

**THE EFFECT OF FINANCIAL LITERACY ON PERSONAL
INVESTMENT DECISIONS AMONGST EMPLOYEES OF SEVENTH
DAY ADVENTIST CHURCH IN KENYA**

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DECLARATION

This research project is my original work and has not been presented for a degree in any other university.

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DEDICATION

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LIST OF ABBREVIATIONS

ECD	East Central Africa Division
SDA	Seventh Day Adventist
OECD	Organisation for Economic Cooperation and Development
IQ	Intelligent Quotient
US HRS	United States Health and Retirement Study
NCEE	National Council on Economic Education
SPSS	Statistical Package for Social Sciences
NSSF	National Social Security Fund

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ABSTRACT

The study assessed the effect of financial literacy on personal investment decisions amongst church employees of SDA church in Kenya. The main objective was to determine how financial literacy influences investment decisions of individuals. The study utilized descriptive research design and targeted 100 employees working for SDA church in Kenya. A self-administered questionnaire was given to the respondents to answer multiple choice questions and Likert scale questions. The first part covered demographic variables and part two covered financial literacy factors. The last part covered investment decision making on a five Likert-scale. The data collected was analysed using SPSS programme and presented on tables, figures and percentages. The study found that a high percentage of staff considers financial concepts such as returns, investment risks, holding periods, trends in interest rates among others in making investment decisions. The results further indicated financial literacy has a strong positive relationship with investment decision making. The researcher thus recommends information to be availed through educational sessions so as to equip individuals with requisite skills essential for effective financial decision making.

CHAPTER ONE

1.1 Background of the Study

Financial literacy helps individuals to improve their level of understanding of financial matters which enables them to process financial information and make in-formed decisions about one's finances. Financial literacy has a direct relationship to the well being of individuals. Earlier research poists that those with low levels of financial literacy face problems with issues relating to personal finance such as savings, borrowings, invest-ments and retirement planning . Over the recent years, financial landscape has changed considerably becoming complex with the introduction of many new financial products (Puneet, 2014)

It is difficult for a common man to understand the risk associated with various financial products. So as to understand risk and return associated with these products, a certain level of financial literacy is required. People who a financially literate can make effective use of these financial products and services by evaluating associated risks and returns and finally choosing those products which are suitable to them. Thus persons who are financially literate can make effective use of financial products and services and will not get cheated by sales people selling financial products unsuitable to them. Literacy in money matters aids in improving the quality of financial services and contribute to economic growth and development of a country. Through this paper an attempt has been made to know whether financial literacy affects the awareness and investment preferences of salaried individuals towards various financial products available in the market (Puneet, 2014)

Sound financial planning and financial advice is necessary to achieve retirement income adequacy. The fact that many baby boomers will live well into their eighties requires a planned investment strategy to provide retirement income for that length of time (Mastin, 1998). Social security alone is inadequate to serve as a lifetime income for retirees, and social security payments represents on average only 22 percent of a couple's income. The pay-as-you-go pension plan and the ability of the economy to support old-age benefits with resources produced by a proportionately smaller number of current workers has been challenged as the rate of retirement increased during the past decades (Frostin,1999).

1.1.1 Financial Literacy

Worthington (2005) defines financial literacy as the capability of exercising right judgement when making decisions relating to financial matters. Financially literate persons have the ability to make informed decisions relating to their pensions. This is because their confidence is developed out of the financial skills gained (Agnew et al., 2007).

OECD has defined financial literacy as the combination of consumers and investors understanding of financial products and concepts and their ability and confidence to appreciate financial risks and opportunities, to make informed choices, to know where to go for help and to take other effective actions so as to improve one's financial wellbeing.

Without adequate financial knowledge, individuals are at a greater risk of incurring too much debt and accumulating too little or no savings at all. Since wrong financial decisions have longlasting consequences, financial literacy should be attained at early stages of life, if possible before an individual draws his first paycheck. In addition, a good foundation on reading as well as writing and numerical skills lays the building blocks upon which financial literacy is based. This is only just the beginning. As one progresses to adulthood, major distinct occasions come up like securing a job, purchasing or building a home, starting a savings plan in which the financial choices made can be the difference between a life of worry and a life of comfort. Fortunately, such occasions are also opportunities for improving financial astuteness. Financial literacy as an essential should be a lifelong pursuit, and one that it is never too late to enter into (Alexander, 2011).

Both borrowing and saving have large potential upsides. Debt allows us to invest in education or finance the acquisition of new assets like a home. Savings allows us to maintain in retirement the standard of living we enjoyed while working. However, when we make a financial decision we also expose ourselves to a degree of risk. Financial literacy is about possessing the knowledge and tools to manage these risks, and ensure that the financial choices we make are in our best interests in both the short and long term (Alexander, 2011).

Nye et al, (2013) defines financial literacy as a measure of the extend to which a person understands basic financial concepts and possessing the ability to manage ones finances confidently by making sound and appropriate short term financial decisions, in a long-range

perspective of financial planning, taking care of different economic situations and life events. Majority of researchers have utilised objective knowledge to measure financial literacy despite financial literacy being understood to refer to skills. Financial literacy is measured by percent correct on knowledge tests where each question has a right answer (Al-Tamimi and Kalli, 2009).

1.1.2 Personal Investment Decision

The risk attitude between individuals varies from one person to another and it's possible to attach different probabilities to various risk appetites. Due to these absorbable probabilities, individuals will have different quantities of savings influenced by their risk uptake. Various factors will play a great role in defining the difference between actual and adequate levels of saving. One's financial capability, health, preferences or even individual perceptions, public policies that have been put in place, and labour market opportunities available. As we consider what's adequate, these influences have to be taken into consideration. (Gscobie et al, 2004)

According to Venti and Wise (2000) at all stages of life savings there is a noticeable dispersion of wealth accumulation for households nearing retirement. The researchers find that individual circumstances combined with chance differences play a very little role in explaining such dispersions. The researchers then conclude that, the differences in what individuals opt to save in life can be used to explain such wealth dispersions. Such differences in the saving choices amongst individuals with similar or related earnings lead to vastly different levels of asset accumulation by the time retirement age approaches.

Households with low financial literacy borrow more (Agarwal et al. 2009, Lusardi and Tufano 2009), save less (Lusardi & Mitchell, 2007), and the probability of them not planning for retirement is high. (Lusardi and Mitchell 2007, Almenberg and Säve-Söderbergh 2011). Van Rooij, Lusardi, and Alessie (2011a) state that stock market participants typically have a higher level of financial literacy compared to the average population. Grinblatt, Keloharju, and Linnainmaa (2011, 2012) find evidence that, on average, investors with a higher IQ are more likely to invest and succeed in the stock market. In previous studies intelligence combined with financial literacy has been found not to necessarily prevent investors from making common investment mistakes. There is evidence that even investors with presumably high financial literacy do not make use of their knowledge when building their own portfolio and that they are

driven by behavioral factors comparable to lay investors (Doran et al 2010; Müller and Weber 2010). Besides that, there are several studies in which financial literacy has weak influence or does not show any impact on the quality of investment decisions (for example Gathergood 2012; Bodnaruk and Simonov 2012)

Stock market participation as way of investment is very important in any economy. Individuals can suffer serious welfare loss if they don't participate in stock market. This is because as people are exposed to equities and the premiums attached to them, they could realise a good return of their individual savings in the long run (Cocco et al. 2005).

A number of factors have been proposed for the substantial non-participation even among households that can afford savings for the future, such being cognitive ability (Benjamin et al. 2006), high participation costs (Haliassos and Bertaut 1995), lack of financial markets knowledge or social connections (van Rooij et al. 2011), lack of confidence (Guiso et al. 2008), and risk aversion (e.g. Halko et al.)

1.1.3 The effect of Financial Literacy on Personal Investment Decisions

Financial decisions often seem more complex than what they are. Financial language is unique; but, the moment its meaning is grasped, making financial decisions will not be difficult. For instance gaining the necessary financial knowledge may be as easy as asking for it. There are many people at financial institutions and charitable groups that are available to help probably at no or minimal cost. Financial literacy should be pursued throughout life and it must start early and continue to be upgraded progressively in order to pay dividends at a comfortable retirement. (C Alexander 2011)

Lack of information and financial illiteracy provide fertile a base for mistakes in financial decision making. Low financial literacy combined with lack or limited information affects one's ability to maintain savings as a way of securing comfortable retirement life. Financial literacy will boost the ability to handle day to day financial problem and will reduce the negative consequences of poor financial decisions that otherwise might take years to overcome (Delafrooz & Laily, 2011). A number of individuals depend on assistance from financial counselors and previous research indicated that many households are not preparing adequately for retirement and will have to cut back spending when they stop working. This situation is

troublesome because, individuals are expected to be in control of their finances as a process of preparing for a secure retirement.

Financial illiteracy has implications for most households behaviour. Bernheim (1995, 1998) first pointed out not only that most households cannot perform very simple calculations and lack basic knowledge in finance, but rather that most households saving practices are based on try and error methods. In their recent works, Bernheim et al (2001) and Bernheim and Garrett (2003) show that people who had early exposure in monetary studies in their high school or tertiary college or in the workplace save more. Similarly, Lusardi and Mitchell (2006, 2007a) argue that those possessing low financial literacy are likely not to plan for retirement thus end up accumulating much less wealth in their prime years.

Financial literacy in the form of knowledge about the stock market has also been related to stock market participation. In a study of a representative sample of the Dutch population, van Rooij et al. (2011) find that many families shy away from the stock market because they have little knowledge of stocks and the stock market. It has also been shown that more basic measures of financial literacy, essentially measures of numeracy, can predict stock market participation. Christelis et al. (2010) find that this is the case when exploring numeracy and recall skills among a sample of individuals above the age of 50 in 11 European countries, with complete data on how people derive their portfolios.

1.1.4 The Employees of SDA Church in Kenya

The seventh day Adventist church is one of the mainstream churches in Kenya with approximately 800 staff serving in various categories of Teaching, medical and preaching ministry (Adventistdirectory.org). The greatest percentage of this staff are the clergy. The church is organized into two unions in Kenya with their headquarters in Nairobi and Kisumu. The two unions both have 9 conferences charged with church administration in various geographical bases. The staff working with the church are entitled to a non contributory pension scheme along with several important supplementary retirement benefits. The plan provides one with a portion of retirement income through guaranteed monthly payments starting from retirement. Each staff is in charge of making his or her own investment decisions. (ECD working policy, 2014)

The church as a corporate entity is allowed to commit some of its funds to investment through the guidance of the governing executive committee. In achieving this objective the treasurer of every conference will ensure his entity commits funds for investment subject to these guidelines ; 50% of working capital in hand and 75% of any excess authorized working capital as calculated from the most recent financial statements, 90% of the total of all current trust funds, 25% of the total of all reserve funds (ECD policy, 2014). With over 80% of the employees being theologians, financial literacy is worth studying because it is the same theologians who will be in top leadership of the various institutions and will be expected to guide the same organisations in making wise investment decisions.

1.2 Research Problem

Financially educated investors help financial markets to operate efficiently, as they take better trading decisions based on fundamental and or technical analysis instead of acting irrationally. In addition, those people are in better position to protect themselves from financial frauds (Volpe et al., 2002; OECD 2005). Furthermore, financially educated customers demand more customized products, which increases competition between businesses, encourages innovation and improves products quality.

Increasingly, staff at the SDA Church East Africa Union are in charge of securing their own financial well-being after retirement. With the shift from defined benefit to defined contribution pensions, the staff must decide both how much to save and how to allocate their retirement wealth. Financial markets have become more complex and the staff are faced with a proliferation of new investment products. Investment opportunities have expanded beyond national borders, permitting individuals to invest in a broad range of assets and currencies (ECD working policy, 2014). However, it is very hard to navigate this new financial system, and the consequences of mistakes can be devastating. It is therefore vital for the staff to be well equipped to make investment decisions. Every SDA institution in Kenya through the governing boards is allowed to commit some funds to both short and long term investment vehicles (ECD working policy, 2014). Despite this provision most institutions have not explored the returns associated with trading on the financial markets.

Most investors view themselves as rational and logical, but when they make investment decisions, emotions and thought patterns, financial literacy and cognitive biases color their perceptions to the world and their decision making process.(Iyer& Bhaskar,2002). Individuals are actively involved in financial markets and market participation is characterized by advent of new financial products and services. For the financially illiterate investors, some of these new products are complex and even more advance to grasp. As markets become liberalized and governments initiate structural reforms on social securirty and pensions, decision power tends to move from government and employers towards private individual. Thus,the financial well-being of individuals becomes one's sole responsibility (Van Rooji, 2007).

Numbers of studies have linked between financial literacy and the quality of investment decisions. Beal and Delpachitra (2003) argued that having financial literacy skills enable individuals to make informed decisions about their money and minimizes the chances of being misled on financial matters. Rooij et al. (2007) found that financial literacy affects financial decision-making because individuals with low literacy are more likely to rely on family and friends as their main source of financial advice and are less likely to invest in stocks. Improving financial literacy contributes positively to the financial markets and the economy.

Study done by Njuguna (2010) show that there has been an increase in the types of instruments available for investment and some relaxation of the regulatory investments guidelines with more of a focus on scheme based investment strategies. Consequently financial troubles of a significant number of pension schemes have triggered an urgent need for formulation and implementation of solutions to the problem. Therefore the need of having the right investment decisions in place is important. While Mugweru, (2001) in his study on National Social Security Fund (NSSF) recommended that Investment department at NSSF should consist of professionals who adhere to proper investment policies and procedures. Kibuthu (2005) found that there is a wide gap of informational endowment in developing and developed nations. Investors in developing nations were found to have very little information to enable them make decisions on investment. Odundo(2004) while studying on investment evolution established that the need to invest and financial constraints influenced evolution of investment. Many households are misinformed even about basic economic concepts vital for making saving and investment decisions (Lusardi & Mitchel,2007). Therefore they is no consensus on the impact of financial

literacy on investment decision making hence they exists a gap. The study sought to establish the impact of financial literacy on investment decision making. Its for this purpose,that the study aimed to answer the question; what is the effect of financial literacy on personal investment decisions amongst employees of seventh day Adventist church in kenya?

1.3 Research Objective

The objective of this study was to determine the effect of financial literacy on personal investment decisions of staff of SDA church in kenya.

1.4 Value of the Study

The findings of this study are of great importance to investors and will enhance their knowledge about the factors influencing their investment decisions. It makes it easier to relate such influences to all investment decisions made and help learn how their investment behavior deviates from the planned investment strategy.

The church as an employer can be helped to know the level of financial literacy amongst its staff and help in planning and initiating financial education programs to improve literacy level which will indirectly afford good investments through making of wise investment decisions. As the church enlightens its staff on financial matters great changes will be realised leading to higher portfolio returns not only for individuals but also for the entire organization. This is because an organizational strategy can only be delivered by shrewd and well informed managers. The managers or trustees are involved in making investment decisions on behalf of the organization and will find the results of this study more enriching in discharging their responsibilities efficiently. Data collected provides clear warnings on the deficient financial knowledge and how individuals are vulnerable due to lack of firm grasp of basic literacy skills in finance.

Academicians in finance can find the study enriching to the existing body of knowledge and be able to identify research gaps for further study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter discusses theories relevant to the study. Literature related to the study is also reviewed with the aim of identifying literature gaps. The literature also guides the relevance of the study findings.

2.2 Theoretical Review

This are theories used to illustrate Financial and personal investment decisions. Some of these are life cycle theory, disposition Effect theory and Dual process theory.

2.2.1 Life-Cycle Theory

Franco Modigliani and Richard Brumberg developed this theory in the early 1950s. They worked out a theory stating out that people make intelligent choices relating to how much they wish to spend at every stage of life with the available resources being a limiting factor. As individuals acquire and dispose their assets they are capable of providing for their retirement and consequently tailor make consumption patterns as per their needs at every age, independently of what they earn at each age. With this theory an important and non obvious prediction relating to the economy can be made, that national saving is directly proportional to national income and not necessary its level, and that the retirement span length has a simple relation to the level of wealth in the economy. Later works by Modigliani and other researchers have supported these predictions, despite being untestable in the early years. Despite the theory of consumption being challenged, life-cycle hypothesis has turned to be central part of psychologists and economists thinking. Without it, people would have little or non to say in regard to serious economic issues, such as social security provisions, the impact of stock market on a country's economy, the effects of changes in demographics on national saving, the role played by savings in economic growth, and what determines national wealth.

From a microeconomic perspective, economists argue that a rational individual will consume less in times of high income hence saving to consume in times of reduced income. (after retirement). Starting with Modigliani & Brumberg (1954), Friedman (1957), a consumer is believed to smooth his/her marginal utility in his lifetime by optimally arranging his savings and creating decumulation patterns. studies in the past have tried to show such optimization process in life cycle theory shapes consumer preferences. (for example,discount rates and risk aversion), economic environment (for example,liquidity constraints and returns volatility on investments), and social security benefits (welfare schemes offering generous).

Young people have a preferred consumption and incases where income is low the difference will be made up through borrowing. For instance, this will allow ; a student use a loan to financé his college studies and those joining labour force to invest in housing project through mortgage. At a certain point in future life, middle age income surpasses consumption and the model poists that individuals will limit their current consumption so to defray education loans and mortgage loans among other debts and save for afterwork life; this can be defined as saving phase. This savings will be spend at retirement because at that time income falls and people tend to dissave. Thus, consumption is smoothened over time through borrowing and saving.

The major assumption of life cycle model is that the preference of people is to smoothen consumption over time,income can reasonably be estimated,and can organize their investment and expenditure patterns to arrive at a smoothened consumption pattern over the horizon. However, research suggests that during years of highest income people tend to save little. evidence suggests that people do not save enough during peak earning years. Generation X carries huge amounts of debt compared to other cohorts at a time when they should be repaying their debts and investing for retirement.

2.2.2 Dual Process Theory

The dual process theory is a cognitive psychology theory that explains the different levels of information processing in individuals. It is used in many different psychological fields including social, cognitive, and clinical psychology. Early dual process theories were proposed by the philosopher and psychologist William James in 1890 and has been developed and elaborated

over time with the current view of this theory being formalized in the 1990s. Dual process theory divides the processing of information into two pathways. Dual-process theories (Evans 2008) posit the idea that intuitive and cognitive processes do drive investment decisions.. Although these theories come in many various forms, they all arrive at differentiating two main processing mechanisms. The first process is characterized as fast, non-conscious, and tied to intuition (System 1), the other is described as slow but controlled, and conscious (System 2) (Stanovich and West 2000). System 2 is used for analytical and rational thinking (Stanovich and West 2000) which is indeed useful for consistent implementation of financially literate and clear investment strategy. Goel and Dolan (2003) and Sanfey et al. (2006) provide neuropsychological evidence on dual processes operations.

Dual-process theory has been studied and applied in many different areas, for example like reasoning and social cognition (Evans 2008). Dual process theory when linked to decision making has shown that biases and heuristics like framing (Tversky and Kahneman 1981), representativeness (De Bondt and Thaler 1985; Kahneman and Tversky 1972), can be associated with System 1 (Shiloh et al 2002; Kahneman and Frederick 2002, 2005; Mahoney et al. 2011; Alós-Ferrer and Hügelschäfer (2012). System two is responsible for intervention and decision improvement. Still, evidence is also available for the superiority of unconscious decision-making. Klein (1999) states that people while under pressure will rapidly retrieve a scheme that will probably provide a solution to the problem at hand. Reyna (2004) posits that experts, in contrast to novices, do not require to depend on clear analytic reasoning. Dijksterhuis et al. (2006) argues that unconscious decisions are better than conscious ones. Gigerenzer and Gaissmaier (2011) and Gigerenzer (2007) state that heuristics, less time, and less computation does improve accuracy.

Crusius et al(2012) do underline the usefulness and explanatory power of a process-focused perspective when trying to analyze economic behavior in various contexts. Lovric et al (2008) presented a descriptive model for an individual investor behavior whereby decisions were driven by dual systems. Nevertheless, few researches in economics and finance have tried to integrate the concept of dual process. An exceptional case is Godek and Murray (2008) who analyzed the role of rational and experiential processing modes on the willingness to pay for advice. Moreover, Thaler and Shefrin (1981) integrate the idea of two contrasting processes into their

model on intertemporal choice. Gennaioli and Shleifer (2010) highlight intuitive inference model in their study. Kempf et al (2013) linked effective attitudes of investors to stock market expectations.

2.2.3 Disposition Effect theory

The disposition effect theory was developed by Shefrin and Statman in 1985. Disposition effect refers to the tendency that investors have of selling assets that have gained value (winners) and keeping assets that have lost value (losers). When prices fall, investors tend to hold to assets they already have, to avoid the regret of having sold at a loss, hoping that the prices will rise in the future. On the other hand, when prices rise, investors tend to sell assets too fast to realize gains.

According to Weber and Camerer (1998), disposition effects can be explained by the two features of prospect theory: the idea that people value gains and losses relative to a reference point (which is the initial purchase price of assets), and the tendency to seek risk when faced with possible losses, and avoid risk when a certain gain is possible.

Shefrin and Statman (1985) found evidence that due to their desire to avoid regret, investors tend to sell winners too early and ride losers too long. Shiller and Case (1988) interviewed home buyers and found prevalence of disposition effects; that homeowners were more eager to sell at a profit than at a loss. Real estate economists and agents widely believe that volume slows, sometimes dramatically, when prices sag (Weber and Camerer, 1998). Barber and Odean (1999) conclude that the disposition effect based on loss aversion best explains the tendency for investors to hold losers and sell winners. They even found that investors are more inclined to purchase additional shares of their losing investments by almost 1.5 times than additional shares of their winning investments.

2.3 Determinants of Personal investment decisions

Recent studies do argue that Prospect Theory (Kahneman and Tversky, 1979) and mental accounting (Thaler, 1985), in exclusion of other psychological biases, can provide possible explanations in regard to investor behaviour (for example the disposition effect) and for pricing anomalies of assets such as equity premium puzzle, value premium, and momentum effect. It is evident that most studies related to research on this concept of financial psychology comfortably do borrow and extrapolate psychological biases from psychologists experiments outcomes to investors in stock markets. Such extrapolation of the psychological results to stock

markets points that under the effect of one or more set of natural and heuristic biases, agents in financial markets would not be rational and especially to grasp and react to information immediately and appropriately. That's why on many occasions, agents end up overreacting or underreacting to news thus driving stock prices and returns to experience momentum effect.

Krishnan and Brooker (2002) studied the factors influencing investors decision making to make use of analysts' recommendations so as to arrive at a short-term decision on holding or selling a stock. The results report that a strong form of the analyst summary recommendation report, that details additional information to support the analyst's position further, does reduce disposition error for both gains and losses of investors.

Nagy and Obenberger (1994) in their study examined the factors which influence investor behaviour. They came up with a questionnaire that contained 34 factors such as need for diversification, expected corporate earnings, stocks past performance, perceptions and preference towards firm's products and services, individual portfolio past performance, stock broker recommendations just to mention a few. Their study findings suggested that the idea of wealth-maximization criteria is very important to investors, despite employing diverse criterion when making a choice for stocks to invest in. Contemporary concerns like local and international operations, ethical posture of the firm and environmental track record appeared to carry only cursory consideration. Stock brokers, individual, coworkers and family recommendations largely goes unheeded. Most investors were keen to evaluate stocks by process of discounting benefits attributable to valuation models.

Merikas, et. al. (2003) used a modified questionnaire in analyzing the factors influencing investor behaviour of the Greeks at the Athens Stock Exchange. The results suggested that people base their stock investment decisions on economic criteria in addition to other diverse variables. The researchers did not depend solely on a single integrated approach, but rather relied on various categories of factors. The results further revealed a certain degree of correlation between the factors that behavioural finance theory and previous empirical evidence identify as the influencing factors for the average equity investor, and the individual

Fischer and Gerhardt (2007) conducted extensive study on investment decision making of various investors. Their findings suggest that individual investor always deviate from financial theory recommendations when making investment decisions. The researchers report that such deviations result to significant welfare losses. In their conclusion they state that financial advice can be a potential correcting factor in the process of investment decision making. They supported their conclusion by constructing a simple model to capture the impact of financial advice on personal investment decision making success, measured by use of risk-adjusted return and wealth.

2.4 Review of Empirical Studies

Few studies in the past have tried to provide information on both financial literacy and variables related to financial decision-making (for example retirement planning, portfolio choice, and saving). To remedy such lack of data, Lusardi and Mitchell (2006) devised a module questionnaire on financial literacy for the 2004 US Health and Retirement Study (HRS). Their questions focused on testing basic financial knowledge in areas of interest compounding, risk diversification and the effects of inflation. They found out that some specific groups in the countrys population like women, less educated people and the elderly the level financial illiteracy was widespread and acute. Such results were surprising not only because the financial literacy questions were quite simple and basic, but also because the sample was comprised of respondents who are aged 50 or older. This age group comprises of people with bank accounts, credit cards, or have even invested in a mortgage for construction. Hilgert and Hogarth (2002) report similar findings by using a sample which covers all age groups to examine financial literacy. Surveys by the National Council on Economic Education (NCEE), covering financial literacy amongst high school students and the adult population also agrees with the studies of Lusardi and Mitchell. Findings of widespread financial illiteracy are further reported in studies on smaller samples or specific groups of the population (Agnew and Szykman (2005), Bernheim (1995,1998), Mandell (2004), and Moore (2003)).

While all these studies focussed on data from the US, studies from other countries show similar results. A study by the OECD (2005) and additional work by Lusardi and Mitchell (2007b) reviewed the evidence of financial literacy from one country to the other and reported that financial illiteracy features widely even in the developed countries, including European

countries, Australia, and Japan. These findings agree to the study of Christelis et al (2007), which used data similar to the one of US HRS, and reports that most respondents in Europe score low on numeracy scales.

Financial illiteracy has serious implications when it comes to household behavior. Bernheim (1995, 1998) was the first to report that not only do most households incapable of performing simple calculations and lack basic financial skills, but also that the saving culture is low in many households. In more recent studies, Bernheim et al (2001) and Bernheim and Garrett (2003) show that if one had an early exposure to financial education like in high school or at work place will save more. Similarly, Lusardi and Mitchell (2006, 2007a) show that financially illiterate people will most likely not plan for retirement thus accumulating less wealth at old age. This finding is confirmed by the works of Stango and Zinman (2007), who shows that people incapable of calculating interest rates correctly from a stream of payments, will in many cases borrow more and accumulate less wealth. Agarwal et al (2007) further reports that the young and elderly with low financial knowledge, financial mistakes are a common factor to them.

Existing studies in the past have used various methods to measure financial literacy. For example, Lusardi and Mitchell (2006, 2007a) have relied on only three questions as a way of measuring financial literacy, and (Stango and Zinman, 2007) have used one question. Moreover, the works that attempt to give extensive information on financial literacy often have minimal or no data on saving, wealth or other crucial economic outcomes. In addition, a link between financial literacy and an important economic variable of stock market participation is being explored. Despite a wide research on this concept, the reason why so many households don't hold stocks is still a puzzle (Campbell (2006)). Arguments of short sale constraints, inertia, income risk, and deviating from anticipated utility maximization could help explain why so many households don't hold stocks (Haliassos and Bertaut (1995)), though the available micro data sets aren't enough to account and explain all these factors.

Others researchers have argued that the young generation lack finances to channel to stocks due to their inability to borrow. Constantinides, et al (2002). Some life-cycle considerations and the wedge between borrowing and lending rates can provide some explanation for lack of stock

ownership (Davis et al (2006)), but even such reasons cannot exhaustfully tell us why a large proportion of households fail to hold stocks. In recent papers other reasons have been incorporated, such as trust and culture (Guiso et al (2005)), neighbours and peer influence (Hong et al,2004), and Weisbenner (2007)). Other authors have considered issues like limited numeracy and cognitive ability (Christeli et al,2007)), lack of asset awareness (Guiso and Jappelli,2005), and lack of financial sophistication (Kimball and Shumway,2006).

Volpe et al. (2002) argue that an online investor is more informed than other investors and will succeed in the financial markets. This is because rarely will such investors be surrounded with manipulation and financial misinformation. In their study they used 530 online investors to test investment literacy amongst various group of people by using variables like age,gender,income,past online trading experience and education. They demonstrated that financial literacy level varies with investors' education, experience, age, income, and gender. In Particular, men were more financially literate compared to women and the older people performed better compared to younger participants. As well, online investors had higher knowledge compared to others. Moreover, those investors with higher income were more knowledgeable in investments than lower income investors, and college or higher degree graduates performed better in investment than those with low education.

Mirshekary and Saudagaran (2005) studied how different users utilize the different information items in the financial statements to make investment decisions. They used a questionnaire to get the thoughts of various users of financial statements in Tehran. Institutional investors, stock brokers and bank investment officers were included among the different users in the sample. In general, annual reports were ranked as the main source of information by respondents. respondents ranked the annual reports as the main influential source of information. Oral information and share price were ranked as second and third main sources of information respectively. On the other hand, the respondents ranked the least influential factors in sequence of importance: advice of friends and acquaintances, tips and rumors, and stockbrokers' advice. Mirshekary and Saudagaran concluded that the annual reports are used regularly in Iran as a basis for making investment decisions.

Maditinos et al. (2007) examined the methodology used by six various groups of Greek investors: at the Athens stock exchange; official members, portfolio investment companies, mutual fund management companies, listed companies, individual investors, and brokers. The results revealed that on average the participants ranked their instinct/experience as the most important factor followed by fundamental analysis and the movement of foreign financial markets. Noise in the market and portfolio analysis were considered the least important.

2.5 Summary of the Literature review

Decisions on investment are ongoing and always requires members to periodically monitor and evaluate the performance of their chosen investment option, and decide whether to switch to another investment option. To achieve optimal outcomes in this complex decision-making environment requires decision-makers to have adequate levels of financial knowledge and skills. The call for enhanced financial literacy amongst consumers is a global phenomenon, driven by the growing complexity of financial markets and products, and government concerns about the affordability of supporting an ageing population. An important prerequisite for informed financial decision-making is adequate financial knowledge and skills to make competent investment decisions. Furthermore, the expansion of financial services in Kenya creates not only great opportunities, but also more potential for the general population to take wrong financial decisions hence the need to enhance financial literacy initiatives.

The general conclusion of this literature review is that there is low level of financial literacy regardless of the stage of economic development of each country. Additionally, a relationship between financial literacy and demographic factors can be noted. Also from previous studies it has been proven that highly literate investors do use a different criteria to make investment decisions in comparison to low literate investors. Highly literate investors do use financial publications whereas less literate are comfortable in relying on family, friends or even stockbrokers. A gap exists in previous studies on the relationship between financial literacy and personal investment decisions. This study endeavoured to examine the relationship between financial literacy and personal investment decisions.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter highlights the research design used in the study, the target population, data collection and data analysis used to arrive at the empirical results.

3.2 Research Design

Burns and Grove (2003) define a research design as a blueprint for conducting a study with maximum control over factors that may interfere with the validity of the findings. The study utilizes descriptive research design. Chargy (2003) defines it as one which goes on a fact finding mission to explain a present situation. The use of the design is to ensure the present situation is well described ensuring there is little or no bias in data collection and errors are reduced at the point of data interpretation. The design also provided an accurate and complete picture of the situation as discussed in literature review.

3.3 Population

Mugenda and mugenda (2003) defines population as the entire group of individuals, events or objects having common observable characteristics. The target population was 800 staff working with East Africa Union of SDA (SDA Church East Africa Union, 2013).

3.4 Sample

The sampling plan describes the sampling unit, sampling frame, sampling procedures and the sample size for the study. The sampling frame describes the list of all population units from which the sample selected (Cooper & Schindker, 2003). Mugenda and Mugenda (2003) suggest that in descriptive studies, ten per cent or above of the accessible population is enough for the study.

In selecting the sample size, the following formula was used as proposed by Mugenda and Mugenda, (2003);

$$nf = \frac{n}{1 + \left(\frac{n}{N}\right)}$$

Where: nf = the desired sample size (when the population is less than 10,000)

n = the desired sample size (when the population is more than 10,000) =100

N = the estimate of the population size = 1000

$$\text{Therefore } nf = \frac{100}{1 + \left(\frac{100}{1000}\right)} = 100$$

Therefore the sample size consisted of 100 respondents from a total of 800 staff working with East Africa Union of SDA. Random sampling was adopted in selecting the respondents to be interviewed in the study.

3.5 Data Collection

The study utilized primary data through use of self administered questionnaire to assess the financial literacy and factors that determine investment decisions. The reason for using questionnaire is that as the research questions are defined clearly, questionnaire is the best choice to have standardized data, which is easy to process, and analyze. Especially, as no interviewers are present when the questionnaires are being filled, the results may not be affected by the interviewers (Bryman& Bell, 2007). Moreover, it is cheaper than other methods (Bryman & Bell, 2007). Questionnaires also are more convenient for respondents in case they need to provide some sensitive information, in other words; they tend to be more honest than in an interview (Bryman& Bell, 2007).

The questionare consists of questions of which elicit demographic and socioeconomic information. Other questions measured different factors on determining investment decisions, and others measured the respondents understanding of investment and finance.

The questionnaire is divided into 2 sections, section 1 covers demographic and socioeconomic variables of age,gender, income and education level. Section 2(part 1) collects data on personal

investment decision. Part 2 identifies data on effects of financial literacy on personal investment decisions using 5 point likert scale ranking from 1- totally disagree to 5- totally agree.

3.6 Data Analysis

Data analysis means categorizing, manipulating, summarising and presenting data so as to obtain answers to the research question. The purpose of data analysis is therefore to obtain meaning from the data that had been collected.

Before processing the responses, the completed questionnaires were sorted, checked and edited for completeness and consistency. The data then was coded which to enable the responses to be grouped into various categories. Descriptive statistics techniques was used to analyze the quantitative data. Coding was done in SPSS, analyzed and the output interpreted in frequencies, percentages, mean scores, standard deviation and rankings. The findings were presented using tables, graphs and figures. This was enhanced by an explanation and interpretation of the data.

3.6.1 Empirical model

Multiple regression analysis was conducted to determine the relationship between financial literacy and investment decisions where the financial literacy was regressed against the investment decisions. The results of the regression analysis was interpreted based on the R square, significance of F statistics and the significance of beta values from the coefficients of the X variables. Significance was tested at 5% level. Thus the tentative hypothesis is that the higher the level of financial literacy the better the investment decision other things held constant.

The regression equation will be ; $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \epsilon$

Where:

Y is the dependent variable (Investment decision)

X₁ is Financial knowledge and awareness

X₂ is Personal characteristics

β_0 is the regression constant

β_1, β_2 , are the coefficients of independent variables,

ϵ is the Error Term.

The values of X1 and X2 were calculated from the mean score response on each likert scaled data for each bank. The mean score was thus obtained for the respective variable for each respondent. These values were then utilized for regression analysis. The value of Y (Investment decision) will be mean average score for the likert scaled responses from the respondents.

3.6.2 Tests of Significance

F-test was tested for joint significance of all coefficients and t-test for significance of individual coefficients. Measures of central tendency (mean) and a measure of dispersion/variation (standard deviation) were used to analyze the data.

CHAPTER FOUR

DATA ANALYSIS, FINDINGS AND DISCUSSIONS

4.1 Introduction

This chapter describes the characteristics of the study population and further explains the existence of financial literacy among the staff of SDA church in Kenya. The chapter then culminates with description of the relationship between financial literacy and personal investment decisions amongst staff of SDA church in Kenya.

4.2 Background Characteristics Among the SDA Church Staff in Kenya

This study sought information from 100 staff of the SDA church in Kenya of which majority are males with a percentage count of 56.9% of the target population and a mean of 1.42. The female respondents had a count of 41.2%.

In terms of age, it is evident that these group of investors embark on investment as from the age of 20 years old. Majority of the population interviewed were aged between thirty and fifty years. Moreover, the average age of those who were interviewed was 37.2, a mean of 2.34, showing a relatively youthful sample population and therefore reflecting the true picture of investment in Kenya, where majority begin engaging in serious investment after the age of thirty years.

The population of study seems educated with almost 96% of the respondents having at least a basic education. However, the majority of these population have undergraduate to post graduate education something that tends to confirm the hypothesis of this study.

The average earning for the study population is between Ksh 30,000 to Ksh 40,000 per month with a count of 33.3% and a mean of 3.15. (Refer Appendix 11)

4.3 Financial Literacy and Investment Decision Making

The study analysed the financial literacy and how it relates to investment decision in two basic components. The first is to focus on financial literacy to assess how well individual respondents are equipped to make complex financial decisions, while the second is to assess effects of financial literacy on behavior, especially investment decision making.

4.3.1 Financial Literacy statistical discussion

The study endeavoured to gauge the extend of financial literacy on basis of investment objective,tools used for investment ,income invested,duration of investment,expected return and source used to get investment information.According to the study of the respondents, the main reason influencing their investment decision is the fact that they would want to achieve income generation over time. This seemed to be the greatest objective of the majority represented by 45.9 percent of the staff interviewed. However, capital appreciation also seemed to be a main objective of some proportion of the study group with a percentage point of 20.7. Most respondents though never felt tax shelter and life style change to be the main drive to investment with only 3.6 and 1.8 percentage point in each case.

A 41.4% of the population would invest in government securities if given a chance to chose appropriate tool of investment. This might be due to the secured nature of the tool. Derivatives and insurance premiums attracted the least of the respondents with 5.4% and 8.1 % respectively. This could again be due to the lack of knowledge about the two tools for investment meaning they seemed insecure for the investors. Majority of the investors are comfortable investing between 0-10% of their income represented by a percentage point of 42.3, although a big proportion of 34.2% will invest between 21-30% of their salaries. Majority of the study population would invest their incomes for a period of between 1-5 years and above 5 years. On the expected return the investors seem to have varied rate of return expected. All available options in the data tool were selected. However marginally greater majority will expect between 21 and 30% form their investments representing 18.9% of the study population.

The findings also revealed that reference groups is the main source of information about the investment market. As such, above a third (34.2 percent) of those who were interviewed reported a preference of reference groups to any other. Other than reference groups, sources information such as, print, television and broke or fund managers are also preferred and rarely from internet websites. This preference can be associated wit the reliability of the source. The information from reference groups tend to be more reliable because it is firsthand information.(Appendix 111)

4.3.2 Personal Financial Characteristics

Appendix 11 and table 4.1 reveal the personal characteristics of the study population with regard to their financial capability. Majority agree, 52.9%, that they are accountable for managing money in order to satisfy their current and future economic choices. However, almost a third, 31.4% strongly agree. On spending and saving plan, majority agree to have stipulated a budget. However the concern lies with 29.4% who disagree with this fact. Reasons may also lie on lack of appropriate knowledge on how or simply the information as to the importance of the budget.

While many of the respondents don't agree to have had a decision-making strategy on purchasing stocks (28.4 and 29.4%), a greater proportion of the population of study admit that they would depend on financial experts for guidance and advice on a wide variety of financial issues (40.2 and 31.4%). Infact there is a strong agreement (48 and 23.5%) that financial professionals and what they recommend would be trusted. On time horizon, cost and time value of money majority agree that it will be a factor that will determine their investment decision.

Table 4.1 Personal Financial Characteristics One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
ACCOUNTABLE FOR MANAGING MONEY	100	4.0800	.90654	.09065
PERSONAL BUDGET	100	3.7600	2.17943	.21794
STRATEGY FOR BUYING STOCKS	100	2.5200	1.33696	.13370
DEPEND ON FINANCIAL EXPERTS ADVISE	100	3.8700	1.08855	.10886
CHECK DURATION FOR INVESTMENT	100	3.6700	1.14640	.11464
CONSIDER PRODUCT COST	100	3.6000	.82878	.08288
CONSIDER TIME VALUE OF MONEY	100	3.8800	.79493	.07949
CREDIT /DEBT BALANCING	100	3.4200	.88967	.08897
ASSET DIVERSIFICATION	100	3.8700	.77401	.07740
RETIREMENT PLAN	100	3.7300	.94125	.09413
TAKE LOANS BASED ON RATES	100	3.0600	1.03299	.10330
MANAGE FINANCIAL LOSS	100	3.4600	.91475	.09148
TRUST FINANCIAL EXPERTS ADVISE	100	3.8200	.96797	.09680
GOOD RETURNS DUE TO OWN TALENTS	100	2.7700	.82701	.08270
EXPERIENCE AID MY DECISIONS	100	3.7400	.84829	.08483

Source: Research Findings

4.4 Financial Knowledge and Awareness

Table 4.2 and table 4.3 show the descriptive statistics of the financial knowledge and awareness of the respondents. There is consistency among the respondents that indicate that financial knowledge is directly related to financial awareness. The findings indicate also that the extent of the use of financial services among the respondents, their understanding of the various financial products offered by financial service providers, and their ability to manage their financial resources, from planning a budget to saving for the future, greatly depends on the extent of the individual knowledge. The level of education and the type thereof will greatly determine the degree of individual's comprehension of the financial services and also the extent to which the individual will appropriately apply the knowledge in investment choice.

Table 4.2 Financial Knowledge and Awareness Descriptive Statistics

	N	Mean		Std. Deviation	Variance
		Statistic	Std. Error	Statistic	
MARKET VALUE FLUCTUATIONS	100	2.7600	.11987	1.19865	1.437
ASSESSMENT OF FUND PERFORMANCE	100	3.1100	.13991	1.39910	1.957
UNDERSTANDING FINANCIAL POSITION STATEMENT	100	2.9100	.09959	.99590	.992
CAN MAKE EFFECTIVE COMPLAINT	100	2.2200	.13149	1.31487	1.729
AWARE OF INFLATION RATES	100	3.4400	.10182	1.01822	1.037
INVESTMENT DECISION ON PAST RECORDS	100	2.6700	.11015	1.10147	1.213
CALCULATE EXPECTED RETURNS	100	2.7100	.12736	1.27363	1.622
CALCULATE EXPECTED RISKS	100	2.7900	.11485	1.14852	1.319
CALCULATE TRENDS OF INTEREST RATES	100	2.5500	.11667	1.16667	1.361
MEASURE BEST INVESTMENT PORTFOLIO	100	2.6100	.11968	1.19675	1.432
Valid N (listwise)	100				

Source: Research Findings

Besides, the study reveals that knowledge and being aware are related. The responsive individual to the financial services is the individual with at least basic financial knowledge. Those are the individuals who can make informed choice on investments and be able to determine the value of such investments before they take such decisions

Table 4.3 Financial Knowledge and Awareness Coefficients

Model		Correlations			
		Partial	Part	Tolerance	VIF
1	(Constant)				
	MARKET VALUE FLACTUATIONS	.079	.063	.405	2.472
	ASSESSMENT OF FUND PERFORMANCE	-.227	-.186	.615	1.626
	UNDERSTANDING FINANCIAL POSITION STATEMENT	.086	.069	.268	3.736
	CAN MAKE EFFECTIVE COMPLAINT	.050	.040	.196	5.106
	AWARE OF INFLATION RATES	-.096	-.077	.438	2.283
	CALCULATE EPECTED RETURNS	-.103	-.083	.476	2.099
	CALCULATE EXPECTED RISKS	.059	.048	.184	5.440
	CALCULATE TRENDS OF INTEREST RATES	-.056	-.045	.401	2.496
	MEASURE BEST INVESTMENT PORTFOLIO	.043	.034	.205	4.880

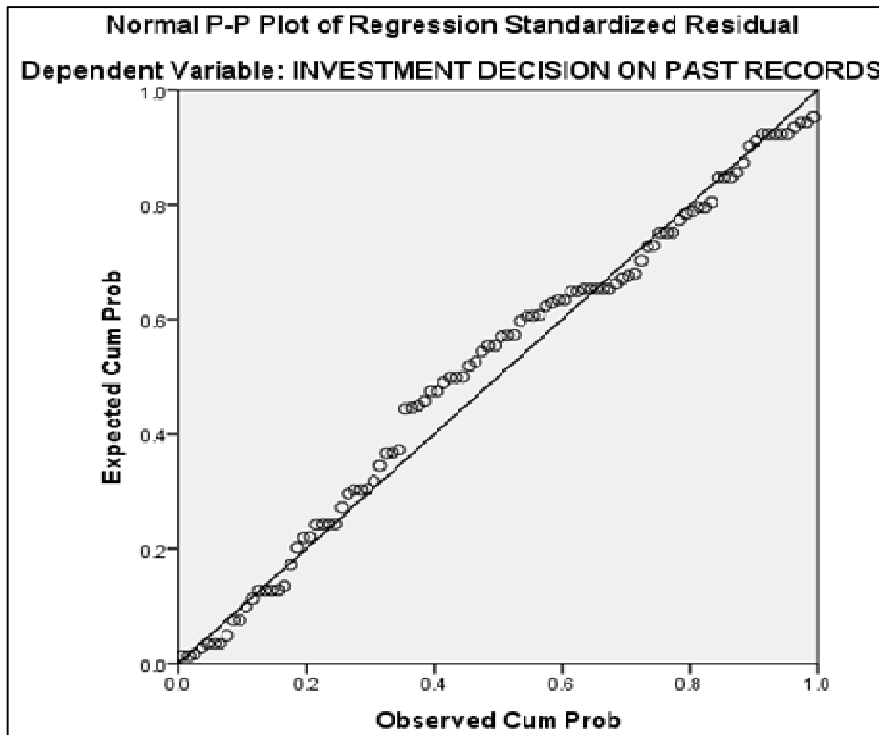
Source: Research Findings

4.5 Interpretation of Findings and discussions

Financial literacy has become a major factor both in the investment and retirement literature with respect to the increasing complexity of financial products and more frequent need to save for retirement. This study has found that most individuals are generally financially uninformed and lacking in basic financial principles.

The study exposed existing levels of individual investor financial literacy and investor preferences for investment decisions. It has revealed that financial knowledge has important implications in increasing levels of financial literacy and awareness. The study findings have also determined that the degree of financial knowledge persons have has an implication on the individuals investment decision. This impact of level of financial literacy on financial decision-making is examined, and correlated as in the figure 4.1 below.

Figure 4.1 Effect of Financial Literacy on Financial Decision-Making Regression Report



Source: Research Findings

The study findings also revealed that there are several fundamental factors that would underly individual investor savings and investment decisions such as numeracy and ability to make calculations related to interest rates, expected risks, expected returns; understanding inflation; and understanding diversification risk. From the results it was evident that since most individual investors lack at least basic financial knowledge they end up applying crude rules of thumb in savings behavior. Investor actions have been classified as "mistakes," which overcome the problem of connection between financial literacy and behavior. Those persons with the least financial literacy and most likely to make mistakes include the low income and less educated either at younger or very older ages.

Over 50% of older investors report making ineffective investments decisions. The study also assessed links between financial literacy and specific investment behavior. There is a strong correlation between financial literacy and day-to-day financial management skills. More literate and numerate investors are more likely to participate in financial markets, invest in stocks, undertake retirement planning, hence gaining more wealth. This leaves advanced financial knowledge and ability to make calculations as the most important components of financial literacy measures.

Financial knowledge was also realized to be a factor in designing individual future life and associated with greater retirement planning and wealth accumulation. These are important decisions as retirees face uncertainty in making irrevocable decisions with far-reaching consequences, especially in decisions to purchase lifetime annuities.

The results can therefore be interpreted to confirm Delafrooz & Laily, (2011) assertions that lack of information and low financial literacy provide fertile ground for financial mistakes. Low financial literacy and lack of information affect the ability to save and to secure a comfortable retirement. Financial literacy boosts the ability to handle day to day financial problem and will reduce the negative consequences of poor financial decisions that otherwise might take years to overcome (Delafrooz &Laily, 2011).

As revealed by the research findings a number of individuals rely on the help of financial experts and trust their financial advise. This situation is troublesome because, individuals are in charge of their own financial security after retirement. Therefore appropriate financial knowledge, literacy and awareness is a requirement for the majority of investors in order that they be the masters of their own financial destiny.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter provides a synopsis of the study, conclusions and recommendations made with critical focus on the findings from the analysis.

5.2. Summary of the Findings

This study sought determine the effect of financial literacy on personal investment decisions amongst staff of SDA church in kenya who are supposed to be in charge of securing their own financial well-being after retirement. This research goal was due to the fact that there has been a shift from defined benefit to defined contribution pensions, the complexity to which the financial markets have become and the proliferation nature of new investment that are facing the investors and the fact that investment opportunities have expanded beyond national borders, permitting individuals to invest in a broad range of assets and currencies. Therefore, the investors must decide both how much to save and how to allocate their retirement wealth. On the other hand, it is very hard to navigate this new financial system, and the consequences of mistakes can be devastating. It is therefore vital for the individual investor to be well equipped and knowledgeable to making investment decisions.

The theoretical models used to illustrate Financial and personal investment decisions included life cycle theory which was developed by Franco Modigliani and Richard Brumberg. They asserted that people make intelligent choices relating to how much they wish to spend at every stage of life with the available resources being a limiting factor. Disposition Effect theory which was developed by Shefrin and Statman claimed that investors will sell assets that have gained value (õwinnersõ) and keeping assets that have lost value (õlosersõ). Finally, the Dual process theory by Evans (2008) poist the idea that intuitive and cognitive processes do drive investment decisions.

This study population was 100 staff of the SDA church in Kenya. There were 56.9% males and 41.2 % females respondents. Majority of the population interviewed were aged between thirty

and fifty years. The majority of population have undergraduate to post graduate education. The average earning for the study population is between Ksh 30,000 to Ksh 40,000 per month with a count of 33.3% and a mean of 3.15. The greatest objective for investing was income generation over time represented by 45.9 percent. 41.4% of the population would invest in government securities and 42.3%, are comfortable investing between 0-10% of their income. 34.2% reported a preference of reference groups as the source of information. Majority agree, 52.9%, that they are accountable for managing money in order to satisfy their current and future economic choices. However, almost a third, 31.4% strongly agree. On spending and saving plan, majority agree to have stipulated a budget.

5.3 Conclusion

The study findings on how financial literacy effects on investment decision making of the SDA staff show that a high percentage of staff considers financial concepts such as returns, investment risks, holding periods, trends in interest rates among others in making investment decisions. The results indicate that investors generally need to be financially literate in-order to make sound investment decisions. Beal and Delpachitra (2003) argued that having financial literacy skills like risks, investment portfolio, returns, diversification of the portfolio enable fund managers to make informed investment decisions about their money and minimizes the chances of being misled on financial matters. In addition Rooij et al. (2007) found that financial literacy affects financial decision-making because individuals with low literacy are more likely to rely on other people as their main source of financial advice and are less likely to make informed investment decisions.

Therefore to make effective investment decision, investor needs to select the right stock among different alternatives at the right time. In order to choose superior stock, investor has to evaluate alternative investments and specify criteria to minimize those alternatives and rank the lifted ones (Albadui et al., 2006). The criteria or factors that affect investment decision could be categorized to financial knowledge and financial awareness because they have a significant effect on decision making of the study population. Which implies that financial literacy has a strong positive relationship with investment decision making.

5.4 Recommendations for Policy

The study findings have showed that financial knowledge, literacy and awareness is instrumental in making investment decisions. Since such decisions are made in all organizations it generally acceptable that firms should be ready to avail these knowledge and literacy where it is required even if it means invest money in it. This will foster clearly calculated decisions being made and reduce the number of bad outcomes from investment decisions.

The research also recommends that in hand with the governments vision of increasing computer literacy through increasing computer hardware in learning institutions, investment agencies should partner with other stakeholders in increasing the amount of information available for use in making clear investment decisions to investors and simplified financial courses for learning institutions in all sectors.

Besides, researcher also recommends for more regulatory guidelines concerning financial literacy in key institutions as is the case for accountants and procurement officers who need certification to actively engage in their professional activities especially so as country transforms itself into a middle-income country and as financial service providers offer a greater variety but also a greater complexity of financial products, it is important to ensure that investors have the information and understanding necessary to make the best financial decisions for themselves.

5.5 Limitation of the study

This study was done based on small institution of the SDA church which by its nature may not reflect the typical investors. Although it did give adequate proof to the study objectives of the research but may not serve as typical example for all investment agencies representation due to different aspects of the organization's staff.

Besides, the study on the effect of financial literacy on investment decisions making by the investors in kenya could have been more reflective if the data was collected in different environments other than focusing the study only on one institution which may not give accurate dynamics of investment decision making thus influencing the results of this research.

Many of the underlying assumptions about the effect of financial literacy on investment decisions making by investors emphasize the nature of investment as dynamic. The study being based in one region (Nairobi) would not be able to gauge the the attitudes of the entire country towards the study and its influence.

Another limiting factor was that the sample of respondents was limited to a small number because of data collection cost. The design used was ex-post-facto research design where the researcher has no control over the independent variables because the effects of financial literacy on investment decisions have already occurred.

The questions used for financial literacy did not involve computation or quiz as it has been used by other researchers in the past hence we cant make an absolute conclusion on level of financial literacy.

The research used questionairre as tool of data collection hence we cant judge the genuiness of the respondents as the results can change if a different tool was used.

The study studied only 100 staff out of a total of 800 hence the results could be diferent if survey was done for the entire staff.

5.5 Suggestions for further study

The study recommends for further study in the relationship between the non ó financial factors like psychological factors and financial literacy in influencing investment decision making

The study recommends for further study in the impact of inflation rates on investment decisions and ways to mitigate against sudden losses due to inflation fluctuation.

The study was limited to staff of a church organization. The researcher would thus recommend for further study in the topic of financial literacy and financial awareness among investors across the board and look at its relevance to all elements of the economy.

Further study in financial literacy and its effect on key decisions and overall performance would improve literature on the topic as well as improve the capacity of the organizations.

The researcher recommends survey to be done for the entire population and find out wether there will be a significant variance of the results.

Interviews can be utilized to collect data on the same topic and find out whether similar responses will be attained as per the questionnaire.

Finally the same sample can be used to undertake a computational quiz on financial literacy and gauge the difference in results attained in the different scenarios.

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APPENDICES

Appendix 1: Questionnaire

Instructions: Kindly take a few minutes to respond to this questionnaire. Information supplied is purely for academic research purposes and will be treated with utmost confidentiality.

SECTION A: BACKGROUND INFORMATION

1. What is your gender? (tick one)

Male [] Female []

2. Please tick your Age Bracket

20-30 [] 31-40 []

41-50 [] 50 and Above []

3. What is your highest level of education?

Primary level []

Secondary level []

Diploma []

Undergraduate []

Post Graduate []

4. Please estimate your Monthly Income

Below 20000 []

20001-30000 []

30001-40000 []

40001-50000 []

Above 50000 []

SECTION B: FINANCIAL LITERACY FACTORS AND PERSONAL INVESTMENT DECISIONS

First part

Please answer the following question by ticking the choice that strongly agree with.

1. How would describe the objective of your investment?

- a) Lifestyle Change
- b) Capital appreciation
- c) Tax shelter
- d) Income generation
- e) Secure retirement

2. What would you describe your most preferable tool of investment to be?

- a) Bank deposits e.g. savings a/c
- b) Insurance premiums
- c) Real estate
- d) Government bonds, Corporate bonds , debentures & preference shares
- e) Equity share
- f) Derivative instruments
- g) Mutual fund

3. Generally, what proportion of your income would you prefer to invest?

- a) 0 ó 10%
- b) 21 ó 30%
- c) 31 ó 40%
- d) 41 ó 60%
- e) Above 60%

4. What duration would like for your investment?

- a) One month
- b) A quarter year
- c) A half year
- d) One year
- e) Between one and five years
- f) More than 5 years

5. What would be your expected return from any investment?

- a) Between 5 & 10%
- b) Between 11 & 15%
- c) Between 16 & 20%
- d) Between 21 & 25%
- e) Between 26 & 30%
- f) Above 30%

6. What is your main source of information about the investment market?

- a) Print media (including newspapers like business standard,)
- b) Television
- c) Websites from the internet
- d) Reference groups
- e) From the broker/fund manager

Second Part

Please answer the following statements by ticking the choice (box) that best describes yourself on the scale totally disagree (1), Disagree(2), Unsure(3), Agree(4) and Totally agree (5)

FACTORS	1	2	3	4	5
Personal characteristics					
I am accountable for managing money in order to satisfy my current and future economic choices.					
I have developed a spending and savings plan (personal budget).					
I have a decision-making strategy on purchasing stocks					
I depend on financial experts for guidance and advice on a wide variety of financial issues.					
I consider the time horizon of the investment before making an investment decision					
I consider the product costs before making an investment decision					
I consider the time value of money before making an investment decision					
Effectively balancing credit and debt helps me achieve some short and long-term goals.					
I have diversified my assets as one way to manage risk.					
I have retirement benefits plan for my future					

I take loans based on the prevailing interest rates					
I would be able to manage my financial situation for a period of time if I experienced a major loss of income					
I would trust financial professionals and accept what they Recommend					
Any good outcomes of my investment decisions are due to my own talents					
I tend to make decisions based on stereotypes formed from experience					
Financial knowledge and Awareness					
Short term fluctuations in market value can be expected even with good investments					
I can assess the performance of a fund or managed investment					
I understand my statements of financial position					
I am confident about making an effective complaint against a bank or other financial institution					
I am aware of the prevailing inflation rates when making investment decisions					
I base my investment decisions on past performance of the organization/products of interest					
I am able to calculate the expected returns for my investments					
I am able to calculate the expected risks on my investments					
I am able to calculate the trends in interest rates of my credit facilities					
I am able to measure the best investment portfolio to invest in					

Thankyou for your cooperation and input!!!

Appendix 11: Background Information statistical count

			Value	Count	Percentage
GENDER	Standard Attributes	Measurement	Nominal		
	Valid Values	1.00	MALE	58	56.9%
		2.00	FEMALE	42	41.2%
	Missing Values	System		2	2.0%
AGE	Valid Values	1.00	20-30	15	14.7%
		2.00	31-40	45	44.1%
		3.00	41-50	31	30.4%
		4.00	50 AND ABOVE	9	8.8%
	Missing Values	System		2	2.0%
EDUCATION LEVEL	Valid Values	1.00	PRIMARY	2	2.0%
		2.00	SECONDARY	12	11.8%
		3.00	DIPLOMA	23	22.5%
		4.00	UNDERGRADUATE	48	47.1%
		5.00	POSTGRADUATE	15	14.7%
	Missing Values	System		2	2.0%
INCOME LEVELS	Valid Values	1.00	BELOW 20000	8	7.8%
		2.00	20001-30000	22	21.6%
		3.00	30001-40000	34	33.3%
		4.00	40001-50000	19	18.6%
		5.00	ABOVE 50000	17	16.7%
	Missing Values	System		2	2.0%

Source: Research Findings

Appendix 111: Background Information Descriptive Statistics

	N	Range	Mean		Std. Deviation	Variance
	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic
GENDER	100	1.00	1.4200	.04960	.49604	.246
AGE	100	3.00	2.3400	.08435	.84351	.712
EDUCATION LEVEL	100	4.00	3.6200	.09511	.95113	.905
MONTHLY INCOME	100	4.00	3.1500	.11839	1.18386	1.402
Valid N (listwise)	100					

Source: Research Findings

Appendix 1V: Financial Literacy Statistical Counts

			Frequency	Percent	Valid Percent	Cumu. Percent
INVESTMENT OBJECTIVE	Valid	lifestyle change	2	1.8	2.0	2.0
		capital appreciation	23	20.7	23.0	25.0
		Tax shelter	4	3.6	4.0	29.0
		income generation	51	45.9	51.0	80.0
		secure retirement	20	18.0	20.0	100.0
		Total	100	90.1	100.0	
	Missing	System	11	9.9		
TOOL OF INVESTMENT	Valid	bank deposits	14	12.6	14.0	14.0
		insurance premiums	9	8.1	9.0	23.0
		real estates	10	9.0	10.0	33.0
		government securities	46	41.4	46.0	79.0
		equity shares	15	13.5	15.0	94.0
		derivatives	6	5.4	6.0	100.0
		Total	100	90.1	100.0	
Missing	System	11	9.9			
INCOME INVESTED	Valid	0-10%	47	42.3	47.0	47.0
		21-30%	38	34.2	38.0	85.0
		31-40%	15	13.5	15.0	100.0
		Total	100	90.1	100.0	
	Missing	System	11	9.9		
DURATION FOR INVESTMENT	Valid	1 year	24	21.6	24.0	24.0
		1-5 years	39	35.1	39.0	63.0
		more than 5years	37	33.3	37.0	100.0
		Total	100	90.1	100.0	
	Missing	System	11	9.9		
EXPECTED RETURN	Valid	5-10%	11	9.9	11.0	11.0
		11-15%	16	14.4	16.0	27.0
		16-20%	18	16.2	18.0	45.0
		21-25%	21	18.9	21.0	66.0
		26-30%	21	18.9	21.0	87.0
		Above 30%	13	11.7	13.0	100.0
		Total	100	90.1	100.0	
Missing	System	11	9.9			
SOURCE OF INFORMATION	Valid	Print media	21	18.9	21.0	21.0
		television	17	15.3	17.0	38.0
		internet	11	9.9	11.0	49.0
		reference groups	38	34.2	38.0	87.0
		brokers	13	11.7	13.0	100.0
		Total	100	90.1	100.0	
Missing	System	11	9.9			

Source: Research Findings

Appendix V: Personal Financial Characteristics Statistical Count

			Frequency	Percent	Valid Percent	Cumu. Percent
ACCOUNTABLE FOR MANAGING MONEY	Valid	TOTALLY DISAGREE	3	2.9	3.0	3.0
		DISAGREE	4	3.9	4.0	7.0
		UNSURE	7	6.9	7.0	14.0
		AGREE	54	52.9	54.0	68.0
		TOTALLY AGREE	32	31.4	32.0	100.0
		Total	100	98.0	100.0	
	Missing	System	2	2.0		
PERSONAL BUDGET	Valid	DISAGREE	30	29.4	30.0	30.0
		UNSURE	7	6.9	7.0	37.0
		AGREE	37	36.3	37.0	74.0
		TOTALLY AGREE	25	24.5	25.0	99.0
		22.00	1	1.0	1.0	100.0
		Total	100	98.0	100.0	
	Missing	System	2	2.0		
STRATEGY FOR BUYING STOCKS	Valid	TOTALLY DISAGREE	29	28.4	29.0	29.0
		DISAGREE	30	29.4	30.0	59.0
		UNSURE	8	7.8	8.0	67.0
		AGREE	26	25.5	26.0	93.0
		TOTALLY AGREE	7	6.9	7.0	100.0
		Total	100	98.0	100.0	
	Missing	System	2	2.0		
DEPEND ON FINANCIAL EXPERTS ADVISE	Valid	TOTALLY DISAGREE	3	2.9	3.0	3.0
		DISAGREE	12	11.8	12.0	15.0
		UNSURE	12	11.8	12.0	27.0
		AGREE	41	40.2	41.0	68.0
		TOTALLY AGREE	32	31.4	32.0	100.0
		Total	100	98.0	100.0	
	Missing	System	2	2.0		
CHECK DURATION FOR INVESTMENT	Valid	TOTALLY DISAGREE	3	2.9	3.0	3.0
		DISAGREE	21	20.6	21.0	24.0
		UNSURE	6	5.9	6.0	30.0
		AGREE	46	45.1	46.0	76.0
		TOTALLY AGREE	24	23.5	24.0	100.0
		Total	100	98.0	100.0	
	Missing	System	2	2.0		
CONSIDER PRODUCT COST	Valid	DISAGREE	14	13.7	14.0	14.0
		UNSURE	20	19.6	20.0	34.0
		AGREE	58	56.9	58.0	92.0
		TOTALLY AGREE	8	7.8	8.0	100.0

		Total	100	98.0	100.0	
	Missing	System	2	2.0		
CONSIDER TIME VALUE OF MONEY	Valid	TOTALLY DISAGREE	1	1.0	1.0	1.0
		DISAGREE	6	5.9	6.0	7.0
		UNSURE	14	13.7	14.0	21.0
		AGREE	62	60.8	62.0	83.0
		TOTALLY AGREE	17	16.7	17.0	100.0
		Total	100	98.0	100.0	
	Missing	System	2	2.0		
CREDIT /DEBT BALANCING	Valid	DISAGREE	19	18.6	19.0	19.0
		UNSURE	28	27.5	28.0	47.0
		AGREE	45	44.1	45.0	92.0
		TOTALLY AGREE	8	7.8	8.0	100.0
		Total	100	98.0	100.0	
		Missing	System	2	2.0	
ASSET DIVERSIFICATION	Valid	DISAGREE	7	6.9	7.0	7.0
		UNSURE	16	15.7	16.0	23.0
		AGREE	60	58.8	60.0	83.0
		TOTALLY AGREE	17	16.7	17.0	100.0
		Total	100	98.0	100.0	
		Missing	System	2	2.0	
RETIREMENT PLAN	Valid	DISAGREE	18	17.6	18.0	18.0
		UNSURE	7	6.9	7.0	25.0
		AGREE	59	57.8	59.0	84.0
		TOTALLY AGREE	16	15.7	16.0	100.0
		Total	100	98.0	100.0	
		Missing	System	2	2.0	
TAKE LOANS BASED ON RATES	Valid	TOTALLY DISAGREE	8	7.8	8.0	8.0
		DISAGREE	25	24.5	25.0	33.0
		UNSURE	21	20.6	21.0	54.0
		AGREE	45	44.1	45.0	99.0
		TOTALLY AGREE	1	1.0	1.0	100.0
		Total	100	98.0	100.0	
		Missing	System	2	2.0	
MANAGE FINANCIAL LOSS	Valid	DISAGREE	20	19.6	20.0	20.0
		UNSURE	23	22.5	23.0	43.0
		AGREE	48	47.1	48.0	91.0
		TOTALLY AGREE	9	8.8	9.0	100.0
		Total	100	98.0	100.0	
		Missing	System	2	2.0	
TRUST FINANCIAL EXPERTS ADVISE	Valid	DISAGREE	15	14.7	15.0	15.0
		UNSURE	12	11.8	12.0	27.0
		AGREE	49	48.0	49.0	76.0
		TOTALLY AGREE	24	23.5	24.0	100.0

		Total	100	98.0	100.0	
	Missing	System	2	2.0		
GOOD RETURNS DUE TO OWN TALENTS	Valid	DISAGREE	48	47.1	48.0	48.0
		UNSURE	27	26.5	27.0	75.0
		AGREE	25	24.5	25.0	100.0
		Total	100	98.0	100.0	
	Missing	System	2	2.0		
EXPERIENCE AID MY DECISIONS	Total		102	100.0		
	Valid	DISAGREE	11	10.8	11.0	11.0
		UNSURE	19	18.6	19.0	30.0
		AGREE	55	53.9	55.0	85.0
		TOTALLY AGREE	15	14.7	15.0	100.0
		Total	100	98.0	100.0	
	Missing	System	2	2.0		

Source: Research Findings