

**EFFECT OF FINANCIAL LITERACY ON PERSONAL  
FINANCIAL MANAGEMENT  
OF EMPLOYEES OF MUMIAS SUGAR COMPANY LIMITED**

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## **DECLARATION**

I, the undersigned, declare that this is my original work and has not been submitted to any other college, institution or university other than the University of Nairobi for academic credit.

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## **DEDICATION**

I wish to dedicate this project to my family and friends who were of much support when writing this project.

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## **ABBREVIATIONS**

ANOVA	Analysis of variance
HRS	Health and Retirement Study
MSC	Mumias Sugar Company Limited
OECD	Organization for Economic Co-operation and Development
PACFL	Presidents Advisory Council on Financial Literacy
SPSS	Statistical package for social sciences

## ABSTRACT

The study was guided by two objectives namely to establish the level of financial literacy of Mumias Sugar company employees; and Effect of financial literacy on saving practices and social security planning of Mumias Sugar Company employees. To achieve this objective the study used descriptive survey design to explore the relationship between the different variables. The study used primary data collected from semi-structured questionnaires. Data collected was edited to ensure that it was correct and complete thus reducing biases, increasing the precision and achieving consistency. Data was then analyzed by using regression analysis and descriptive statistics which was presented using mean, correlation, standard deviation and percentages. The study findings revealed that majority of the employees of Mumias Sugar Company had a good background on financial knowledge and skills. With regard to their retirement plans, it was revealed that most of the respondents agreed to a moderate extent that they had set stable retirement plans. The study further revealed that even though most of the respondents fully understood the concept of estate planning and its significance in financial management, most of the employees did not have a will. The findings also showed that most respondents moderately applied their financial knowledge in relation to managing credit and other liabilities. In general, it was observed that the employees implemented their financial knowledge and skills in personal financial management. The results of the regression showed that there was a positive relationship between financial literacy and personal financial planning of employees in Mumias Sugar Company. This is explained by the by the level of significance of the independent variables whose level of significance was below 5%. It was concluded that that most of the employees of Mumias Sugar Company were financially literate and this highly contributed to better personal financial planning, saving practices and social security planning. The challenge faced by the researcher was that there was no control over the data collection; some of the respondents gave out incomplete questionnaires while others failed to fill the questionnaires. Most of the respondents agreed to participate on condition that the information was only for academic purposes only and therefore would not be divulged to any other party. The study recommends that a study should be conducted on the effect of financial literacy on personal financial management on small and medium enterprises to find out whether the owners of small businesses understand the concepts of financial management and its effect on personal financial management then, conclusions and recommendations can be drawn in accordance to the findings of the study.

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background to the Study

Financial literacy has received increased attention since the global financial crisis and the literature confirms that it is correlated with personal financial management . In parallel, financial education programs have grown in popularity and an increasing number of countries are developing national financial education strategies and making more investments in related programs. Literature has recently emphasized the association between financial literacy or numerical and mathematical ability, on the one hand, and risk diversification, retirement savings, investment portfolios on the other.

Traditional economic theory suggests that forward-looking individuals maximize expected lifetime utility using economic information to accumulate and then decumulate wealth effectively over their lifetimes. Yet survey evidence reveals that fewer than half of U.S. workers have even attempted to estimate how much money they might need in retirement, and many older adults face significant retirement saving shortfalls (Lusardi and Mitchell, 2007). Numerous economic explanations for these phenomena have been suggested including dispersion in discount rates, risk aversion, and credit constraints, but the empirical literature exploring such factors thus far has been unable to account for much of the observed differentials in wealth (Bernheim and Garrett, 2003).

The present study seeks to evaluate whether people who find it difficult to understand their financial environment are also less likely to accumulate wealth. Specifically, we examine the links between financial literacy that is the ability to process economic information and make informed decisions about household finances, and personal financial management. Gustman et al., (2007), Previous studies have reported strong correlations between financial literacy and asset accumulation as well as retirement planning. These findings have prompted policymakers to support efforts to enhance household personal financial management and welfare through increasing financial literacy. For instance, the U.S. President's Advisory Council on Financial Literacy recently stated that: "While the crisis has many causes, it is undeniable that financial illiteracy is one of the root causes, Sadly, far too many individuals do not have the basic financial skills necessary to develop and maintain a budget, to understand credit, to understand investment vehicles, or to take advantage of the banking systems.

### **1.1.1 Financial Literacy**

Financial literacy is the ability to use knowledge and skills to manage financial resources effectively for a lifetime of financial well-being while financial education is the process by which people improve their understanding of financial products, services and concepts, so they are empowered to make informed choices, avoid pitfalls, know where to go for help and take other actions to improve their present and long-term financial well-being (NCEE, 2005). Moore (2003) explained that individuals are considered financially literate if they are competent and can demonstrate they have used knowledge they have learned. Financial literacy cannot be measured directly so proxies must be used. Literacy is obtained through practical experience and active integration of knowledge. As people become more literate they

become increasingly more financially sophisticated and it is conjectured that this may also mean that an individual may be more competent” Many concepts, such as numeracy, share features with financial literacy. However, numeracy applies much more broadly than to just financial matters and represents a much more basic skill set more closely aligned to more general cognitive abilities (OECD, 2005). Hence, we argue that it is more productive to keep general numeracy distinct from financial literacy, instead treating it as synonymous to financial literacy.

As would be expected from the diversity of conceptual definitions, the methods used to measure financial literacy also vary quite substantially. Even though the PACFL report is not an empirical study, the authors do provide a list of concepts that a person exiting a financial education program should understand in order to be considered financially literate. These include, for example, understanding the capital market system and financial institutions, household cash flow, reasons for having an emergency fund, and the fundamentals of credit granting.

We measure financial literacy using a rich set of 12 questions. The “core” first three financial literacy queries were developed and implemented in the United States Health and Retirement Study (HRS); they have also been adopted by several other international surveys. A second, more “sophisticated,” set of three questions was devised for a special HRS module (Lusardi and Mitchell, 2007) to measure more complex concepts such as compound interest, inflation, and risk diversification. A final set of questions touches on key aspects of the Chilean retirement system, including the mandatory contribution rate, minimum male and female retirement ages,

how pension benefits are computed, whether people know about the welfare program for the elderly, and whether people know they can contribute to a Voluntary Pension system (Bernheim et al, 2001).

### **1.1.2 Personal Financial Management**

Finance may be defined as the art and science of managing money. The major areas of finance are namely financial services, managerial finance and corporate finance and financial management (Campbell and John, 2006). While financial services is concerned with the design and delivery of advice and financial products to individuals, businesses and governments within the areas of banking and related institutions, financial management is concerned with the duties of the finance managers in the business firm. Financial managers actively manage the financial affairs of any type of business, namely, financial and non-financial, private and public, large and small, profit-seeking and not-for-profit. They perform such varied tasks as budgeting, financial forecasting, cash management, credit administration, investment analysis, funds management and so on (John, 2006). In recent years, the changing regulatory and economic environments coupled with the globalisation of business activities have increased the complexity as well as the importance of the financial managers' duties. As a result, the financial management function has become more demanding and complex (OECD, 2005).

Financial management on the other hand has been defined by Pandey (1999) as a managerial activity that is concerned with the planning and controlling of a firm's financial resources. The resources considered here include assets both tangible and

intangible assets. It also includes managing the firm's indebtedness in order to minimise the cost of doing business. This definition is applicable to households and individuals as well since there is need for planning and controlling households' and individuals resources for wealth creation, financial stability and peaceful retirement. As individuals become literate they increase their financial sophistication and it is assumed that this also means that an individual has become more competent (Olima, 2013). Mandell (2007) however suggests that it is the ability to consider new and complex financial instruments and be able to make an informed choice of instruments and extent of use that would be in an individual's own best interests. The National Council on Economic Education (NCEE) (2005) on the other hand defines financial literacy as familiarity with basic economic principles, knowledge about the U.S. economy, and understanding of some key economic terms.

### **1.1.3 Financial Literacy and Personal Financial Management**

Managing personal finances is an important and often difficult issue. Personal debt continues to rise (Bennett, 2006), bankruptcy rates are uncertain due to recent changes in bankruptcy legislation, while the personal savings rate remains in the low at negative 1.5% in June 2006 in developing nations. In The Bankruptcy Abuse Prevention and Consumer Protection Act of 2005 requires consumers who file bankruptcy to complete a personal financial management class before the bankruptcy can be discharged, suggesting that more knowledge will help avoid future financial difficulties (White, 2005).

Educators believe that financial education leads to improved financial literacy and financial security for families (Garman, 1999). There has been an increase in interest in how financial education can equip individuals with the skills needed to avoid financial problems and recover from the consequences of extreme debt such as bankruptcy. Researching the effectiveness of financial education programs can guide program development and refinement (Hilgert, Hogarth and Beverly, 2003) and help educators find a method for dealing with community needs related to family financial management.

Research on successful financial education methods is scarce (Financial Literacy and Education Commission, 2006), and even though some research suggests that use of sound financial practices can provide families with greater personal financial management (Beutler and Mason, 1987), it is unclear whether there is a direct relationship between education and improved economic well-being (Braunstein and Welch, 2002). Financial literacy programs are designed with the goal of helping individuals adopt sound financial practices that promote economic health and improved quality of life. It is important to know if that goal is being met. (Hira, 1987)

#### **1.1.4 Employees of Mumias Sugar Company**

In the year 2013, Mumias Sugar Company Limited had 1,932 employees and Kenya shillings 2,163 million was incurred as salary costs and wages. Employees of Mumias became attractive for research in this area as they currently comprise of almost 2,000 employees with varied diversity of back ground and education levels. The diversity is in areas of age, education background and financial literacy levels. It is also attractive

as MSC is not a financial or banking institution which makes it different from the organization covered by the study Nyamute & Monyoncho (2008), in terms of expected attention to financial knowledge through every day work and training.

The sugar industry in Western Kenya has been chosen to investigate the study variables relationship because according to Kenya Sugar Board (2009), the sugar industry is a major contributor to the agricultural sector which is the backbone of the Kenyan economy and supports livelihoods of at least 25% of the population. Mumias Sugar Company Ltd is selected owing to its history as market leader in the respective sugar industries and the availability of public information pertaining to its operations and performance.

## **1.2 Research Problem**

Evidence shows that those who are less financially literate are likely to face more challenges with regard to debt management, savings and credit, and are less likely to plan for the future. Regulators of financial services, have a responsibility to help consumers of financial services in making informed financial decisions so as to promote consumer protection, public awareness, and maintenance of market confidence (Mwangi and Kihui 2012). One may argue whether financial literacy affects knowledge of pensions and Social Security benefits. Using data from a sample of older US individuals, Gustman, Steinmeier and Tabatabai (2010) do not find any relationship between basic cognitive skills (numeracy) and knowledge of retirement plan characteristics and Social Security. While there is a positive relationship between pension, wealth and knowledge, Gustman, Steinmeier and Tabatabai (2010) argue that

the causality is more likely to run from pension wealth to pension knowledge than the other way around, and that the positive numeracy–wealth relationship should not be taken as evidence that increasing cognitive skills and numeracy will increase the wealth of households as they enter into retirement. Bernheim and Garrett (2003) were among the first to note that policymakers and researchers might have overlooked the importance of financial literacy to explain savings and differences in saving behaviour. Since then many studies have emphasised the role of financial knowledge but, in the absence of specific literacy measures, resort to crude proxies (Calvet, Campbell and Sodini, 2005).

The disadvantage of these proxies is that there is no way to disentangle the effect of financial literacy from the effect of the proxy variable. For example, by using education as a measure of financial literacy, one is not able to separate the independent effect of financial knowledge from the impact of the education level, in many regression equations, education also serves as a proxy for lifetime income. In the past few years researchers have increased their efforts to develop specific measures of financial knowledge and have also investigated the relationship between financial literacy and financial decision-making. Hilgert, Hogarth and Beverly (2003) developed a set of true/false questions to measure financial knowledge and explored the relationship between financial knowledge and money management. Lusardi and Mitchell (2005) pioneered a module to measure financial literacy that was part of the 2004 Health and Retirement Study (HRS).

More recently, Christelis, Jappelli and Padula (2005) showed that there is a positive relationship between the decision to invest in stocks and specific measures of financial literacy and cognitive ability. An increasing number of studies document the prevalence of financial mistakes. Agarwal, Driscoll, Gabaix and Laibson (2009) provide evidence of financial mistakes in the loan market, with many households paying excessive fees or too-high interest rates on credit card debt, home equity loans and mortgages (Moore, 2003). Calvet, Campbell and Sodini (2005) show that in Sweden a country that is often considered to have well-informed investors many households hold under diversified portfolios or do not participate in financial markets at all. Several authors have also stressed that the welfare costs of financial mistakes are not negligible (Campbell and John, 2006).

Cocco, Gomes and Maenhout (2005) explained that most of the studies have been done in developed states. Secondly, there is conflicting information on financial literacy and personal financial management; the study will investigate the effect of financial literacy on financial accumulation of employees at Mumias sugar Company Ltd in Kenya.

Nearly half of Kenya's population lives on less than \$2 a day and approximately 11 million do not have access to financial services, especially youth and those living in rural areas. The majority of the youth is engaged in the informal economy and need financial services as well as business training to improve their livelihoods (Mwangi, 2012). Studies estimate that there are close to seven million youth in need of such services. Additionally, women below the poverty line face particular challenges with

regards to accessing employment, finance and technical skills to run enterprises. In order to understand the link between household financial decisions and financial literacy, there is need to understand household's effective numeracy strength, as well as the connection between financial literacy and access to credit services.

### **1.3 Research Objective**

The objectives of the study were to establish:

- i. Level of financial literacy of Mumias Sugar company employees; and
- ii. Effect of financial literacy on saving practices, estate planning and debt management practices of Mumias Sugar Company employees.

### **1.4 Value of the Study**

This rigorous analysis of the impact of financial literacy on personal financial management should be useful in informing governments and their policy advisers around the world, as they consider new initiatives for financial education.

The sugar industry in Western Kenya has been chosen to investigate the study variables relationship because according to Kenya Sugar Board (2009), the sugar industry is a major contributor to the agricultural sector which is the backbone of the economy and supports livelihoods of at least 25% of the Kenyan population. The sugar subsector accounts for about 15% of the agricultural GDP, is the dominant employer and source of livelihoods for most households in Western Kenya (Kenya Sugar Board, 2009). The results of this study can be used to educate the sugarcane farmers as well as Mumias Sugar employees.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

The purpose of this segment of the research is to determine how behaviour theory can be applied to provide insight regarding financial behaviour. In order to motivate financial behaviour change, better understanding is needed about how behaviours are formed and how to help consumers change undesirable financial behaviours and develop positive ones. This section also looks at the studies that have been carried out so far to address research gaps from the theories put forward so far and in the literature.

#### **2.2 Theoretical Review**

The theoretical framework used to model consumption and saving decisions posits that rational and foresighted consumers derive utility from consumption over their lifetimes. In the simplest format, the consumer maximizes a lifetime expected utility subject to an intertemporal budget constraint.

##### **2.2.1 Social Learning Theory**

Bandura, and Ross (1961) posits that social learning theory illustrates how social factors such as sources of information & financial advice influence in shaping a person's behavior. The financial attitudes and values people have about money come from their environment. The effects of social interactions on individual behavior have been modeled, tested and applied to a wide variety of situations (Bandura, 1977). Social interaction may affect financial decisions as people receive and process

information through interacting with others. In a US pension plan participation study, Greenspan (2002) found that peer effects influenced retirement savings decisions because many people had not carefully thought through the advantages and disadvantages of particular plans for themselves. Many employees used information from peers when deciding on participation as they may lack their own reasoned information for making sound retirement investment decisions. Moreover, beliefs about social norms will additionally influence employee decisions due to a desire to behave similarly to those in their social group (Gravetter and Forzano, 2003).

According to this theory, investors are likely to make investment decisions based on the information available in the market, if investors have information about an investment which is likely to generate higher returns in future investors are more likely to invest in such an investment to accrue higher returns in future (Goel and Dolan, 2003). The proponents of this theory, the behavioral theorists believed that learning led to a permanent change in behavior, observational learning demonstrates that people can learn new information without demonstrating new behaviors especially when considering making financial decisions (Glaeser and Scheinkman, 2003).

### **2.2.2 Psychosocial Theory**

Psychosocial theory focuses on developmental conflicts that are also relevant to financial behavior: trust, will power, and self-regulation. Financial security requires one to trust banks and other financial authorities in being responsible with one's money. Allon (2012) found that mistrusting individuals were less likely to buy stocks, and, if they did, they bought less. As evidenced by the recent financial crisis, the

ability to ascertain who to trust is critical to making appropriate financial sound decisions (Idowu, 2010).

Psychosocial theory supports financial literacy education for preadolescents, the stage at which will power and self-regulation is hypothesized to develop. According to this theory, the engagement in positive financial decisions is dependent on the positive identity, self-confidence and independence that develops during adolescence and continues into adulthood (Lusardi and Mitchell, 2006).

Here the role of primary caregivers is critical, but the social and cultural norms of the family and community are also important. Falicov (2001) concluded that the social context of family life, individual boundaries, and human interactions play a significant role in how money is viewed among Latinos and Anglo-Americans. This is illustrated by research showing that the percentage of stockownership in a community makes an individual more likely to participate themselves (Atkinson and Messy, 2005).

### **2.2.3 Financial Literacy Theory**

According to this theory, Gallery, Newton and Palm (2011) framework financial knowledge is a form of investment in human capital, and many empirical surveys establish that people need to know much more to become informed. The authors show how financial literacy shapes economic outcomes. They conclude with thoughts on research needs to better inform theoretical and empirical models as well as public policy. 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 according to dual-process theories: intuition and cognition. Dual-process theories (Idowu 2010) embrace the idea that decisions can be driven by both intuitive and cognitive processes. Dual-process theories have been studied and applied to many different fields, e.g., reasoning and social cognition (Idowu 2010).

Financial literacy remains an interesting issue in both developed and developing economies, and has elicited much interest in the recent past with the rapid change in the finance landscape. Atkinson and Messy (2005) define financial literacy as the combination of 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 assistance, and to take other effective actions to improve their financial well-being.

Financial literacy helps in empowering and educating investors so that they are knowledgeable about finance in a way that is relevant to their business and enables them to use this knowledge to evaluate products and make informed decisions. It is widely expected that greater financial knowledge would help overcome recent difficulties in advanced credit markets (Lusardi and Oliver, 2006).

Financial literacy prepares investors for tough financial times, through strategies that mitigate risk such as accumulating savings, diversifying assets, and purchasing insurance. Financial literacy facilitates the decision making processes such as payment of bills on time, proper debt management which improves the credit

worthiness of potential borrowers to support livelihoods, economic growth, sound financial systems, and poverty reduction. It also provides greater control of one's financial future, more effective use of financial products and services, and reduced vulnerability to overzealous retailers or fraudulent schemes. Facing an educated lot, financial regulators are forced to improve the efficiency and quality of financial services (Falicov, 2001).

## **2.3 Determinants of Personal Financial Management**

Some of the factors that affect the personal financial management include; Age, financial socialization and education level.

### **2.3.1 Financial Socialization**

Financial socialization is defined as the process by which young people obtain knowledge, skills, and attitudes relevant to their effective functioning in financial issues. Financial management, like all other issues, is learned principally from parents through observation and participation in financial experiences like shopping. Within this environment of financial interaction between parents, children have acquired information by observing how their family views financial processes. Children learn financial management behavior through participation and observation and through intentional instruction by socialization agents such as peer groups and the media (Mandell, 2007). Contained by the family, children learn how to handle their money and interact with the adult financial world when entering school and communicating with peers through the media and the Internet. However, it is widely documented that the principal and financial management skills, financial attitude, habits and even

financial styles are learned during the socialization process and interaction with socialization agents (Chen and Ronald, 2002).

### **2.3.2 Financial Attitude**

Financial attitude is defined as beliefs and feelings about money. Evidence suggests that money attitudes precede the development of money behavior (Roberts and Jones, 2005). In other words, money attitudes contribute to predict financial practices and financial management. Research findings indicate that people with stronger perceptions and positive financial attitudes tend to be more successful in financial management and are more satisfied with their financial appraisals (Joo and Grable, 2000). While the findings indicate that a positive attitude toward money contributes to effective financial management, others have indicated that those with a negative money attitude are involved with a higher level of financial problems (Lim and Teo, 1997).

### **2.3.3 Gender**

Gender has been identified by several empirical studies to have a relationship with the level of knowledge on financial differences. Bernheim, Garrett and Maki (2001) found that males perform better on both financial and macroeconomic questions. Being male is associated with greater financial knowledge. Goldsmith and Goldsmith (1997) suggest that women score worse than men because in general they are less interested in the topics of investment and personal finance and, consequently, use financial services more seldom.

Chen and Volpe (1998), and Goldsmith, Goldsmith (1997) linked risk taking and confidence as contributors to gender differences in financial literacy. Similarly, Chen and Volpe (2002), reported that women were more risk averse than men. Conversely, Schubert, Brown, Gysler, and Brachinger (1999) stated that under controlled economic conditions, female subjects do not generally make less risky financial choices than male subjects, suggesting that risk attitudes about female investors and managers may be more prejudice than fact. From a gender perspective, male and female differences in financial issues such as attitude, knowledge and overall behaviour is due to different financial socialization during childhood (Lim, Teo and Loo, 2001). For instance, in most cultures, boys have grown up with the expectation of being the family breadwinner while girls have grown up with the expectation of being the caregiver (Wilhelm, Varcoe and Fridrich, 1993). Therefore, diversity in gender role expectations would provide different strategies to the financial socialization of boys and girls, and, consequently, the different levels of financial knowledge among them (Falahati and Paim, 2011).

## **2.4 Empirical Review**

In their study, Garman and Grable (1999) investigated on the effect of financial decisions on productivity 100 households in Amsterdam, Holland data was collected by use of an interview guide and analysis was done by use of content analysis the results from the analysis indicated that there was a positive correlation between financial decisions and productivity of each households from their various investments and projects.

Moore (2003) carried out a study on the effect of financial literacy on investment decisions, a sample of 20 companies was surveyed in Washington DC, a descriptive survey research design was used and data was analyzed by using a regression model, the results of the analysis showed that there was a positive correlation between the level of financial literacy and investment decisions of firms. It was concluded that financial literacy had a significant effect on the financial performance of firms since firms that had access to financial information and training invested in profitable investments.

In his study Miles (2004) investigated on the link between financial literacy and investment decision based on priorities, a cross sectional survey was conducted among customers of 25 sampled banks, a structured questionnaire was used for data collection and descriptive statistics was used for data analysis, the results of the analysis showed that most customers that had access to financial information invested on profitable investments unlike the customers who were ignorant of about financial instruments and investments.

A study was conducted by Harvard University, in United States of America by Calvert et al., (2005) in relation to financial literacy and financial behavior, a descriptive study was conducted and data was collected using a structured questionnaire in 200 households in Cambridge Massachusetts. Data was analyzed using frequencies, mean and standard deviation, the results of the analysis revealed that financially sophisticated households are more likely to buy risky assets and invest more efficiently.

Lusardi and Mitchell (2006) devised a special module on financial literacy for the 2004 HRS. Adding these types of questions to a large U.S. survey is important not only because it allows researchers to evaluate levels of financial knowledge but also and, most importantly, because it makes it possible to link financial literacy to a very rich set of information about household saving behaviour. The module measures basic financial knowledge related to the workings of interest rates, the effects of inflation, and the concept of risk diversification. Findings from this module revealed that there was an alarmingly low level of financial literacy among older individuals in the United States (50 and older). Only 50% of respondents in the sample were able to correctly answer two simple questions about interest rates and inflation, and only one-third of respondents were able to answer correctly these two questions and a question about risk diversification. Financial illiteracy is particularly acute among the elderly, African-American and Hispanics, women, and those with low education, a common finding in the surveys of financial literacy.

Gatakaa (2010) conducted a census survey was conducted involving all 43 Commercial Banks in Kenya registered and licensed under the banking act as at 31st December 2009 as per the Central Bank of Kenya. This study used primary data that was collected from the respondents of the survey. Data was collected through the use of detailed questionnaires issued to banks. The data was analyzed using descriptive statistics where frequency tables, percentages, means and standard deviations, Graphs and charts were used to provide conclusions on findings. Based on findings, personal financial literacy does influence the lending decision by increasing the chances of approval of the loan facility; client understanding of the decisions and

consequences is key and demonstrating serviceability. Customers therefore have little or no access to personal financial information from banks beyond the scope of the products. Most banks also have a variety of products and services tailored towards the key personal finance areas: Financial Position (Net worth), Protection, Tax planning, Investment and accumulation goals, Retirement planning and Estate planning.

Amisi (2012) in his study examined the relationship between financial literacy and the influence of the factors that affect the investment decision. A modified likert scale questionnaire was used and the results of the study indicated that the financial literacy was far from the needed level. The financial literacy level was found have a significant effect on investment decision making by fund managers. Since these decisions are ongoing, requiring members to periodically monitor and evaluate the performance of their chosen fund and investment option, and decide whether to switch to another fund and/or investment option.

Nyamute and Monyoncho (2008) examined the personal financial management practices that encompasses Savings practices, Expenditure practices, Debt management, Investment, Money management , retirement and unexpected practices of both employees who are financially educated verses those who are not. The survey data was obtained from 192 employees using a structured questionnaire. This study focused on the effect of financial education on personal financial management practices. The results have shown that those who are financially educated do practice to an extent the standard financial behaviors. A likert's mean score of 5 would have indicated that the financially educated perfectly understand the impact of poor money

management habits caused by lack of financial education. It further observes that one can still practice financial management behaviors whether or not they are financially literate. This is as a result of other available avenues of acquiring financial knowledge. The student t-test of equal means gave a p-value of 0.029086 at a 5% significance level. These results show that there is a significant difference between the personal financial management practices of the finance and the non-finance literate respondents. The financially literate had a better appreciation and application of the financial management practices. It can be concluded that financial literacy influences personal financial management practices.

Olima (2013), investigated on the effect of financial literacy on saving practices and social security planning of Kenya Revenue Authority employees. The study used primary data collected from semi-structured questionnaires. Quantitative data was analyzed using descriptive statistics while qualitative data was analyzed using content analysis. The study also used multiple regression analysis to establish the relationship between financial literacy and personal financial management. The study findings indicated that financial literacy impacts to a great extent on the financial management because financial education programs guide program development and refinement. The study findings indicate that generally financial literacy to a great extent affects personal financial management among the respondents. However, most participants considered retirement planning less important, were less aware of the effects of estate planning, insurance planning and tax planning.

Kibui (2013) sought to find out the effect of financial literacy and financial management of the youth enterprise development fund in Konoin Constituency Kenya. A cross sectional descriptive survey technique was adopted to find out the financial literacy and financial management of the youth enterprise development fund in Konoin constituency. A representative sample of 250 respondents was selected using random sampling technique. The study used primary data which was collected from the respondents using a detailed questionnaire which had both open ended and close ended questions. Data was then analyzed by using regression analysis and descriptive statistics which was presented using mean, correlation, standard deviation and percentages. The analysis was then visually displayed using graphs, frequency tables and charts. Based on the findings financial literacy had a direct relationship with financial management with many youth lacking the basic skills in financial planning practices.

Mwangi (2013) evaluated the impact of financial literacy on access to credit by households in informal settlements in Nairobi. It also sought to gather information on the financial management skills used to manage personal finance by households in informal settlements, their financial literacy levels and its impact on credit access. To achieve this objective, the study involved four slums in Nairobi, which included Mathare, Kibera, Mukuru Kwa Njenga and Korogocho. The research design utilized was survey method and convenience sampling was carried out based on the relative number of households willing to participate. Data was organized, coded and analyzed using descriptive statistics and presented in form of ratios, tables, charts and graphs. The study found out that households in the informal settlements in Nairobi have low

financial literacy which largely hindered them from accessing credit from financial institutions, government and Nongovernmental institutions.

In a study to investigate the effect of business development services on the performance of Small Scale enterprises in Kisii Town Osinde et al (2013) found out that the entrepreneurs who received business development services recorded an improvement in the growth of sales and growth in market shares on the various businesses they were operating. The study further established that those who attended the training services recorded an improvement in their businesses in terms of growth in sales and profits with 83.3% of the respondents who always attended training reporting to have good growth in profits as opposed to only 41.2% of those who never attended training.

## **2.5 Summary of Literature Review**

Financial literacy surveys in many developed nations show that consumers are poorly informed about financial products and practices. This is troubling, in that financial illiteracy may stunt peoples' ability to save and invest for retirement, undermining their well-being in old age. It is also concerning that these deficiencies are concentrated among particular population subgroups - those with low income and low education, minorities, and women were being financially illiterate may render them most vulnerable to economic hardship in retirement.

Given the increased complexity of financial instruments, the evidence of illiteracy raises the question of whether consumers will appreciate and take advantage of the opportunities offered by financial markets or more easily fall prey to scams or unscrupulous brokers. No studies definitively provides an evaluation of the costs of

financial education programs and, without that information, it is not possible to estimate a return on financial education programs. Moreover, as previous studies show, few employees ever attend education programs and of those who attend, many do not modify behavior, at least in the short run. While these are drawbacks, financial education programs cannot be dismissed.

Information and financial knowledge can affect many financial decisions, not simply saving for retirement. Moreover, that knowledge may be put to use over long periods of time and should be evaluated in the long run rather than just in the few months or years after a program is offered. For example, according to Bernheim, Garrett and Maki (2001), those who were exposed to financial education programs while in high school were more likely to save later in life.

Another finding that emerges from both the literature on saving and studies on financial literacy is that there are specific segments of the population, those with low education and low income that save in very different ways than other, more educated and affluent households. It may be important to target these groups and devise programs that are better tailored to their needs and barriers to saving. There is evidence that existing targeted programs have had some success in increasing saving among the poor (Schreiner and Sherraden, 2007). Recognizing that individuals possess limited literacy and do not plan for retirement brings us inevitably to the issue of mistakes. One such program could be to require people to acquire some basic financial knowledge (Alesina and Lusardi, 2006).

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter presents a blueprint that was used in carrying out the research. It includes the research design, target population, sampling method was used, data collection Instrument and procedure and analysis, interpretation and presentation.

#### **3.2 Research Design**

The study used descriptive survey design. This method was found appropriate because the research intend to explore the relationship between the different variables forming the study that's the relationship between budgetary control and performance. There are several arguments for choosing descriptive statistics. Mugenda (2008), defines descriptive research as a process of collecting data in order to test hypotheses or to answer questions concerning the current status of the subjects in the study.

According to Lockesh (1984) descriptive research studies are designed to obtain pertinent and precise information concerning the status of phenomena and whenever possible to draw valid general conclusions from the facts discovered. According to Mugenda and Mugenda (1999) descriptive survey design is considered to be relevant in a survey because it involves collecting data which can then be used to answer the research question in the current state of the object of the study.

#### **3.3 Population**

According to Mugenda and Mugenda (1999) population is the entire group of individuals, events or objects having common observable characteristic while the

target population refers to the population to which the researcher wants to generalize the results to absolute population of a study. The study targeted a total of 2000 employees, from Mumias sugar Company. The sampling unit was one single employee which is an acceptable practice in sampling design for social sciences (Kothari, 2004).

### **3.4 Sampling Design**

Stratified sampling technique was used to categorize employees in their strata (according to the department). The simple random sampling was used to select 200 employees from the strata, so that each and every one in the target population has an equal chance of inclusion from the target populations of 2000 employees. This was done so that the study does not miss any parameters that are vital to the research.

The sample size of employees was determined by use of Kombo and Tromp (2006) recommendation that a sample size of 10% to 30% is representative enough for the study population. Therefore the sample size of employees was determined on the basis of 10% recommended by Kombo and Tromp (2006): Number of employees: -  $10/100 \times 2000 = 200$  employees.

### **3.5 Data Collection**

The study used primary data collected from semi-structured questionnaires. Questionnaires will be useful instrument of collecting the primary data since the respondents can read and then give responses to each item and they can reach a large number of subjects (Orodho, 2004). Questionnaires were used to capture data from the employees at the employees concerning the questions on the area of study.

This instrument was used in the study because it is convenient to administer when handling a large group of respondents. They are confidential, save on time, no bias and cover wide area (Mugenda and Mugenda, 1999). The questionnaire as an instrument used both closed ended and open ended questions in its structure. On the other hand secondary data collection instruments were used. This includes documentary analysis from the relevant and already existing information from the treasury.

### **3.6 Validity and Reliability**

Reliability is a way of determining the study's authenticity, where a high level of reliability implies that it is replicable. To ensure validity of the instruments, content validity was established (Cozby, 1977) from the pretest and re-test method that was done before the actual research. The research instrument was pre-tested on 10 employees of the treasury department since they form a sample outside our target respondents to establish its validity and reliability. The research instrument sought opinions of experts in the field of study. This facilitated the necessary revision and modification of the research Instrument thereby enhancing validity. This area was avoided during the actual research undertaking.

Supervisors and the research experts in the School of Business administration and social sciences were used to evaluate the applicability and appropriateness of the content, clarity and adequacy of the research instrument from a research perspective. Borg and Gall (1985) points out that validity of an instrument is improved through expert judgment.

### 3.7 Data Analysis

The completed questionnaires were edited for completeness and consistency. Qualitative data resulting from respondents' divergent views on personal financial management was used as they were not limited by choices. Data collected was edited to ensure that it is correct and complete thus reducing biases, increasing the precision and achieve consistency. Data was then analyzed by using regression analysis and descriptive statistics was presented using mean, correlation, standard deviation and percentages. The analysis was then visually displayed using graphs, frequency tables and charts.

A multiple regression model was applied to analyze the relationship between the various variables. The model treated financial management as the dependent variable while the independent variables were financial literacy, saving practices, spending patterns, financial planning practices, investment practices and debt management practices. Five likert scale questions were used to determine the extent of the employees' skills in financial management. The responses were measured by computing the mean percentage score based on the responses derived from the Likert scale questions.

The relationship equation is as shown below:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \epsilon$$

Where Y = Financial management

$\alpha$  = Constant term

$\beta_1$  = Beta co-efficient

X<sub>1</sub> = is the investment/savings literacy index calculated from its scale;

X<sub>2</sub> = is the retirement literacy index calculated from retirement/pensions scale;

X3= Tax return/insurance literacy index calculated from its scale; and,

X4= Debt management practices which was evaluated by use of a questionnaire

X5= Spending patterns was evaluated by use of a questionnaire

$\varepsilon$  = Error term

### **3.7.1 Tests of Statistical Significance**

Analysis of variance (ANOVA) is a hypothesis testing technique used to test the equality of two or more population by examining the variance of samples that are taken. Y is the dependant variable personal financial management,  $\beta_0$  is the regression constant or Y intercepts  $\beta_1\beta_3\dots B_n$  are the coefficients of the regression model. The basis of the model is to help in determining the extent to which financial literacy contribute to personal financial management. Correlation was used to establish the relationship between the variables of financial literacy and personal financial management of Mumias Sugar Company limited

## **CHAPTER FOUR**

### **DATA ANALYSIS, INTERPRETATION AND FINDINGS**

#### **4.1 Introduction**

This section covers data analysis, results and discussions of the study in reference with the research objective and research methodology. The findings of this study are presented on the level of financial literacy of Mumias Sugar Company employees and the effect of financial literacy on saving practices and social security planning of Mumias Sugar Company employees. A structured questionnaire was used to collect primary data from the employees of Mumias Sugar Company.

#### **4.2 Response Rate**

To achieve the objective of this study, a population of 200 employees from Mumias Sugar Company was targeted. Out of 200 questionnaires issued, 140 were filled and returned making a response rate 70%, this was considered a sufficient representation of the whole population. Some respondents cited busy schedules as the reason for not responding since the study was carried out within a limited period of time.

#### **4.3 Data Validity**

To achieve the objective of the study the participants were briefed early in advance by the researcher on the need and importance of the study and permission sought for their participation in order to have their full support. Guidance on how to answer the questionnaire was provided by the researcher to ensure a high completion rate and accuracy of the information provided. Mugenda and Mugenda (1999) contend that usual procedure in assessing the content validity of a measure is to use professional expert in a particular field.

#### 4.4 Descriptive Statistics

Descriptive statistics is used to describe the basic features of the data in a study. They provide simple summaries about the sample and the measures. It aims to summarize a sample, rather than use the data to learn about the population that the sample of data is thought to represent. Below are the research results:

**Table 4.4 Descriptive Statistics**

	<b>Personal Financial Management</b>	<b>Investment literacy</b>	<b>Retirement index</b>	<b>Tax return</b>	<b>Debt Management</b>	<b>Spending pattern</b>
<b>Minimum</b>	3.89	.04	.49	23	-13.15	18.57
<b>Maximum</b>	614.09	80.57	22.61	33.5	13.20	17.35
<b>Median</b>	0.49	23.61	12.6223	17.4	5.40236	3.67
<b>Mean</b>	74.1817	9.3887	12.6223	28.25	4.6250	3.567
<b>Standard Deviation</b>	8.613	3.0641	3.553	5.315	2.151	1.889

Source Research Findings

Statistical analysis of personal financial management is shown in the table above. Considering the two main variables of this study which are financial literacy and personal financial management. The results are as follows: The maximum value of personal financial management is 614.09 and the minimum value for personal financial management is 3.89 and the average value for Mumias Sugar Company is 74.1817. Financial literacy has a maximum value of 80.57 while its minimum value is exhibited as 0.4. Similarly; the average for Mumias Sugar Company 9.3887 with a standard deviation of 3.0641.

#### **4.4.1 Extent of Respondent Knowledge on Financial Literacy**

The respondents were requested to determine the extent of literacy in the following aspects of financial management in a five point Likert scale. The range was ‘very great extent’ (5), ‘not at applicable’ (1). The scores of ‘not at all’ and ‘to a less extent;’ were taken to present a variable which had an impact to a small extent (S.E) (equivalent to mean score of 0 to 2.5 on the continuous Likert scale ;(  $0 \leq S.E < 2.4$ ). The scores of ‘to a moderate extent;’ was taken to represent a variable that had an impact to a moderate extent (M.E.) (equivalent to a mean score of 2.5 to 3.4 on the continuous Likert scale:  $2.5 \leq M.E. < 3.4$ ). The score of ‘great extent; and very great extent’ were taken to represent a variable which had an impact to a large extent (L.E.) (equivalent to a mean score of 3.5 to 5.0 on a continuous Likert scale;  $3.5 \leq L.E. < 5.0$ ). A standard deviation of  $>1.5$  implies a significant difference on the impact of the variable among respondents. These findings are provided in Appendix II.

#### **4.4.2 Aspects of Financial Literacy**

The study sought to investigate the aspects of financial management of the respondents in regard to the effect of financial literacy on personal financial management of the respondents in Mumias Sugar Company. The researcher sought to find out the aspects of financial literacy of the respondents. They were asked to provide their views on financial literacy as provided above. Most of the respondents noted that financial literacy highly impacted on personal financial management of employees in Mumias Sugar Company.

The findings show that most employees understood the concept of financial literacy this is shown by the mean and standard deviation as follows: (M=4.77, S.D=1.231), I

know what I want to accomplish, financially. (M=3.85, S.D=1.322), I have fully outlined my financial objectives on paper; I maintain a current list of my assets and liabilities (M=3.78, S.D=0.978), I am fully aware of the impact of inflation on my future retirement income (M=3.01, S.D=6.99), (M=3.44, 6.79), A disciplined approach to re-balancing my investment is very important. From the above findings, this is an indication that financial literacy had an impact on personal financial management to most employees of Mumias Sugar Company.

#### **4.4.3 Retirement Plan**

The study determined the retirement plan of the respondents in order to establish whether financial literacy had an effect on personal financial planning of the employees in Mumias Sugar Company. The study findings in relation to retirement plan revealed that most respondents of the respondents revealed 'a moderate extent' while asked about their retirement plan. For example, I maximize my retirement contributions each year (M=3.41, S.D=1.502, M=3.10, S.D=0.986, M=3.06, S.D=0.978, M=3.57, S.D=0.932).Some of the respondents agree that they have an alternative sources of income in the event of an extended disability (M=3.57, S.D=.932). It was evident that most of the respondents agree to a moderate extent about their retirement plans.

#### **4.4.4 Estate Planning**

The researcher investigated the extent to which the employees of Mumias Sugar Company carried out Estate planning in order to determine the effect of financial literacy skills on estate planning among employees. The findings revealed that estate planning reveal that most of the respondents did not have a will for example, I have a

will (M=2.16, S.D=1.112). Conversely most of the respondents understand the concept of estate planning and its significance as evidenced by the following result: Estate planning is important to me (M=4.01, S.D=.876), Having estate planning leave me peace of mind if I were to pass away (M=3.67, S.D=.961), I understand the available government death benefits (M=4.27, S.D=.878), I understand how taxes will be applied to my estate (M=4.12, S.D=.789) and My executor is familiar with the location of my will and estate plan (M=3.1, S.D=.671). From the above findings, it was revealed that even though most of the respondents fully understood the concept of estate planning and its significance in financial management most of the respondents did not have a will.

#### **4.4.5 Credit and Other Liabilities**

The study requested the employees of Mumias Sugar Company to provide information on their credit and other liabilities with the objective of establishing whether the employees applied their financial literacy knowledge in management of credit and other liabilities. The respondents were requested to specify on credit and other liabilities if they effect on the financial literacy. According to the findings, most respondents pointed a moderate extent on personal financial management in relation to credit and other liabilities. From the above findings, I pay off the full credit card outstanding amount every month had (M=251, S.D=.561) and I pay my mortgage and hire purchase installments on time every month (M=2.91, S.D=.754). About Personal loans offered by financial institutions in the market being a convenient tool for the customers to borrow was to a large extent an important financial management concept in relation to credit and other liabilities, it had (M=3.98, S.D=1.02). It was concluded

that most of the respondents were moderate on credit management aspects of financial management.

#### **4.4.6 Insurance Cover**

The researcher investigated on the extent to which employees of Mumias sugar implemented their financial literacy concepts in insurance. It was revealed that most of the employees had an insurance cover, this is shown by (M=3.44, S.D=1.223), similarly the it was further revealed that life insurance and medical insurance covers were the most popular among the employees (M=4.11, S.D=.978).It was also found that employees who could distinguish the different types of insurance policies offered in the market were not very many, moderate extent (M=2.55, S.D=.579).This is an indication that most of the employees of Mumias Sugar Company applied their financial literacy skills in selecting insurance product in the market.

#### **4.4.7 Tax Return**

The study examined the extent to which the employees of Mumias Sugar Company applied their financial literacy concepts managing and filling their own taxes returns efficiently. The findings reveal that most of the employees of Mumias Sugary Company implemented their financial literacy knowledge in managing their own taxes. This is shown by the results of the study as shown above in the table 4.3.9.1 above (M=5.11, S.D=1.211).On the other hand, the employees of Mumias Sugar Company were found to utilize their tax rebate effectively (M=3.76, S.D=.988). This was a clear indication that most of the employees implemented their financial knowledge in personal financial management.

#### 4.4.8 Personal Financial Management Practices

The study sought to determine the effect of financial literacy on the implementation of personal financial management practices by employees of Mumias Sugar Company Kenya. The results of the findings are as provided on Annex III. From the findings, it was found that majority of the respondents used their financial knowledge in the implementation of personal financial management practices. For example I pay my credit card bills in full each month (M=3.23, S.D=1.222), I pay my utilities (water, electric) in full and on-time (M=4.02, S.D=1.205), I max out or go over the limit on my credit card(s) (M=4.12, S.D=1.011), I spend more in a month than I earn (M=3.01, S.D=1.107), My account has a positive balance at the end of the (M=3.08, S.D=1.234) I balance my credit and debit account each month (M=5.11, S.D=.995) The findings concluded that most of the employees of Mumias Sugar Company applied their financial literacy knowledge in personal financial management practices.

**Table 4.5 Correlation Analysis between the Study Variables**

	Savings Literacy Index	Retirement Literacy Index	Tax Return	Debt Management Practices	Spending Returns	Personal Financial Learning
Savings Literacy Index	1					
Retirement Literacy Index	0.87	1				
Tax Return	0.65	0.67	1			
Debt Management Practices	0.82	0.72	0.92	1		
Spending Return	0.75	0.61	0.78	0.55	1	
Personal Financial Learning	0.65	0.52	0.81	0.67	0.87	1

Source: Research Findings

From the findings in the table 4.1 above, the results revealed that there is a strong positive relationship between financial literacy and personal financial management. This relationship is explained by the following independent variables namely: savings literacy index, retirement literacy index, tax return, debt management practices. From the above findings, the independent variables exhibit values close to 1. Generally, this means that there is a strong positive correlation between financial literacy practices and personal financial management of employees in Mumias Sugar Company.

#### **4.6 Regression Analysis**

Regression analysis is a statistical process for estimating the relationships among variables. It includes many techniques for modeling and analyzing several variables, when the focus is on the relationship between a dependent variable and one or more independent variables. The researcher investigated the effect of financial literacy on personal financial management planning. Below is the summary of the Model in table 4.12.

##### **4.6.1 Model Summary**

The model summary table provides information about the regression line's ability to account for the total variation in the dependent variable. Further, the model summary for the regression model has a correlation coefficient of 0.442 when the variables of savings literacy index, retirement literacy index, tax return, debt management practices, spending returns are considered. The correlation coefficient increases by a unit as a result of a corresponding increase in the independent variables.

**Table 4.12 Summary of the Model**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.442 <sup>a</sup>	0.195	.791	.0231

a.predictors: (constant), savings literacy index, retirement literacy index, tax return, debt management practices, spending returns

Source: Research Findings

#### 4.6.2 Analysis of Variance

The study sought to establish the impact between the independent and the dependent variable. In the ANOVA setting, the observed variance in a particular variable is partitioned into components attributable to different sources of variation. ANOVA provides a statistical test of whether or not the means of several groups are equal, and therefore generalizes the t-test to more than two groups. Below are the findings presented in table 4.13 below:

**Table 4.13 ANOVA Significance of the Regression Model for PFM**

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	.08220	5	0.1644	19.83	.036 <sup>b</sup>
Residual	1.1112	134	0.00829		
<b>Total</b>	<b>0.9332</b>	<b>139</b>			

a. Dependent Variable: Personal Financial Management

Source: Research Findings

The study found that the overall regression model (Model 1 in table 5.4) is significant. This means that the independent variables of savings literacy index, retirement literacy index, tax return, debt management practices, spending returns considered together significantly explain the extent of personal financial management planning of employees as explained by the extent of implementation of the saving and social

security planning concepts of financial literacy, as shown in table 5.4 where the p-value is 0.036.

#### 4.6.3 Test of Coefficients

The regression coefficients represent the mean change in the response variable for one unit of change in the predictor variable while holding other predictors in the model constant. This statistical control that regression provides is important because it isolates the role of one variable from all of the others in the model.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.640	1.0033		7.290	.000
	Savings Literacy Index	1.283	.593	.302	3.249	.001
	Retirement Literacy Index	.123	.0103	-.158	-.345	.002
	Tax Return	.453	.0423	.136	1.607	.004
	Debt Management Practices	-.678	.157	.322	1.101	.231
	Spending Returns	.534	.579	.101	1.1223	.005
a. Dependent Variable: Personal Financial Management						
b. Predictors: (Constant), savings literacy index , retirement literacy index, tax return , debt management practices, spending returns						

**Table 4.14 Coefficients**

Source: Research Findings

$$PFM=0.640+1.283X_1+.123X_2+.453X_3-.678X_4+.534X_5$$

Using this model, it is possible to determine the effect of personal financial management on the exhibited financial literacy skills by the employees in Mumias Sugar Company using the following independent variables: savings literacy index, retirement literacy index, tax return, debt management practices and spending return. The individual independent variables in the above model are, however, significant

with only the debt management practices being insignificant (p-value is 0.231) as shown in Table 4.14 above.

#### **4.7 Discussion of Research Findings**

According to the demographic findings, the study observed that Mumias Sugar had more male than female employees. The male accounted for 57.9% and their female counterparts accounted for 42.1%. This was an indication that there was more male than female in Mumias Sugar Company. It was further established that most of the employees of Mumias Sugar Company aged between 31-34 years at 40.71%, followed by 27.14% who were aged between 35-40 years. Thus, most employees of Mumias Sugar Company are aged between 31-34 years. With regard to the education background of the respondents, it was observed showed that most of the employees were degree holders at 74.3%, 20% of the respondents had attained post graduate level and only 5.7% of the respondents had attained certificates. When asked about their length of service, it was observed that 64.3% of the employees had served for less than 5 years while 27.9% of the respondents had served for 6-10 years. 5% of the respondents had served for 11-15 years and only 2.9% of the respondents had served in the institution for 16 years and above.

The study further established that majority of the employees of Mumias Sugar Company understood financial literacy concepts that highly impacted on personal financial management of employees at Mumias Sugar Company. In reference to the retirement plans of the respondents, it was revealed that most of the respondents agreed to a moderate extent about their retirement plans. Similarly, the researcher

investigated the extent to which the employees of Mumias Sugar Company carried out Estate planning in order to determine the effect of financial literacy skills on estate planning among employees. The findings of this study revealed that even though most of the respondents fully understood the concept of estate planning and its significance in financial management, most of the employees did not have a will.

The study also found that most respondents moderately implemented personal financial management in relation to credit and other liabilities. When asked personal information on the extent of implementation of financial literacy concepts in insurance it was found that majority of the employees applied their financial literacy skills in selecting insurance products as well as managing their tax returns. The employees were asked to comment about the level of implementation of personal financial management practices, it was concluded that most of the employees of Mumias Sugar Company applied their financial literacy knowledge in personal financial management practices.

The regression analysis revealed that the regression model had a correlation coefficient of 0.442 when the variables of savings literacy index, retirement literacy index, tax return, debt management practices, spending returns were considered. This meant that the independent variables of savings literacy index, retirement literacy index, tax return, debt management practices, spending returns considered together significantly explained the extent of personal financial management planning of employees as explained by the extent of implementation of the saving and social security planning concepts of financial literacy. This means that the model was statistically significant such that, an increase in one of the independent variables holding all factors constant resulted into a corresponding increase into the dependent variable.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

This section covers the summary of the findings, conclusions, policy recommendations, limitations of the study and suggestions for further study.

#### **5.1 Summary**

The objectives of the study were to identify the level of financial literacy of Mumias Sugar company employees and effect of financial literacy on saving practices and social security planning of Mumias Sugar Company employees. The study sought to determine the demographic information of its respondents; the study revealed that it was revealed that. The study findings revealed that there was more male than female in Mumias Sugar Company. According to the demographic findings, the study found that Mumias Sugar had more male than female employees. It was further established that most of the employees were aged between 31-34 years. Also, most of the employees were degree and has served for more than 20 years in their place of work.

Majority of the employees of Mumias Sugar Company understood financial literacy. With regard to their retirement plans of the respondents, it was revealed that most of the respondents agreed to a moderate extent about their retirement plans. The study further revealed that even though most of the respondents fully understood the concept of estate planning and its significance in financial management, most of the employees did not have a will. The findings also found that most respondents moderately implemented personal financial management in relation to credit and other liabilities. It was observed that the employees implemented their financial literacy

knowledge in personal financial management. This is evident from the statistical results of the regression analysis which shows statistically significant relationship between financial literacy and personal financial planning of employees in Mumias Sugar Company. This is explained by the by the level of significance of the independent variables as shown in table 5.4 above.

## **5.2 Conclusion**

The objectives of the study were to identify the level of financial literacy of Mumias Sugar Company employees and the effect of financial literacy on saving practices and social security. In reference to the findings of the study, the study concludes that most of the employees of Mumias Sugar Company were financially literate and this highly contributed to personal financial planning of the employees, this is demonstrated by the findings in chapter four in table 4.3.13 above which shows a statistically positive relationship between the independent variables and the dependent variable. From findings of the study on credit and other liabilities, tax planning, and spending patterns respondents were ‘to a less extent’ literate due to poor financial decisions. This can affect savings and financial stability or independence.

The results indicate that in general individuals need to be financially literate in order to make good financial and investment decisions. Miles (2004) argued that possession of financial literacy skills like investment literacy, tax returns planning, good debt management practices and appropriate spending patterns assists employees in making good decisions about their money and minimizes the chances of being misled on financial matters. In addition, Moore (2003) found that financial literacy affects

financial decision-making because individuals with low literacy are more likely to rely on other people as their main source of financial advice and are less likely to make informed investment decisions. The findings on how other factors which do not depend on financial literacy rather depend on attitude, behavior and age portrays a low percentage and therefore has a less effect on investment decision.

### **5.3 Recommendations to policy and practice**

The study recommends that increasing financial literacy can improve credit card management as well as reduce or possibly eliminate gender-based differences. Financial education, when paired with access to bank accounts, can lead to significant increases in formal savings by poor households.

The study recommends that financial literacy services should focus on how financial education programs can be optimally targeted to customers for example, interventions that are offered along with access to bank accounts seem to have higher chances of success than interventions targeted to an unbanked population. Also, the content of the training should be carefully designed, providing select, useful, notions and delivering information in groups (to exploit peer effects) through engaging tools.

The study recommends that financial institutions should be encouraged to check that clients read and information, especially when related to long-term commitments or financial services with potentially significant financial consequences: small print and abstruse documentation should be discouraged to avoid poor financial decisions due inadequate financial skills.

The study further recommends that financial education programs should focus particularly on important life-planning aspects, such as basic savings, debt, insurance or pensions. Programs should be oriented towards financial capacity building, where appropriate, targeting specific groups in order to create an impact on their financial decisions.

The study recommends that future retirees should be made aware of the need to assess the financial adequacy of their current public and private pensions schemes. National campaigns, specific web sites, free information services and warning systems on high-risk issues for financial consumers such as fraud should be promoted.

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

One of the challenges faced by the researcher during data collection was time factor. Primary data collection consumes a lot of time. The researchers will need to make certain preparations in order to handle the different demands of the processes and at the same time, manage time effectively.

The other challenge faced by the researcher was that there was no control over the data collection; some of the respondents gave out incomplete questionnaires while others failed completely to fill the questionnaires. Most of the respondents agreed to participate on condition that the information was only for academic purposes only and therefore would not be divulged to any other party.

The findings of this study and application thereof are limited to Mumias Sugar Company and might not be applicable directly or indirectly to other organizations operating outside Mumias Sugar. It would be therefore appropriate for the reader to demystify that these findings can only be used for comparative purposes only and not direct application of any other sector.

It was also difficult to persuade and convince the participants to actively participate in the research process. Some of the respondents cited busy schedules in the work place to create more time for filling in the questionnaires. A few completely refused even to have a look at the questionnaires.

The researcher also lacked adequate support and professional guidance from experts to edit, proof read and conduct the entire research project work. The researcher had to personally work through the night to ensure that the research project conformed to all the guidelines provided by the University of Nairobi, school of business, Master of Business Administration.

### **5.5 Suggestions for Further Study**

A study should be conducted on the effect of financial literacy on personal financial management on small and medium enterprises to find out whether the owners of small businesses understand the concepts of financial management and its effect on personal financial management then, conclusions and recommendations can be drawn in accordance to the findings of the study.

It would be interesting to carry out a study on the effect of access to financial information on investment decisions on firms listed at the Nairobi securities exchange. This study would be beneficial in showing the significance of financial information on investment choices. This will help in making key recommendations to firms on investing more resources to enable access to financial information in order to invest in profitable investments.

It is also recommended that similar studies to this one be carried out over a period of time. This is important in order to capture employee's financial literacy levels and financial management practices over a period of time since rational consumers have changing knowledge levels, preferences over a period of time.

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## APPENDIX I: QUESTIONNAIRE

### SECTION A: FINANCIAL LITERACY

1. Kindly indicate the extent of literacy of the following aspects of financial management in your life. Use a scale of 1 to 5 where: 1 = not at all/applicable; 2 = less extent; 3 = moderate extent; 4 = great extent; 5 = very great extent.

<b>Aspects of Financial Literacy</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
I know what I want to accomplish, financially.					
I have fully outlined my financial objectives on paper.					
I maintain a current list of my assets and liabilities.					
Holding a strong cash position is necessary for my financial pursuit					
I systematically save for life's eventualities in 10 years' time or more.					
I understand all the benefits that are available to me at MSC					
I am satisfied with my present rate of savings and investment accumulation.					
I feel that maximizing tax efficiency in my investment Portfolio is essential.					
I am satisfied with the performance of my investments outside of my retirement saving plans					
A disciplined approach to re-balancing my investment is very important.					
I am a member of a MSC's pension plan that provides adequate pension upon retirement.					
I have determined how much income I can expect on retirement.					
I am fully aware of the impact of inflation on my future retirement income.					
My current investment portfolio design employs modern Portfolio theory.					
<b>Retirement Plan</b>					
I maximize my retirement/pension contributions each year.					
I want to help build a vision of my retirement lifestyle					
I know what income I would need if I were unable to work due to an accident or severe illness					
In the event of a prolonged disability, I know how long I could survive on my present savings.					
I fully understand the government disability benefits.					

<b>Aspects of Financial Literacy</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
I have an alternative source of income in the event of an extended disability.					
I feel confident that the present health care system can support my needs in the event of a major illness					
<b>Estate Planning</b>					
I have a will					
I understand what a trust is					
Estate planning is important to me					
Having estate planning leave me peace of mind if I were to pass away					
I understand the available government death benefits					
All of my beneficiary/guardian designations are up to date					
I understand how taxes will be applied to my estate					
My executor is familiar with the location of my will and estate plan					
<b>Credit and Other Liabilities</b>					
I pay off the full credit card outstanding amount every month					
I pay my mortgage and hire purchase installments on time every month					
Personal loans offered by financial institutions in the market is a convenient tool for me to use- I can borrow for any reason at any point of time					
<b>Insurance Cover</b>					
I have enough insurance to ensure that if I were to pass away or become sick or be disabled, my family and I would not suffer financially or be financially disabled					
Currently, I have life insurance but no other type of insurance i.e. health or critical illness, personal accident or insurance on my properties such as car and house					
I can distinguish the different types of insurance policies offered in the market					
<b>Tax Return</b>					
I manage my own taxes					
I utilize the various tax relieves/rebate that I am entitled to when I am filing in my tax return					

## SECTION B: PERSONAL FINANCIAL MANAGEMENT

2. The following are statements regarding an individual financial management practices. Please select the most appropriate answer to each of the following questions:

Use a scale of 1 to 6 where: 1 = not applicable; 2 = Never; 3 = Rarely; 4=Sometimes; 5 =Usually; 6 = Always.

<b>Financial Management Practices</b>	<b>Not Applicable</b>	<b>Never</b>	<b>Rarely</b>	<b>Sometimes</b>	<b>Usually</b>	<b>Always</b>
I pay my credit card bills in full each month						
I pay my rent/mortgage in full and on-time						
I pay my utilities (water, electric) in full and on-time						
I max out or go over the limit on my credit card(s)						
I spend more in a month than I earn						
I use alternative sources of credit (e.g. borrow from friends)						
My account has a positive balance at the end of the month						
I balance my credit/debit account each month						
I have checks returned because of insufficient funds(bounced checks)						
I have taken overdrafts						
I have a daily, weekly or monthly budget that I follow						
I set aside some money each month for savings						
I am a member of a SACCO(s) and have not defaulted on any loans						

**THANK YOU FOR YOUR TIME**

## APPENDIX II: ASPECTS OF FINANCIAL LITERACY

<b>Aspects of Financial Management</b>	<b>N</b>	<b>Mean</b>	<b>S.D</b>
I know what I want to accomplish, financially.	140	4.77	1.231
I have fully outlined my financial objectives on paper	140	3.85	1.322
I maintain a current list of my assets and liabilities.	140	3.78	0.978
Holding a strong cash position is necessary for my financial pursuit	140	3.68	1.343
I systematically save for life's eventualities in 10 years' time or more	140	3.68	1.343
I understand all the benefits that are available to me at MSC	140	3.68	1.343
I am satisfied with my present rate of savings and investment accumulation.	140	2.54	.539
I feel that maximizing tax efficiency in my investment portfolio is essential.	140	2.57	.446
I am satisfied with the performance of my investments outside of my retirement saving plans	140	3.27	.446
A disciplined approach to re-balancing my investment is very important.	140	3.44	.679
I am a member of a MSC's pension plan that provides adequate pension upon retirement.	140	3.61	.641
I have determined how much income I can expect on retirement.	140	3.56	.940
I am fully aware of the impact of inflation on my future retirement	140	3.76	.699
My current investment portfolio design employs modern portfolio theory	140	3.34	.476
<b>Retirement Plan</b>	<b>N</b>	<b>Mean</b>	<b>S.D</b>
I maximize my retirement/pension contributions each year.	140	3.41	1.502
I want to help build a vision of my retirement lifestyle	140	3.10	.986
I know what income I would need if I were unable to work due to an accident or severe illness	140	3.51	.771
In the event of a prolonged disability, I know how long I could survive on my present savings.	140	2.52	1.244
I fully understand the government disability benefits.	140	3.06	.978
I have an alternative source of income in the event of an extended disability.	140	3.57	.932
I feel confident that the present health care system can support my needs in the event of a major illness	140	3.49	.971
<b>Estate Planning</b>	<b>N</b>	<b>Mean</b>	<b>S.D</b>
I have a will	140	2.16	1.112

<b>Aspects of Financial Management</b>	<b>N</b>	<b>Mean</b>	<b>S.D</b>
I understand what a trust is	140	3.01	.976
Estate planning is important to me	140	4.01	.876
Having estate planning leave me peace of mind if I were to pass away	140	3.67	.961
I understand the available government death benefits	140	4.27	.878
All of my beneficiary/guardian designations are up to date	140	4.13	.910
I understand how taxes will be applied to my estate	140	4.12	.789
My executor is familiar with the location of my will and estate plan	140	3.11	.671
<b>Credit and Other Liabilities</b>			
I pay off the full credit card outstanding amount every month	140	2.51	.561
I pay my mortgage and hire purchase installments on time every month	140	2.91	.754
Personal loans offered by financial institutions in the market is a convenient tool for me to use- I can borrow for any reason at any point of time	140	3.98	1.02
<b>Insurance Cover</b>			
I have enough insurance to ensure that if I were to pass away or become sick or be disabled, my family and I would not suffer financially or be financially disabled	140	3.44	1.223
Currently, I have life insurance but no other type of insurance i.e. health, medical, or critical illness, personal accident or insurance on my properties such as car and house	140	4.11	.978
I can distinguish the different types of insurance policies offered in the market	140	2.55	.579
<b>Tax Return</b>			
I manage my own taxes	140	5.11	1.211
I utilize the various tax relieves/rebate that I am entitled to when I am filing in my tax return	140	3.76	.988

**Source: Research Findings**

### APPENDIX III PERSONAL FINANCIAL MANAGEMENT PRACTICES

<b>Personal Financial Management Practices</b>	<b>N</b>	<b>Mean</b>	<b>S.D</b>
I pay my bills in full each month	140	3.23	1.221
I pay my rent/mortgage in full and on-time	140	3.11	1.345
I pay my utilities (water, electric) in full and on-time	140	4.02	1.205
I go over the limit on my credit card(s)	140	4.12	1.011
I spend more in a month than I earn	140	3.01	1.107
I use alternative sources of credit (e.g. borrow from friends)	140	3.41	1.233
My account has a positive balance at the end of the Month	140	3.08	1.234
I balance my credit/debit account each month	140	5.11	.995
I have checks returned because of insufficient funds	140	3.01	.907
I have taken overdrafts	140	4.22	.907
I have a daily, weekly or monthly budget that I follow	140	3.65	.745
I set aside some money each month for savings	140	4.21	.879
I am an active member of a SACCO(s)	140	4.23	.901