

**THE RELATIONSHIP BETWEEN FINANCIAL LITERACY AND  
INDIVIDUAL FINANCIAL BEHAVIOUR OF EMPLOYEES OF THE HOTEL  
INDUSTRY: A CASE STUDY OF SERENA HOTELS**

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## **DECLARATION**

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

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This research project proposal has been submitted for examination with my approval as the **University Supervisor**.

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## **DEDICATION**

This Research Project is dedicated to my family for the support, they offered during the entire duration of this course. May God bless you.

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## **ABSTRACT**

The study on financial literacy has continued to gain greater prominence in the field of education and beyond. The objective of this study was to examine the relationship between financial literacy and individual financial behaviour of employees of the hotel industry with focus on Serena Hotels. The study population was 1327 employees from 9 properties of Serena Hotels in Kenya. A sample of 140 employees was selected using stratified random sampling technique. Primary data was collected through semi-structured questionnaires. The questionnaires were edited for accuracy and completeness. The collected data was tested for validity and reliability. 112 questionnaires were sent back complete and accurate representing a response rate of 80%. Quantitative data was analyzed through descriptive statistics while qualitative data was analyzed through content analysis. The study also used regression analysis to establish the extent to which financial literacy, age, level of education, gender and level of income influence individual financial behaviour. The model significance was tested at 95% confidence level. Data presentation was done by use of tables. The study findings revealed that the employees of Serena Hotels had a moderate background of financial literacy. The results of the regression showed that there was a positive relationship between financial literacy and individual financial behaviour of employees of Serena Hotels. Age, level of education and income also had a direct relationship with individual financial behaviour. On the other hand it was found that there was an inverse relationship between gender of respondents and individual financial behaviour. Males were found to be more financially literate than females. From the results of the findings, the study recommends that employers in the hotel industry review their employees pay to level off with those of employees in other sectors of the economy, this is because most of the respondents cited their inability to save, plan for retirement, purchase insurance, set long term financial goals and pay bills on time due to the relatively low pay they received. The study also recommends that employees be on the lookout for their own financial well-being by sponsoring themselves for financial trainings, and having other sources of income to improve their financial health.

## **LIST OF ABBREVIATIONS**

<b>ADD</b>	American Dream policy Demonstration
<b>AGM</b>	Annual General Meeting
<b>AKFED</b>	Aga Khan Fund for Economic Development
<b>AMND</b>	Average Monthly Net Deposit
<b>ANOVA</b>	Analysis of Variance
<b>COYA</b>	Company of the Year Award
<b>FC</b>	Financial Corps
<b>FSA</b>	Financial Services Authority
<b>HRS</b>	Health Retirement Survey
<b>IDAs</b>	Individual Development Accounts
<b>INFE</b>	International Network on Financial Education
<b>KNBS</b>	Kenya National Bureau of Statistics
<b>NSE</b>	Nairobi Securities Exchange
<b>NYIB</b>	National Youth Involvement Board
<b>OECD</b>	Organization for Economic Co-operation and Development
<b>PWC</b>	Price Waterhouse Coopers
<b>SACCOs</b>	Savings and Credit Co-operative societies
<b>SMEs</b>	Small and Medium Enterprises
<b>TPS</b>	Tourism Promotion Services
<b>US</b>	United States
<b>USA</b>	United States of America

## **CHAPTER ONE: INTRODUCTION**

### **1.1 Background to the Study**

The period of 1950s saw a time when issues of personal financial management; planning for retirement, investment in real assets, stocks and shares, budgeting and saving had raised a myriad concerns. In this period, financial literacy continued to gain greater prominence in the field of education and beyond. Various stakeholders namely commercial banks, consumers, the government, and private organizations came up to heighten the debate on this topic. Concerns were raised world over about individual financial security (Braunstein, 2002). In USA, for instance credit union volunteers emerged and formed the National Youth Involvement Board (NYIB) to focus on youth financial literacy providing financial education to young people in the country (FC, 2014).

According to the prospect theory, investors make choices in situations that involve risks. They evaluate the potential gains and losses associated with each investment and select the one with the highest value. The level of financial literacy impacts attitude that in turn affects the individuals' financial behaviour. Individuals with more financial knowledge are better positioned to identify the prospects associated with each investment and therefore select behaviour that optimizes their returns (Chen & Volpe, 1998). With the aspiration for individual employee to achieve financial security for themselves, their families and future generations, there has been need to offer financial education to the populace. Workers are being given responsibility to save, budget and plan on their retirement to ensure their security in old age as the role played by government and employers in helping them manage their finances reduces overtime (Arkes, 1991). Accordingly, what is critically needed is new information permitting analysts to investigate the links between financial literacy and economic decision-making (Lusardi & Mitchell, 2008).

Employees are gradually taking responsibility for a number of financial decisions. Among the most important arguably being the purchase and financing of a home and preparing for retirement (Anthes, 2004). It is becoming ever more important for households to acquire and manage economic know-how (Arkes, 1991). There is no

doubt that many people are poorly informed about basic issues in personal finance and take decisions that are difficult to interpret as rational (FSA, 2006).

The financial systems of the 21st century have been growing with speed, sophistication and becoming more complex world over (Hilgert & Hogarth, 2002). These changes in technology and competition in the marketplace have led to the introduction of a broad spectrum of services and wide variety of institutions to offer these services compelling the urgency to develop a field of study that will seek to enhance the knowledge of consumers in making financial decisions (Braunstein & Welch, 2002). There is no doubt that many people are poorly informed about basic issues in personal finance and take decisions that are difficult to interpret as rational (FSA, 2006). Availability of innovative loans and credit products, changes in the financial market and technological advancements in the way financial services are offered and distributed have indisputably left many people with decisions that need to be made (Mahdzan & Tabiani, 2013).

### **1.1.1 Financial Literacy**

Financial literacy refers to an evolving state of competency that enables people to respond effectively to ever changing personal and economic circumstances (Brown, et al., 2006). It is the understanding ordinary investors have of market principles, instruments, organizations and regulations (FINRA, 2003). The knowledge acquired enables an individual 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 (Mandell, 2007).

The skills acquired in financial literacy enables individuals to navigate the financial world, make informed decisions about their money and minimize their chances of being misled on financial matters (Beal & Delpachitra, 2003). Individuals are considered financially literate if they are competent and can demonstrate they have applied the knowledge they have learned (Moore, 2003).

The measurement of financial literacy is a prime issue, while it is important to assess how financially literate people are, in practice it is difficult to explore how people process economic information and make informed decisions about household finances (Lusardi & Mitchell, 2008). This study will measure financial literacy using

the OECD core questionnaire which includes 8 questions to test levels of knowledge. A financial knowledge score will be created by counting the number of correct responses given by each respondent, and calculated on the basis of the proportion of the population. A score of 6 or more correct responses exhibits a relatively high level of financial literacy. Similar measures were adopted in a pilot study of the OECD, and its INFE to compare the proportion of people in each country who correctly answer six or more out of eight questions. The questions test knowledge on division, interest paid on loans, risk and return, diversification, definition of inflation, compound interest, time value of money and calculation of interest and principal (Atkinson & Messy, 2005).

### **1.1.2 Individual Financial Behaviour**

Behaviour is a response made by individuals towards stimuli in their environment (Minton & Khale, 2014). Individual financial behaviour can be viewed through measures such as spending and saving habits, borrowing patterns, budgeting level and access to financial products. Making people better informed is hard and expensive and is of minimal value if it has no effect on behaviour (Bernheim, Garrett & Maki 2001). The way in which a person behaves will have a significant impact on their financial wellbeing. It is therefore important to capture evidence of behaviour within a financial literacy measure (Atkinson & Messy, 2005). Poor financial behaviours are personal and family practices that have consequential, detrimental and negative impact on one's life at home and work (Thomas, 1997). Thomas (1997) provides examples of poor financial behaviours that negatively impact one's family life for example regularly running out of money, inability to pay due bills on time and failure to contribute to a pension plan.

In order to measure financial behaviour The OECD/INFE core questionnaire does this by asking a variety of questions in different styles, to find out about behaviours such as thinking before making a purchase, paying bills on time, budgeting, saving or buying of investments, borrowing to make ends meet, purchasing a financial product after gathering some information about the product and keeping close watch on personal financial matters. The study adopted nine questions from the OECD survey that concern individuals' financial choices in different contexts, namely budget management, savings, credit, insurance and financial advice.

A similar approach was used by Atkinson and Messy (2005). The financial behaviour score counts positive behaviours exhibited; it takes a maximum value of 9, and a score of 6 or more is considered to be relatively high.

### **1.1.3 Financial Literacy and Individual Financial Behaviour**

Previous research has shown that financial literacy is a precursor to different healthy financial behaviours for instance financial literacy plays a key role in financial preparation for retirement (Adams & Rau, 2011). Van, Lusardi, and Alessie (2011) through their study showed that individuals with lower financial literacy are much less likely to invest in stocks. According to Nelson and Wambugu (2008) financial education teaches the knowledge, skills and attitudes that people can use to adopt good money management practices for earning, spending, savings, borrowing and investing. Even though the relation between financial literacy and financial behaviour deserves further investigation there are some evidences of correlation and causality between knowledge and behaviour in personal finance (Hilgert, Hogarth & Beverly, 2003). According to Lusardi and Mitchell (2008) literature shows that basic knowledge is tied to more efficient financial behaviour such as planning and saving for retirement. Van et al. (2011) states that financial knowledge will lead to wealth accumulation. Investing in the stock market is seen as another impact directly related to financial literacy (Stango & Zinman, 2009). There is also some indication that financial illiteracy affects borrowing behaviour leading to higher debt levels at higher cost (Moore, 2003).

Although research shows that the acquisition of additional information can result in improved behaviour in financial matters, studies also make clear that increased information does not automatically result in such improvement. While the overarching objective of financial literacy training is to impart knowledge that will ultimately, improve financial behaviours, the assumption that the presence of more information will lead to improved behaviour is faulty (Braunstein & Welch, 2002). Education must improve relevant knowledge and understanding and better knowledge must change behaviour (Meza, Irlenbusc, Bernd, Reyniers, & Dianneo, 2008). Perhaps more distressing than low levels of financial literacy is the consistent finding that those who have taken a high school class designed to improve financial literacy

tend to do no better or little better than those who have not had such a course (Mandell & Lewis 2004).

#### **1.1.4 Serena Hotels**

Serena Hotels was incorporated in 1970. The company trades under the name TPS Eastern Africa. It is a limited liability company and was first listed on the NSE in 1997. Serena Hotels is one of the affiliate members of AKFED, an international development agency dedicated to promoting entrepreneurship and building economically sound enterprises in the developing world.

The group operates 36 luxury hotels, safari lodges and resorts in Eastern Africa and Southern Asia with a total of 2,251 employees. It owns 9 properties in Kenya and has established itself as a world leading brand. The main objective is to promote tourism locally and beyond, promote cultural heritage, offer quality accommodation and conferencing solutions. Serena Hotels contributes to the local economy through the training of skilled manpower, reinvigoration of artisans and craft industries, and environmental conservation. The company has won a number of awards including Africa's leading hotel brand, COYA award in 2000, Super brand status, PWC-excellence 20 most respected companies in East Africa, and 500 best hotels in the World leisure travel magazine among others.

Serena Hotels views its employees as its most valued assets. Employees who exhibit outstanding performance in their duties are rewarded. The company has undertaken measures to train its employees on financial management and health through its wellness program administered by the human resource department. Financial literacy programs are gradually gaining prominence in the organization, financial awareness is being created to teach employees on measures to take in order to benefit from low interest rates, reduce their tax liability, promote a savings culture, draft budgets and take insurance covers. The company has established a voluntary pension scheme for its employees. The employees of Serena hotels originate from different backgrounds socially, economically, culturally and geographically.

#### **1.2 Research Problem**

Debate continues in the study of financial literacy. Past studies have not come up with sophisticated measures of financial literacy; instead proxies such as numeracy, debt

literacy, time value of money, inflation, ability to calculate compound interest have been used as measures. Some have argued that financial literacy measures are simply a proxy for cognitive ability (Lusardi & Mitchel, 2008).

KNBS (2014) reported that the hotel industry in Kenya employed an estimated 73.7M out of a total of 2,265.8M of the workforce, representing 3% and making a total wage payment of 2% compared to other sectors of the economy in the year 2013. According to Riley and Heinemann (1996) this industry is characterized by long working hours, relatively low pay, job instability, seasonality, unfavorable working hours and low status making it unattractive as a career choice, as a result employees in non-managerial roles seem dissatisfied with their jobs. Due to these factors the industry is mostly male dominated. A similar trend is noted by Ondieki and Kung'u (2013) who state, that due to these factors the industry continues to suffer from high turnover. Serena Hotels is famed for its world class hospitality, excellent services and facilities. However it is also faced with some challenges facing the hotel industry. Not much is known about the financial capability of the employees; concern arises on whether they are able to manage the finances at their disposal. While the need for training in the hospitality industry is acknowledged, the necessity of possessing the financial capability has not been fully explored (Yuan, 2014).

Bernheim and Garrett (2003) did a study on the effect of retirement seminars on savings and found a positive correlation for employees of companies in USA. It is unlikely that short exposure to financial literacy training would make much of a dent in consumers' decision-making prowess. For this reason, offering a few retirement seminars or sending employees to a benefit fair may be judged as relatively ineffective (Duflo & Saez 2003, 2004). Another concern is that researchers have often little or no information on the content and quality of the workplace seminars. Only a few authors have measured the information content of the seminars (Clark & D'Ambrosio, 2008)

Locally, previous studies have been carried out on financial literacy in Parastatals, State Corporations, Financial institutions e.g. banks, Youth Enterprise Development funds at constituency level and SMEs. However no study has been carried out on the relationship between financial literacy and individual financial behaviour of the



employees in the hotel industry. The hotel industry is non-financial. It offers limited if any opportunities to its employees to advance their financial knowledge unlike the case with financial institutions e.g. banks that teach their employees about financial products and instruments (Ondieki & Kung'u, 2013).

This research aims at addressing the gap to establish whether employees in the hotel industry have some level of financial knowledge and how such knowledge impacts behaviour owing to the nature of the industry they are in. The study therefore seeks to answer the question what is the relationship between financial literacy and individual financial behaviour of the employees of the hotel industry in Kenya?

### **1.3 Research Objective**

The objective of this study was to examine the relationship between financial literacy and individual financial behaviour of the employees of Serena Hotels.

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

This study will be of benefit to employees working in the hotel industry, it will enable them to improve decision making and confidence to make sound financial decisions for themselves and their families. They will be in a better position to understand the need to save and plan for retirement or unexpected job loss as well as reduce unnecessary expenditure by drawing budgets before incurring expenditures. Research indicates that a third of employees ages 51-61 have not begun thinking about retirement (Lusardi, 2003). Proper financial management will reduce stress caused by factors such as over indebtedness, and exploitation by fraudulent schemes. By reducing financial stress, employees reduce their overall stress as stated by Peditwal (2011) which may be a leading cause of health implications and therefore they will save the costs associated with seeking medical attention brought about by stressing conditions.

To employers, financially literate employees are more productive. Making proper financial decisions will enable them to focus more on work activities and not their financial problems. 65% of employers said that employees are less productive at work when worried about financial issues (Eldred & Madden, 2010). Employers will be able to plan for their employees' retirement and therefore improve workforce

planning and attrition rates. Productive employees are able to work towards the achievement of the financial health of their organization by increasing productivity. Therefore this research will enlighten employers on the need of training employees to be financially literate in their organization. Garman, Leech and Grable (1996) found out that employees in the US were stressed about their poor financial behaviour that impacted negatively on their job productivity.

This study will also be of importance to financial institutions namely banks, building societies, mortgage firms, and insurance companies. These institutions offer financial services to their clients. They are interested in understanding the level of financial literacy of their clients and their behaviour concerning the services and products they offer. Financial institutions are concerned about their clients' knowledge in such aspects as calculating interest rates on personal loans and mortgages, compounding, calculating premiums on sum assured, bonuses, investing in stocks, shares and bonds.

To the government the knowledge acquired can be viewed as a complement to consumer protection; employees are able to protect themselves against fraud and unfair practices by financial institutions when they have the requisite knowledge on finance (Mandell, 2008).

This study will also be of benefit to researchers who seek to further knowledge in the area of financial literacy and individual behaviour by identifying knowledge gaps in the area and broadening their research in the field to target employees in other sectors of the economy.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Introduction**

This chapter presents the theoretical framework, determinants of individual financial behaviour and an empirical analysis of related studies.

### **2.2 Theoretical Review**

Theoretical review presents a body of knowledge studied and developed by experts. This section reviews the theories propounded by scholars in finance and economics in explaining individual financial behaviour. The theories include Dual process theories, Prospect theory and Social-cognitive learning theory.

#### **2.2.1 Dual Process Theories**

Dual process theories proponents assert that reasoning comprises two underlying systems that serve functionally separate roles (Cosmides & Tooby, 1996). The first system is intuitive, fast, automatic and involuntary. This system is referred to as system 1. It is an unconscious process which we are not aware of. Decisions in this system are geared towards avoiding losses rather than taking risks (Tversky & Kahneman, 1974). Decisions in system 1 are informal, unstructured and rely on heuristics such as framing and representativeness. It is characterized as implicit, associative, fast, and highly robust (Gilinsky & Judd, 1994). The second system is slow, deliberate and voluntary. This system is referred to as system 2. It is conscious and we are aware of it (Stanovich & West 2000). System 2 enables the mind to think analytically and in a rational manner (Stanovich & West 2000). It is explicit, sequential, controllable, and makes high demands of working memory and is responsible for the intervention and improvement of the decision.

Humans use both systems to process information. Dual process theories system 1 suggest that individual financial behaviour is pragmatic, based on prior experience, beliefs, background knowledge, implying that individuals will behave irrationally at times even when they are considered to be financially literate; alluding that financial goals can be achieved reliably and efficiently without necessarily accompanying awareness (Gigerenzer & Gaissmaier, 2011).

Dijksterhuis, Bos, Nordgren and Van (2006) System 2 suggests that individuals will be rational and apply reason in selecting behaviour that gives them optimum benefit without reference to prior experiences or background.

### **2.2.2 Prospect Theory**

Prospect theory is concerned with decision makers who are faced by a set of two alternatives. Decisions subject to risk are viewed as a choice between alternative actions, which are associated with particular probabilities (prospects) or gambles (Goldberg & Von 2001). Prospect theory adopts a descriptive approach-how decisions are actually made. There are two phases in the choice making process. The first phase is called editing and consists of a preliminary analysis of the prospects offered which often yields a simpler representation of these prospects. In the second phase the prospects are evaluated and the one with the highest value is chosen. Prospect theory focuses on subjective decision-making influenced by the investors' value system (Barberis, Huang & Santos, 2001).

The theory describes three states of mind affecting an individual's decision-making processes; regret aversion, loss aversion and mental accounting (Waweru, Munyoki & Uliana, 2008). Regret is an emotion that occurs after people make mistakes (Loomes & Sugden, 1982). Loss aversion implies that people are reluctant to sell at a loss; the disposition effect (Barberis & Huang, 2001). They are more distressed at the prospect of losses than they are pleased by equivalent gains (Barberis & Thaler, 2003). It leads people to value what they own more than what they don't own in the sense that they demand more money to give up an object than they would be prepared to pay to acquire it; the endowment effect. Mental accounting refers to the process by which people think about and evaluate their financial transactions and organize their portfolio into separate accounts (Barberis, Huang & Santos, 2001) . Thaler (1999) suggests that, in their construction of mental accounts, people engage in hedonic editing i.e. selecting the set of accounts that is most attractive to them (Zeelenberg & Beattie, 1997).

In a financial decision making context where subjects have to choose between two investment options, the expectation of feedback on the outcome of the riskier option can promote risk seeking behaviour.

### **2.2.3 Social-Cognitive Learning Theory**

This is a theoretical perspective in which learners acquire new behaviour and knowledge by observing others referred to as models. A model is a person who is

used as an example for others to imitate. Learning is a mental process that may or may not lead to behaviour and need not occur immediately. A person observes new behaviour and processes them. However the persons learning may or may not be affected until some later point (Bandura, 1986).

According to Hurst (2003) social cognitive theory relies on various assumptions: Behaviour is goal directed; people set goals for themselves and direct their behaviour towards the achievement of those goals. The second assumption states that behaviour becomes eventually self-regulated after several observations. The third assumption focuses on reinforcement and punishment as having indirect effects on learning and behaviour. People form expectations about likely consequences of future responses based on how current responses are reinforced or punished. People's expectations are also influenced by the observations of the consequence that follow other people's behaviour; a situation referred to as vicarious experience. The non-occurrence of an expected consequence may also have a reinforcing or a punishing effect. Because of man's anticipatory behaviour, reinforcement can have strong incentive motivational effects. The more rudimentary form of learning rooted in direct experience is largely governed by the rewarding and punishing consequences that follow any given action (Bandura, 1997).

An individual though financially literate may adopt financial behaviour emulated from another in reaching a decision; should the outcome be unfavorable they will exercise caution in the next move. However some studies show that more financially sophisticated individuals are less affected by the choices of peers in their financial decisions (Bursztyn, Ederer, Ferman, & Yuchtman 2013).

### **2.3 Determinants of Individual Financial Behaviour**

Several studies have shown that financial literacy is positively related to self-beneficial financial behaviour (Hilgert, Hogarth, & Beverly, 2003).

Studies reveal that the youth are lacking in financial literacy (Lusardi & Mitchell, 2003). Their level of saving is low compared to the middle age employees. The level of retirement planning is also low. The young and older people in the United States and other countries appear woefully under-informed about basic financial

computations, with serious implications for saving, retirement planning, mortgages, and other decision (Lusardi & Mitchell, 2008). Similarly Finke, Howe, and Huston (2011) showed that age influences financial behaviour by developing a multidimensional measure of financial literacy for the old and confirming that, though actual financial literacy falls with age, people's confidence in their own financial decision-making abilities increases with age.

Lusardi and Mitchell (2007) show that the level of education impacts behaviour in the sense that those without a college education are likely to have less knowledge on financial matters. The level of numeracy is particularly low for those individuals with low financial literacy (Christelis, Tullio, & Padula 2010). One possible reason for this discrepancy has been cited to be cognitive ability (McArdle, Smith, & Willis 2009). Tasks are carried out from how we learn, remember and pay attention rather than with any actual knowledge. According to Atkinson and Messy (2012) some people have achieved high scores of financial literacy despite low levels of education, indicating that high levels of financial literacy is possible even amongst those who have not completed formal education.

Research shows that men are generally more financially knowledgeable than women holding all factors constant (Lusardi, Mitchell, & Curto 2010). According to Hsu (2011) married women tend to build up financial knowledge later in their lives. Single women also tend to have limited financial knowhow with regards to their own personal finances. Koenen et al. (2012) points out these differences due to self confidence that differs by sex. Mahnaz and Horton (2012) examined the financial literacy level among US women in a liberal college of arts. Their conclusion was that even well educated women have low levels of financial literacy despite the education they have acquired.

The poor might not be completely rational and knowledgeable when it comes to saving practices (Bernheim, 1994). A high level of financial literacy is possible at all income levels. Income itself does not impact on the ability of someone to gain knowledge, to form attitudes conducive to their own financial wellbeing or to exhibit positive behaviours. However, low income is often seen as an explanation for certain

behaviours such as borrowing to make ends meet, and a reason not to undertake actions such as saving or making long term plans (Atkinson & Messy, 2012).

In conclusion the factors expected to influence financial behaviour of individuals include age, level of education, level of income and gender.

## **2.4 Empirical Review**

This section presents the international and local studies done by scholars and researchers on financial literacy; the methodology used, summary of their findings and the conclusions drawn.

Clancy et al. (2001) examined the relationship between financial education and savings outcomes in IDAs. These are subsidized savings accounts targeted to the poor. The data was obtained from 14 IDA programs across the United States that are part of the ADD. 2,364 participants age 13-72 were selected; 80% being female. A Heckman two-step regression was used to analyze the data. One regression is run with AMND as the dependent variable and the other is run with deposit frequency as the dependent variable. The first step of the Heckman two-step regression predicts exit from the IDA program (and thus a high likelihood of a low opportunity for attendance at financial education). The second step predicts the savings outcome measure for those participants who did not exit, controlling for length of participation and a wide range of other factors that might affect AMND and deposit frequency. The results showed that a few hours of general financial education increases saving a lot, although the effects may diminish or reverse as hours increase.

Clark and D'Ambrosio (2002) evaluated effects of seminars in providing financial information that would assist individuals in the retirement planning process using a pre-test post-test survey. Their empirical analysis is based on information obtained in three surveys: participants completed a first survey prior to the start of a seminar, a second survey at the end of a seminar and a third survey several months later. Respondents were asked whether they had changed their retirement goals or revised their desired levels of retirement income following attendance of a seminar. They find changes for both retirement goals and stated savings behaviour, particularly for women. The study concluded that exposing workers to retirement seminars does influence workers stated desire to save more.

Lusardi (2003) used survey data to examine the impact of attending retirement seminars on savings behaviour, among older households in the American HRS. Data was collected by questionnaires from the Rand ALP in a survey of respondents aged 18 and above recruited by the University of Michigan. The study found positive effects on saving behaviour, particularly for those with lower education and low initial savings.

Bernheim and Garrett (2003) use a household survey to analyze the effect of employer-based financial education on the savings behaviour of employees in general and for retirement in the US. Data was collected from a nationally representative sample of respondents between ages 30-49. Their cross-sectional analysis finds positive correlation between education programs and savings, with sufficient controls to suggest that the relationship is causal.

Locally few studies have been done on financial literacy:

Nyamute and Monyoncho (2008) conducted a case study of the effects of financial literacy on personal financial management of employees of finance and banking institutions. The population of the study consisted of financial institutions listed on the NSE. Data was obtained from a sample of 192 employees using structured questionnaires. This sample was divided in two with one sample targeting employees with financial knowledge while the other sample targeted employees without financial background. SPSS was used to analyze the data; Likert scale was administered. The results of the study showed that one can still practice financial management behaviour whether or not they are financially literate; this is due to the availability of other channels of acquiring financial knowledge. The results of the study also showed a significant difference in the behaviour of the financially literate versus the financially illiterate. The student t square test gave a p value of 0.029086 at a 5% significance level the financially literate were in a better position to apply the principles of proper financial management.

Kibui (2013) did a cross sectional descriptive survey to determine the relationship between financial literacy and the financial management among the youth in Konoin



constituency. A total of 250 participants was selected using random sampling technique. Data was collected using open ended and close ended questionnaires and analyzed by regression analysis and descriptive statistics. The findings showed that there is a direct relationship between financial literacy and financial management among the youth of Konoin constituency.

Olima (2013) did a study on the effect of financial literacy on the personal financial management of the employees of KRA. 100 employees were selected from a target population of 2000 respondents. Primary data was collected using semi structured questionnaires. Analysis of quantitative data was done using descriptive statistics while qualitative data was analyzed using SPSS. To study the relationship between the dependent and independent variable multiple regression analysis was applied. The findings of the study indicated that financial literacy impacts personal financial management.

Njehia (2014) explored the effect of financial literacy on personal financial management of the employees of Mumias Sugar Company in western Kenya and determine the level of financial literacy among the employees. The study used primary data collected from semi structured questionnaires. 200 employees were selected from a target population of 2000 employees using random sampling technique. The data was analyzed using regression analysis and descriptive statistics; mean correlation, standard deviation and percentages. The findings revealed that majority of the employees of Mumias Sugar Company had a good background in financial knowledge. Generally it was observed that the employees implemented their financial knowledge and skills in personal financial management.

## **2.5 Summary of Literature Review**

Financial literacy has been a worldwide concern; it has been proven that one can still practice financial management behaviour whether or not they are financially literate. This study is most concerned with the potential implications of financial literacy on economic behaviour. Most authors have confirmed the positive association between knowledge and financial behaviour. For example, Calvert, Campbell, and Sodini (2005) find that more financially sophisticated households are more likely to buy

risky assets and invest more efficiently. Hilgerth, Hogarth, and Beverly (2003) also document a positive link between financial knowledge and financial behaviour.

Financial knowledge and literacy promotes particular forms of positive financial behaviour. However other behaviour such as investing result from market experience, and this can also promote higher levels of financial literacy (Capuano & Ramsay, 2011).

It is important to establish the link between financial literacy and good financial behaviour to elucidate the benefits of financially literate consumers. Often time's seminar participants who say they will start contributing to pensions or boost their contributions often fail to do so, in practice (Choi, Laibson, Madrian & Metrick, 2004) and the effect of seminars improving financial behaviour of an individual cannot be concluded with finality (Madrian & Shea, 2001).

## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1 Introduction**

This chapter presents the research methodology to be adopted for the study. It includes the research design, population, sampling techniques, data collection and analysis techniques.

### **3.2 Research Design**

Research design is the blueprint that holds the research project together (Trochim, 2006). This study adopted a descriptive survey design. Gay (1983) defines descriptive survey research as a process of collecting data in order to test hypotheses or to answer questions concerning the current status of the variables on the subjects in the study. This design enables the gathering of pertinent and precise information and therefore be able to draw valid general conclusions (Lockesh, 1984).

### **3.3 Population**

Population is a complete set of individuals, cases or subjects with common observable characteristics (Mugenda & Mugenda, 2003). The target population is that population to which the researcher wants to generalize the results of a study. The study targeted a total of 1,327 employees from the 9 properties of Serena Hotels in Kenya. The sampling frame comprised of the list of the number of employees in the various hotels, resorts, safari lodges and tented camps.

### **3.4 Sampling Design**

Kombo and Tromp (2006) define sampling as the process of selecting a number of individuals or objects from a population such that the selected group contains elements representative of the characteristics found in the entire population.

This study adopted a stratified random sampling technique. Stratified random sampling is a probability sampling procedure in which the population is divided into two or more relevant strata and a random sample is drawn from each stratum (Cooper & Schindle, 2008). For this study, the population was divided into nine strata; the 9 property units of Serena Hotels. The advantage of stratified random sampling technique is that it ensures inclusivity, aiming at a sample that is true representative to the accessible population (Mugenda & Mugenda, 2003).

The sample size was obtained by use of Kombo and Tromp (2006) recommendation that a sample size of 10-30 percent is representative enough of the population under investigation. The sample size was 140 respondents.

### **3.5 Data Collection**

The study used primary data collected by the administration of semi-structured questionnaires. Questionnaires are economical in terms of cost and time (Cavana et al. 2001). The use of questionnaires is convenient and can be administered to a large number of respondents without the researcher necessarily having to be physically present and also enhances confidentiality of the respondents. Open ended questions were asked to allow a detailed response as well as give insight into a respondent's feelings and background. Closed ended questions were posed because they are easy to analyze since they are in an immediate usable form (Mugenda & Mugenda, 2003). The study also used contingency questions as a follow-up to obtain further information. The questionnaires adopted the Likert scale.

### **3.6 Validity and Reliability**

Validity is the extent to which the results of the study are a true representation of the phenomenon being studied (Mugenda & Mugenda, 2003). The questionnaire was pretested on 10 respondents who were not part of the sample to establish content validity. Content validity is the degree to which data collected using a particular instrument represents a specific domain of indicators or content of a particular concept (Mugenda & Mugenda, 2003). The validity of the research instrument was enhanced by seeking the opinion of experts in this field. The questionnaire was then amended and edited for accuracy and completeness.

Reliability is a measure of how consistent the results are from the test (Kothari, 2004). Cronbach's Alpha coefficient was used to test reliability. The value obtained was compared with Cronbach's value of 0.7. The higher the value was the more reliable the instrument was taken to be.

### **3.7 Data Analysis**

Quantitative data was analyzed using descriptive statistics. The purpose of descriptive statistics was to enable the researcher to meaningfully describe a distribution of scores or measurements using a few indices or statistics. The main

types of descriptive statistics used were measures of central tendency e.g. mean, median, measures of variability e.g. range, standard deviation and variance. Content analysis was used to analyze qualitative data. The analyzed data was then visually presented using frequency tables.

A multiple linear regression model was also developed to analyze the data. The model was represented as follows:

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

Where:

- Y= Individual financial behaviour of employees measured by the respondents reactions to such factors as thinking before making a purchase, spending, budgeting, savings, investments, borrowing, and ability to keep watch on personal financial matters
- $\beta_{1-n}$ = Coefficients of regression
- $\alpha$ = constant term
- $X_1$ = Financial literacy index measured by employees knowledge on inflation, compounding, risk and return, time value of money, division and calculation of interest
- $X_2$ = Age index measured in respondent's age in years using interval scale;
- $X_3$ = Education index measured by the respondent's highest level of schooling;
- $X_4$ = Gender index measured by the respondent's classification as male or female;
- $X_5$ = Income index measured by the current earnings of the respondent using interval scale;
- $\varepsilon$ = Error term.

## CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

### 4.1 Introduction

This chapter focuses on the data analysis, interpretation and presentation of the findings. The objective of the study was to examine the relationship between financial literacy and individual financial behaviour of employees of Serena Hotels. A semi-structured questionnaire was used to collect primary data from the respondents.

### 4.2 Response Rate

The study targeted a population of 1327 employees from Serena Hotels in Kenya. Out of 140 questionnaires issued, 112 were filled and sent back complete. This represented a response rate of 80% which was considered representative of the study population. This response rate conforms to Mugenda and Mugenda (2003) stipulation that a response rate of 50% is adequate for analysis and reporting; a response rate of 60% is good and a response rate of 70% and over is excellent. Six out of the 140 questionnaires were returned incomplete and this was considered insufficient for analysis. Most of the respondents cited busy schedules as the reason for not responding since the study was carried out within a limited period of time while others cited that the information required was of confidential nature.

**Table 4.1 Response rate**

	<b>Frequency</b>	<b>Percentage</b>
Response	112	80
Non response	22	16
Incomplete	6	4
<b>Total</b>	<b>140</b>	<b>100</b>

Source: Author (2015)

### 4.3 Data Validity

The research instrument was pre-tested on 10 employees of Serena Hotels who were not part of the sample of respondents to establish its validity. This facilitated revision and modification of the instrument thereby enhancing validity.

Cronbach Alpha was used to test the reliability of the research instrument. The value obtained of 0.73 was compared with Alpha value of 0.7. Since the value was higher

than 0.7 the instrument was deemed reliable. After the pilot study the main survey followed. This pre testing was done after the research proposal approval.

#### 4.4 Descriptive Statistics

Descriptive statistics are used to describe the basic features of the data in a study. They provide simple summaries about the sample and measures.

##### 4.4.1 Gender of Respondents

From the analysis, there were more male than female employees in Serena Hotels. Males were 69 in number while females comprised 43 out of the total of 112 respondents sampled representing 62% and 38% respectively of the population.

**Table 4.2 Gender of Respondents**

<b>Gender</b>	<b>Frequency</b>	<b>Percentage</b>
Male	69	62
Female	43	38
<b>Total</b>	<b>112</b>	<b>100</b>

Source: Author (2015)

##### 4.4.2 Age of Respondents

The results indicated that 33% of employees were aged between 26 and 30 years, 24% between 31 and 35 years, 11% percent between 36 and 40 years, 13% between 41 and 45 years, 9% between 46 and 50 years. 7% were aged between 51 and 55 years while 56 years and above represented 3% of the population.

**Table 4.3 Age of Respondents**

<b>Age</b>	<b>Frequency</b>	<b>Percentage</b>
26-30	37	33
31-35	27	24
36-40	12	11
41-45	14	13
46-50	10	9
51-55	8	7
Over 56	4	4
<b>Total</b>	<b>112</b>	<b>100</b>

Source: Author (2015)

**Table 4.4 Descriptive Statistics of Respondents age**

Mean	36.790
Median	33.000
Standard Deviation	8.985
Sample Variance	80.741
Kurtosis	-0.507
Skewness	0.796
Minimum	28.000
Maximum	58.000
Count	112.000

Source: Author (2015)

The mean age of the respondents was 36.79 years. The standard deviation of 8.985 indicates that the age variable is spread out over a wider range of values from the mean. Kurtosis measures the degree of peakedness of a distribution. The negative value obtained of -0.507 indicates a relatively flat distribution of the age variable. Skewness measures the degree of asymmetry in a distribution. The positive value obtained of 0.796 indicates that the age distribution was asymmetric with a tail inclined more on the higher values.

#### 4.4.3 Marital Status

The results indicated that 43% of employees were single with or without dependants, 52% were married, 4% were separated while 1% was widowed.

**Table 4.5 Marital Status**

<b>Marital Status</b>	<b>Frequency</b>	<b>Percentage</b>
Single	48	43
Married	58	52
Separated	5	4
Widowed	1	1
<b>Total</b>	<b>112</b>	<b>100</b>

Source: Author (2015)

#### 4.4.4 Level of Education

From the results, majority (41%) of the respondents had Diploma level education, 24% had undergraduate degrees, 18% were certificate holders, and 7% had postgraduate degrees while 10% belonged to the category other. Those with



undergraduate and higher degrees were relatively more financially literate than those with certificate and diploma level.

**Table 4.6 Education of Respondents**

<b>Education</b>	<b>Frequency</b>	<b>Percentage</b>
Postgraduate	8	7
Undergraduate	27	24
Diploma	46	41
Certificate	20	18
Other	11	10
<b>Total</b>	<b>112</b>	<b>100</b>

Source: Author (2015)

#### **4.4.5 Current Earnings Level**

From the results, 58% of the respondents reported a monthly salary below Ksh. 50,000.00. 28% made an earning of between Ksh. 51,000.00 and 100,000.00. Ten percent of the respondents reported an earning of between Ksh. 101,000.00 and 150,000.00 while the remaining 4% of respondents reported that they earned a gross pay of above Ksh 150,000.00.

**Table 4.7 Respondents Earnings**

<b>Earnings</b>	<b>Frequency</b>	<b>Percentage</b>
Below 50,000	65	58
51000- 100000	31	28
101000-150000	11	10
Over 150000	5	4
<b>Total</b>	<b>112</b>	<b>100</b>

Source: Author (2015)

**Table 4.8 Descriptive statistics of Earnings**

Mean	55,857.14
Median	25,500.00
Standard Deviation	42,105.16
Kurtosis	0.98
Skewness	1.31
Minimum	25,500.00
Maximum	175,500.00
Count	112

Source: Author (2015)

The mean income was found to be Ksh. 25,500.00 with a huge standard deviation of 42,105.16 showing that there was a significant variation of income level of respondents from the mean. The positive kurtosis value of 0.98 indicates a relatively peaked distribution of the income variable. Skewness measures the degree of assymetry in a distribution. The positive skewness value of 1.31 indicates that the income distridution was assymmetric with a tail inclined more on the higher values.

#### **4.4.6 Employee Rank**

The findings showed that 57% of the employees were surbodimates, 27% were at supervisory level, 13% were in middle management while 3% were senior management employees.

**Table 4.9 Respondents Job Rank**

<b>Rank</b>	<b>Frequency</b>	<b>Percentage</b>
Senior Management	3	3
Middle Management	15	13
Supervisory	30	27
Junior employee	64	57
<b>Total</b>	<b>112</b>	<b>100</b>

Source: Author (2015)

#### **4.4.7 Department of Work**

From the findings, 35% of the employees were in food, catering and service, 21% were in finance and accounting, 13% were in sales and marketing, 11% in house

keeping and room service, 10% in front office and guest relations and 2% in the departments of engineering, human resource and information technology.

**Table 4.10 Respondents Job department**

	<b>Frequency</b>	<b>Percentage</b>
Engineering	2	2
Finance and Accounting	24	21
Food, Catering and Service	40	35
Front office and Guest relations	11	10
Housekeeping and Room service	12	11
Human Resource	2	2
Information and Technology	2	2
Other	5	4
Sales and Marketing	14	13
<b>Total</b>	<b>112</b>	<b>100</b>

Source: Author (2015)

#### **4.4.8 Dependants**

67% of the respondents reported that they had one or more dependants to support. Those without dependants were mostly aged 26-30 years and those above 51 years.

**Table 4.11 Respondents level of Dependants Support**

<b>Dependants</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	75	67
None	37	33
<b>Total</b>	<b>112</b>	<b>100</b>

Source: Author (2015)

<b>No of Dependants</b>	<b>Frequency</b>	<b>Percentage</b>
1	11	10
2	24	21
3	26	23
4	12	11
Above 5	2	2
None	37	33
<b>Total</b>	<b>112</b>	<b>100</b>

Source: Author (2015)

#### **4.4.9 Nature of Job**

76% of the respondents were permanent employees while 24% were contracted. Contractees were less concerned about their financial literacy and therefore were not taking measures to improve their personal financial management such as investing, saving, taking insurance covers, planning for retirement and budgeting.

**Table 4.12 Employees nature of job**

<b>Nature of Job</b>	<b>Frequency</b>	<b>Percentage</b>
Permanent	85	76
Contract	27	24
<b>Total</b>	<b>112</b>	<b>100</b>

Source Author (2015)

#### **4.4.10 Ownership of Financial Products**

From the respondents sampled, 22% reported that they were members of a pension scheme, 4% had taken mortgages with financial institutions, 18% were currently servicing a bank loan, 27% had invested in the stock market, 2% had taken long-term bonds, while 26% had taken insurance policies. None of the respondents were members of mutual funds, had invested in treasury bills or taken options.

**Table 4.13 Ownership of financial products**

<b>Product</b>	<b>Frequency</b>	<b>Percentage</b>
Pension fund	85	22
Mutual funds	0	0
Mortgage	16	4
Bank loan	68	18
Shares and Stock	104	27
Treasury bills	0	0
Options	1	0
Bonds	6	2
Insurance	99	26
<b>Total</b>	<b>379</b>	<b>100</b>

Source: Author (2015)

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

The respondents were asked to indicate the extent of their knowledge on the following aspects of financial literacy; Responses were rated on a 5-point Likert scale. The range was 1-very strong extent to 5 not at all. The score of 1 was taken to represent a variable which had an impact to a very great extent while the score of 5 was taken to represent a variable which had no impact or a small impact.

**Table 4.14 Aspects of Financial Literacy**

<b>Aspect of Financial Literacy</b>	<b>N</b>	<b>M</b>	<b>S.D</b>
I understand how to minimize my tax liabilities.	112	2.16	0.59
I have determined how much income I can expect on retirement.	112	2.69	0.47
I know how to do my own interest calculations and compare with the bank rates.	112	2.71	1.42
I understand all the benefits available to me at Serena Hotels.	112	2.24	0.43

I understand that the higher the risk profile the greater the return is on an investment.	112	2.05	0.27
I understand inflation and how it may impact my future investment income.	112	2.80	1.33
My current investment portfolio design employs modern portfolio theory to diversify risks.	112	2.39	0.49
I understand that time value of money will cause the value of a shilling today to be different form a shilling tomorrow.	112	2.80	1.33
I have adequate knowledge to manage my personal finance.	112	2.48	0.60

Source: Author (2015)

**Key:**

**N**-Number of respondents **M**-Mean and **S.D**-Standard Deviation

Only 2% of the respondents had attended a course in finance other than the one offered by the employer. This shows that most of the respondents were solely dependent on the trainings offered by the employer for knowledge to be applied in their personal financial management.

From the analysis, it can be concluded that most of the respondents agreed to a great extent on the questions posed on the aspects of financial literacy.

**4.4.12 Aspects of Individual Financial Behaviour**

The respondents were asked to indicate the extent of their reactions on the following aspects of individual financial behaviour. Responses were rated on a 5-point Likert scale. The range was 1-not at all to 5-very great extent. The score of 1 was taken to represent a variable which had an impact to no extent while the score of 5 was taken to represent a variable which had an impact to a very great extent.

**Table 4.15 Aspects of Individual Financial Behaviour**

<b>Aspects of Individual Financial Behaviour</b>	<b>N</b>	<b>M</b>	<b>S.D</b>
I purchase only what I need.	112	2.500	1.945
I do purchase on impulse.	112	2.625	0.486
I purchase a financial product after gathering information about it.	112	3.589	0.578
I pay my bills on time.	112	3.545	0.842
I keep a close watch on my financial affairs.	112	3.518	0.859
I set long term financial goals and set to achieve them.	112	3.375	0.881
I have a budget that I stick to.	112	3.518	0.859
I save a portion of my income regularly.	112	2.482	1.450
I am satisfied with my present rate of savings and investment accumulation.	112	3.589	0.812
I have an insurance cover.	112	3.589	0.812
I monitor changes in the various insurance policies offered in the market by different providers.	112	2.607	0.924
I borrow to make ends meet.	112	1.938	1.397
I am planning for retirement.	112	3.268	0.859
I manage my own taxes.	112	2.696	0.957
I spend more in a month than I earn.	112	3.170	0.826
I balance my credit/debit account each month.	112	3.170	0.826
I compare loans from different financial institutions before making a decision.	112	3.125	0.950
I check for the terms and conditions of any loan I take and ensure I understand the consequences of default.	112	3.250	0.875
I have invested in shares.	112	3.053	0.919

I have invested in real assets.	112	3.054	0.919
I borrow money to invest.	112	3.214	0.981
I borrow to spend.	112	2.607	0.924

Source: Author (2015)

**Key:**

N-Number of respondents M-Mean and S.D-Standard Deviation

85% of the respondents were responsible for the management of their own personal finances in their households. From the results it can be concluded that most of the responses were in the range of 3-4 indicating that the respondents' behaviour was to a moderate extent.

**4.5 Correlation Analysis**

To establish the relationship between the independent variables and the dependent variable, correlation analysis was used. Financial literacy has a correlation coefficient of 0.85 which shows a strong positive relationship between financial literacy and individual financial behaviour. The age variable has a correlation coefficient of 0.02 which shows a weak but positive relationship between age and individual financial behaviour. The correlation coefficient of 0.03 between level of education and individual financial behaviour shows a weak positive relationship between the two variables. Gender and financial behaviour have an inverse relationship shown by the negative correlation coefficient of -0.4. Income and financial behaviour also have a weak positive relationship.



**Table 4.16 Correlation among Variables**

	<b>Individual Financial Behaviour</b>	<b>Financial Literacy</b>	<b>Age</b>	<b>Education</b>	<b>Gender</b>	<b>Income</b>
<b>Individual Financial Behaviour</b>	1.00					
<b>Financial Literacy</b>	0.85	1.00				
<b>Age</b>	0.02	0.00	1.00			
<b>Education</b>	0.03	0.01	0.04	1.00		
<b>Gender</b>	(0.40)	0.38	0.09	0.06	1.00	
<b>Income</b>	0.09	0.11	0.26	0.45	0.18	1.00

Source: Author (2015)

#### **4.6 Regression Analysis**

From Table 4.17 below, the regression equation is:

$$Y = 0.337 + 1.1377X_1 + 0.0089X_2 + 0.0246X_3 - 0.1365X_4 + 0.0063X_5 + \varepsilon$$

According to the equation, taking into account all the variables of financial literacy, age, level of education, gender and level of income, individual financial behaviour will be 0.337. The data findings analysis also shows that, a unit increase in financial literacy will lead to a 1.1377 increase in individual financial behaviour of employees of Serena Hotels; a unit increase in age will lead to a 0.0089 increase in individual financial behaviour; a unit increase in level of education will lead to a 0.0246 increase in individual financial behaviour; a unit increase in gender will lead to a 0.1365 decrease in individual financial behaviour while a unit increase in level of income will lead to an increase in individual financial behaviour of by 0.0063.

From the regression equation; gender had a negative influence on individual financial behaviour. Financial literacy, age, level of education and level of income all had a positive impact on individual financial behaviour of employees of Serena Hotels.

**Table 4.17 Financial Literacy and Individual Financial Behaviour**

	<b>Coefficients</b>	<b>Standard Error</b>	<b>t Stat</b>	<b>P-value</b>	<b>Lower 95%</b>	<b>Upper 95%</b>	<b>Lower 95.0%</b>	<b>Upper 95.0%</b>
Intercept	0.3374	0.3322	1.0156	0.3121	-0.3212	0.9959	-0.3212	0.9959
Financial Literacy	1.1377	0.0753	15.1056	0.0000	0.9884	1.2870	0.9884	1.2870
Age	0.0088	0.0231	0.3786	0.7057	-0.0371	0.0546	-0.0371	0.0546
Education	0.0246	0.0356	0.6907	0.4913	-0.0460	0.0953	-0.0460	0.0953
Gender	-0.1365	0.0926	-1.4733	0.1436	-0.3201	0.0472	-0.3201	0.0472
Income	0.0063	0.0580	0.1084	0.9139	-0.1086	0.1212	-0.1086	0.1212

Source: Author (2015)

#### 4.6.1 Regression Model Summary

Multiple R is the correlation coefficient showing the relationship among the study variables. The value obtained of 0.86 indicates that there is a strong positive relationship among the variables. R-square, the coefficient of determination indicates that 73% of individual financial behaviour can be explained by financial literacy, age, level of education, gender and level of income.

**Table 4.18 Regression Summary**

<b>Regression Statistics</b>	
Multiple R	0.856645794
R Square	0.733842016
Adjusted R Square	0.721287394
Standard Error	0.428337144
Observations	112

Source: Author (2015)

#### 4.6.2 Analysis of Variance

The model significance was tested using ANOVA. The test was conducted at 95% confidence level ( $\alpha \leq 0.05$ ). ANOVA determines whether there are significant differences between two samples at the significance level to yield the F-statistic. Analysis of variance (ANOVA) is a hypothesis testing technique used to test the equality of two or more population by examining the variance of samples

that are taken. From the table, the data has a significance level of 0.006503 which shows that the model is statistically significant; the value being less than 5%. This means that the independent variables of financial literacy, age, level of education, gender and level of income significantly explain the extent of individual financial behaviour of the respondents. Therefore the data is ideal for drawing conclusions on the population.

**Table 4.19 ANOVA**

	df	SS	MS	F	Significance F
Regression	5	53.62168	10.72434	58.45194	0.006503
Residual	106	19.44811	0.183473		
Total	111	73.06979			

Source: Author (2015)

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

The demographic findings revealed that they were more male employees than female employees in Serena Hotels. This was attributed to the nature of the industry and working conditions. Males were generally more financially literate than their female counterparts. This resulted in them undertaking positive financial behaviours such as savings, budgeting and planning for retirement.

It was further observed that most employees were in the age bracket of 26-30 years. Few employees were above 51 years of age as most of them opted for early retirement. Majority of the respondents aged 26-30 years were single persons recently graduated from college or university. The highest level of education for most of the employees was diploma level, followed closely by undergraduate degree. Those employees with finance background were more knowledgeable on financial management compared to employees who had taken non-finance courses. More than 50% of the employees earned less than KSh. 50,000.00. This is in line with Ondieki and Kung'u (2013) findings that employees in the hotel industry received relatively low pay compared to those in other sectors. A good percentage of the employees were responsible for financial decisions in their household.

The study established that majority of the employees of Serena Hotels understood basic financial literacy concepts which impacted positively on their individual financial behaviour. Most respondents agreed to a great extent on concepts such as

understanding how to minimize tax liabilities, having determined how much income to expect on retirement, being knowledgeable on interest calculations, having understanding on risk and return, inflation, modern portfolio theory and time value of money. Further 55% of the respondents stated that they had adequate knowledge to manage their personal finances.

On the nature of work, most respondents were permanent employees. The study revealed that these employees were members of the employer pension scheme and were already planning for retirement. Contractees seemed less concerned about savings and planning for retirement. 35% of the respondents were in Food, catering and service departments. Majority of these employees had moderate extent of knowledge on financial literacy concepts. Employees in the departments of finance and accounting, human resource, sales and marketing, and information technology responded to a great extent on the aspects of financial literacy indicating that they were more knowledgeable than those in food, catering, service and other departments.

## **CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS**

### **5.1 Introduction**

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

### **5.2 Summary of Findings**

The objective of the study was to examine the relationship between financial literacy and individual financial behaviour of employees of Serena Hotels. Descriptive survey design was adopted for the study. Data collection was done using semi-structured questionnaires. The population of the study was 1327 employees of Serena Hotels in Kenya. A sample of 140 respondents was drawn using stratified random sampling technique with an 80% response rate.

Demographic trends showed that males were more than females with most of the respondents aged 26-30 years. The youth were less financially literate. They were not actively involved in the lookout for their financial well-being by undertaking savings and investments, budgeting and most of them had not started to plan for retirement. The study also revealed that males were generally more financially literate than their female counterparts. A number of female employees stated that they do not participate in the financial decisions of their household and have left that role to their partners.

The findings further revealed that as the level of income rises, individuals are seen to improve their financial behaviours through measures such as budgeting, saving, product information gathering, taking insurance; suggesting that there is a direct relationship between income and individual financial behaviour.

### **5.3 Conclusion**

In examining the relationship between financial literacy and individual financial behaviour of employees of Serena Hotels, the findings revealed that individual financial behaviour of employees of Serena Hotels depends on financial literacy, age, education, gender and income of individuals. The young, males and those with a college education were more financially literate. This is seen in chapter four of the research study. The findings also show that there is a statistically positive relationship between financial literacy and individual financial behaviour.

From the results, individuals need to take positive steps in actively managing their own finances. This will enable them avoid work related stresses that may result due to over-indebtedness. The youth are encouraged to start planning early for retirement and not wait until old age. By being financially knowledgeable, exploitation by financial institutions will be reduced. Financially literate individuals understand the products offered in the financial markets and will not hesitate to raise questions on ambiguous clauses accompanying the terms and conditions. All in all possession of financial knowledge is instrumental in ensuring a financially healthy society.

#### **5.4 Recommendations**

The study recommends that the financial literacy training of employees in the hotel industry be enhanced at their employment places. From the findings even employees who had attended financial training courses did not adopt positive individual financial behaviour. This raises concern as to the quality of training given to these employees. Enhancing the training will improve savings and investment, budgeting, retirement planning. In so doing this will possibly eliminate differences in financial literacy resulting from gender, age, marital status and income level differences.

The study recommends that financial institutions encourage their clients to read and understand the terms and conditions relating to the products they have to offer before making any long term commitments. It was found out that most of the respondents did not check for the terms accompanying the loans before making applications. Loanees are also encouraged to go through these terms to avoid any misunderstanding that may result in future when it comes to repayment.

The study recommends that employees in the hotel industry be on the lookout for their own financial welfare by attending financial literacy courses to improve their knowledge on personal financial management. On the other hand employers also need to support their employees by meeting the costs of attending financial literacy trainings for those employees who may not be in a position to cater for such costs.

The study recommends that employers in the hotel industry review their employees pay to be in tandem with other sectors of the economy. From the findings majority of the employees earned a basic pay of less than KShs 50,000.00 independent of their

age, gender, academic or professional qualifications. Most of the respondents cited their inability to save and plan for retirement due to the low pay they received and financial obligations at hand. By so doing employees will be able to save and invest the resources left after incurring basic expenditure. They will also be able to sponsor themselves for financial training.

### **5.5 Limitations of the Study**

The researcher was faced by a number of challenges. Some of the data on the questionnaire was of a confidential nature; most respondents were unwilling to provide the details about themselves as they considered it an invasion of their privacy. As a result some questionnaires were returned incomplete while others were not returned at all. The researcher had to spend time to convince the respondents that the data so collected was strictly for academic purposes and assured them that the response will be treated in confidence. The incomplete questionnaires were insufficient for analysis.

The researcher was limited by cost constraint. The data collection exercise involved massive printing of the questionnaires, travel in order to reach those respondents who did not have access to email, then doing follow ups through phone calls which burdened the researcher financially. In some instances the researcher had to reprint more questionnaire copies and send to those respondents who had spoiled the initial copy by responding inappropriately.

The study focused on Serena Hotels. The target population may not be representative enough of all the employees in the hotel industry in Kenya. It will therefore be appropriate that the findings be used for comparative purposes only and not for generalization of the entire hotel industry in Kenya.

The researcher did not have control over the data collected. Some respondents gave conflicting responses. For instance some stated that they were single and went ahead to say that they were responsible jointly with their partners in the financial decisions of their household. This rendered the data unreliable and therefore the researcher rejected such questionnaires for analysis.

## **5.6 Suggestions for Further Research**

It is recommended that similar studies be done on financial literacy and individual financial behaviour of employees in the hotel industry over a period of time. This will enable one to observe any changes in financial literacy levels and individual financial behaviour over time, and see what other factors influence individual financial behaviour other than age, gender, education and level of income.

The findings from this study cast some doubt on the ability of higher education courses to impact positive financial behaviour for certain individuals. In spite of certain individuals having undertaken higher degrees, they still portrayed some poor aspects of individual financial behaviour in managing their personal finances. The study therefore suggests that a similar research be carried out on those who offer financial education to establish whether there is any relationship between financial literacy and individual financial behaviour of this group who are the source of financial knowledge.

It is recommended that a study be done on financial literacy and behaviour of employees of tour operator firms who are also in the hospitality industry and interact closely with those in the hotel industry. This will help to find out whether there are any relationships or differences among these employees, owing to the fact that both are not in a finance related setting and deal with clients from multi-cultural dimensions.



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## **APPENDICES**

### **Appendix I: Letter of Transmittal**

Jacinta Odek,

Email: odekjacinta@gmail.com,

P.O BOX 100415-10101,

Nairobi.

Dear Sir/Madam,

#### **RE: REQUEST FOR PARTICIPATION IN THIS RESEARCH STUDY**

I am a student undertaking a research on the relationship between financial literacy and individual financial behaviour of employees of Serena Hotels. This is in partial fulfilment of the requirements for the award of the degree of Master of Business Administration at the University of Nairobi.

Data obtained is purely for academic purpose and your responses will be treated in the strictest confidence. Please spare a moment of your time to participate in this study.

Your positive response will be highly appreciated.

Thank you for your co-operation.

Yours Faithfully,

Jacinta Odek.

## Appendix II: Questionnaire

Please answer all questions appropriately by putting a tick [] in the provided box or by writing in the space given.

### SECTION A: DEMOGRAPHIC INFORMATION

1. What is your gender? Male [] Female [
2. What is your age in years? 26-30 [] 31-35 [  
36-40 [] 41-45 [  
46-50 [] 51-55 [  
Over 56 [
3. What is your marital Status? Single [] Married [  
Divorced [] Separated [  
Widowed [
4. What is your highest level of education? Post graduate [  
Undergraduate [  
Diploma [  
Certificate [  
O-Level [  
Other \_\_\_\_\_
5. Please indicate your current level of earnings in Ksh  
Below 50,000 [  
51000- 100000 [  
101000-150000 [  
Over 150000 [
6. Which department do you work in? Finance and Audit [  
Human Resource [  
Sales and Marketing [  
Engineering [

- Front office and Guest Relations
- Food, Catering and Service
- Information and Technology
- House Keeping and Room Service
- Other \_\_\_\_\_

5. What level is your role rank in your organization?

Senior Management  Middle Management  Supervisory  Junior employee

a) What is the nature of your job?

Permanent  Contract

6. Do you support any dependants? Yes  No

a) If yes, how many \_\_\_\_\_

**SECTION B: FINANCIAL LITERACY**

7. Have you attended any finance course other than the one offered by your employer?

Yes  No

a). If Yes state the nature of the training \_\_\_\_\_

8. Please indicate your understanding of the following financial products

Where 1=excellent, 2=good, 3=average, 4=poor, 5=very poor

	1	2	3	4	5
Pension fund					
Mutual funds					
Mortgage					
Bank loan					
Shares and Stock					
Treasury bills					
Options					
Bonds					
Insurance					

Which one (s) do you hold currently? \_\_\_\_\_

9. Please select the most appropriate answer to each of the questions. Using a scale of 1 to 5 where: 1 = very great extent; 2 = great extent; 3=moderate extent; 4=less extent; 5 = not applicable

<b>Aspects of Financial Literacy</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
I understand how to minimize my tax liabilities.					
I have determined how much income I can expect on retirement.					
I know how to do my own interest calculations and compare with the bank rates.					
I understand all the benefits available to me at Serena Hotels.					
I understand that the higher the risk profile the greater the return is on an investment.					
I understand inflation and how it may impact my future investment income.					
My current investment portfolio design employs modern portfolio theory to diversify risks.					
I understand that time value of money will cause the value of a shilling today to be different form a shilling tomorrow.					
I have adequate knowledge to manage my personal finance.					

### **SECTION C: INDIVIDUAL FINANCIAL BEHAVIOUR**

10. Who is responsible for most of the financial decisions in your house hold?

I  My partner  Both of us

Other, explain \_\_\_\_\_

11. The following are statements regarding an individual financial behaviour. Please select the most appropriate answer to each of the questions. Use a scale of 1 to 5 where: 1 = not applicable; 2 = less extent; 3=moderate extent; 4=great extent; 5 = very great extent

<b>Aspects of Individual Financial Behaviour</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
I purchase only what I need.					
I do purchase on impulse.					
I purchase a financial product after gathering information about it.					
I pay my bills on time.					
I keep a close watch on my financial affairs.					
I set long term financial goals and set to achieve them.					
I have a budget that I stick to.					
I save a portion of my income regularly.					
I am satisfied with my present rate of savings and investment accumulation.					
I have an insurance cover.					
I monitor changes in the various insurance policies offered in the market by different providers.					
I borrow to make ends meet.					
I am planning for retirement.					
I manage my own taxes.					
I spend more in a month than I earn.					
I balance my credit/debit account each month.					
I compare loans from different financial institutions before making a decision.					
I check for the terms and conditions of any loan I take and ensure I understand the consequences of					

default.					
I have invested in shares.					
I have invested in real assets.					
I borrow money to invest.					
I borrow to spend.					

**THANK YOU FOR YOU TIME AND CO-OPERATION**



### Appendix III: Tabulation of Responses from the Respondents

Respondent	Age	Education	Gender	Income
1	7	4	2	4
2	7	2	2	4
3	7	1	2	4
4	7	5	2	4
5	7	2	2	3
6	7	1	2	3
7	7	2	1	3
8	7	4	2	4
9	6	3	1	4
10	6	6	1	4
11	6	3	1	4
12	6	3	2	4
13	6	3	2	4
14	5	3	1	4
15	5	3	1	4
16	4	4	1	2
17	4	3	2	2
18	4	3	2	4
19	2	1	1	1
20	3	4	1	4
21	1	3	2	3
22	1	3	2	3
23	1	3	2	3

24	2	3	2	4
25	7	4	2	4
26	6	3	2	4
27	7	2	2	4
28	7	2	2	3
29	4	4	1	2
30	4	3	2	4
31	5	3	1	4
32	1	1	2	3
33	3	4	1	4
34	7	3	2	3
35	7	4	2	4
36	4	3	2	2
37	4	3	2	2
38	2	3	2	4
39	7	4	2	4
40	5	3	1	4
41	5	3	1	4
42	7	2	1	3
43	6	3	1	4
44	7	2	1	3
45	6	6	1	4
46	6	6	1	4
47	7	6	2	4
48	7	2	1	3
49	7	2	1	3

50	7	2	1	3
51	4	4	1	2
52	3	4	1	4
53	2	1	1	1
54	4	3	2	4
55	6	3	2	4
56	6	3	2	4
57	6	3	1	4
58	6	3	2	4
59	6	3	2	4
60	7	2	1	3
61	6	3	1	4
62	7	2	1	3
63	6	6	1	4
64	6	3	2	4
65	7	2	1	3
66	6	6	1	4
67	6	3	2	4
68	2	3	2	4
69	2	1	1	4
70	5	3	1	4
71	5	3	1	4
72	4	4	1	2
73	7	2	1	3
74	7	2	1	3
75	6	6	1	4

76	6	3	2	4
77	3	4	1	4
78	7	2	1	3
79	4	4	1	2
80	4	3	2	2
81	5	3	1	4
82	2	3	2	4
83	6	3	2	4
84	7	2	1	3
85	6	6	1	4
86	6	3	2	4
87	7	2	1	3
88	2	1	1	1
89	3	4	1	4
90	2	3	2	4
91	5	3	1	4
92	5	3	1	4
93	7	2	1	3
94	4	3	2	2
95	4	4	1	2
96	5	3	1	4
97	5	3	1	4
98	2	1	1	1
99	3	4	1	4
100	6	6	1	4
101	7	2	1	3

102	6	6	1	4
103	7	2	1	3
104	6	6	1	4
105	3	4	1	4
106	7	2	1	3
107	3	4	1	4
108	7	2	1	3
109	7	2	1	3
110	7	2	1	3
111	7	2	1	3
112	7	2	1	3

**Key:**

**X2= Age represented by**

**1-** Over 56 years **2-**(46-50 years) **3-**(51-55 years) **4-** (41-45 years) **5-**(36-40 years) **6-** (31 – 35years) **7-** (26-30 years)

**X3= Education level represented by**

1-Postgraduate 2-Undergraduate 3-Diploma 4- Certificate 5- Other

**X4= Gender represented by**

1= Male 2=Female

**X5= Income levels represented by**

**1-**Over 150000 **2-**101000-150000 **3-** 51000-100000 **4-**Below 50,000

## Appendix IV: Target Population

<b>Serena Hotels Property</b>	<b>Number of Employees</b>
Amboseli Serena Safari Lodge	121
Kilaguni Serena Safari Lodge	82
Lake Elementeita Serena Camp	39
Mara Serena Safari Lodge	102
Nairobi Serena Hotel	425
Serena Beach Resort and Spa	245
Serena Mountain Lodge	61
Sweet Waters-tented Camp	111
TPS Head office	141
<b>Total</b>	<b>1327</b>

Source: Serena Hotels Employee Database (2015)

## Appendix V: Wage levels

Sector	2010	2011	2012	2013
Agriculture, forestry and fishing	331.30	330.40	337.70	346.70
Mining and quarrying	8.50	8.70	9.00	9.40
Manufacturing	261.70	270.20	271.00	280.30
Electricity, gas, steam and air conditioning supply	11.70	11.40	14.30	14.70
Water supply; sewerage, waste management and remediation activities	7.60	7.60	8.50	9.50
Construction	100.10	106.10	116.10	130.30
Wholesale and retail trade; repair of motor vehicles and motorcycle	181.50	190.40	198.00	212.40
Transportation and storage	70.70	72.90	75.20	76.40
Accommodation and food service activities	63.10	65.60	68.90	73.70
Information and communication	77.90	80.50	85.70	92.70
Financial and insurance activities	54.10	58.10	61.60	67.00
Real estate activities	3.50	3.60	3.70	3.80
Professional, scientific and technical activities	60.10	61.30	62.70	65.40
Administrative and support service activities	4.00	4.20	4.50	4.80
Public administration and defense; compulsory social Security	190.80	206.00	207.40	217.80
Education	356.00	370.00	384.80	400.80
Human health and social work activities	94.60	97.90	104.70	112.80
Arts, entertainment and recreation	6.00	6.10	6.40	6.70
Other service activities	27.00	27.30	28.20	29.80
Activities of households as employers; undifferentiated goods and services producing activities of households for own use	105.00	104.80	106.30	109.70
Activities of extraterritorial organizations and bodies	1.00	1.00	1.00	1.10
	<b>2,016.20</b>	<b>2,084.10</b>	<b>2,155.70</b>	<b>2,265.8</b>

Source: KNBS (2013)