

**EFFECT OF FINANCIAL LITERACY ON PERSONAL FINANCIAL MANAGEMENT  
PRACTICES: A CASE OF EMPLOYEES IN FINANCE AND BANKING INSTITUTIONS  
IN KENYA.**

**PRESENTED BY:**

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## **DECLARATION**

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

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This project has been presented for examination with my approval as the appointed supervisor.

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Mr. Mirie Mwangi

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## TABLE OF CONTENTS

Declaration.....	ii
Acknowledgements.....	iii
Dedication.....	iv
List of Tables.....	vii
List of Abbreviations.....	viii
Abstract.....	ix
<b>CHAPTER ONE.....</b>	<b>1</b>
<b>INTRODUCTION.....</b>	<b>1</b>
1.1. Background of the Study.....	1
1.1.1. Personal Financial literacy.....	2
1.1.2. Personal Financial Management.....	3
1.1.3. Personal Financial Literacy and Personal Financial Management.....	4
1.1.4. Employees of Financial Institutions.....	7
1.2. Research Problem.....	7
1.3. Research Objectives.....	9
1.4. Value of the Study.....	9
<b>CHAPTER TWO.....</b>	<b>11</b>
<b>LITERATURE REVIEW.....</b>	<b>11</b>
2.1. INTRODUCTION.....	12
2.2. Theoretical Review.....	13
2.2.1. Theory of Planned Behaviour.....	15
2.2.2. The Dual – process Theory of Financial Functioning.....	15
2.3. Emperical Review.....	23
2.4. Summary of Literature Review.....	24
<b>CHAPTER THREE.....</b>	<b>24</b>
<b>RESEARCH METHODOLOGY.....</b>	<b>24</b>
3.1. INTRODUCTION.....	24
3.2. Research Design.....	24
3.3. Research Population.....	25
3.4. Research Sampling Technique.....	25
3.5. Data Analysis.....	26

<b>CHAPTER FOUR.....</b>	<b>27</b>
<b>DATA ANALYSIS AND FINDINGS.....</b>	<b>27</b>
4.1. Introduction.....	27
4.2. Response Rate.....	27
4.3. Data Validity.....	27
4.4. Correlation Analysis between Personal Financial Literacy Levels and Personal Financial Management Practices.....	31
4.5. The relationship between personal financial literacy levels and personal financial management practices.....	32
4.6. Discussion of the Findings.....	35
<b>CHAPTER FIVE.....</b>	<b>37</b>
<b>SUMMARY, CONCLUSION AND RECOMMENDATIONS.....</b>	<b>37</b>
5.1 Introduction.....	37
5.2 Summary of the Research.....	37
5.3 Conclusion.....	39
5.5 Recommendations.....	40
5.4 Limitations of the study.....	41
5.6 Further Research Suggestions.....	42
<b>REFERENCES.....</b>	<b>43</b>
<b>APPENDICES.....</b>	<b>50</b>

## LIST OF TABLES

Table 4.1: Respondents' Age.....	28
Table 4.2.....	28
Table 4.3: Respondents' Gender.....	29
Table 4.4.....	29
Table 4.5: Respondents' Level of Education and Qualifications in Business Related Courses.....	30
Table 4.6: Respondents Participation in a Financial Literacy Course.....	30
Table 4.7.....	31
Table 4.8: Correlation Matrix between Personal Financial Management, Personal Financial Literacy and Level of Education.....	32
Table 4.9.....	33
Table 4.10.....	33
Table 4.11.....	34

## **LIST OF ABBREVIATION**

ELOC:	Economic Locus of Control
HRS:	Health and Retirement Study
PBC:	Perceived Behavioral Control
TPB:	The theory of planned behaviour
TRA:	Theory of Reasoned Action
TTM:	The transtheoretical model of change



## **ABSTRACT**

We live in troubled economic times and financial literacy is increasingly becoming, not only a national concern, but also a global concern. Financial markets have increasingly been deregulated with rapid growth of financial products being experienced across many financial markets. In this regard, it is becoming increasingly important for individuals to become aware of their personal finances so as to ensure, them and their families are financially secure in the longrun. This research project focuses on employees of financial institutions in Kenya and the effect of personal financial literacy on their personal financial management practices. Two fundamental aspects, including personal financial literacy and level of education, have been considered in explaining personal financial management practices. A survey methodology was adopted with the design of a questionnaire to capture information among the employees of financial institutions in Kenya. The data collected from the respondents are tabulated and analyzed into logical statements using percentage and mean score analysis. The study revealed that personal financial management practices is greatly affected by personal financial literacy levels and also to some extent, level of education, which was a proxy for other cognitive factors affecting personal financial management practices. The study reveals that employees of financial institutions are no better than other people with their personal financial management practices despite their great exposure to financial literacy. The findings further revealed that high education levels do not necessarily lead to financial literacy but somewhat improve personal financial management practices. Nevertheless, the greatest factor influencing personal financial management practices is personal financial literacy. Lack of it therefore leads to poor personal financial management practices. Therefore, concerted efforts among various stakeholders, including financial institutions, the government and institutions of higher education are important in helping to promote financial literacy in Kenya. Increased financial literacy will go a long way in enabling households, let alone employees of financial institutions, to make informed decisions to budget, save and borrow thus enhance their financial stability, ability to plan for the future and family welfare. This will also improve the financial institutions industry by creating well informed employees and consumers as well, thus reducing the risks for financial institutions.

# CHAPTER ONE

## INTRODUCTION

### 1.1. Background of the Study

There is a lack of understanding of financial systems and the complexity of financial services and products. This has been evidenced by reports of historically low savings rates, high consumer debt, and rising bankruptcy rates, further indicating personal financial difficulties. It is becoming increasingly important for individuals to take personal responsibility for their financial affairs, for instance, in accessing education, health care and meeting basic needs. Financial systems are developing rapidly becoming more sophisticated and complex (Hilgert and Hogath, 2003). The social as well as the economic environment in which people make financial decisions have and continue to change significantly.

Effective and efficient financial management calls for skills that can be obtained through financial literacy. The ability to understand financial choices would involve ability to compare offers before accessing credit, having a current and a savings account, planning for the future, for instance, saving or investing for long term goals such as education or a home plan, or monitoring ones finances through a book keeping system. Lack of knowledge on various financial concepts can be linked to basic standard financial behaviours and practices such as lack of planning for retirement, lack of participation in the stock market, and bad borrowing behaviour (Basu, 2005).

There are factors that are increasingly necessitating enhanced financial education. Individuals are faced with a variety of complex financial instruments due to rapid and growing sophistication of financial markets, as a result of deregulation, globalisation and

technological progress in the financial marketplace (Lyons et al, 2006). This has created a large range of options of financial products and services which may take a long time before the quality of the product and services can be accessed.

More risk and responsibility of financial decisions has been transferred to households especially in the areas of credit and retirement savings. For instance, the pension field has shifted to defined contribution schemes which implies that both investment and longevity risks have been transferred to individuals, who may not have the knowledge to deal with these risks.

### **1.1.1. Personal Financial literacy**

Financial literacy is defined as the set of knowledge and skills that allows one to understand the financial principles needed to make informed financial decisions and the financial products that impact one's financial well-being (Basu, 2005). The Task Force on Financial Literacy defined financial literacy as "having the knowledge, skills and confidence to make responsible financial decisions" (TFFL, 2011). Personal financial literacy is therefore the ability to make informed judgements and make effective decisions regarding the use and management of money. Financial literacy helps one to understand, have confidence and motivation to make prudent financial judgments and decisions.

Financial literacy can be improved through financial education, information, instruction, training and advice (Brown et al, 2005). It is important to note that financial literacy initiatives do not include financial product marketing and commercial financial advice. Financial product marketing involves promoting a brand or specific products or services while the latter involves recommendation of a specific financial product or service from a particular provider.

Financial literacy is key to enable people identify important finance issues and behaviours that support effective management of financial resources for a lifetime of financial well-being (Hilgert and Hogath, 2003). This includes ability to understand important financial products needed in life including various bank products, basic investment products or ideas and savings and retirement planning. It enables understanding of critical financial concepts, for instance, risk and return of investments, diversification of investments, compound interest, among others.

Financial literacy improves how individuals are able to examine and appreciate money and financial issues. This assists in making effective financial decisions regarding spending, saving and managing debt. For instance, when investing in a home plan, paying for education, starting a family and preparing for a retirement. It also assists individuals to respond competently to changes that affect their everyday financial well-being – including events in the general economy like collapse of financial markets, rising unemployment and the threat of rapid inflation (Hilgert and Hogath, 2003).

### **1.1.2. Personal Financial Management**

Financial management involves the efficient and effective management of monetary resources. This is concerned with procurement of funds and their effective utilization (Hilgert and Hogarth, 2003). In this regard, personal financial management encompasses how individuals or family units procure, budget, save and expend money over a period of time taking cognisance of various financial risks and future life events. The most important aspect of personal financial management is financial planning which involves a dynamic process of regular monitoring and re-evaluation of personal finance (Brown et al, 2005).

Financial planning involves assessing of one's financial situation by evaluating a simplified personal balance sheet and income statement (Lusardi and Mitchell, 2007, 2009). A personal balance sheet will list a person's assets and liabilities while the income statement will list the incomes and expenses. It also involves setting goals including long term and short term goals. This assists to direct financial planning and helps to achieve certain financial requirements. For instance, a long term financial goal would include a retirement plan while a short term financial plan would include saving for school fees.

Another aspect of financial planning involves creating a detailed plan on how to achieve ones goals, for example, increasing ones employment income, reducing unnecessary expenses, or investing (Lusardi and Tufano, 2009). It also assists in implementing the plan which involves great discipline and perseverance. This may also be achieved with assistance from professionals such as financial planners, investment advisers, or accountants (Van Rooij, Lusardi, and Alessie, 2011). It is important to monitor the financial plan for possible adjustments.

There are a number of key areas in personal financial management. These include financial positioning, financial protection, tax planning, investing, retirement planning and estate planning.

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

Personal financial literacy fosters the transfer of knowledge and skills that is likely to result in effective and efficient personal financial management (Lusardi and Mitchell, 2007). Different individuals have varied responsibilities, values, needs wants and resources. It is important for everyone to determine their own plan as they are the only ones who well understand the way they live, work, their preferences, their obligations and dreams or

aspirations for the future. With an ability to make informed judgements and effective decisions regarding the use and management of money, it becomes easier to focus on the most important areas of financial management (Hilgert and Hogarth, 2002).

It is important for individuals and households to understand their financial position which involves examining one's net worth and a household's cash flows (Lusardi and Tufano 2009). A person's net worth involves considering one's assets vis a vis his/ her liabilities at a given point in time. A household's cash flows include totalling up all their expected income during a particular year considering their anticipated expenditure within the same year. This analysis assists to identify which financial goals will be achieved and at what time, thus creating a financial plan.

It is important to consider and plan for insurance protection as well. Individuals and families need to protect themselves against unforeseen risks such as illness, accidents, loss or damage to personal property or loss of income, which could lead to financial loss. In order to identify how much insurance to buy at the most cost effective terms, one requires knowledge of the market for personal insurance as well as understanding of what risks threaten them financially (Lusardi and Tufano 2009). This helps one identify the best way to transfer those risks from themselves to the insurance company.

Managing personal taxes is key to successful financial management (Lusardi and Tufano 2009). While it is the obligation of every law abiding citizen in any jurisdiction to pay their fair share of taxes that are used to run their respective country, understanding how various tax laws work will enable one to take advantage of various tax breaks available when planning their personal finances thus minimising their tax obligations. There are a myriad of complexities involved with taxes that are always changing. If however one is not aware of

how to plan their tax affairs or file their returns, it is advisable to consult a tax adviser (Lusardi and Tufano 2009).

It is important for people to save and invest during their productive years of employment. Saving money enables one to meet emergencies when they occur as well as provide cash for future expenses when they are needed. Saving is essential to enable a person achieve his/ her investment goals which could either be to accumulate assets or derive income. Investment decisions are influenced by various factors including one's financial position, risk attitudes, age, and tax position.

Providing for retirement is also important in financial management. This involves understanding how much it costs to live at retirement and coming up with a plan to distribute assets to meet any income shortfall (Hilgert and Hogarth, 2002). This helps to ensure financial security, physical and emotional health as well as a comfortable way to utilize so much free time after retirement. It is therefore important to take control of one's financial future by putting in place a retirement savings plan throughout one's working years.

Today, just like in the past, estate planning is a key aspect in financial management. This involves planning for the disposition of one's assets after death (Hilgert and Hogarth, 2002). Assumption of this key aspect of financial management has led to loss of considerable amounts of resources for individuals as well as households. This has mainly occurred due to conflicts and disputes in households concerning inheritance of wealth and also due to unclaimed assets in various financial institutions in form of fixed deposits of funds or in form of securities or stocks.

#### **1.1.4. Employees of Financial Institutions in Kenya**

Financial institutions are institutions that provide financial services to its clients or members (Siklos and Pierre, 2001). The financial services include accepting and managing deposits, lending money, investment and brokerage services and insurance services. Financial institutions comprise of employees who are varied across many demographic groups including those with minimum graduate education level, a broader age group comprising of a majority of young people aged between 23 years and 33 years of age as well as older people aged up to 55 years of age, and a gender balance. Employees in financial institutions are also exposed to data related to various financial concepts other than in the area of employee benefits as they have undergone some level of financial training and education such as in finance, banking, accountancy and auditing.

Whereas financial behaviour seems to be positively affected by financial literacy, the effects of various forms of financial education on financial behaviour are less certain. In this regard, though employees in financial institutions have more financial education, they do not portend significantly better financial management practices. It is therefore becoming increasingly important to enhance financial education to increase financial literacy to improve ability of individuals to more effectively use various financial services and products for their best interest (Lusardi and Mitchell, 2009).

#### **1.2. Research Problem**

In recent times, concern for the levels of financial literacy in society as a whole has grown considerably and is expected to grow even more importantly in the future. Now, consumers have to differentiate between a broad range of financial products and services available in the modern financial market (Greenspan, 2005). The need for financial literacy has become



increasingly significant with the deregulation of financial markets, the easier access to credit, the ready issue of credit cards, and the rapid growth in marketing financial products.

People with low financial literacy are more likely to have problems with debt (Lusardi and Tufano 2009), less likely to participate in the stock market (van Rooij, Lusardi, and Alessie 2007), less likely to choose mutual funds with lower fees (Hastings and Tejada-Ashton, 2008), less likely to accumulate wealth and manage wealth effectively (Stango and Zinman, 2007; Hilgert, Hogarth, and Beverly 2003), and less likely to plan for retirement (Lusardi and Mitchell, 2006, 2009).

Individual productivity at the workplace is considerably affected by financial problems employees face (Kim and Garman, 2004). Employees in financial institutions are increasingly suffering from stress and this is as a result of money problems. This included financial problems from behaviours such as over indebtedness, overspending, unwise or poor credit habits, poor spending decisions and money management as well as lack of sufficient money to make ends meet. This is irrespective of the fact that most of the employees in financial institutions enjoy salaries and remuneration packages that are the envy of many employees in other sectors.

Financial management and well being of employees in the financial sector is becoming an area of concern. Despite much exposure to financial education and availability of financial information, there is a call for enhanced financial education to improve ability of individuals to more effectively use various financial services and products for their best interest (Lusardi and Mitchell, 2009). It is therefore important to appreciate the financial education needs of individuals at various stages in their lives and how financial literacy initiatives can best address these needs. It will be helpful to understand how individuals prefer to receive

knowledge and skills in various financial issues and how financial literacy can be best impacted on individuals busy with jobs and families.

There are key factors that affect the effectiveness of financial literacy on financial management of people, let alone employees of financial institutions. These include economic factors, individual behaviours, individual attitudes and demographic factors. This study seeks to investigate the influence of these factors on financial literacy and financial management practices of employees in financial institutions. This will help to create an understanding of whether financial literacy is effective in enhancing financial management of employees in financial institutions.

### **1.3. Research Objectives**

This research project examines the effect of personal financial literacy on personal financial management practices of employees in financial institutions.

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

This study will assist to create better understanding and appreciation in the field of financial literacy and financial management by employees of financial institutions. Households will be able to use resources more effectively, for instance, by choosing the financial services and products that best meet their needs and shift from reactive to pro-active decision-making. They will also be able to make informed decisions to budget, save and borrow carefully thus enhance their financial stability, ability to plan for the future and family welfare.

On an institutional level, this study will help financial institutions better meet their 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 (Candace and Angela, 2008). Further, informed consumers play a developmental and monitoring role in the market, weeding out bad practices and providers. For instance, informed consumers put pressure on financial institutions for appropriately priced and transparent services.

## CHAPTER TWO

### LITERATURE REVIEW

#### 2.1. Introduction

This chapter will present a review of existing literature on financial literacy and financial management. The chapter examines different studies to identify factors associated with money management, debt control, and saving behaviours. Economic psychologists have discovered behaviour patterns that have implications for consumer financial behaviours, including identification of contextual factors that influence decision making. For instance, decisions tend to be “local,” intention does not mean action, and choice can be overwhelming. (Barr, Mullainathan, and Shafir, 2008).

#### 2.2. Theoretical Review

Experts generally agree that financial literacy appears to be directly correlated with self-beneficial financial behaviour (Hilgert, Hogarth, and Beverly, 2003). In their research, Hilgert, Hogarth, and Beverly (2003) added financial behaviour and financial literacy questions to the nationwide Survey of Consumer Finances. They formed a Financial Practices Index based upon behaviour in four variables: cash-flow management, credit management, savings, and investment practices. Comparing the results of this index with scores on the financial literacy quiz, they found that those who were more financially literate had higher Financial Practices Index scores, indicating that financial knowledge is related to financial behaviour.

A number of international surveys have however made evident a rather low level of understanding of financial matters and of basic economics among the average consumer. A

UK survey found that at all income levels many people do not plan ahead, and that 70% had no provision to cover an unexpected drop in income, for instance, in the event of bereavement, relationship breakdown or periods of unemployment (Hilgert, Hogarth, and Beverly, 2003).

Further, using the 2004 Health and Retirement Study (HRS) to test basic financial knowledge of adults over the age of 50, Lusardi and Mitchell (2006) developed questions related to the understanding of interest compounding and the effects of inflation and risk diversification. They found widespread financial illiteracy that is particularly severe among the elderly. The results were particularly surprising since most respondents over age 50 tend to have more experience with credit cards and bank accounts and have taken out at least one mortgage.

There are several behavioural theories that have been applied in trying to explain the relationship between financial literacy and financial management. This study will look at the theory of planned behaviour (TPB), and the dual – process theory. These theories have been used to help to understand and predict human behaviour and motivations as well as human needs.

### **2.2.1. Theory of Planned Behaviour**

The theory of planned behaviour (TPB) illustrates the relationship between financial literacy and financial management practices by augmenting Ajzen's (1991) theory of planned behavior to include the construct of financial literacy. TPB began with the theory of reasoned action (TRA) (Fishbein and Ajzen, 1975). According to the TRA guidelines, behaviour is predicted using attitudes toward a specific behaviour and subjective norms, which is the perceived social pressure to perform or not perform behaviour, to form a behavioural intention that determines the actual behaviour.

Ajzen (1991) modified the TRA to create the TPB. This was by including perceived behavioural control (PBC) to contribute to the formation of behavioural intentions and actual behaviour in order to address the issue of personal control that the original model was lacking. Perceived behavioural control refers to the perceived ease or difficulty of performing a behaviour and it is assumed to reflect past experiences as well as anticipated impediments and obstacles.

Within the theoretical framework of the TPB, attitude toward the behaviour, subjective norms, and perceived behavioural control come together to predict behavioural intention which, in turn, mediates the relationship between attitudes, subjective norms, PBC, and actual behaviour. Researchers suggest that the more favourable the attitude toward the behaviour and subjective norm, and the greater the perceived behavioural control, the stronger the behavioural intention (Hrubes, Ajzen, and Daigle, 2001). Financial literacy was also added as a predictor to the TPB model as from various researches, it is conceivable that financial literacy is a contributory factor in determining the financial behavioural intention of people (Grable et al., 2004).

### **2.2.2. The Dual – process Theory of Financial Functioning**

Dual-process theories argue that there are two modes, or systems, of human information processing: one that is energizing, largely unconscious, automated, and of high capacity (reflexive); while the other is sophistic, conscious, and deliberate (reflective) (Evans, 2008 ). The systems function parallel to each other and are potentially competitive or cooperative depending upon the extent of balance or self concordance present in or cultivated by people (Sheldon et al., 2004). The reflexive system is based on emotion while the reflective system is thoughtful, analytic, controlled, cognitive, conscious, and concerned with abstract thought.

The extent of reflexive versus reflective system influence on individuals' decisions and behavior with money is a measure of financial literacy. The financial behaviour of individuals with stronger reflexive systems is driven by passion and impulse. People with weak reflexive systems are uninterested in financial affairs and are found to attend to and feed on financial desire, for instance, through watching commercials on television or compulsive shopping, which increases financial cravings.

Individuals with stronger reflective systems are more thoughtful and reflective in their financial choices, but extremely strong reflective systems produce paralysis from excessive deliberation. People with low reflective systems are either thoughtlessly uninterested in financial affairs, have weak reflexive systems, or driven by passion at high reflexive systems. Financial education including for instance in accounting and finance is likely to, primarily, strengthen reflective systems, and secondarily, weaken reflexive systems.

Balance and internal consistency of the reflexive and reflective systems are psychologically desirable. It leads to positive affect (emotion), financial trust, relational reciprocity (i.e., relational balance), financial self-care, and a willingness to provide financial care for others. When reflexive systems have more influence than the reflective system, it depicts a financially uneducated mind. Often, this will equate to impulsive motivations of greed and materialism and may include conspicuous or compulsive consumption (Kasser, 2002; Kasser and Kanner, 2004 ). Instances when the reflective systems have greater influence on reflexive systems are rare as this would suggest a paralysis of analysis.

Lea and Webley (2006) argue that money influences human behavior through two distinct paths or motivations. The first, a "tool" (or reflective) motivation for obtaining money, is based on a rational belief that financial resources are means to achieving organismic goals,

such as food, shelter, reproductive success, and successful social relations. In contrast, the second motivation, posits that money can be metaphorically characterized as having a psychological influence that mirrors that of psychoactive drugs. Specifically, the acquisition or spending of money can be addictive and lead to ultimately dysfunctional organismic outcomes. Lea and Webley (2006) argue that the addictive motivation to obtain money stimulates organismically pleasing neurological activity similar to psychoactive drugs.

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

Many studies have shown that financial literacy is positively related to self-beneficial financial behaviour (Hilgert, Hogarth, and Beverly, 2003). Indicators to financial management practices are well determined by analysing four main aspects of individual financial behaviours. These include individual cash-flow management, credit management, savings, and investment practices.

Generally, personal financial management practice is evidenced through various attitudes and financial behaviour. These include individual debt levels (Lusardi and Tufano 2009), participation in the stock market (Van Rooij, Lusardi, and Alessie 2007), ability to accumulate wealth and effectively manage wealth (Stango and Zinman 2007; Hilgert, Hogarth, and Beverly 2003), ability to choose financial products with lower fees, e.g. mutual funds (Hastings and Tejeda-Ashton 2008), and ability to plan well for retirement (Lusardi and Mitchell, 2009).

### **2.4. Emperical Review**

Research has indicated that many different factors influence attitude toward a particular behaviour. Attitude has been defined as the degree to which a person has a favourable or unfavourable evaluation or appraisal of the behaviour in question. Among attitudes that



influence financial behaviour are debt tolerance, money specific attitudes, unrealistic optimism, and level of financial knowledge. Psychological constructs, such as cognitive dissonance (Festinger, 1954) and locus of control have also been found to influence attitudes toward financial behaviours, more specifically credit borrowing.

Of the attitudinal factors that are associated with debt, tolerance may be one of the most important. Davies and Lea (1995) found that individuals who expected to make more money in future were more tolerant of debt. When coupled with unrealistic optimism that many individuals have about their financial futures, this influences the level of debt tolerance to the point at which individuals tolerate levels of debt that have a negative impact on other aspects of their lives. This point is further illustrated through the findings of Davies and Lea's (1995). They suggested that individuals, as a result of their young age and early stage in their career, are more tolerant of debt than the general population due to optimism that they will be in a good position to reconcile their debts in their later stages in their career.

One possible explanation for this increased tolerance of debt is an increased social support for debt that has grown over the past 25 years. Lea et al. (1995) argued that attitudes toward debt changed a great deal in the twentieth century with a shift from general abhorrence of debt to acceptance of credit as a part of a modern consumer society. Furthermore, Lea et al. (1995) suggested that in some countries, such as the United Kingdom and United States, a growing culture of indebtedness exists. This idea suggests that debt does not simply pertain to individual cases but, rather, is a cultural phenomenon affecting not only the poor but also the middle class and the rich. However, it also suggests that those who have overextended themselves have done so due to their change in attitude toward borrowing.

Attitudes toward money has also been found to relate to the frequency of borrowing and debt amounts of individuals. Six factors have been used in the money beliefs and behaviours scale in order to take into account elements that have been found to influence financial behaviour (Furnham, 1984). These include obsession, power/spending, retention, security, inadequacy, and effort/ability.

The money attitude of obsession emphasizes thinking about different aspects of money. The attitude of power/spending implies that the individual has to spend money in order to feel powerful and worthwhile, whereas the attitude of retention suggests not wanting to spend money even when it is available. The security factor suggests that one deals with one's finances in a very secure manner assuming the smallest amount of risk possible. Inadequacy suggests that one spends money in order to combat feelings of ineptitude, and effort/ability is the degree one thinks one deserves one's income.

Individuals without debt scored lower on the money attitudes of independence, power, and inadequacy, but higher on the money attitudes of obsession and retention. Therefore, lower scores on the money attitudes of independence, power, and inadequacy in individuals without debt can be attributed to feelings of less financial independence and having less of a need to spend money as a means of impressing others or making themselves feel better.

In a study measuring the psychological factors that lead to consumer debt, Lea et al. (1995) measured attitude toward debt and locus of control. Research has suggested that there was a positive correlation between attitudes toward debt and actual debt (Lea et al., 1993). However, no relationship was found between attitudes and debt (Lea et al, 1995). Rather, the researchers argued that the variables of economic socialization, money management, and use of credit were more important factors in determining the psychological variables that

influence borrowing. Although Lea et al. (1995) found no direct relationship between attitudes and debt, the researchers suggested that the psychology of debt is part of a wider problem and what should really be looked at is the psychology of poverty as a whole.

Locus of control refers to the extent to which people think they have control over events that affect them. Locus of control was also not found to have a significant effect on levels of consumer debt (Lea et al.'s, 1995). Davies and Lea (1995) argued that this is not surprising because measures of locus of control are known to possess weak psychometric properties. A more specific measure of economic locus of control (ELOC) was developed by Furnham (1986) in further research on this subject but did not yield any significantly different result.

The factors of economic socialization, social comparisons, and use of debt were found to be important with regard to debt (Lea et al., 1995). These results are interpreted within the context of a complex psychological and behavioural model, which assesses a wide range of psychological, behavioural, and economic variables that better explain and predict debt behaviours. Therefore, the problem of debt is considered to be one of dysfunctional economic behaviour, and, although psychological factors play a part, the problem is first and foremost an economic one (Lea et al., 1995). People in dysfunctional economic positions are not able to better cope with difficult economic situations in order to put themselves in a frame of mind to handle their debt problems appropriately.

Individuals' experiences have also been found to influence attitudes toward debt. As people progress through their career or lives and take on more debt, they adjusted their attitudes toward debt in an effort to avoid cognitive dissonance (Davies and Lea 1995). Dissonance theory posits that if people act in ways which contradict their beliefs then they will usually

change their beliefs to align with their actions in order to avoid psychic tension (Festinger, 1954).

There is a strong positive correlation between attitudes toward debt and the amount of debt people incur. This finding is consistent with dissonance theory, which would suggest that people who have a positive or accepting view of debt tend to take on more debt because in doing so they are not contradicting their beliefs. By accepting one's debt, one is able to avoid feeling like a hypocrite or being seen as one (Hogg and Terry, 2000). This concept of cognitive dissonance has been a staple of the social psychology literature since developed by Festinger in 1954.

Norvilitis et al. (2006) identified unrealistic optimism as a precipitant of irresponsible borrowing. Norvilitis et al. (2006) reported that 73% of participants in his research believed that it would take them less time than the average household to get out of debt. By contrast, only 6% thought that it would take them longer than the average household to get out of debt, and 21% believed it would take them an average amount of time.

These results also revealed that 33% of the sample surveyed expected to earn more than the average household in the future; 43% thought that they would earn average salaries, and 23% thought that they would earn less than average salaries. These figures illustrate the unrealistic optimism that many households have regarding their financial future, including their estimated future income, which for many households has great influence on the amount of debt that they are able to tolerate.

Furthermore, unrealistic optimism towards future finances is a matter of lack of financial knowledge which has also been found to influence borrowing by many individuals (Norvilitis et al., 2006). Their research contended that financial knowledge is one of the strongest

predictors of debt and is also one of the most amenable to change. Despite the support for financial literacy being a successful predictor of debt (Norvilitis et al., 2006), additional research has shown that individuals whom completed a course in personal finance were not more knowledgeable about personal finance than those whom had not taken a course (Mandell, 2009). Similarly, college courses did not improve financial literacy among college students (Mandell, 2009).

A couple of hypothesis have been used to test the correlation between attitudes, perceived behavioural control, subjective norms, financial literacy and level of debt which basically depicts financial management, to predict behavioural intention. Generally, the hypothesis yielded mixed results. Attitudes toward credit card debt, subjective norm, and perceived behavioural control did predict behavioural intention. Likewise, perceived behavioural control and behavioural intention did predict reported credit card debt.

Although financial literacy was positively correlated with behavioural intention, the addition of financial literacy to the original TPB variables did not increase the overall predictability of the model. Additionally, the TPB variables did not directly predict reported credit card debt, which precluded the possibility of behavioural intention mediating the relationship between attitudes, subjective norms, perceived behavioural control, financial literacy, and reported credit card debt.

The first hypothesis tested the relationship between attitudes toward borrowing, subjective norms, perceived behavioural control and behavioural intention. In the results, attitudes towards borrowing, subjective norms, and perceived behavioural control predicted behavioural intention to use credit. However, attitudes and perceived behavioural control

were the only variables found to be significant predictors of behavioural intention to borrow credit.

Confirmatory results from the first hypothesis are in line with previous findings supporting the role that attitudes play in the use of credit and acquisition of debt among people (Norvilitis et al., 2006). Similarly, individuals believing they have greater control in their ability to avoid debt had less intention to use debt and acquire the same. This finding is also in line with previous research, which supports perceived behavioural control as a predictive variable in behavioural intention (Elliot, Armitage and Baughan, 2007).

Although, subjective norms was not found to be predictive of behavioural intention. This is potentially explained by a meta-analysis on the efficacy of the TPB, which found subjective norms to be the weakest predictor among the TPB variables (Armitage and Conner, 2001). More specifically, this result provides support for the idea that individuals' perception of friends and family members' credit behaviour may not be important predictor of their individual amount of debt.

The second hypothesis tested perceived behavioural control together with behavioural intention in relation to debt. This hypothesis predicted that perceived behavioural control together with behavioural intention would directly predict credit behaviour of individuals. This hypothesis was also supported as behavioural intention and perceived behavioural control accounted for a substantial amount of the variance in actual reported credit card debt. Although individuals' intentions to use credit facilities did predict the amount of reported amounts of debt, individuals' perception of their ability to control whether or not they acquired debt was not a successful predictor of reported amounts of debt.

The third hypothesis was to predict how financial literacy relates with behavioural intention above and beyond attitudes, subjective norms, and perceived behavioural control. This hypothesis was not supported as financial literacy was not found to have a statistically significant relationship with behavioural intention and did not predict behavioural intention better than the original TPB variables. This result suggests that peoples' knowledge (or lack thereof) regarding personal finance matters did not influence intention to use credit facilities and acquire the same (Mandell, 2008).

In the fourth hypothesis, attitudes toward debt, subjective norms, perceived behavioural control, and financial literacy was tested to be positively correlated with behavioural intention and predicted behavioural intention above and beyond the original TPB model. This hypothesis received only partial support as it was noted that the addition of financial literacy to the model did not account for a statistically significant change in predicting behavioural intention (Mandell, 2008).

The fifth hypothesis tested how the behavioural intention mediates the relationship between attitudes, subjective norms, perceived behavioural control, financial literacy, and reported credit card debt. This hypothesis was found not to be supported as attitudes, subjective norms, and perceived behavioural control were not found to be a significant predictor of amounts of debt. It suffices to infer therefore that no effect may be mediated by behavioural intention. As the model including attitudes, subjective norms, perceived behavioural control, and financial literacy did significantly predict intention to use credit facilities, it is possible that these variables are more predictive of intention to engage in a behaviour rather than actual performance of a behaviour.

Literature and data on Africa's financial literacy programs is limited, with very little evidence of any studies evaluating the financial literacy programs in Africa. However, developing countries have very low financial literacy levels. This is evidenced in DFID (2008) report which shows that only half of the adult population knew how to use basic financial products. In Kenya, FSD (2008b) challenges policy makers to address financial literacy needs of the general population.

## **2.5. Summary of Literature Review**

Fairly positive correlations have been found between financial knowledge and financial practices (e.g., Hilgert, Hogarth, and Beverly, 2003; Lyons, Rachlis, and Scherpf, 2007). However, there is little conclusive evidence to suggest causation. While evidence suggests that financial education leads to more improved financial behaviour, the literature has been unable to clearly establish this relationship as a stylized empirical fact. There is still considerable debate among researchers as to whether financial literacy and education actually results in long-term improvements in financial behaviour and well-being. Exploratory studies have revealed that graduates and even chartered accountants have limits in financial literacy.

Generally, various researches in financial literacy all make the same kinds of statements that as the financial system grows in complexity, consumers are ill-prepared and appear to lack financial education (Lyons et al, 2006). Researchers from diverse fields have conducted different researches to identify factors associated with money management, debt control, and saving behaviours (Xiao et al, 1995). Economic psychologists have discovered behaviour patterns that have implications for consumer financial behaviours, including identification of contextual factors that influence decision making, for instance, decisions tend to be "local," intention does not mean action, and choice can be overwhelming (Lyons et al, 2006).



## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1. INTRODUCTION**

A research methodology guides the researcher in collecting, analyzing and interpreting observed facts. Therefore this chapter illustrates how the research will be carried out. This chapter provides the research design that will be adopted in this study.

Research is a systematic, patient study and investigation in some field of knowledge, undertaken to establish facts or principals. A research can be defined as any systematic examination of a subject matter intended to come up with solutions for decision making that will lead to better performance of an organization.

This chapter describes the research design, methodology, research instruments, data collection tools, data analysis and presentation.

#### **3.2. Research Design**

A descriptive survey research design was adopted to identify the effects of financial literacy on personal financial management practices. The descriptive approach was concerned with who, what, or how much of the interest variables being studied affected personal financial management practices. This approach was prime for investigating, explaining and describing the relationship between personal financial literacy and personal financial management practices of the participants in the study

### **3.3. Research Population**

The study will involve a survey on employees of financial institutions in Kenya including various banks, MFIs, investment firms and insurance companies in Kenya. The study will focus on employees of the banking industry only including employees at Standard Chartered Bank, Credit Bank, Guarantee Trust Bank, Chase Bank, ABC Bank, Bank of Africa, CFC Stanbic Bank, NIC Bank, Diamond Trust Bank and Equatorial Commercial Bank.

### **3.4. Research Sampling Technique**

A structured questionnaire with a five point balanced likert scale for measuring level of awareness of financial literacy of the respondents will be used. The questionnaire will assist in collecting basic information about the respondents, measure the respondents' own assessment of their understanding of financial concepts as well as theories, and measure the ability of respondents to manage finances.

The banking industry in Kenya has 43 banks in total employing thousands of employees. A non –probabilistic sampling method will be used in administering a questionnaire to the participants. A convenience sampling technique will be used which will involve approaching employees in their work premises. Therefore, any employees of the financial institutions can participate in the questionnaire. The sample size will include 100 participants.

### 3.5. Data Analysis

A multiple linear regression analysis model will be used to analyse the effect of personal financial literacy on personal financial management. This is as described below.

$$Y^* = \alpha + \beta_1 X_1 + \beta_2 X_2 + \epsilon$$

Where:

$Y^*$  = personal financial management practises of individuals. This will be measured from the respondents' ability to manage their own financial matters. For instance, balancing check books, checking their bank statements for inconsistencies, or preparedness for retirement.

$X_1$  = personal financial literacy level. This will be measured from the respondents' own assessment of their understanding of financial concepts and theories.

$X_2$  = cognitive factors that influence decision making, i.e., level of education and knowledge. This will be determined from individual's responses on their level of education and the number of financial courses attended.

$\epsilon$  = a continuously distributed variable independent of  $x$ , and the distribution of  $\epsilon$  is symmetric about zero.

## **CHAPTER FOUR**

### **DATA ANALYSIS, RESULTS AND DISCUSSION**

#### **4.1. Introduction**

This chapter presents the data analysis, presentation and interpretation of findings from a study based on employees of financial institutions in Kenya on the effects of financial literacy on their financial management practices. The study sampled 100 employees from ten different financial institutions in Kenya. The data was interpreted as per the research questions. The analysis was done through descriptive and inferential statistics. The findings were presented in form of frequency tables, and percentages.

#### **4.2. Response Rate**

Out of the 100 questionnaires given out to respondents, 100 questionnaires were successfully returned. This was mainly attributed to the convenience sampling technique used in carrying out the study.

#### **4.3. Data Validity**

To be sure that what was found in the questionnaires actually represented what was measured, a section of the questionnaire was designed to capture background data on respondents. Background data therefore took care of the validity and reliability of the questionnaires used as data collection tools. Individual respondents' data included the age of the respondents, their gender, level of education as well as their participation in financial literacy courses.

The following tables below provide summary of data relating to the respondents. The data from the first section of the questionnaire analyses standard demographic characteristics of the respondents who participated in the questionnaire. This includes age, gender, and marital status of the respondents. It also includes education levels of the respondents which will be used as a proxy for analyzing the cognitive factors that influence decision making. The second section of the questionnaire provides data relating to how respondents assess their personal financial literacy levels as well as their personal financial management practices.

**Table 4.1: Respondents' Age**

Age in Ranges (Years)				
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	23 to 33 (Category 1)	47	47.0	47.0
	34 to 44 (Category 2)	33	33.0	80.0
	45 to 55 (Category 3)	20	20.0	100.0
	Total	100	100.0	100.0

**Statistics**

Age in Ranges (Years)		
N	Valid	100
	Missing	0
Mean		1.7300
Median		2.0000
Std. Deviation		.77662
Minimum (Age Range Category)		1.00
Maximum (Age Range Category)		3.00

**Table 4.2**

From the data in Table 4.1 above, it can be seen that most of the respondents were of ages 23 to 33 as they comprised of 47% of the total respondents, those of ages 34 to 44 were 33%, while those of ages 45 to 55 were the least comprising of 20% of the total respondents.

**Table 4.3: Respondents' Gender**

<b>Gender</b>				
	Frequency	Percent	Valid Percent	Cumulative Percent
Female	58	58.0	58.0	58.0
Valid Male	42	42.0	42.0	100.0
Total	100	100.0	100.0	

The data in Table 4.3 shows that there was a fair gender balance of the respondents though female respondents were more than their male counterparts comprising of 58% of the total number of respondents while the male respondents were 42%.

**Table 4.4: Respondents' Personal Financial Management Practices, Personal Financial Literacy and Level of Education**

<b>Statistics</b>				
		Personal Financial Management	Personal Financial Literacy	Level of education
N	Valid	100	100	100
	Missing	0	0	0
Mean		2.4175	3.6100	1.94
Median		2.0000	4.0000	2.00
Std. Deviation		.95878	1.14168	.422
Minimum		1.50	1.00	1
Maximum		5.00	5.00	3

Level of education				
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Diploma	12	12.0	12.0
	Bachelor Degree	82	82.0	94.0
	Post Graduate	6	6.0	100.0
	Total	100	100.0	100.0

**Table 4.5**

The data in Table 4.4 shows that on average, employees of financial institutions consider themselves to have high personal literacy levels which average at 3.61 out of 5. Similarly, from Table 4.5 it can be observed that on average most employees of financial institutions are university graduates with degrees from different disciplines. However, it can be observed that their personal financial management practices are just below average at 2.4175 out of 5. the respondent's level of education.

**Table 4.6: Respondents Participation in a Financial Literacy Course**

Attended a financial literacy course				
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	78	78.0	78.0
	Yes	22	22.0	100.0
	Total	100	100.0	100.0

### Statistics

Attended a financial literacy course

N	Valid	100
	Missing	0
Mean		.22
Median		.00
Std. Deviation		.416
Minimum		0
Maximum		1

**Table 4.7**

The data in Table 4.6 represents the proportion of the participants who have attended a financial literacy course with 22% of the respondents indicating they have attended a financial literacy course while 78% of the respondents having not attended a financial literacy course.

#### **4.4. Correlation Analysis between Personal Financial Literacy Levels and Personal Financial Management Practices.**

This subsection assessed the relationship between personal financial literacy level and personal financial management practices of the employees in financial institutions in Kenya. The variables used include personal financial literacy level, personal financial management practices and cognitive factors that influence decision making, i.e., level of education and knowledge. It is important to note that at 0, there is no correlation. At 1 there is a strong positive correlation and at -1 there is a strong negative correlation. The more the value approaches 1 the stronger it becomes and the opposite is true. The following Table 4.8 presents correlation matrix between the variables.



**Table 4.8: Correlation Matrix between Personal Financial Management, Personal Financial Literacy and Level of Education**

<b>Correlations</b>			
	Personal Financial Management	Personal Financial Literacy	Level of education
Personal Financial Management	1		
Personal Financial Literacy	-.943**	1	-.421**
Level of education	.512**	-.421**	1

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

From the results in Table 4.8 above personal financial management practices has a positive correlation with level of education but a negative correlation with personal financial literacy level. This therefore means that personal financial literacy levels of employees in financial institutions negatively influences their personal financial management practices. However, their level of education positively influences their personal management practices. It can further be observed that level of education has a negative correlation with personal financial literacy level. Therefore, this shows that high level of education will not necessarily lead to personal financial literacy of individuals.

**4.5. The relationship between personal financial literacy levels and personal financial management practices.**

A multiple regression analysis was conducted so as to test relationship between personal financial literacy levels and other individual cognitive factors such as educational level and their effect on personal financial management practices of employees in financial institutions. A 95% confidence interval and 5% confidence level was assumed. Table 4.7 and Table 4.8 present the data and regression model summary respectively.

### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.951 <sup>a</sup>	.905	.903	.29909

a. Predictors: (Constant), Level of Education, Personal Financial Literacy

b. Dependent Variable: Personal Financial Management

**Table 4.9**

From the table above, it can be observed that personal financial literacy and education level of individuals explain 90.5% of individuals' personal financial management practices as represented by the R – squared ( $R^2$ ). This indicates that other factors not studied in this research affect personal financial management practices by 9.5%.

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	82.330	2	41.165	460.183	.000 <sup>b</sup>
	Residual	8.677	97	.089		
	Total	91.007	99			
a. Dependent Variable: Personal Financial Management						
b. Predictors: (Constant), Level of Education, Personal Financial Literacy						

**Table 4.10**

The table above shows that personal financial literacy and education level predict personal financial management practices significantly well. This is because the p-value of the f-statistic is  $< 0.05$ .

Coefficients <sup>a</sup>							
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
1 (Constant)	4.482	.220		20.349	.000	4.045	4.919
Personal Financial Literacy	-.742	.029	-.884	-25.572	.000	-.800	-.685
Level of education	.317	.079	.140	4.038	.000	.161	.473

a. Dependent Variable: Personal Financial Management

**Table 4.11**

Coefficient of determination explains the extent to which changes in the dependent variable can be explained by the change in the independent variables. This therefore shows the extent to which variation in personal financial management practices is explained by variation in personal literacy levels as well as other cognitive factors influencing personal financial management practices such as education level. From the coefficient of determination, the study model or equation:

$$Y^* = \alpha + \beta_1 X_1 + \beta_2 X_2 + \epsilon, \text{ becomes:}$$

$$Y^* = 4.482 - 0.742X_1 + 0.317X_2 + \epsilon$$

According to the model, when all independent variables are at zero, the dependent variable (personal financial management practices) will be 4.482.

#### **4.6. Discussion of the Findings**

The research objective that was set out was to determine the effect of personal financial literacy on personal financial management practices of employees in financial institutions. The study therefore looked at two main factors affecting personal financial management of employees in financial institutions. These were personal financial literacy levels of the respondents and other cognitive factors affecting personal financial management practices, with the proxy being respondents' education levels.

Annex 4. describes the respondents' own assessment of their personal financial literacy levels and personal financial management practices. From the respondents' self assessment of their personal financial literacy levels, majority appreciate that they have a more than average personal financial literacy level. The first statement shows that the respondents agree that they have an ability to discern financial choices & discuss financial issues. The second statement shows that the respondents agree that they use combinations of skills, resources and knowledge to make financial decisions. The third statement as well shows that the respondents agree that they make informed effective financial choices. The fourth statement depicts that the respondents agree that they understand financial terms and concepts.

Statements five to eight show that the respondents don't agree that they have considerable personal financial management practices. Statement five shows that the respondents don't agree that they regularly check their bank statements. Statement six shows that the respondents do not agree that they balance their check book. Statement seven shows that the respondents do not agree that they check the accuracy of transactions then file them. While statement eight shows that the respondents do not agree that they are prepared to manage their finances upon retirement.

The results of the study indicated that, though the respondents' own assessment of their personal financial literacy levels depicted high levels of personal financial literacy levels, respondents did not report better financial management practices. From Table.6 it was reported that few employees of financial institutions had attended a financial literacy course. This therefore means that respondents, on overall, don't have a satisfactory level of knowledge and skills in financial literacy. This is despite the fact that most of the respondents have high academic qualifications as well as qualifications in business related courses such as accounting, finance or banking and consider themselves to be financially literate.

These findings are similar to a study by De Clercq et al., (2009) which revealed that graduates and even chartered accountants have limits in financial literacy. These results therefore show that financial literacy is not only having financial knowledge and skills but having the ability to make judgments and take effective decisions regarding the use and management of monetary and financial resources.

## **CHAPTER FIVE**

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

#### **5.1 Introduction**

The chapter wraps the whole research study in three sections, summary, conclusion and recommendations. The summary section highlights all the various concepts and thoughts on personal financial management and personal financial literacy of employees in financial institutions in Kenya described in the study. The conclusion derives a believed perception from the summary of the study while recommendation section offers direction of future research on the same topic.

#### **5.2 Summary of Findings**

The objective of the study focused around understanding the effects of personal financial literacy on personal financial management practices of employees in financial institutions in Kenya. After a careful examination of previous reviewed literature on the topic, two factors were identified as being key forces determining the personal financial management practices of employees in financial institutions. These factors were personal financial literacy levels as well as educational level of the employees in financial institutions, which was used as a proxy for other cognitive factors that affect personal financial management practices.

A descriptive research design was crafted which used a questionnaire to capture primary data from a sample of employees working in financial institutions in Kenya regarding their personal financial management practices in relation to their personal financial literacy and level of their education. The design of the questionnaire was aligned

to the objectives that guided the study which touched on these two key areas highlighted above.

A correlation analysis of the collected data revealed that indeed there was a correlation between the two variables of the study and personal financial management practices of employees in financial institutions in Kenya. To understand whether personal financial management practices of employees of financial institutions was affected by their personal financial literacy levels and similarly their education levels, a negative correlation was found between personal financial literacy level and personal financial management levels while a positive correlation was found between education level and personal financial management practices. This goes to show that employees of financial institutions in Kenya are not very financially literate. This is supported by the respondents report that 78% had not attended a financial literacy course. The correlation analysis further revealed that level of education was negatively related to financial literacy. This goes to mean that high levels of education do not lead to highly financial literacy levels.

The regression analysis also shows the relationship between personal financial management practices and personal financial literacy and education levels. The analysis show that the greatest factor affecting personal financial management practices is personal financial literacy while other cognitive factors, such as level of education, also affect personal financial management practices, but to a lesser extent. This therefore means while education levels improve individuals' personal financial management practices to some extent, lack of personal financial literacy leads to poor personal financial management practices because it is the greater factor influencing personal financial management practices.

### **5.3 Conclusion**

The need for financial literacy has become increasingly significant among the employees of financial institutions in Kenya. Personal financial literacy is a very important aspect in ensuring individuals' ability to effectively evaluate and manage their finances in order to make frugal decisions in order to reach life goals and achieve financial well-being (Nufazil, 2014). According to Greenspan (2005), the current financial world has become so complex when compared to the previous generation where a simple knowledge of how to maintain a checking and savings account at local banks and financial institutions was more than enough. The financial literacy needs have therefore increased as individuals are now faced with numerous financial products and services to choose from.

Despite the fundamental importance of finding out what employees of financial institutions in Kenya know about their personal financial management practices and how this drives their personal financial management practices, surprisingly little research has asked how they gather this information and apply it to personal financial decisions. These topics are of paramount importance, especially at a time when individuals are increasingly responsible for their own personal financial matters.

Therefore there is greater need for institutions of higher education as well as financial institutions to facilitate more efforts in promoting financial literacy. This will go a long way in preventing individuals from becoming involved with fraudulent financial transactions or engaging in financially destructive behavior. Personal financial literacy will also help in wealth preservation as research has shown that people who are more financially literate tend to be better at retirement planning, accumulating wealth, and avoiding debt.



## **5.4 Recommendations**

The major challenges to participation in personal financial literacy programs are lack of finance, lack of the programs at the work places, courses not available in the market, work load, perception that personal financial literacy does not have immediate benefits and increased family commitments. Financial institutions in Kenya should lobby all professional and trade associations to sensitize their members on personal financial literacy and personal financial management matters.

Financial institutions in Kenya should seek partnerships with interested parties, for instance, universities and colleges, in provision of personal finance literacy courses. The role of financial institutions will be to ensure that the courses offered have the suitable content especially relating to personal financial management practices. The other partners will be responsible for training and availing the appropriate facilities and venues. The partnerships should ensure that the courses are relevant in terms of content and are delivered in a practical and simplified mode.

Personal financial literacy needs of employees in financial institutions are significantly different on the basis of vocational area, education level, occupational level, monthly income and participation in personal financial literacy programs. This calls for specialized financial literacy programs to be tailored to satisfy the various niches on the basis of various socioeconomic factors or demographic variances such as education level, gender, income and those who have already attended past financial literacy forums.

The government of Kenya should have a national financial literacy strategy that should include retirement planning. The strategy should aim to equip Kenyans with lifelong understanding of personal financial management matters and should be made in

consultation with all the relevant stakeholders (business, government and non-governmental organizations).

Taxation incentives can be introduced to encourage both employers and employees to encourage work place financial literacy.

## **5.5 Limitations of the Study**

The researcher experienced some challenges while carrying out the study, notably with the employees of the financial institutions. Personal finance matters are very sensitive matters especially in the financial sector industry. Employees of financial institutions were somewhat reluctant to participate in answering the questionnaire due to confidentiality issues thus making it very difficult to have questionnaires filled. The researcher therefore spent a lot of time convincing concerned offices within the banks to authorize filling of the questionnaire.

The data that was captured in the questionnaire constituted mostly nominal and ordinal data which is not very accurate in predicting variables. The researcher would have wished to collect scale data that could reveal more accurate patterns in the study.

The study was based on a small sample size of 100 respondents from banking institutions which represented employees of various financial institutions in Kenya. As such, it may be argued that a much larger sample might produce different results. On the contrary, however, fact that all the respondents came from the same vocational area, that is, banking and finance, helps to exclude many extraneous variables which could account for differences in personal financial behavior.

The researcher doubled up as a full time employee as well as a student. Thus time to

study, collect data and or even do analysis of collected data was always short. This translated into reading up to late hours and resulting into fatigue of the researcher. That means creativity and understanding of certain concepts was not optimized.

## **5.6 Suggestions for Further Research**

Citing scholarly publications and recommendations regarding personal financial literacy levels and personal financial management practices of employees in financial institutions in Kenya, it will be prudent for upcoming researchers to concentrate on in depth research on the level of personal financial literacy and personal financial management in Kenya to provide more empirical evidence and literature for review on the same.

The findings from this study cast some doubt on the ability of higher education courses in personal financial management, as currently administered, to significantly improve financial decision making. This is due to the fact that employees of financial institutions have taken one or more courses in university or college and this seems to have done little to improve their personal financial management practices. Therefore, either the content or the educational methods used to provide personal financial literacy that meet individuals' needs should be reconsidered.

Additional study is needed to determine more appropriate approaches to teaching financial literacy. Research should focus on determining teaching methods that enable individuals to understand the impact of financial decisions and/or the information that would improve subsequent financial behavior.

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## APPENDICES

### Appendix 1: Letter of Transmittal

Denis Munyambu Gachango

P.O BOX 2123-00200,

Nairobi.

Dear Respondent,

I am a student at the University of Nairobi pursuing a Masters of Business Administration Degree. I am conducting an academic research on the Effect of Personal Financial Literacy on Personal Financial Management. A Case Study of Employees In Financial Institutions. This questionnaire has been prepared to obtain information on your personal financial literacy level and personal financial management practices.

Please note that all the information provided for this study will be treated with utmost confidentiality. Your ability to answer all the questions comprehensively and to the best of your knowledge will be highly appreciated.

Thank you for your co-operation.

Yours faithfully,

Denis Munyambu Gachango

E-mail: [denisgachango@gmail.com](mailto:denisgachango@gmail.com) Phone: 0722 959609

## Appendix 2: Questionnaire for Employees of Financial Institutions in Kenya

### Instructions

Please tick in the appropriate box and also fill in the blank spaces provided for those questions where elaborate answers are required. You are requested to complete this questionnaire as honestly and objectively as possible. Use the space at the back of this questionnaire if you need more space for your responses.

### 1. Profile of Employees of Financial Institutions

i. Age : \_\_\_\_\_

ii. What is your Gender? Male  Female

iii. What is your marital status?

Single

Married

Divorced

iv. What is your highest level of education attained?

Graduate

Post Graduate

v. Have you attended a financial education course? Yes  No

If yes, how many courses? Please elaborate. \_\_\_\_\_

vi. Do you have any business, finance or accounting qualification (s)?

Yes  No

If yes, please list them. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**2. Please circle one answer for each of the following questions:**

i. I have the ability to discern financial choices and discuss financial issues without discomfort.

*(Strongly Disagree)*      1      2      3      4      5      *(Strongly Agree)*

ii. I can use combinations of skills, resources and knowledge to make financial decisions.

*(Strongly Disagree)*      1      2      3      4      5      *(Strongly Agree)*

iii. I can make informed effective financial choices.

*(Strongly Disagree)*      1      2      3      4      5      *(Strongly Agree)*

iv. I understand financial terms and concepts.

*(Strongly Disagree)*      1      2      3      4      5      *(Strongly Agree)*

v. I do regularly check my bank statements for inconsistencies.

(Strongly Disagree)      1      2      3      4      5      (Strongly Agree)

vi. I balance my checkbook carefully.

(Strongly Disagree)      1      2      3      4      5      (Strongly Agree)

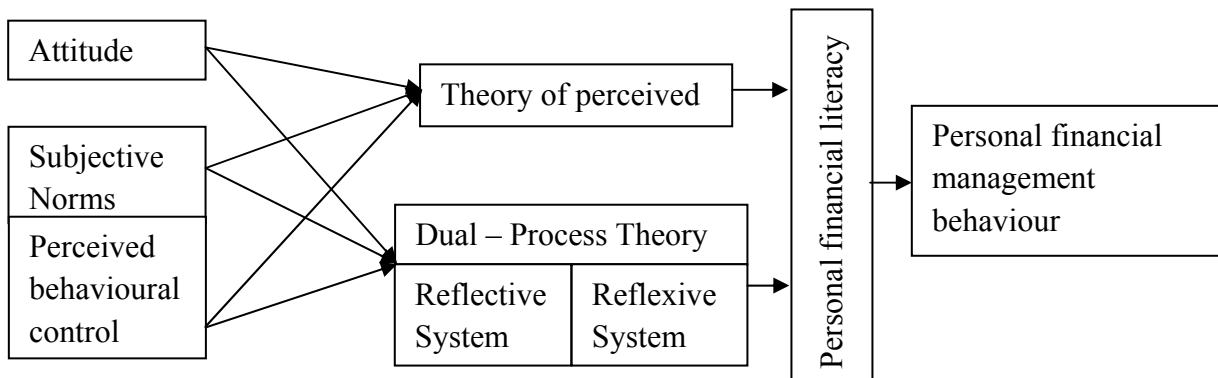
vii. I check the accuracy of transactions then file them.

(Strongly Disagree)      1      2      3      4      5      (Strongly Agree)

viii. I am/ will be prepared to manage my finances upon retirement.

(Strongly Disagree)      1      2      3      4      5      (Strongly Agree)

**Appendix 3: Theoretical Framework of Study**



**Appendix 4: Respondents' Self Assessment of their Personal Financial Literacy Levels and Their Personal Financial Management Practices.**

<b>Participant No.</b>	<b>Ability to discern financial choices and discuss financial issues.</b>	<b>Use combinations of skills, resources and knowledge to make financial decisions.</b>	<b>Make informed effective financial choices.</b>	<b>Understand financial terms and concepts.</b>	<b>Regularly check my bank statements.</b>	<b>Balance my check book.</b>	<b>Check the accuracy of transactions then file them.</b>	<b>Prepared to manage my finances upon retirement.</b>
1	4	4	3	5	2	3	1	2
2	4	4	3	5	2	3	1	2
3	4	4	3	5	2	3	1	2
4	4	4	3	5	2	3	1	2
5	4	4	3	5	2	3	1	2
6	4	4	3	5	2	3	1	2
7	4	4	3	5	2	3	1	2
8	4	4	3	5	2	3	1	2
9	4	4	3	5	2	3	1	2
10	4	4	3	5	2	3	1	2
11	4	4	3	5	2	3	1	2
12	4	4	3	5	2	3	1	2
13	4	4	3	5	2	3	1	2
14	4	4	3	5	2	3	1	2
15	4	4	3	5	2	3	1	2
16	4	4	3	5	2	3	1	2
17	4	4	3	5	2	3	1	2
18	4	4	3	5	2	3	1	2
19	4	4	3	5	2	3	1	2
20	4	4	3	5	2	3	1	2
21	4	4	3	5	2	3	1	2
22	4	4	3	5	2	3	1	2
23	4	4	3	5	2	3	1	2
24	4	4	3	5	2	3	1	2
25	4	4	3	5	2	3	1	1
26	4	4	3	5	2	3	1	1
27	5	4	5	5	2	3	1	1
28	5	4	5	5	2	3	1	1
29	5	4	5	5	2	3	1	1
30	5	5	5	5	2	3	1	1
31	5	5	5	5	2	3	1	1
32	5	5	5	5	2	3	1	1
33	5	5	5	5	2	3	1	1

<b>Participant No.</b>	<b>Ability to discern financial choices and discuss financial issues.</b>	<b>Use combinations of skills, resources and knowledge to make financial decisions.</b>	<b>Make informed effective financial choices.</b>	<b>Understand financial terms and concepts.</b>	<b>Regularly check my bank statements.</b>	<b>Balance my check book.</b>	<b>Check the accuracy of transactions then file them.</b>	<b>Prepared to manage my finances upon retirement.</b>
34	5	5	5	5	2	3	1	1
35	5	5	5	5	2	3	1	1
36	5	5	5	4	2	3	2	1
37	5	5	5	4	1	3	2	1
38	5	5	5	4	1	3	2	1
39	5	5	5	4	1	3	2	1
40	5	5	5	4	1	3	2	1
41	5	5	5	4	1	3	2	1
42	5	5	5	4	1	3	2	1
43	5	5	5	4	1	3	2	1
44	5	5	5	4	1	2	2	1
45	5	5	5	4	1	2	2	1
46	5	5	5	4	1	2	2	1
47	5	5	5	4	1	2	2	1
48	5	5	5	4	1	2	2	1
49	5	5	5	4	1	2	2	1
50	5	5	4	4	1	2	2	1
51	5	3	4	4	1	2	2	1
52	5	3	4	4	1	2	2	1
53	5	3	4	4	1	2	2	1
54	5	3	4	4	1	2	2	1
55	5	3	4	4	1	2	3	1
56	5	3	4	4	1	2	3	3
57	5	3	4	4	1	2	3	3
58	5	3	4	4	1	1	3	3
59	5	3	4	4	1	1	3	3
60	5	3	4	4	1	1	3	3
61	5	3	4	4	1	1	3	3
62	5	3	4	4	1	1	3	3
63	5	3	4	4	1	1	3	3
64	5	3	4	4	3	1	3	3
65	5	3	4	4	3	1	3	3
66	5	3	4	4	3	1	3	3
67	5	3	4	4	3	1	3	3
68	5	3	4	4	3	1	3	3



<b>Participant No.</b>	<b>Ability to discern financial choices and discuss financial issues.</b>	<b>Use combinations of skills, resources and knowledge to make financial decisions.</b>	<b>Make informed effective financial choices.</b>	<b>Understand financial terms and concepts.</b>	<b>Regularly check my bank statements.</b>	<b>Balance my check book.</b>	<b>Check the accuracy of transactions then file them.</b>	<b>Prepared to manage my finances upon retirement.</b>
69	5	3	4	4	3	1	3	3
70	3	3	4	4	3	1	3	3
71	3	3	4	3	3	1	3	3
72	3	3	4	3	3	1	3	3
73	3	3	4	3	3	1	3	3
74	3	3	4	3	3	1	4	3
75	3	3	4	3	3	1	4	3
76	3	2	2	3	3	1	4	3
77	3	2	2	3	3	1	4	3
78	3	2	2	3	3	1	4	3
79	3	2	2	3	3	1	4	3
80	3	2	2	3	3	1	4	3
81	3	2	2	3	3	1	4	3
82	3	2	2	3	4	1	4	3
83	3	2	2	3	4	1	4	4
84	2	2	2	3	4	1	4	4
85	2	2	2	3	4	1	4	4
86	2	2	2	2	4	1	4	4
87	2	2	2	2	4	1	4	4
88	2	2	2	2	4	1	4	5
89	2	2	2	2	4	1	4	5
90	2	1	2	2	4	4	4	5
91	2	1	1	2	4	4	5	5
92	2	1	1	2	4	4	5	5
93	1	1	1	2	4	4	5	5
94	1	1	1	2	4	4	5	5
95	1	1	1	2	5	5	5	5
96	1	1	1	1	5	5	5	5
97	1	1	1	1	5	5	5	5
98	1	1	1	1	5	5	5	5
99	1	1	1	1	5	5	5	5
100	1	1	1	1	5	5	5	5

## **Appendix 5: List of Banks in Kenya by Central Bank of Kenya as at July 2014**

1	African Banking Corporation ltd
2	Bank of Africa k Ltd
3	Bank of Baroda Kenya
4	Bank of India Ltd
5	Barclays Bank of K Ltd
6	Chase Bank Kenya Ltd
7	Citibank N.A.
8	CFC Stanbic Bank Ltd
9	CharterHouse Bank Ltd
10	Commercial Bank of Africa ltd
11	Consolidated bank
12	Co-operative Bank of Kenya
13	Credit Bank Ltd
14	Credit Finance C Bank Ltd
15	Development Bank of K
16	Diamond Trust Bank
17	Dubai Bank Ltd
18	Ecobank Kenya Ltd
19	Equatorial Commercial Bank ltd
20	Equity Bank
21	Family Finance Bank
22	Fidelity Commercial Bank Ltd
23	FINA Bank ltd
24	First Community Bank Ltd
25	Giro Commercial Bank
26	Guardian Bank Ltd
27	Gulf African Bank Ltd
28	Habib Bank A.G Zurich
29	Habib Bank Ltd
30	Imperial Bank ltd
31	Jamii Bora Bank Ltd
32	KCB Ltd
33	K-Rep Bank ltd
34	Middle East Bank
35	National Bank of Kenya
36	National Industrial Credit Bank ltd
37	Oriental Commercial Bank Ltd
38	Paramount Universal Bank Ltd
39	Prime Bank ltd
40	Standard Chartered Bank of Kenya
41	Trans-National Bank
42	Victoria Commercial Bank Ltd
43	UBA Kenya Bank Ltd