EFFECT OF FINANCIAL LITERACY ON PERSONAL FINANCIAL MANAGEMENT: THE CASE OF MUMIAS SUGAR COMPANY EMPLOYEES

ABDELAHI DAYIB MOALIM

A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF BUSINESS ADMNISTRATION, SCHOOL OF BUSINESS UNIVERSITY OF NAIROBI

2017

DECLARATION

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

Signed: ____________________________ Date: ____________________

ABDELAHI DAYID MOALIM

D61/79818/2015

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

Signed: ………………………………………… Date: …………………….

DR. JOSHPHAT LISHENGA

FINANCE AND ACCOUNTING DEPARTMENT

DEDICATION

This project is dedicated to my classmates, for their moral support and for encouraging me to advance my studies.

.

ACKNOWLEDGEMENT

I am most thankful to God Almighty for this far he has led me. My sincere gratitude goes to my supervisor Dr. Joshphat Lishenga, for his valuable guidance in the development of this proposal and my dear wife Amina Mohamed Ahmed and all my families, friends and fellow students for their support.

ABSTRACT

The study sought to establish the effect of financial literacy on personal financial management using the case of Mumias Sugar Company. The specific objectives of the study were; to establish the effect of financial literacy on saving practices of Mumias Sugar Company employees, to establish the effect of financial literacy on social security planning of Mumias Sugar Company employees and to determine the effect of financial literacy on debt management practices adopted by Mumias Sugar company employees. The descriptive survey design was adopted in this study .This method deemed suitable since the research sought to explore the association between the various variables forming the basis of the study. The study targeted a total of 2000 employees, from Mumias sugar Company (Ministry of Trade, 2013). The simple random sampling was used to select 200 employees from the strata, so that each member of the target population stands an equal chance of being included in the target populations of 200 employees. The study used primary data collected from semi-structured questionnaires and the collected data was analyzed using SPSS and Microsoft Excel whereby means, standard deviations, frequencies and percentages were computed. The study found out that, there was a strong positive relationship between savings literacy change and personal financial management (Pearson correlation = 0.501 p value = 0.000), there was a strong positive relationship between investment literacy and personal financial management (Pearson correlation = 0.579 p value = 0.000), there was a strong positive relationship between retirement plan literacy and personal financial management (Pearson correlation = 0.850 p value = 0.000) and there was a moderate positive relationship between debt management literacy and personal financial management (Pearson correlation = 0.462 p value = 0.000). The study concluded that employees saved investment out of each payment they received and they saved at least 15 percent of their gross monthly income, a disciplined approach to re-balancing their investment was very important which, the employees had determined how much income they can expect on retirement and employees maximized tax efficiency in their investment portfolio which was essential, employees felt confident that the present health care system can support their needs in the event of a major illness and also that they maximized their retirement/pension contributions each year and that employees paying off the full credit card outstanding amount every month, also paid their mortgage and hire purchase installments on time every month and personal loans offered by financial institutions in the market was a convenient tool for them to use- they could borrow for any reason at any point in time. The study recommended that savings literacy is an important element of financial literacy therefore all employees should learn to save investment out of each payment they received and they save at least 15 percent of their gross monthly income, investment literacy should be considered as a critical factor of personal financial management to all employees as a disciplined approach to re-balancing their investment which is very important and also employees should determined how much income they can expect on retirement and maximize tax efficiency in their investment portfolio which will be essential, all employees should be aware of their retirement plans so as to be confident that the present health care system can support their needs in the event of a major illness and also maximize their retirement/pension contributions each year and that employees should pay off the full credit card outstanding amount and also pay their mortgage and hire purchase installments on time

TABLE OF CONTENT

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

ANOVA	Analysis of variance
IEBC	Interim Electoral Boundaries Commission
HRS	Health and Retirement Study
KMC	Kakamega Municipal Council
MOCD	Ministry of co-operatives and development
MSC	Mumias Sugar Company Limited
OECD	Organization for Economic Co-operation and Development
PACFL	Presidents Advisory Council on Financial Literacy
R&D	Research and development
SPSS	Statistical package for social sciences

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Financial literacy has been a matter of great concern since the occurence of the global financial crisis and previous studies confirm that it has a direct correlation with personal financial management . Financial education program has also received increased attention and most countries are formulating national financial education strategies and increasing the number of investments in the related programs. Literature has greatly emphasized on the association between financial literacy or mathematical and numerical ability and risk retirement savings, diversification and investment portfolios among others.

The traditional economic theory argues that aggressive individuals maximize the expected future utility through use of the available economic information to effectively accumulate and afterwards de-accumulate wealth as they coexist. Most surveys in the US however reveal that less than a half of their workers have attempted to estimate the amount of money they may require upon retirement, and the outcome indicates that most adults are faced with the challenge of retirement saving since they are too little to meet their financial thresholds (Lusardi & Mitchell, 2007). This has triggered the emergence of many economic explanations seek to explain disparities. The suggested economic phenomenon include; dispersion in risk aversion, credit limitations and discounts. The empirical literature on these factors has however not been successful in giving exclusive explanations on the evident wealth differentials (Bernheim & Skinner, 2001).

This study seeks to find out whether individuals who do not easily understand their financial environment also find the accumulation of wealth a difficult task. This study will critically examine the association between financial literacy which implies to the capability articulate economic information and make viable decisions regarding personal financial management, household finances and pension contributions. Barsky et al., (1997), Studies that were previously undertaken indicate that a strong correlation exists between financial literacy and retirement planning as well as asset accumulation. The outcome of these studies have triggered the policymakers to put more efforts in enhancing personal financial management of households and welfare by spreading financial literacy across the board.

1.1.1 Financial Literacy

Financial literacy is a term that implies the capacity to apply various informed and skillful practices in order to effectively handle personal money during the good season, Financial education on the other hand refers to that process that individuals attain better information about of the concepts as well as various commercial services which enables them to make avoid pitfalls and make informed choices, understand where to seek help and the undertakings that they should per take to improve their financial well-being both in the present and long-term (Danes & Hira, 2007).

Moore (2003) asserts that people can only be perceived as financially literate if they can effectively apply the acquired knowledge in the execution of their activities. Proxies are always used since financial literacy cannot be directly measured. Literacy is acquired through active integration of knowledge and practical experience. People become more financially sophisticated when their financial literacy level increases and it is assumes that that the competence of an individual also increases. Many concepts such as numeracy share common characteristics with financial literacy. Numeracy is however a broader concept which represents much more basic skill set which is related to general cognitive abilities and not just the financial matters

(OECD, 2005). Thus the general argument holds that general numeracy should be kept more distinct from financial literacy, as opposed to viewing it as a supporting construct.

The varying conceptual definitions of lead to substantial variations in the measurements of financial literacy. Despite PACFL not being an empirical study, its authors give a list of concepts which need to be understood by people in the financial education program so as to be considered as financially literate. These include, understanding financial institutions, capital market systems, household cash flow, the fundamentals of credit granting and reasons for having an emergency fund (Brown, 2008)

Financial literacy is measured using a complete set of 12 questions. The United States Health and Retirement Study (HRS) developed and implemented the first three most important financial literacy questions which have been widely adopted by other several international surveys. The second categories of three complex questions were devised formulated for special HRS module (Mitchell and Lusardi, 2007) to enable the measurement of complex terminologies such as risk diversification, inflation and compound interest. The final set of questions is concerned with fundamental aspects of the Chilean retirement system, this include the minimum retirement ages of male and female, mandatory contribution rate, making people understand the welfare program for the elderly, methods of computing pension benefits and making people to understand when to contribute to a Voluntary Pension system (Bernheim et al, 2010).

1.1.2 Personal Financial Management

Opdyke, *(*2010) observed that personal finance refers to the style of management of a person’s money and other monetary resources through budgeting, saving as well as expenditure of those finances having in mind the demands of the future life as well as the unforeseen risks that an individual may encounter. As a result of these an individual will be forced to make choices that suites his/her needs through he numerous banking products such as accounts for savings, loan acquisition, purchase of shares and bonds at the stock market as well as various types of insurance schemes. These insurance schemes may be that of life, disability, health among others. Other financial management plans may include that of retirement benefits, social security fund, as well as income tax management among others

The art and science of managing money is referred to as finance. Finance contains major areas such as managerial finance, corporate finance financial services and financial management. Financial services mainly deals with the delivery an design of financial products and gives advice to individuals, governments and businesses within banking areas and related institutions, investments, personal financial planning, insurance, real estate and so on whereas financial management is mainly concerned with the responsibilities of the financial managers within the business environment. Financial managers are actively involved in the management of the monetary affairs of any business type, namely, private and public, financial and non-financial ,profit-seeking and not-for-profit and large and small. Financial managers undertake various tasks as financial forecasting, budgeting, cash management, credit administration, funds management and investment analysis among others. The changing economic and regulatory environments arising due to the globalization of business activities have made the importance and duties of financial managers more complex. This has made the role of the financial management more complex and demanding (John, 2006).

Financial management on the other hand has been defined by Pandey (1999) as the managerial activity that is concerned with the planning and controlling the firm's financial resources. The resources under consideration include both tangible assets like inventory, machinery and cash debtors and intangible assets like goodwill and patents. It also includes managing the indebtedness of the firm so as to minimize the cost running a 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.

1.1.3 Financial Literacy and Personal Financial Management

The management of personal finances is an important and often viewed as a complex issue. Bennett, (2006) asserts that personal debt constantly rise and that a lot of uncertainty exist regarding bankruptcy rates due to recent amendments in bankruptcy legislation whereas rate of personal savings remains wanting at negative 1.5% in June 2006 in the developing countries. The Bankruptcy Abuse Prevention and Consumer Protection Act of 2005 argues that it is mandatory that for consumers who file bankruptcy to fill an individual financial management class before the discharge of the bankruptcy .This suggests that more knowledge be helpful in the mitigation of financial difficulties in future(White, 2005).

Scholars believe that improved financial security and financial literacy for families can be attained through financial education (Garman, 1999). Many scholars have become increasingly interested on how to equip individuals with the necessary skills required in curbing financial problems and recovering from extreme debt crisis such as bankruptcy. A study on the financial education programs' effectiveness will help in the development and refinement of programs (Hilgert, Hogarth, & Beverly, 2003) which will be of help to the educators in finding a way for handling the community needs related financial management at family level.

According to a study by the (Financial Literacy and Education Commission, 2006), little research has been done on the methods of attaining successful financial education .Some studies however suggest that the use of effective financial practices provides families with better personal financial management (Mason & Beutler) 1987). (Braunstein & Welch, 2002) argues that it is not proven whether a direct association exists between education and improved economic well- being. Financial literacy programs basically seek to help individuals to adopt the most appropriate financial practices that promote improved quality of life and economic health. It is always necessary to understand whether an objective has been met. This study therefore seeks to examine the experience of a state in supporting adults in the adoption of better financial management practices through effective financial education programs (Hira, 1987, Titus, Fanslow, & Hira, 1989),

1.1.4 Employees of Mumias Sugar Company

In the year 2012, Mumias Sugar Company Limited had 1,896 employees and Kenya shillings 1,998 million was paid to the staff as salary costs and wages. Employees of Mumias become attractive for research in this area as they currently comprise of over 2,000 employees with varied diversity. The diversity is in areas of age, education background, hierarchy in the organization and varied 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 greatly contributes to the agricultural sector which is the main contributor of economic growth and supports the livelihoods of not less than 25% of Kenya's population. There were a total of seven active sugar manufacturing firms (KSB 2013). 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

Previous studies have proven that less financially literate individuals often face more challenges regarding credit, debt management and savings which limit their ability to plan for the future. Financial services regulators are entitled with the responsibility of helping the financial services' consumers in making wiser financial decisions which promotes consumer protection, maintenance of market confidence and public awareness Mwangi (2012). The influence of financial literacy on the Social Security benefits and knowledge of pension is not clear. To dissect this, data was extracted by sampling older US individuals, Tabatabai and Steinmeier (2010) and no association was found between basic cognitive skills and knowledge on Social Security and retirement plan benefits.

While a positive association exists between knowledge and wealth and pension, Gustman, Tabatabai and Steinmeier (2010) asserts that causality can be easily converted to pension knowledge from pension wealth instead of flowing in the reverse direction. It also posits that the positive numeracy–wealth relationship do not necessarily prove that increasing numeracy and cognitive skills will increase households' wealth as they begin their retirement tenure. Policymakers and researchers overlooked to a large extent the role of financial literacy in explaining savings and savings differences behavior Bernheim (1995, 1998). The absence of adequate and specific literacy measures has triggered the use of crude proxies despite many studies emphasizing on the contribution of financial knowledge (Calvet, Sodini and Campbell, 2007).

These proxies pose a challenge since it makes it hard to distinguish the impact of financial literacy from the proxy variables’ impact. The use education to measure financial literacy cannot precisely distinguish the independent impact of knowledge about finance in relation to peoples levels of education.. Additionally, education serves as lifetime income proxy in many regressions. Over the recent years, researchers have put more effort in developing specific financial knowledge measures and the association between the levels of education about finance that an individual has in relation to the type of decision that he makes. Some research was conducted by a number of researchers such as Higert,Horgath and Beverly(2003) using some questions that could be answered using a true and false answers in measuring the relationship between knowledge about finances that an individual bears and the skills he possesses about managing money. Mitchel & Lusardi (2011) came up with a measuring module of the levels of knowledge about finances that people possess; this includes the studies on matters dealing with health as well as retirement.

A positive association exists between stock investment decisions and specific financial literacy and cognitive ability measures Van Rooij, Alessie & Lusardi (2011), Yoong and Christelis (2011), Padula & Japelli (2010). Many studies also document the existence of many financial mistakes. Financial mistakes’ evidence in the loan market includes; Payment of excessive fees by households, home equity loans and mortgages and very high interest rates on credit card debt by households Laibson &

Gabaix (2009). Studies by Calvet, Sodini& Campbell (2007) prove that in Sweden different people have diversified their investments and economic activities and they partially take part in money markets.considering that it is a country perceived to have well informed investors. Authors such as (Campbell, 2006) and (Calvet, Campbell & Sodini, 2007) have stressed that financial mistakes' welfare costs are not negligible.

According to Cocco, Gomes & Maenhout (2005), 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 on the levels of education on financial matters that workers at the mumias sugar factory possess and how far it has shaped their spending habits.

It is approximated that about half of Kenya's population live on less than $2 a day and with close to 11 million lacking financial services' access, especially the rural households and youth. Most of the youths are found within the informal sector of the economy and therefore require financial services and business training so as to make their livelihoods better. Mwangi(2012). It has been estimated from previous studies that about seven million youth are in need of financial services. Furthermore, women within the informal sector who are faced with financial challenges face specific challenges with regard to accessing finance, technical skills and employment to operate their enterprises. So as to understand the association between household financial decisions and financial literacy, the effective numeracy strength of households need to be understood, and the link between financial literacy and credit services access.

1.3 Research Objectives

The major objective of this study was to find out the Level of financial literacy of Mumias Sugar company employees. Specific objectives include:

i. To establish the effect of saving literacy on saving practices of Mumias Sugar Company employees.
ii. To establish the effect of investment literacy on social security planning of Mumias Sugar Company employees.
iii. To determine the effect of retirement plan literacy on debt management practices adopted by Mumias Sugar company employees
iv. To determine the effect of debt management literacy on debt management practices adopted by Mumias Sugar company employees

1.4 Value of the Study

This thorough analysis of financial literacy on personal financial would be beneficial in informing governments and their policy advisers around the globe as they make new financial education initiatives.

The sugar industry in Western Kenya was chosen to investigate the study variables relationship because according to Kenya Sugar Board (2009), the sugar industry is among the main contributors of the agricultural sector which is the backbone of the Kenyan economy and support the livelihoods of above 25% of Kenya’s population.

The sugar subsector contributes to about 15% of the total GDP in Agriculture, and it employs more households thus enabling most households to meet their needs in Western Kenya which comprise Nyanza, Western provinces and Rift valley (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 was determined how behavior theory can be applied to provide insight regarding financial behavior. So as to motivate change in financial behavior, more insight need to be drawn into understanding means in which behaviors are formed and methods that could be adopted by consumers eliminate the financial behaviors that are deemed undesirable and adopt the positive ones. This chapter also reviews the studies that have been previously conducted in a bid to address the research gaps from the theories have that postulated with regards to the literature.

2.2 Theoretical Review

The theoretical framework adopted in modeling the consumption and saving decisions asserts utility is derived by the rational and foresighted consumers from their lifetime consumptions. In simple terms, the lifetime expected utility is maximized by the consumers based on the constraints of the inter temporal budget.

2.2.1 Modern Portfolio Theory

The choice between the wide varieties of investment alternatives to achieve optimal personal portfolios ushers in the role of modern portfolio theory (MPT). These three frameworks: lifecycle, MPT and sociological bases of wealth holding find wide application in this discourse. In contrast to the egalitarian concerns for wealth holding at the macro level, the focus of studies at the micro level is on the specifics of personal wealth portfolios. One of the areas of interest is the accumulation and deccumulation of personal wealth and its underlying determinants especially in the family lifecycle framework, and more recently sociology. This is usually tied to a second phenomenon where the academic curiosity is the form in which wealth is held by individuals and households and its adequacy to support similar standards of living after retirement.

Almost working in parallel, the thrust of studies by economists in the latter half of the 20th Century was an attempt to gain insight into the life cycle of household economic behaviour, namely income, savings, consumption and wealth. These studies examined personal financial management and its determinants on the foundation of saving and consumption theory. In this line of inquiry, the life cycle hypothesis (LCH) of Modigliani and Blumberg (1954) appears to have gained wider acceptance in its proposition that age is the most important determinant of a person's wealth and that it (wealth) follows a hump-shape to a person's age; rising during the youthful age, peaking just before retirement and declining thereafter. Ando and Modigliani (1963) expands these works and develops the life cycle hypothesis of saving where they test empirical data to show that savings, a necessary precursor to wealth also follows a hump shape to age.

2.2.2 Learning Theory

The learning theory greatly evolved the studies by Skinner who argued that once behaviors that are associated with consequences, whether punishment or punishment, there will be change in the likelihood of action continuing. According to skinner, there is no equality between positive reinforcement and punishment as positive reinforcement provides longer lasting outcomes and whereas punishment is associated with many negative side effects (Skinner, 1953). There are a lot of critics on the question of learning theory and a lot of scientific basis behaviourism over psychoanalysis or psychosocial theory and that the capability to explain the complexity of human behaviours through consideration of observable attributes and not considering the vital roles of emotions and cognitions (Breger and McGaugh 1965). Moreover, since behavioral experiments are conducted in the laboratory, it is pounded that the learning theory is only applicable in describing the behavior which occurs in the context of social reality (Bandura 1977).

The learning theory also investigated human behavior by drawing attention on the observable factors, which emphasize on the usefulness of determining the prepositions of behaviour. It highly considers the positivity or negativity of the prerequisite conditions and the anticipated consequences of influencing the actions of individuals. The learning theory emphasizes more on the likelihood of lifelong learning during which the factors triggering behavioral consequences are altered which contrasts with the theor ies that emphasized more on the power of early development (Crain 1992; Goldhaber 2000).

2.2.3 Piaget's Cognitive Theory

The interest of cognitive theory lies within the cognitive processes which lie between the observed cause and how it influences behaviour. (Byrnes, 2008) asserts that the sensitization to the stimulus and the way in which people think is what elicits responses through the observation of the actions and thinking of children. The Piaget's theory further argues that individuals gain knowledge, first through physical interaction with objects and then followed by mental interactions. He was assured that that the subject must act upon transform objects so as to understand them. He states that the object must connect, displace, take part, combine and reassemble them (Piaget, 1983) Four developmental stages were highlighted in the cognitive theory (Goldhaber 2000; Piaget 1983). Each of the stages is developed by an individual and is achieved at his pleasure.

Crain (1992) argues that no stage is however skipped, which makes it hard for other individuals to reach the final cognitive development stage. Development capabilities such as the logic and ability to follow rules are formed in the third stage which is fundamental for are making decisions which are financially sound. The last stage may however not be attained as individual develop the ability to manage hypothetical situations and think abstractly (Crain, 1992). These individuals have an added advantage when it comes to financial decision making since they have a greater ability to plan ahead and think through all possibilities, (Bruner, 1988).

Existing theories however provides little comprehensive view on the methods of making financial decisions. The combinations of these theories to different emphasize and degrees confirm the emotional, behavioral, cognitive, cultural and psychological forces that shape decisions. Despite the most advantageous decisions being mechanistically evident, people bring misperceptions, values, fears, and the shared community goals while making decisions.

2.3 Determinants of Financial Literacy

The factors that affect the financial literacy include; investment literacy, debt management literacy, retirement plan literacy

2.3.1 Saving Literacy

Saving is a big part of personal finance management, People save because of these reasons; improving their consumption levels over the years, securing their old age as well as the time their retire, making lifetime investments such as educating children, buying or building their own houses, dealing with any unforeseen calamities among other reasons. Modigliani & Brumberg (1954) developed a theory on peoples spending habbits.They argued that individual spending habits are influenced by among other things age and the amount of resources they have. This means that people have a saving pattern of a hump-shaped in their life period especially when they are earning some reasonable incomes. Individual savings increase while, during low earning periods (for instance, prior to employment, or during retirement), individuals consume their life time savings to meet their current needs. A saving culture is beneficial not only to the individual, but also to the economy as a whole.

2.3.2 Investment Literacy

Studies have revealed that financially educated people save more because they are well capaciteted to make sound future plans..Therefre the levels of one's education matters more when it comes to savings and planning for the future. This is because one is empowered to plan according to his income situations. For instance in the developed world. The levels of peoples financial literacy has greatly influenced on their retirement plans as well as improved on their personal savings level.Infact a number of studies have discovered that individuals that plan for their retirement s have the capacity to increase on their savings level and enjoy a well secured retirement age. For example Lusardi (1999) experimented this issue by asking a number of respondents in 1992 and 2004 on their thoughts about their retirement, the question had multiple answers of a lot, some, little as well as hardly at all. The author discovered that the subject of retirement had a double the wealth of those who thought about it than those who didn't (Lusardi & Beeler 2007).

Other studies done by Bernheim & Garret(2003) on one hand as well as that of Baernheim,Maki & Garret(2001) reveal that people who had early exposure in monetary studies in their high school, tertiary college, places of work had more savings.Lusardi & Mitchel (2006,2011) on the contrary revealed that the individuals with low levels of education and low financial education do not plan for their old age and their retirement period in most cases. Thus they end up accumulating much less wealth in their prime years. Lusardi and Mitchel (2006, 201l) confirmed that those people with little information on financial education do not save for their retirement life. Banks (2010) confirms these arguments that the level of financial education that an individual has influences his savings habits and the rates of his retirement package.

2.3.3 Retirement Plan Literacy

Muske & Winter (2004) notes that the idea of programs that deals with retirement issues serves to encourage people into saving more and make proper plans during their working period. This is regarded as a wise decision by a number of scholars. A number of studies have revealed that most people worry so much about their future lives with regard to their finances. Lusardi(2000) observes that the level of ones information about personal finances will influence the type of decisions that he makes.on the flipside he reveal that less education about financial education leads to unplanned retirement, lack of investments, under-utilization of bank loans,underparticapation in the stock markets just to mention but a few.

2.3.4 Debt Management Literacy

High levels of debts are so problematic and it threatens the financial stability and the general welfare of the people as well as the community at large. Low levels of financial education is a leading factor in causing different behaviors when it comes to debts as well as increases the levels of debts that the individuals have.. Debt management is pegged on the ability of one to be financially literate hence their ability to make informed personal financial decisions on how to minimize their debts. Excess high debt levels are a propellant to one being susceptible to being conned during investments, bankruptcy, as well as financial delinquency all of which are pointer's to low levels of financial education among the people. (Kim, 2000).

2.4 Empirical Review

2.4.1 Global Empirical Studies

Empirical studies posit that wealth positively influences the level of financial knowledge possessed by the households even after the removal of wealth endogeneity and socio demographics controls. Financial literacy has gained immense attention over the recent past over many banking companies, grass-roots consumer, community interest groups and government agencies. Stakeholders such as policymakers are concerned with the inadequate working knowledge possessed by the consumers with regard to financial concepts and lack of necessary tools required in reaching to the most advantageous decisions which result in economic wellbeing. Financial literacy challenges have an impact on the daily money management of an individual and his capacity of enhancing on his level of savings in order to finance his bigger and long term ideas like advancing on his education, purchasing of his new home, as well as planning for his retirement days.

Gustman and Steinmeier (2004) carried out a research that compared the types of pensions possessed by workers whether defined benefit, defined contribution, or both combined with the employers' report. He noted that close to a half of elderly individuals workers were able to mention their future plans with certainty. Errors can arise both from the workers' and firm and reports. The studies by Gustman, Steinmeier and Tabatabai (2007) adopted different data sources such as the Watson Wyatt data, to aid the identification of the pension type from the data of the firm. The results indicated that workers are the most confused with regard to the type of pension they possess.

The Washington State sponsored a study which surveyed small samples of respondents to determine the amount of financial knowledge that individuals possessed found out that that individuals had very little information regarding financial literacy, Moore (2003). A number of participants failed to understand the association that existed between the prices of bonds and interest rates. The respondents were also not aware of the mutual funds, as most of them neither understood the meaning of a no-load mutual fund nor paid a guaranteed rate of return. A number exceeding one-third were also not aware that the rate of stocks had shown higher returns than the bonds for the past forty years, furthermore, majority possessed poor risk diversification skills and finally, a larger percentage of the respondents did not well articulate interest rates, which was a crucial issue as most had made loan applications.

Agnew and Szykman (2005),carried out a research on the level of education that individuals possessed on financial matters also reported similar findings. Similar patterns of findings were deduced from all the respondents; students and parents, college employees, local construction workers and tourists had very little information related to mutual funds and therefore could not even distinguish between money mutual funds, bonds and stocks. This study was also in line with previous surveys conducted by the EBRI. Their 1996 survey for instance portrayed that only 55 percent of workers were aware of the lower government bonds returns provided by the US government in the past 20 years as compared to their stock market.

According to Miles (2004) the UK borrowers do not properly understand interest rates and mortgages. It was also concluded by the UK Financial Services Authority that the least sophisticated financial consumers were the younger people, those with low incomes and, those in low social classes. Studies by Christelis, Padula and Japelli (2005) recorded that several European nations’ respondents scored low on literacy scales and financial numeracy.

Despite low financial literacy levels having a direct influence on specific individuals, it draws the policymakers' attention since its implications influence the economic behaviour in the long run. Hogarth, Anguelov, and Lee (2005), offered an illustration of this by demonstrating that the less educated consumers are not proportionately represented amongst those lacking transaction account types. Studies by other authors also show a positive link between knowledge and financial behaviour. Calvert, Sodini & Campbell (2005) opine that households who are more financially sophisticated have higher likelihoods of purchasing more risky assets and conducting more efficient investments.

2.4.2 Local Empirical Studies

Nyamute and Monyoncho (2008) surveyed Employees of finance and banking institutions and concluded that the financially literate individuals engaged in practices that were in line with the existing literature. Study findings however reveal that financially literate individuals exhibit strong personal financial management characteristics which imply that the education attained from school and work environment is not the only sources of financial education.

Nyabwanga (2011) did a study on the influence matters to do with the capital that is generated by the working class who happen to be small scale traders on the performance of their finances in kisii south district. So as to make a logical conclusion, 113 small scale enterprises were used as the sample in the study and through the use of a survey design, it was established a vast of the small business managers and owners possessed the least basic education with over 57% of them having not attended any training workshop and over 60% possessed no knowledge on the practice of managing a business thus lacking the essential business management skills required for effective running of the business. The small scale enterprises' performance was thus found to be low and wanting.

Simeyo et al., (2011) explored the impact of the availability of micro financial services in kisii county.. To draw viable conclusions, 86 youth micro enterprises were selected as the sample for the study and the conclusion that micro enterprise investment training had a notable positive correlation on the microenterprises performance with a 0.281 standardized beta coefficient indicating an increase in the provision of training to SSEs by one unit resulted to a rise in performance by 28.1% was reached. It was further established from the study that most of the respondents were contended with capital investment provision and training on basic business skills in micro enterprise investment.

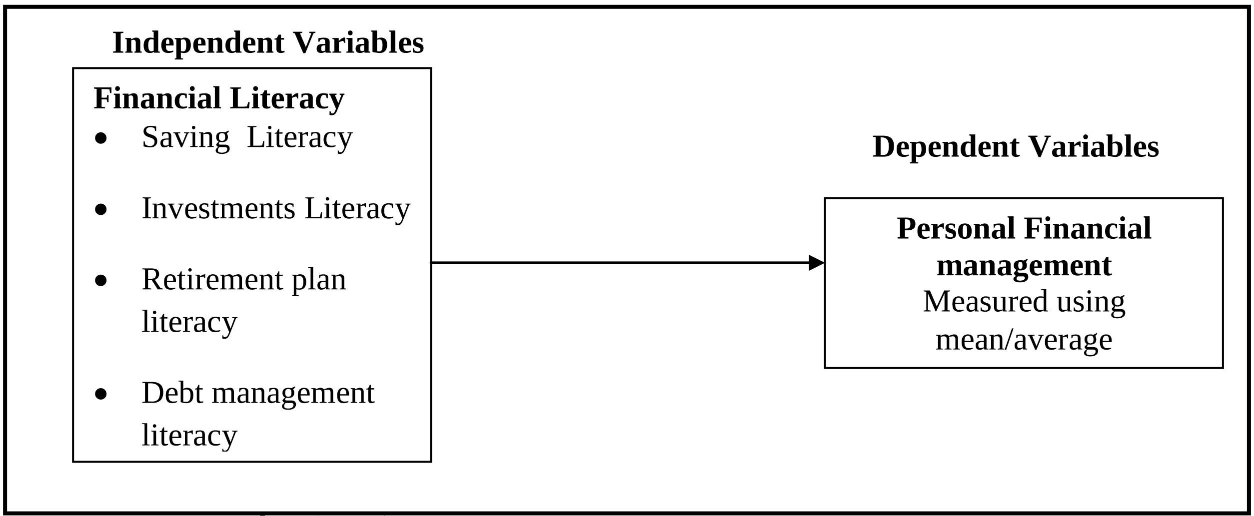
Osinde et al., (2013) also noted that entrepreneurs had proper access to business development services experienced a tremendous growth in sales and market shares on their various business undertakings. It was also noted from the study that the business persons who had attended training services recorded improved businesses performances with regard to growth in profits and sales with 83.3% of the selected respondents who regularly attended training programs recording a remarkable profit growth compared to only 41.2% who did not attend workshops.

Olima (2013) investigated on the effect of financial literacy on saving practices and social security planning of Kenya Revenue Authority employees. 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.

Barua and sane (2014) evaluated the effects of a financial education program in Mumbai India among female customers of an urban microfinance institution which was mandatory; they were aiming at establishing whether there was a link between financial education and discipline in the loan repayment area. They found out that the higher levels of financial education that an individual has leads to less period that they take in repaying the loans.

2.5 Conceptual Framework

The framework below indicates the relationship that exists between the two variables that have been employed by the study. In this case, the independent variable is financial literacy which is represented by savings literacy, investment literacy, retirement literacy and debt management. On the other hand, personal financial management is the dependent variable.



Source: Researcher (2017)

Figure 2.1: Conceptual Framework

2.6 Summary of Literature Review

The various surveys that have been conducted on financial literacy in most developed countries indicate that consumers possess little information regarding financial products and practices. This poses a challenge since financial illiteracy reduces the ability of the people to make savings and invest for retirement which undermines their welfare when they grow older. Another alarming concern is that these deficiencies influence specific population subgroups - those with low education and income, women and minorities which increase their vulnerability to economic hardship upon their retirement. Due to the higher complexity of financial instruments, it is upon the consumers to appreciate and capitalize on the opportunities offered by financial markets or easily succumb to unscrupulous brokers. No studies have been conducted on evaluation of financial education programs cost which makes it impossible to estimate financial education programs returns.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This section discussed the research design and methodology used. It focused on the target population, sampling design, data collection procedures and data analysis.

3.2 Research Design

The case study design was adopted by the study .This method deemed suitable since the research sought to explore the association between the various variables forming the basis of the study that's the relationship between budgetary control and performance. There were several arguments for choosing descriptive statistics. A descriptive study sought to exploit facts which generated vital principles, knowledge and solutions to facts related to the study (Kombo and Tromp 2006:9). A descriptive study was therefore conducted in the measurements, analysis, classification, comparisons and interpretation of the collected data. Lockesh (1984) states that descriptive research studies are tailored to obtain precise and logical information regarding the condition of the phenomena and the ability to draw logical conclusions the gathered facts

3.3 Population

A population entailed the study's object Welman and Kruger (2001:46). It comprised of objects, individuals, organizations, events and products. Mugenda and Mugenda (2003) describe the target population as the population to which the researcher intended to generalize the outcome to absolute population of a study. The study targeted a total of 2000 employees, from Mumias sugar Company (Ministry of Trade, 2013). The sampling unit was individual employee who was accepted in the sampling design for social sciences (Kothari, 2004).

3.4 Sampling Design

The employees were categorized into their strata (as per their departments) using stratified sampling technique. The study adopted random sampling method in selecting 200 employees from the strata, so as to make every selected participant have an equal chance to be selected in the target populations of 200 employees. This sought to ensure that all the vital parameters of the study were met.

The Kombo and Tromp (2006) recommended that a sample size of 10% to 30% is a fair representative of the study population was used to determine the number of employees to be sampled. Thus the 30% recommended by Kombo and Tromp (2006) was used to determine the sample size: Number of employees: - 10/100 x 2000 = 200 employees.

3.5 Data Collection

The study used primary data collected from semi-structured questionnaires. There was a vital in the collection of the primary data since the respondents were able to read and provided responses to all the items and thus its scope were not limited (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 adopted in the study since it can be easily administered when handling many respondents. The questionnaires were also considered as it reduces the level of bias, preserve confidentiality and have a wider coverage (Mugenda, Mugenda, 2003). The questionnaire was structured to capture both open ended and close ended questions. On the other hand secondary data collection instruments will also be 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. Content validity was conducted to ensure the validity of the research instruments through performing a pilot study of the research (Cozby, 1977).

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 also sought experts' opinions in the study. This allowed the appropriate modification and revision of the research Instrument which enhanced validity.

3.7 Data Analysis

The filled questionnaires were then edited to ensure that the information contained was complete and consistent. Qualitative data resulting from respondents' divergent views on personal financial management was used as they were not limited by choices The descriptive and regression analysis was used in data analysis upon which the outcome were presented using mean, standard deviation, correlation, and percentages. The analyzed data was then displayed using charts, graphs and frequency tables.

A multiple regression model was applied to analyze the association between the various variables. The model treated financial management as the dependent variable while the independent variables were financial literacy, saving practices, investment practices, retirement plan literacy and debt management practices. Five likert scale questions were also used to determine the extent of the employee's 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:

$Y = \alpha + \beta 1X1 + \beta 2X2 + \beta 3X3 + \beta 4X4 + \varepsilon$

Where Y = Personal Financial management

α = Constant term

$\beta 1$= Beta co-efficient

X1= saving literacy index calculated from its scale

X2= Investment literacy index calculated from its scale;

X3= Retirement plan literacy index calculated from retirement/pensions scale;

X4= Debt management literacy which will be evaluated by use of a questionnaire

ε = Error term

The model gives a broader understanding of the link between the independent and the dependent variables and explores the nature of their association.

3.7.1 Tests of statistical significance

ANOVA was used in testing the equality of two or more population through the examination of the variance of the selected samples.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSIONS

4.1 Introduction

The chapter centers on data collection as well as data analysis on the Level of financial literacy of Mumias Sugar company employees. The data was collected and gathered from the questionnaires. The questionnaires were designed in line with the research objectives.

4.1.1 Response Rate

The number of the distributed questionnaires was 200 to the participants and out of this 197 of them were returned to the researcher dully filled giving the responding rate to be 98.5%.According to Mugenda and Mugenda (2008), a response rate of 75% and above is excellent and suitable to analyze and establish data.

4.1.2 Reliability Test

The researcher Carried out a pilot testing so as to determine the suitability of the instruments of research. They are indicated in Table 4.1.

Table 4. 1: Reliability Test

Variable	No of Items	Cronbach Alpha
Savings literacy	5	0.776
Investment literacy	14	0.910
Retirement plan literacy	7	0.863
Debt management literacy	3	0.756
Personal financial management	17	0.939

The study established that savings literacy had a Cronbach Alpha of 0.776, investment literacy had 0.910, retirement literacy had 0.863, debt management literacy had 0.756

and personal financial investment had 0.939. Since all the values were above 0.7 this shows that the scale used was reliable.

4.2 Background Information

The researcher wanted to find out the general information about the respondents. The findings are shown in this subsequent section.

4.2.1 Gender of the respondents

Table 4.2.

Gender	Frequency	Percent
Male	113	57.4
Female	84	42.6
Total	**197**	**100**

This indicated that the study covered both genders and the majorities were male since they had the highest percentage

4.2.2 Age of the Respondents

Table 4.3.

Years	Frequency	Percent
Below 24 Years	27	13.7
25-30	86	43.7
31-34	29	14.7
35-40	28	14.2
41-44	2	1.0
45-50	16	8.1
Over 51 years	9	4.6
Total	**197**	**100**

From the results, 13.7% of the were below 24 years, 43.7% were between the age of 25-30 years, 14.75 were between 31-40 years, 14.2% were between 35-40 years, 1.0% were between41-44 years, 8.1% were between 45-50 years and 4.6% were over 51 years. Majority of the respondents were between the age of 25-30 years since they had a highest percent and this shows that the study covered across all the employees working in Mumias Sugar Company.

4.2.3 Duration of work

The study sought to establish the time which the study participants had worked in the company.

Table 4. 2: Duration of work

Time in Years	Frequency	Percent
Less than 5 years	76	38.6
6-10Years	91	46.2
11-15 Years	16	8.1
16 years and more	14	7.1
Total	**197**	**100.0**

Most of the respondents 46.2% had worked between 6-10 years, 38.6% had worked for less than 5 years, 8.1% had worked between 11-15 years and only 7.1 had worked for more than 16 years. This shows that the study catered all the employees who were working in the company.

4.2.4 Level of Education

Table 4. 3: Level of Education

Level of Education	Frequency	Percent
Certificate/Diploma	107	54.3
Graduate	70	35.5
Post-Graduate	20	10.2
Total	**197**	**100**

The respondents who had certificate/Diploma were 54.3%, 35.5% were graduates and only10.2% of them were post graduates. Most of the respondents had certificates/Diplomas as per the findings of the study.

4.2.5 Company Grade

The section wants to find out the company grade of Mumias Sugar. It's explained in this table.

Table 4.4: Company Grade

Grade	Frequency	Percentage %
Below MSC 3	85	43.1
MSC3-4	70	35.5
MSC5-6	37	18.8
MSC7 and above	5	2.5
Total	**197**	**100.0**

From the findings, 43.5% of the respondents noted that the company was below MSC 3, 35.5% noted that it was at MSC3-4, 18.8% noted that the company was at MSC5-6 and only 2.5% said it was at MSC 7 and above. This indicated that the company grade was below MSC 3 since the majority agreed so.

4.2.6 Employee Current Income

The researcher sought to establish the current income of the employees at Mumias Sugar Company. The findings are presented in Table 4.7.

Table 4.5: Employee Current Income

Amount	Frequency	Percentage %
10,000-50,000	130	66.0
50,001-100,000	45	22.8
100,001-200,000	17	8.6
200,001-300,000	2	1.0
Above 300,000	3	1.5
Total	**197**	**100.0**

From the results 66.0% of the respondents earned 10,000-50,000, 22.8% earned 50,001-100,000, 8.6% earned 100,001-200,000, 1.0% earned 200,001- 300,000 and 1.5% earned above 300,000, therefore this shows that most of the employees earned a salary of 10,000-50,000.

4.3 Financial Literacy

The findings of the study on financial literacy are clearly indicated in subsequent sections.

4.3.1 Savings Literacy

Several aspects of savings literacy and personal financial management were carefully indicated by the researcher.

Table 4.6: Savings Literacy

Statement	Mean	Std Dev
I save at least 15 percent of my gross monthly income	4.49	1.83
I set aside money for future needs/wants	2.70	1.02
I save investment out of each payment I receive	4.59	1.95
I am always keen in saving money	2.77	1.05
I increase my savings when I receive a bonus	3.83	1.02

The respondents agreed to a great extent that they saved at least 15 percent of their gross monthly income with a mean of 4.49 and a standard deviation of 1.83. On whether they set aside money for future needs/wants had a mean of 2.70 with a standard deviation 1.02 which indicated that the respondents agreed to a moderate extent with the statement in line with Steinmeier and Tabatabai (2007) who says that workers are the most confused with regard to the type of pension they possess.

The respondents further agreed to a very great extent that saved investment out of each payment they received with a mean of 4.59 and a standard deviation of 1.95. However the respondents were not sure whether they were always keen in saving money with a mean of 2.77 and a standard deviation of 1.05. Finally it was found out that the respondents increased their savings when they receive a bonus with a mean of 3.83 and a standard deviation of 1.02.

4.3.2 Investment Literacy

Several statements on investment literacy and personal financial management were carefully indicated by the researcher.

Table 4. 7: Investment Literacy

Statement	Mean	Std Dev
I know what I want to accomplish, financially.	2.45	0.94
I have fully outlined my financial objectives on paper.	3.79	1.01
I maintain a current list of my assets and liabilities.	2.66	1.02
Holding a strong cash position is necessary for my financial pursuit	3.68	0.98
I systematically save for life’s eventualities in 10 years’ Time or more.	2.72	1.04
I understand all the benefits that are available to me at MSC	2.83	0.91
I am satisfied with my present rate of savings and investment accumulation.	3.73	1.75
I feel that maximizing tax efficiency in my investment portfolio is essential.	4.20	0.89
I am satisfied with the performance of my investments outside of my retirement saving plans	4.06	0.91
A disciplined approach to re-balancing my investment is very important.	4.50	1.10
I have determined how much income I can expect on retirement.	4.27	1.08
I am fully aware of the impact of inflation on my future retirement income.	3.70	0.89
My current investment portfolio design employs modern portfolio theory.	3.83	1.21

The findings of the study showed that the respondents agreed to a moderate extent that they know what they want to accomplish, financially with a mean of 2.45 and a standard deviation of 0.94. On whether they had fully outlined their financial objectives on paper had a mean of 3.79 with a standard deviation of 1.01 which indicated that the respondents agreed to a great extent with the statement.

The respondents also agreed to a moderate extent that they maintain a current list of their assets and liabilities with a mean of 2.66 and a standard deviation of 1.02. The study established that holding a strong cash position was necessary for financial pursuit with a mean of 3.68 and a standard deviation of 0.98.

The respondents systematically saved for life’s eventualities in 10 years ‘time or more with a mean of 2.72 with a standard deviation of 1.04 which supports Lusardi and Mitchell (2006, 2011) who noted that less financially literate are less likely to save for retirement . The respondents also understood all the benefits that were available to them at MSC with a mean of 2.83 and a standard deviation of 0.91.

It was also found out that the respondents were satisfied with their present rate of savings and investment accumulation which had a mean of 3.73 with a standard deviation of 1.75. The respondents felt that maximizing tax efficiency in their investment portfolio was essential with a mean of 4.20 with a standard deviation of 0.89.

On whether they were satisfied with the performance of their investments outside of their retirement saving plans had a mean of 4.06 with a standard deviation of 0.91 which indicated that the respondents agreed to a great extent with the statement which supports Simeyo et al., (2011) explored that most of the respondents were contended with capital investment provision and training on basic business skills in micro enterprise investment . On whether a disciplined approach to re-balancing their investment was very important had a mean of 4.50 with a standard deviation of 1.10 which indicated that the respondents agreed to a very great extent with the statement.

The study further established that the respondents had determined how much income they can expect on retirement with a mean of 4.27 and a standard deviation of 1.08. On whether they were fully aware of the impact of inflation on their future retirement income had a mean of 3.70 with a standard deviation of 0.89 which indicated that the respondents agreed to a great extent with the statement in accordance with Agnew and

Szykman (2005) who noted that only 55 percent of workers were aware of the lower government bonds returns provided by the US government in the past 20 years as compared to their stock market. The respondents felt that their current investment portfolio design employs modern portfolio theory which had a mean of 3.83 with a standard deviation of 1.21.

4.3.3 Retirement Plan Literacy

Several statements on retirement literacy and personal financial management were carefully indicated by the researcher.

Table 4.8: Retirement Plan Literacy

Statement	Mean	Std Dev
I maximize my retirement/pension contributions each year.	4.08	1.89
I want to help build a vision of my retirement lifestyle	3.74	1.54
I know what income I would need if I were unable to work due to an accident or severe illness	3.01	0.98
In the event of a prolonged disability, I know how long I could survive on my present savings.	4.00	1.76
I fully understand the government disability benefits.	2.57	0.80
I have an alternative source of income in the event of an extended disability.	3.60	1.90
I feel confident that the present health care system can support my needs in the event of a major illness	4.54	1.87

The study established that the respondents maximized their retirement/pension contributions each year with a mean of 4.08 and a standard deviation of 1.89. The respondents felt that they wanted to help build a vision of their retirement lifestyle with a mean of 3.74 and a standard deviation of 1.54.

On whether they knew what income they would need if they were unable to work due to an accident or severe illness had a mean of 3.01 with a standard deviation of 0.98 which indicated that the respondents were neutral with the statement. It was also seen that in the event of a prolonged disability, they knew how long they could survive on their present savings with a mean of 4.00 and a standard deviation of 1.76.

The respondents further agreed to a moderate extent that they fully understand the government disability benefits with a mean of 2.57 and a standard deviation of 0.80. The study also established that the respondents had an alternative source of income in the event of an extended disability which had a mean of 3.60 with a standard deviation of 1.90. On whether they feel confident that the present health care system can support their needs in the event of a major illness had a mean of 4.54 with a standard deviation of 1.87 which indicated that the respondents agreed to a very great extent with the statement.

4.3.4 Debt Management Literacy

Several statements on debt management literacy and personal financial management were carefully identified by the researcher.

Table 4. 9: Debt Management Literacy

Statement	Mean	Std Dev
I pay off the full credit card outstanding amount every month	4.68	1.96
I pay my mortgage and hire purchase installments on time every month	3.77	1.78
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 in time	3.64	1.64

From the results, on whether they pay off the full credit card outstanding amount every month had a mean of 4.688 with a standard deviation of 1.96 which indicated that the respondents agreed to a very great extent with the statement. The respondents also paid their mortgage and hire purchase installments on time every month wi9th a mean of 3.77 and a standard deviation of 1.78. The respondents personal loans offered by financial institutions in the market was a convenient tool for them to use- they could borrow for any reason at any point in time which had a mean of 3.64 and a standard deviation of 1.64.

4.4 Personal Financial Management

Several statements on personal financial management were carefully identified by the researcher.

Table 4. 10: Personal Financial Management

Financial Management Practice	Mean	Std. Dev
I pay my credit card bills in full each month	3.99	1.05
I pay my rent/mortgage in full and on-time	3.72	1.10
I pay my utilities (water, electric) in full and on-time	3.92	1.09
I max out or go over the limit on my credit card(s)	4.57	1.98
I spend more in a month than I earn	3.94	1.08
I use alternative sources of credit (e.g. shy-lock, lender)	3.95	1.02
My account has a positive balance at the end of the month	4.78	1.95
I balance my credit/debit account each month	3.83	1.02
I have checks returned because of insufficient funds (bounced back)	4.03	1.90
I have taken overdrafts	4.71	1.77
I have a daily, weekly or monthly budget that I follow	3.91	1.01
I set aside some money each month for savings	3.94	1.12
I am a respected member of a SACCO(s)	3.88	0.96
I am aware of how NSE market operates	3.97	1.16
I am aware of the types of bonds in NSE market	3.99	1.05
I am aware of the types of securities traded in the stock market i.e. shares	2.72	1.07
I am aware of the companies listed in the NSE market	3.92	1.09

On whether they pay their credit card bills in full each month had a mean of 3.99 with a standard deviation of 1.05 which indicated that the respondents agreed to a great extent with the statement. It was also found out that the respondents pay their rent/mortgage in full and on-time had a mean of 3.72 with a standard deviation of 1.10.

The findings further revealed that they pay their utilities (water, electric) in full and on-time with a mean of 3.92 with a standard deviation of 1.09. On whether they max out or go over the limit on their credit card(s) had a mean of with a standard deviation of 1.98 which indicated that the respondents agreed to a very great extent with the statement.

The respondents felt that they spend more in a month than what they earn with a mean of 3.94 and a standard deviation of 1.08. Respondents of the study agreed to a great extent that used alternative sources of credit (e.g. shy-lock lender) which had a mean of 3.95 with a standard deviation of 1.02.

On whether their account has a positive balance at the end of the month had a mean of 4.78 with a standard deviation of 1.95 which indicated that the respondents agreed to a very great extent with the statement. The respondents balanced their credit/debit account each month which had a mean of 3.83 with a standard deviation of 1.02.

It was also found out that the respondents have checks returned because of insufficient funds (bounced back) with a mean of 4.03 and a standard deviation of 1.90. The results further indicated that respondents have taken overdrafts which had a mean of 4.71 with a standard deviation of 1.77.

On whether had a daily, weekly or monthly budget that I follow had a mean of 3.91 with a standard deviation of 1.01 which indicated that the respondents agreed to a great extent with the statement. The respondents' further agreed to a great extent that they set aside some money each month for savings with a mean of 3.94 with a standard deviation of 1.12.

The findings also indicated that respondents were the respected member of a SACCO which had a mean of 3.88 with a standard deviation of 0.96. On whether they were aware of how NSE market operates had a mean of 3.97 with a standard deviation of 1.16 which indicated that the respondents agreed to a great extent with the statement.

However respondents of the study were aware of the types of bonds in NSE market with a mean of 3.99 and a standard deviation of 1.05. The respondents were not sure whether they were aware of the types of securities traded in the stock market i.e. shares with a mean of 2.72 and a standard deviation of 1.07. Finally it was found out they were aware of the companies listed in the NSE market that with a mean of 3.92 and a standard deviation of 1.09.

4.5 Correlation Analysis

The researcher carried out correlation analysis to determine the strength and direction of the relationship between financial literacy and personal financial management.

Table 4.11: Correlation Analysis

		Personal	Savings literacy	Investment literacy	Retirement plan literacy	Debt management literacy
Personal financial management	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	197				
Savings literacy	Pearson Correlation	.501	1			
	Sig. (2-tailed)	.000				
	N	196	197			
Investment literacy	Pearson Correlation	.579	.734	1		
	Sig. (2-tailed)	.000	.000			
	N	197	197	197		
Retirement plan literacy	Pearson Correlation	.850	.797	.791	1	.
	Sig. (2-tailed)	.001	.003	.004		.
	N	197	197	197	197	
Debt management literacy	Pearson Correlation	.462	.544	.712	.922	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	197	197	197	197	197

From the results, savings literacy had a Pearson correlation of 0.501 which equal to 50.1% and its p value was 0.000. Therefore savings literacy contributes to personal financial management by 50.1% and this showed that there was a strong positive relationship between savings literacy change and personal financial management. Since its p value was less than 0.05, this indicated that variable was significant to the study.

Investment literacy had a Pearson correlation of 0.579 which is the same as 57.9%, the p value was 0.000 and therefore investment literacy contributes to personal financial management by 57.9% and this indicated that there was a strong positive relationship between investment literacy and personal financial management. However its p value was less than 0.05 which showed that the variable was significant to the study.

Retirement plan literacy had a Pearson correlation of 0.850 which is equivalent to 85.0% and the p value was 0.000. This showed that retirement plan literacy contributes to personal financial management by 85.0% and therefore this indicated that there was a strong positive relationship between retirement plan literacy and personal financial management and since its p value was less than 0.05, it shows that the variable was significant to the study.

Finally debt management literacy had a Pearson correlation of 0.462 which is the same as 46.2% and the p value was 0.000 thus indicated that debt management literacy contributes to personal financial management by 46.2%. Therefore there was a moderate positive relationship between debt management literacy and personal financial management.

4.6 Regression Analysis

Regression analysis was used to establish tyhe effect of financial literacy on personal management of employees of Mumias Sugar. The findings are indicated in subsequent Tables

Table 4. 12: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.907a	.822	.704	8.40256

Table 4.10 shows a model summary of regression analysis between four independent variables on the Level of financial literacy of Mumias Sugar company employees. The value of R was 0.907, the value of R square was 0.822 and the value of the adjusted R square was 0.704. From the findings 90.7% of change personal financial management was attributed to by four independent variables in the study (Savings literacy, investment literacy, retirement plan literacy and debt management literacy).

Table 4.13: ANOVA Statistics

	Sum of Squares	Df	Mean Square	F	Sig.
Regression	1960.019	4	490.005	6.940	.019b
Residual	423.618	192	70.603		
Total	2383.636	196			

ANOVA statistics of the processed data at 5% level of significance indicates that the value of calculated F is 6.940 and the value of F critical at is 4.534. Since F calculated is greater than the F critical 6.940>4.534, this shows that the overall regression model was significant.

Table 4. 14: Regression Coefficients

	Unstandardized Coefficients		Standardized Coefficients		
	B	**Std. Error**	**Beta**	**t**	**Sig.**
(Constant)	8.415	1.012		8.315	.027
savings literacy	.445	.0884	.012	5.033	.041
Investment literacy	.942	.125	.513	7.546	.034
Retirement plan literacy	.538	.136	.454	3.943	.023
Debt management literacy	.613	.102	.002	6.004	.004

$Y = 8.415 + 0.445X_1 + 0.942X_2 + 0.538 X_3 + 0.613 X_4$

Where Y= personal financial management X_1= savings literacy $X_{2=}$investment literacy $X_{3=}$ retirement plan literacy and $X_{4=}$ debt management literacy

From the findings of the regression analysis if all factors were held constant, personal financial management would be at 8.415. An increase in savings literacy would lead to an increase in personal financial management by 44.5%. An increase in investment literacy would lead to an increase in personal financial management by 94.2%. An increase in retirement plan literacy would lead to an increase in personal financial management by 53.8% and an increase in debt management literacy would lead to an increase in personal financial management by 61.3%. All the variables were significant as the p-values were less than 0.05 which indicates that all the factors considered were statistically significant.

4.7 Cross Tabulation

The researcher conducted cross tabulation to establish association between demographic and the variables of the study. The findings are indicated in subsequent section.

4.7.1 Cross Tabulation Between Demographic and Savings Literacy

The cross tabulatuio between demographic and savings literacy are indicated in table 4.17

Table 4. 15: Cross Tabulation between Demographic and Savings Literacy

		I Save at least 15% of my gross monthly income					
		Not at all	Less Extent	Moderate Extent	Great extent	Very Great extent	Total
gender	male	23	47	18	15	10	113
	Female	13	29	31	9	2	84
Total		36	76	49	24	12	197
		I save investment out of each payment I receive					
		Not at all	Less Extent	Moderate Extent	Great extent	Very Great extent	Total
gender	male	22	37	38	14	2	113
	Female	4	26	39	13	2	84
Total		26	63	77	27	4	197
		I save investment out of each payment I receive					
		Not at all	Less Extent	Moderate Extent	Great extent	Very Great extent	Total
Current income	10,000-50,000	12	42	59	15	2	130
	50,001-100,000	7	15	13	10	0	45
	100,001-200,000	4	4	5	2	2	17
	200,001-300,000	0	2	0	0	0	2
	Above 300,000	3	0	0	0	0	3
Total		26	63	77	27	4	197

From the findings, more male as compared to females saved at least 15% of their gross monthly income, saved investment out of each payment they received and increase their savings when they receive a bonus. The study further established that respondents with income ksh10, 000-50,000 saved investment out of each payment they received as compared to others.

4.7.2 Cross Tabulation between Demographics and Investment Literacy

The cross tabulation between demographics and investment literacy are indicated in Table 4.18.

Table 4. 16: Cross Tabulation between Demographics and Investment Literacy

		I know what I want to accomplish, financially				Total
		Not at all	Less Extent	Moderate Extent	Great extent	
Level of education	Certificate/Diploma	18	42	34	13	107
	Graduate	11	22	29	8	70
	Post-Graduate	5	4	3	8	20
Total		34	68	66	29	197

		I maintain a current list of my assets and liabilities					Total
		Not at all	Less Extent	Moderate Extent	Great extent	Very Great extent	
Company grade	Below MSC 3	10	29	34	11	1	85
	MSC3-4	4	22	24	16	4	70
	MSC5-6	13	6	10	6	2	37
	MSC7 and above	0	2	3	0	0	5
Total		27	59	71	33	7	197

		I am satisfied with my present rate of savings and investment accumulation					Total
		Not at all	Less Extent	Moderate Extent	Great extent	Very Great extent	
Age	Below 24 Years	6	7	9	5	0	27
	25-30	10	37	18	19	2	86
	31-34	7	5	11	6	0	29
	35-40	6	2	5	10	5	28
	41-44	0	1	0	1	0	2
	45-50	2	4	3	7	0	16
	Over 51 years	2	0	1	5	1	9
Total		33	56	47	53	8	197

The study established that respondents with Certificate/Diploma knew what they want to accomplish, financially as compared to graduates and post graduates. This is because they formed the highest proportion of the sample size used in the study. More respondents in grade MSC3-4 maintained a current list of their assets and liabilities as compared to bother grades. Respondents between 25-30 years were more satisfied with their present rate of savings and investment accumulation as compared to other age categories.

4.7.3 Cross Tabulation between Demographics and Retirement Plan Literacy

The cross tabulation between demographics and retirement plan literacy are indicated in Table 4.19.

Table 4. 17: Cross Tabulation between Demographics and Retirement Plan Literacy

		I maximize my retirement/pension contributions each year					
		Not at all	Less Extent	Moderate Extent	Great extent	Very Great extent	Total
Level of education	Certificate/Diploma	6	59	13	29	0	107
	Graduate	7	28	13	22	0	70
	Post-Graduate	0	9	5	4	2	20
Total		13	96	31	55	2	197
		I know what income I would need if I were unable					
		Not at all	Less Extent	Moderate Extent	Great extent	Very Great extent	Total
Age	Below 24 Years	0	11	7	8	1	27
	25-30	1	29	42	14	0	86
	31-34	0	9	7	10	3	29
	35-40	6	4	4	10	4	28
	41-44	0	1	0	1	0	2
	45-50	0	4	3	5	4	16
	Over 51 years	0	2	3	4	0	9
Total		7	60	66	52	12	197
		I feel confident that the present health care system can support my needs in the event of a major illness					
		Not at all	Less Extent	Moderate Extent	Great extent	Very Great extent	Total
gender	Male	19	20	70	3	1	113
	Female	13	18	48	5	0	84
Total		32	38	118	8	1	197

The findings of the study indicated that more respondents with certificate/Diploma maximized their retirement/pension contributions each year as compared to other levels of education. More respondents with 25-30 year and 35-40 knew what income they would need if they were unable as compared to other ages. More females than male felt confident that the present health care system can support their needs in the event of a major illness.

4.7.4 Cross Tabulation between Demographics and Debt Management

The cross tabulation between demographics and debt management are indicated in Table 4.20.

Table 4. 18: Cross Tabulation between Demographics and Debt Management

		I pay off the full credit card outstanding amount every month					
		Not at all	Less Extent	Moderate Extent	Great extent	Very Great extent	Total
gender	male	14	39	43	12	5	113
	Female	4	38	23	11	8	84
Total		18	77	66	23	13	197

		I pay my mortgage and hire purchase installment on time every month					
		Not at all	Less Extent	Moderate Extent	Great extent	Very Great extent	Total
Duration of work	Less than 5 years	3	30	30	11	2	76
	6-10Years	10	28	37	9	7	91
	11-15 Years	1	1	7	6	1	16
	16 years and more	2	7	2	1	2	14
Total		16	66	76	27	12	197

		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 in time					
		Not at all	Less Extent	Moderate Extent	Great extent	Very Great extent	Total
Current income	10,000-50,000	8	47	55	14	6	130
	50,001-100,000	6	14	16	8	1	45
	100,001-200,000	8	4	2	2	1	17
	200,001-300,000	0	0	1	1	0	2
	Above 300,000	0	1	0	2	0	3
Total		22	66	74	27	8	197

The study established that more females than male paid off the full credit card outstanding amount every month. More respondents who had worked for 6-10Years paid their mortgage and hire purchase installment on time every month as compared to other periods worked by different employees. More respondents earning Ksh 10,000-50,000 felt that personal loans offered by financial institutions in the market was convenient tool for them to use- they could borrow for any reason at any point in time.

4.7.5 Cross Tabulation between Demographics and Financial Management

The findings of the cross tabulation between demographics and financial management are indicated in Table 4.21.

Table 4.19: Cross Tabulation between Demographics and Financial Management

		I Pay my credit card bills in full each month						
		Not Applicable	Never	Rarely	Sometimes	Usually	Always	Total
gender	Male	9	4	12	65	14	9	113
	Female	2	1	7	55	13	6	84
Total		11	5	19	120	27	15	197
		I pay my rent/mortgage in full and on-time						
		Not Applicable	never	Rarely	Sometimes	Usually	Always	Total
Age	Below 24 Years	2	0	10	9	5	1	27
	25-30	3	3	35	20	25	0	86
	31-34	3	2	7	11	5	1	29
	35-40	2	2	7	9	8	0	28
	41-44	0	0	0	1	1	0	2
	45-50	0	0	8	4	2	2	16
	Over 51 years	0	0	3	2	4	0	9
Total		10	7	70	56	50	4	197
		I spend more in a month than I earn						
		Not Applicable	never	Rarely	Sometimes	Usually	Always	Total
Level of education	Certificate/Diploma	2	5	22	48	28	2	107
	Graduate	7	6	4	32	20	1	70
	Post-Graduate	0	1	1	9	7	2	20
Total		9	12	27	89	55	5	197

The findings of the study indicated that more male than females paid their credit card bills in full each month. More respondents aged between 25-30 years paid their rent/mortgage in full and on-time compared to respondents with other ages. More respondents with Certificate/Diploma spend more in a month than they earned as compared to other education levels.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Introduction

The chapter will deal with a summary of the entire study, it will also give a conclusion as well as state the recommendations made. The chapter will also go ahead and give the suggestions for further research. The summary, conclusion as well as the recommendations of this study were drawn from the objectives of the study which was to find out the levels of financial literacy of Mumias Sugar company employees.

5.2 Summary Findings

The key summary findings on the Level of financial literacy of Mumias Sugar company employees are represented in this subsection as per each objective.

5.2.1 Savings Literacy

The study found out that employees saved investment out of each payment they received which had a mean of 4.59 with a standard deviation of 1.95, they saved at least 15 percent of their gross monthly income with a mean of 4.49 and a standard deviation of 1.83 and that they increased their savings when they receive a bonus, the mean was 3.83 and a standard deviation of 1.02. However the employees were always keen in saving money with a mean of 2.77 and a standard deviation of 1.05.

5.2.2 Investment Literacy

The study established that a disciplined approach to re-balancing their investment was very important which had a mean of 4.50 with a standard deviation of 1, the employees had determined how much income they can expect on retirement with a mean of 4.27 and a standard deviation of 1.08.

The study further established that employees felt that maximizing tax efficiency in their investment portfolio was essential which had a mean of 4.20 with a standard deviation of 0.89, employees were satisfied with the performance of their investments outside of their retirement saving plans with a mean of 4.06 and a standard deviation of 0.91.

Furthermore employees felt that their current investment portfolio design employs modern portfolio theory which had a mean of 3.83 with a standard deviation of 1.21, they had fully outlined their financial objectives on paper had a mean of 3.79 with a standard deviation of 1.01and that they were satisfied with their present rate of savings and investment accumulation which had a mean of 3.73 with a standard deviation of 1.75.

It was also found out that employees of Mumia Sugar Company were fully aware of the impact of inflation on their future retirement income which had a mean of 3.70 with a standard deviation of 0.89 and also holding a strong cash position was necessary for financial pursuit with a mean of 3.68 and a standard deviation of 0.98.

5.2.3 Retirement Plan Literacy

The study revealed that employees felt confident that the present health care system can support their needs in the event of a major illness with a mean of 4.54 with a standard deviation of 1.87 and also that the they maximized their retirement/pension contributions each year which had a mean of 4.08 with a standard deviation of 1.89.

The study also revealed that in the event of a prolonged disability, employees knew how long they could survive on their present savings with a mean of 4.00 and a standard deviation of 1.76, they also felt that they wanted to help build a vision of their retirement lifestyle the mean was 3.74 with a standard deviation of 1.54 and finally they had an alternative source of income in the event of an extended disability which had a mean of 3.60 with a standard deviation of 1.90.

5.2.4 Debt Management Literacy

The results of the study showed that employees paid off the full credit card outstanding amount every month which had a mean of 4.688 with a standard deviation of 1.96, also paid their mortgage and hire purchase installments on time every month wi9th a mean of 3.77 and a standard deviation of 1.78 and personal loans offered by financial institutions in the market was a convenient tool for them to use- they could borrow for any reason at any point in time which had a mean of 3.64 and a standard deviation of 1.64.

5.2.5 Personal financial management

The study found out that employees account had a positive balance at the end of the month with a mean of 4.78 with a standard deviation of 1.95, they had taken overdrafts which had a mean of 4.71 with a standard deviation of 1.77 and that they had checks returned because of insufficient funds (bounced back) with a mean of 4.03 and a standard deviation of 1.90.

It was also established that employees paid their credit card bills in full each month had a mean of 3.99 with a standard deviation of 1.05, they were aware of the types of bonds in NSE market with a mean of 3.99 and a standard deviation of 1.05 and they were also aware of how NSE market operates with a mean of 3.97 with a standard deviation of 1.16.

Finally the study established that the employees used alternative sources of credit (e.g. shy-lock lender) which had a mean of 3.95 with a standard deviation of 1.02, they set aside some money each month for savings with a mean of 3.94 with a standard deviation of 1.12 and balanced their credit/debit account each month which had a mean of 3.83 with a standard deviation of 1.02.It was also found out that they paid their rent/mortgage in full and on-time had a mean of 3.72 with a standard deviation of 1.10.

5.3 Conclusion

The study concludes that gender influences saving patterns for retirement planning among employees of Mumias sugar company Kenya. The role of gender in investment as well as debt management on personal financial management shows that male save better than female. However the study also concludes that age influences personal financial management, the findings shows that employees who were between the ages of 23-30 years save better than others and invest better too. Furthermore the study concludes that employees who had worked for 6-10 years saved better and invested accordingly than others and also on the level of education the study concludes that employees who were post graduates were advanced in savings and investment, retirement planning and debt management compared to those who had certificate/Diploma and graduates.

On savings literacy the study concluded as follows; there was a strong correlation between financial and savings education on one hand and personal financial management since employees saved investment out of each payment they received and they saved at least 15 percent of their gross monthly income.

On investment literacy the study concluded a strong correlation between investment informed people and personal financial management as a disciplined approach to re-balancing their investment was very important which, the employees had determined how much income they can expect on retirement and employees maximized tax efficiency in their investment portfolio which was essential.

The study also concludes a strong correlation between retirement plan information and personal financial management since employees felt confident that the present health care system can support their needs in the event of a major illness and also that they maximized their retirement/pension contributions each year. The study also concludes incase disaster happens and it takes long period of time, employees knew the period in which their savings could sustain them.

Finally on Debt management literacy the chapter concluded that a moderate correlation between debt management information and personal financial management as seen by employees paying settling the entire loan facility on a monthly basis. The individuals also developed the habits of settling their mortgages as well as things bought on higher purchase on a monthly basis. The individuals found that the loan facilities offered to them by the commercial banks were so convenient to them in that they settled it without any difficulties, due to their disciplined financial records, they would use that as an excuse to acquire other loan facilities.

5.4 Recommendations

The recommends that savings literacy is an important element of financial literacy therefore all employees should learn to save investment out of each payment they received and they save at least 15 percent of their gross monthly income.

The study also recommends that investment literacy should be considered as a critical factor of personal financial management to all employees as a disciplined approach to re-balancing their investment which is very important and also employees should determine how much income they can expect on retirement and maximize tax efficiency in their investment portfolio which will be essential.

Furthermore on retirement plan literacy the study recommends that all employees should be aware of their retirement plans so as to be confident that the present health care system can support their needs in the event of a major illness and also maximize their retirement/pension contributions each year. The study also recommends that in the event of a prolonged disability, employees should be aware of how long they could survive on their present savings.

Finally on debt management literacy the study recommends that employees should pay off the full loan, things acquired on hire purchase, personal loans that they obtained from banks and other financial institutions on time. This will earn them a clean financial records hence they can use those records as a bargaining power in securing more loans.

5.5 Suggestion for Further Studies

Several studies should be carried out to establish the Level of financial literacy of Mumias Sugar company employees. The study also concentrated with the Mumias Sugar Company therefore more research should be carried to include all the organizations not only in Kenya but across the world.

REFERENCES

Agarwal, J. Driscoll, X. Gabaix, & D. Laibson (2007). The Age of Reason: Financial Decisions over the Lifecycle, mimeo, Harvard University.

Agnew, R. & Szykman, R. (2005). Asset allocation and information overload: The Influence of information display, asset choice, and investor experience. *Journal of Behavioral Finance*, 6, 57-70.

Alesina, Alberto, & Annamaria Lusardi (2006). *Driving Your Financial Investment. Perhaps a License is Needed*. Dartmouth College.

Ando, A., & Modligliani, F.(1963). The Life-Cycle Hypothesis of Saving: Aggregate Implications and Tests. *American Economic Review* 53 :(1963): 55–84.

Anthes, W.L. (2004). Financial illiteracy in America: a perfect storm, a perfect Opportunity. *Journal of Financial Service Professionals*, 58(6):49–56

Antonides, G. (2008). Comparing Models of Consumer Behaviour, in Alan Lewi (ed.), *The Cambridge Handbook of Psychology and Economic Behaviour. Cambridge, UK: Cambridge University Press:* 227-252.

Arkes, H. R. (1991). Costs and Benefits of Judgment Errors: Implications for Debiasing, *Psychological Bulletin*, 110(3):486-498.

Bandura, A. (1977). Self-Efficacy: Toward a Unifying Theory of Behavioral Change, *Psychological Review*, 84 (2), 191-215.

Bennett, J. (2006). *Spend cycle. Newsweek*, August 8, 2006.

Bernheim, B. D., & Garrett, D. M. (2003). The effects of financial education in the workplace: evidence from a survey of households. Journal of public Economics, 87(7), 1487-1519.

Bernheim, B. D., Garrett, D. M., & Maki, D. M. (2001). Education and saving: The long-term effects of high school financial curriculum mandates. Journal of public Economics, 80(3), 435-465.

Bernheim, D. and Garrett, D. (2003). The effects of financial education in the workplace: Evidence from a survey of households, *Journal of Public Economics*, 871487-1519.

Century, K. (2008). *The determinants of home ownership: an application of human capita Investment Theory to the home owner shift decision. Honors projects*. Paper 71. Illinois Westeyan University Economic Department.

Christelis, D., Jappelli, J. & Padula, M.(2005). Health Risk, Financial Information and Social Interaction: *The Portfolio choice of European Elderly Households. Working Paper*. University of Salemo.

Hogarth, H., Jeanne, S., Christoslav, E., Anguelov, B. & Jinhook, L. (2005). Who Has a Bank Account. Exploring Changes over Time, 1989-2001, *Journal of Family and Economic Issues*, 26(1):1-5

Jayantilal, D. A. (2017). The effect of financial literacy on personal finance management: a case study on employees of Bank of Baroda (Kenya) Limited. *Unpublished Master's thesis,* United States International University – Africa

John, A. (2006). First Data Plots Personal Financial Management Service. American Banker, 177(104): 34-7.

Joo, S. & Grable, E. (2000). Improving employee productivity: the role of financial Counseling and education. *Journal of Employment Counseling*, 37, 2–15.

Kempson, E., Anderloni, L. Bayot, B. & Iwanicz-Drozdowska, M. (2008). Financial Services provision and prevention of financial exclusion, *European Commission*.

Kempson, H., Atkinson, A. & Pilley, O. (2004). Policy level response to financial Exclusion in developed economies: lessons for developing countries. Ministry of Economic Development (2006). *ANZ-Retirement Commission Financial Knowledge Survey*.

Keynes, J.M.(1936). The General Theory of Employment, Interest and Money, London: Macmillan.

Kim, J. (2000). The effects of workplace financial education on personal finances and work outcomes. *Unpublished Doctoral dissertation*, Virginia Polytechnic Institute and State University.

Lusardi A. & Oliver, M. (2006). Financial Literacy and Planning; Implications for Retirement wellbeing, *Pension Research Council Working Paper 1*, The Wharton School.

Lusardi, A. (1999). Information, expectations, and savings for retirement. Behavioral dimensions of retirement economics, 81, 115.

Lusardi, A., & Mitchell, O. S. (2011). Financial literacy and retirement planning in the United States. Journal of Pension Economics and Finance, 10(04), 509-525.

Lusardi, A., & Mitchelli, O. (2007). Financial literacy and retirement preparedness: Evidence and implications for financial education. Business economics, 42(1), 35-44.

Modigliani, F. R. B. (1954). Utility analysis and the consumption function: An interpretation of cross-section data. K. K. Kurihara, ed. Post Keynesian Economics. Rutgers University Press, New Brunswick, NJ

APPENDICES

APPENDIX I: INTRODUCTION LETTER

Dear Respondent,

RE: RESEARCH DATA COLLECTION

I am a student pursuing degree of Master of Business Administration, School of Business University of Nairobi. Undertaking a research project on, **"Effect of Financial Literacy on Personal Financial Management: The Case of Mumias Sugar Company Employees."** The data being collected is purely for academic purposes and a copy of findings will be availed to you upon request. Any information received will be treated with strict confidentiality and at no point will your name or that of your organization be mentioned in the final report.

Your cooperation will be highly appreciated.

Yours faithfully

Abdelahi Dayid Moalim

APPENDIX II: RESEARCH QUESTIONNAIRE

Instructions: (**Please read the instructions given and answer the questions as Appropriately as possible).**

It is advisable you answer or fill in each section as provided. Make an attempt to answer every question fully and correctly.

SECTION A: DEMOGRAPHIC INFORMATION

1. Gender: Male [ ] Female [ ]

2. Please indicate your age bracket:

Below 24 Years [ ] 25 - 30 Years [ ] 31 - 34 years [ ] 35 – 40 years [ ]

41 – 44 years [ ] 45 – 50 years [ ] Over 51 years [ ]

3. For how long have you served in employment?

Less than 5 years [ ] 6 – 10 years [ ]

11 – 15 years [ ] 16 years and more [ ]

4. What is your highest level of education?

Certificate/ Diploma [ ] Graduate [ ] Post-Graduate [ ]

5. What is your current Mumias Sugar Company grade?

Below MSC 3 [ ] MSC3 – 4 [ ] MSC 5 – 6 [ ] MSC 7 and above [ ]

6. What is your current income level in Kenya Shillings?

10,000 – 50,000 [ ]   50,001 - 100,000 [ ]   100,001 – 200,000 [ ] 200,001 – 300,000 [ ]   Above 300,000 [ ]

FREQUENCY /PERCENTAGE

SECTION B: FINANCIAL LITERACY

6. 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.

Saving Literacy	**1**	**2**	**3**	**4**	**5**
I save at least 15 percent of my gross monthly income					
I set aside money for future needs/wants					
I save investment out of each payment I receive					
I am always keen in saving money					
I increase my savings when I receive a bonus					
Investment Literacy					
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.					
Retirement Plan Literacy					
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.					
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					
Debt Management Literacy					
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 in time					

SECTION C: PERSONAL FINANCIAL MANAGEMENT

7. 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.

Financial Management Practices	**Not Applicable**	**Never**	**Rarely**	**Sometimes**	**Usually**	**Always**
I pay my credit card bills in full each month						
I pay my rent/mortgage in full and on-time						

Financial Management Practices	**Not Applicable**	**Never**	**Rarely**	**Sometimes**	**Usually**	**Always**
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. shy-lock						
lender)						
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						

Financial Management Practices	Not Applicable	Never	Rarely	Sometimes	Usually	Always
money each month for savings						
I am a respected member of a SACCO(s)						
I am aware of how NSE market operates						
I am aware of the types of bonds in NSE market						
I am aware of the types of securities traded in the stock market i.e. shares						
I am aware of the companies listed in the NSE market						

THANK YOU FOR YOUR TIME