Since the need for cognition triggers the use of analytical process, it can directly shape investment portfolio composition. Such investors will therefore more likely use the systematic approach of capital budgeting when evaluating investment opportunities and are more likely to diversify investments compared to those with a low need for cognition.

Dual process theories imply that individuals who are high on cognition will seek out for information and are more likely to be influenced by a relevant message. This means that their decision making skills can be boosted by financial literacy training using simple easy to understand methodologies. Moreover, use of intuition may be reduced by provision of relevant information to support decision making through financial education since individuals tend to rely on intuition where relevant information is lacking. However optimal results may not be achieved where individuals trust their intuitions in decision making.

### **2.2.3 Operationalization of Variables.**

The enterprise growth theories and financial literacy theory allude to the fact that the skills and knowledge of the entrepreneur are central in achieving enterprise growth therefore financial management skills of the owner manager are an important determinant of MSE growth. However, there is no standardized measure of financial literacy; different studies have used different variables to measure financial literacy (Fatoki, 2014; Cole & Fernando 2008). The USAID (2009) used finance related knowledge i.e (awareness of sources of finance, awareness of business finance technology and consumer financial literacy), finance related business skills and information skills to measure financial literacy for an entrepreneur. Siekei *et al.*, (2013) used competence in book keeping, credit management, budgeting skills and financial control to measure financial literacy. Fatoki (2014) used financial planning analysis and control, Book keeping, understanding of funding sources, Business terminology, use of technology and risk management (insurance) to measure the financial literacy of new micro entrepreneurs. Obago (2014) in a study to determine the effect of financial literacy on management of personal finances of employees of commercial banks in Kenya used: money basics, budgeting, saving and planning, borrowing, debt literacy, financial products, recourse and self-help. The Kenya Financial Sector Deepening report (FSD, 2009) identifies key themes of financial literacy education as; Savings Culture, Financial planning and budgeting, Debt Management, Bank Services and Investments management. In this study, the researcher used debt management, budgeting, access to banking services and Book keeping literacy in measuring financial literacy of MSE owners in Kakamega Central Sub County.

### 2.3. Conceptual Framework

The figure 2.3 shows a schematic relationship between financial literacy and MSE growth.

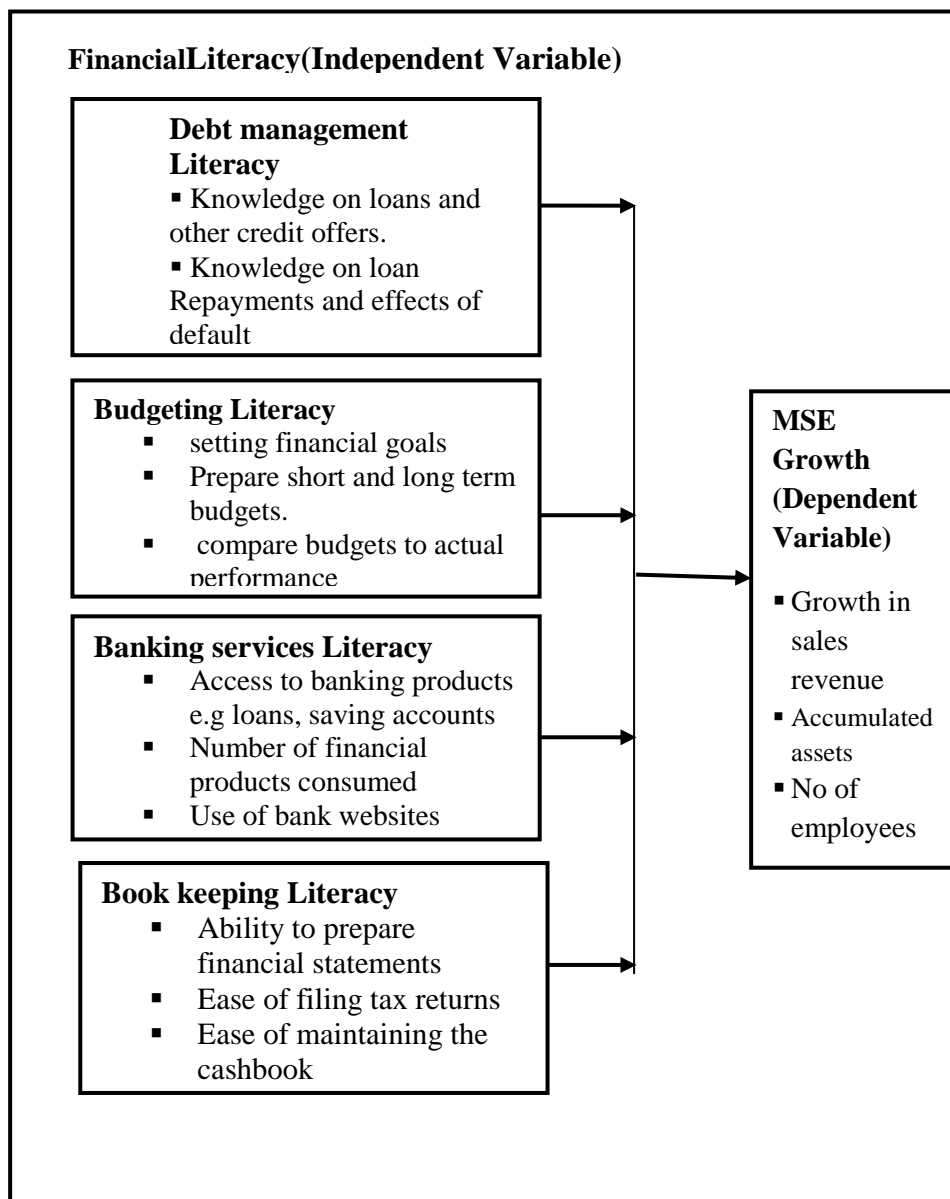


Figure 2. 3: Conceptual framework.

## **2.4 Empirical Review.**

### **2.4.1 Debt Management Literacy**

Most governments in developed and developing economies are concerned about the financial literacy of their citizens. The Organization for Economic Cooperation and Development (Pisa,2013) posits that the rising interest in financial literacy as a key life skill has been brought about by a number of factors such as; transfer of risk from both governments and employers to individuals as a result of introduction of contributory pension to replace the automatic pension which has shifted to workers the responsibility to save for their own financial security upon retirement, upsurge of contributory health schemes, increased number of financial decisions that individuals have to make both at the personal and business level as a result of the changing market place and increased supply of a wide range of financial products from a variety of providers which requires complex financial knowledge to select from a wide array of alternatives. All of these trends have transferred the responsibility of major financial decisions to individuals which require that individuals must be sufficiently financially literate to take the necessary steps to protect themselves from fraudulent schemes.

Accessing finance is a key element for MSEs to succeed in building productive capacity, compete, create jobs and contribute to poverty alleviation in developing countries. However, small businesses especially in Africa can rarely meet the conditions set by financial institutions which see MSEs as risky because of poor guarantees and lack of information about their ability to repay loans ( Siekei *et al.*, 2013). As a result of these constraints, most MSEs finance a smaller share of their investment with formal sources of external finance than do large firms and instead, relies more heavily on informal sources of finance, such as borrowing from family and friends or from unregulated moneylenders which inhibits their growth. However, although self financing and money lenders are an alternative, self financing is constrained by low saving capabilities of most MSEs while money lenders charge high interest rates due to the perceived high risk of default by MSEs (Rweyemamu, Kimairo & Urasa, 2003; G20 Seoul Summit, 2010).

Studies reveal that individuals with less financial literacy are likely to face more challenges with regard to debt management, savings and credit, and are less likely to plan for the future while those with higher financial literacy are better able to manage their money, participate in the stock market and perform better on their portfolio choice and are more likely to choose mutual funds with lower fees (Hilgert, Hogarth, & Beverly, 2003; Lusardi & Mitchell, 2011; FSD, 2009). Moreover, those who have greater financial knowledge are more likely to accumulate higher amounts of wealth, have better debt management skills and avoid high interest payments (Lusardi & Mitchell, 2011; Wachira & Kihui, 2012). On the contrary, those who are financially illiterate tend to borrow too much and generally use more expensive sources of finance that may impact negatively on their business performance and are also likely to report excessive debt position or inability to measure their debt position (FSD, 2009; Master card, 2011). Obago (2014) in a study that sought to determine whether financial literacy had any effect on personal financial management practice among employees of commercial banks in Kenya using a sample of 100 respondents revealed that higher numeracy skills have a positive relationship with higher levels of household wealth and good financial decisions while poor numeracy was linked with unnecessary expenses. Individuals with stronger numeracy and financial literacy are also more likely to participate in financial markets and to invest in stocks. Lusardi *et al.*, (2011) found that an increase in the financial literacy of an individual with otherwise average characteristics is associated with a 17 percentage point higher probability of stock market participation.

Lusardi and Tufano (2009) in a study on Debt Literacy, Financial Experiences, and over indebtedness among Americans found that only one-third of respondents in the target population could apply concepts of interest compounding to everyday situations or understand the workings of credit cards. They further established that debt illiteracy is particularly severe among women, the elderly, minorities, and those who are divorced or separated. Problems resulting from poor financial management also affect the productivity of employees. Brown *et al.* ,(1993) as cited by Obago (2014) found that many

employees suffer from stress as a result of money problem behaviors which include: over-indebtedness, overspending, unwise use of credit, poor money management and inadequate resources to make ends meet which impacts negatively on their productivity at work. As a result of these employee problems, many companies in the United States adopted financial education at work places aimed at equipping their employees with personal financial management skills. The Financial capability Report of 2009 reveals that a significant population of Kenyans i.e 25% has credit difficulties and tends to borrow loans to repay loans and admit that they are not in control of their finances. Therefore acquisition of financial literacy skills would have a positive impact on an individual's behaviors in terms of increased savings, wealth accumulation and avoidance of unnecessary expenses. This would make MSE managers better customers for the banks, prudent managers of the limited financial resources in their businesses and better able to select the most suitable products for their businesses.

#### **2.4.2 Budgeting Literacy**

A budget is a plan that describes all future business activities expressed in financial terms. It is the yardstick by which an organization's performance is measured. Budgeting on the other hand is the process of preparing, compiling, and monitoring financial budgets (Nugus, 2006). Budgeting is a key management tool for planning and controlling departments within an organization. Budgeting is an aid to better management of an enterprise and helps to achieve higher profits and minimize losses. Siekei *et al.*,(2013) established that there is a positive relationship between budgeting skills acquired through financial literacy training and improved performance of MSEs in terms of increased sales and business profitability as it provides a basis of establishing performance targets. However, Fatoki (2014) established that most micro enterprises are survivalist they might have some form of budgeting and financial planning and control but on an informal basis a view that is corroborated by Abanis, Sunday, Burani & Eliabu (2013) who found that most small businesses do not engage in formal financial planning and control and budgeting.

Warue and Wanjira (2013) also attribute business failure to poor budgeting skills which is also common among Kenyans. FinAccess survey (FSD, 2009) revealed that although a large number of Kenyans are familiar with the concept of budgeting, over 51.2% felt they are not in control of their finances. These empirical studies reveal a positive relationship between financial literacy and human behaviors such as increased saving, wealth accumulation, investment portfolio choice and debt management and business survival. However, mounting evidence shows that there is a low level of financial literacy among adult population across countries worldwide. This illiteracy is also higher amongst women than men which negatively impacts on their businesses.

### **2.4.3. Banking services Literacy**

The increase in the number and complexity of financial products requires MSEs to have some level of financial knowledge in order to select from among alternatives the best products for their businesses. Andoh and Nunoo (2011) found that the financial literacy of owners of MSEs is a very important factor in explaining utilization of financial services by MSEs. Low levels of financial literacy can prevent MSEs from understanding and assessing financial products from financial institutions. On the other hand, MSE managers who are financially literate will mount competitive pressure on financial institutions to improve their products.

Wachira and Kihui (2012) conducted a study to establish the impact of financial literacy on access to financial services in Kenya by households using the 2009 National Financial Access (FinAccess) survey data using the multinomial logit model. Findings revealed that factors such as the age of the borrower, income, level of education and gender were significant in determining access to financial services while marital status was found insignificant. Financial literacy was also rated low as a factor in household decision making which implies that majority of individuals did not value and seek out financial information in making financial decisions although financial literacy was significant in explaining exclusion from financial services market. Results also indicate that financial knowledge reduced the probability of an individual remaining excluded by 8.5% an indication that with increased



sensitization, more people can be pulled out of the excluded strand. Education serves to enlighten people on the various financial services available while at the same time creating awareness on how best to manage the available services. This study only dwelt on how financial literacy affected access to financial services of households and did not show how it affected business growth.

When financial regulators face an educated customer, they are forced to improve the efficiency and quality of financial services because financially literate consumers demand for more appropriately priced and transparent services from financial institutions by comparing options, asking the right questions, and negotiating more effectively (Fatoki,2014). Besides, financially literate consumers pose less risk to the financial system due to their responsible use of financial products and services which help to strengthen financial market stability and contribute to increased savings and wider economic growth (Master card, 2011; PISA, 2005).

According to Siekei *et al.*, (2013) consumers who are financially literate are able to evaluate and compare financial products, such as bank accounts, saving products, credit and loan options, payment instruments, investments, insurance coverage, and navigating complex loan application procedures so as to make optimal decisions. However a major challenge for most financial institutions is a low level of financial awareness of most business owners as established by the Association of Chartered Certified Accountants (2014). In addition, financial literacy impacts on access and payment of loans which provides development finance for business expansion. According to Fatoki (2014), lack of personal financial literacy impacts negatively on the financial management of new ventures and can lead to possible failures of MSEs. Hence a good financial foundation of the entrepreneurs is a significant barometer of the success and growth of the enterprises which helps improve access to finance by new ventures (Wise 2013), facilitates an objective evaluation of credit worthiness of MSEs (Mills, & McCarthy,2014) and reduces the chance of loan default and improve sales and business performance (Fatoki, 2014).

#### **2.4.4 Book Keeping Literacy.**

Larry and Cristopher (2009) define book keeping as “the art of recording all money transactions so that financial position of an undertaking and its relationship to proprietors and outside persons can be readily ascertained”. Every enterprise, however simple requires written records which are used by managers as guides to routine action, taking of decisions, formulation of general rules and maintaining relationships with other organizations or with individuals (Frankwood, 2010). Therefore a business without written records is like a blind man without his aid or a vehicle without a driver for it does not know which way it is going. Frankwood, (2010) identifies the following as the main benefits of keeping business records; They help in calculating business profits or losses, reveal value of debtors in terms of amount due and when payments are due so as to avoid heavy costs of bad debts, They reveal fast moving and slow moving goods and those about to expire, They also help in business planning and are needed by lenders of business finance etc. Hussein (1983) as cited by Ezejiofor, Ezenyirimba, & Olise (2014) notes that, a good accounting system is not only judged by how well records are kept but by how well it is able to meet the information needs of both internal and external decision-makers. Quality accounting information will enhance financial management as well as accessibility of finance by small businesses. Wise (2013) finds that increase in financial literacy leads to more frequent production of financial statements and such an entrepreneur who produces financial statements more frequently has a higher probability of loan repayment and a lower probability to voluntarily close his/her business. Ezejiofor *et al.*, (2014) in a study to establish the relevance of accounting records in small business performance in Nigeria found that MSEs that kept proper books of account were able to measure accurately the performance of their businesses. They also assert that business decisions with regard to expansion, maintaining a competitive edge, prevention of business failure and filling tax returns need to be supported by quality financial information which needs to be relevant, user friendly and available in a timely manner. They caution that accounting systems that generate the information should be simple in order not to impose unnecessary operative burdens.

Most micro-enterprises do not keep books of accounts that will allow them to extract useful accounting information due to lack of accounting knowledge (Fatoki, 2014; Agyei, 2011; Maseko & Manyani, 2011). In addition, these findings indicate that most micro-enterprises still use manual method instead of computers for operations which results to inefficient use of accounting information to support assessment of financial performance of their businesses. They propose the use of accounting software to improve accounting practices, albeit they lament the unavailability of medium-sized software for MSEs. Ezejiofor *et al.*, (2014) opine that except for statutory demands, MSEs hardly give serious thoughts to the process of sound accounting, yet the inadequacy and ineffectiveness of accounting processes have been responsible for untimely collapse of a host of them. Most MSE owners prefer to recruit unskilled personnel especially clerical and accounting staff the product of which is business stagnation and winding up. This is because unskilled accounting staffs are not able to keep reliable accounting records and cannot correctly determine the profit or loss of the firm.

The Kenya Revenue Authority (KRA) commissioner general Waweru in his report on “Addressing the different tax policy and tax administrative challenges of micro, small and medium businesses” observed that, many small businesses in Kenya in the informal sector lack detailed business records as a strategy to avoid taxation (Waweru, 2007). He opines that imposing fines on such entities would discourage rather than enforce tax compliance. These entities may avoid taxation but this information asymmetry has a negative effect on the business as it makes it difficult for financiers to quantify accurately the level of risk involved in a business opportunity so as to fix accurate interest rates which results to high transaction costs due to high cost of information gathering, screening and monitoring of MSEs. Consequently financiers tend to fix high premiums, high interest rates and demand excess collateral which makes it difficult for MSEs to comply. Such severe credit rationing for MSEs results to credit constraints making them miss out on projects that are profitable because they cannot raise the external capital necessary to fund them (G20 Seoul Summit, 2010).

The G20 Seoul Summit (2010) also reports that low levels of financial literacy particularly book keeping skills have contributed to lost opportunities for a large number of MSEs worldwide. It affirms that information asymmetry arising from MSEs inadequate financial statements or business plans make it difficult for creditors to assess the creditworthiness of potential MSE proposals which makes most lenders reluctant to fund small firms especially those with new products. Mills and McCarthy (2014) confirm this and opine that assessing creditworthiness of small businesses is difficult due to information asymmetry because their transactions are largely informal. Through business training an entrepreneur can acquire basic skills of Book keeping which increases the transparency of his business and improves his credit standing.

#### **2.4.5 Micro and Small Enterprise Growth**

The Micro and Small enterprise sector plays a critical role in economic growth of both developed and developing economies which affirms the recent attention to the growth and sustainability of this sector. This focus has been boosted by the formation of worldwide networks such as the Global Entrepreneurship Network that aims at marshalling resources for the sector through forums such as the Global Entrepreneurship Summit held in Kenya in July 2015. Enterprise growth can be measured in various ways. Gupta ,Guha, & Shiva (2013) suggests the use of quantitative features such as; value addition, revenue generation, volume of assets and volume of business or qualitative features like market position, quality of product, and goodwill of the customers, on the contrary Mateev and Anastasov (2010) opines that financial structure, productivity, sales revenue and total assets have a more direct impact on growth but caution that the number of employees, investment in R & D, and other intangible assets have minimal influence on the enterprise's growth prospects. Chaston and Mangles (1997) suggest that if an enterprise adopts multi-strategy transformation initiatives, the probability of achieving the growth objective increases.

A number of factors have also been identified by various scholars as determinants of MSE growth; Muthaih and Venkatesh (2012) suggest that presence of institutional and financial barriers may hinder MSE growth. Institutional barriers include the enterprise's interaction with government, legal requirements and procedures, taxation while financial barriers involve lack of financial resources. Gilbert , McDougall and Audretsch (2006) suggested that it is the **how** and **where** questions that are more important in the context of the growth of an enterprise. They opine that growth is a function of the decisions an entrepreneur makes, like how to grow internally or externally and where to grow in domestic market or international market. Conversely, Lorunka , Kessler, Frank and Lueger, (2011) argue that the gender of the founder, the amount of capital required at the time of starting the business, commitment of the entrepreneur and growth strategy of the enterprise are the most important factors in predicting growth in a small enterprise. Men owned enterprises exhibited faster growth than women owned enterprises. This could be attributed to the assertion that men tend to acquire knowledge on financial literacy earlier in life while women will do so late in life particularly in anticipation of death of a spouse (Lusardi & Mitchell, 2013). Consequently, growth may be achieved quickly, slowly, or not at all. It depends on the strength of the growth aspirations and growth-enabling factors of an enterprise (Mckaskill, 2010)

Various studies further confirm that while some entrepreneurs aspire to grow either for recognition as founders of business empires or to serve their customers better (Penrose, 1959) others are not able to grow due to inability to manage transition (Greiner, 1972) and others do not want to grow. A study by Kolvereid and Bullvag (1996) found that almost 40% of the respondents do not want to grow. Further, they found that there is a significant relation between education, industry, past growth in turnover, and entrepreneur's aspiration to grow. They concluded that entrepreneurs who want their firms to grow will have higher level of education and will tend to have manufacturing firms rather than service firms. However, Njoroge (2013) argues that education may not be the only determinant of growth as there are also cases of illiterate persons running successful enterprises in Kenya especially in informal sector, many Jua Kali and farming entrepreneurs are financially illiterate

and yet they run very successful MSEs. A clear understanding of factors that greatly influence the growth of MSEs would ensure that they are measured and enhanced to promote the growth of MSEs. More research is also needed to find out whether the financially illiterate entrepreneurs would be better if they had financial literacy.

In a study to investigate the effect of business development services on the performance of Small Scale enterprises in Kisii Town Osinde, Iravo, Munene, & Omaiyo (2013) found that the entrepreneurs who received business training services recorded an improvement in the growth of sales and market shares. 83.3% of MSE managers who always attended training recorded an improvement in their businesses in terms of growth in sales and profits as opposed to only 41.2% of those who never attended training. This study focused on the financial literacy skills of the entrepreneur and how it affected the growth of MSE businesses in Kakamega Central Sub County. Growth was measured in terms of sales revenue, accumulated assets and number of employees.

## **2.5. Critique of the Literature Reviewed.**

Empirical studies reviewed present both convergent and divergent views on the role of financial literacy on the growth of MSEs. Most scholars concur that financial literacy greatly influences enterprise growth. While various factors may play a role in determining enterprise growth, the skills of the entrepreneur have been found to be a key determinant. Penrose (1959) and Greiner (1972) concur that enterprise success is dictated by the ability of the owner manager to make sound business decisions, identify and pursue opportunities and convince others to invest in his venture. They also concur that growth brings about organizational complexities and it's only those organizations that are able to reorganize that will transit to the next level of growth.

Whereas Penrose (1959) proposes a participatory management style to push decision making to lower levels of management so as to avoid managerial limitations to growth and take advantage of existing talent in the business. Greiner (1972) and Lewis & Churchill (1983) propose a new management style at each level of complexity with main emphasis on appropriate delegation of responsibility and

sound financial controls and capacity building of managers. This implies that with appropriate financial management literacy MSE managers can put in place adequate financial controls to enhance accountability of employees for faster growth. Kolvereid and Bullvag (1996) opine that high growth firms have entrepreneurs with high level of education. On the contrary Njoroge (2013) argues that the level of education may not be the only determinant as there are very successful MSEs run by illiterate managers while others run by highly educated managers have failed.

Lorunka *et al.*, (2011) argues that the gender of the founder is significant in predicting growth in small enterprises. Men owned enterprises experience faster growth than women owned enterprises a view that is supported by Lusardi and Mitchell (2013) and Wachira and Kihiu (2012) who opine that men tend to acquire financial knowledge earlier in life than women. Although access to finance is crucial for MSEs to build productive capacity, compete and create employment, Siekei *et al.*, (2013) argues that it is the poor guarantees and lack of financial information that makes MSEs to be rationed out in access to loan finance. They therefore tend to rely on money lenders who are expensive and family and friends who may not raise adequate funds thus they miss out on investment opportunities that could bring growth. The G20 Seoul Summit (2010) and Wachira and Kihiu (2013) confirm that lack of relevant information is a major reason for credit rationing of MSEs by financial institutions.

Financial literacy has also been associated with positive behaviors such as debt management, increased savings, wealth accumulation and avoidance of over indebtedness (Lusardi & Mitchell, 2011; Mastercard, 2011; Obago, 2014). However, Chan, and Park (2013) caution that financial literacy may not always yield optimal results where an individual relies heavily on intuitions in decision making. Wachira and Kihiu (2012) further suggest that increase in knowledge about financial services reduces the probability of an individual being financially excluded by 8.5%. This view is corroborated by Lusardi and Mitchell (2011) who opine that increase in financial literacy of an individual with average characteristics would increase the probability of stock market participation by 17%. This implies that with increased

sensitization more people can be pulled out of the excluded strand. Ezijiofor *et al.*,(2014); Fatoki, 2014; and Agyei,(2014) opine that although book keeping allows a business to file tax returns, compare its business performance with others and put in place appropriate financial controls to prevent business failure most MSEs do not keep proper business records due to lack of accounting knowledge. On the contrary, Waweru (2007) asserts that failure to produce financial information by MSEs particularly in the informal sector in Kenya is a strategy to avoid taxation although it eventually impacts on their ability to access external finance due to information opacity. These studies also reveal limited use of budgeting by MSE managers which negatively impacts on business performance as well as personal money management (FSD, 2009; Warue and Wanjira,2013; Fatoki,2014).Through business training, MSE managers can acquire the right skills, knowledge and attitudes necessary to improve financial management of their businesses and increase their uptake of financial products to realize growth and transit to the next level of enterprise size.

## **2.6. Summary**

The importance of financial literacy as a key life skill cannot be over emphasized. This has been brought about by the changing social economic environmental factors which place a higher responsibility of making financial decisions to an individual both in terms of personal finances as well as business finance. Consequently, there is need for individuals to strive to acquire financial management skills so as to be able to make sound financial decisions in managing personal or business finances. A dearth of literature on theories of enterprise growth mainly (Penrose, 1959; Greiner,1972;Churchil and Lewis,1983) concur that skills and competencies of the entrepreneur play a crucial role in attaining growth. Financial literacy education can thus improve the growth of MSEs by equipping the entrepreneur with skills to make sound financial decisions, raise the required capital and put in place appropriate financial performance measurement systems to monitor and measure performance of the business and take corrective action.

The high failure rate of MSEs can be attributed to the low level of financial literacy of the entrepreneur which results to poor planning, limited access to finance and poor



financial management(Oluoch,2014;Agyei,2014; Njoroge,2012). Financially illiterate individuals are more susceptible to over indebtedness, vulnerable to fraudulent schemes and are also likely to use expensive sources of finance which impact negatively on their business profitability (Siekei *et al.*, 2013; Fatoki, 2014).Such individuals are likely to face more challenges with regard to debt management, savings and credit, and are less likely to plan for the future.( Lusardi & Mitchell, 2008, 2011; FSD 2009). Financial illiteracy has also been attributed to credit card behaviors that generate fees and interest charges. Lusardi and Tufano (2009a) found that although illiterate customers account for just 28% of card holders, they account for the bulk of money received by financiers from these fee inducing behaviors. On the contrary, Acquisition of credit management skills through financial literacy training enables MSEs to acquire loans and manage loan portfolios in a manner to ensure that loan liability and interest expenses are minimized (Siekei *et al.*,2013).

Although a positive relationship exists between budgeting skills and improved performance of MSEs in terms of increased sales and business profitability and better money management by individuals; A number of MSEs in Kenya fail due to lack of budgeting (Warue & Wanjira ,2013) and this poor budgeting skills are also common among Kenyans since over 51.2%of Kenyans who are familiar with the budgeting concept feel not in control of their finances.(FSD,2009). On the other hand, acquisition of financial literacy results to positive outcomes which include; better financial decisions with fewer management mistakes (Njoroge, 2014; Fatoki, 2014) which reduces the need and cost of government intervention and support for those who have made wrong financial decisions (Pisa,2013), improved quality of financial products and stability of financial institutions in the market(Wachira & Kihiu,2012) and enables a business to attract investors and access to loans (Wise, 2013; Mills & McCarthy, 2014). Whereas these studies reveal a positive relationship between financial literacy, household well being and business performance, most studies in Kenya on financial literacy and business performance have dwelt on an impact assessment of MSEs that have undergone Equity Foundation Financial literacy training programme while others have focused on the relationship between financial literacy and individual money management. No study has attempted to establish the

relationship between financial literacy of MSE managers in Kenya and the growth of their businesses.

## **2.7. Research Gaps**

Reviewed literature reveal that many studies especially in Kenya have mainly dwelt on importance of financial literacy and its effects on household or personal financial behavior with little effort to ascertain the role of financial literacy on the growth of MSEs (FSD, 2008 & 2009; Mastercard, 2011). MSEs account for over 75% of the private sector in Kenya which are expected to spur economic growth under the devolved governance system. Although deliberate efforts have been made to avail subsidized capital to this sector, the failure rate remains high. Very few micro and small enterprises have been able to transit to medium scale. There is need to delve further on how financial illiteracy inhibits growth, results to poor performance and subsequent failure of MSEs in Kenya.

Njoroge (2013) sought to find out whether there is a relationship between financial literacy and MSE success by interviewing a sample of seventy nine entrepreneurs who are registered and operate in Nairobi County. The study concluded that there is a positive relationship between financial literacy and entrepreneurial success in Nairobi County. However, the study used respondents from MSEs with at least 3 employees, 5 years operation with a turnover of 5 million. This means that micro enterprises with a lower turnover were left out yet these form the bulk of traders in this sector. The current study mainly targeted MSEs with a turnover of less than 500,000 who are majority in the country. Siekei *et al.*,(2013) looked at the role of financial literacy on performance of MSE enterprises whose managers had undergone the Equity foundation financial literacy training in Njoro district. The findings revealed a positive relationship between the financial literacy training and the performance of the MSE managers that had been trained. However, for a conclusive picture, It is necessary to measure the level of literacy of all MSEs and how their level of literacy impacts on MSE performance so that those that have not been reached by financial education training can be prioritized by future efforts. Moreover, there is need to identify which of these variables are most significant in influencing enterprise growth to inform future program design.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter outlines the research methodology and data collection procedures that were used in the study. It specifically addresses the study's research design, target population, sample design, sampling procedure and data collection instruments and data analysis procedures.

#### **3.2 Research Design**

The study adopted a descriptive cross sectional survey design. This design was deemed appropriate because in surveys the researcher is an outsider which increases reliability and eliminates subjectivity. Samples are also mainly based on probability sampling which allows for generalizability of data collected (Guthrie, 2012). The design was also the most appropriate given the large number of respondents targeted in the study. Other advantages include; generating standardized quantifiable empirical data, confidentiality and anonymity of the respondents (O'leary, 2011).

#### **3.3 Target Population**

Target population is the collection of elements that possess the information sought by the researcher (Guthrie, 2012). The Target population which represents the sampling frame was entrepreneurs in MSEs registered by the Revenue Department under single business permit with less than 20 employees and operating within Kakamega Central Sub County. Records availed to the researcher by the Revenue department of the County government of Kakamega indicate that as at March 2015 MSEs in this category were 1300 from which a sample was drawn.

#### **3.4 Sample and Sampling Technique**

The researcher adopted a stratified proportionate sampling technique. MSEs were first stratified into sectors; Service, Retail/Wholesale, Manufacturing and Agribusiness. Proportionate sampling was then used to determine the number of respondents from each strata to ensure equal representation hence reduce sampling errors (Kombo & Tromp, 2006; Guthrie, 2012). The sample size was calculated using Yamane's formula (1967) on the basis of which a sample of 306 MSEs was

selected (Kasomo, 2006; Cohen, Manion & Keith, 2007; Guthrie, 2012). A proportion of the sample size was then computed. This proportion was used to determine the number of items to be examined from each stratum.

$$n = \frac{N}{1 + N(e)^2} = \frac{1300}{1 + 1300(0.05)^2} = 305.8824 \sim 306.$$

Where, n = sample size, N = population size,  
 e = level of precision. The level of precision is the range in which the true value of the population is estimated to be; it is expressed in percentage points ( $\pm 5\%$ ).  
 This sample size was thus calculated at 95% significance level.  
 The proportion =  $306/1300 = 0.23538 \sim 0.235$ .

**Table 3 1: Sample Size**

S/No	Strata	Population	Proportion	Sample size
1	Retail/Wholesale	638	0.235	150
2	Service	438	0.235	103
3	Agribusiness	148	0.235	35
4	Manufacturing	76	0.235	18
	<b>Total</b>	<b>1300</b>		<b>306</b>

**3.5 Data Collection Instruments.**

A structured questionnaire with both closed-ended and open ended questions was used to collect primary data. The closed ended questions were designed on a likert scale of 5-6 items. Secondary data on how financial education affects MSE growth, financial education efforts in place in Kakamega County was collected through document analysis of government publications and reports, journal articles and relevant industry reports. Individual MSE business records were also examined where available to estimate the value of assets and sales volume. The mixed approach allows for use of both deductive and inductive reasoning which helped the researcher to build a broader picture by adding depth and insights to numbers (Cohen *et al.*, 2007; O’Leary, 2011).

### **3.6. Data collection Procedure**

In collecting data, the researcher first obtained an introductory letter from the Graduate school of Jomo Kenyatta University of Agriculture and Technology. The researcher then sought permission from the Kakamega County director of trade to allow the collection of data from MSEs in Kakamega Central Sub County and allow access to business registration records from the county revenue department. The researcher also pre-visited the study site to familiarize with the study area. After obtaining the list of registered businesses sampling was done and questionnaires administered to the selected respondents. The questionnaires were delivered on a drop and pick basis by the researcher to increase the response rate as recommended by Guthrie (2012).

### **3.7. Pilot Testing.**

Good planning and development of research instruments is essential but not sufficient. The only way to know if something is going to work is to give it a try (O'leary, 2011). To ensure that the instruments are reliable and valid, a pilot study involving thirty randomly selected respondents was carried out. Mugenda and Mugenda (2003) recommends that a sample of 10% of the proposed sample size is adequate for piloting. The respondents were drawn from MSEs at Lunza Market in the neighboring Butere Sub County with characteristics similar to the target population. The pilot study assisted the researcher in making the necessary corrections on the instruments to ensure the questions were focused on the objectives, accurate and consistent before carrying out the actual research.

### **3.8. Reliability of Research Instruments**

Reliability is the degree of consistency, accuracy, stability and predictability of a research instrument (Kumar, 2005). Kumar (2005) further asserts that a scale or test is reliable to the extent that repeat measurements made by it under constant conditions will give the same result. Internal consistency reliability of the research instrument was measured using the Cronbach's alpha which gave an overall alpha value of  $\alpha=0.944$  for all the 23 items in the instrument. Reliability of the individual scales was also computed which gave alpha values as shown in the table below.

**Table 3 2: Questionnaire Reliability**

<b>Likert Scale</b>	<b>Cronbach Alpha Value</b>
1 Debt Management Literacy	0.817
2 Budgeting Literacy	0.974
3 Banking Services Literacy	0.643
4 Book keeping Literacy	0.985

Field (2005) recommends a minimum alpha value of 0.7 although he also opines that in psychological constructs, values below 0.7 can realistically be expected while a value of 0.9 is rated as excellent. In this study the alpha value of 0.944 was way above the minimum recommended by Field (2005) of 0.7 which shows that the instrument had a high level of internal consistency.

### **3.9. Validity of Research Instruments**

Validity indicates the degree to which an instrument measures what it is supposed to measure (Kothari, 2004). The face and content validity of the research instruments was established by seeking opinions of experts in the field of study especially my supervisors and colleagues in the Research and Collaboration committee of Bukura Agricultural College. Their advice and suggestions helped the researcher to make the necessary changes to the questionnaire to ensure it was structured in a focused, accurate and consistent manner. In addition, content validity of the instrument was determined through piloting, where the responses to the questions were checked against the research objectives. For a research instruments to be considered valid, the content selected and included in the questionnaire must be accurate and relevant to the variable being investigated (O’leary, 2011). Any questions found ambiguous and/or irrelevant were removed.

### **3.10. Data Analysis and Presentation**

After collecting the questionnaires from the respondents, they were first scrutinized to ensure completeness and consistency. Only dully filled questionnaires were used in the final analysis. The data was then coded and entered into the computer using SPSS Version 17.0. Quantitative data was analyzed and summarized using means, mode, frequencies and percentages. The analyzed data was then presented in tables,

bar graphs and pie charts from which statistical inferences as well as necessary recommendations were made. Content analysis and tallying was used on qualitative data. Chi square test of independence was used to determine the relationship between financial literacy and the growth of MSEs while relationships between independent and dependent variable was determined using cross tabulation (Kothari, 2005). The tests were done at 95% level of significance.

## **CHAPTER FOUR**

### **RESEARCH FINDINGS AND DISCUSSION**

#### **4.1 Introduction**

This chapter presents analysis and findings of the study as set out in the research methodology. The results are presented on the relationships between financial literacy and the growth of MSEs in Kenya.

#### **4.2 Response Rate**

306 questionnaires were distributed on a drop and pick basis. All the 306 questionnaires were returned from which 3 questionnaires were discarded for being incomplete. The researcher ended up with 303 usable questionnaires which represented a response rate of 99.02%. This response rate was above the minimum recommended of 50-70% therefore deemed adequate for analysis and reporting (Mugenda & Mugenda, 2003; Nulty, 2008).

#### **4.3 Demographic Characteristics**

Respondents were asked to provide information regarding their demographic profile which included gender, age, level of education, type of business and duration in business. This information was deemed relevant in assessing the relationship between financial literacy and the growth of MSEs since these characteristics could have some effect on this relationship. Consequently, data was analyzed based on disaggregated sub groups. Any important trends noted were highlighted to draw out lessons on what might facilitate financial knowledge acquisition among MSE managers.

##### **4.3.1. Gender of the Respondents.**

The analysis established that majority of the respondents in the study were male (56.1%) while female represented 43.9% of the respondents as shown in Table 4.1 and Figure 3.1 in Appendix 3. Therefore majority of the respondents were male although females were also fairly well represented.



**Table 4.1: Gender of Respondents**

	Frequency	Percent
Male	<b>170</b>	<b>56.1</b>
Female	133	43.9
Total	303	100.0

#### **4.3.2 Age of the Respondents**

Majority (51.2%) of the respondents indicated that they were between 36 to 60 years of age, 40.9% were between 18 to 35 years and 7.9% above 60 years. This implies that majority of MSE managers are in the adult bracket of 36-60 as shown in table 4.2 and Figure 3.2 in the appendix 3.

**Table 4.2: Age of Respondents**

		Frequency	Percent
Valid	18-35	124	40.9
	<b>36-60</b>	<b>155</b>	<b>51.2</b>
	>60	24	7.9
	Total	303	100.0

#### **4.3.3. Educational Attainment.**

From the results as depicted in Table 4.3 and Figure 2.3 in appendixes 2, majority (40.6%) of the respondents had Secondary education, 16.2% had primary education, 29% had college level of education, 7.3% of the respondents were University graduates and 6.9% had no education. This implies that most of the MSE managers in the study area totaling to 63.9% had less than College education.

**Table 4.3: Level of Education**

		Frequency	Percent
Valid	Primary	49	16.2
	<b>Secondary</b>	<b>123</b>	<b>40.6</b>
	Diploma/Certificate	88	29.0
	None	21	6.9
	Total	303	100.0

**4.3.4. Type of Business.**

It was established that majority of the respondents (49.2%) are in Retail /Wholesale business, 33.3% in Service business,11.6% in Agribusiness and 5.9% in Manufacturing as shown in the table 4.4 and Figure 3.4 in appendix 3. This is consistent with the findings of KIPPRA ( 2012) that majority of the MSEs in Kenya operate wholesale and retail trade due to low capital requirements for the sector.

**Table 4.4: Type of Business.**

		Frequency	Percent
Valid	Manufacturing	18	5.9
	<b>Retail/Wholesale</b>	<b>149</b>	<b>49.2</b>
	Service	101	33.3
	Agribusiness	35	11.6
	Total	303	100.0

**4.3.5. Duration in Business.**

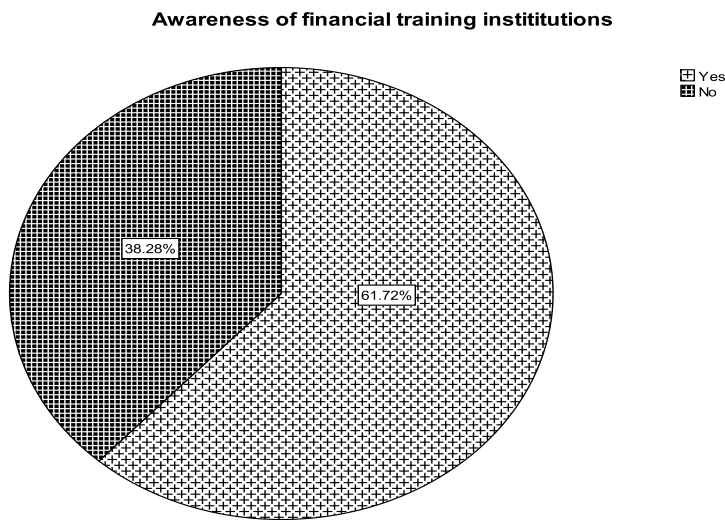
The analysis revealed that majority ( 41.6%) of the businesses have been in existence for 0-5 years, 38.3% for 6-10 years,17.5% for 11-15 years and only 2.6 % for 16-20 years. This implies a low rate of transition of these MSEs to the next level of growth as shown in Table 4.5 and Figure 3.5 in appendix 3 where only a few are able to survive beyond five years. This is consistent with the assertion by Fatoki (2014) and Oluoch (2014) that most MSEs in developing economies do not survive to celebrate their third birthday.

**Table 4.5: Duration in Business**

		Frequency	Percent
<b>Valid</b>	<b>0-5</b>	<b>126</b>	<b>41.6</b>
	6-10	116	38.3
	11-15	53	17.5
	16-20	8	2.6
	Total	303	100.0

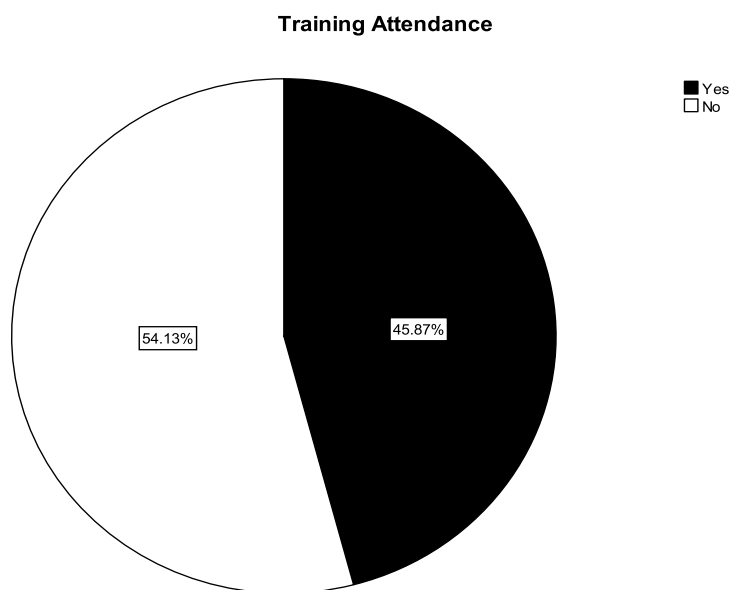
**4.4. Awareness of Financial Education Services**

Figure 4.1 shows that majority of the respondents accounting for 61.72% were aware of the existence of financial training institutions against 38.28% who were not aware.



**Figure 4 1: Awareness of Financial Education Services by Respondents**

On training attendance figure 4.2 indicates that out of the total sampled majority have not attended any training accounting for 54.13% against 45.87 who have attended financial education training.



**Figure 4 2: Financial Literacy Training Attendance by Respondent**

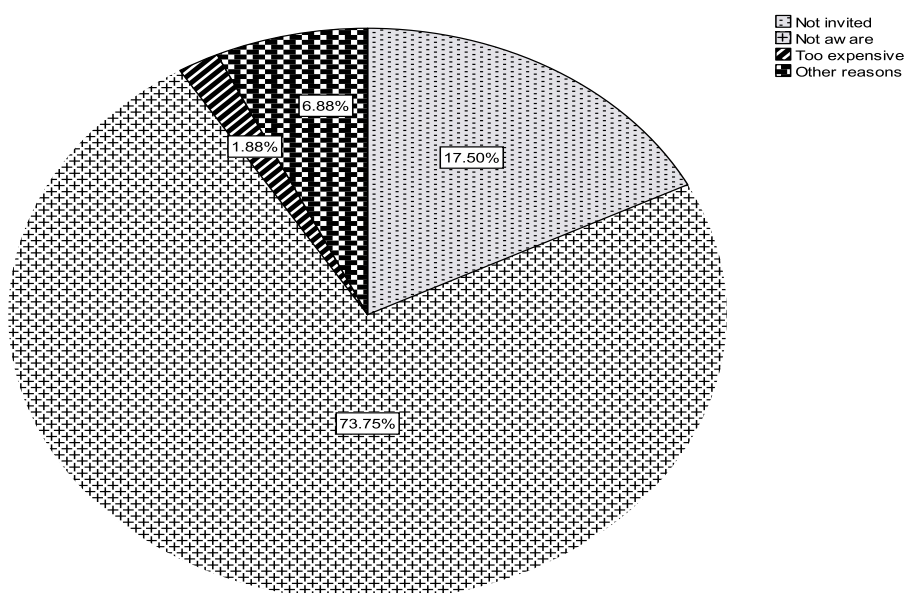
Although the results as shown in Figure 4.1 established that majority of the respondents were aware of the existence of financial education training institutions, only a small percentage had attended training against a majority who had not (Figure 4.2.) Main reason cited was lack of awareness of the trainings being conducted. This implies that most financial education service providers have not done much to create awareness on the services they provide to MSEs.

Table 4.6 shows a further cross tabulation of awareness of training institutions and training attendance which revealed that of the 187 who were aware of the existence of training institutions 48 respondents(M=31,F=17) accounting for 25.69% had not attended any training hence the percentage increase in those who had not received any training.

**Table 4.6: Awareness of Financial Training Institutions \*Training Attendance\*  
Gender Tabulation**

Gender		Training Attendance		Total	
		Yes	No		
Male	Awareness of financial training institutions	Yes	81	31	112
		No	0	58	58
	<b>Total</b>		<b>81</b>	<b>89</b>	<b>170</b>
Female	Awareness of financial training institutions	Yes	58	17	75
		No	0	58	58
	<b>Total</b>		<b>58</b>	<b>75</b>	<b>133</b>

Figure 4.3 shows the reasons given by respondents for not attending training. Majority of the respondents(73.75%) were not aware of the trainings being conducted,17.50% said they were not invited,6.88% cited other reasons which mainly included lack of time to attend and lack of interest while only 1.88% claimed the training was too expensive.



**Figure 4 3: Reasons for not Attending Financial Literacy Training**

The study also asked respondents to list the organizations offering financial literacy training in the Sub County. It was established that Faulu Micro finance and Equity bank are the main institutions offering financial education in the Sub County as shown in the Table 4.7.

**Table 4.7: Financial Training Institutions in Kakamega County**

	<b>Name of Organization</b>	<b>Frequencies</b>
1.	Faulu Micro Finance	138
2.	Equity Bank	136
3.	Kenya Women Finance Trust	79
4.	SMEP	59
5.	Uwezo Fund	56

Whereas capacity building of MSEs is one of the main mandates of Government agencies such as Women Enterprise Fund and Youth Enterprise Fund(ILO,2008), the only agency mentioned was Uwezo fund which was ranked fifth which means that these agencies have not done much on capacity building mandate. Moreover findings reveal that most financial trainings were offered by financial institutions which were ranked as the main service providers. These institutions offer training as a component of their products and are mainly pre- financing trainings only accessible to those that have qualified for loans (Mastercard, 2011).This limits access to financial education by SME managers who may want to acquire financial knowledge but are not interested in loans.

**4.5. Financial Literacy of the Respondents**

Financial literacy of the respondents was measured on four main sub scales namely; debt literacy, budgeting literacy, banking services literacy and Book keeping literacy. The scales were developed on a nominal and ordinal scaling and therefore the main measure of central tendency used was the modal response as recommended by O’Leary (2011) and Kothari (2004).

#### 4.5.1. Debt Management Literacy.

Respondents were presented with 5 questions on a likert scale to state their level of agreement with the statement. On whether they repay loan installments on time the modal response was agree with 54.8%, strongly agree (19.8%), disagree (18.2%), Strongly disagree (5.9%) and Unsure (1.3%) as shown in Table 4.8. This implies that most of the MSE owners were able to repay their loans on time.

**Table 4.8: Timely Loan Payment**

	Frequency	Percent
Valid Strongly Disagree	18	5.9
Disagree	55	18.2
Unsure	4	1.3
<b>Agree</b>	<b>166</b>	<b>54.8</b>
Strongly Agree	60	19.8
Total	303	100.0

The next question was on ability to compare terms and conditions before buying financial products. Table 4.9 indicates that the modal response was agree (50.5%). Whereas 56.8% of the respondents either agreed (50.5%) or strongly agreed (6.3%) a significant number (43.2%) either strongly disagreed(5.9%), disagreed(33.3%) or were unsure 4.0 %. This implies that although majorities were comparing terms and conditions of various financiers before buying products. A significant number were not comparing terms and conditions.

**Table 4.9: Ability to Compare Terms and Conditions**

		Frequency	Percent
Valid	Strongly Disagree	18	5.9
	Disagree	101	33.3
	Unsure	12	4.0
	<b>Agree</b>	<b>153</b>	<b>50.5</b>
	Strongly Agree	19	6.3
	Total	303	100.0

On whether the businesses use more than half of the revenue to repay loans Table 4.10 shows that 59.7% of the respondents either strongly disagreed (13.2%) or disagreed(46.5%) against a total of 37.3% who either agreed or strongly agreed. This shows that most businesses were using affordable loans in their businesses.

**Table 4.10: Use More than Half Business Revenue to Repay Loans**

		Frequency	Percent
Valid	Strongly Disagree	40	13.2
	<b>Disagree</b>	<b>141</b>	<b>46.5</b>
	Unsure	9	3.0
	Agree	98	32.3
	Strongly Agree	15	5.0
	Total	303	100.0

The analysis also revealed that majority of the respondents agreed (55.4%) that their debt management skills had enabled them access various sources of finance. This implies that finance is readily accessible to most MSEs surveyed although the cumulative total of those who disagreed is also significant (43.2%) as shown in Table 4.11.



**Table 4.11: Access to Various Sources of Finance**

		Frequency	Percent
Valid	Strongly Disagree	18	5.9
	Disagree	83	27.4
	Unsure	30	9.9
	<b>Agree</b>	<b>168</b>	<b>55.4</b>
	Strongly Agree	4	1.3
	Total	303	100.0

On whether the respondents know the effect of inflation and interest rates on the loans they borrowed. The modal response was disagree at 42.9% ,strongly disagree(19.1%) unsure(5.6%) totaling to 67.6% as those who either did not know or were unsure against only 32.4 % who agreed and strongly agreed that they knew the effects (Table 4.12).

**Table 4.12: Effect of Inflation and Interest Rates**

		Frequency	Percent
Valid	Strongly Disagree	58	19.1
	<b>Disagree</b>	<b>130</b>	<b>42.9</b>
	Unsure	17	5.6
	Agree	96	31.7
	Strongly Agree	2	.7
	Total	303	100.0

Table 4.13 shows responses on the last question that sought to establish whether the respondents were able to accurately determine the total debt position of their businesses. Responses indicate that 66.0% agreed, 19.8% disagreed, 5.3% strongly disagreed,7.3% were unsure while 1.7% strongly agreed. This implies that majority were able to ascertain their total debt which was also made easier by the small size of their businesses.

**Table 4.13: Can Determine Accurately the Total Debt Position of my Business**

		Frequency	Percent
Valid	Strongly Disagree	16	5.3
	Disagree	60	19.8
	Unsure	22	7.3
	<b>Agree</b>	<b>200</b>	<b>66.0</b>
	Strongly Agree	5	1.7
	Total	303	100.0

While the modal response on debt management literacy was “**agree**” which shows that majority were knowledgeable on most of the areas tested. Responses on question two on whether the respondents were comparing terms and conditions before buying financial products show mixed results with 50.5% who were comparing against a significant number 43.2% who were not which can be attributed to their low level of financial literacy. This is supported by the assertion made by Wachira and Kihui (2012) and Siekei *et al.*,(2013) who argue that failure to compare options, ask questions and negotiate effectively with financial providers depicts a low level of financial literacy. Knowledge of inflation and interest rates further reveal that majority of the respondents do not understand the effects, which coincide with the findings by Lusardi and Mitchell (2014) and Atkison and Messy (2014) that majority of the adult population do not understand inflation, interest rates and terms and conditions of consumer loans and mortgages which could negatively affect their financial decisions and ultimately business performance in terms of how much to borrow, when to borrow and from whom.

Whereas a cross tabulation of debt literacy variables with gender and age did not reveal any significant trends. Education attainment revealed that the negative responses on two questions i.e ability to compare terms and conditions and Knowledge of the effect of inflation and interest rates were given by respondents with below college education as shown in Table 4.14 and Table 4.15. Of the 18 respondents who strongly disagreed that they were comparing terms and conditions only 3 had above certificate education. While of the 101 who disagreed only 17 had a

certificate education and above. Similar trends were observed on inflation and interest rates. This supports the findings by Obago (2014) and Marzieh *et al.*,(2013) that higher education is positively associated with financial awareness.

**Table 4.14: Educational Attainment \*Ability to Compare Terms and Conditions**

		Ability to compare terms and conditions before buying financial products					
		<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Unsure</b>	<b>Agree</b>	<b>Strongly Agree</b>	<b>Total</b>
Educational Attainment	Primary	7	27	0	14	1	49
	Secondary	3	47	8	59	6	123
	Diploma/ Certificate	2	14	2	61	9	88
	University graduate	1	3	1	14	3	22
	None	5	10	1	5	0	21
<b>Total</b>		<b>18</b>	<b>101</b>	<b>12</b>	<b>153</b>	<b>19</b>	<b>303</b>

**Table 4.15: Educational Attainment \*The Effect of Inflation and Interest Rates**

		Knowledge of the effect of inflation and interest rates on business loans					
		<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Unsure</b>	<b>Agree</b>	<b>Strongly Agree</b>	<b>Total</b>
Educational Attainment	Primary	19	28	0	2	0	49
	Secondary	20	67	9	27	0	123
	Diploma/ Certificate	6	25	5	52	0	88
	University graduate	1	1	3	15	2	22
	None	12	9	0	0	0	21
<b>Total</b>		<b>58</b>	<b>130</b>	<b>17</b>	<b>96</b>	<b>2</b>	<b>303</b>

#### 4.5.2. Budgeting and Control Literacy.

On whether respondents had written annual financial objectives for their businesses, Results in Table 4.16 revealed that 34.7% have never while 23.8% rarely prepare written financial objectives for their businesses accounting for 58.4% of the respondents. This implies that majority of the entrepreneurs sampled do not have written financial objectives.

**Table 4.16: Prepare Written Annual Financial Objective**

		Frequency	Percent
<b>Valid</b>	<b>Never</b>	<b>105</b>	<b>34.7</b>
	Rarely	72	23.8
	Sometimes	74	24.4
	Often	42	13.9
	Always	10	3.3
	Total	303	100.0

Results as shown in Table 4.17 indicate that 32.7% never, 21.8% rarely, 26.7% sometimes and 13.2% often prepare annual budgets for their businesses. With never and rarely responses accounting for cumulative response of 54.5% which shows that majority of the businesses do not prepare budgets.

**Table 4.17: Prepare Annual Budgets for the Business**

		Frequency	Percent
<b>Valid</b>	<b>Never</b>	<b>99</b>	<b>32.7</b>
	Rarely	66	21.8
	Sometimes	81	26.7
	Often	40	13.2
	Always	17	5.6
	Total	303	100.0

The analysis as shown in Table 4.18 depicts that most respondents answered never (35.0%) and rarely (25.1%) totaling to 60.1% of respondents not comparing financial objectives with business performance. This shows that use of budgets as a tool for

financial planning and control is not being done in majority of the businesses surveyed which could negatively affect their growth.

**Table 4.18: Ability to Compare Financial Objectives and Business Performance**

		Frequency	Percent
<b>Valid</b>	<b>Never</b>	<b>106</b>	<b>35.0</b>
	Rarely	76	25.1
	Sometimes	70	23.1
	Often	41	13.5
	Always	10	3.3
	Total	303	100.0

Respondents were also asked to state how often they used budgets to set performance targets for employees. Table 4.19 reveals a modal response of never (42.2%) followed by rarely (27.7%) cumulatively accounting for 70.0% showing that majority of the businesses do not use budgets as an employee performance management tool.

**Table 4.19: Use Budgets to Set Targets for Employees**

		Frequency	Percent
<b>Valid</b>	<b>Never</b>	<b>128</b>	<b>42.3</b>
	Rarely	84	27.7
	Sometimes	49	16.2
	Often	34	11.2
	Always	8	2.6
	Total	303	100.0

The last question on this scale as shown in Table 4.20 established that majority of the respondents do not use budgets to track spending with never (33.3%) and rarely (18.8%) cumulatively accounting for (52.1%).

**Table 4.20: Use Budgets to Track Spending**

		Frequency	Percent
<b>Valid</b>	<b>Never</b>	<b>101</b>	<b>33.3</b>
	Rarely	57	18.8
	Sometimes	82	27.1
	Often	41	13.5
	always	22	7.3
	Total	303	100.0

The overall analysis revealed that the modal response across all the five items on budgeting literacy was “never”. This indicates that most MSEs do not engage in budgeting. Whereas budgeting has been found to be an important tool for financial planning and control particularly in growth oriented businesses(Churchill & Lewis,1983; Fatoki,2014) and a basis for setting performance targets( Siekei *et al.*,2012) which ultimately results to increased sales ,business profitability and growth. The cumulative response revealed that over 50% of the respondents have never or rarely use budgets in the management of their businesses. These results are consistent with the findings of FSD (2009) and Warue and Wanjira (2013) who found that there is limited use of budgeting among MSEs which impacts negatively on their business performance.

A cross tabulation of budgeting literacy constructs with education attainment as shown in Table 4.21(collapsed table) revealed that negative responses of never and rarely were mainly given by respondents of below college education while favorable responses of sometimes, often and always came from respondents with College education and above implying that high education has a favorable influence on budgeting literacy which could result to good business performance and growth.

**Table 4.21: Budgeting Literacy \* Education Attainment\***

	<b>Budgeting literacy area.</b>	<b>Education attainment</b>	<b>No (Never,Rarely)</b>	<b>Yes (Sometimes,Often,Always)</b>
1.	Written financial objectives	Secondary &Below	153	2
		College & Above	24	124
2.	Prepare budgets	Secondary &Below	141	51
		College & Above	24	70
3.	Compare financial objectives to bus. performance	Secondary &Below	156	3
		College & Above	26	118
4.	Setting Performance targets	Secondary &Below	174	19
		College & Above	38	64
5.	Tracking Spending	Secondary &Below	138	55
		College & Above	20	90

**4.5.3. Banking Services Literacy.**

The third variable sought to measure the literacy of the respondents on banking services on a likert scale with six items. Table 4.22 shows a summary of the responses obtained from the survey.

**Table 4.22: Banking Services Literacy**

No.	Banking Question	Yes		No	
		Frequency	Percentage	Frequency	Percentage
1)	Operates a business bank account.	<b>281</b>	<b>97.7</b>	22	7.3
2)	Banks business proceeds daily.	85	28.1	<b>218</b>	<b>71.7</b>
3)	Knows where to get extra finance for the business.	<b>273</b>	<b>90.1</b>	30	9.9
4)	Is aware of commercial bank requirements of lending to MSEs.	<b>158</b>	<b>52.1</b>	145	47.9
5)	Checks commercial bank websites to see their credit products and their requirements.	70	23.1	<b>233</b>	<b>76.9</b>
6)	Can access other bank products other than loans(creditcards, fixed deposits etc).	89	29.4	<b>214</b>	<b>70.6</b>

Findings indicate that 97.7% of the respondents operate a bank account while only 7.3% have no bank account for the business. However, only 28.1% bank their proceeds daily against 71.7% who do not bank their business proceeds on a daily basis which could negatively affect their ability to access finance. The study also established that majority of the respondents (90.1%) know where to get extra finance for the business while only 9.9% do not know. On whether they were aware of commercial banks lending requirements the responses were mixed with 52.1% agreeing while a significant number (47.9%) did not know. Majority of the respondents (76.9%) have never accessed commercial bank websites to check their products and requirements, only 23.1% have accessed. The analysis also established



that only 29.4% of the respondents are able to access other bank products for their businesses other than loans while 70.6 % of the respondents are not able.

The overall analysis on banking services reveals that MSE managers surveyed generally portrayed a fair knowledge of banking services literacy. However, although majority operated bank accounts for their businesses, very few MSEs bank their proceeds on a daily basis which could affect their credit scoring hence ability to access business loans. Low activity on a savings account reduces the internal data available for credit scoring making banks to rely on external information from credit reference bureaus which limits the maximum loan available to such a client (Berger & Udell, 2005; FSD, 2009; Mills & McCarthy, 2014). While use of information technology can significantly reduce the search costs for information, use of bank websites was found to be limited. Most MSEs have not taken advantage of commercial bank websites to check and compare product offers and their terms and conditions. Moreover only 29.4 % are able to access other bank products other than loans which imply that MSEs are still constraint in accessing banking services.

#### **4.5.4 Book Keeping Literacy.**

Results further revealed that majority of the respondents had no knowledge and skills on all the book keeping skills tested. Specifically, on whether the respondents were able to prepare financial statements accurately 31.4% had no knowledge and skills, 23.4% unsatisfactory knowledge, 25.4% satisfactory knowledge while 18.8% had good and excellent knowledge as shown in Table 4.23.

**Table 4.23: Ability to Prepare Financial Statements**

	Frequency	Percent
<b>Valid</b>		
<b>No knowledge and Skills</b>	<b>95</b>	<b>31.4</b>
Unsatisfactory knowledge and Skills	71	23.4
satisfactory knowledge and Skills	77	25.4
Good knowledge and Skills	53	17.5
Excellent knowledge and Skills	7	2.3
Total	303	100.0

On ability to perform financial analysis, findings as shown in Table 4.24 revealed that more than half of the respondents (58.1%) had either no knowledge or unsatisfactory knowledge and skills while only 19.8% rated themselves as having good or excellent skills and knowledge.

**Table 4.24: Ability to Perform Financial Analysis**

	Frequency	Percent
<b>Valid</b>		
<b>No knowledge and skills</b>	<b>101</b>	<b>33.3</b>
Unsatisfactory knowledge and skills	75	24.8
Satisfactory knowledge and skills	67	22.1
Good knowledge and skills	56	18.5
Excellent knowledge and skills	4	1.3
Total	303	100.0

Table 4.25 shows that majority (55.8% ) of the respondents had either no knowledge or unsatisfactory knowledge and skills on maintenance of a cashbook while only 18.5% had good or excellent skills and knowledge.

**Table 4.25: Maintenance of Cashbook**

	Frequency	Percent
<b>Valid</b> <b>No knowledge and skills</b>	<b>100</b>	<b>33.0</b>
Unsatisfactory knowledge and skills	69	22.8
Satisfactory knowledge and skills	78	25.7
Good knowledge and skills	51	16.8
Excellent knowledge and skills	5	1.7
Total	303	100.0

Table 4.26 on filling tax returns shows that, 40.3% had no knowledge and skills, 24.4% had unsatisfactory knowledge and skills, 17.2% had satisfactory skills while those with good to excellent skills were only 18.2%.

**Table 4.26: Filling Tax Returns**

	Frequency	Percent
<b>Valid</b> <b>No knowledge and skills</b>	<b>122</b>	<b>40.3</b>
Unsatisfactory knowledge and skills	74	24.4
Satisfactory knowledge and skills	52	17.2
Good knowledge and skills	49	16.2
Excellent knowledge and skills	6	2.0
Total	303	100.0

Findings as shown in Table 4.27 further revealed that majority of the respondents (38.3%) had no knowledge and skills on maintenance of the ledger book, 27.1% had unsatisfactory knowledge, 17.5 % had satisfactory knowledge while only 17.2 % had good or excellent skills and knowledge.

**Table 4.27: Maintain and Balance the Ledger Accurately**

		Frequency	Percent
<b>Valid</b>	<b>No knowledge and skills</b>	<b>116</b>	<b>38.3</b>
	Unsatisfactory knowledge and skills	82	27.1
	Satisfactory knowledge and skills	53	17.5
	Good knowledge and skills	49	16.2
	Excellent knowledge and skills	3	1.0
	Total	303	100.0

Results in Table 4.28: on ability to do bank reconciliations reveal that 65.7% had either no knowledge or unsatisfactory knowledge and skills with only 17.1% indicating that they had good or excellent skills and knowledge.

**Table 4.28: Ability to do Bank Reconciliations**

		Frequency	Percent
<b>Valid</b>	<b>No knowledge and skills</b>	<b>121</b>	<b>39.9</b>
	Unsatisfactory knowledge and skills	78	25.7
	Satisfactory knowledge and skills	52	17.2
	Good knowledge and skills	48	15.8
	Excellent knowledge and skills	4	1.3
	Total	303	100.0

In general, the findings on book keeping literacy imply that most of the MSE managers surveyed were not practicing book keeping in their businesses due to lack of skills and knowledge since the modal response was “**no knowledge and skills**” on all the knowledge areas tested. This confirms findings by the G20 Seoul Summit (2010) and Gordon and Brayden (2014) that a low level of literacy on book keeping skills has contributed to lost opportunities for a large number of MSEs worldwide. This is because lack of business records increases the opacity of the business making it difficult to assess their credit worthiness. Consequently most MSEs are rationed out on the growth capital they need.

A cross tabulation of book keeping skills and education attainment( Appendix 2) revealed that on all the six skills tested, majority of the respondents who answered no knowledge or unsatisfactory knowledge and skills had Secondary education or below while those with satisfactory skills and above had diploma/Certificate education or university education. This implies that higher education attainment has a positive impact on book keeping skills.

#### **4.6. Measuring MSE Growth.**

The growth of MSEs in the study area was measured based on volume of assets, number of employees and sales volume. Findings in Table 4.29 indicate that 72.3% of the MSEs surveyed have asset value of less than KSh100,000/= with only 10.2% operating with asset value of over 500,000/=.

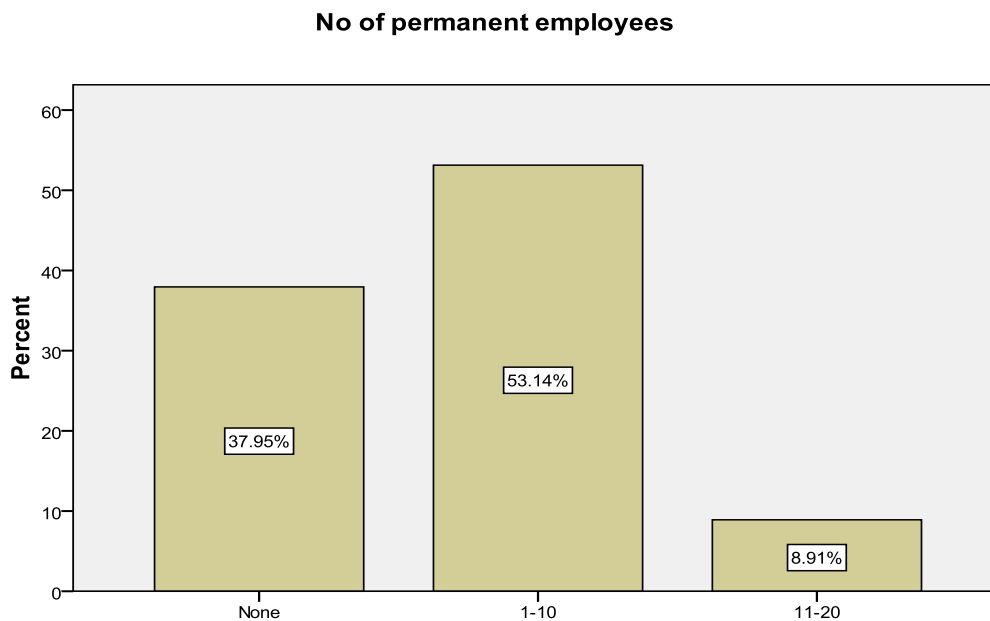
**Table 4.29: Value of Assets**

	Frequency	Percent
Valid 500<50000	110	36.3
51000<100000	109	36.0
101000<500000	53	17.5
501000<1000000	30	9.9
Over 1000,000	1	.3
Total	303	100.0

A cross tabulation of duration in business and value of assets indicates a stagnation in growth which may impact negatively on business survival. Of the businesses that had been in operation for 6-10 years 63.79% had not grown their assets beyond 100,000, of those that had operated for 11-15 years 66.04% still have assets below KSh.100,000 while of the 8 businesses that had operated for more than 16 years only 2 (25% ) have assets with a value of more than 100,000. These results further indicate that of the 303 respondents only 31 (10.23%) have grown their assets to 500,000 and above. This implies that volume of assets has not grown proportionately with duration in business indicating stagnation.

**Table 4.30: Duration in Business \*Value Assets Cross Tabulation**

		Value of assets					Total
		500< 50000	51000< 100000	101000 <500000	501000 <1000000	Over 1000,000	
Duration business	in 0-5	65	39	17	5	0	126
	6-10	34	40	26	15	1	116
	11-15	10	25	8	10	0	53
	16-20	1	5	2	0	0	8
<b>Total</b>		<b>110</b>	<b>109</b>	<b>53</b>	<b>30</b>	<b>1</b>	<b>303</b>



**Figure 4 4: Number of Permanent Employees**

On the number of employees findings revealed that most businesses have less than 10 employees. Figure.4.4 indicates that 53.14% have 1-10 employees, 37.95% are self employed with no employees while only 8.91% have 11-20 employees. Moreover, a cross tabulation of number of employees and duration in business also indicates a stagnation in business growth as shown in Table 4.31.

**Table 4.31: Duration in Business \*No of Permanent Employees Cross Tabulation**

			No of permanent employees			
			None	1-10	11-20	Total
Duration in business	0-5		66	56	4	126
	6-10		39	62	15	116
	11-15		10	35	8	53
	16-20		0	8	0	8
Total			115	161	27	303

Of the businesses that have been in existence for more than 16 years ,none has more than 10 employees, of the 11-15 years only 8 out of 53 accounting for 15.09% have more than 10 employees while in the 6-10 category 101 out of 116 accounting for 87.07% have less than 10 employees.

This study therefore reveals stagnation in business growth in terms of volume of assets and number of employees. Of the 177 MSEs that have operated between 6-20 years only 26 accounting for 14.69% have grown their assets to more than 500,000/= while only 23 have an employee population of 11-20 employees. This stagnation could negatively affect business survival. This finding agrees with the findings of Oluoch (2014) and Fatoki (2014) who established that MSEs tend to remain small which makes them vulnerable to failure as a result of simple management mistakes because the capital base is not sufficient to absorb the resultant losses. Njoroge (2012) also opines that majority of small MSEs tend to operate for long with minimal or no growth over the years. It also confirms the findings of the Sessional paper No 2 of 2005 that Kenya has a very small number of MSEs employing 11-50 employees creating the missing middle gap.

#### **4.7. Financial Literacy and MSE Growth.**

The study also sought to establish whether a relationship exist between financial literacy and the growth in sales volume of MSEs in the study population. A chi - square test of independence was done as shown in Table 4.32.

**Table 4.32: Training Attendance \*Growth in Sales Volume Cross Tabulation  
Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
<b>Pearson Chi-Square</b>	<b>22.445<sup>a</sup></b>	<b>2</b>	<b>.000</b>
Likelihood Ratio	22.719	2	.000
Linear-by-Linear Association	19.336	1	.000
N of Valid Cases	303		

a. 0 cells (.0%) have expected count less than 5.the minimum expected count is 34.86.

A chi –square value of 22.445 was found to be significant at 2 degrees of freedom and  $p= 0.001$ . This shows that there exists a significant relationship between financial training and the growth in volume of sales. A further cross tabulation of training attendance and duration in business revealed that majority of the businesses that have survived beyond 10 years have had a chance to attend financial training as shown in table 4.33. This implies that training positively influences business survival.

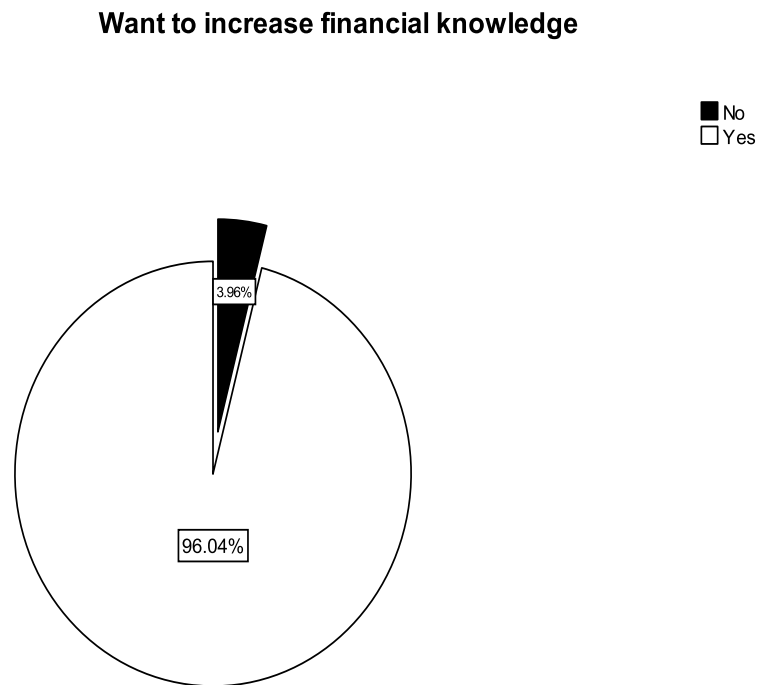
**Table 4.33: Training Attendance \*Duration in Business Cross Tabulation**

		Duration in business				
		0-5	6-10	11-15	16-20	Total
Training	Yes	38	57	<b>36</b>	<b>8</b>	139
Attendance	No	88	59	17	0	164
Total		126	116	53	8	303

This supports the findings by Lusardi and Mitchell (2013), Turyahebwa *et al.*,(2013) and FSD(2009) that a strong association exists between financial literacy, ability to make good financial decisions and business survival. Whereas a high educational attainment was found to have a positive influence on the level of financial literacy, the influence of other demographic characteristics such as age and gender were not supported by the results mainly because the measurement of the variables was on ordinal and nominal scales that may not clearly bring out the individual abilities.



Most of the respondents (96.04%) indicated their desire to increase financial knowledge while only 3.96% were not interested as shown in Figure 4.5.



**Figure 4 5: Want to increase Financial Knowledge**

The respondents were also asked to rank the following topics in order of priority starting with the most important. On tallying the results, the analysis established that important topics in order of priority were; Investing, loans/debt management, banking services, interest rates and inflation, budgeting and lastly book keeping skills.

A cross tabulation of various financial literacy constructs namely debt management, budgeting, banking services literacy and book keeping with growth indicators was also done to find out whether a relationship exist. Results were as follows;

### **Debt Literacy and MSE growth in value of Assets**

Findings in Table 4.34 reveal that knowledge on debt management has a positive influence on the growth in value of assets of MSEs. Specifically, of the 31 MSEs that have grown their assets beyond 500,000/= only 6 disagreed that they are not able to repay their loan installments on time while of the 77 MSEs that strongly disagreed, disagreed or were unsure on timely loan repayments only 9 have a value of assets above 100,000/=. This implies that timely loan repayments improve the ability of the owner manager to access development finance for business expansion. On ability to compare terms and conditions 131 MSE owners either strongly disagreed (18), disagreed (101) or were unsure (12), Consequently only 8 out of 131 have assets valued above 500,000/= implying that inability to compare terms and conditions has a negative impact on the growth in assets since the owner manager may not purchase the best products for his business. On whether MSEs use more than half business revenue to repay loans 181 MSEs either strongly disagreed (40) or disagreed (141). Although this implies that majority were using affordable loans in their businesses only 14 out of 181 have grown their assets above 500,000/=. This could be because of low maximum loan ceilings which limits access to large amounts of development capital for MSEs. On ability to access various sources of finance, of the 131 MSEs that either strongly disagreed(18), disagreed(83) or were unsure(30) only 7 have grown their assets to at least 500,000/=. On the other hand, of the 30 MSEs with assets above 500,000/= 23 agreed that they are able to access various sources of finance which implies that access to finance accelerates business growth. 205 MSE owners either strongly disagreed, disagreed or were unsure on knowledge of the effect of inflation and interest rates, consequently only 10 out of the 205 have assets valued above 500,000/= hence lack of knowledge on inflation and interest rates negatively affects business growth.

**Table 4.34: Debt Literacy and Growth in Value of Assets**

		Value of assets					Total
		500<50000	51000<100000	101000<500000	501000<1000000	Over 1000,000	
Timely loan repayment	Strongly Disagree	10	7	1	0	0	18
	Disagree	27	20	2	6	0	55
	Unsure	3	1	0	0	0	4
	Agree	57	60	31	17	1	166
	Strongly Agree	13	21	19	7	0	60
<b>Total</b>		<b>110</b>	<b>109</b>	<b>53</b>	<b>30</b>	<b>1</b>	<b>303</b>
Ability to compare terms and conditions before buying financial products	Strongly Disagree	9	8	1	0	0	18
	Disagree	55	33	6	7	0	101
	Unsure	7	3	1	0	1	12
	Agree	37	58	39	19	0	153
	Strongly Agree	2	7	6	4	0	19
<b>Total</b>		<b>110</b>	<b>109</b>	<b>53</b>	<b>30</b>	<b>1</b>	<b>303</b>
Use more than half business revenue to repay loans	Strongly Disagree	16	11	13	0	0	40
	Disagree	53	50	24	13	1	141
	Unsure	5	3	0	1	0	9
	Agree	33	38	13	14	0	98
	Strongly Agree	3	7	3	2	0	15
<b>Total</b>		<b>110</b>	<b>109</b>	<b>53</b>	<b>30</b>	<b>1</b>	<b>303</b>
Access to various sources of finance	Strongly Disagree	10	7	1	0	0	18
	Disagree	47	26	5	5	0	83
	Unsure	13	14	1	2	0	30
	Agree	40	59	45	23	1	168
	Strongly Agree	0	3	1	0	0	4
<b>Total</b>		<b>110</b>	<b>109</b>	<b>53</b>	<b>30</b>	<b>1</b>	<b>303</b>
Knowledge of the effect of inflation and interest rates on business loans	Strongly Disagree	38	17	2	1	0	58
	Disagree	56	53	15	6	0	130
	Unsure	6	6	2	3	0	17
	Agree	10	32	33	20	1	96
	Strongly Agree	0	1	1	0	0	2
<b>Total</b>		<b>110</b>	<b>109</b>	<b>53</b>	<b>30</b>	<b>1</b>	<b>303</b>
Can determine accurately the total debt position of my business	Strongly Disagree	8	7	1	0	0	16
	Disagree	33	16	5	6	0	60
	Unsure	8	12	0	2	0	22
	Agree	59	72	47	21	1	200
	Strongly Agree	2	2	0	1	0	5
<b>Total</b>		<b>110</b>	<b>109</b>	<b>53</b>	<b>30</b>	<b>1</b>	<b>303</b>

### **Budgeting Literacy and Growth in Value of Assets**

Findings as shown in Table 4.35 reveal that there exists a positive relationship between budgeting literacy and the growth in value of assets in MSEs. In particular, of the 177 MSEs that rarely or never prepare written financial objectives, only 4 have grown their assets above 500,000/= while 161 have assets below 100,000/=. On the contrary, of the 52 MSEs who often or always prepare written financial objectives 36 have assets above 100,000/=, 16 above 500,000/= and none below 50,000/=. Of the 165 who never or rarely prepare annual budgets for their businesses, only 5 have assets above 500,000/=. Conversely, of the 57 who often or always prepare annual budgets none has assets below 50,000/= while 20 have assets above 500,000/=. On ability to compare financial objectives with business performance, 182 businesses either never or rarely do. Consequently, only 6 of these MSEs have grown their business assets above 500,000/=. However, of the 51 MSEs who often or always compare financial objectives with business performance only 15 have assets below 100,000/= with none having assets below 50,000/=. On use of budgets to set performance targets for employees, findings indicate that 212 MSEs never or rarely use budgets. Consequently, 183 of these have assets less than 100,000/= while of the 42 who often or always use budgets to set targets 29 MSEs have assets valued above 100,000/=. Of the 31 businesses with assets over 500,000/=: 18 MSEs either often or always use budgets to track spending in the business. These results therefore indicate that improving the budgeting skills of MSE owners can have a positive impact on the MSE growth in terms of value of assets which is consistent with the findings of Warue and Wanjira (2013) that budgeting skills improve business performance in terms of increased sales, better money management and increased profitability.

**Table 4.35: Budgeting Literacy and MSE Growth in Value of Assets**

		Value of Assets					Total
		500<	51000<	101000<	501000<	Over	
		50000	100000	500000	1000000	1000,000	
Prepare written annual financial objectives	Never	71	29	4	0	1	105
	Rarely	24	37	8	3	0	72
	Sometimes	15	27	21	11	0	74
	Often	0	13	18	11	0	42
	Always	0	3	2	5	0	10
<b>Total</b>		<b>110</b>	<b>109</b>	<b>53</b>	<b>30</b>	<b>1</b>	<b>303</b>
Prepare annual budgets for the business	Never	71	23	3	1	1	99
	Rarely	23	33	7	3	0	66
	Sometimes	16	36	23	6	0	81
	Often	0	9	17	14	0	40
	Always	0	8	3	6	0	17
<b>Total</b>		<b>110</b>	<b>109</b>	<b>53</b>	<b>30</b>	<b>1</b>	<b>303</b>
Ability to compare financial objectives and business performance	Never	76	27	2	0	1	106
	Rarely	22	39	10	5	0	76
	Sometimes	12	28	22	8	0	70
	Often	0	11	18	12	0	41
	Always	0	4	1	5	0	10
<b>Total</b>		<b>110</b>	<b>109</b>	<b>53</b>	<b>30</b>	<b>1</b>	<b>303</b>
Use budgets to Set targets for employees.	Never	81	40	5	1	1	128
	Rarely	22	40	15	7	0	84
	Sometimes	7	16	18	8	0	49
	Often	0	10	15	9	0	34
	Always	0	3	0	5	0	8
<b>Total</b>		<b>110</b>	<b>109</b>	<b>53</b>	<b>30</b>	<b>1</b>	<b>303</b>
Use budgets to track spending	Never	72	25	3	0	1	101
	Rarely	20	27	7	3	0	57
	Sometimes	15	38	20	9	0	82
	Often	3	9	18	11	0	41
	always	0	10	5	7	0	22
<b>Total</b>		<b>110</b>	<b>109</b>	<b>53</b>	<b>30</b>	<b>1</b>	<b>303</b>

### **Banking Services literacy and MSE growth**

Results in Table 4.36 indicate that there exists a positive relationship between banking services literacy and growth in value of assets. In particular, all the 31 businesses with assets over 500,000/= have a business bank account while of the 22 who have no bank account 21 businesses have assets less than 50,000/=. Of the 219 businesses that do not bank their proceeds daily only 13 have grown their assets above 500,000/=. Further, of the 31 MSEs with assets over 500,000/= 18 agreed that they bank their proceeds daily which improves their credit scoring and access to development finance. All the 31 MSEs with assets over 500,000/= know where to get extra finance for their businesses while of the 30 MSEs who did not know where to get extra finance none has grown their assets above 100,000/=.

On ability to access websites of commercial banks, 233 MSE managers answered “No” out of which 191 have not grown their assets above 100,000/=. Conversely, of the 70 who answered “yes” 42 MSEs have assets above 100,000/= with only 5 having assets below 50,000/=. Of the 145 MSE owners who are not aware of commercial bank requirements of lending to MSEs 123 have assets below 100,000/= with only 5 having grown their assets above 500,000/=. 26 out of 31 MSEs with assets over 500,000/= are aware of commercial bank requirements of lending to MSEs. On ability to access other bank products apart from loans 214 answered “No” out of which only 6 have grown their assets above 500,000/= in the last 4 years while of the 89 who can access other bank products 57 have grown their assets above 100,000/= while only 2 have assets below 50,000/=. These findings indicate that MSEs with literacy on banking services are able to access adequate finance which enables them to grow their businesses in terms of increasing the value of assets.

**Table 4.36: Banking Service Literacy and Growth in Value of Assets**

		Value of assets					Total
		500< 50000	51000< 100000	101000< 500000	501000< 1000000	Over 1000,000	
Operates a business bank account	No	21	0	1	0	0	22
	Yes	89	109	52	30	1	281
<b>Total</b>		<b>110</b>	<b>109</b>	<b>53</b>	<b>30</b>	<b>1</b>	<b>303</b>
Banks business proceeds daily	No	107	73	26	12	1	219
	Yes	3	36	27	18	0	84
<b>Total</b>		<b>110</b>	<b>109</b>	<b>53</b>	<b>30</b>	<b>1</b>	<b>303</b>
Knows where to get extra finance for business	No	20	10	0	0	0	30
	Yes	90	99	53	30	1	273
<b>Total</b>		<b>110</b>	<b>109</b>	<b>53</b>	<b>30</b>	<b>1</b>	<b>303</b>
Can access websites of commercial banks to see their products and requirements	No	105	86	30	11	1	233
	Yes	5	23	23	19	0	70
<b>Total</b>		<b>110</b>	<b>109</b>	<b>53</b>	<b>30</b>	<b>1</b>	<b>303</b>
Is aware of commercial bank requirements of lending MSEs	No	76	47	17	5	0	145
	Yes	34	62	36	25	1	158
<b>Total</b>		<b>110</b>	<b>109</b>	<b>53</b>	<b>30</b>	<b>1</b>	<b>303</b>
Can access other bank products apart from loans	No	108	79	21	6	0	214
	Yes	2	30	32	24	1	89
<b>Total</b>		<b>110</b>	<b>109</b>	<b>53</b>	<b>30</b>	<b>1</b>	<b>303</b>

**Book keeping Literacy and MSE Growth in Value of Assets**

Results as shown in Table 4.37 reveal a positive relationship between book keeping literacy and growth in value of assets. Specifically, of the 166 MSE managers with no knowledge or unsatisfactory knowledge and skills on ability to prepare financial statements accurately, majority have assets below 100,000/= with only 3 having grown their assets above 500,000/=. Conversely of the 59 with good or excellent skills 45 have grown their business assets above 100,000/=. On ability to perform financial analysis, out of the 186 MSE managers who have no knowledge or

unsatisfactory knowledge and skills only 3 have assets valued above 500,000/= while majority still have assets below 100,000/= over the last 4 years. On the other hand, of the 60 MSEs who rated themselves as having good or excellent skills to perform financial analysis 46 have asset value above 100,000/= which implies that ratio analysis improves financial decision making that facilitates growth in assets. On ability to maintain the cashbook, 169 MSE managers were found to have no knowledge or unsatisfactory knowledge and skills. Consequently, 157 have not grown their assets above 100,000/= with only 3 having assets above 500,000/=. However, of the 56 with good or excellent skills on cashbook maintenance only 11 have assets less than 100,000/=. On filling tax returns, 196 MSE managers were found to have no or unsatisfactory knowledge and skills out of which only 3 have assets above 500,000/=. On the other hand of the 31 businesses with assets above 500,000/= 22 have good or excellent skills on filling tax returns. Though the ledger is an important book for tracking business transactions, 198 MSE managers were found to have either no or unsatisfactory knowledge and skills. As a result, only 4 have grown their assets above 500,000/=. However, of the 52 with good or excellent skills only 11 still have assets below 100,000/=. Moreover, majority (199) of the MSEs were also found to be lacking skills and knowledge to do bank reconciliations, consequently only 5 have grown their assets above 500,000/=. It can therefore be inferred that an increase in book keeping literacy has a high potential in bringing about growth in MSEs in terms of value of assets which supports the findings of Ezijiofor *et al.*, (2014) that businesses that keep proper books of account are able to measure accurately the performance of their business which provides quality financial information to support business decisions with regard to expansion, maintaining a competitive edge and prevention of business failure which improves business survival.



**Table 4.37: Book Keeping Literacy and Growth in Value of Assets**

		Value of assets					Total
		500< 50000	51000< 100000	101000< 500000	501000< 1000000	Over 1000,000	
Can prepare business financial statements accurately	No knowledge and Skills	63	27	5	0	0	95
	Unsatisfactory knowledge and Skills	31	32	5	3	0	71
	satisfactory knowledge and Skills	15	37	21	4	1	78
	Good knowledge and Skills	1	12	21	18	0	52
	Excellent knowledge and Skills	0	1	1	5	0	7
<b>Total</b>		<b>110</b>	<b>109</b>	<b>53</b>	<b>30</b>	<b>1</b>	<b>303</b>
Ability to perform financial analysis	No knowledge and skills	65	31	5	0	0	101
	Unsatisfactory knowledge and skills	32	34	6	3	0	75
	Satisfactory knowledge and skills	12	31	20	3	1	67
	Good knowledge and skills	1	13	21	21	0	56
	Excellent knowledge and skills	0	0	1	3	0	4
<b>Total</b>		<b>110</b>	<b>109</b>	<b>53</b>	<b>30</b>	<b>1</b>	<b>303</b>
Maintenance of cashbook	No knowledge and skills	65	31	4	0	0	100
	Unsatisfactory knowledge and skills	31	30	5	3	0	69
	Satisfactory knowledge and skills	13	38	21	5	1	78
	Good knowledge and skills	1	10	22	18	0	51
	Excellent knowledge and skills	0	0	1	4	0	5
<b>Total</b>		<b>110</b>	<b>109</b>	<b>53</b>	<b>30</b>	<b>1</b>	<b>303</b>

Filling tax returns	No knowledge and skills	75	40	6	1	0	122
	Unsatisfactory knowledge and skills	28	37	7	2	0	74
	Satisfactory knowledge and skills	5	22	19	5	1	52
	Good knowledge and skills	2	10	19	18	0	49
	Excellent knowledge and skills	0	0	2	4	0	6
<b>Total</b>		<b>110</b>	<b>109</b>	<b>53</b>	<b>30</b>	<b>1</b>	<b>303</b>
Maintain and balance the ledger accurately	No knowledge and skills	73	38	5	0	0	116
	Unsatisfactory knowledge and skills	31	40	7	4	0	82
	Satisfactory knowledge and skills	5	21	21	5	1	53
	Good knowledge and skills	1	10	19	19	0	49
	Excellent knowledge and skills	0	0	1	2	0	3
<b>Total</b>		<b>110</b>	<b>109</b>	<b>53</b>	<b>30</b>	<b>1</b>	<b>303</b>
Ability to do bank reconciliations	No knowledge and skills	74	40	6	1	0	121
	Unsatisfactory knowledge and skills	29	39	6	4	0	78
	Satisfactory knowledge and skills	6	20	21	4	1	52
	Good knowledge and skills	1	10	19	18	0	48
	Excellent knowledge and skills	0	0	1	3	0	4
<b>Total</b>		<b>110</b>	<b>109</b>	<b>53</b>	<b>30</b>	<b>1</b>	<b>303</b>

These findings indicate that debt literacy, banking services, budgeting literacy and book keeping literacy have a positive relationship with growth in value of assets since MSEs that were found to have these skills have managed to grow their assets above 500,000/= while a majority of those without financial literacy skills have remained below 100,000/=. This implies that financial literacy skills of the owner managers has the potential to bring about growth in MSEs consistent with the assertion by Turyahebwa *et al.*, (2013) that sound financial management is critical for business survival and growth.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1. Introduction**

This chapter presents the summary and conclusion of the study and offers recommendations to MSE managers in Kenya, the County and National government and other stakeholders in the MSE sector.

#### **5.2. Summary of the Findings**

This research set out to investigate the relationship between financial literacy and the growth of MSEs in Kenya based on four main objectives of debt management literacy, budgeting literacy, banking services literacy and book keeping literacy with a view to establish the level of literacy of MSE managers and how it affected the growth of their businesses.

##### **5.2.1. Effect of Debt Management Literacy on the Growth of MSEs**

Findings on objective one revealed that although MSE managers had a fair knowledge of debt management with a modal response of agree on most knowledge areas tested, majority do not understand the effect of inflation and interest rates on loans they borrow and were not comparing terms and conditions before purchasing financial products which could affect their financial decisions of when to borrow, how much and from whom, leading to sub-optimal performance of their businesses. The study also found out that MSE owners with good knowledge and skills on debt management have grown their volume of assets above 500,000/= while majority of those with low level of debt management skills have remained with business assets below 100,000/= over the last four year period. Therefore debt management literacy was found to have a positive influence on the growth in value of assets of MSEs.

### **5.2.2. Effect of Budgeting Literacy on the Growth of MSEs**

Whereas budgeting skills have been found to improve business performance in terms of increased sales, better money management and increased profitability, the analysis revealed that the modal response across all the five items on budgeting literacy was “never”. This indicates that most MSEs in the study area do not engage in budgeting as a tool for business planning and control. Using descriptive statistics, it was further established that there exists a positive relationship between budgeting literacy and the growth in volume of assets. Specifically, for SMEs that **often or always** use budgets in their businesses majority have grown their assets above 50,000/= while of the 31 businesses with assets above 500,000/= at least 20 agreed that they use budgets in their businesses. These results therefore indicate that improving the budgeting skills of MSE owners can have a positive impact on the MSE growth in terms of value of assets. The study further revealed that majority of the SME managers with low budgeting literacy had below college education.

### **5.2.3. Effect of Banking Services Literacy on the Growth of SMEs**

Findings on objective three indicate that the MSE managers surveyed generally portrayed a low knowledge of banking services literacy. Although majority operated bank accounts for their businesses, very few MSEs bank their proceeds on a daily basis which could affect their credit scoring hence ability to access business loans. While use of information technology can significantly reduce the search costs for information, use of bank websites was found to be limited as most MSEs have not taken advantage of commercial bank websites to check and compare product offers and their terms and conditions. Moreover only 29.4 % are able to access other bank products other than loans which imply that MSEs are still constraint in accessing banking services. Results also established that there exists a positive relationship between banking services literacy and growth in value of assets since at least 20 of the 31 SMEs with assets above 500,000/= agreed that they were able to use various banking services tested.

#### **5.2.4. Effect of Book keeping Literacy on the Growth of SMEs**

Results on objective four revealed that majority of the respondents had no knowledge and skills on the book keeping skills tested. It was also established that a positive relationship exists between book keeping literacy and growth in value of assets. While over 50% SME managers rated themselves as having no knowledge or unsatisfactory knowledge and skills only 3 SMEs in this category have grown their assets above 500,000/= over the last four year period. On the contrary, of those that have good or excellent skills and knowledge on the Book keeping skills tested, majority have grown their assets above 100,000/=. It was further established that training impacts positively on business survival and higher education attainment increases financial awareness.

#### **5.3. Conclusions**

In view of the findings as summarized above, this study concludes that a positive relationship exist between enterprise growth and financial literacy. MSEs that are more successful are run by entrepreneurs who have financial literacy and understand key financial concepts that include, debt management, interest rates, budgeting and control, knowledge on efficient use of banking services and book keeping. Whereas efforts have been made to expose the public to financial education, financial literacy among majority of MSE managers in Kakamega Sub County remains low implying that financial literacy education is yet to achieve its objectives. In particular;

There is a low level of debt management literacy among MSE managers which may negatively affect their financial decisions of when to borrow, how much and from whom resulting to poor business performance. Most MSEs in the study area do not engage in budgeting as a tool for business planning and control which can have a negative impact on business survival. However, improving the budgeting skills of MSE owners can have a positive impact on the MSE growth in terms of value of assets.

Although most MSEs appreciate the need to operate business bank accounts, a majority do not bank their proceeds daily which could affect their credit scoring and ability to access bank loans. Also, a large majority have not taken advantage of bank

websites to access product information which can significantly reduce information search costs and further only a small percentage are able to access other bank products other than loans which depicts a low level of banking literacy.

The Study also concludes that most MSEs in the study area do not keep business records that can enable them measure accurately the financial performance of their businesses due to unsatisfactory knowledge and skills on Book keeping. Lack of records increases their information opacity and may constraint their access to finance.

Financial literacy was also found to go hand in hand with formal education; entrepreneurs that scored high in financial literacy had at least a diploma/certificate education, while in contrast, entrepreneurs with low level of formal education demonstrated low level of financial literacy.

## **5.4. Recommendations**

### **5.4.1. Recommendations for Policy and Practice.**

In view of the conclusions made above, the following recommendations are made;

Micro Finance Institutions and government agencies including WEF, YEF and Uwezo should organize financial education capacity building programs and financial awareness campaigns on debt management and banking services literacy for SMEs under their jurisdiction since they are in constant contact with SMEs. Such trainings should be separated from financing since mixing training and financing has been reported to be ineffective (UNCTAD, 1997) as MSE participants are only interested in the loan with little commitment to learning.

Book keeping skills and Budgeting skills require a longer duration for trainees to master the skills. Accordingly, the Micro and Small Enterprise Authority charged with a mandate to do capacity building of MSEs (MSE Act, 2012) should in collaboration with village Youth polytechnics organize training on budgeting and book keeping skills for MSEs on a Training of Trainer (TOT) approach whereby instructors in the Youth Polytechnics can be used to train MSEs having been trained

by MSEA. Youth polytechnics are easily reachable and training programmes can be organized at the convenience of the participants. This would help ensure that all SMEs have basic book keeping and budgeting literacy.

Incorporate financial education in the school curriculum from Primary level so that individuals are financially informed early in life. Business studies as a subject was removed from primary school curriculum and is an elective at secondary level. Business studies should be re- introduced at primary school and be compulsory subject for the first two years of secondary education. The curriculum should teach concepts on debt management, budgeting, book keeping and awareness on efficient utilization of banking services.

Government agencies such as MSEA, WEF, YEF or Uwezo as well as MFIs should develop easy to learn modules that can be downloaded by interested MSE operators from their websites to reduce information search costs and take advantage of existing technology platforms.

#### **5.4.2. Areas for Further Research.**

The following are recommended as areas of further research;

In order to improve the external validity in terms of generalization of the study findings, it is recommended that this study be replicated in MSEs drawn from other Counties in Kenya.

The FSD report of 2009 proposes six key areas of financial literacy. A study should be undertaken to determine the effect of saving literacy and investment literacy on the growth of MSEs. These variables were not included in the current study.



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3. Have you attended any training organized by any of these organizations on financial management of your business in the last three years? Yes  
No
4. If no why? Not invited  Not aware of the training  Too expensive.  
Other (specify).....

**B. Debt Management Literacy**

**Choose whether you;**

**5. Strongly agree. 4. Agree 3.Unsure 2. Disagree 1. Strongly Disagree (tick one)**

S/no	Debt management Literacy	5	4	3	2	1
1.	I always repay my loan installments on time.					
2.	I compare the terms and conditions of various financiers before buying their products and services for my business.					
3.	My business uses more than half the revenue generated to repay loans.					
4.	My debt management skills have enabled me to access various sources of finance for my business					
5.	I know the effect of inflation and interest rates on the loans I borrow for my business.					
6.	I am able to determine accurately the total debt position of my business to date.					



**C. Budgeting Literacy**

Answer the following statements by choosing whether you:

**5. Always. 4. Often 3. Sometimes 2. Rarely 1. Never (tick only one)**

S/no	Budgeting and control Literacy	5	4	3	2	1
1.	Do you prepare written financial objectives of what you want to achieve in a year for your business?					
2.	Do you prepare a written annual budget of income and expenditure for your business?					
3.	Do you compare your financial objectives to your business performance periodically?					
4.	I use budget plans to set performance targets for my employees.					
5.	I use a budget to track spending in your business?					

**D. Banking Services Literacy.**

Answer the following statement by choosing;

**2. Yes 1. No (tick only one)**

S/No	Banking Literacy	2	1
1.	Do you operate a bank account for your business?		
2.	Do you bank your business proceeds on a daily basis?		
3.	If you need extra finance for your business, are you aware of where you can get it?		
4.	Have you ever checked the websites of commercial banks to see their credit products and their requirements?		
5.	Are you aware of the requirements of commercial banks in lending money to small businesses?		
6.	Other than loans, are you able to access other bank products for your business.(credit cards, bill payment service, fixed depos		

**E. Book Keeping Literacy**

Please evaluate your knowledge and skills in book keeping by stating whether you have;

**5. Excellent knowledge and skills. 4. Good knowledge and skills 3.Satisfactory knowledge and skills 2. Unsatisfactory knowledge and skills 1. No knowledge and skills (tick only one)**

S/no	Book keeping Literacy	5	4	3	2	1
1. 1	Ability to prepare financial statements for your business. ( income statement and balance sheet )					
2. 2	Ability to perform financial analysis on your business financial statements(e.g calculate gross profit margin, current ratio, debt ratios etc)					
3. 3	Adequate knowledge on maintenance of a cashbook.					
4.	Filling tax return.					
5.	Ability to maintain and balance the ledger book accurately.					
6.	Ability to do bank reconciliations for your business?					

**F. Measuring MSE Growth.**

1. State the total value of assets in your business for the past four years (KShs)

- i. 2012.....
- ii. 2013.....
- iii. 2014.....
- iv. 2015.....

2. How many permanent employees do you have?

- None
- 1-10
- 11-20
- >20

3. To what extend has your sales revenue changed in the last four years?(Tick one)

- 3. Increased**
- 2. Remained constant.**
- 1. Decreased**

4. Are you interested in increasing your financial Knowledge?

Yes      No

5. If yes in 4 above, which topics would be of interest to you to promote the growth of your business (Rank them in order of importance where 1-most important to 6 least important).

Budgeting              Loans/Debt management              Investing

Book keeping.              Banking services              Interest rates and inflation.

**Thank you for your cooperation.**

**Appendix 2: Cross Tabulation Education Attainment \* Book Keeping Literacy.**

		<b>Can prepare business financial statements accurately</b>					
		No knowledge and Skills	Unsatisfactory knowledge and Skills	Satisfactory knowledge and Skills	Good knowledge and Skills	Excellent knowledge and Skills	Total
Educational Attainment	Primary	39	9	1	0	0	49
	Secondary	33	46	37	6	0	122
	Diploma/ Certificate	4	11	35	31	6	87
	University graduate	0	2	4	15	1	22
	None	19	2	0	0	0	21
<b>Total</b>		<b>95</b>	<b>70</b>	<b>77</b>	<b>52</b>	<b>7</b>	<b>301</b>

**Educational Attainment \* Ability to perform financial analysis Cross tabulation**

		<b>Ability to perform financial analysis</b>					
		No knowledge and skills	Unsatisfactory knowledge and skills	Satisfactory knowledge and skills	Good knowledge and skills	Excellent knowledge and skills	Total
Educational Attainment	Primary	41	7	1	0	0	49
	Secondary	36	52	30	5	0	123
	Diploma/ Certificate	4	12	33	36	3	88
	University graduate	0	3	3	15	1	22
	None	20	1	0	0	0	21
<b>Total</b>		<b>101</b>	<b>75</b>	<b>67</b>	<b>56</b>	<b>4</b>	<b>303</b>

**Educational Attainment \* Maintenance of cashbook Cross tabulation**

		<b>Maintenance of cashbook</b>					<b>Total</b>
		No knowled ge / skills	Unsatisfactory knowledge / skills	Satisfactory knowledge/ skills	Good knowledge / skills	Excellent knowledge / skills	
Educational Attainment	Primary	41	7	1	0	0	49
	Secondary	35	47	36	5	0	123
	Diploma / Certificate	3	13	37	31	4	88
	University graduate	1	1	4	15	1	22
	None	20	1	0	0	0	21
<b>Total</b>		<b>100</b>	<b>69</b>	<b>78</b>	<b>51</b>	<b>5</b>	<b>303</b>

**Educational Attainment \* Filling tax returns Cross tabulation**

		<b>Filling tax returns</b>					<b>Total</b>
		No knowled ge and skills	Unsatisfacto ry knowledge and skills	Satisfacto ry knowledg e and skills	Good knowled ge and skills	Excellent knowled ge and skills	
Educational Attainment	Primary	42	6	1	0	0	49
	Secondary	51	47	19	6	0	123
	Diploma/ Certificate	8	17	31	27	5	88
	University graduate	1	3	1	16	1	22
	None	20	1	0	0	0	21

**Educational Attainment \* Maintenance of cashbook Cross tabulation**

		<b>Maintenance of cashbook</b>					
		No knowled ge / skills	Unsatisfactory knowledge / skills	Satisfactory knowledge/ skills	Good knowledge / skills	Excellent knowledge / skills	Total
Education	Primary	41	7	1	0	0	49
Attainme nt	Seconda ry	35	47	36	5	0	123
	Diploma / Certifica te	3	13	37	31	4	88
	Universi ty graduate	1	1	4	15	1	22
	None	20	1	0	0	0	21
	<b>Total</b>		<b>122</b>	<b>74</b>	<b>52</b>	<b>49</b>	<b>6</b>

**Educational Attainment \* Maintain and balance the ledger accurately Cross tabulation**

		<b>Maintain and balance the ledger accurately</b>					<b>Total</b>
		No knowledg e and skills	Unsatisfactory knowledge and skills	Satisfactor y knowledge and skills	Good knowledge and skills	Excellent knowled ge and skills	
Education al Attainmen t	Primary	41	7	1	0	0	49
	Secondar y	47	54	18	4	0	123
	Diploma / Certifica te	8	16	32	29	3	88
	Universit y graduate	0	4	2	16	0	22
	None	20	1	0	0	0	21
<b>Total</b>		<b>116</b>	<b>82</b>	<b>53</b>	<b>49</b>	<b>3</b>	<b>303</b>

**Educational Attainment \* Ability to do bank reconciliations Cross tabulation**

		<b>Ability to do bank reconciliations</b>					<b>Total</b>
		No knowledg e and skills	Unsatisfacto ry knowledge and skills	Satisfactor y knowledg e and skills	Good knowled ge and skills	Excellent knowled ge and skills	
Education al Attainmen t	Primary	41	7	1	0	0	49
	Secondary	50	53	16	4	0	123
	Diploma/ Certificate	8	16	32	29	3	88
	University graduate	1	2	3	15	1	22
	None	21	0	0	0	0	21
<b>Total</b>		<b>121</b>	<b>78</b>	<b>52</b>	<b>48</b>	<b>4</b>	<b>303</b>

### Appendix 3: Data Analysis figures

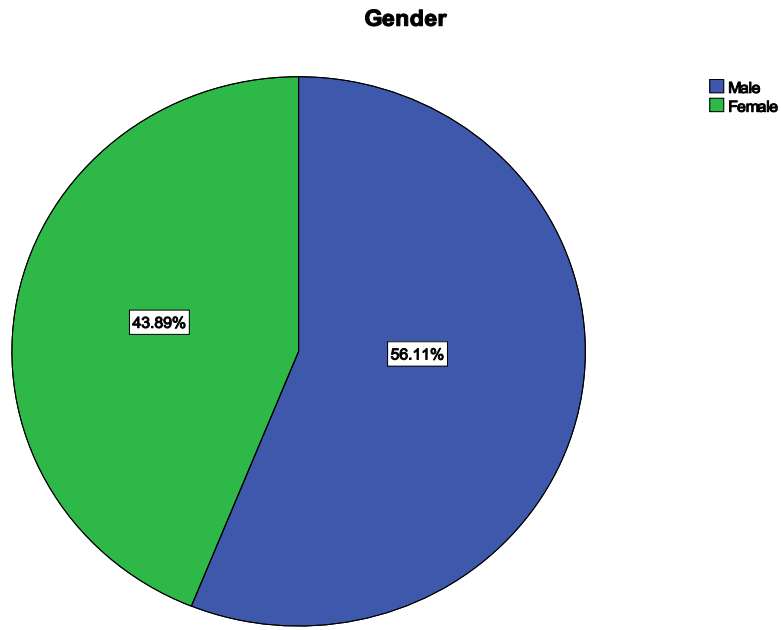


Fig 3.1 The Gender of MSE owner Managers

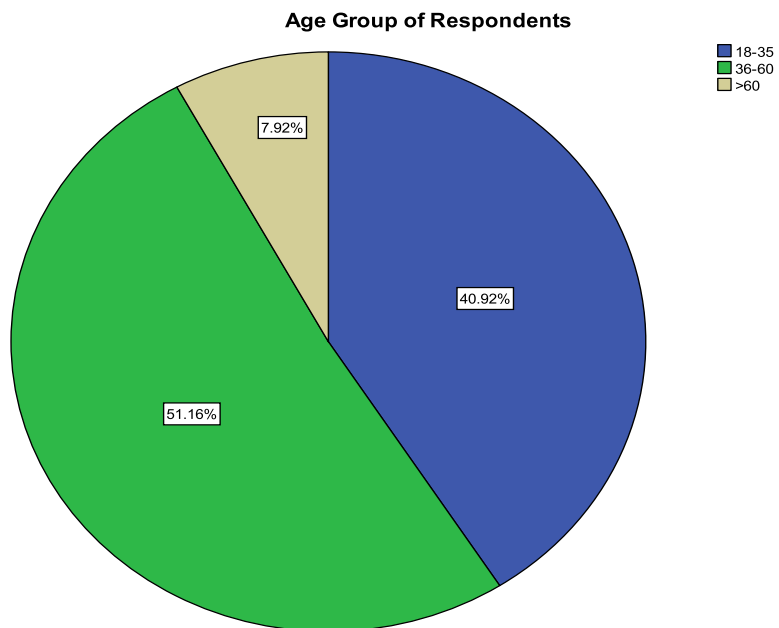


Fig 3.2. Age Groups of MSE Owner Managers



### Educational Attainment

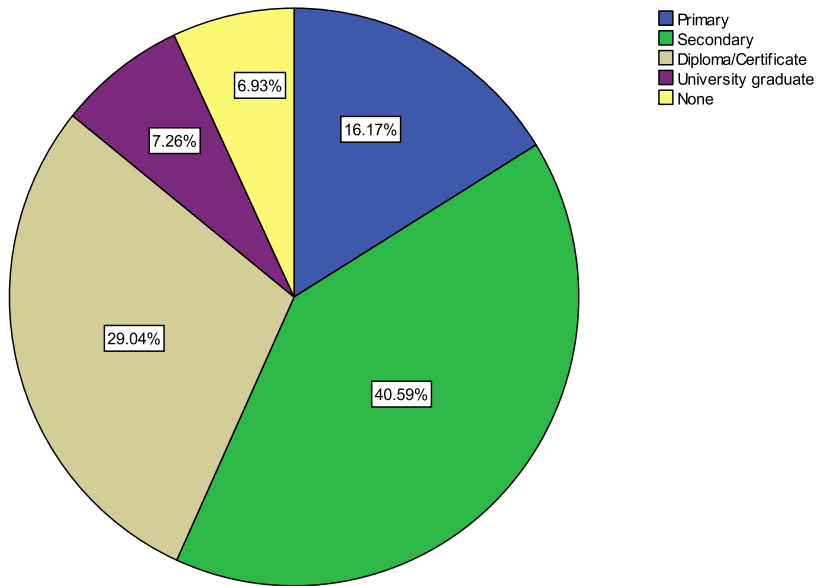


Fig 3.3 Educational Attainment of MSE Owner Managers

### Business type

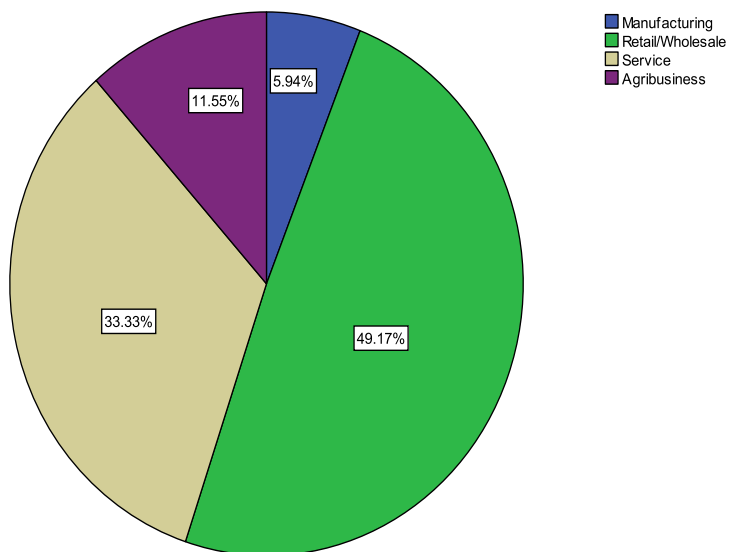


Fig 3.4 Profile of types of MSE Businesses

### Duration in business

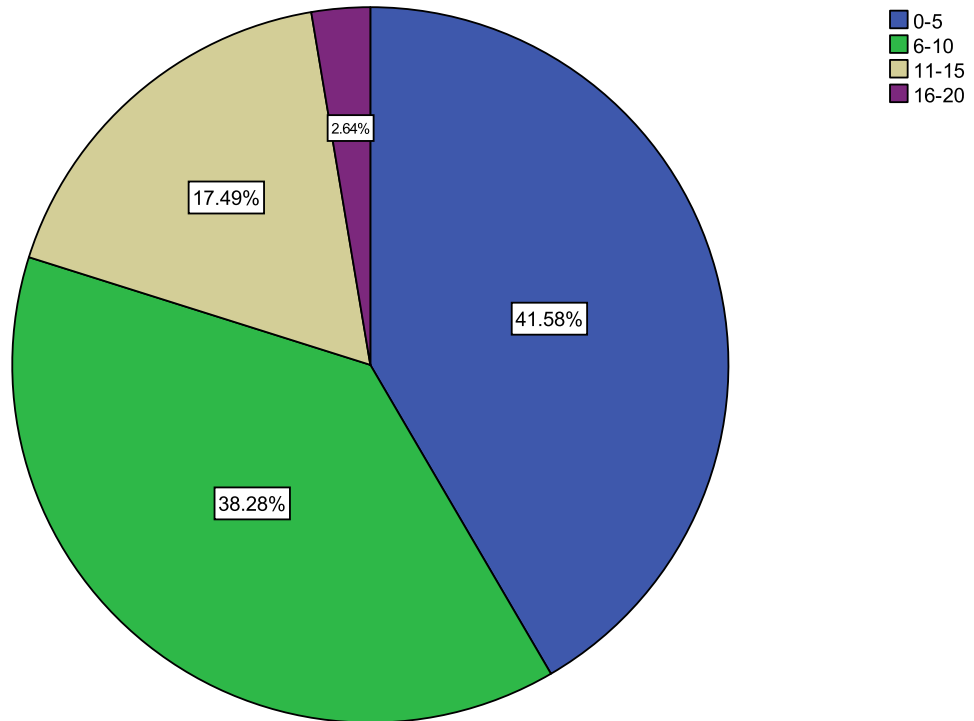
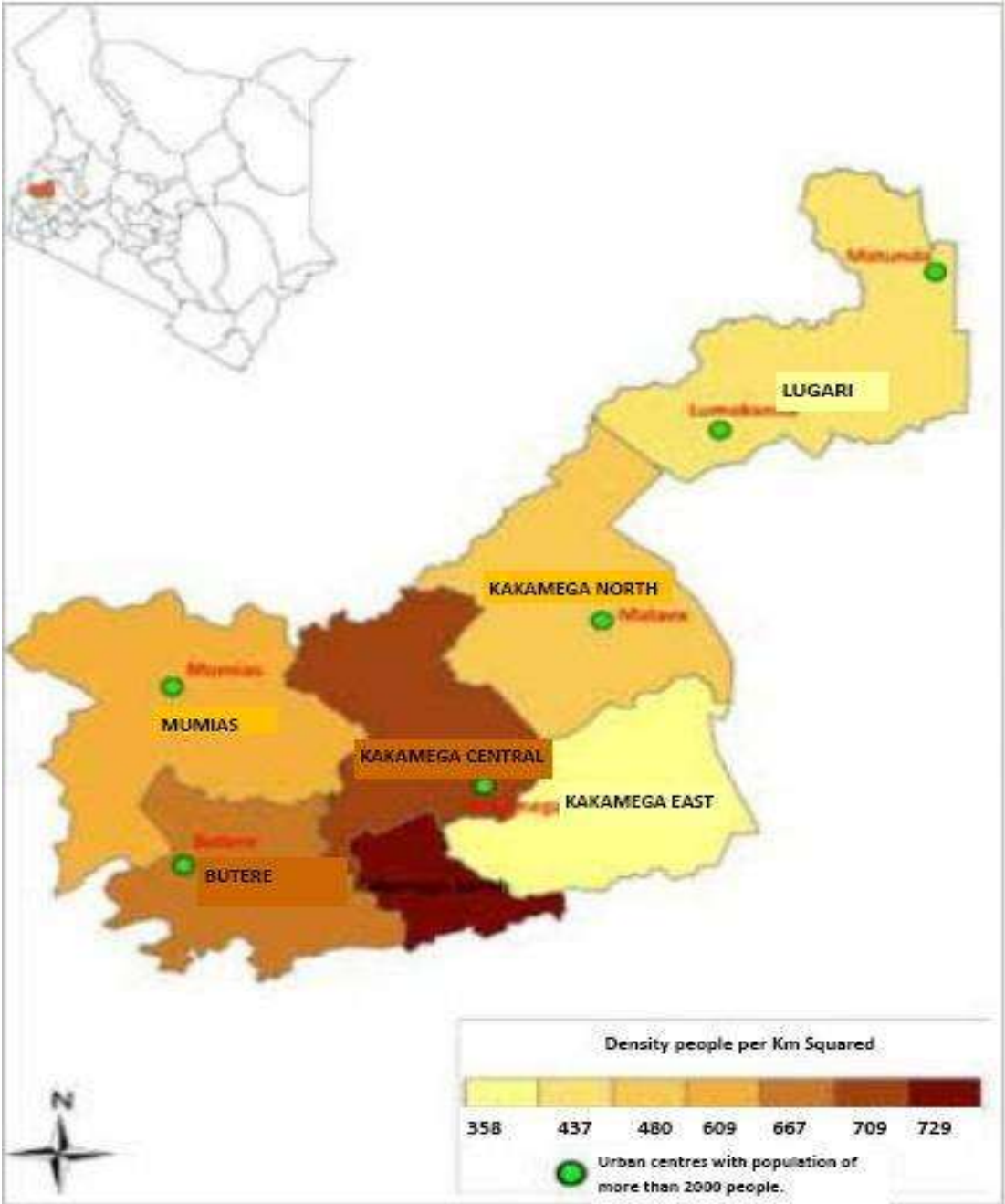


Fig 3.5. Duration in business of MSEs.

**Appendix 4: Location Map of Kakamega Central Sub County.**



(Source: Kakamega County Integrated Development Plan 2013-2017)

**Appendix 5: Cover Letter**



JOMO KENYATTA UNIVERSITY  
OF  
AGRICULTURE AND TECHNOLOGY

KISUMU CBD CAMPUS  
Office of the Director

P.O. Box 3433 - 40100 KISUMU, Kenya. Tel: +254 736 693960/+254 724 333534, Fax: +254(67)52089  
E-mail: [kisumuchd@jkuat.ac.ke](mailto:kisumuchd@jkuat.ac.ke)

FROM: Director Kisumu CBD DATE: 3<sup>rd</sup> March, 2016.

TO WHOM IT MAY CONCERN

**REF: INTRODUCTION OF MS. LUSIMBO NEKESA EVELYN;**  
**REG. NO HD313-C012-0238/2014**

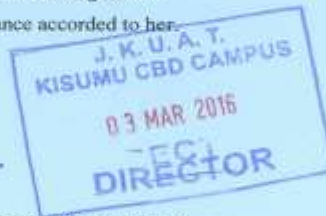
This is to introduce Ms. Lusimbo Nekesa Evelyn who is Master of Science in Entrepreneurship student at JKUAT Kisumu CBD Campus.

She has completed her course work and currently doing research. The research activity involves extensive data collection among others.

We will appreciate any assistance accorded to her.

Yours faithfully,

**Dr. JARED O.H. NDEDA**  
**DIRECTOR, JKUAT KISUMU CBD CAMPUS.**



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