

**INFLUENCE OF FINANCIAL LITERACY ON FINANCIAL  
DECISIONS OF MICRO FINANCE INSTITUTION CLIENTS IN  
EMBU COUNTY**

**BY**

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**D61/73552/2009**

**A Project Report Presented in Partial Fulfillment of the Requirement for the Award  
Of a Master of Business Administration of University of Nairobi**

**October 2012**

## **DECLARATION**

This Research Project Report is my original work and has not been submitted for an award of a degree in this or any other University.

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## **DEDICATION**

This Research Project is dedicated to my wife Francisca and to my children Mary Immaculate and Peter.

## **ACKNOWLEDGEMENTS**

I wish to acknowledge The Almighty God, His grace and gift of life. My special gratitude goes to my supervisor, DR. Josiah Aduda, the chairman Finance and Accounting Department of the University for his Professional Guidance throughout the study.

I wish to appreciate my family for their patience and encouragement during the entire course. Further appreciation goes to my colleagues Veronica, Mutegi Mwaniki and Josephine for their support during the study.

May The Almighty God bless you all.

## **ABSTRACT**

This study examined the influence of financial literacy on financial decisions of micro finance institution clients in Embu County. Specifically, the study investigated on what influence financial technological literacy, financial investment literacy and financial literacy on sources of finance has on the financial decisions of the micro finance clients. The study targeted all Micro Finance Institutions in Embu County and the targeted population consisted of the clients in the twenty-five registered MFIs in the County but due to homogeneity selected forty respondents in eight MFIs which had a total of 2,168 members as of July 2012.

A questionnaire was administered to the sample chosen for the study. The collected data by way of questionnaire was organized to answer set objectives in the study. Data was coded, tabulated in excel and analyzed using statistical package for social sciences (SPSS) computer program. The data was further analyzed using descriptive statistics, frequency tables and percentages. Test of Significance was done by use of Spearman's correlation coefficient using inferential statistics.

The study observed that financial technological literacy, financial investment literacy and financial literacy on sources of finance had influence on financial decision making of Micro finance Institution Clients. The study further found that majority of the respondents indicated that that the level of financial literacy on MFI operations had made people poorer while majority of them relied on their friends and group members for financial decision making.

The study concludes that the stakeholders can attempt to get involved with the efficacy of the MFI programmes by supporting the MFI clients to directly get training specifically on financial literacy or indirectly through a voucher scheme to enable the clients advance their financial management skills.

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## **ABBREVIATIONS**

US	United States
GOK	Government of Kenya
UK	United Kingdom
ILO	International Labor Organization
IPAR	Institute of Public Analysis and Research
MFI	Micro Finance Institutions
NGO	Non Governmental Organization
SACCOs	Savings and Credit Co-operatives
ARDFL	African Regional Dialogue on Financial Literacy
NCEE	National Council on Economic Education
OECD	Organization for Economic Cooperation and Development
FSA	Financial Services Authority
USHRS	United States Health and Retirement Study
SPSS	Statistical Package for Social Sciences

# **CHAPTER ONE**

## **1.0 INTRODUCTION**

### **1.1 Background Information**

Consumers must confront complicated financial decisions in today's demanding financial environment, and financial mistakes made in life can be costly. People often find themselves carrying large amounts of loans or credit card debt, and such entanglements can hinder their ability to accumulate wealth. It is critical for researchers to explore how financially knowledgeable the population is as understanding the factors that contribute to or detract from the acquisition of financial knowledge can help policymakers design effective interventions.

Financial illiteracy is a growing economic and social concern garnering greater attention from consumer advocates, scholars, governmental agencies and policymakers (Harnisch, 2010). Numerous factors have led to a complex, specialized financial services marketplace that requires consumers to be actively engaged if they are to manage their finances effectively. The forces of technology and market innovation, driven by increased competition, have resulted in a sophisticated industry in which consumers are offered a broad spectrum of services by a wide array of providers. Compelling consumer issues, such as the very visible issue of predatory lending, high levels of consumer debt, and low saving rates, have also added to the sense of urgency surrounding financial literacy (Jackson, 2001). In other words, factors prompting increased attention to financial literacy include the rise in consumer debt levels, the decline in already-low personal saving rates, and the increase in non-business bankruptcy filings (Jurg, 2000).

### **1.1.1 Financial Literacy**

Financial literacy is associated with the health and well-being of individuals, families, communities and markets. Financial education whose primary objective is financial Literacy, can help individuals plan for their future and contribute to a sustainable, vibrant lifestyle during work years and retirement. Effective financial education can therefore help individuals develop efficient household budgets, create savings plans, manage debt and formulate strategic investment decisions for themselves and their families. It also provides more opportunities to save and invest, helps people obtain goods and services at lower costs and helps develop better consumers (Braunstein and Carolyn, 2010).

In recent years, financial literacy has gained the attention of a wide range of major banking companies, government agencies, grass-roots consumer and community interest groups, and other organizations. Interested groups, including policymakers, are concerned that consumers lack a working knowledge of financial concepts and do not have the tools they need to make decisions most advantageous to their economic well-being. Such financial literacy deficiencies can affect an individual's or family's day-to-day money management and ability to save for long-term goals such as buying a home, seeking higher education, or financing retirement. Ineffective money management can also result in behaviors that make consumers vulnerable to severe financial crises (Annamaria, 2010).

Financial institutions have a vested interest in supporting or providing financial literacy programs. Relative to cost, financial literacy provides both immediate and long-term returns. The most obvious is brand recognition and market share. Financial literacy offers an excellent opportunity to personalize ones institution among consumers who have myriad options in selecting financial service providers. Consumers who understand the merits of responsibly managing their financial resources are more likely to effectively and profitably utilize the services of a traditional financial institution (Ben, 2010)

Given the recognized need for increased financial literacy and improved consumer behavior, policymakers have focused on mandating financial education and consumer

economics curricula in primary and secondary schools, but inconclusive or null results in financial literacy tests have led some to reconsider this approach. Valid concerns remain that students do not pay attention to or retain these lessons because many of them are not financially independent and do not make key financial decisions at that point in their lives (Harnisch, 2010). Many micro entrepreneurs live in far off rural areas, often remote villages, and have little formal education which leads to two issues: a lack of knowledge about the existence of financial services for the poor and little access to microfinance services offered by MFIs (Karen, 2010). A natural consequence of this is that loan providers face difficulty in targeting these potential clients. Some researchers view financial education efforts as having inconclusive, null or even counterproductive results. This has led to calls for discontinuing or changing financial education and pursuing alternative solutions for improving consumer behavior trends. Others, however, doubt that the alternatives to financial education will be better. Despite the importance of financial literacy, surveys demonstrate that the youth and adults do not possess the basic knowledge needed to make good financial choices (Chen & Volpe (1998; Volpe, Chen & Liu, 2006).

### **1.1.2 Financial Decision**

In comparison to the research on corporate finance, research on household financial decisions has received scant attention in the professional literature. This disparity exists because household financial decisions incorporate some unique and complex characteristics that prevent an easy application of models from corporate finance. The uniqueness of household financial decision-making almost certainly means that what economists know about corporate finance cannot be applied in a straightforward manner to households.

While Financial Capability is the combination of knowledge, understanding, skills, attitudes and especially behaviors which people need in order to make sound personal finance decisions suited to their social and financial circumstances; Financial Literacy is the ability to understand how to use financial products and services and how to manage

personal, household, or micro-enterprise finances over time. Financial literacy is associated with the health and well-being of individuals, families, communities and markets. Financial education can help individuals plan for their future and contribute to a sustainable, vibrant lifestyle during work years and retirement (OECD, 2005).

Effective financial education can help individuals develop efficient household budgets, create savings plans, manage debt and formulate strategic investment decisions for themselves and their families. It also provides more opportunities to save and invest, helps people obtain goods and services at lower costs and helps develop better consumers (Braunstein, Sandra and Carolyn Welch, 2010)

### **1.1.3 MFIs in Embu County**

There is ample evidence in various studies carried out in Kenya that poor people have limited or no access to formal financial services. The 1995 GEMINI study for example found that 90% of micro and small enterprises in Kenya had never received credit. Since 45% of Kenya's population lived at or below the poverty line, this implied that a significant proportion of the population did not have access to formal financial services. They relied largely on informal mechanisms such as merry-go-rounds, family and friends at the lowest end and NGO, church groups and SACCOs at the upper end respectively. Except possibly for the Post Bank, banks in Kenya had not paid much attention to the poor. NGOs had made efforts to act as intermediaries but their outreach was limited to densely populated urban and rural areas.

The Kenyan Micro Finance (MFI) industry is one of the oldest and most established in Africa. Interest in the informal sector in Kenya started as far back as the early 1970's after the seminal ILO report on employment was issued in Kenya in 1972. This report for the first time identified the informal sector as a potentially important contributor to employment and economic growth in Kenya and other developing countries.

By the early 1990's, interest and knowledge about the microfinance industry had grown substantially and the approach to the industry began to become more focused and sustainability oriented. The "minimalist" Grameen approach was adopted by most MFIs and other ancillary activities like training were either stopped completely or spun off into separate programs. A few specialized, product based institutions began to emerge in the sector as many church based organizations died out or collapsed due to lack of funding in many parts of the country including Embu County.

Embu County is in the eastern part of Kenya and borders with Machakos, Meru and Kirinyaga Counties to each side, has a Population of 516,212 and covers 2,818 Km<sup>2</sup>. Its electoral constituencies are Manyatta, Runyejes, Gachoka, and Siakago. Its major Towns are Embu, Runyejes, Siakago, Kiritiri, Ishiara, Kanyuambora. The Main Features of Embu county included; Seven Forks Dams, Coffee and Tea Farms, Mt. Kenya.

## **1.2 The Problem Statement**

The financial service industry has become increasingly complex and continues to change, revolutionizing the financial markets. Within this framework, experts recognize the importance of consumer finance and understand that basic finance relationships are key to modern financial security. In recent years the focus has been on the importance of financial education and literacy in the functioning of the financial markets (Morton (2005), Greenspan (2003, 2005), Hilgert, Hogarth & Beverly (2003), and Braunstein & Welch (2002).

Willis (2010) argues against Financial Literacy and asserts that financial education programs have shown no evidence of improved financial literacy. Further, Willis maintains that financial education efforts are flawed because they cannot keep pace with rapidly evolving marketplaces and the vast diversity of financial products, services and situations and therefore concludes that the costs of providing financial education certainly swamp any benefits; while Karen, (2010) argues for substantive prohibitions and mandates on financial products, increasing resources available to consumers to help



consumers make better decisions by arranging the incentives of sellers with the needs of consumers.

Lusardi, Keller and Keller, (2008) on the hand believes the evidence on the effectiveness of financial literacy education programs is mixed and should not be discontinued simply because students are not performing well on tests. They say that financial literacy has shown to be effective in some groups, such as those at the bottom of the wealth distribution. They however do not dismiss having vigilant regulators, but argues that even the most thoughtful regulations, must confront a very complex and constantly changing marketplace.

From a broader perspective, market operations and competitive forces are compromised when consumers do not have the skills to manage their finances effectively. Informed participants help create a more competitive, more efficient market. As knowledgeable consumers demand products that meet their short and long-term financial needs the providers compete to create products having the characteristics that best respond to those demands (Jeanne, 2001).

In Kenya today, there is an increase in access to financial services which enables households to invest in activities that are likely to contribute to higher future income and, therefore, to growth (Karen, Alberto and Juan-Pablo, 2010). However, as new and increasingly vulnerable consumers enter financial markets, the knowledge, skills, attitudes and especially behaviors to understand one's financial life become even more critical than ever before (ARDFL, 2012). The challenge is that financial literacy surveys in Kenya indicate inadequate finance literacy levels amongst the general population (Njuguna and Otsola (2011).

The commercial Banks in Embu are 8 with twenty five registered MFIs. These indicators presented Embu County as a well developed semi-urban settlement with a rich menu of financial institutions and MFI clientele where the influence of financial literacy on

financial decisions of Micro Finance Institution clients could effectively be investigated and be representative of similar environment

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

#### **1.3.1 General Objective**

The General objective of the study was to investigate the influence of financial literacy on financial decisions of micro finance institution clients.

#### **1.3.2 Specific Objectives**

- i. To assess to what extent Financial Technological Literacy Influence financial decisions of micro finance institution clients.
- ii. To establish to what extent Financial Investment Literacy Influence financial decisions of micro finance institution clients.
- iii. To determine to what extent Financial Literacy on Sources of Finance Influence financial decisions of micro finance institution clients.

### **1.4 Significance of the Study**

MFI clients should be interested in finding out the influence of financial literacy on financial decisions. The clients would be informed by the dissemination of the findings in a simplified language.

MFI Managers are charged with ensuring the success of their institutions. The study would assist them in identifying their weaknesses in managing their client's awareness level and reasons for the nature of decisions they make.

The Government policy makers may in future formulate strategies on how to support MSEs and so the influence of financial literacy on financial decisions of the MFI clients is critical. The Government could through policy have the school curriculum reviewed to accommodate appropriate financial literacy.

Future Scholars/Researchers interested in carrying out a similar research would have a data base to start from, and then he/she can fill in gaps left by this research. Current researchers will have answers to some of the challenges they are facing due to the level of financial illiteracy of the MFI clients.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

In this Chapter, the researcher reviewed empirical and theoretical literature by various researchers and authors as it related or was in support of the study on Financial Literacy and its influence on financial decision making.

#### **2.2 Theoretical Literature Review**

Consistent with expectations and goal setting theories of motivation, the Jumpstart survey results show that level of aspiration is one of the most important determinants of financial literacy. Students bound for a four-year college, a professional job or a higher starting salary consistently outscore students who are less highly motivated. Among demographic variables, family income and gender are not determinants of financial literacy although race and region are determinants (Mandell, 2004). Because little, if anything can be done to affect student demographics, the brunt of the responsibility for improving financial literacy has fallen upon the secondary educational system in many countries Kenya Included.

##### **2.2.1 Expectancy Theory**

Expectancy theory of Motivation has long been recognized as a key driver of individual behavior. Starting as early as Tolman (1932) and Lewin (1938), expectancy theory ties perception to behavior. Since then, extensive academic research has been focused on developing our understanding of motivation. Both the force model (Vroom, 1964) and the utility model (Samuelson, 1967), provide a theoretical grounding for explaining the motivational influences underlying human behavior as a function of expectancy, instrumentality, and valence or utility. Expectancy relates to the expectation or likelihood that specific actions will yield a certain outcome, alternately that performance is based on effort. Instrumentality relates to the relation between performance and reward, alternately that outcome is based on performance. Valence and/or utility relates to the value or

importance the individual places on the perceived outcome. Based on these theories, individuals are motivated by things that can successfully lead to valued outcomes. Financial literacy is therefore seen as a means to an end and would not be a motivation if it were an end by itself.

According to Pinder (1998) expectancy and valence theory is the most widely accepted expectancy theory in research on work motivation. Stahl and Harrell (1981) and Harrell and Stahl (1986) use a behavioral decision model approach to test expectation theory on individual decision making. Their findings demonstrate that motivational decision making is an additive process rather than Vroom's multiplicative process. This implies that motivation can still be significant even when expectations of success are small if the value or utility of the outcome is large. In some cases, individual behavior may not result in the optimal outcome. A limited number of options may be considered (Wanous, Keon & Latack, 1983), information processing may be suboptimal (Bowen & Qiu, 1992; Park, 1978), or individuals exhibit behavior that is satisfying or simply "good enough" (Wabba & House, 1974). More recently, expectancy theory has been integrated with goal setting theory (Hollenbeck & Klein, 1987).

### **2.2.2 Goal Setting Theory**

Goal setting theory is grounded in the belief that conscious goals and intentions drive results. Based on goal setting theory of motivation, Locke (1968) and Locke and Latham (1990) find that individual goals are likely to determine how well they perform related tasks and in this study; the individual perception of the cost-benefit of financial literacy. Specifically, clearly defined and more challenging goals yield higher performance than vague, easy or do-your-best goals. To be effective, goal setting theory assumes that individuals must be committed to the goal, must get feedback and must have the ability to perform the task. Based on motivational and goal setting theory, financial literacy would be more appealing when motivated by perceptions and concerns about financial well-being later in life. Motivational theory suggests that measures of financial literacy should be related to financial behavior that is in the consumer's best interests.

### **2.2.3 Contingency Theory**

The existing dilemma from the reviewed literature, as to the appropriateness of financial literacy creates the need for this study to lean on the Contingency theory, which does not aim to help us identify any particular approach to organization and management. Rather, it takes the view that there is no one best form of organization or ideal situation and that one needs to consider the impact of the situation in which the organization finds itself – the form of organization and management will, or should, be conditioned by the demands placed upon it (Burns, Stalker, Lawrence and Lorsch, 2009).

### **2.3 Empirical Review of Literature**

The growing literature on financial literacy suggests that consumers' knowledge of basic financial principles and products is quite scarce, and that it may not be sufficient to guarantee that households make sound financial decisions. For instance, more financially illiterate households are more prone to lack of planning for retirement, portfolio under diversification, and over-indebtedness (Guiso and Jappelli, 2008; Kimball and Shumway, 2007; Lusardi and Mitchell, 2006, 2007; Lusardi and Tufano, 2009).

Concern about financial literacy has increased in recent years, and many countries have embarked on programs and other research initiatives to introduce and enhance financial literacy among their populations. According to Braunstein and Welch, 2002, financial literacy, or the lack thereof, has gained the attention of a wide range of banking corporations, government agencies, educational institutions, consumer and community interest groups, and other organizations. In the USA, studies on financial literacy were conducted, among others, by Cutler (1997); Chen and Volpe (1998); Jacob, Hudson and Bush (2000); and the National Council on Economic Education (NCEE 2005). In the UK, financial literacy surveys were conducted, among others, by Schagen and Lines (1996); and the Financial Services Authority (FSA 2004).

While these studies mostly investigated financial literacy levels among the general public and university students, a study by Joo and Garman (1998) focused on the relationship

between personal financial wellness and worker job productivity. According to a study on the financial literacy of US working adults, Volpe, Chen and Liu (2006), found that working adults are not knowledgeable about personal finance topics. According to international studies on financial literacy, the factors that make financial education increasingly important include changing demographic profiles, the growing complexity of the financial sectors, the decrease in personal savings while personal indebtedness is increasing, and the fact that government resources are limited (Orton 2007).

The Organization for Economic Cooperation and Development's (OECD) landmark study, *Improving Financial Literacy*, concluded that financial understanding is low among consumers across their 30 member countries and that consumers, among other things, feel that they know more about financial matters than is actually the case. The surveys also reported that consumers believe that financial information is difficult to find and understand (OECD 2005: 98). Hilgert et al. (2003) formed a "Financial Practices Index" based upon (self-benefiting) behavior in cash-flow management, credit management, saving and investment practices. When they compared the results of this index with scores on a financial literacy quiz, they found a positive relation between financial literacy scores and Financial Practices Index scores. Their results suggest that financial knowledge is related to financial practices. Although financial behavior seems to be positively affected by financial literacy, the long-term effects of financial education on financial behavior are less certain.

Bernheim, Garrett and Maki (2001) found that those who took a financial management course in high school tended in middle age to save a higher proportion of their incomes than others. On the other hand, Mandell (2006a) found little positive impact of a well-regarded high school personal finance course on post high school financial behavior from one to five years after taking such a course. In addition, as Table 3 shows, every JumpStart survey since 2000 found that high school seniors who have completed a full-semester high school course in money management or personal finance are no more financially literate than students who have not taken such a course.

A 2001 Harris poll of graduating seniors in America found that only 8% of college seniors believed that they were “very knowledgeable” about investing and financial planning. In contrast, about half believed that they were “not very” or “not at all” knowledgeable. This lack of basic financial literacy often results in poor financial decision making. Murray (2000) demonstrates students have serious issues with credit card use. Citing a Nellie May report, he states 25% of undergraduate college students have four or more credit cards and about 10% carry outstanding balances.

Garman, Leech and Grable (1996) and Joo and Grable (2000) find that in addition to adversely affecting individuals, poor financial decisions negatively influence productivity in the workplace. Volpe et al. (2006) surveyed corporate benefit administrators and identified basic personal finance as a critical area in which employee knowledge is deficient. They recommend that educational programs should focus on improving knowledge of basic personal finance. However, educational programs are beneficial only if they are successful at improving financial literacy.

There exist very few surveys that provide information on both financial literacy and variables related to financial decision-making (for example saving, portfolio choice, and retirement planning). To remedy this lack of data, Lusardi and Mitchell (2006) devised a module on financial literacy for the 2004 US Health and Retirement Study (HRS). Their questions aimed to test basic financial knowledge related to the working of interest compounding, the effects of inflation, and risk diversification. They found that financial illiteracy is widespread and particularly acute among specific groups of the population, such as women, the elderly, and those with low education. These results are surprising not only because the literacy questions were rather simple and basic, but also because their sample was composed of respondents who are 50 or older. Most respondents in that age group have checking accounts, credit cards, and have taken out one or two mortgages.



However, similar results are found in the work by Hilgert and Hogarth (2002), which examines financial literacy in a sample covering all age groups, and on surveys by the National Council on Economic Education (NCEE), that cover financial literacy among high school students and the adult population. Findings of widespread illiteracy are also reported in studies on smaller samples or specific groups of the population (Agnew and Szykman (2005), Bernheim (1995, 1998), Mandell (2004), and Moore (2003). While these studies focus on data from the US, surveys from other countries show very similar results. A study by the OECD (2005) and work by Lusardi and Mitchell (2007b) review the evidence on financial literacy across countries and show that financial illiteracy is a common feature in many other developed countries, including European countries, Australia, and Japan. These findings are echoed in the work of Christelis, Jappelli and Padula (2007), which uses data very similar to the US HRS, and finds that most respondents in Europe score low on numeracy scales.

Financial illiteracy has implications for household behavior. Bernheim (1995, 1998) was the first to point out not only that most households cannot perform very simple calculations and lack basic financial knowledge, but also that the saving behavior of many households is dominated by crude rules of thumb. In more recent works, Bernheim, Garrett and Maki (2001) and Bernheim and Garrett (2003) show that those who were exposed to financial education in high school or in the workplace save more. Similarly, Lusardi and Mitchell (2006, 2007a) show that those who display low literacy are less likely to plan for retirement and, as a result, accumulate much less wealth (see also Hilgert, Hogarth and Beverly (2003)).

This finding is confirmed in the work by Stango and Zinman (2007), which shows that those who are not able to correctly calculate interest rates out of a stream of payments end up borrowing more and accumulating lower amounts of wealth. Agarwal, Driscoll, Gabaix and Laibson (2007) further show that financial mistakes are prevalent among the young and elderly, who are those displaying the lowest amount of financial knowledge. The measures of financial literacy used in existing studies are often crude. For example,

Lusardi and Mitchell (2006, 2007a) rely on only three questions to measure financial literacy, and Stango and Zinman (2007) rely on one question. Moreover, the surveys that provide more extensive information about financial literacy often have little or no data on wealth, saving, or other important economic outcomes (see, for example, the NCEE survey).

From an ARDFL (2012) study, financial inclusion is accelerating, extending access to financial products and services to millions of previously unbanked, low income consumers. This expansion of products and services brings with it multiple risks, many of which are difficult for even experienced consumers to handle, much less for new market entrants. As new and increasingly vulnerable consumers enter financial markets, the knowledge, skills, attitudes and especially behaviors to understand one's financial life become even more critical than ever before. This combination of skills is also known as financial capability. According to Karen, Alberto and Juan-Pablo (2010), Access to financial services enables households to invest in activities that are likely to contribute to higher future income and, therefore, to growth.

According to Njuguna and Otsola (2011), financial literacy surveys indicate inadequate pension finance literacy levels amongst the general population. For instance, DFID (2008) reported that only half of the adult population in Africa knew how to use basic financial products and in seven African countries only 29% of adults had a bank account and 50% did not use any financial products, not even informal financial products. In addition, there is a link between financial literacy and important economic outcome: participation in the stock market. While extensive research on this topic exists, it is still a "puzzle" why so many households do not hold stocks (Campbell (2006)). Some have argued that short sale constraints, income risk, inertia, and departures from expected utility maximization may explain why so few households hold stocks (Haliassos and Bertaut (1995)), but it has proven hard to account for all these factors in available micro data sets. Others have argued that young people cannot borrow and thus do not have wealth to invest in stocks (Constantinides, Donaldson and Mehra (2002)).

These life-cycle considerations and the wedge between borrowing and lending rates can provide some explanation for lack of stock ownership (Davis, Kubler and Willen (2006)), but even these reasons cannot fully explain why such a large proportion of families do not hold stocks. More recent papers have incorporated other reasons, such as trust and culture (Guiso, Sapienza and Zingales (2005), and the influence of neighbors and peers (Hong, Kubik and Stein (2004), and Brown, Ivkovich, Smith, and Weisbenner, 2007)). Yet other authors have started to consider limited numeracy and cognitive ability (Christelis, Jappelli and Padula (2007)), lack of asset awareness (Guiso and Jappelli (2005)), and lack of financial sophistication (Kimball and Shumway, 2006).

As financially literate investors have a better understanding of financial products and concepts, one might expect them to have an easier access to financial markets, suggesting that they may have a lower need for financial advisors. Financial knowledge can be interpreted as a way to reduce participation costs, since it has to do with "understanding basic investment principles as well as acquiring enough information about risks and returns to determine the household's optimal mix between stocks and riskless assets" (Vissing-Jorgensen, 2004, p. 179), which is typically identified as one of the main costs to stock market participation.

Van Rooij et al. (2011) show that financial literacy is related to higher stock market participation among Dutch households. If financial literacy increases stock market participation, then it may also increase the probability of investing autonomously and having less of a need for external support. However, much of the existing empirical literature (in addition to the theoretical predictions of section 3) suggests the opposite, i.e. that advice is demanded by knowledgeable investors and not by financially illiterate ones. The (mainly descriptive) evidence on financial literacy suggests that it may affect the choice of financial advisors and information sources (Bernheim, 1998).

Lusardi and Mitchell (2006) show that individuals who are correct about three financial literacy questions tend to use formal tools for retirement planning (attend retirement seminar; use calculator/worksheet; consult a financial planner) rather than informal ones (talk to family, friends, coworkers). At the same time, those who used more sophisticated tools were always more likely to get the literacy questions right, as compared to those who relied on personal communications. Similar evidence is found in the Netherlands, where those who display high levels of basic and advanced financial literacy are less likely to rely on informal sources of information (family, friends) and are more likely to rely on formal sources (read newspapers, consult financial advisors, and seek information on the internet) (van Rooij et al., 2011).<sup>2</sup> Moreover, Hackethal et al. (2009) show that advisors are matched with wealthier and older investors, rather than with poorer and inexperienced ones, suggesting that the demand for advice might be a complement rather than a substitute to Financial literacy.

Finally, the idea that advice is demanded by more knowledgeable investors is shared also by the psychological research. This literature points to the fact that individuals who do not know much about (any) subject tend not to recognize their ignorance, and so fail to seek better information. Relatively less knowledgeable people are more likely to overestimate their abilities and as a consequence of their incompetence they also lack the metacognitive ability to realize it (Kruger and Dunning, 1999). This in effect appears to be there also in the financial domain (Forbes and Kara, 2010).

## **2.4 Summary of Literature Review**

Numerous academic studies have discovered the importance of financial literacy for various aspects of household's wellbeing and economic stability. It has been shown that financial literacy has serious implications for wealth accumulation and portfolio choice. Moreover, several researchers stress that financial literacy has an effect on the level of participation in the formal financial market and stock market. Concerning the debt side, empirical studies reveal that lack of financial literacy may result in costly borrowing and high debt load. Finally, financial literacy has implications for overall economic and

financial development and stability and results in more efficient savings behavior and as a result raises returns and attracts more investments into the economy and helps to develop confidence in the economy and thus induces growth.

According a final report on the Financial Literacy Scoping Study, despite multiple financial literacy initiatives, South Africans remain underserved by programs offering financial education. This finding indicated a high level of confusion about financial matters, even among fully banked individuals. This high level of confusion among the respondents in that study (approximately 40% of whom were fully banked and approximately 60% of whom did not have bank accounts), confirms that there are still problems with financial capacity building and that there is an ongoing challenge to provide more financial literacy programs or more specific fit-for-purpose financial education. There is little evidence of empirical studies to inform on less developed economies like Kenya and there is need therefore to undertake this study to inform the Kenyan scholars and policy makers.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This section explored the methodology used in this research. This included aspects such as the research design, the population targeted by the researcher, the sample size, sampling design, data collection method as well as data analysis techniques used in the study.

#### **3.2 Research Design**

The study adopted a descriptive ex-post design. This kind of study design attempts to collect data from a large population in order to determine the current status in respect to one or more variables. The researcher infers information about a population based on responses of a sample drawn from the population (Gay 1992). Descriptive studies are designed to obtain pertinent and precise information concerning the current status of phenomena and whenever possible to draw valid general conclusions from facts discovered (Lokesh, 1984). It was noted by Borgo and Gall (1989), that Descriptive survey research is intended to produce statistical information about aspects of relationships between phenomenons of interest. This survey design was appropriate because it enabled the researcher to gather information on attitudes and opinions in relation to financial Literacy among the MFI clients.

#### **3.3 Population**

The study targeted all MFIs in Embu County and the population consisted of the clients in the twenty-five registered MFIs in Embu County. However, the accessible population for this study was clients of the eight MFIs which had more than five employees and had been in operation for more than two years. Respondents were sampled from eight (8) MFIs which had a total of 2,168 members as of July 2012.

### **3.4 Sample Size**

In Embu County there were 8 MFIs that had over 5 employees and over two years of existence. The population of the 8 MFIs clients in Embu County as of July 2012 was 2,168 members. Mugenda and Mugenda, 2003 advises that a sample above 30 percent for descriptive studies to be representative. However, due to the high level of homogenous nature of the population this study randomly sampled 40 respondents (5 clients from each MFI) of the accessible population as respondents for the study.

### **3.5 Sampling Design**

The study used stratified random sampling method. The sample is a finite part of a statistical population whose properties are studied to gain information about the whole (Webster, 1985). However, according to Mugenda and Mugenda (2003) where the time and resources allow, the researcher should take a big sample as possible, while Kothari (2004) is of the opinion that where the population is small there is no need to resort to a survey. Because of the small population and the desire to reduce the sampling error, all the eight (8) MFIs were included in the study. The stratified random sampling method was suitable as some information could only be available to specific people in the MFIs.

### **3.6. Data Collection Instrument and Procedures**

A questionnaire was administered to the sample chosen for the study (a sample questionnaire is attached -appendix I). The researcher opted for the primary data collection technique in the form of questionnaires which was researcher assisted as all respondents may not have been literate enough for the purpose of the questionnaire items. The questionnaires were conveyed to the respondents by use of the drop and pick method. An introductory letter from the University authorizing the research to be undertaken was used by the researcher to assure the authenticity of the study. The researcher chose to use a questionnaire because of the following benefits. First, the questionnaire enabled the researcher to ask structured or closed-ended questions which were easier to analyze as well as to administer since each question was followed by alternative answers. Secondly, the questionnaire also enabled the researcher to use open-

ended questions thus permitting a greater in-depth response from the respondents. These particular responses enabled the researcher to get greater insight into the feelings, decisions and thinking of the respondents (Fraenkel, 2000).

### **3.7 Validity and Reliability**

Data validity refers to the degree to which results obtained from analysis of data actually represents phenomenon under study, Mugenda and Mugenda (2003). To achieve content validity the researcher sought assistance from the experts (supervisor) on various sections in the questionnaire which was the primary instrument for data collection. Adjustment was made to accommodate the recommendations.

Data reliability is the degree to which research instrument yield consistent results or data after repeated trials Mugenda and Mugenda (2003). To achieve this, the questionnaire was designed with systematic and comprehensive questions to enable respondents to answer them without much reference. A pilot study comprising ten (10) non -respondents from the accessible population was used for the piloting of the study questionnaire and changes to accommodate the adjustment necessary was undertaken before the instrument was fielded.

### **3.8 Data Analysis and Presentation**

Frequency of various demographic variables was derived for analysis of the demographic aspects of respondents of the selected MFIs. The demographic variables were gender, age, education level and experiences. The data generated from the study was analyzed on the basis of questions and specific objectives both quantitative and qualitative techniques. The collected data by way of questionnaire was organized to answer set objectives in the study. Data organization started with coding of the questionnaire items, then coded data was tabulated in excel and computer program statistical package for social sciences (SPSS). Data was analyzed using descriptive statistics, frequency tables and measures of central tendencies. Test of Significance was done by use of Spearman's correlation coefficient using inferential statistics.



The model was:

$$Y=B_0+B_1X_1+B_2X_2+B_3X_3+B_4X_4+E$$

Y= Financial decisions

X1= Financial Literacy on savings decisions

X2= Financial Literacy on sourcing finance

X3= Technology driven financial literacy

B0= Constant

B1, B2, B3, B4, = correlation coefficients as a result of change induced by each X

E= error prediction.

The results of the survey were presented using tables. The SPSS computer software (Version 17) was used to aid the analysis.

### **3.9 Ethical Consideration of the Study**

The informants were identified and objectively selected as the subjects who provided information for this study. Informants were kindly requested to provide the information needed for successful completion of the study. Any information given would be kept strictly confidential and also anonymous and utilized only for the purposes for which it is intended. Finally the respondents being Clients of the MFIs had a stake in the success of the study.

## **CHAPTER FOUR**

### **4.0 DATA ANALYSIS PRESENTATION AND INTERPRETATION**

#### **4.1 Introduction**

This chapter presents the analysis of data collected from the fielded items in the study questionnaire. The findings were analyzed and presented in the form of frequency tables, numerical values and percentages for comparison of the responses. The responses are presented followed by a brief interpretation guided by the research objectives and a discussion on research findings from the analysis of the data.

#### **4.2 Reliability of Statistics**

According to Sakaran (2001), testing goodness of data by testing the reliability and validity of the measures is a pre-requisite for data analysis. The consistency of measure for this study was done by use of Cronbach's Alpha, a reliability coefficient that indicated how well the items in the data collection instrument were positively correlated to one another (Hatcher, 1994).

**Table 1**

#### **Reliability Statistics**

Cronbach's Alpha	No of Items
0.680	28

Cronbach's Alpha has reliability index of 0.680. This is considered moderately high on a scale between 0.00-1.00 as it tends to 1.00 in attitudinal measurement scales and above the 60 percent generally accepted as a cut off for reliability.

### 4.3 DATA ANALYSIS

**Table 2**

#### **Response Rate**

	<b>Frequency</b>	<b>Percentage</b>
Respondents	35	88
Non respondents	5	12
Total Respondents	40	100

From the table 2, 88 percent of the respondents responded while 12percent did not respond. This is due to the nature of work of the MFI clients who were the respondents hence they were able to respond within the data collection period.

**Table 3**

#### **Type of Membership in the MFI**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
Individual	23	65.7
Group Membership	12	34.3
Total	35	100

Table 3 Indicate that 66 percent of the respondents had individual membership to the MFIs while 34 percent were group members in their association with the MFI.

**Table 4**  
**Age of Respondents**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
Below 25 years	10	28.6
26 - 34	23	65.7
35 - 44	2	5.7
Total	35	100

Table 4 Shows that 66 percent of the respondents were aged between 26- 34 years of age with 29 percent being below 25 years. However, 6 percent were between 35-44 years of age.

**Table 5**  
**Years have been a member of the MFI**

<b>Response(years)</b>	<b>Frequency</b>	<b>Percentage</b>
1	7	20.0
2	18	51.4
3	7	20.0
4	3	8.6
Total	35	100

Table 5 shows the duration of respondents as members of the MFI. The table shows that 51 percent had been members for two years while 20 percent had been members for 1 and 3 years respectively. 9 percent of the members on the other hand had been members for 4 years.

**Table 6**

**Highest level of Education**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
Primary	15	42.9
Secondary	16	45.7
College	3	8.6
University	1	2.9
Total	35	100

Table 6 Shows the respondents level of education and indicates that 46 percent had indicated as having secondary school level education, with 43 percent being of primary school level education. However, there were only 9 percent and 3 percent of the respondents who had college and university level of education respectively.

**Table 7**

**Active Management Responsibilities in the group financed by MFI**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	30	85.5
No	5	14.5
Total	35	100

Table 7 Shows that 86 percent of the respondents had active management responsibilities in the groups financed by MFIs while 14 percent said they did not have any management responsibilities.

**Table 8**  
**Any Training in Business Management**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	23	65.7
No	12	34.3
Total	35	100

Table 8 Shows the responses on their ever having any training in business management where 66 percent indicated they had while 34 percent said they had not.

**Table 9**  
**Ever Undertaken Any Business Finance Management**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	13	37.1
No	22	62.9
Total	35	100

Table 9 Indicate that 63 percent of the respondents had never undertaken any training in any business finance management with only 37 percent saying they had.

**Table 10**  
**Who Helps You Make Financial Savings Decisions**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
The MFI officials	12	34.3
My group members	14	40.0
My children	8	22.9
My spouse	1	2.9
Total	35	100

Table 10 shows respondent's responses which indicates that 40 percent of the respondents got help in making financial decision from fellow group members, with a further 34 percent stating they got the assistance from the MFI officials, 23 percent from their children with only 3 percent indicating their spouses as source of assistance in making financial savings decisions.

**Table 11**  
**Informs You on the Possible Sources of Business Finance**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
The MFI officials	9	25.7
My group members	19	54.3
My children	5	14.3
My spouse	2	5.7
Total	35	100

Table 11 Presents responses which indicate that 54 percent of the respondents were informed on the possible sources of business finance by group members with 26 percent being informed by the MFI officials.

**Table 12**  
**The Level of Literacy on MFI Have Made People Poorer**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	19	54.3
No	16	45.7
Total	35	100

Table 12 Presents opinions of the respondents and 54 percent indicate that level of literacy on MFI have made people poor with 46 percent saying no to literacy level making people poor.

**Table 13**

**I Fear To Use the ATM**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
Strongly disagree	15	42.9
Disagree	15	42.9
neutral	4	11.4
Agree	1	2.9
Total	35	100

Table 13 Shows that 43 percent of the respondents strongly disagreed and another 43 percent disagreed with the statement that they feared using ATM for business transaction with only 3percent agreeing with the statement.

**Table 14**

**Extent of using M-pesa in my business**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
Very grate extent	11	31.4
Great extent	17	48.6
Not much	6	17.1
Not at all	1	2.9
Total	35	100

Table 14 Shows that 49 percent of the respondents indicated using M-Pesa services in their businesses to a great extent with a further 31 percent using M-Pesa in their business to a very great extent; only 3percent indicated not at all using M-Pesa services in their business.



**Table 15**

**Financial Literacy Is the Ability to Know When to Invest or when Not**

Response	Frequency	Percentage
Strongly Agree	11	31.4
Agree	15	42.9
Not sure	8	22.9
Disagree	1	2.9
Total	35	100

Table 15 Shows that 43 percent of the respondents agreed that financial literacy was the ability to know when to invest or when not to invest with 31percent strongly agreeing with the statement. However, 3 percent were not in agreement.

**Table 16**

**Management responsibilities in the group financed by the MFI**

Response	Frequency	Percentage
To a very great extent	11	31.4
To a great extent	16	45.7
Not much	3	8.6
Not at all	5	14.3
Total	35	100

Table 16 Indicates that 46 percent of the respondents had management responsibilities in the MFI to a great extent with 31 percent stating the management responsibilities to be a very great extent.

**Table 17**

**Extent You Have Adequate Financial Knowledge to Manage Your Business**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
Very great extent	12	34.3
Great extent	17	48.6
Not much	5	14.3
Not at all	1	2.9
Total	35	100

Table 17 Indicate that 49 percent of the respondents had to a great extent, adequate financial knowledge to manage their business with 34 percent having the financial knowledge to a very grate extent. There was however 3 percent who did not have adequate financial knowledge to manage their business at all.

**Table 18**

**The Decisions I Make Have Made My Investments in the MFI Grow**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
Strongly disagree	14	40
Disagree	14	40
Neutral	6	17.1
Agree	1	2.9
Total	35	100

Table 18 Shows that 40 percent of the respondents strongly disagreed and a further 40 percent of the respondents disagreed that the decisions they made had made their investments to grow with only 3 percent agreeing the decisions had made their business to grow.

**Table 19**

**The Decisions on Savings Made By My Friends Are Better Than Mine**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
Strongly disagree	15	42.9
Disagree	15	42.9
Neutral	4	11.4
Agree	1	2.9
Total	35	100

Table 19 Show that 43 percent strongly disagreed while a further disagreed that their decisions made by their friends were better than theirs while 3 percent agreed with the statement.

**Table 20**

**The Decisions Made By the MFI Officials on Our Savings Plan Are Not Very Good**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
Strongly disagree	12	34.3
Disagree	18	51.4
Neutral	5	14.3
Total	35	100

Table 20 Shows that 51 percent of the respondents disagreed that the decisions made by the MFI officials on their savings plans were not very good with 34 percent strongly disagreeing with the statement.

**Table 21**

**The MFI Is the Most Expensive Source of Finance**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
Strongly disagree	9	25.7
Disagree	18	51.4
Neutral	8	22.9
Total	35	100

Table 21 Shows that 51 percent of the respondents disagreed and a further 26 percent strongly disagreeing that the MFI is the most expensive source of finance with 25 percent opting to be non committal or neutral in their opinions.

**Table 22**

**The Other Sources Have Too Complicated a Process**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
Strongly disagree	5	14.3
Disagree	13	37.1
Neutral	14	40.0
Agree	3	8.6
Total	35	100

Table 22 Shows that 40 percent of the respondents were neutral on the other sources of finance having too complicated processes with 37 percent disagreeing. There was however, 9 percent who agreed with the statement.

**Table 23**

**There Are Far Cheaper Sources than Banks and MFI for Business Finances**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
Strongly disagree	14	40.0
Disagree	15	42.9
Neutral	5	14.3
Strongly agree	1	2.9
Total	35	100

Table 23 Shows that 42 percent of the respondents strongly disagreed that there are other cheaper sources than banks and MFIs for business finance, while 43 percent disagreeing with the statement.

**Table 24**

**Extent of Using ATM Card for Business Transactions**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
Very great extent	7	20.0
Great extent	21	60.0
Not much	6	17.1
Not at all	1	2.9
Total	35	100

Table 24 Shows that 60 percent of the respondents used an ATM in their business transactions to a great extent in their business transactions.

**Table 25**

**Frequency of Using M-Pesa Services for Business Transactions**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
Very often	9	26.0
Often	21	60.0
Rarely	3	8.6
Not at all	2	5.4
Total	35	100

Table 25 Shows that 60 percent of the respondents used M-Pesa services to transact in their business often with 26 percent using M-Pesa very often with only 6 percent not at all using M-Pesa services to transact in their business.

**Table 26**

**Ever Used Your Mobile Phone to Transact With the MFI**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
Very often	11	31.4
Often	21	60.0
Neutral	3	8.6
Total	35	100

Table 26 Shows that 60 percent often uses their mobile phones to transact with the MFI with 31 percent doing this very often. However, 9 percent were not sure how often they used their mobile phones to transact their business.

**Table 27**  
**No Need to Use M-Pesa Service in My Business**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
Strongly agree	15	42.9
Agree	15	42.9
Neutral	4	11.4
Disagree	1	2.9
Total	35	100

Table 27 Shows that 43 percent of the respondents strongly agreed that there was no need to use M-Pesa service in their business and a further 43 percent agreed. However, there was 3 percent who disagreed with the statement.

**Table 28**  
**The Mobile Phone Transactions with the MFI Are Risky**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
Strongly disagree	17	48.6
Disagree	16	45.7
Neutral	2	5.7
Total	35	100

Table 28 Shows that 49 percent of the respondents strongly disagreed with the statement that the mobile phone transactions with MFI were risky with 46 percent disagreeing. However, 6 percent were neutral or non-committal.

### 4.3.1 Nonparametric Correlations

**Table 29**  
**Influence of Financial Technological Literacy**

		Use of M-pesa service in business	mobile phone transactions with the MFI	Use of the ATM
Use of M-pesa service in business	Pearson Correlation	1	-.053	1.000
	Sig. (1-tailed)		.381	.000
	N	35	35	35
mobile phone transactions with the MFI	Pearson Correlation	-.053	1	-.053
	Sig. (1-tailed)	.381		.381
	N	35	35	35
Use the ATM	Pearson Correlation	1.000	-.053	1
	Sig. (1-tailed)	.000	.381	
	N	35	35	35

Table 29 presents the non parametric correlation coefficient of the Financial Technological Literacy on financial decisions of Micro Finance clients in Embu County. The correlation co-efficient index between the Use of M-pesa service in business and mobile phone transactions with the MFI is 0.053 which is negligible as it falls within  $\pm 0.002$  to  $\pm 0.200$ . However this was found not to have any influence on financial decision making of the MFI clients because the significance level was found to be 0.381 which is above 0.05 ( $P > 0.05$ ).



From table 29 the correlation co-efficient index between Use of M-pesa service in business and Use the ATM is 1.000 which is strong as it falls within  $\pm .812$  to  $\pm 1$ . However, this was found to have influence on financial decision making of the MFI clients because the significance level was found to be .000 which is below 0.05 ( $P < 0.05$ ).

From the table 29 the a correlation co-efficient index between Use the ATM and Use of mobile phone transactions with the MFI is -.053 which is negligible as it falls within  $\pm 0.002$  to  $\pm 0.200$ . However, this was found to have no influence on financial decision making of the MFI clients because the significance level was found to be 0.381 which is above 0.05 ( $P > 0.05$ ).

**Table 30**

**Financial Investment Literacy**

		The decisions made in the MFI grow	The Decisions my friends being better	The decisions my by the MFI need for training in savings decisions	
The decisions made in the MFI grow	Pearson Correlation	1	.663	.201	.663
	Sig. (1-tailed)		.000	.124	.000
	N	35	35	35	35
The Decisions my friends being better	Pearson Correlation	.663	1	.289	1.000
	Sig. (1-tailed)	.000		.046	.000
	N	35	35	35	35
The decisions the MFI officials are not very good	Pearson Correlation	.201	.289	1	.289
	Sig. (1-tailed)	.124	.046		.046
	N	35	35	35	35
need for training in savings decisions	Pearson Correlation	.663	1.000	.289	1
	Sig. (1-tailed)	.000	.000	.046	
	N	35	35	35	35

Table 30 presents the non parametric correlation coefficient of the Financial Investment Literacy on financial decisions of Micro Finance clients in Embu County. The correlation co-efficient index between the investments decisions made in the MFI to grow and The Decisions by MFI officials being not very good is 0.201 which is very weak as it falls within  $\pm 0.002$  to  $\pm 0.800$ . However this was found to have no influence on financial decision making of the MFI clients because the significance level was found to be 0.124 which is more than 0.05 ( $P < 0.05$ ).

The correlation co-efficient index between the investments decisions made in the MFI to grow and the decisions by my friends being better is 0 .663 which is average as it falls within  $\pm 0.612$  to  $\pm 0.800$ . However, this was found to have influence on financial decision making of the MFI clients because the significance level was found to be 0 .000 which is below 0.05 ( $P > 0.05$ ).

The correlation co-efficient index between the decisions made investments in the MFI to grow and need for training in savings decisions is 0 .663 which is average as it falls within  $\pm 0.612$  to  $\pm 0.800$ . However, this was found to have influence on financial decision making of the MFI clients because the significance level was found to be 0.000 which is below 0.05 ( $P < 0.05$ ).

The correlation co-efficient index between the decisions by friends being better and the need for training in savings decisions is 1.000 which is strong as it falls within  $\pm 0.812$  to  $\pm 1.00$ . However, this was found to have influence on financial decision making of the MFI clients because the significance level was found to be 0.000 which is below 0.05 ( $P < 0.05$ ).

The correlation co-efficient index between the Decisions by friends being better and the decisions by MFI officials not being very good is 0.289 which is relatively weak as it falls within  $\pm 0.212$  to  $\pm 0.400$ . However, this was found to have influence on financial decision making of the MFI clients because the significance level was found to be .046 which is below 0.05 ( $P < 0.05$ ).

**Table 31**

**Influence of Financial Literacy on Sources of Finance**

		The MFI is the most expensive source of finance	The other sources have too complicated a process	There are far cheaper sources than banks and MFI for business finances
The MFI is the most expensive source of finance	Pearson Correlation	1	.462	.646
	Sig. (1-tailed)		.003	.000
	N	35	35	35
The other sources have too complicated a process	Pearson Correlation	.462	1	.372
	Sig. (1-tailed)	.003		.014
	N	35	35	35
There are far cheaper sources than banks and MFI for business finances	Pearson Correlation	.646	.372	1
	Sig. (1-tailed)	.000	.014	
	N	35	35	35

Table 31 presents the non parametric correlation coefficient of the Financial Literacy on Sources of Finance influencing financial decisions of MFI clients in Embu County. The correlation co-efficient index of the MFI being the most expensive source of finance and the other sources having too complicated a process is .462 which is moderate as it falls within  $\pm 0.412$  to  $\pm 0.600$ . However, this was found to have influence on financial decision making of the MFI clients because the significance level was found to be 0.0030 which is below 0.05 ( $P < 0.05$ ).

From table 31, the correlation coefficient index between MFI as the most expensive source of finance and the existence of far cheaper sources than banks and MFI for business finances is 0.646 which is average as it falls within  $\pm 0.612$  to  $\pm 0.800$ . However, this was found to have influence on financial decision making of the MFI clients because the significance level was found to be 0.000 which is below 0.05 ( $P < 0.05$ ).

Further, from table 31, the correlation coefficient index between the existence of there being far cheaper sources of finance than banks and the other sources having too complicated a process is 0.372 which is relatively weak as it falls within  $\pm 0.212$  to  $\pm 0.400$ . However, this was found to have influence on financial decision making of the MFI clients because the significance level was found to be 0.014 which is below 0.05 ( $P < 0.05$ ).

#### **4.4 Summary of Major Findings**

The study was an investigation of the influence of financial literacy on financial decisions of micro finance institution clients in Embu County. Specifically on what influence financial technological literacy, financial investment literacy and financial literacy on sources of finance has on the financial decisions of the micro finance clients.

The findings indicate that majority of the respondents had individual membership to the MFIs and majority of the respondents were aged between 26-34 years of age. The study found that majority had been members of the MFIs for two years and also found the majority of the respondents indicated as having secondary school level education and that majority of the respondents had active management responsibilities in the groups that are financed by the MFIs.

The study found while majority of the respondents had training in business management they got help in making financial decision from fellow group members. The study indicate that majority of the respondents had never undertaken any training in any

business finance management and that majority of the respondents were informed on the possible sources of business finance by group members.

On opinions of the respondents majority indicate that level of literacy on MFI has made people poor and that majority of the respondents strongly disagreed with the statement that they feared using ATM for business transaction. The study further found that majority indicated using M-Pesa services in their businesses to a great extent or very great extent. The study found that majority of the respondents agreed that financial literacy was the ability to know when to invest or when not to invest

Study findings indicate that majority of the respondents had management responsibilities in the groups funded by the MFIs to a great extent and that majority of the respondents had to a great extent, adequate financial knowledge to manage their business. The study further found that majority of the respondents strongly disagreed that the decisions made by their friends were better than theirs with majority of the respondents disagreeing that the decisions made by the MFI officials on their savings plans were not very good.

The study found that majority of the respondents disagreed that the MFI is the most expensive source of finance and majority of the respondents were neutral on the other sources of finance having too complicated processes. The study found that majority of the respondents strongly disagreed that there are other cheaper sources for business finance than banks and MFIs; however majority of the respondents used an ATM in their business transactions to a great extent.

The study also found that majority of the respondents used M-Pesa services to transact their business often with majority using their mobile phones to transact with the MFI. Majority of the respondents strongly agreed that there was no need to use M-Pesa service in their business while majority of the respondents strongly disagreed with the statement that the mobile phone transactions with MFI were risky.

## **4.5 Discussions**

### **4.5.1 Influence of Financial Literacy on Sources of Finance on the Financial Decisions of the Micro Finance Clients**

The MFIs as an expensive source of finance was found to have influence on financial decision making of the MFI clients while existence of far cheaper sources than banks and MFI for business finances also influence on financial decision making of the MFI clients. Equally, other sources of finance having too complicated a process, was also found to have an influence on financial decision making of the MFI clients. These findings concur with Ben, (2010) who found that consumers who understand the merits of responsibly managing their financial resources are more likely to effectively and profitably utilize the services of a traditional financial institution. In addition, the finding is confirmed in the work by Stango and Zinman (2007), which shows that those who are not able to correctly calculate interest rates out of a stream of payments end up borrowing more and accumulating lower amounts of wealth.

### **4.5.2 Influence of Financial Investment Literacy on the Financial Decisions of the Micro Finance Clients**

On whether financial investment literacy made investments in the MFI to grow was found to have influence on financial decision making of the MFI clients while the need for training in savings decisions was found to have influence on financial decision making too. In addition, decision making of the MFI clients by friends being better was found to have influence on financial decision making of the MFI clients. These study findings agree with Bernheim, Garrett and Maki (2001) who found that those who took a financial management course in high school tended in middle age to save a higher proportion of their incomes than others. On the other hand, Mandell (2006a) found little positive impact of a well-regarded high school personal finance course on post high school financial behavior from one to five years after taking such a course.

### **4.5.3 Influence of Financial Technological Literacy on the Financial Decisions of The Micro Finance Clients**

Use of the ATM accompanied by M-pesa was found to have influence on financial decision making of the MFI clients. Use of M-pesa service in business was however not found to have any influence on financial decision making of the MFI clients while use of mobile phone transactions was also found to have no influence on financial decision making of the MFI clients.

This findings agree with Juniper (2009) findings that although the number of mobile phone banking (M-Banking) users will exceed 150 million globally by 2011 in contrast with trends in M-Banking thus far with consumer uptake around the world falling below the expectations of both academics and industry specialists (Kleijnen, et al, 2004; Riivari, 2005; Suoranta and Mattila, 2004). This supports the notion that technological advances and service availability do not automatically lead to widespread adoption and use (Wang, et al, 2004)



## **CHAPTER FIVE**

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

#### **5.0 Introduction**

This chapter presents the summary of the study, conclusions, policy recommendations, and limitations of the study. The chapter ends with suggestions for further research to fill gaps identified as important by the researcher.

#### **5.1 Summary of the Study**

The study examined the influence of financial literacy on financial decisions of microfinance institution clients in Embu County. In particular the study focused on what influence financial technological literacy, financial investment literacy and financial literacy on sources of finance has on financial decisions of the microfinance clients. Numerous academic journals were reviewed and it was observed that studies have discovered the importance of financial literacy for various aspects of household well being and economic stability.

The study adopted descriptive ex-post research design. While the study targeted on clients of the 25 registered MFIs in Embu County, due to homogeneity, 40 respondents were through stratified random sampling design selected from 8 MFIs which had a total of 2,168 members as of October 2012. The researcher opted for primary data collection method in which case a questionnaire was administered to the sample selected. The collected data was organized to answer set objectives of the study. The data was coded, tabulated in excel and analyzed using statistical package for social sciences (SPSS) computer program. The data was further analyzed using descriptive statistics, frequency tables and percentages. Test of significance was done by use of spearman's correlation coefficient using inferential statistics.

The study found that financial literacy had influence on financial decision making of microfinance institution clients. The study also observed that MFI clients appreciated the need to acquire financial literacy for financial decision making.

## **5.2 Conclusion**

The study concluded that although Mpesa and mobile phone transactions in business had no influence on financial decision making, use of Mpesa and ATM had influence on financial decision making of microfinance institutions' clients. This contributed to savings and investments. Therefore financial technological literacy had significant influence on financial decision making of the MFIs clients.

While decisions by MFIs officials were found not to have influence on financial decision making of MFI clients, decisions made by friends and group members were found to have influence on financial decision making of MFI clients as they made investments to grow. In addition, since training on financial investments was observed to have influence in financial decision making, financial investments literacy was concluded to have significant influence on financial decision making of the MFI clients.

On influence of financial literacy on sources of finance, the study observed that although MFIs may be a more expensive than other sources of business finance it influenced decision making of microfinance clients by a way of weighing the available options. Similarly, existence of other cheaper sources of finance than banks with complicated processes influenced decision making of the MFI clients. It was therefore concluded that financial literacy on sources of finance had significant influence on financial decision making of microfinance institutions clients.

From the above, it was therefore concluded that financial technological literacy, financial investments literacy and financial literacy on sources of finance had significant influence on financial decisions of microfinance clients.

### **5.3 Policy Recommendations**

MFI Managers must acknowledge the challenges being faced by their clients as they transact with them through the MFI officials. Such challenges are the lack of training in financial management and the need to be able to make informed decisions without assistance of group members. Further the management must acknowledge that MFI clients may not be receiving the necessary advice from MFIs staff. It would therefore be appropriate for the MFI managers to invest in training programs on financial literacy for effective decision making by microfinance clients.

The government of Kenya having realized the need to empower its citizens through several funding schemes, should develop a policy for all financing organizations to develop financial literacy training programs so as to improve decision making of the various potential and existing clients.

In addition, the Government can attempt to get involved with the efficacy of the MFI programmes by supporting the MFI clients to directly get training on financial management skills or indirectly through a voucher scheme to enable the clients advance their financial management skills.

### **5.4 Limitations of the Study**

To achieve more representative findings the study would have expanded the scope to all MFIs in Kenya. However, due to time frame required to complete the study this would not have been possible hence time was a limitation.

It would have been appropriate to cover a larger sample from the population of study in order to achieve a more representative position. However, the cost of distributing the questionnaires, follow ups and data analysis would have been prohibitive. During the study therefore, cost was a limitation.

The researcher used stratified random sampling design in the study. This was necessary in order to target the more educated in the MFI membership. The general literacy level was therefore a limitation.

The MFI- Client relationship has a high level of confidentiality. The questionnaire was therefore developed with caution to avoid breaching the confidentiality. In particular, it was not possible to get the opinion of the MFI staff on the influence of financial literacy on financial decision making of specific clients.

### **5.5 Suggestion for further study**

This study was keen to investigate the influence of financial technological literacy, financial investment literacy and financial literacy on sources of finance on MFI client's financial decisions. However more can be investigated on the extent of the MFIs investing in the financial Literacy of their clients.

More studies may also investigate on the skills inventory of the MFI clients in working capital management. This may contribute to improving business finance management and increase wealth of the MFI clients.

A comparative study of influence of financial literacy on individual and group decision making may be appropriate. The researcher makes this recommendation because it was found that financial decisions made by group members were observed to be better than individual decisions.

The researcher also recommends studies on influence of financial literacy on financial decision making of clients in other areas e.g insurance industry.

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## APPENDICES

### APPENDIX 1

#### QUESTIONNAIRE FOR MFI CLIENTS

I am a student of University of Nairobi undertaking an MBA Finance. This questionnaire is for an academic research and all the Information collected will be treated as confidential and personal details collected here will not form part of the final research. The information you give will go a long way in helping me achieve my objectives

Please fill out the details below and tick the answer most suitable.

#### PART: A

Q.1. which is your institution .....

Q.2. What is your type of membership in the MFI?

Individual                       Group

Q.3. Indicate your age bracket below

Below 25 years       26-34 years       35-44 years   
45-54 years       above 55 years

Q4. How many years have you been a Member of this MFI?.....

Q5. What is your highest level of Education?

University       College       High school       Primary

## Section B: Financial Literacy

Q5. To what extent do you have active management responsibilities in the group financed by the MFI?

Yes  No

Q7. To what extent are you competence in business management?

Very grate extent  Grate extent.  Not much  Not at all

Q8. To what extent have you undertaken any business finance management training?

Very grate extent  Grate extent.  Not much  Not at all

Q9. To what Extent would you say you have adequate financial knowledge to manage your business?

Very great extent

Greatly

Not much

Not at all

## SECTION C: Literacy on Savings Decisions Making

Q10. Who helps you make financial savings Decisions as a member of the MFI?

The MFI officials

My group members

My children

My spouse

Myself

Q11. Please tick the most appropriate alternative in the boxes provided

1= strongly disagree 2= Disagree 3=Neutral 4 = Agree 5= strongly agree

	1	2	3	4	5
The decisions I make have made my investments in the MFI grow					
The Decisions on savings made by my friends are better than mine					
The decisions made by the MFI officials on our savings plan are not very good					
I need to be trained to make better decisions on savings					

### Part D: Literacy on Sourcing Business Finance

Q12. Who informs you on the possible sources of business finance?

The MFI officials

My group members

My children

My spouse

Myself

Q13. How many other sources of finance have you borrowed from in the last two years?

None

one

two

three

more than Three

Q14. Please tick the most appropriate alternative in the boxes provided

1= strongly disagree 2= Disagree 3=Neutral 4 = Agree 5= strongly agree

	1	2	3	4	5
The MFI is the most expensive source Of finance					
The other sources have too complicated a process					
There are far cheaper sources than banks and MFI for business finances					

**Part E: Technology Driven Financial Literacy**

Q15. To what extent do you use ATM card for your business transactions with the MFI?

Very grate extent  Grate extent.  Not much  Not at all

Q16. To what extent use M-pesa Services to transact in your business?

Very grate extent  Grate extent.  Not much  Not at all

Q17.How often have you used your Mobile phone to transact with the MFI?

Very often  Often  Rarely  Not at all



Q18. Please tick the most appropriate alternative in the boxes provided

	1	2	3	4	5
The mobile phone transactions with the MFI are risk					
There is no need to use M-pesa services in my business					
I fear to use the ATM					

Q19. To what extent do you need to be trained on investing in the financial management?

Very grate extent  Grate extent.  Not much  Not at all

Q20. In your opinion the MFI have made people poorer than they were before due to joining many MFIs

Strongly disagree  Disagree  Neutral  Agree  strongly agree

Q21. Financial Literacy is the ability to know when to invest or when not to invest

Agree  Not sure  Disagree

***Thanks for the co-operation in filling the questionnaire***