EFFECTS OF FINANCIAL LITERACY ON PERSONAL FINANCIAL DECISIONS AMONG EGERTON UNIVERSITY EMPLOYEES, NAKURU COUNTY, KENYA

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DECLARATION AND APPROVAL

Declaration

This research project is my original work and has not been presented for the award of a degree in this or any other Institution.

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Approval

This research project has been presented for examination with my approval as university supervisor.

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DEDICATION

This document is dedicated to my daughters Valerie Wangeci and Abigail Wanjiru and to my family and friends for their encouragement and support throughout the duration of my study.

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ABSTRACT

The current financial service market is complex and offers consumers a vast array of products and services to meet their financial needs. The degree of choice requires that consumers be equipped with the financial knowledge and skills to evaluate the options available in the market. Studies by (Beal & Delpachitra, 2003, Nyamute & Monyoncho, 2008) on the effects of financial on personal financial decisions indicate contradicting results. This study was carried out to establish the effect of financial literacy on personal financial decisions among Egerton University employees. The study was guided by the general objective of examining the effects of financial literacy on personal financial decisions. Specifically: to determine the effect of financial knowledge on personal financial decisions, to determine the effect of financial skills on personal financial decisions and to determine the effect of financial attitude on personal financial decisions. The study adopted the descriptive survey research design. The population of the study consisted of all Egerton University employees consisting of top management, middle level staff who include technical, administrative and teaching staff and lower level staff totaling to 1998 employees. A sample of 320 respondents was determined using a sample determination table. The sample size determined was drawn proportionately from each employee categorization. A random sample from each stratum was taken in a number proportional to the stratum's size when compared to the population. Primary data was collected through structured questionnaires. Data validity and reliability was checked by pilot testing and by use of Cronbach Alpha (0.876). Data was analyzed using descriptive statistics, Pearson correlation and multiple regression analysis with the help of Statistical package for Social Sciences (SPSS) .Findings revealed that financial knowledge and financial skills were significant in determining personal financial decisions while financial attitudes did not influence significantly personal financial decisions. Overall the effect of financial literacy was found to have a positive statistically significant relationship with personal financial decisions. The study recommendations include: Financial literacy programs with the aim of closing any knowledge gaps. The training will ensure that the employees have the requisite skills to manage their personal finances. This will enable them formulate financial plans to achieve financial freedom and improve their welfare and standard of living which would then improve productivity at their place of work. The findings of this study are important not only to the employees of Egerton University but also to the employer and government to guide in policy formulation.

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ANOVA	Analysis of Variance
IQ	Intelligence Quotient
NGO	Non-Governmental Organisation
OECD	Organisation for Economic Co-operation and Development
RBA	Retirement Benefits Authority
SPSS	Statistical Package for Social Science

CHAPTER ONE
INTRODUCTION

1.1 Background of the Study

The global marketplace has become increasingly risky and unpredictable. It affects the nations and the societies and its main implications include rising costs of goods and services that push people to make well-informed financial decisions (Lusardi & Mitchell, 2011). Remund (2010) defines financial literacy as a measure of the degree to which one understands key financial concepts and possesses the ability and confidence to manage personal finances through appropriate, short-term decision-making and sound, long-range financial planning, while mindful of life events and changing economic conditions.

Financial literacy has immeasurable significance to both individuals and institutions (Lusardi & Mitchell, 2007). For example, they assert that financially literate consumers make better clients, who in turn represent reduced risk for financial institutions and contribute to a stronger bottom line. And on the market level informed consumers play a developmental and monitoring role in the market by weeding out bad practices and providers.

According to Jappelli (2012), financial literacy is increasingly important for households' decisions about how to invest wealth and how much to borrow in financial markets. Financially literate households are able to use scarce resources more effectively, choose the financial services and products that best meet their needs and shift from reactive to pro-active decision making. Informed decisions to budget, save and borrow carefully enhance financial stability and ability to plan for the future and family welfare.

Malcolm (2000) describes that on an individual level, the lack of financial literacy makes people more susceptible to the devastation caused by emergencies, over- indebtedness, over-zealous retailers or fraudulent schemes. On an institutional level, lack of financial literacy generates misinformation and mistrust of formal financial service providers. Therefore in promoting financial literacy, financial institutions can better meet client demand, gain competitive advantage, foster informed consumers and enhance their standing as good corporate citizens. Financial literacy is a win-win proposition for clients and institutions.

The Global financial crisis of 2008 highlighted vulnerabilities created by financial innovation and the increasing complexity of financial markets. For example, financial products that require financial knowledge have become too complex for consumers to easily understand, and their financial details disclosure inadequate to clarify the risks. While this situation occurred in developed-country markets, these same issues are relevant for developing-country markets and for a range of financial products and providers (Braunstein & Welch, 2002). Cole et al. (2008) derives that financial decision making capability has received growing attention in both the developed and developing world, as a potentially important determinant of household well-being.

Financial literacy surveys have been conducted in the U.K. (Atkinson et al., 2007), Austria (Fessleret al., 2007), Poland (Szafranska & Matysik-Pejas, 2010), Fiji (Sibley, 2010), and Ireland (O'Donnell & Keeney, 2009). Some of the findings from the most recent FinScope surveys in 14 countries generally indicate low levels of financial access, especially occasioned by low literacy levels. For instance, in Ghana, one of the higher-income countries in the region, only 56 percent of adults use any kind of financial product This figure rises to 81 percent in Lesotho, but falls to just 22 percent in Mozambique. In seven African countries only 29% of adults had a bank account and that approximately 50% use no financial products whatsoever, not even informal financial products (DFID, 2008). These surveys indicate that financial literacy levels are low in high income countries and even lower in middle and low income countries.

It is important for people of all ages to be capable of making effective personal financial decision. The ability to make well informed financial decisions plays an important part in the ability of individuals to manage their financial affairs. The outcomes of financial decisions have significant implications for an individual's financial security and standard of living. In order for households to make day to day decisions correctly they should know the basic concepts of personal finance such as budgeting, compound interest and investment risks during short and long term. These concepts help in eliminating most frequent incorrect decisions. In order to make correct decisions appropriate level of financial literacy in needed (Lusardi, 2008).

In Kenya, the FinAccess 2013 survey results revealed that the levels of financial literacy are low despite the concerted efforts to raise literacy levels by the government and other stakeholders.

The Kenyan government while admitting the seriousness of this problem said "education and training in Kenya today is facing various challenges that have negatively impacted on its economic development. Unless addressed immediately, these challenges are likely to affect unfavorably the current and future development in Kenya" (Ministry of Education Science & Technology, 2004). With the entry of new providers and ever-more complex financial products and services, with the inclusion of new consumers to financial markets individuals must make appropriate decisions. These factors, together with a likely contraction of international capital flows, increase the importance of financial literacy for consumers in developing countries like Kenya.

1.2 Statement of the Problem

Today's complex financial service markets offer consumers a vast array of products and services to meet their financial needs. The degree of choice requires that consumers be equipped with the financial knowledge and skills to evaluate the options and identify those that best suit their needs and circumstances. Beal and Delpachitra (2003) argued that having financial literacy skills enables individuals make informed decisions about their money and minimizes the chances of financial mismanagement. However, a study by Nyamute and Monyoncho (2008) on the effect of financial literacy on personal financial management practices observes one can still practice financial management behaviors whether or not they are financially literate. The findings from the two studies are contradicting hence the effects of financial literacy on personal financial decisions cannot be conclusively determined. Moreover, from Egerton University Human Resource Department, it is estimated that 50% of the employees do not earn a third of their basic pay as per the government policy (Employment Act, 2007). Many employees are aware of the policy though they still find themselves adding up on loans. Further data from the Egerton University Sacco, where most Egerton University employees are members show that 10 percent of the employees have defaulted on their loan repayments. The default rate as well as employees not able to meet the one third on basic pay indicates that Egerton university employees could probably have a financial management problem. The reasons of the probable financial decisions problems could be as a result of the effects of financial literacy or not. It is for this reason that the study purposes to examine the effect of financial literacy on personal financial decisions among employees of Egerton University as an institution of higher learning.

1.3 General Objective

The main objective of the study was to examine the effects of financial literacy on personal financial decisions among the employees of Egerton University.

1.4 Specific Objectives

The specific objectives of the study were:

i. To determine the effect of financial knowledge on personal financial decisions among the employees of Egerton University.
ii. To determine the effect of financial skills on personal financial decisions among the employees of Egerton University.
iii. To determine the effect of financial attitude on personal financial decisions among the employees of Egerton University.
iv. To determine the effect of financial literacy on personal financial decisions among the employees of Egerton University.

1.5 Research Hypotheses

H_{01}: Financial knowledge has no effect on personal financial decisions among the employees of Egerton University.

H_{02}: Financial skills have no effect on personal financial decisions among the employees of Egerton University.

H_{03}: Financial attitudes have no effect on personal financial decisions among the employees of Egerton University.

H_{04}: Financial literacy has no effect on personal financial decisions among the employees of Egerton University.

1.6 Significance of the Study

In order to come up with the best financial literacy plan for working individuals, measuring the level of knowledge and skills of the population and assessing, their financial attitudes' with regard to their finances is fundamental in order to identify potential needs and gaps in relation to specific aspects of finance, as well as identifying groups at risk. This study is of interest not only to the employees of Egerton University but also to employer and other sectors that will use the study findings to identify critical areas of applying financial literacy. The employees will be able to evaluate themselves in terms of ability to make appropriate financial decisions and therefore formulate appropriate strategies to manage their finances. The employer will also find the findings of this study critical in developing a culture of prudent financial management among their employees since employees who have trouble with their personal finances often carry those problems to their work place with negative results to the employer.

Financial literacy also aids in improving the quality of financial services and contribute to economic growth and development of a country. Financially literate population is of benefit to the financial institutions since informed consumers enhance their standing as good corporate citizens. The country will benefit from a population that is well informed and are able to manage their savings and investments to create a sustainable future and create jobs through investments decisions.

The study also gives insight to government policy formulation role especially in the ministry of finance and Ministry of education as it's seeks to evaluate the role of financial education in the ongoing financial sector reforms in the country. This study could also contribute to knowledge in the academic field and could provide a base for other researchers interested in exploring financial literacy studies.

1.7 Assumptions of the Study

In this study the researcher made the following assumption: that the employees of Egerton University make some form of financial decisions and the information received from the respondents is a true representation of their financial literacy levels and their how they make their decisions.

1.8 Scope of the Study

The study was carried out in Egerton University and engaged all Egerton University employees namely; management staff, support staff and middle level staffs that include technical, administrative and teaching staff. The scope of the study was limited to collecting personal financial information only. The identification and selection of the study population was based on the fact that Egerton University employees provided a financial environment that was sufficient for the researcher to gather necessary data for the study. The research was carried out during the months of March 2016 to December 2016.

1.9 Limitations of the Study

The study sought to collect data on the effect of financial literacy on personal financial decisions. Since the data was personal and sensitive regarding personal finances and financial decisions, the respondents in some cases were unwilling to provide sufficient information sought. The researcher assured the respondents on the confidentiality of the information provided. The researchers' assurance improved the availability of data sought from the respondents so as to support the objectives of the study.

1.10 Operational Definition of Terms

Financial attitudes	Refers to the personal disposition towards financial matters and can be considered as a psychological tendency expressed when evaluating recommended financial management practices with some degree of agreement or disagreement.
Financial capability	The ability to apply financial literacy in personal money management to improve financial well-being
Financial Decisions	Financial decisions are a selection of possible choices made with the applied knowledge of financial literacy and are influenced by a constant battle between the generating of goods and services in the marketplace and a person's limited reserves to acquire such goods and services
Financial education	Financial education is the process by which individuals improve their understanding of financial products and concepts; and through information and instruction
Financial knowledge	Financial knowledge is defined as understanding key financial terms and concepts needed to function daily
Financial literacy	It is the ability of individuals to make informed judgments' and take effective decisions in managing their finances
Knowledge:	Awareness of concepts, such as risk, interest, inflation and probability, financial products and institutions, including sources of information, advice and redress avenues.
Lower level staff	Staffs within grade 1-4 are subordinate staffs who are cleaners, messengers, clerks, drivers under Egerton University service scheme
Middle level staff	Staffs within grade 5-14 are administrative support staff, technicians and lecturers under the Egerton University service scheme
Financial Skills	Gathering financial information and record keeping with ease, financial planning in regard to saving, spending and budgeting.
Top-level management	Staff within grade 15-18 who are in the university management board.

CHAPTER TWO
LITERATURE REVIEW

2.1 Theoretical Review

The conventional economic approach to saving and consumption decisions posits that a fully rational and well-informed individual consumes less than his income in times of high earnings, and he saves to support consumption when income falls (e.g. after retirement). Theoretical models incorporating such key aspects of consumer behavior and the economic environment implicitly assume that people are able to formulate and execute saving and spend-down plans, all of which require expertise in dealing with financial markets, knowledge of purchasing power, and the capacity to undertake complex economic calculations. This study however borrows from the Financial Literacy theory and the Life cycle model to guide the study.

2.1.1 Financial Literacy Theory

According to this theory, Gallery, Newton and Palm (2011) framework financial knowledge as a form of investment in human capital, and many empirical surveys established that people need to know much more to become informed. The authors show how financial literacy shapes economic outcomes. Financial literacy theory argues that the behavior of people with a high level of financial literacy might depend on the prevalence of the two thinking styles according to dual-process theories: intuition and cognition.

Dual-process theories embrace the idea that decisions can be driven by both intuitive and cognitive processes. Although dual-process theories come in many different forms, they all agree on distinguishing two main processing mechanisms or systems. The first system is characterized as fast, non-conscious, and tied to intuition while the second system as slow, controlled, and conscious (Stanovich & West, 2000). The second system is responsible for analytical and rational thinking (Stanovich & West, 2000) which is needed to consistently implement a financially literate investment strategy.

Financial literacy remains an interesting issue in both developed and developing economies, and has elicited much interest in the recent past with the rapid change in the finance landscape. Atkinson and Messy (2005) define financial literacy as the combination of investors understanding of financial products and concepts and their ability and confidence to appreciate financial risks and opportunities, to make informed choices, to know where to go for assistance, and to take other effective actions to improve their financial well-being.

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

Financial literacy prepares investors for tough financial times, through strategies that mitigate risk such as accumulating savings, diversifying assets, and purchasing insurance. Financial literacy facilitates the decision making processes such as payment of bills on time, proper debt management which improves the credit worthiness of potential borrowers to support livelihoods, economic growth, sound financial systems, and poverty reduction. It also provides greater control of one's financial future, more effective use of financial products and services, and reduced vulnerability to overzealous retailers or fraudulent schemes. Facing an educated lot, financial regulators are forced to improve the efficiency and quality of financial services (Falicov, 2001).

Locke and Mann (2005), states that investors should try to be disciplined and maintain their investment strategy. Taking these concepts into account, financially literate investors are more likely to deviate from their investment strategy if they rely on their intuition. Still, there is also evidence for the superiority of unconscious decision-making.

2.1.2 The Life Cycle Model

The point of departure of the life cycle model is the hypothesis that consumption and saving decisions of households at each point of time reflect a more or less conscious attempt at achieving the preferred distribution of consumption over the life cycle, subject to the constraint imposed by the resources accruing to the household over its lifetime. In theory, as long as people are earning more than is required to meet basic needs, they may choose to transfer funds from periods of high income to periods of low income. This so called smoothing of lifetime income is probably the most commonly understood reason for saving for retirement during employment. It is based on the idea that it is easier to save when there is more money from which a contribution may be put aside. This idea is important because there is a less than perfect correlation between people's expenditure and their income. At both ends of the adult life cycle, comparatively low incomes are topped up through borrowing in younger years, and by drawing on savings, pensions and investments in retirement.

The life cycle model is built on several assumptions about human behavior. The lifecycle model hypothesizes that individuals are forward looking in choosing how much of the resources that they receive and consume in each period over their lifetime. This brief statement incorporates four powerful assumptions about people: they are forward looking across the span of their lifetimes; they can predict the financial resources they have over their lifetime (i.e. lifetime income); they understand something about the financial resources they need in successive periods of their lives; they make informed choices about the use of their financial resource. The simplest life cycle consumption theory posits that consumers save so as to transfer resources life stages where the marginal utility of consumption is highest.

Given concavity of the utility function, consumers seek to transfer resources from periods of their lives where they earn substantial income, to periods where they earn less. These income paths are estimated separately for workers prior to age 65 and retirees age 65+; education groups refer to household heads having completed less than a high school education, high school graduates, and those with at least some college education. The proponents of this theory believe that employees are likely to make financial decisions based on the stage of life in which they are currently in.

2.2 Overview of Financial Literacy

Financial literacy is a relative and not an absolute concept. It is possible to define only the basic level of financial literacy required by everyone in a given society. Messy and Monticone (2012) define financial literacy as the ability to make informed judgments and to take effective decisions regarding the use and management of money. Roy Morgan Research of 2003 agreed that financial literacy was about people being informed and confident decision makers in all aspects of their budgeting, spending and saving (Jappelli, 2012). However, those measures of financial literacy should reflect individual circumstances and be tested against an individual's needs and circumstances rather against the entire array of financial products and services some of which they may neither use nor need.

Financial literacy can be defined as the ways in which people manage their money in terms of insuring, investing, saving and budgeting Horgath (2002).According to Huston (2010), financial literacy can be conceptualized as understanding personal finance knowledge and using it. Hence, it could be described as measuring how well an individual can understand and use personal finance-related information. Wachira and Kihiu (2012) states that financial literacy helps consumers in being prepared for difficult times by determining risk mitigating strategies, and in using financial products effectively, most importantly in making plausible decisions. In other words becoming financially literate refers to possessing knowledge and skills in order to handle money well.

Albeit the absence of an exact or explicit definition, this study adopted the OECD (2005) definition, that financial literacy consists of three interrelated elements: knowledge, skills and attitude. People require a basic body of knowledge and understanding, upon which they can draw when managing their financial affairs. Knowledge relevant to financial decisions will be acquired in different ways: through experience; through education and training; and through passive receipt of information from different sources such as family and friends, the media and information materials produced by the financial sector. This basic knowledge and understanding will be supplemented from time to time by information gathered for specific purposes. The additional information will be assimilated and understood in the context of an individual's existing body of knowledge. It follows, therefore, that the body of knowledge will tend to increase through a person's life.

Having the knowledge is not enough as people also need the ability to apply the knowledge and understanding of financial concepts in order to manage their money and to make appropriate financial decisions. This calls for a range of specific skills necessary for choosing and using financial products which need to be underpinned by basic levels of literacy and numeracy. Necessary skills may include and not limited to skills to gather financial information and those necessary to guide in record keeping and skills that help in financial planning in regards to saving, spending and budgeting (OECD, 2005).

People must however be prepared to take whatever steps necessary to apply their knowledge and to exercise their skill. This is largely a question of attitude. Knowledge and skill alone are not enough to ensure that people manage their financial affairs appropriately. People must be willing to invest the time and other resources required to apply their knowledge and to exercise their skills. They must also be able to gain access to information, advice and other resources; and be confident enough to exercise their skills and to act on the results. The strength of these attitudes can be measured by assessing the extent to which the willingness, ability and confidence is reflected in a person's behavior. The end result will be measured by the decision the person makes (OECD, 2005).

Financial literacy is important especially in the current economic and financial environment. Whether people are financially knowledgeable helps greatly in explaining various financial and economic behavior. In the course of time, individuals have increasingly been more responsible for their financial planning than ever before. In fact, this increased responsibility fundamentally could have stemmed from an humanistic need- preserving self, since recent crises, for example the global crisis known as subprime mortgage crisis in 2008 predominantly damaged the naive and the inexperienced Mandell and Klein, (2009). In a study conducted by OECD in 14 countries, Atkinson and Messy (2012) concludes that financial illiteracy is prevalent in many countries (e.g., Albenia, Poland, Malaysia,UK, South Africa). This is an indication that people around the world suffer from the lack of financial knowledge both in the developed and developing countries. These individuals have the deficiency of financial literacy which would assist them to make wise financial decisions.

2.3 Role of Financial Literacy

Financial literacy is first and foremost about empowering and enlightening consumers so that they are knowledgeable about finance in a way that is relevant to their lives and enables them to use this knowledge to evaluate products and make informed decisions. As a consequence of the changing structure of an economy, financial knowledge has become not just a convenience but an essential survival tool. Financial literacy do not make people financial experts, rather, it empowers individuals with sufficient skills and knowledge to form financial decisions and allow them to be more in control of their circumstances. A lack of financial knowledge can contribute to the making of poor financial choices that can be harmful to both individuals and communities (Kefela 2010).

Financial literacy has a valuable contribution to make at multiple levels in the economy. Malcolm (2000) describes that on an individual level the lack of financial literacy makes people more susceptible to the devastation caused by emergencies, over- indebtedness, over-zealous retailers or fraudulent schemes. Financial literate households are able to use scarce resources more effectively, choose the financial services and products that best meet their needs and shift from reactive to pro-active decision making. Informed decisions to budget, save and borrow carefully will enhance financial stability and ability to plan for the future and family welfare.

Financial literacy is important because it benefits consumers, the financial system and the economy. Financial literacy causes consumers to behave in a particular way, and develop particular attitudes concerning money. Jappelli (2012) asserts that financial literacy gives consumers and households the knowledge and skills necessary to assess the suitability of financial products and investments. Financially literate people have a greater capacity to save for retirement and do so. This is achieved by financial efficiency, which results in saving money, making an effort to set aside money and an enhanced ability to set realistic retirement goals and select suitable investments to realize those retirement goals (Fonseca et al., 2010). A better-informed consumer saves for the future, for retirement and for unforeseen circumstances and emergencies. Financial literacy is useful in life stages where important decisions are made, and as such, financial education at these stages can successfully alter behavior relating to retirement planning and saving.

Financial education ensures that people have a more realistic assessment of their own financial knowledge and accordingly approach investments and financial decisions with the caution that their particular level of understanding warrants. The realization of good financial behavior is achieved through the development of knowledge and skills, which provides the basis for making informed decisions (Landerretche & Martinez, 2011). A skilful and knowledgeable person with good attitudes is in the best position to make the most of life's opportunities and to budget and plan spending.

According to Jappelli (2012), financial literacy results in financial efficiency. This refers to the use of financial products and investing without waste and unnecessary cost. Financial literacy therefore gives consumers the ability to live more efficiently, without unnecessary cost and waste. Financial efficiency can include selecting the best value product on the market, and paying the lowest possible price on the market for a particular product or service. Financial efficiency is achieved by comparison shopping, an attribute of financially literate consumers. Comparison-shopping leads to savings by purchasing the best value products. This means that financial literacy should result in much more than realizing financial goals. Realizing financial goals and lifetime utility at the lowest possible price is the result of financial literacy. That is, behavior that does not result in unnecessary expenses, such as paying off credit card bills late, choosing the wrong financial product or paying higher interest rates etc.

Lusardi and Mitchell (2007) argue that financial literacy sometimes goes beyond the provision of financial information and advice. The focus of any discussion on financial literacy is primarily on the individual, who usually has limited resources and skills to appreciate the complexities of financial dealings with financial intermediaries on a day-to-day basis. In their analysis Farhana and Sabri (2013), consumers with low levels of education are disproportionately represented among the “un-banked,” that is, those lacking any kind of transaction account. Financial literacy helps to improve the efficiency and quality of financial services.

Miller (2009) asserts that financial literacy is important because financially literate consumers help to reinforce competitive pressures on financial institutions to offer more appropriately priced and transparent services. This according to Remund (2010) can be done by comparing options, asking the right questions, and negotiating more effectively. Kefela (2010) concurs that financial knowledge is directly correlated with self-beneficial financial behavior and without it individuals were most likely have problems with debt, not save, engage in exorbitant mortgages and did not plan for retirement. Financial knowledge has been found to have a strong positive relationship to individual’s involvement in pension matters understanding of rights and obligations in pension schemes sharpening the risk attitude , increasing savings and investments in complex assets (Lusardi & Mitchell, 2006) and enhancing innovative ideas (Moore, 2003).

Low level of knowledge is associated with limited success of voluntary savings schemes, for instance, in Kenya, the lack of a unified financial education program impacts negatively on the general savings culture and low awareness on pension matters (RBA, 2007). Malcolm (2000) observes that on an institutional level, lack of financial literacy generates misinformation and mistrust of formal financial service providers. Therefore in promoting financial literacy, financial institutions can better meet client demand, gain competitive advantage, foster informed consumers and enhance their standing as good corporate citizens.

Financial literacy is a win-win proposition for clients and institutions. Informed consumers make better clients, who in turn represent reduced risk for financial institutions and contribute to a stronger bottom line. And on the market level informed consumers play a developmental and monitoring role in the market by weeding out bad practices and providers (Malcolm, 2000). Therefore, in promoting financial literacy, financial institutions can better meet client demand, gain competitive advantage, foster informed consumers and enhance their standing as good corporate citizens.

2.4 Financial Literacy Measures

In order to enhance comparability and consistency across the evidence base, core concepts must be clearly defined. Different researchers and organizations have tried to understand the term financial literacy in many different ways. Although these definitions vary in scope, they have agreed in the characteristics of financial literacy as an ability, knowledge and competency in making financial decisions. It is important to note henceforth that before one can be said to be financially literate, it is assumed that the person has the intellectual framework for understanding, finding, evaluating and using information relating to finances, financial products, risks and any other information related to his financial well-being to make sound financial decision with limited risks (Lusardi & Mitchell, 2007).

Based upon a review of research studies, the many conceptual definitions of financial literacy fall into three categories; knowledge of financial concepts, aptitude and skill in managing personal finances and confidence and attitude in planning effectively for future financial needs.

PACFL (2008) defines financial literacy as the ability to use knowledge and skills to manage financial resources effectively for a lifetime of financial well-being and financial education as the process by which people improve their understanding of financial products, services and concepts, so that they are empowered to make informed choices, avoid pitfalls, know where to go for help and take other actions to improve their present and long-term financial well-being. Mandell (2007) defines financial literacy as the ability to evaluate the new and complex financial instruments and make informed judgments in both choice of instruments and extent of use that would be in their own best long-run interests. Lusardi (2008) defines financial literacy as knowledge of basic financial concepts, such as the working of interest compounding, the difference between nominal and real values, and the basics of risk diversification. A financially literate population is able to make informed decisions and take appropriate actions on matters affecting their financial wealth and well being. All these definitions agree in one thing; that financial literacy is an ability or knowledge to make sound financial decision or judgment regarding a financial issue.

Many conceptual definitions of financial literacy include some mention of an ability or aptitude for managing personal finances. Chen and Volpe (2002) define financial literacy as the ability to keep track of cash resources and payment obligations, knowledge of how to open an account for saving and how to apply for a loan, basic understanding of health and life insurance, ability to compare competing offers, and plan for future financial needs. Moore (2003) analyze that individuals are considered financially literate if they are competent and can demonstrate they have used knowledge they have learned in making financial decision. As people become more experienced in financial matters they increasingly become financially sophisticated and it is predicted that individual become more financially competent. Financial literacy requirements change over the life time of an individual in response to the changing financial needs and are therefore important in the personal decision making due to the unique nature of the financial products supplied; which could be complex, long-term and have wide social coverage (OECD, 2008). In this study, this argument will be significant in studying the target respondents' financial literacy with regard to the financial decisions they make.

Lusardi and Tufano (2009) focuses on debt literacy, a component of financial literacy and defines debt literacy as the ability to make simple decisions regarding debt contracts in particular how to apply basic knowledge about interest compounding measured in the context of everyday financial choices. These are the parameters that will be used to gauge the financial literacy of the population under study. The key issue will be whether the respondents are able to utilize these gauges to make informed financial decisions.

2.5 Personal Financial Decisions

Financial decision making is the thought process of selecting a logical financial choice from the available options. Financial decisions are greatly influenced by a constant battle between the generating of goods and services in the marketplace and a person's limited reserves to acquire such goods and services (Remund, 2010). Amidst current evolutions in financial markets, it's now becoming increasingly necessary for consumers to be more knowledgeable and competent in administering their finances. This is because changes in financial markets have resulted in the availability of a wider selection of financial products and services, making financial decisions multifaceted and more complicated.

Individuals must therefore make day to day money management decisions to enable better planning and management of life events such as food, education, illness, housing purchase or retirement. The knowledge and skills related to money management include the ability to balance a checkbook, prepare a budget and compare prices of different products (Beverly & Burkhalter, 2005). Easier access to credit cards, deregulation of financial markets and technological improvements in the way financial services are distributed have undoubtedly left many consumers with more available income to spend (Campbell,2006).

Saving decisions refer to decisions to defer consumption of income earned today. The life-cycle saving theory (Modigliani, Brumberg, 1954) posits that individuals will follow a hump-shaped saving pattern over their lifetime. During high earning periods of employment, individuals will save increasing amounts and smooth out expenditure. During low income levels for example later on in their retirement year's people will use up their savings to fund their lifetime spending needs. At the macroeconomic level, individual saving benefits the entire nation as it provides the base for long-term investments and infrastructure development for every country therefore contributing towards economic growth. Saving also acts as a hedge for nations against economic downturns and financial crisis. One of the avenues to boost national saving is by encouraging individuals to increase personal saving.

Investment on the other hand is putting money into an asset with the expectation of capital appreciation, dividends, and/or interest earnings. Most or all forms of investment involve some form of risk, such as investment in equities, property, and even fixed interest securities which are subject, among other things, to inflation risk. It generally does not include deposits with a bank or similar institution. A good investment strategy will diversify the portfolio according to the specified needs. Investing in the stock market for example, provides an opportunity to take advantage of the equity premium and to benefit from risk diversification. In addition, it has been argued that households are either simply unaware of the investment opportunities in the stock market or refrain from investing in stocks due to a lack of trust (Guiso & Jappelli, 2005). However, appropriate financial decisions must be made since some households may in fact be better off not investing in the stock market due to excessive trading or bad timing of transactions as vast majority of households that invest in the stock market follow very passive investment strategies (Ameriks & Zeldes, 2004).

From time to time individuals may require borrowing money in order to meet their needs. Debt management decisions are made to help consumers avoid over indebtedness. To be able to perform calculations, individuals require at minimum, an understanding of compound interest and the time value of money. Decisions about how much to accumulate and how much to borrow to be able to smooth consumption over the life-cycle also require an understanding of the working of interest rates. This means that individuals are faced with complex situations that require them to be equipped with appropriate knowledge and skills. This therefore means that the actual requirements for making personal decisions are demanding since individuals have must collect information, interpret the information and make forecasts about many variables (Lusardi, 2011).

2.6 Financial Literacy and Personal Financial Decisions

According to Kempson (2009), money management skills are influenced by three important factors; financial control, making ends meet and approaches to financial management. Financial control relates to budgeting, keeping records and knowledge of daily living costs and the ability to meet the financial obligations as they fall due (Hastings et al., 2013). Looking into all the approaches towards personal finance might seem complicated for an individual without financial education, as such people usually do not understand ways of managing (planning, saving, investing and borrowing) money as may be necessary from time to time (Hastings et al., 2013).

Moreover, studies that examine saving literacy conclude that despite the greater saving potentials among some people, the level of savings literacy and practice is generally moderate compared to observed high levels of expenditure literacy and practice. Generally financial literacy largely affects personal financial management (Knoll & Houts, 2012) although most people have financial literacy acquired through training or work experience. Nyamute and Monyoncho (2011) argue that financially educated people do practice to an extent the standard financial behaviors.

2.7 Empirical Review

There is an ever-rising interest in the financial literacy from academic community, international organizations and recently governments have embarked on finding ways of raising its citizen's financial knowledge. Different sectors of the economy, which constitute persons from various backgrounds, have been studied and their financial literacy assessed. Studies have indicated that the average level of financial wellness imply high financial literacy score because those with high levels of personal financial wellness report better performance ratings, less absenteeism, and less work time used for personal financial matters (Farhana & Sabri, 2013; Remund, 2010; Fonseca et al., 2010). It has been noted that some workers are not financially well because they have financial problems. If employers can improve personal financial wellness of workers, such as through financial education, it may increase productivity, because personal financial wellness is related to worker productivity.

Mercer (2006) in their study sought to understand the level of working Australians' financial knowledge and preparedness for retirement. A random sample of 802 working Australians found alarmingly low levels of financial literacy. Only half of the respondents surveyed had given, at best, some thought to retirement, but made very little, if any, preparations for it. Correspondingly, as financial literacy levels decline, anticipation of a lifestyle in retirement that is far less comfortable than now increases. Financial literate consumers were thus more confident in making personal financial decisions and making decisions on behalf of the employer.

Suwanaphan (2013), in their study of personal financial literacy examined the level of personal financial literacy of academic support-employee and analyzed their spending and saving behaviors. The samples taken were for 400 academic support-employees from Chiang Mai University. Results showed the overall mean of correct answers for the survey was about 36%. Although the questions included in the survey were basic, none of the mean scores for each area of general knowledge, debt, risk, and investments was above 44%. These levels of financial literacy are low. It is also found that participants with less knowledge held wrong opinions limiting their ability to make informed decisions. The academic support-employees knowledge of personal finance was low and needed to improve.

Nayebzahed (2013) in their study to investigate financial literacy of university professors' a sample of 94 professors was selected randomly from a population of 550 professors. Data was collected using questionnaires was analyzed using statistical analyses such as correlation, independent samples T-test and ANOVA. The results showed that university professors lacked essential financial information for handling their daily financial issues. There was a relationship between financial literacy and marital status characteristics, and finally there was no significant relationship between variables such as age, education and employment status with financial literacy.

Volpe et al., (2002) argued that online investors should have more knowledge than normal investors to succeed in the securities markets, because they are more likely to be surrounded by financial misinformation and manipulation. Therefore, the authors examined investment literacy of 530 online investors and the difference in the literacy level among various groups of participants using age, income, gender, education, and previous online trading experience as variables. The study demonstrated that the level of financial literacy varied with people's education, experience, age, income, and gender. Particularly, women had much lower financial literacy than men and older participants performed better than younger participants. As well, online traders had higher knowledge than others. Moreover, investors with higher income had more knowledge in investment than those with lower income, and investors with college or higher degree performed better than those with low education.

Worthington (2004) used logit models to predict financial literacy using the 2003 ANZ Survey of Adult Financial Literacy in Australia. The results indicate that all other things being equal, males, older persons, people whose occupations are professional, business owners and executives, small business and farm owners and semi-skilled traders, those with a university education and those with higher levels of income, savings and mortgage debt have a greater likelihood of a high level of financial literacy. Conversely, females, the unemployed and other non-working persons, farm workers, and those with low educational level had low levels of financial literacy.

Lusardi & Mitchell (2006) in their study on the relationship between financial literacy and retirement readiness included 989 observations taken from the American life panel. Panel C offered insight into why financial literacy patterns vary by age, educational attainment and sex. The results indicated that the respondents age 50+ were consistently better informed. Differences in financial literacy by education were however more striking with those with less than college education much more likely to respond incorrectly, especially to questions on compound interest, the time value of money, and inflation. Women on the other hand, exhibited much lower levels of financial literacy than men did.

According to Kempson (2009), money management skills are influenced by three important factors; financial control, making ends meet and approaches to financial management. Financial control relates to budgeting, keeping records and knowledge of daily living costs and the ability to meet the financial obligations as they fall due (Hastings et al., 2013). Looking into all the approaches towards personal finance might seem complicated for an individual without financial education, as such people usually do not understand ways of managing (planning, saving, investing and borrowing) money as may be necessary from time to time.

Hilgert, Hogarth, and Beverly (2003) examined the correlation between financial knowledge and actual behavior among the general population in the United States. They measured knowledge using the 28-question Financial IQ measures that were included in the Survey of Consumer Finances. The results indicated significant correlations between credit management scores and scores on the composite measure of financial knowledge which showed a strong relationship between financial knowledge and the likelihood of engaging in a number of financial practices: paying bills on time, tracking expenses, budgeting, paying credit card bills in full each month, saving out of each paycheck, maintaining an emergency fund, diversifying investments, and setting financial goals.

Al-Tamimi (2009) assessed financial literacy of the UAE individual investors, it examined the relationship between financial literacy and the influence of the factors that affect the investment decision. A convenient sample of 290 of UAE national investors was used, and data collected using a modified questionnaire. The results indicated that the financial literacy of UAE investors was far from the needed level and the financial literacy level was affected by income level, education level, and workplace activity. High-income respondents holding high educational degrees, and those who work in the field of finance/banking or investment had as expected a higher financial literacy level as others whereas; financial illiteracy existed regardless of the age of the respondents. A significant difference in the level of financial literacy was found as well between the respondents according to their gender. Specifically, women have a lower level of financial literacy than men. Finally, the results indicated that there is a significant relationship between financial literacy and investment decisions.

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

Mahdzan and Tabiani (2013) in their study examined the influence of financial literacy on saving decisions in Malaysia using a sample of 200 individuals. The results revealed that the level of financial literacy had a significant positive impact on individual saving. According to Jappelli (2012), financial literacy is increasingly important for households' decisions about how to invest wealth and how much to borrow in financial markets. Literacy also has far-reaching consequences for the stability of the overall economy. These factors, together with a likely contraction of international capital flows, increase the importance of financial literacy for consumers in poor countries. Financial literacy is especially important today for several reasons.

Financial literacy reinforces behaviors such as timely payment of bills and avoidance of over indebtedness that helps consumers to maintain their access to loans in tight credit markets.

Messy and Monticone (2012) argue that financially educated people do practice to an extent the standard financial behaviors. Research also shows that income and education level are a significant determinants of the amount of money individuals save for retirement (Mahdzan & Tabiani, 2013). Moreover, studies that examine saving literacy conclude that despite the greater saving potentials among some people, the level of savings literacy and practice is generally moderate compared to observed high levels of expenditure literacy and practice. Generally financial literacy largely affects personal financial management (Knoll & Houts, 2012) although most people have financial literacy acquired through training or work experience.

Nyamute and Monyoncho (2008) examined the personal financial management practices of both employees who are financially educated verses those who are not. The results have shown that those who are financially educated do practice to an extent the standard financial behaviors It further observes that one can still practice financial management behaviors whether or not they are financially literate. This is as a result of other available avenues of acquiring financial knowledge. The student t-test of equal means gave a p-value of 0.029 at a 5% significance level. These results show that there is a significant difference between the personal financial management practices of the finance and the non-finance literate respondents. The financially literate had a better appreciation and application of the financial management practices. It can be concluded that financial literacy influences personal financial management practices.

Studies examining saving and investment literacy among university students as that of Kinoti (2012) report that despite the greater saving potentials, the level of savings literacy and practice is generally moderate compared to observed high levels of expenditure literacy and practice among students. This implies that there is a mismatch between the saving expenditure and practices among the university students.

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

Wamae (2015) carried out a study to assess financial literacy and its role on personal financial management by bankers in Nairobi. The research questions addressed the benefits of financial literacy on personal financial management, challenges in personal financial management and the strategies that can enhance personal financial management. The study found that financial literacy positively affects personal financial management among employees in the banking sector which leads to increase in investment returns. The study concluded that low levels of financial management skills negatively affect employee's return on investments. Lack of commitment on financial management among bankers affected personal financial management which affected their ability to achieve their financial goals leading to lack of financial well-being. The study recommends that banks in Kenya should come up with financial literacy programs which are aimed at addressing financial well-being of employees.

Musindi (2014) study assessed the financial literacy of the real estate investors who invested in the real estate industry in Nairobi County. In addition, it examined the relationship between financial literacy and the influence of the factors that affect the investment decision. A modified questionnaire was developed and divided into three parts. Out of a target population of 140, 115 respondents were used in the study. The results indicated that the financial literacy of the real estate investors is far from the needed level. The financial literacy level was found to have a significant effect on investment decision making by real estate investors. To achieve optimal outcomes in a complex decision-making environment requires decision-makers to have adequate levels of financial knowledge and skills.

Robb and Sharpe (2009) in their study examined the role of financial knowledge in students' credit card decisions using an Internet-based survey sent electronically to a large sample of undergraduate and graduate students. The results showed that financial knowledge is a significant factor in the credit card decisions but not entirely in the expected directions. The results of a double hurdle analysis indicated that students with relatively high levels of financial knowledge were not significantly different from students with relatively low levels in terms of the probability of having a credit card balance. However, contrary to expectations, those with higher levels of financial knowledge had significantly higher credit card balances. These results highlight the complex nature of the relationship between personal financial knowledge and credit card behavior.

Mohamed and Fatima (2013), in their study on the relationship between financial literacy, personal financial attitude and forms of personal debt among residents of UAE, whose results indicated that there was no significant relationship between the average of financial literacy, as well as personal financial attitude and the decision to carry debt from bank loans or borrow from a friend or a family member. However, there was a strong negative statistical relationship between personal financial attitude and borrowing through a credit card. These results concluded that improving personal financial attitude through education and practice reduces dependence on credit cards.

Borden et al. (2008), in their study on changing college students financial knowledge, attitudes and behavior through seminar participation presented findings that questioned the link between knowledge and behavior, as they did not note any significant relationship between financial knowledge and effective financial behavior. The results presented suggested that whereas greater knowledge may improve student intentions towards more responsible behavior, it did not necessarily indicate whether or not students follow through with their plans.

Obago (2014) conducted a study to determine whether financial literacy had effect on personal financial practice among employees of commercial banks in Kenya. The population of the study was employees assumed to be financially literate by virtue of their training and nature of work. A random sample of 100 respondents were given questionnaires , the students' T test was used to examine the data with the objective of determining whether there is a significant relationship between financial literacy and personal financial management practices. The findings show that most respondents have financial literacy acquired through training or work experience and that it affects personal financial management. However, despite the sound financial literacy levels, not all employees are good managers of their personal finances.

2.8 Summary of Reviewed Literature and Knowledge Gap

After studying the literature on financial literacy it can be said consumers in both developed and developing nations are poorly informed about financial products and services. With the financial markets bringing in a vast array of products, financial illiteracy may stunt peoples' ability to save and invest for retirement, undermining their well being in old age Kefela (2010).

Reviewed literature shows that financial literacy often positively influences financial decisions; Olima (2013), investigated the effect of financial literacy on saving practices and social security planning of Kenya Revenue Authority employees and the study findings indicate that generally financial literacy to a great extent affects personal financial management among the respondents. Musindi (2014) study on financial literacy of the real estate investors who invested in the real estate industry in Nairobi County indicated also that the outcomes in a complex decision-making environment required decision-makers to have adequate levels of financial knowledge and skills.

However, in some instances, financially literate consumers do not make appropriate decisions as a study by Nyamute and Monyoncho (2008) found out while examining the effect of financial literacy on personal financial management practices that encompasses Savings practices, Expenditure practices, Debt management, Investment, Money management , retirement and unexpected practices of both employees who are financially educated verses those who are not observed that one can still practice financial management behaviors whether or not they are financially literate. Borden et al (2008) study also presented findings that questioned the link between knowledge and behavior, as they did not note any significant relationship between financial knowledge and effective financial behavior. Whereas greater knowledge may improve student intentions towards more responsible behavior, it did not necessarily indicate whether or not students follow through with their plans. The study's aim was to fill this gap by examining the effect of financial literacy on personal financial decisions among Egerton university employees.

2.9 Conceptual Framework

The following figure 2.1 shows the conceptual framework used in the study.

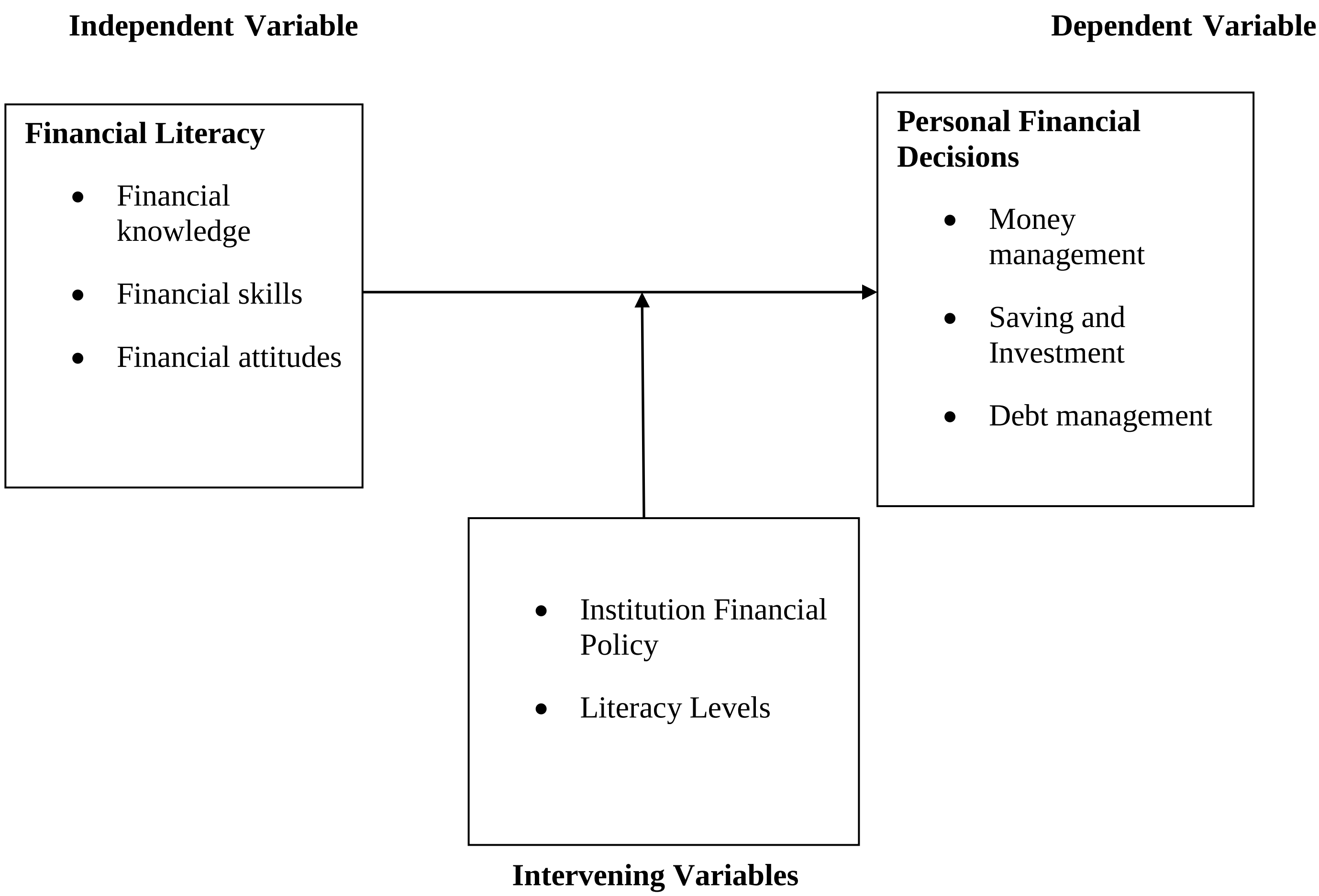

Figure 2.1: Conceptual Framework

The conceptual framework shows the relationship between financial literacy as the independent variable and personal financial decisions as the dependent variable. The financial literacy has been operationalized in terms of three variables: Financial knowledge, financial skills and financial attitudes that affect the personal financial decisions in regards to money management, debt management, savings and investment decisions. The independent variables were evaluated on their influence on each decision; money management, savings and investment and on debt management and then on the combined personal financial decisions. The framework shows the relationship between the combined effect of the financial literacy and personal financial decisions. The intervening variables were operationalized in terms of institution’s financial policy and literacy levels and were assumed constant in this study.

CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Research Design

This study adopted a descriptive survey research design. Data was collected regarding the effect of financial literacy on personal financial decisions from a selected sample of respondents. This research method was chosen because it's devoted to gathering of information about prevailing conditions or situations for purpose of description and interpretation. It describes the situation as it exists by examining the relationship between exposure (of financial literacy) and outcome prevalence (personal financial decision). This approach is used to describe variables and it provides the researcher with appropriate techniques for systematic collection of extensive data from a large group of respondents through administration of questionnaires (Orodho, 2009).

3.2 Target population

The target population for this study consisted of all employees of Egerton University with civil servants with characteristics to other public institutions of higher learning . According to the Egerton University Human Resource Department, there were 1998 employees within the 98 departments of the University as at 1st January, 2016 (See Appendix II). This study used a population that was quite diverse in respect of levels of financial literacy; composed of employees in the Lower level, Middle level and Top level management.

3.3 Sampling Procedure and Sample Size

Stratified sampling, proportionate sampling and simple random sampling techniques were used to determine the sample. The sampling techniques in this study were considered based on the different distributions of the respondents in the organizations' management structure as well as the characteristics of the target population. The target population was 1998 employees categorized into strata: Lower level=541, Middle level=1447 and Top level=10. A sample of 320 respondents was determined using Kathuri and Pals (1993) sample determination table (Appendix III). The target sample size determined of 320 respondents was drawn proportionately from each categorization. A random sample from each stratum was taken in a number proportional to the stratum's size when compared to the population.

Table 3.1 Study Sample

Respondents Clusters	Proportional Sample(s=n/N*S)	N
Top management	2	10
Middle level staff	231	1,447
Lower level Staff	87	541
	320	**1,998**

3.4 Instrumentation

The study used structured questionnaires to collect data. The use of questionnaires was relatively quick in collecting information from the respondents since most of the information needed was personal in nature. The questionnaire was divided into sections A, B, and C. Section A contained questions to determine the demographic variables. Section B and C in the questionnaire covered major aspects of personal finance; Section B included questions relating to measures of financial literacy; financial knowledge, financial skills and financial attitudes using a five point likert scale respondents were expected to state what was their level of understanding on the existence and functionality of some of the available financial products, whether on a scale to 1-5 they agreed to the statements regarding financial skills and financial attitudes. Section C covered individual's opinion regarding personal financial decisions relating to money management, savings and investments and debt management. The respondents were examined using a five point likert scale where they 1 strongly disagree to 5 strongly agree to the statements relating to financial decisions.

3.5 Data Collection Procedure

The researcher obtained permission to carry out the study from Egerton University SACCO, Egerton University Human Resource Department and Faculty of Commerce, Egerton University. The study used both primary and secondary data. The researcher collected primary data using structured questionnaires which were administered to the respondents by drop and pick method.

The drop and pick approach was considered an appropriate method for the study because the respondents were relatively literate and it gave the respondents time to fill the questionnaires. To maintain confidentiality, the questionnaires did not require respondents' names and the respondents were assured that the information and data provided were for research purposes only. Secondary data was collected through literature review, Human Resource Data and related journals.

3.6 Validity and Reliability

To ensure validity of the instruments, content validity was established (Cozby, 1977) from the pretest method that was done before the actual research. The questionnaires were pilot tested on 10 employees, before they were administered in the actual study. This helped refine the questions before they were administered in the actual study. The accuracy of data collected largely depended on the data collection instruments in terms of reliability and validity (Mugenda & Mugenda, 2008). The input by my supervisor and lecturers in the Faculty of Commerce were used to evaluate the applicability and appropriateness of the content, clarity and adequacy of the research instrument from a research perspective. Borg and Gall (1985) pointed out that validity of an instrument is improved through expert judgment. The reliability of data was estimated using Cronbach Alpha coefficient. Cronbach alpha reliability coefficient normally ranges between 0 and 1; and higher alpha coefficient values are more reliable. The generally agreed lower limit is 0.7 (Nunnally & Bernstein, 1994).

3.7 Data Analysis

The completed questionnaires were checked for completeness and consistency. Only fully filled questionnaires were used. Demographic data on the respondents were analyzed using descriptive statistics including frequency, percentages, mean and standard deviation to enable the researcher to profile sample characteristics and major patterns emerging from the data. The correlation between financial literacy aspects (financial knowledge, financial skills, and financial attitudes) and personal financial decisions was tested using Pearson Moments Correlation. Pearson's correlation coefficient is a measure of the strength of the linear relationship between two variables. In 1904 Spearman adopted Pearson's correlation coefficient as a measure of the strength of the relationship between two variables that cannot be measured quantitatively (Haukej & Kossowsk, 2011).

The Pearson correlation coefficient (r) measured the strength of association between financial literacy and personal financial decisions among employees determined at alpha level of $p<0.05$. Regression analysis was used to test the strength and significance of the relationship between the dependent and independent variables. The data was analyzed with the help of Statistical Package for Social Sciences (SPSS) version 20.0. Before the regression analysis was run, multi-collinearity tests were performed to see whether there was correlation between the independent variables. To achieve the objectives of study, the use of Pearson correlation and multiple regression analysis were used to establish the effect financial literacy on personal financial decisions.

The following regression model was used.

$Y= \beta_0+ \beta_1 X_1+ \beta_2 X_2+ \beta_3 X3+e$

Where by:

Y = the dependent variable representing the personal financial decisions score calculated as an index from the financial decisions facets

β_0 = the constant

β_i = coefficient of the independent variable

X_1=Financial knowledge

X_2= Financial skills

X_3= Financial attitude

e = error term

CHAPTER FOUR
DATA ANALYSIS, RESULTS AND DISCUSSIONS

4.1 Response Rate

To achieve the objectives of the study, a sample size of 320 was targeted. Out of the 320 questionnaires issued, 278 questionnaires were filled and returned making a response rate of 87%. Any response rate of above 80% and above is adequate for analysis and therefore, the response rate of 87% is satisfactory**.**

4.2 Reliability and Validity

The Cronbach's Alpha was computed for every variable in the study through SPSS. The overall alpha was obtained as shown in Table 4.1

Table 4.1: Reliability Analysis for the Study

Variables	No. of items	Cronbach Alpha Coefficient (α)
Financial knowledge	12	0.919
Financial skills	6	0.798
Financial attitudes	7	0.702
Financial decisions	21	0.762
All questionnaire items	46	0.876

Source: Research Data (2016)

Table 4.1 shows the mean of Cronbach's alpha as calculated through SPSS. Mean Cronbach's value of 0.876 was obtained. This result was greater than the threshold 0.7 and the items were therefore considered reliable.

4.3 Descriptive Statistics

The section presents and discusses results of descriptive statistics of the profiles of the respondents and study variables of financial literacy (Financial knowledge, skills and attitude) as well as personal financial decisions (money management, savings & investment and debt management).

4.3.1 Profile of Respondents

This section contains the general characteristics of the respondents. It contains findings on respondent's gender, age and educational level, current grade, staff category and marital status. The results are presented in Table 4.3.1.

Table 4.3.1 Background Statistics

Variable		Frequency	Percent
Gender of Respondent	Male	187	67.3
	Female	91	32.7
	Total	278	100.0
Age Group	< 30 yrs	43	15.5
	31-35yrs	77	27.7
	36-40yrs	44	15.8
	41-45yrs	52	18.7
	>46yrs	62	22.3
	Total	278	100.0
Level of Education	Primary	3	1.1
	secondary	38	13.7
	Tertiary	64	23.0
	Undergraduate	72	25.9
	postgraduate	101	36.3
	Total	278	100.0
Grade	1-4	56	20.1
	5-14	213	76.6
	15-18	9	3.2
	Total	278	100.0
Category of Staff	Teaching	70	25.2
	Technical & administrative	152	54.7
	Support	56	20.1
	Total	278	100.0

Marital Status	Single	60	21.6
	Married	206	74.1
	separate/divorced	7	2.5
	Widowed	5	1.8
	Total	278	100.0
Gross Income			
	<40,000	56	20.1
	41000-70000	75	27.0
	71000-100000	54	19.4
	101000-130000	24	8.6
	131000-160000	22	7.9
	>161000	47	16.9
	Total	278	100.0

Source: Research Data (2016)

Based on the 278 respondents 67.3% were male, while 32.7% were female out of which majority were aged between 31-35 at 27.7% and 22.3% were aged over 46 years while those aged between 41-45 and between 36-40 years were 18.7% and 15.8% respectively with the least being those aged below 30 at 15.5% of the respondents. With respect to marital status majority of employees sampled were married at 74.1% while 21.6% were single and only 4.3% were divorced, separate or widowed. From these findings, it is clear that majority of employees in the universities are people with families as seen by the percentages of respondents in marriage, divorced, separated or widowed.

A majority of respondents who took part in the study had attained a postgraduate degree as evidenced by 36.3%, while 25.9% having attained an undergraduate degree, accounting for 62.2% of respondents. Most employees have been able to take advantage of the support the University gives in terms of staff waivers on fees, education fund and scholarship. The distribution of respondents according to their grades had 20.2% of the respondents in grade 1-4, 76.6% were in grade 5-14 and 3.2% were in grade 15-18. This showed that majority of respondents in grade 5-14 since all and administrative and technical staff (54.7%) and teaching staff (25.2%) fall in this category while the university has outsourced services normally done by grade 1-4 who constitute 20.1% of those interviewed. The employees earned gross incomes distributed across the levels with 20.1% earning less than 40,000 with the highest percentage of 27% being those earning between 41,000-70,000 and 19.4% earning between 71,000-100,000 and 16.9% earning above 161,000.

4.3.2 Financial Knowledge

With respect to financial knowledge, the respondents were asked to indicate their level of understanding on the existence and functionality of some of the available financial products in the market. A five point likert scale with the levels where 1 = Very low extent; 2 = Low extent; 3 = Moderate; 4 = High extent; 5 = Very high extent was used. From the likert scale, the results of the descriptive statistics were interpreted as follows: mean scores below 3.0 suggests that the respondents level of understanding on the existence and functionality of the different financial products was low. On the other hand, mean scores above 3.0 suggests that respondents level of understanding was high. The results are presented in Table 4.3.2.

Table 4.3.2 Responses on Financial Knowledge

Statement	N	Minimum	Maximum	Mean	Std. Dev
Mobile phone payment account/Mpesa	278	1.00	5.00	4.33	0.91
Savings account	278	1.00	5.00	4.05	1.07
Current account	278	1.00	5.00	3.74	1.17
Pension Fund	278	1.00	5.00	3.61	1.10
secured bank loan on property	278	1.00	5.00	3.41	1.23
Credit card	278	1.00	5.00	3.40	1.26
Insurance	278	1.00	5.00	3.38	1.26
Microfinance loan	278	1.00	5.00	3.25	1.29
Unsecured bank loan	278	1.00	5.00	3.23	1.39
A Mortgage	278	1.00	5.00	3.20	1.26
Stocks & Shares	278	1.00	5.00	3.18	1.26
investment account or mutual trust	278	1.00	5.00	3.09	1.20
Overall Mean Score				**3.49**	**1.2**

Source: Research Data (2016)

The results indicate that generally the respondents had high financial knowledge. The mean scores show that "Mobile phone payment account e.g. Mpesa" (M = 4.33,SD=0.91), "A savings account" (M = 4.05, SD=1.07), "A current account" (M = 3.74, SD=1.17), "A pension fund" (M = 3.61, SD=1.10), "A bank loan secured on property" (M=3.41, SD=1.23), "A credit card" (M = 3.40, SD=1.26), "Insurance" (M = 3.38, SD=1.26), "A microfinance loan" (M = 3.25, SD=1.29), "An unsecured bank loan" (M=3.23, SD=1.39), "A mortgage" (M = 3.20, SD=1.26) , "Stocks, shares and bonds" (M = 3.18, SD=1.26) and "An investment account such as Old mutual unit trust" (M = 3.09, SD=1.2).

The findings generally indicate that the level of financial knowledge was higher among study respondents on products such as Mpesa, savings and current accounts products but very low on financial products like investments & mutual trusts, stocks & shares as well as mortgages. Study findings show that the employees' overall level of understanding on existence and functionality of financial products had an overall index of 3.49 and standard deviation of 1.2. This overall index indicates that the employees understood to a high extent the availability and functionality of the financial products listed.

The findings of this study support past studies, Hilgert et al. (2003) reported that most Americans failed to understand basic financial concepts especially those relating to bonds, stocks and mutual funds similar to the findings in the study. While Moore (2003) finds that people frequently failed to understand terms and conditions of consumer loans and mortgages.

4.3.3 Financial Skills

The study sought to understand the extent to which financial skills affect personal financial decisions. Respondents were asked to indicate the extent to which they agreed with the statements that measured their financial skills. A five-point Likert scale with the levels where 1 = strongly disagree; 2 = disagree; 3 = moderately agree; 4 = Agree; 5 = strongly agree was used. From the likert scale, the results of the descriptive statistics were interpreted as follows: mean scores below 3.0 suggests that the respondents have low financial skills that help the employees in making financial decisions. On the other hand, mean scores above 3.0 suggests that respondents have high financial skills relevant to making personal financial decisions. The results are presented in Table 4.3.3.

Table 4.3.3: Responses on Financial Skills

Statement	N	Minimum	Maximum	Mean	Std. Dev
Cost borrowing evaluation for loans	278	1.00	5.00	3.89	1.08
Financial planning for the future	278	1.00	5.00	3.81	0.94
Keep personal financial watch on assets and savings	278	1.00	5.00	3.80	1.11
Prepare monthly budget for money	278	1.00	5.00	3.43	1.08
Negotiate for better rates of return on investments	278	1.00	5.00	3.31	1.20
Rely on expert advice in financial matters	278	1.00	5.00	3.00	1.21
Overall Mean Score				**3.54**	**1.1**

Source: Research Data (2016)

The mean scores show that the employees have financial skills in the to assist them in making financial decisions as from being able to "evaluate the cost of borrowing before signing a loan" (M = 3.89, SD=1.08), "do financial planning for the future" (M = 3.81, SD=0.94), "keep a personal watch on financial affairs relating to a person's assets, debts and savings" (M = 3.80, SD=1.11), "prepare a monthly budget to manage money" (M = 3.43,SD=1.08), "negotiate for better rates of return on investment products" (M=3.31, SD=1.20), and "rely on the advice from professional expect on financial matters" (M = 3.00, SD=1.21).

The overall mean of 3.54 indicate that in general the employees moderately agree to the statements on financial skills. The higher the index scores the higher the ability of the employee to use financial skills in making decisions. Specifically the findings indicate that the level of financial skills were found to be higher on evaluating the cost of borrowing before signing a loan, financial planning for the future and keep a personal watch on financial affairs relating to a person's assets, debts and savings. However, the level of financial skills was low especially on negotiating for better rates of return on investment products and relying on the advice from professional expect on financial matters.

These findings indicate low financial skills on respondents who did not rely on advice from professional experts as supported by Van Rooij et al., (2007) found out those households with high financial literacy levels are most likely to use financial experts or financial magazines to assist with their financial decision making.

4.3.4 Financial Attitude

The study respondents were asked to indicate their attitude towards personal financial decisions. A five-point Likert scale with the levels where 1 = strongly disagree; 2 = disagree; 3 = moderately agree; 4 = Agree; 5 = strongly agree was used. From the likert scale, the results of the descriptive statistics were interpreted as follows: mean scores below 3.0 suggests that the respondents have negative attitude towards financial issues. On the other hand, mean scores above 3.0 suggests that respondents have positive attitude towards financial issues which are relevant to making personal financial decisions. The results are presented in Table 4.3.4.

Table 4.3.4: Responses on Financial Attitude

Statement	N	Minimum	Maximum	Mean	Std. Deviation
Saving for retirement necessary even with meagre resources	278	1.00	5.00	4.21	1.03
Only invest in high returns products	278	1.00	5.00	3.55	1.15
Make investments with long maturity periods	278	1.00	5.00	3.11	1.08
I do not spend money on items not budgeted for	278	1.00	5.00	2.67	1.30
Investment in IPOs is understanding of stock market not luck	278	1.00	5.00	2.53	1.21
Satisfying to save money than spend	278	1.00	5.00	2.24	1.23
Don’t take loans at high interest rates	278	1.00	5.00	2.07	1.15
Overall Mean Score				**2.91**	**1.16**

Source: Research Data (2016)

The study revealed the following financial attitude scores on the financial issues “saving for retirement is necessary even with meagre resources” (M = 4.21, SD=1.03), “ invest in products with high return only” (M = 3.55, SD=), “Invest on investments with long maturity periods” (M

= 3.11, SD=1.08), “I do not spend money on items not budgeted for” (M = 2.67, SD=1.30), “Investment in IPOs is understanding of stock market not luck,” (M=2.53, SD=1.21), “ it is satisfying to save money than spend (M = 2.24, SD=1.23)” and “ Not willing to take loans at high interest rates” (M = 2.07, SD=1.15).

In order to determine the overall level of employee’s financial attitude in making personal financial decisions, an index was constructed by summing up the frequencies and ratings of statements measuring the financial attitude in Table 4.3.4. The overall mean was 2.91 with a standard deviation of 1.16 this implies that the level of financial attitude among the employees was low. Employee’s attitude on saving for retirement even with meagre resources and investing in high return products were slightly higher compared to financial attitude on taking loans at high interest rates and finding it more satisfying to spend than to save.Borden et al., 2008 observed that a positive attitude toward financial management had a positive effect on an individual’s intentions to utilize several types of savings/investment vehicles, limit credit card use, and manage their finances in more beneficial ways.

4.3.5 Financial Literacy Mean

With respect to the level of financial literacy among employees, based on the components of financial literacy (Financial knowledge, financial skills, financial attitude) the Table 4.3.5 below gives the overall mean. These findings indicate that level of financial literacy among employees was found to be generally average among employees of Egerton University at 3.3 on a 1 to 5 rating.

Table 4.3.5: Financial Literacy Mean

Financial Literacy	Mean	Std. Deviation
Financial Knowledge	3.49	1.2
Financial Skills	3.54	1.1
Financial Attitudes	2.91	1.16
Overall Mean	**3.3**	**1.15**

Source: Research Data (2016)

4.3.6 Money Management Decisions

With regard to personal financial decisions in terms of money management, the respondents were required to answer to the following statements. The necessary data collected was measured and scored using the likert scale where 1=strongly disagree; 2=disagree; 3=moderately agree; 4= agree and 5=strongly agree. From the likert scale, the results of the descriptive statistics were interpreted as follows: mean scores below 3.0 suggests that the respondents are not good in making decisions relating to money management. On the other hand, mean scores above 3.0 suggests that respondents good money management decisions.

Table 4.3.6: Responses on Money Management

Statement	N	Minimum	Maximum	Mean	Std. Deviation
Repay the money borrowed on time	278	1.00	5.00	3.60	1.11
Pay all my bills on time	278	1.00	5.00	3.53	1.11
Compare prices for major expenses	278	1.00	5.00	3.25	1.13
Spend on what I can afford only	278	1.00	5.00	3.17	1.10
Monitor expenses regularly	278	1.00	5.00	2.96	1.02
Set aside funds for unexpected bills/occurrences	278	1.00	5.00	2.95	1.21
Buy only what is budgeted for	278	1.00	5.00	2.94	1.16
Overall Mean Score				**3.2**	**1.12**

Source: Research Data (2016)

According to the Table 4.3.6 on personal financial decisions relating to money management , the mean scores on how the employees make decisions in terms of being able to “repay the money borrowed on time” (M = 3.60), “pay all bills on time” (M = 3.53), “compare prices for major expenses” (M = 3.25), “spend on what you can afford only” (M = 3.17). On the other hand the means that showed decisions with “monitor expenses regularly” (M=2.96), “set aside emergency funds/account for unexpected bills and occurrences” (M=2.95), and “buy only what is budgeted for” (M = 2.94). The findings generally indicate that the level of financial decisions was higher among study respondents especially on timely repayment of the borrowed money and “timely payment of all bills. However, the level of financial decisions on aspects such as setting aside emergency funds/account for unexpected bills and occurrences as well as buying only what is budgeted for was found to be low among employees.

In order to determine the overall level of employee's financial decision making as it relates to money management, an index was constructed by summing up the frequencies and ratings of statements measuring the money management. The higher the index scores the higher the employee's ability to make decisions relating to money management. The overall mean was 3.2 and standard deviation was 1.12. This finding indicates that the employees' decision making abilities on money management were generally good. This is consistent with the findings of Hilgert, et al; (2003) indicated the likelihood of paying bills on time, tracking expenses, budgeting, paying credit card bills in full each month, saving out of each paycheck, maintaining an emergency fund, diversifying investments, and setting financial goals.

4.3.7 Saving and Investment Decisions

As regards to the individual's opinion on his personal financial decisions in regard to saving and investment, the respondents were required to answer to the following statements. The necessary data collected was measured and scored using the likert scale where 1=strongly disagree; 2=disagree; 3=moderately agree; 4= agree and 5=strongly agree. From the likert scale, the results of the descriptive statistics were interpreted as follows: mean scores below 3.0 suggests that the respondents disagree on some aspects of savings and investments decisions. On the other hand, mean scores above 3.0 suggests that respondents agree on savings and investments aspects in making personal financial decisions. The results are presented in Table 4.3.7.

Table 4.3.7: Responses on Savings and Investments Decisions

Statement	N	Minimum	Maximum	Mean	Std. Deviation
Save for retirement and future investments	278	1.00	5.00	4.07	0.94
Set long-term financial goals and try to achieve them	278	1.00	5.00	3.81	1.03
Save given % of monthly pay before spending balance	278	1.00	5.00	3.45	1.23
dispose loss-making investments	278	1.00	5.00	3.45	1.18
Consider different investments from different companies	278	1.00	5.00	3.44	1.14

Spread money across more than one type of investment	278	1.00	5.00	3.34	1.10
Increase savings when I get salary increment	278	1.00	5.00	3.22	1.15
Overall Mean Score				**3.54**	**1.11**

Source: Research Data (2016)

According to the Table 4.3.7 on personal financial decisions relating to savings and investments, the mean scores on how the employees make decisions in terms of being able to “save for retirement and future investments” (M = 4.07), “set long-term financial goals and try to achieve them” (M = 3.81), “Save given % of monthly pay before spending balance” (M = 3.45), “ dispose loss-making investments” (M = 3.45), “consider different investments from different companies” (M=3.44), “spread money across more than one type of investment” (M=3.34), and “increase savings upon a salary increment” (M = 3.22).

The study findings generally indicate that the level of financial decisions was higher among respondents especially with regard to saving for retirement and future investments and setting long-term financial goals to achieve. Nevertheless, the level of financial decisions on aspects such as spreading money across more than one type of investment and increasing savings upon a salary increment was found to be low among employees.

The overall mean index of employee’s financial decision making as it relates to savings and investments was 3.54.This findings were generally good indicating a generally good level of decision made in regards to savings and investments. Olima (2013), investigated on the effect of financial literacy on saving practices However, most participants considered retirement planning less important, were less aware of the effects of estate planning, insurance planning and tax planning.

4.3.8 Debt Management Decisions

As regards to the individual’s opinion on his personal financial decisions in regard to debt management, the respondents were required to answer to the following statements. The necessary data collected was measured and scored using the likert scale where 1=strongly disagree; 2=disagree; 3=moderately agree; 4= agree and 5=strongly agree. From the likert scale, the results of the descriptive statistics were interpreted as follows: mean scores below 3.0 suggests that the respondents disagree on some aspects of debt management. On the other hand, mean scores above 3.0 suggests that respondents agree on debt management aspects in making personal financial decisions.

Table 4.3.8: Responses on Debt Management

Statement	N	Minimum	Maximum	Mean	Std. Deviation
Have not defaulted on SACCO loans	278	1.00	5.00	4.28	1.15
Read terms & conditions applicable to credit products	278	1.00	5.00	3.75	1.07
Money borrowed from friends paid promptly	278	1.00	5.00	3.63	1.13
Do not have cheques returned due to insufficient funds	278	1.00	5.00	3.56	1.04
Use unsecured loans as long as can pay	278	1.00	5.00	3.14	1.33
Do not take overdrafts to offset debts	278	1.00	5.00	3.10	1.09
Salary covers all financial obligations	278	1.00	5.00	2.49	1.30
Overall Mean Score				**3.42**	**1.16**

Source: Research Data (2016)

According to the Table 4.3.8 on personal financial decisions relating to debt management, the mean scores on how the employees manage debt as regards to “having not defaulted on SACCO loans” (M = 4.28), “reading terms & conditions applicable to credit products” (M = 3.75), “money borrowed from friends paid promptly” (M = 3.63), ‘’do not have cheques returned due to insufficient funds” (M = 3.56) “use of unsecured loans as long as can pay” (M = 3.14), “do not take overdrafts to offset debts” (M=3.10), and “salary covers all financial obligations” (M=2.49).

In order to determine the overall level of employee’s financial decision making as it relates to debt management an index was constructed by summing up the frequencies and ratings of statements measuring the debt management aspects. The overall mean was found to be 3.42 with standard deviation of 1.16. The findings generally indicate that the level of financial decision especially on aspects of debt management such as having not defaulted on SACCO loans and reading terms & conditions applicable to credit products was higher among study respondents. However, the respondents are not able to cover their financial obligations using their salary while others seem to take up overdrafts to offset their debts. The findings were inconsistent with Moore (2003) findings that people frequently fail to understand terms and conditions of consumer loans and mortgages.

4.3.9 Personal Financial Decisions Overall Mean

With respect to the level of combined financial decision among employees, survey data as presented in Table 4.3.9 indicate that the overall mean was 3.39 indicating a moderate mean. These findings indicate that level of combined financial decisions among employees found to be generally moderate among employees of Egerton University.

Table 4.3.9: Personal Financial Decision Mean

Personal Financial decisions	Mean	Std. Deviation
Money Management	3.20	1.12
Savings and Investment	3.54	1.1
Debt Management	3.42	1.16
Overall Mean	**3.39**	**1.12**

Source: Research Data (2016)

4.4: Correlation Analysis

The Pearson product-moment correlation coefficient is a measure of the strength of the linear relationship between two variables. Correlation coefficient (r) measures the extent to which two variables tend to change together. It describes both strength and direction of the relationship. In this study, Pearson correlation coefficient (r) measured the strength of association between financial literacy and personal financial decisions among employees determined at alpha level of $p<0.05$.

4.4.1 Relationship between Financial Knowledge and Personal Financial Decisions

To determine the correlation between financial knowledge and personal financial decisions, correlation analysis was done. In this regard, the relationship between financial knowledge and personal financial decisions was assessed and results of the analysis presented in Table 4.4.1.

Table 4.4.1: Financial Knowledge and Personal Financial Decisions

Independent Variable			**Dependent variables**		
	Financial Knowledge	Money management	Savings & investment	Debt management	Personal financial decisions
Financial Knowledge computed	1	.209**	.333**	. .210**	.346**
		.000	.000	.000	.000
	278	278	278	278	278

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

According to the correlation results findings (Table 4.4.1), financial knowledge was found to be positively and significantly related to money management (r = .209); savings and investments (r= .333) and debt management (r = .210). Further, according to the study findings financial knowledge was positively and significantly related to combined personal financial decisions components (r= .346). The r value of 0.346 indicates a positive correlation between financial knowledge and personal financial decisions among employees of Egerton University. The significance value of 0.000 which is less than 0.05 indicates that the relationship is statistically significant.

4.4.2 Relationship between Financial Skills and Personal Financial Decisions

The relationship between financial skills and personal financial decisions was assessed through a correlation analysis. The results of the analysis presented in Table 4.4.2.

Table 4.4.2: Financial Skills and Personal Financial Decisions

Independent Variable	Dependent variables				
	Financial skills	Money management	Savings & investment	Debt management	Personal financial decisions
Financial skills computed	1	.478**	.687**	.035	.598**
		.000	.000	.563	.000
	278	278	278	278	278

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

Source: Research Data (2016)

According to the correlation results findings (Table 4.4.2), financial skills was found to be positively and significantly related to money management (r = .478) and savings and investments (r= .687). The findings indicate that financial skills was found to be positive and not significantly related to debt management (r = .035). The results of the study affirms a study by Jappelli (2012) indicating that financial literacy gives consumers and households' skills necessary to assess the suitability of financial products and investments .It ensures that financially literate people have a greater capacity to save for retirement and do so. A better-informed consumer saves for the future, for retirement and for unforeseen circumstances and emergencies.

The study also sought to determine the relationship between financial skills on combined personal financial decisions. Findings indicate that financial skills was positively and significantly related to combined personal financial decisions components (r= .598). Therefore, it was concluded that financial skills have statistically significant positive relationship with personal financial decisions.

4.4.3 Relationship between Financial Attitudes and Personal Financial Decisions

The relationship between financial attitude and personal financial decisions was assessed through a correlation of the financial attitude and hypothesized personal financial decision indicators such as money management, savings and investments and debt management. The results of the analysis presented in Table 4.4.3.

Table 4.4.3: Financial Attitude and Personal Financial Decisions

Independent Variables		Dependent Variables				
		Financial attitude	Money management	Savings & investment	Debt management	Personal financial decisions
Financial attitude computed	**Pearson Correlation**	1	-.003	.063	.212**	.105
	Sig. (2-tailed)		.960	.295	.000	.080
	N	278	278	278	278	278

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

Source: Research Data (2016).

According to the correlation results findings (Table 4.4.3), financial attitude was found to be negatively related to money management (r = -.003,); positively related to savings and investments (r= .063,) and positively related to debt management (r = .212). While, financial attitude was positively but not significantly related to combined personal financial decisions components (r= .105). The r value of 0.105 indicates a positive but not significant correlation between financial attitude and personal financial decisions among employees of Egerton University. Therefore, it was concluded that financial attitude was not statistically significant to personal financial decisions.

4.4.4 Relationship between Financial Literacy and Personal Financial Decisions

The study sought to determine the relationship between financial literacy and combined personal financial decisions. The results of the correlation analysis were summarized in Table 4.4.4.

Table 4.4.4: Financial Literacy and Personal Financial Decisions

Independent variable		Dependent variable	
		Personal financial decisions	Financial literacy
Financial literacy	**Pearson Correlation**	.486**	1
	Sig. (2-tailed)	.000	
	N	278	278

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

Source: Research Data (2016)

Study findings show that financial literacy was found to be positively and significantly related to personal financial decisions ($r = .486$, $p < 0.005$). Therefore, it was concluded that the effect of financial literacy has a statistically significant positive relationship with personal financial decisions. This finding is in accordance with the findings of previous studies by Jappelli (2012), Lusardi and Oliver, (2006), Atkinson and Messy (2005) which found that financial literacy as the combination understanding of financial products and concepts improve a person's ability and confidence to appreciate financial risks and opportunities to help make informed choices and decisions that enable one to take effective actions to improve their financial well-being. Miller (2009) asserts that financial literacy is important because financially literate consumers help to reinforce competitive pressures on financial institutions to offer more appropriately priced and transparent services. This according to Remund (2010) can be done by comparing options, asking the right questions, and negotiating more effectively.

4.5: Hypotheses Testing

The study further assessed the effect of financial literacy components on personal financial decisions indicators using multiple regression analysis. Regression analysis is used to establish causal relationships between variables and also explain the power of each of the independent variable in accounting for variations in the dependent variable Kothari (2008).

Before the regression analysis was carried out, Pearson's correlation analysis was carried out to ensure that independent variables were not highly correlated. According to Bryman and Cramer (2006) a correlation at or in excess of 0.80 is a sign of multi-collinearity. In this study, the correlation was between financial literacy and personal financial decisions ($r = 0.486$) which rules out multi-collinearity (See Table 4.5.1 below). Multiple regression analysis was carried out between financial literacy (financial knowledge, financial skills, and financial attitudes) and personal financial decisions. The results are discussed below:

Table 4.5.1: Results of Multiple Regression Analysis

	Un-standardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	36.528	3.321		10.999	.000		
Financial knowledge	.144	.048	.153	2.972	.003	.857	1.166
Financial skills	1.152	.108	.544	10.713	.000	.877	1.140
Financial attitude	.054	.119	.022	.451	.391	.976	1.025

Source: Research Data (2016)

The main objective of the study was to examine the effect of financial literacy on personal financial decisions among the employees of Egerton University. In order to achieve this, the study sought to test the following hypotheses:

4.5.1 Effect of Financial Knowledge on Personal Financial Decisions

The first objective of the study was to determine the effect of financial knowledge on personal financial decisions among the employees of Egerton University. The hypothesis to be tested was; financial knowledge has no effect on personal financial decisions among the employees of Egerton University. According to Table 4.5.1 above, the results indicate the significance (p) values for financial knowledge as 0.003, If $p<0.05$, the conclusion is that the independent variable is a predictor of the dependent variable. In testing the effect of financial knowledge on personal financial decisions, significance value of (p) of 0.003 which is less than 0.05 shows that financial knowledge is statistically significant to personal financial decisions, thus the null hypothesis is rejected.

Therefore, it was concluded that financial knowledge has statistically significant positive influence on personal financial decisions. According to Kefela (2010) study the results concur that financial knowledge is directly correlated with self-beneficial financial behavior and without it individuals were most likely have problems with debt, not save and would engage in exorbitant mortgages contracts. Hilgert et al., (2003) in their study among a general population also concluded that financial knowledge and financial behavior are positively related. The findings indicated significant correlations between credit management scores and scores on the composite measure of financial knowledge which showed a strong relationship between financial knowledge and the likelihood of engaging in a number of financial practices for example paying bills on time, tracking expenses, budgeting, paying credit card bills in full each month, saving out of each paycheck, maintaining an emergency fund, diversifying investments, and setting financial goals.

4.5.2 Effect of Financial Skills on Personal Financial Decisions

The second objective of the study was to determine the effect of financial skills on personal financial decisions among the employees of Egerton University. The hypothesis to be tested was; financial skills have no effect on personal financial decisions among the employees of Egerton University. According to Table 4.5.1 above, the results indicate the significance (p) values for financial skills as 0.000, If $p<0.05$, the conclusion is that financial skills have a statistically significant influence on personal financial decisions. The null hypothesis is thus rejected.

The results can therefore be interpreted to confirm Beal and Delpachitra (2003) assertions that that having financial literacy skills enable individuals to make informed decisions about their money and minimizes the chances of being misled on financial matters. Wamae (2015) also concluded that low levels of financial management skills negatively affect employee's return on investments and also affected their ability to achieve their financial goals leading to lack of financial well-being.

4.5.3 Effect of Financial Attitudes on Personal Financial Decisions

The third objective of the study was to determine the effect of financial attitude on personal financial decisions among the employees of Egerton University. The hypothesis to be tested was; financial attitudes have no effect on personal financial decisions among the employees of Egerton University. According to Table 4.5.1 above, the results indicate the significance (p) values for financial attitude as 0.391, If $p<0.05$, the conclusion is that the independent variable is a predictor of the dependent variable. In testing the effect of financial attitudes on personal financial decisions, significance value of (p) of 0.391 was more than 0.05. The findings demonstrate that financial attitude is not statistically significant and did not influence personal financial decisions thus the null hypothesis is not rejected.

The results can be interpreted to confirm Mohamed et al. (2013) assertions that there was a strong negative statistical relationship between personal financial attitude and borrowing through a credit card. These results concluded that improving personal financial attitude through education and practice reduces dependence on credit cards.

4.5.4 Effect of Financial Literacy on Personal Financial Decisions

The forth objective of the study was to determine the effect of financial literacy on personal financial decisions among the employees of Egerton University. The hypothesis to be tested was; financial literacy has no effect on personal financial decisions among the employees of Egerton University. From Table 4.5.1 above the regression model can be given by;

$$\boldsymbol{\gamma = 36.528 + 0.144x_1 + 1.152x_2 + 0.054x_3}$$

Where

$\boldsymbol{\gamma}$ = Personal Financial Decisions,

$\mathbf{x_1}$ = Financial Knowledge,

$\mathbf{x_2}$ = Financial Skills, and

$\mathbf{x_3}$ = Financial Attitude

According to the regression equation established, taking all factors constant personal financial decisions will be 36.528. The data findings analyzed also shows that taking all other independent variables at zero, a unit increase in the financial knowledge will lead to a 0.144 increase in personal financial decisions among Egerton University employees; a unit increase in financial skills will lead to a 1.152 increase in personal financial decisions while a unit increase in financial attitudes will lead to a 0.054 increase in personal financial decisions.

From the resulting regression equation; financial knowledge, financial skills and financial attitudes had a positive influence on personal financial decisions among employees. Consequently, the null hypothesis that financial literacy has no effect on personal financial decisions among the employees of Egerton University was thus rejected.

Table 4.5.2: Regression Model Summary

Model	R	R Square	Adjusted R Square	*F*-ANOVA	Sig. F-change
1	.616[a]	.380	.373		.000

Predictors: (Constant), Financial attitude, Financial skills, Financial knowledge

Further the results in the model summary contained R-Square and adjusted R-Square. The R-Square shows how much the variation in a dependent variable is explained by the variations of the independent variable. When a small sample is involved, R-Square tends to be rather optimistic of the true value in a population. Adjusted R-Square corrects this and provides a better estimation of the true population value Kothari (2008). The regression model summary is presented in Table 4.5.2.

Based on the summary regression model, the results indicate a coefficient of determination of 0.380 (R^2=0.380) the percentage variation in the dependent variable being explained by the changes in the independent variables. This implies that 38 percent of the total variation in personal financial decisions is explained by financial literacy. The remaining 62 percent is explained by other factors, not captured by the model. The adjusted R^2 indicates that it is closer to the R^2 therefore there is no much variation existing between the two thus proving the coefficient of determination.

CHAPTER FIVE
SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary of the Study Findings

The main objective of the study was to examine the effects of financial literacy on personal financial decisions among the employees of Egerton University. In this regard the study presents descriptive findings on the various aspects of financial literacy (Financial knowledge, skills and attitude), financial decisions (money management, savings & investment and debt management) as well as testing the study hypotheses. On the basis of the study objectives and data analysis, the results support the following summary findings:

5.1.1 Effect of Financial Knowledge on Personal Financial Decisions

The first objective of the study was to determine the effect of financial knowledge on personal financial decisions among employees of Egerton University. Descriptive findings generally indicate that the level of financial knowledge was higher among study respondents on products such as Mpesa, savings and current accounts products but very low on financial products like investments & mutual trusts, stocks & shares as well as mortgages. These findings were consistent to study findings by Hilgert et al. (2003) and Moore (2003). Furthermore, study findings show that the overall level of financial knowledge among employees was generally moderate.

Correlation results indicate that financial knowledge was found to be positively and significantly related to personal financial decisions ($r = .346$). Consequently, the null hypothesis was thus rejected and it was concluded that financial knowledge has statistically significant positive relationship with personal financial decisions. In testing the effect of financial knowledge on personal financial decisions, significance value of (p) of 0.003 which is less than 0.05 shows that financial knowledge is statistically significant to personal financial decisions, thus the null hypothesis is rejected.

The findings demonstrate that people require a basic body of knowledge and understanding, upon which they can draw when managing their financial affairs. This finding is in accordance with the literature (Lursadi & Oliver 2006, and Suwanaphan 2013).

5.1.2 Effect of Financial Skills on Personal Financial Decisions

Objective two of the study sought to determine the effect of financial skills on personal financial decisions among employees of Egerton University. Descriptive findings revealed that that the level of financial skills were found to be higher on evaluating the cost of borrowing before signing a loan, financial planning for the future and keep a personal watch on financial affairs relating to a person's assets, debts and savings. However, the level of financial skills was low especially on negotiating for better rates of return on investment products and relying on the advice from professional expect on financial matters. In addition, the overall financial skills index indicated that a significant proportion of the respondents had moderate level of financial skills.

Correlation results reveal that financial skills were found to be positively and significantly related to personal financial decisions ($r = .598$). The regression analysis indicate the significance (p) values for financial skills as 0.000, If $p<0.05$, the conclusion is that financial skills have a statistically significant influence on personal financial decisions. Consequently, the null hypothesis was thus rejected and it was concluded that financial skills has statistically significant positive relationship with personal financial decisions. The findings demonstrate that people need financial skills to apply the knowledge and understanding in order to manage their money and to make appropriate decisions. This finding is in accordance with the literature Messy and Monticone (2012), Beal and Delpachitra (2003) and Wamae (2015).

5.1.3 Effect of Financial Attitudes on Personal Financial Decisions

The third objective sought to determine the effect of financial attitude on personal financial decisions among employees of Egerton University. Descriptive study findings generally indicate that the level of financial attitude among the employees was higher in terms of saving for retirement even with meagre resources and investing in high return products. Nevertheless, financial attitude such as satisfaction to spend money than long term savings and willingness to take loans even at high interest rates were found to be low among employees. The study findings further indicate that the level of financial attitude among employees was generally moderate.

According to the correlation results, financial attitude was found to be positive but not significantly related to personal financial decisions (r = .105). In testing the effect of financial attitudes on personal financial decisions, significance value of (p) of 0.391 was more than 0.05. The findings demonstrate that financial attitude did not influence the ability to apply their knowledge and to exercise their skills in order to manage their money and to make appropriate decisions thus the null hypothesis is not rejected.

The results are in line with financial literacy theory that argues that the behavior of people with a high level of financial literacy might depend on the prevalence of the two thinking styles according to dual-process theories: intuition and cognition. The first system is characterized as fast, non-conscious, and tied to intuition while the second system as slow, controlled, and conscious (Stanovich & West 2000). The results can further be interpreted to confirm Mohamed et al. (2013) assertions that there was a strong negative statistical relationship between personal financial attitude and borrowing through a credit card. Consequently, the null hypothesis is thus not rejected.

5.1.4 Effect of Financial Literacy on Personal Financial Decisions

The fourth objective was to establish the effect of financial literacy (financial knowledge, financial skills, and financial attitude) on personal financial decisions (money management, savings and investments, and debt management). Descriptive findings generally reveal that the level of financial literacy among employees found to be generally high among employees of Egerton University. Furthermore, study findings indicate that their financial decision making level among employees was found to be generally moderate among employees of Egerton University.

Correlation results show that financial literacy was found to be positively and significantly related to personal financial decisions ($r = .486$, $p < 0.005$). Therefore, it was concluded that the effect of financial literacy has a statistically significant positive relationship with personal financial decisions. Furthermore, regression results indicate a coefficient of determination of 0.380 (R^2=0.380) the percentage variation in the dependent variable being explained by the changes in the independent variables. This implies that 38 percent of the total variation in personal financial decisions is explained by financial literacy. The remaining 62 percent is explained by other factors, not captured by the model. Consequently, the findings demonstrate that financial literacy influences personal financial decisions; this finding is in accordance with the literature Mahdzan and Tabiani (2013).

5.2 Conclusions

The main purpose of the study was to evaluate the effect of financial literacy and personal financial decisions among employees of Egerton University, Nakuru County. In this regard, the study examined the financial literacy in terms of financial knowledge, financial skills and financial attitudes and their effect on personal financial decisions in terms of money management, savings and investments, and debt management.

On the basis of descriptive findings, it can be concluded that although the overall level of financial knowledge among employees was generally moderate, financial knowledge was higher among study respondents on products such as Mpesa, savings and current accounts products but very low on financial products like investments & mutual trusts, stocks & shares as well as mortgages. Furthermore, the study concludes that the relationship between financial knowledge and financial decisions was generally positive and a significant. This implies that adoption of appropriate knowledge of financial products would translate into adoption of expected financial decisions. Nevertheless, the employees of Egerton University have relatively lower financial knowledge of critical products to attain higher levels of financial decision-making.

With regard to financial skills, the study concluded that financial skills have significant influence on personal financial decisions. It was however notable the level of financial skills was low especially on negotiating for better rates of return on investment products and relying on the advice from professional expert on financial matters. In addition, it was evident that the overall financial skills among employees were found moderate. These findings suggest that adoption of appropriate financial skills was not sufficient enough among the employees to considerably influence financial decisions (especially saving & investments and debt management).

On the effect of financial attitudes and personal financial decisions, the study concluded that financial attitude has very low influence on personal financial decisions. It was notable that financial attitude influences to a very small extent savings and investments decisions and to a moderate extent on debt management decisions. Financial attitude were found to negatively influence money management decisions. These findings suggest that higher levels of financial attitude among employees did not translate into appropriate personal financial decisions

On the basis of correlation and regression results, the study concluded that financial literacy influences personal financial decisions among employees of Egerton University. The outcomes of financial decisions have significant implications for an individual's financial security and standard of living. A person with a good level of financial literacy is likely to be better placed than someone without those skills and knowledge to manage their financial affairs prudently. It was evident that financial attitude did not have statistically significant effect on personal financial decisions.

5.3 Recommendations

It was evident from the study findings that overall level of financial knowledge among employees was generally moderate. This was attributed to lack of knowledge on financial products like investments & mutual trusts, stocks & shares as well as mortgages. This therefore recommends for financial literacy training programs for employees with the aim of closing any knowledge gaps. The training should be complemented by promotion of a savings and investment culture among employees.

With regard to financial skills, it was notable the level of financial skills was low especially on negotiating for better rates of return on investment products and relying on the advice from professional expect on financial matters. The study therefore recommends provision of financial education programs to employees to enhance their financial skills. These programs can be implemented by introducing some seminars that should help employees understand the basics of financial decision making and enable them formulate personal financial plans premised on a sustainable expenditure, savings and investment plans. Such initiative would ensure that employees have the required skills for managing personal finances which would enhance their welfare hence more productivity at work.

It was also evident from the study that financial attitude does not significantly influence a person's financial decisions. The findings demonstrate that financial attitude did not influence ability to apply their knowledge and to exercise their skills in order to manage their money and to make appropriate decisions. This calls for concerted efforts to inculcate appropriate attitude to translate acquired financial skills into practice and decisions-making among the employees.

5.4 Suggestions for Future Research

This study provided critical insight into the effect of financial literacy on personal financial decisions. An in-depth study on the financial literacy levels among the different cadres of staff may be necessary so as to determine the financial education needs to be addressed for each level.

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APPENDICES

APPENDIX 1: Letter of Introduction

The Respondent,

Re: Request for Research Data

I am a Postgraduate student at the Egerton University pursuing a Master of Business Administration (MBA), Finance option. My research project topic is **"Effect of Financial Literacy on Personal Financial Decisions among Egerton University Employees, Nakuru County. Kenya"**

The purpose of the research is to assess the Effect of financial literacy on personal financial decisions among employees of Egerton University. The attached questionnaire has been designed to help the researcher gather data from the respondent with respect to this purpose. You have been identified as one of the respondents.

The purpose of this letter is to kindly request you to fill in the questionnaire objectively and accurately as possible. All the data collected in this study will be treated with utmost confidentiality and the information sought will purely be for academic purposes.

Thank You.

Yours' Faithfully,

Anne Wangeci Mwathi

APPENDIX II: Questionnaire

Instructions: Please answer questions by putting a tick [√] in the appropriate box or by writing in the space provided.

SECTION A

DEMOGRAPHIC INFORMATION

Tick as appropriate.

1. Gender

   Male ☐ Female ☐

2. Age

   Below 30 years ☐ 30-35years ☐ 36-40years ☐ 41-45years ☐ 46 and above ☐

3. Highest level of education attained.

   Primary ☐ Secondary ☐ Tertiary ☐ Undergraduate ☐ Postgraduate ☐

4. Current Grade

   Grade 1-4 ☐ Grade 5-14 ☐ Grade 15-18 ☐

5. Category of staff

   Teaching ☐ Technical & Administrative ☐ Support ☐

6. Marital status

   Single ☐ Married ☐ Separated/Divorced ☐ Cohabiting ☐ Widowed ☐

7. Gross monthly income level (Ksh)

   - Below 40,000 ☐
   - 40,000-below 70,000 ☐
   - 70,000-below 100,000 ☐
   - 100,000-below 130,000 ☐
   - 130,000-below 160,000 ☐
   - 160,000 and above ☐

SECTION B: Financial Literacy

a) Financial Knowledge

The following are some of the available financial products in the market. Please state the level of your understanding on the existence and functionality of these products. On a scale of 1-5, where 1=Very Low Extent **[VLE],** 2=Low Extent **[LE]**, 3=Moderate **[M]**, 4= High Extent **[HE]** and 5 = Very High Extent **[VHE]**.

Financial Product	**VLE**	**LE**	**M**	**HE**	**VHE**
i)A pension fund					
ii) An investment account, such as a Old mutual unit trust					
iii) A mortgage					
iv) A bank loan secured on property etc					
v) An unsecured bank loan					
vi) A credit card					
vii) A current account					
viii) A savings account					
ix) A microfinance loan					
x) Insurance					
xi) Stocks and shares , Bonds					
xii) Mobile phone payment account e.g M-Pesa					

b) Financial Skills

On a scale of 1-5, where 1=Strongly Disagree **[SDA],** 2=Disagree **[DA]**, 3=Moderately Agree **[M]**, 4= Agree **[A]** and 5 = Strongly Agree **[SA]** answer to the following statements

Statement	**SDA**	**DA**	**M**	**A**	**SA**
I prepare a monthly budget to manage my money.					
I do financial planning for the future.					
I evaluate the cost of borrowing before signing for a loan.					
I rely on advice from a professional expert on financial matters.					
I negotiate for better rates of return on my investment products.					
I keep a personal watch on my financial affairs relating to my assets, debts and savings.					

c) Financial Attitude

On a scale of 1-5, where 1=Strongly Disagree **[SDA],** 2=Disagree **[DA]**, 3=Moderately Agree **[M]**, 4= Agree **[A]** and 5 = Strongly Agree **[SA]** answer to the following statements

Statement	**SDA**	**DA**	**M**	**A**	**SA**
I do not spend money on items not budgeted even if I have the cash					
I find it more satisfying to save money for the long term other than spending it					
Saving for retirement is necessary even from meager resources					
I am willing to invest only in products with high returns					
Investing in IPO's(Initial public offering) is all about research and understanding of the stock market and not luck					
I make financial investments with long maturity periods					
I am not willing to take loans at high interest rates					

SECTION C

Financial Decisions

The following are statements regarding an individual's opinion on his/her personal financial decisions. On a scale of 1-5, where 1=Strongly Disagree **[SDA],** 2=Disagree **[DA]**, 3= Moderately Agree **[M]**, 4= Agree **[A]** and 5 = Strongly Agree **[SA]** answer to the following statements.

a) Money Management

Statement	**SDA**	**DA**	**M**	**A**	**SA**
I buy only what I have budgeted for.					
I monitor my expenses regularly.					
I compare prices for major expenses.					
I spend on what I can afford only					
I pay all my bills on time					
I have set aside emergency funds/account for unexpected bills and occurrences					
I repay the money I owe on time					

b) Savings and Investments

Statement	SDA	DA	M	A	SA
I save a given percentage from my monthly pay, before spending the balance					
I spread my money across more than one type of Investment.					
I increase my savings when I receive a salary increment					
I consider several investment products from different companies before making my investment decision					
I save for retirement and future investments					
I dispose off of my investments that are making losses					
I set long term financial goals and strive to achieve them					

c) Debt Management

Statement	SDA	DA	M	A	SA
I think it is okay to use an unsecured loan as long as I can afford to pay back					
I always read the terms and conditions applicable to the credit products I hold					
I don't have cheques returned because of insufficient funds(bounced cheques)					
I often take overdrafts to offset debts					
Money borrowed from my friends is paid promptly as agreed					
In the last 12 months, my salary did not cover all my financial obligations –I earned less than 1/3 of my basic pay					
I am a member of a SACCO(s) and have not defaulted on any loans					

THANK YOU

APPENDIX III: Egerton University Staff per Department

	DEPARTMENTS	LLS	MLS	TLS
1	ACCOUNTS DEPARTMENT	7	43	1
2	ACCOUNTS FINANCE AND MGT SCIENCE DEPARTMENT	-	15	-
3	AUDIT DEPARTMENT	2	8	-
4	BARINGO CAMPUS	1	3	-
5	BOARD OF UNDERGRADUATE	2	4	-
6	BUSINESS ADMINISTRATION	1	12	-
7	C.M.R.T PROJECT	-	1	-
8	CATERING	60	21	-
9	CHEMERON FIELD STATION	6	1	-
10	COLLEGE OF OPEN & DISTANCE LEARNING	-	1	-
11	COMMUNITY HEALTH	-	7	-
12	CONFUCIUS INSTITUTE	-	1	-
13	DAIRY MILK ACCOUNT	1	2	-
14	DEAN OF STUDENTS DEPARTMENT	3	18	-
15	DEPARTMENT OF ECONOMICS	1	16	-
16	DEPARTMENT OF GEOGRAPHY	3	15	-
17	DEPARTMENT OF PATHOLOGY	1	9	-
18	DEPT OF APPLIED COMMUNITY DEV. STUDIES	1	18	-
19	DEPT OF CLINICAL MEDICINE& SURGERY	1	25	-
20	DEPT OF CROPS, HORT AND SOILS	16	46	-
21	DEPT OF ENVIRONMENTAL SCIENCE	1	17	-
22	DEPT OF HUMAN ANATOMY	10	10	-
23	DEPT OF INFORMATION COMM. TECH (ICT)	8	18	-
24	DEPT OF MEDICAL PHYSIOLOGY	1	9	-
25	DEPT OF NURSING	-	9	-
26	DEPT OF PHILO,HIST AND RELIGIOUS STUDIES	2	17	-
27	DEPT. OF AGRIC. EDUC. AND EXT.	1	13	-
28	DEPT. OF AGRIC.ECON & AGRI/BUS	2	22	-
29	DEPT. OF AGRICULTURAL ENGINEERING	3	27	-
30	DEPT. OF ANIMAL SCIENCE	6	23	-
31	DEPT. OF BIOCHEMISTRY & MOLECULAR BIO	2	31	-
32	DEPT. OF BIOLOGICAL SCIENCES	5	47	-
33	DEPT. OF CHEMISTRY	4	35	-

34	DEPT. OF CIVIL AND. ENVIRO ENG	1	17	-
35	DEPT. OF COMPUTER SCIENCE	2	26	-
36	DEPT. OF CURR.INSTRUCTION & EDU MGT	2	27	-
37	DEPT. OF DAIRY ,FOOD SCIENCE AND TECH	7	22	-
38	DEPT. OF ELECTRICAL AND CONTROL ENG.	4	21	-
39	DEPT. OF HUMAN NUTRITION	4	8	-
40	DEPT. OF INDUSTRIAL AND ENERGY ENG	2	18	-
41	DEPT. OF KNITTING AND TAILORING	2	-	-
42	DEPT. OF LANGUAGES,LIT AND LINGUISTICS	2	34	-
43	DEPT. OF MATHEMATICS	3	26	-
44	DEPT. OF NATURAL RESOURCES	1	25	-
45	DEPT. OF PEACE SECURITY AND SOCIAL STUD	2	13	-
46	DEPT. OF PHYSICS	4	19	-
47	DEPT. OF PSYCHOLOGY AND COUNSEL.	1	19	-
48	DEPT. OF VETERINARY ANATOMY AND PHYSIOLOGY	2	11	-
49	DEPT. OF VETERINARY CLINICAL STUDIES	3	10	-
50	DIRECTOR EXAM & TIME TABLING	3	13	-
51	DIRECTORATE OF CAPACITY BUILDING		1	-
52	DIRECTORATE OF INSTITUTIONAL ADVANCEMENT	2	7	-
53	DIRECTORATE OF INTERNATIONAL LINKAGES	2	4	-
54	DIRECTORATE OF STUDENT WELFARE SERVICES	2	4	-
55	DIRECTORATE PLANNING & DEV	1	6	-
56	DISABILITY MAINSTREAMING COMMITTEE	-	2	-
57	EGERTON UNIVERSITY PRESS	3	6	-
58	ESTATES(MAINTENANCE) DEPARTMENT	42	30	-
59	EXTERNAL MEDIA STUDIES	-	1	-
60	F.A.S.S. DEAN'S	2	7	-
61	FACULTY OF AGRICULTURE(DEAN'S OFFICE)	2	6	-
62	FACULTY OF COMMERCE (DEAN'S OFFICE)	1	10	-
63	FACULTY OF EDUCATION(DEAN'S OFFICE)	3	8	-
64	FACULTY OF ENGINEERING AND TECHNOLOGY	1	8	-
65	FACULTY OF ENVIRONMENT AND RESOURCES DEVT	2	5	-
66	FACULTY OF HEALTH SCIENCES	5	9	-
67	FACULTY OF LAW	-	7	-
68	FACULTY OF SCIENCE(DEAN'S OFFICE)	1	6	-

69	FACULTY OF VETERINARY SCIENCE AND SURGERY	5	5	-
70	FINANCE DEPARTMENT	2	3	-
71	GAMES DEPARTMENT	5	5	-
72	GENDER DEPARTMENT	3	12	-
73	GRADUATE SCHOOL	4	8	-
74	HALLS(ACCOMODATION)	44	18	-
75	INSTRUCTIONAL MATERIALS DEV	-	4	-
76	INTEGRITY PROMOTION COMMITTEE OFFICE	1	4	-
77	ISO SECRETARIAT	2	3	-
78	MEDICAL DEPARTMENT	30	82	-
79	NAIROBI CITY CAMPUS	3	25	-
80	NAKURU TOWN CAMPUS	19	73	1
81	OFFICE OF DVC (R & E)	9	16	2
82	OFFICE OF THE D.V.C.(A A)		2	1
83	OFFICE OF THE D.V.C.(A and F)	3	6	1
84	OFFICE OF VICE-CHANCELLOR	3	5	1
85	PAEDIATRICS AND CHILD HEALTH	-	8	-
86	PURCHASING, PROCUREMENT AND SUPPLIES	9	32	-
87	QUALITY ASSURANCE DEPT.	1	5	-
88	REGISTRAR (ACADEMIC AFFAIRS)	8	11	1
89	REGISTRAR ADMINISTRATION	14	30	1
90	REPRODUCTIVE HEALTH	-	4	-
91	SECURITY DEPARTMENT	35	5	-
92	TATTON DEMONSTRATION UNIT(T.D.U)	3	2	-
93	TEACHER EDUCATION (SSP)	-	4	-
94	TRANSPORT DEPARTMENT	36	31	-
95	UNIVERSITY BOOKSHOP	4	1	-
96	UNIVERSITY LIBRARY	12	53	1
97	VETERINARY PATHOLOGY, MICROBIOLOGY & PARASISTOLOGY	-	6	-
98	WATER AND SEWARAGE	21	4	-
	Sub Total	**541**	**1447**	**10**
	Grand Total			**1998**

KEY: LLS (Lower Level Staff), MLS (Middle Level Staff), TLS (Top Level Staff)

Source: Egerton University HR Department (2016)

APPENDIX IV: Sample Size Determination Table

N	S	N	S	N	S
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	1000000	384

Source: Kathuri and Pals (1993)