EFFECT OF FINANCIAL LITERACY ON VOLUNTARY RETIREMENT PLANNING AMONG EMPLOYEES OF STATE CORPORATIONS UNDER THE MINISTRY OF HEALTH IN NAIROBI COUNTY, KENYA

BY

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DECLARATION

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

Signature …………………..……………… Date …………………………. /2016

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D61/77918/2015

This research project has been submitted for examination with my approval as the University supervisor.

Signature ………………………………… Date …………………………. /2016

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DEDICATION

This work is dedicated to the almighty God for the wisdom and gift of life that has made me realize and see the conclusion of this research and to those who helped me carry out this research.

ACKNOWLEDGEMENT

I am sincerely grateful to God for the gift of serenity throughout my studies from the beginning of the course to its completion.

To my academic Supervisor, Dr. Duncan Elly Ochieng for his great contribution and support offered that enabled this research project to take its present form, without his guidance and persistent help, this research would not have been successfully completed.

I must admit humbly that the success of this research has been largely due to collaborative efforts and devotion of many people to who I owe a lot of gratitude.

Thank you to you all.

ABSTRACT

The lack of key financial information has been found to cause people to prepare inadequately for retirement. Financial literacy enables individuals to plan for retirement, make proper choices on pension products and contribute effectively in management of their pension schemes. The objective of this study was to determine the effect of financial literacy on voluntary retirement planning among employees of state corporations under the Ministry of Health in Nairobi County, Kenya. This study adopted a descriptive study design and the target population consisted of all the 8,637 employees working in State Corporations under the Ministry of Health in Nairobi, Kenya. The sample size was 368 respondents proportionately distributed across different state corporations. The study used primary data collected using a questionnaire. Data collected was analyzed using descriptive measures of central tendency including means, percentages, frequencies correlation analysis and the multiple regression analysis. The study established that the respondents had no budget for all their expenditure as indicated by a mean of 2.35, do not have a record of their income with a mean of 2.87, and have no idea on total expenditure on their basic needs every month as indicated by a mean of 2.46. The study revealed that most respondents pay all bills on time before due date as supported by a mean of 2.83, respondents do not had enough savings for old age with a mean of 1.62 and had no other forms of retirement packages apart from pension with a mean of 2.28. Respondents were currently not contributing to a pension plan over and above the mandatory deductions made by their employer since the mean was 1.72. The study concludes that gender influences saving patterns for voluntary retirement among employees of state corporations under the Ministry of Health in Nairobi County, Kenya. Financial literacy was found to have a positive impact on voluntary retirement planning. However the results indicate that other factors such as income levels, age, marital status and level of education are also strongly related to voluntary retirement planning. The study recommends that organizations in Kenya should provide their employees with financial literacy programs as well as financial planning training sessions. The study further recommends that financial education be developed to focus on financial planning aspects such as basic savings, debts, insurance and pension. This study focused on the effect of financial literacy on voluntary retirement planning among employees of state corporations under the Ministry of Health in Nairobi County, Kenya. The study recommended that similar researches be replicated in other organizations and the results be compared so as to establish whether there is consistency on effect of financial literacy on voluntary retirement planning among respondents in various organizations. Future studies should cover other variables of financial literacy. Future scholars should also employ the use of both primary and secondary data in future studies.

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ABBREVIATIONS AND ACRONYMS

DFID	Department for International Development, United Kingdom
DNB	De Nederlandsche Bank
FinAccess	Financial Access
GoK	Government of Kenya
MFIs	Microfinance Institutions
NSSF	National Social Security Fund
OECD	Organization for Economic Cooperation and Development
SME	Small and Medium Enterprises
SPSS	Statistical Package for Social sciences
USA	United States of America

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Financial literacy has been found to affect the way individuals save and invest their resources. It also affects the choices of financial products individuals select and how they grow their wealth. Employed individuals have pension plans developed by their employers in which they contribute to create a fund towards retirement. However, following increased inflation and change in lifestyles, the statutory mandatory pension contributions have been found not to be adequate for an individuals’ old age. According to Sze (2008), money set aside for retirement makes up a major source of income for people who get into post employment age commonly known as retirement across the world. Knowledge possessed by these individuals on financial aspects is important as it enables the involved persons make prudent decisions on savings for retirement and how to use their financial resources at all times (Lusardi and Mitchell, 2011). It enables them in building good financial management habit and provides them an opportunity to confidently make prudent decisions regarding setting aside some funds towards their retirement (Agnew and Szykman, 2007).

This study was anchored on two theories: Life cycle hypothesis of savings developed by Modigiliani and Brumberg in 1954 and the Goal setting theory of motivation advanced by Locke in 1968. This school of thought explains how individuals make decision regarding their savings for retirement at different ages to secure a better life in retirement (Wolff, 1979). It will help establish a link on how individuals go about making decisions on voluntary pension savings (Lusardi, 1996). The Goal setting theory of motivation holds the belief that prudent decisions in setting targets at different ages lead to different results (Locke & Latham, 1990). The goals set by an individual regarding their retirement lifestyle will determine how well they develop plans to attain that lifestyle (Lunenburg, 2011).

According to Githui and Ngare (2014), urbanization and modernization levels in Kenya have seen people too engaged in different aspects with the aim or bettering their lifestyle leaving them limited time for others. Statistics indicate that saving for retirement has not been embraced by majority of people across the world including Kenya largely because of the poor saving culture besides insufficient policies to encourage individual savings for retirement. It was established that by the year 2010, 80 per cent of Kenyan work force lack any form of pension plan. Further it has been established that retirement benefits continue to diminish as medical costs continue to escalate with age which makes the situation worse for pensioners. The living standards of the retired population have further been worsened by higher inflation rates which erode the little retirement savings made during active working age. The Kenyan pension system has: National Social Security Fund (NSSF) as a mandatory contributory scheme for all working population; the Civil Service Pension Scheme; occupational retirement schemes that are managed privately; and Individual Retirement Pensions products offered by different financial institutions (Njuguna, 2010).

1.1.1 Financial Literacy

Several definitions have been advanced for financial literacy. For instance, according to Organization for Economic Cooperation and Development (OECD, 2005), knowledge on financial management is concerned with the amount of knowledge possessed by a population on financial products and services in relation to how individuals manage and grow their wealth (Lusardi & Mitchell, 2013). This knowledge influences their ability to make informed choices and decisions in cognizance of the risks and opportunities in order to know where they can seek help and better their financial wellbeing. Further, Worthington (2005) defines it as an individual's ability to make prudent decision on their use and management of money.

Knowledge on financial issues concerns individuals' capability to make prudent decisions on financial options at their disposal like the ability to make a comparison among differing investment opportunities to ensure their financial position is better off. To be in this position, one can wisely spend their financial resources through preparation of budgets which help in tracking expenditure (Lusardi and Mitchell, 2011).

1.1.2 Voluntary Retirement Planning

The process of determining how much an individual would need at retirement as income to sustain projected lifestyle is the retirement planning (The American Association of Retired Persons, 2013). It involves identification of how an individual sources their income, thorough estimating of individual current expenses, and prudent management of financial resources. Planning for retirement has been described as a comprehensive process that offers choices and challenges that helps individuals to identify the appropriate standards during retirement (Klapper and Panos, 2011). It helps them in developing internal and external support systems that replace those that will disappear when one stops working or moves into retirement and it creates awareness of alternative paths of actions or options for decision making while planning for retirement.

Irrespective of how well the employees may plan for their retirement there are several factors that can threaten or affect their retirement plans (Lusardi & Mitchell, 2011). The major factors enumerated were financial constraints due to high inflation, there were also too many financial obligations which they faced such as bringing up of children and their education, the high cost of living and the paying of debts such as loans and mortgages. The employees also feared losing their jobs or being retrenched and also not being able to raise the capital required for the ventures they may have planned (Sze, 2008). However these factors were seemed to be more of challenges rather than obstacles.

Delays in planning for retirement is very expensive and can be a great burden in the later years in life trying to make up for lost time. For one to ensure that the current lifestyle is to continue after retirement, one must be prepared to give up some of their income when they are still working (Subha & Priya, 2014). The perceived saving by delaying pension contributions piles into insignificance when compared with the reduction in an individual's pension fund value. It isn't really a saving at all but a significant loss. Even if one can't afford to pay much into a pension plan right now, the important thing is to make a start today. The sooner one starts, the less they will have to pay to fund the ideal retirement needs.

1.1.3 Financial Literacy and Voluntary Retirement Planning

Different scholars have established different stands on the relationship between financial literacy and voluntary retirement planning. For instance, Githui and Ngare (2014) established that an increase in the level of financial knowledge among a population leads to an improved level in their planning and setting aside financial towards their retirement lifestyles. However, the level of financial knowledge among a population differs with variables like an individual's income levels, age, their marital status and highest level of education attained. Better level of financial knowledge gives individuals confidence to set aside adequate financial resources to secure the desired lifestyle in their retirement (Agnew, Szykman, Utkus, & Young, 2007). The level of planning for desired lifestyle in retirement is influenced by an individual's Knowledge on investment and returns, state of the economy through inflation among other variables.

Nyamute and Monyoncho (2011) established that financial literacy among employees enable them understand the importance of different savings option at their disposal for lige after employment. Well knowledgeable employees set aside adequate funds to secure their desired lifestyle after active working period. The amounts saved have been found to increase as an individual nears retirement on realization that it is important to save for retirement. ad a better appreciation and application of the financial management practices.

1.1.4 State Corporations in the Ministry of Health, Kenya

State Corporations are entities owned and managed by the government and they are formed by the government to deliver goods and services that would be uneconomical for private sector to independently undertake or the private sector would charge huge sums of money to avail the services or goods to the citizenry. They are established to achieve different functions like ensuring that the market is balances, forestering social and political agendas of the Government, provide key services like education and health among others. There are approximately 125 state corporations in Kenya divided into eight broad functional categories based on the mandate and core functions; Financial Corporations, Commercial/ manufacturing Corporations, Regulatory Corporations, Public universities, Training and research Corporations, Service Corporations, Regional development authorities, Tertiary education and Training Corporations. The total number of State Corporations may have changed owing time lapse and creation of new ones (GoK, 2016).

State Corporations under the Ministry of Health have retirement benefits schemes in place for their employees. They operate schemes where both the employer and the employee contribute towards the pension schemes. Prior to 2010, most State Corporations operated defined benefit pension schemes where the retiring employee was accorded a factor of their salary immediately prior to retirement. This ensured that the retiree was in a position to cope with the changing cost of living as the pension was in line with the salary enjoyed immediately before retirement. However, following actuarial assessment on sustainability, defined benefit schemes in the public service were not sustainable hence The National Treasury vide circular No. 18/2010 of November 24, 2010 instructed that all defined benefit schemes to be converted to defined contribution schemes (GoK, 2016). This meant that the retirement benefits are only paid from amounts contributed. However, with high inflation which reduces the purchasing power of money, the cumulative contributions are consumed by inflation. In order to influence employees to save more towards their retirement, they need to have knowledge on financial aspects.

1.2 Research Problem

Access to financial management skills and general education programs is part of many challenges encountered by individuals in their quest to improve their level of knowledge on saving for retirement lifestyle (Zick, Smith and Mayer (2016). The amount of Knowledge held by individuals on financial dynamics helps them build their financial management skills which then gives them confidence to make prudent financial decisions on how to secure the desired lifestyle in retirement (Mwangi & Kihiu, 2012). It helps in equipping employees with relevant information on how to make prudent financial management decisions for the growth of their wealth. Financial management skills enable them plan in advance for their retirement lifestyle. The lack of key financial information has also been found to be inversely related with individual employees' likelihood of setting aside some money over and above the statutory contributions for retirement lifestyle (Lusardi & Mitchell, 2006). The amount of knowledge possessed by employees in an organization especially on the financing of their retirement influences their saving behavior towards retirement (Njuguna & Otsola, 2011).

Employees of State Corporations contribute to retirement benefit schemes set up by their employers as a mandatory requirement as long as one is employed on permanent terms. The monthly contribution is a defined percentage of an employee's basic salary that goes towards retirement savings together with employer's contribution (Ade, 2013). Due to existing retirement plans set up by employers, the employees of state corporations do not pay keen interest on voluntary retirement plans and therefore the only savings that they take home are those contributed to mandatory and statutory retirement benefit schemes.

These savings have been found not to be adequate to sustain desired lifestyles after retirement (Mwangi & Kihiu, 2012). This has negatively affected the living standards of employees once they retire. Making voluntary retirement planning is a decision that individual employees would require to make based on his or her understanding of financial matters.

On the relationship between financial literacy and pension planning. For instance, Ade (2013) reviewed the effects of knowledge owned by employees on management of finances influences individual employees preparedness for retirement lifestyle among members of the informal sector in Kenya. This study sought to find out the effect of awareness and participation among unemployed members engaged in small and medium enterprise businesses. The finding indicate that the literacy level of members of the informal sector and finally seeking to find if there existed a relationship between financial literacy and pension preparedness among members of the informal sector. In another study, Zick et al. (2016) sought to establish whether individuals were making arrangement for their retirement lifestyle or were living a day at a time through the family history of Alzheimer's disease (AD). The findings indicated that Adults with parent having AD who comprised 86% were more likely to have seen a professional financial advisor.

Bengi and Njenje (2016) assessed how the financial factors like financial literacy and interest rates influenced the growth of microfinance institutions (MFIs) in Bahati Sub-county, Kenya. The findings indicate that higher levels of financial literacy leads to higher growth of MFIs; interest rates and growth of MFIs did not indicate any significant relationship. This study did not evaluate the relationship between financial literacy and voluntary pension contributions which is the focus of the current study. Nyamute and Monyoncho (2011) examined how knowledge on financial management and decision making especially with reference to personal financial management practices through a case study of employees among financial institutions. The findings indicate that knowledge possessed on financial management and decision making influences how individuals make decisions regarding setting aside some funds towards their retirement. Githui and Ngare (2014) examined how information and knowledge possessed on financial literacy and retirement planning in the informal sector in Kenya and established that financial literacy had a positive impact on retirement planning.

From the above review of previous studies, it is evident that the existing studies have concentrated on other aspects of financial literacy and not its effects on voluntary retirement planning. This study therefore sought to fill this gap in research by answering one research question: What are the effects of financial literacy on voluntary retirement planning among employees of state corporations under the Ministry of Health in Nairobi County, Kenya?

1.3 Research Objective

The objective of this study was to determine the effect of financial literacy on voluntary retirement planning among employees of state corporations under the Ministry of Health in Nairobi County, Kenya.

1.4 Value of the Study

This study would be important to a number of stakeholders including: future scholars and researchers in that it would act as an empirical source for their research studies besides suggesting areas for their studies.

The findings of this study would also be valuable to the Retirement Benefits Authority and the Government of Kenya especially The National Treasury in development of policies and regulations governing voluntary retirement plans in Kenya in order to encourage more individuals to top up their retirement plan contributions voluntarily.

The findings of this study would also be valuable to managers in State Corporations in making decisions relating to training employees on financial matters, investments and retirement planning. Through the findings of this study, the management in State Corporations would be able to develop and implement appropriate policies to improve voluntary retirement planning contributions among their staff.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents literature review as presented by previous scholars and researchers. It also discusses the theoretical underpinnings of the study, empirical review, summary and research gaps before presenting the conceptual framework.

2.2 Theoretical Review

There are a number of theories that explain financial literacy and retirement planning. These include: the Life Cycle Hypothesis of saving and the Goal setting theory of motivation. These theories are explained in details below:

2.2.1 The Life Cycle Hypothesis of Saving

This theory was developed by Modigliani and Brumberg in 1954 to explain the relationship between the propensity to consume and the propensity to save are at various stages of an individuals' life. It states that householders accumulate and decumulate their level of wealth in accordance to their age. According to them, the amount of savings and wealth accumulated is insignificant during the youth age before continuing to grow to a middle age peaking as they near retirement (Morris, Siegel, and Morris, 1995). Householders save either for precautionary purposes or to prepare themselves for retirement. Precautionary savings are usually triggered by labour income uncertainty faced by householders during their working periods (Lusardi, 1996). Savings for retirement, on the other hand, will result in income smoothing during the lifetime.

According to permanent income hypothesis, individuals need to maintain their current consumption pattern during their retirement. This requires them to put aside a proportion of their current income as savings. The hypothesis suggests that individuals are used to their current level of consumption and will try to smooth their pattern of consumption over their life-cycle (Morris et al., 1995). Thus, the wealth accumulation pace will be inverse U-shaped as younger individuals use a large amount of their income to finance repayment of their education, housing consumption and other costs to settle down. This then leaves them with the need to make up for lost time when they are in their midlife (Lusardi, 1996). The highest point of savings or wealth accumulation takes place most likely among individuals' in their forties and fifties. Later, individuals will use their stock of accumulated wealth during retirement years to maintain the lifestyle they were used to during their working years.

Savings inspired by the life-cycle motive are based on the practice of individuals to maximize their consumption lifetime utility rather than at any specific time period. Due to lifetime maximization, a rational consumer will consume at a stable rate that corresponds to their expected average consumption over their life-cycle. The rationale is that younger individuals are likely to face other high financial commitments such as house purchase and education loan payback. Thus they will save less or even engage in borrowing activities. Individuals of retirement age, on the other hand will start to consume their savings and wealth accumulated due to significant reduction in their income, since they are no longer in full-time employment (Lusardi, 1996). In order to match their former average consumption levels, they have to maximize their saving and wealth during their midlives. This concept is closely related to the hypothesis of habit formation or permanent income hypothesis which was long ago proposed by Duesenberry (1949). This theory explains how financial literacy affects retirement planning especially at different ages, gender, marital status and education Level.

2.2.2 The Goal Setting Theory of Motivation

This theory was advanced by Locke (1968) to help explain the role of goals in driving operations and ways things are done in an organization. Lunenburg (2011) argues that goal setting is a key theory behind motivation of employees at the work places. It beliefs that development of conscious goals increase the efforts developed by individuals and attainment of results (Lusardi, 2004). This theory is relevant in explaining how employees set their retirement goals and how these goals affect their saving plans to achieve the desired life style. This theory explains the variables of the study: time value of money, inflation and how they influence individuals to save if they are to live the desired lifestyle in future after they retire.

2.3 Determinants of Retirement savings

There are several factors that affect retirement savings among individuals from one country to another. Messy (2009) further argues that demographic information of employees play a key role in their savings towards retirement. Some of these variables include: highest level of education attained, job experience, gender, position in the organization, total income earned by the employee and marital status. This section discusses a number of determinants of retirement savings globally.

2.3.1 Financial Literacy

The amount of information possessed by individuals regarding their desired life in retirement and financial management determines their savings bahaviour. Knowledge on financial management enables employees in laying concrete plans on how to set aside some funds towards their retirement. It enables them in choosing the best investment option to be used for their retirement. (Njuguna and Otsola, 2011). Setting aside finances towards the desired lifestyle in retirement is not an normal saving as it demands that one postulates the kind of life they would want to live after which they start savings towards securing it (Messy, 2009).

Knowledge possessed by the employees on how interest rates function and their effect on the money supply and demand in an economy is important in informing the type of investment adopted by the employees. Knowledge on inflation which affects the purchasing power of a currency is crucial in individual employees planning for retirement. This is largely because of the erosion of the purchasing power of a currency as times passes by (Lusardi, 2006). This therefore means that employees have to take into account the prevailing changes in general prices and its effect on their savings. This would enable them achieve their desired future lifestyle (Landerretche & Martinez, 2011).

2.3.2 Disposable Income

The amount of money set aside towards individual's retirement plans depend on the total income earned by the individual (Lerman & Bell, 2006). Normally, savings is the different between total income and the overall expenses of an individual. Increases in disposable income means that individuals can have more left after meeting their consumption needs (Zissimopoulos, Karney & Rauer, 2008). This therefore means that they can have extra money to set aside towards their retirement planning.

2.3.3 Marital Status

The marital status of an individual influences their consumption and the disposable income which is left for normal savings and retirement savings (Bell et al, 2005). Married individuals have been found to contribute more towards their retirement schemes as compared to single employees. This is perhaps a consequence of the responsibilities they carry for their families which demands that they think of their future lifestyle (Forenseca, Mullen, Zamarro and Zissimopouulos, 2010).

2.3.4 Age

The age of an individual employee determined their desires in life and their ability to save towards retirement. At young ages, employees view retirement to be a farfetched idea whose time has not come. Whereas slightly older employees have come into reality with the fact that they are nearing retirement ages and need to do something to secure their life in retirement (Lusardi, 2011). As illustrated in the lifecycle theories, age is categorized into three distinct episodes: young, middle aged and old age. From past studies, employees have been found to borrow funds to finance their young life stages especially through loans which are repaid till the middle ages. This leaves them with little money to set aside for retirement as they are too much into debt (Agarwal, Driscoll, Gabaix, and Laibson, 2007).

Several scholars including (Lusardi (2011; Agarwal et al., 2007; Carroll, 1992; Caroll and Summers, 1989; Gourinchas and Parker, 2002) underscores the role played by age in financial literacy and savings for retirement. They explain how individuals go about saving for their retirement at different ages to secure the desired lifestyle in retirement.

2.3.5 Gender

Savings for retirement has been found to vary across gender. According to Andrade, Bazelais and Das (2014) different genders plan differently for their retirement. Men have been found to have an upper hand in financial management skills compared tyo their female counterparts. However, it has been found that women desire better life in retirement and so they set aside more funds to finance their lifestyles in retirement.

2.3.6 Race

According to a study by Andrade et al (2014), racial differences influence the savings culture of individual employees for retirement. The cultural upbringing determines how individual employees spend their money and how much is left for retirement schemes. The level of basic needs differ from one race to another which determines the savings culture.

2.4 Empirical Review

Several studies have been conducted on knowledge on financial management and how individuals plan for their desired lifestyle in retirement. A study by Boisclair, Lusardi, and Michaud (2014) on knowledge possessed by households on financial planning and how well they coordinated their retirement savings plan revealed that more knowledge on financial subjects positively influences the types of savings plan adopted by employees. The findings indicate that the amount of knowledge possessed by individuals on how interest rate functions and affects investment growth influences their investment options towards retirement. The study established further that the laws and policies in an economy determine the risk and how different investment portfolio performs across borders.

Agnew, Bateman and Thorp (2013) studied how knowledge on financial management and skills influence individuals' plans for retirement in Australia. The study adopted primary data which was collected using a questionnaire and interview guide. From the findings, it was clear that low knowledge on financial management and skills negatively influenced savings for retirement lifestyle. Further findings show that employees ability to compute future values of their contributions to a given pension scheme influenced their savings ability towards the same. Knowledge on financial management and skills promotes employees ability to compute the returns from different investment opportunities.

In another study, Lusardi and Mitchell (2011) sought to establish how knowledge on financial management and skills influence saving plans for individuals towards retirement in the United States. The study conducted interviews through telephone over 1,200 respondents. The study sought to establish how individuals went about formulating their financial decisions and how these financial decisions affected their wealth growth. The study looked at how individuals spend their money on a day to day basis and how this expenditure influenced their savings ability for the future in retirement considering the fact that savings is the difference between disposable income and consumption. The finding show that low levels of knowledge on financial management and skills influence led to low savings for retirement among the employees.

Rooij et al. (2011) sought to establish the effects of knowledge on financial management and skills and planning for retirement among households. The study used a questionnaire on 1091 households. On financial literacy, the survey asked the respondents how well they understood the computation of compound interest, the level of interpretation of general changes in the prices in an economy, and over time. The findings show that knowledge on financial management and skills promote the individuals chances of setting aside some finances towards their retirement.

Lusardi and Mitchell (2007) examined knowledge on financial management and skills influence and its effects on how individuals save towards the desire lifestyle in retirement. The study made use of data from the Rand American Life Panel. The study evaluated how knowledge on financial management and skills influenced employees' savings towards their pension in prime time of their employment. It was established that employees with better knowledge on financial management and skills saved more resources towards securing their desired lifestyle in retirement compared to their colleagues with limited knowledge on financial management and skills.

Locally, Nguya (2015) conducted an evaluation of the relationship between knowledge on financial management and skills influence and how individuals go about planning for their retirement among commercial banks in Kapsabet, Kenya. The study applied a survey questionnaire to collect primary data among commercial banks employees' knowledge on financial management and skills and the evaluation of their behavior towards the different components of personal financial planning (budgeting and tax planning, credit and cash management, purchasing decisions, risk management and insurance, investment management, and retirement and estate planning). The study findings established that employees of commercial banks in Kapsabet have a high level of financial literacy and a good evaluation of personal financial planning. The study further established that the fact that employees of commercial banks are highly financially literate does not have a significant impact on their personal financial planning.

Onduko, Gweyi and Nyawira (2015) sought to find out key determinants of retirement saving bahaviour among Kenyans using a case of pension schemes in the capital city of Kenya- Nairobi. The study collected primary data which was analyzed using various analytical models including T-test, and analysis for variance (ANOVA). The findings indicated that the level of employees' savings for pension among commercial banks in Kenya improved with their income. As their incomes increased, their savings also increased meaning that there was a linear relationship between disposable income and the amount set aside towards retirement planning.

Githui and Ngare (2014) examined knowledge on financial management and skills influence and Planning for life after retirement among unemployed business individuals. The study used primary date collected through questionnaires. Key variables included in the study varied from age, marital status, number of children, type of occupation, income level and education level (Lusardi and Mitchell, 2011). The findings indicate that knowledge on financial management and skills influence positively individual employees plans to set aside funds towards their retirement lifestyle.

Wachira and Kihiu (2012) sought to know how knowledge on financial management and skills influenced individual decision to set aside some finances towards retirement. It applied a multinomial logit approach to show how access to knowledge on financial management influenced savings decision. The findings indicated that improvement in the knowledge on financial management and skills led to higher savings for retirement.

2.5 Conceptual Framework

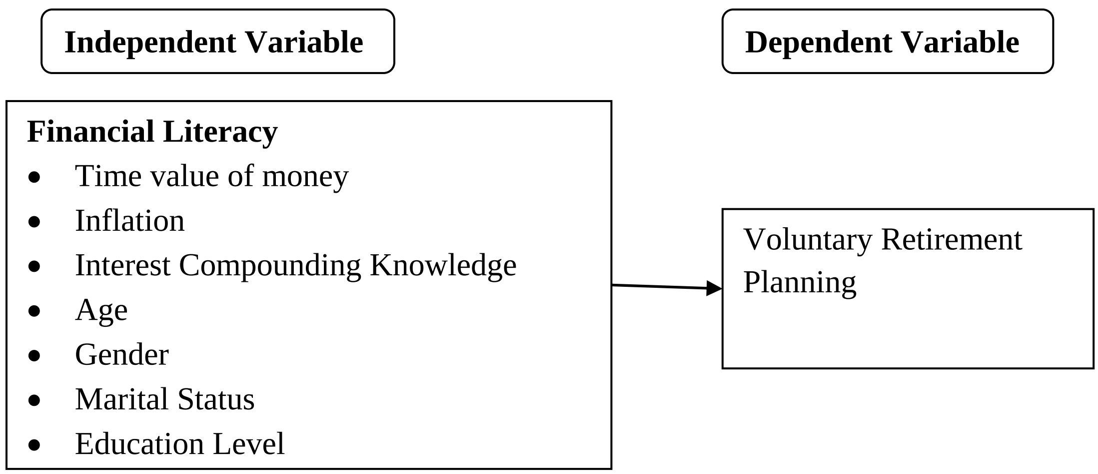

Figure 2.1: Conceptual Framework

The independent variable of this study is financial literacy which has been operationalized in the form of time value of money, inflation, and interest compounding knowledge, age of the individual, gender, marital status, and educational level. The dependent variable is voluntary retirement planning which will be measured by an individual’s contribution to a pension plan over and above the mandatory deductions by employer. These were measures recommended by Lusardi and Mitchell (2007).

2.6 Summary of the Existing Literature

Review of empirical literature above indicate that a number of studies have been conducted on knowledge on financial management and skills and planning for retirement. Internationally, Boisclair et al. (2014); Agnew et al. (2013); Lusardi and Mitchell (2011); Rooij et al. (2011) and Lusardi (2007) examined several aspects of financial literacy and retirement planning. However, their findings may be difficult to apply in the current study settings due to different macroeconomic settings and contexts adopted. Locally, Nguya (2015) conducted an evaluation of the relationship between financial literacy and personal financial planning using a case study of commercial banks employees in Kapsabet, Kenya. Onduko, Gweyi and Nyawira (2015) conducted an Analysis of the determinants on Retirement Planning in Kenya: A Survey of registered pension schemes in Nairobi. Githui and Ngare (2014) examined knowledge on financial management and skills and planning for lifestyle in retirement in the Informal Sector in Kenya. Wachira and Kihiu (2012) examined the impact of financial literacy on access to financial services in Kenya using the 2009 National Financial Access (FinAccess) survey data. These studies concentrated on other aspects of retirement planning leaving out the aspect of voluntary pension planning.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter covers research design, target population, sample size, data collection and data analysis.

3.2 Research Design

This study adopted a descriptive study design because it sought to detail the profile of respondents, their demographic information and how all these influenced their savings towards securing a desired lifestyle in retirement. This study chose descriptive design because it sought to explain the effect of financial literacy on voluntary retirement planning among employees of state corporations under the Ministry of Health, Kenya.

3.3 Population of the Study

The target population of this study consisted of all the 8,637 employees working in State Corporations under the Ministry of Health in Nairobi, Kenya as shown in the Table 3.1 below.

Table 3.1: Population of the Study

No.	State Corporation	No. of Employees
1.	Kenyatta National Hospital	4,612
2.	Kenya Medical Training College	306
3.	National Hospital Insurance Fund	1,701
4.	Kenya Medical Research Institute	1,205
5.	Kenya Medical Supplies Authority	633
6.	Radiation Protection Board	26
7.	Medical Practitioners & Dentist Board	21
8.	National Aids Control Council	133
Total		**8,637**

3.4 Sample Size

A sample is a proportion of the target population selected to represent the population. Following the high level of homogeneity among the target population clusters, the study selected a sample proportion in accordance to the Krejcie and Morgan (1970) table shown in Appendix I. The sample size was 368 respondents proportionately distributed across different state corporations under the Ministry of Health, Kenya. The sample was distributed as shown in the Table 3.2 below:

Table 3.2: Sample Size Distribution

No.	**State Corporation**	**No. of employees**	**Proportion (%)**	**Sample Size**
1.	Kenyatta National Hospital	4,612	53.4	197
2.	Kenya Medical Training College	306	3.5	13
3.	National Hospital Insurance Fund	1,701	19.7	72
4.	Kenya Medical Research Institute	1.205	14.0	51
5.	Kenya Medical Supplies Authority	633	7.3	27
6.	Radiation Protection Board	26	0.3	1
7.	Medical Practitioner & Dentist Board	21	0.2	1
8	National Aids Control Council	133	1.5	6
Total		**8,637**	**100.0**	**368**

3.5 Data Collection

The study used primary data collected using a questionnaire which used a five point Likert scale on the parameters of each variable. The study applied simple random sampling technique to select respondents to participate in the study.

3.6 Data Reliability and Validity

The researcher selected a pilot group of about 10 respondents so as to test the research instrument reliability. The aim of this pilot test was to correct any identified inconsistencies that arise as a result of the designed research instruments. The study compared the computed Cronbach Alpha values to the set minimum Cronbach Alpha minimum coefficients for determining the validity and reliability of the research instrument.

3.7 Data Analysis

Data collected was analyzed means, percentages, frequencies and the multiple regression analysis. The analysis was done at 0.05 level of significance. The study applied the following multiple regression model.

$$\mathbf{Y= \beta_0+ \beta_1(FL)_1+\beta_2(AGE)_2+\beta_3(Gdr)_3+\beta_4(MRS)_4 +\beta_5(ED)_5+€}$$

Y = Voluntary Retirement Planning

FL = Financial literacy

AGE = Age

GDR = Gender

MRS = Marital Status

ED = Education Level

ε = Error term/Erroneous variables

β_0 = the change in Y when the rest of the variables are held at a constant zero

β = measure of the rate of change i.e. β_1 measures the rate of change in Y as a result of a unit change in X_1.

3.7.1 Inferential Statistics

In order to test the significance of the model in measuring the relationship between financial planning and voluntary retirement planning, this study conducted an Analysis of Variance (ANOVA). The findings were tested at 95% confidence level and 5% significant level.

3.7.2 Operationalization of Study Variables

Table 3.3: Operationalization of the study Variables

Variable	**Measure**	**Question number**
Dependent		
Voluntary Retirement Planning	Adequacy of savings for retirement	11
Independent		
Time value of money	Ability to answer question correctly	8
Inflation	Ability to answer question correctly	10
Interest Compounding	Ability to answer question correctly	9
Age	Number of years since birth	3
Marital Status	Married = 1, Single = 2 Widowed = 3	5
Education Level	Highest level of education attained	6
Gender	Male = 1, Female = 2	4

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This chapter presents the results and findings of the study based on the research objectives. The study sought to determine the effect of financial literacy on voluntary retirement planning among employees of state corporations under the Ministry of Health in Nairobi County, Kenya.

4.1.1 Response Rate

The sample was 368 out of whom 264 responded giving a response rate of 72%. This response was good enough and representative as it tallies with what previous scholars like Mugenda and Mugenda (2003) give a threshold for generalizing the findings to the entire population of interest.

4.1.2 Data Reliability and Validity

The results of Cronbach's alpha were above 0.7 implying that the instruments were sufficiently reliable for the measurement.

Table 4.1: Data Reliability and Validity

Variable	Cronbach's alpha	No of items
Financial Literacy	0.717	14

Table 4.1 above indicates the factors affecting voluntary retirement planning. From the findings, financial literacy $\alpha=0.717$. This implies that all the scale was reliable as the reliability value; 0.717 exceeded the prescribed threshold of 0.7.

4.2 General Information

Findings on general information of respondents are shown below:

4.2.1 Number of Years Working with the Institution

Findings on period worked with their respective institution is shown in Table 4.2 below.

Table 4.2: Number of Years Working with the Institution

	Frequency	Percent
Below 3 years	23	8.7
4-6 years	113	42.8
7-10 years	88	33.3
More than 10 years	40	15.2
Total	**264**	**100.0**

From the finding, 8.7% of the respondents had been working in their respective institution for a period below 3 years, 42.8% for a period between 4-6 years, 33.3% for a period between 7-10 years and 15.2% for a period of more than 10 years. This shows that the respondents had been working in their respective institutions long enough thus had clear understanding on knowledge on financial management and skills and voluntary planning for lifestyle desired in retirement and thus provided relevant and reliable information.

4.2.2 Age Bracket

Findings on age distribution are shown in table 4.3 below.

Table 4. 3: Age Bracket

	Frequency	Percent
Below 25 years	34	12.9
26-35 years	113	42.8
36-45 years	71	26.9
46-55 years	21	8.0
More than 55 years	25	9.5
Total	**264**	**100.0**

As indicated in table 4.3 above, 12.9% of the respondents were below 25 years, 42.8% were between 26-35 years, 26.9% were between 36-45 years, 8% were between 46-55 years and 9.5% were more than 55 years. This shows that all relevant age groups were covered in the study.

4.2.3 Gender Distribution

Data on gender distribution is shown in Figure 4.1 below.

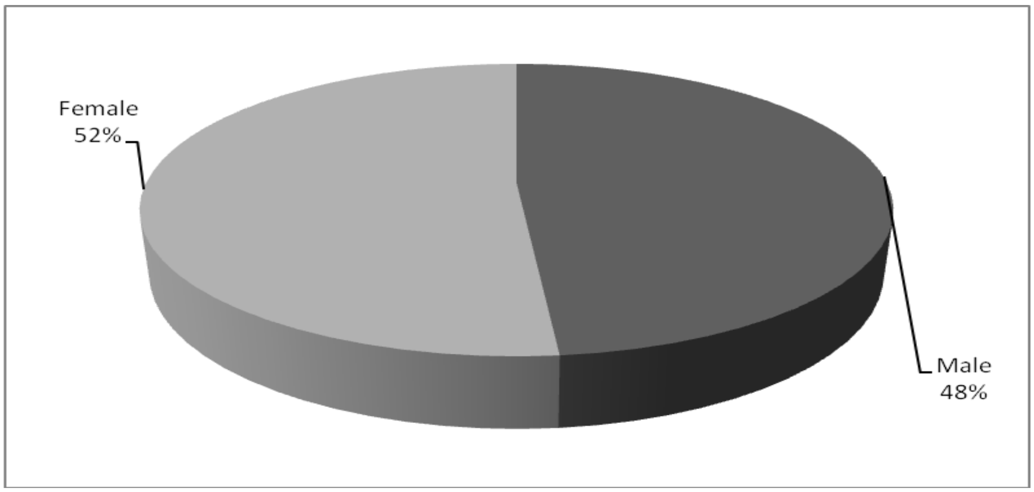

Figure 4.1: Gender Distribution

From the finding, 52% of the respondents were females while 48% were male. This shows that all gender were included thus provide a good representation for the study.

4.2.4 Marital Status

Findings on marital status of respondents are shown in Table 4.4 below.

Table 4.4: Marital Status

	Frequency	Percent
Single	37	14.0
Married	203	76.9
Widowed	20	7.6
Separated / divorced	4	1.5
Total	**264**	**100.0**

As indicated in Table 4.4 above, 14% of the respondents were single, 76.9% were married, 7.6% were widowed and 1.4% were separated / divorced.

4.2.5 Highest Level of Education

The respondents were requested to indicate their highest level of education attained. The finding is presented in Table 4.5 below.

Table 4.5: Highest Level of Education

	Frequency	Percent
Certificate	31	11.7
Diploma	86	32.6
Degree	84	31.8
Masters	63	23.9
Total	**264**	**100.0**

As shown in Table 4.5 above, 11.7% of the respondents indicated that they had attained certificate level in their education, 32.6% indicated diploma level, 31.8% indicated degree level and 23.9% indicated master's level. This implies that the respondents had reasonable knowledge on knowledge on financial management and skills and voluntarily setting aside some funds for retirement planning to effectively and efficiently address the question and provided the relevant responses for the study.

4.2.6 Financial Dependents

The respondents were required to indicate the number of children under the age of 18 they are currently supporting. The finding is shown in Table 4.6 below.

Table 4.6: Financial Dependents

	Frequency	Percent
Below 2	63	23.9
3-5	158	59.8
6-8	19	7.2
Above 8	24	9.1
Total	**264**	**100.0**

From the finding, 23.9% indicated that they support less than 2 children, 59.8% support 3-5 children, 7.2% support 6-8 children and 9.1% support over 8 children. The findings indicate that majority of the respondents (59.8%) have a relatively lower number of financial dependents which implies lower consumption among the respondents and therefore more funds available for saving for retirement planning.

4.3 Financial Literacy

Findings on various statements on financial literacy are shown in Table 4.7 below.

Table 4.7: Financial Literacy

	Mean	**Std. Dev**
I save more than 30% of my salary	1.28	0.45
I have adequate knowledge of price changes on cost of living	1.76	0.88
I have taken insurance covers for my family	2.3	1.364
I have a budget for all my expenditure	2.35	1.061
I always find myself not having money to sustain me until the next income	2.37	1.441
I make my expenditures as per the budget	2.42	0.956
I have taken insurance covers for my property	2.45	1.321
I have an idea on my total expenditure on basic needs every month	2.46	1.37
I often borrow money to settle outstanding bills	2.49	1.527
I pay all my bills on time before due date	2.83	1.157
I have a record of all my income(s)	2.87	1.126
I am confident that the savings I am making are enough for my retirement	3.52	1.405
I have checked my credit report in the last two years	3.59	1.14

From the findings in Table 4.7 above, as to whether the respondents have a budget for all their expenditure had a mean of 2.35 with a standard deviation of 1.061. Regarding whether respondents make expenditures as per the budget had a mean of 2.42 with a standard deviation of 0.956. This indicates that respondents disagreed with the two statements. The findings imply that respondents do not plan on their income and expenses.

As to whether the respondents have a record of all income had a mean of 2.87 with a standard deviation of 1.126. This means that respondents neither agreed nor disagreed with the statement. On whether respondents have an idea on total expenditure on basic needs every month had a mean of 2.46 with a standard deviation of 1.370. This also implies that respondents were neutral with the statement. This finding implies that most respondents have some form of record of their income but do not keep track of their expenditure in order to establish their monthly expenditure on their basic needs. This finding supports the finding that respondents in this study do not have a budget and equally do not expend as per their budget.

As to whether respondents have adequate knowledge of price changes on cost of living had a mean of 1.76 with a standard deviation of 0.880. This indicates that respondents disagreed with statement. In respect to whether respondents save more than 30% of their salary had a mean of 1.28 with a standard deviation of 0.450. This means that respondents strongly disagreed with statement. These findings indicate that respondents lack knowledge on key financial aspects like effect of price changes on their cost of living, retirement planning and savings. Further, the findings imply that failure to understand the said financial aspects would negatively influence the respondents' participation in voluntary retirement planning.

Pertaining whether respondents are confident that the savings made are enough for retirement had a mean of 3.52 with a standard deviation of 1.405. This indicates that respondents agreed on the statement. This finding implies that respondents were satisfied with the savings made through pension contribution to the schemes set up by their employers. Further, the finding implies that the respondents are less likely to voluntarily contribute to pension plans over and above that set up by their employers.

As to whether respondents pay all bills on time before due date had a mean of 2.83 with a standard deviation of 1.157. This indicates that respondents were neutral on the statement. Regarding whether respondents always find not having money to sustain them until the next income had a mean of 2.37 with a standard deviation of 1.441. This indicates that respondents disagreed with the statement. On whether respondents often borrow money to settle outstanding bills had a mean of 2.49 with a standard deviation of 1.547. This implies that the participants neither agreed nor disagreed with the statement. These findings imply that most respondents are able to meet their obligations before due date and their monthly income sustains their expenditure till the next income. Further, these findings indicate that some respondents borrow to settle outstanding obligations and therefore an indication that the respondents may not be able to make savings to voluntary retirement plans.

In respect to whether respondents checked credit report in the last two years had a mean of 3.59 with a standard deviation of 1.140. This is an indication that respondents agreed with the statement. This implies that respondents are conscious about their debt obligations

As to whether respondents have taken insurance covers for their family had a mean of 2.30 with a standard deviation of 1.364. This implies that respondents disagreed with the statement. On whether respondents have taken insurance covers for property had a mean of 2.45 with a standard deviation of 1.321. This implies that respondents neither agreed nor disagreed on the statement. These findings suggest that respondents have not insured themselves against unforeseen risks.

4.4 Voluntary Retirement Planning

Findings on voluntary retirement planning are shown on Table 4.8 below.

Table 4.8: Voluntary Retirement Planning

	Mean	Std. Dev
I have enough savings for my old age	1.62	1.050
I am currently contributing to a pension plan over and above the mandatory deductions made by my employer	1.72	1.072
I have other forms of retirement packages apart from pension	2.28	1.487

As shown in Table 4.8 above, as to whether respondents had enough savings for old age the mean was 1.62 with a standard deviation of 1.050. This shows that the respondents disagreed as the mean lies between 1.5 to 2.4. Regarding whether respondents are currently contributing to a pension plan over and above the mandatory deductions made by employer had a mean of 1.72 with a standard deviation of 1.072. In respect to whether respondents have other forms of retirement packages apart from pension had a mean of 2.28 with a standard deviation of 1.487. This indicates that respondents disagreed on the three statements. These findings imply that respondents do not have voluntary retirement plans and therefore only rely on the mandatory pension savings to sustain their life after retirement.

4.5 Correlation Analysis

The study conducted correlation analysis to establish the strength of the relationship between financial literacy and voluntary retirement planning as shown in the Table 4.9 below:

Table 4. 9: Correlation Analysis

		Voluntary Retirement Planning	Financial Literacy	Age	Gender	Marital Status	Education Level
Voluntary Retirement Planning	Pearson Correlation	1					
	Sig. (2-tailed)						
	N	264					
Financial Literacy	Pearson Correlation	.583	1				
	Sig. (2-tailed)	.0179					
	N	264	264				
Age	Pearson Correlation	.065	-.082	1			
	Sig. (2-tailed)	.291	.187				
	N	264	264	264			
Gender	Pearson Correlation	.597	.103	-.043	1		
	Sig. (2-tailed)	.000	.096	.483			
	N	264	264	264	264		
Marital Status	Pearson Correlation	-.109	-.002	-.005	-.049	1	
	Sig. (2-tailed)	.078	.980	.937	.432		
	N	264	264	264	264	264	
Education Level	Pearson Correlation	.602	.071	.200	.179	.074	1
	Sig. (2-tailed)	.007	.247	.001	.004	.230	
	N	264	264	264	264	264	264

The findings from Table 4.9 above indicate that a strong positive significant correlation exists between financial literacy and voluntary retirement planning (r = .0.583, n = 264, p = .0179). This implies that an increase in financial literacy enhances the ability of the respondents to increase their voluntary retirement planning. The findings are consistent with Agnew, Bateman and Thorp (2013) who studied financial literacy and retirement planning in Australia using a measure that includes questions requiring numeracy. It was noted that it was difficult for individuals to make effective financial decisions if they were unable to apply basic mathematical calculations to their situation and established that there was a positive relationship between financial literacy and retirement planning. Consistent findings were also established by Onduko, Gweyi and Nyawira (2015) who conducted an Analysis of the determinants on Retirement Planning in Kenya and found out that the financially literacy was a major determinant for members of pension schemes largely because financial literacy has an effect on both savings and portfolio choice.

The findings in Table 4.8 above also reveal that there is a strong, positive correlation between gender and voluntary retirement planning, which was statistically significant (r = .0.597, n = 264, p = .000). This implies that the gender of the respondents affects voluntary retirement planning. The findings concur with Andrade, Bazelais and Das (2014) who established that gender determine the savings culture of employees.

Table 4.8 above further indicates that a strong, positive correlation between education level and voluntary retirement planning, which was statistically significant (r = .0.602, n = 264, p = .007). This implies that an improvement in education levels of the respondents enhances their financial literacy which increases the level of their voluntary retirement planning. The findings concur with Hastings et al. (2011) argues that individuals have different affinity to save for retirement among employees.

Furthermore, weak insignificant positive correlation exists between age and voluntary retirement planning (r = .0.065, n = 264, p = .291). Moreover, weak negative insignificant correlation exists between marital status and voluntary retirement planning (r = -109, n = 264, p = .0.078). These findings concur with Onduko, Gweyi and Nyawira

(2015) who established that knowledge on financial management and skills, income and a respondent's education level are a significant determinant of retirement planning. On the other hand, age and years a respondent has been married are not significant determinants of retirement planning.

4.6 Regression Analysis

The study conducted a multiple regression analysis to determine the effect of financial literacy on voluntary retirement planning among employees of state corporations under the Ministry of Health in Nairobi County, Kenya. The results are shown in the subsequent sections.

Table 4.10: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.848[a]	.719	.689	.03388

From the findings in Table 4.10 above, R was 0.848 meaning that there was a positive relationship between the independent variable and dependent variable. R^2 was 0.719 implying that 71.9% variation in voluntary retirement planning is explained by variations in financial literacy, age, gender, marital status and education level. This implies that the regression model has very good explanatory and predictor grounds.

Table 4.11: ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	4248.055	5	84.971	13.234	.000[b]
Residual	1656.505	258	6.421		
Total	**2081.360**	**263**			

From the findings on Table 4.11 above, the significance value is 0.000 which is less than 0.05 thus the model is statistically significant in predicting the effect of financial literacy on voluntary retirement planning. The F critical at 5% level of significance was 2.31.

Since F calculated (value = 13.234) is greater than the F critical (2.31) this shows that the overall model was significant.

Table 4.12: Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta		
(Constant)	3.948	1.293		3.053	.003
Financial Literacy	.035	.034	.057	1.009	.314
Age	.131	.144	.052	.911	.363
Gender	2.361	.319	.420	7.408	.000
Marital Status	-.542	.298	-.101	-1.816	.070
Education Level	-.521	.168	-.179	-3.097	.002

The established regression equation becomes;

$$\mathbf{Y = 3.948 + 0.35(FL) + 0.131(AGE) + 2.361(Gdr) - 0.542(MRS) - 0.521(ED) + \varepsilon}$$

Where: Y= voluntary retirement planning, FL= financial literacy, AGE= Age, Gdr= Gender, MRS= Marital Status, ED= Education Level and ε = Error Term.

From the findings in the regression analysis, if the factors (financial literacy, age, gender, marital status and education level) were held constant, voluntary retirement planning would be at 3.948. An increase in financial literacy would lead to an increase in voluntary retirement planning by 0.35. A change in age would lead to an increase in voluntary retirement planning by 0.131. A change in gender would lead to an increase in voluntary retirement planning by 2.361. A change in marital status would lead to a decrease in voluntary retirement planning by 0.542. A change in education level would lead to a decrease in voluntary retirement planning by 0.521.

4.7 Discussion of Findings

The findings of the study revealed that a strong positive significant correlation exists between financial literacy and voluntary retirement planning (r = .0.583, n = 264, p = .0179). This means that an improvement in financial literacy increases voluntary retirement planning. These findings are consistent with Lusardi and Mitchell (2006) who opine that knowledge on how to manage financial resources improves individual employees to set aside funds to secure the desired lifestyle. The findings also indicates that respondents had financial literacy which concurs with Nguya (2015) who conducted an evaluation of the relationship between knowledge on financial resource management.

The findings of the study further revealed that there is a strong, positive correlation between gender and voluntary retirement planning, which was statistically significant (r = .0.597, n = 264, p = .000). This means that there is a discrepancy in the knowledge on financial resource management among the males and females. The findings concur with Lusardi (2011), who held that savings for retirement schemes vary between male and female.

The study established that there is a strong, positive correlation between education level and voluntary retirement planning, which was statistically significant (r = .0.602, n = 264, p = .007). This means that when people are educated, their financial literacy is enhanced thus enhancing their voluntary retirement planning. This finding concurs with Bell et al (2005) who established that a higher knowledge improves individuals chances of saving finances for retirement lifestyle. Consistent results were also sought by

Onduko, Gweyi and Nyawira (2015) who conducted an Analysis of the determinants on Retirement Planning in Kenya and established that knowledge on financial resource management, income and a respondent’s education level.

The study found out that 71.9% variation in voluntary retirement planning is explained by variations in financial literacy, age, gender, marital status and education level. The findings concurs with Wachira and Kihiu (2012) who argues that background information of employees distinguish their culture and expenditure behavior which directly influences savings behavior.

The study also revealed that most respondents were confident that the savings they were making were enough for their retirement as supported by a mean of 3.52. This means that respondents had stroke a balance between consumption and saving. The finding concurs with the life cycle hypothesis theory by Modigliani and Brumberg in 1954 t which explain the relationship between the propensity to consume and the propensity to save are at various stages of an individuals' life. The study further revealed that respondents had checked their credit reports in the last two years as indicated by a mean of 3.59.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The chapter gives summary, conclusions and recommendations on the study objectives.

5.2 Summary of Findings

The findings of the study indicated that there was no budget for all their expenditure. The study revealed that respondents do not make expenditures as per the budget. This implies that no planning and setting of goals is done by the respondents. There is need to have proper goals set by the respondents that will enhance their retirement saving plans. This is in line with the goal setting theory by Locke (1968) which explains the role of goals in driving operations and ways things are done in an organization. This study further established that respondents have no record of all income and have no idea on total expenditure on their basic needs every month. The study also revealed that respondents do not pay all bills on time before due date, have no enough savings for old age and have inadequate knowledge of price changes on cost of living. Respondents do not save more than 30% of salary and a few of them had confident that the savings made are enough for retirement. The employees checked their credit report in the last two years; most of respondents always find themselves having money to sustain them until the next income and do not borrow money to settle outstanding bills. The study revealed that most respondents have not taken insurance covers for their families and property.

The studies also revealed that the respondents do not have enough savings for old age, had no other forms of retirement packages apart from pension and were currently not contributing to a pension plan over and above the mandatory deductions made by their employer. The findings concur with the life cycle hypothesis by Brumberg (1954). The savings accumulated then become the primary source of income during retirement as an individual's income would have dried up. The rationale is that younger individuals are likely to face other high financial commitments such as house purchase and education loan payback.

The studies revealed that majority of the employees do not make voluntary plans for their retirement. The respondents indicated that they have no other forms of retirement packages apart from pensions and they are not contributing to pension plan over and above the mandatory deductions set by their employer. These findings concur with the theory of equalizing differences by Rosen (1986).

The findings of the regression analysis revealed that statistically significant association exists between independent variables (gender, education level) and voluntary retirement planning. The findings further indicated a positive relationship between gender and voluntary retirement planning. This implies that an improvement in gender improves voluntary retirement planning. Education level on the other held indicated a negative relationship with voluntary retirement planning. Education is a source of knowledge that improves the financial literacy of the respondents. This findings is consistent with Lusardi and Mitchell (2006) who held that knowledge on financial resource management influences the decisions made by employees to set aside finances towards retirement planning.

From correlation analysis, it was established that statistically significant association exists between (financial literacy, gender, education level) and voluntary retirement planning. The findings further indicated strong, significant and positive correlation between (financial literacy, gender, education level) and voluntary retirement planning. It therefore implies that financial literacy affects voluntary retirement planning. The finding concurs with Landerretche and Martinez (2011) who held that knowledge on financial resource management influences personal savings behavior and how they streamline their consumption.

5.3 Conclusions

The study concludes that gender influences saving patterns for voluntary retirement planning among employees of state corporations under the Ministry of Health in Nairobi County, Kenya. The contested role of gender on investment and saving decisions of households shows that women save better than men.

Financial literacy was also established to influence the level of voluntary retirement planning among the employees. They are able to make key decisions that involve money in such a way that there is minimal risk to them. Those who have low levels of literacy will have to rely on other sources like the media, employers, friends and relatives.

The study concludes that knowledge on financial resource management remains low in Kenya. Financial literacy was found to have a positive impact on voluntary retirement planning, however the results indicate that other factors such as income levels, age, marital status and level of education are also strongly related to retirement planning.

Since financial literacy affects voluntary retirement planning, there is need for employees of state corporations to ensure that proper goals are set regarding their consumption and saving habits. An ability to strike a balance between consumption and saving among employees of State Corporation is supported by the life cycle hypothesis of saving Modigliani and Brumberg in 1954. The theory explains the relationship between the propensity to consume and the propensity to save are at various stages of an individuals' life.

From the findings above, the study developed a new conceptual framework as shown in the Figure 5.1 below:

5.3.1 Revised Conceptual Framework

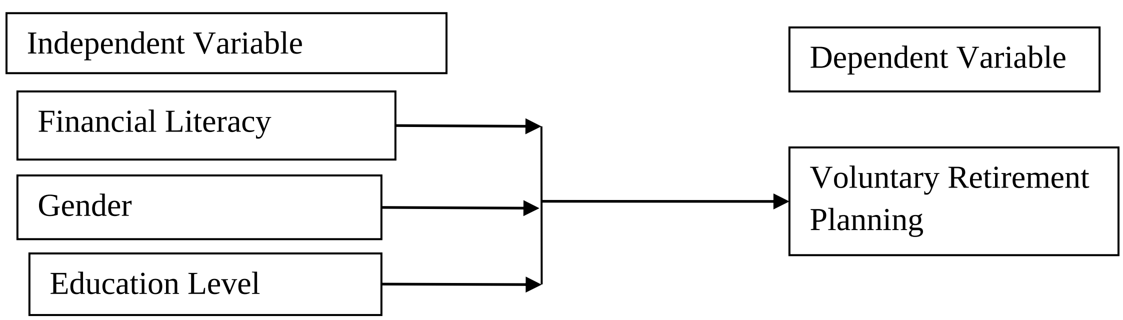

Figure 5.1: Revised Conceptual Framework

5.4 Recommendations

From the findings, it's recommended that financial literacy programs and workshops be offered and conducted in public institutions and comprehensive information on saving and specifically on retirement be emphasized.

To boost the voluntary retirement planning process, the eventuality of retirement should be made obvious for all the employees in the Kenyan economy so as to influence peoples' attitude and receptiveness to the process.

The study further recommends that financial education programs should be developed to focus particularly on important financial planning aspects in employees, such as basic savings, debt, insurance and pensions. Programs should be oriented towards financial literacy capacity building.

The study further recommends that education on retirement savings be introduced earlier in study curriculum to ensure that those who don't make to college and university level also acquire the knowledge.

5.5 Limitations of the Study

Some respondents felt that revealing information that shows inadequacies in their personal financial management aspect can be embarrassing especially where they are not assured of confidentiality hence some respondents were biased and dishonest in their answers.

The study also concentrated on five independent variables: financial literacy, age, gender, and marital status and education levels. These variables guided the analysis and conclusions. The study did not include other control and intervening variables like government regulations and disposable income.

5.6 Suggestion for Further Studies

This study focused on the effect of financial literacy on voluntary retirement planning among employees of state corporations under the Ministry of Health in Nairobi County, Kenya. It is therefore recommended that similar researches should be replicated in other organizations and the results be compared so as to establish whether there is consistency on effect of knowledge on financial resource management on planning for retirement among respondents. Future studies should cover other variables of financial literacy. Future scholars should also employ the use of both primary and secondary data in their studies.

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APPENDICES

APPENDIX I: QUESTIONNAIRE

Please take a few minutes to respond to the questions below. The information you provide will be treated with strict confidentiality.

1. Name of the state corporation you work for (Optional)

   ____

2. Number of years you have worked with this institution

   Below 3 years [ ] 4-6 years [ ] 7-10 years [ ]

   More than 10 years [ ]

3. In what age bracket are you now?

   Below 25 years [ ] 26-35 years [ ] 36-45 years [ ]

   46-55 years [ ] More than 55 years [ ]

4. Please indicate your gender?

   Male [ ] Female [ ]

5. Please indicate your marital status

   Single [ ] Married [ ]

   Widowed [ ] Separated / divorced [ ]

   Don’t know [ ] Other [ ]

6. Please indicate the highest level of education you have attained.

   Secondary [ ] Certificate [ ] Diploma [ ]

   Degree [ ] Masters [ ] PhD [ ]

7. Kindly indicate the number of children under the age of 18 you are currently supporting.

   Below 2 [ ] 3-5 [ ] 6-8 [ ] Above 8 [ ]

SECTION B: FINANCIAL LITERACY

Kindly indicate the extent to which you agree with the following statements. Use a scale of 1-5 where 1= strongly disagree, 2= Disagree, 3= Neither agree nor disagree, 4= Agree, and 5 = Strongly Agree

	1	2	3	4	5
I have a budget for all my expenditure					
I make my expenditures as per the budget					
I have a record of all my income(s)					
I have an idea on my total expenditure on basic needs every month					
I pay all my bills on time before due date					
I have enough savings for my old age					
I have adequate knowledge of price changes on cost of living					
I save more than 30% of my salary					
I am confident that the savings I am making are enough for my retirement					
I have checked my credit report in the last two years					
I always find myself not having money to sustain me until the next income					
I often borrow money to settle outstanding bills					
I have taken insurance covers for my family					
I have taken insurance covers for my property					

8. Suppose you save Ksh. 1000 money in a bank with an interest rate of 5% per year. How much do you think this will grow to if you left the money for five years?

   Less than 1050 [ ] Exactly 1050 [ ]

   More than 1050 [ ] I do not know [ ]

9. Now suppose in question 9 above, the interest rate was 5% per year while inflation was 10% per year. After 1 year, how much would you be able to buy with the money in this account?

   More than today [ ] Exactly the same [ ]

   Less than today [ ] I do not know [ ]

10. Suppose you win a lottery of Ksh 10,000 today while your friend Mutiso wins Ksh10,000 a year after. Who is richer because of the betting?

   You [ ] We are equally rich [ ]

   Mutiso [ ] Do not know [ ]

SECTION C: VOLUNTARY RETIREMENT PLANNING

11. Kindly indicate the extent to which you agree with the following statements. Use a scale of 1-5 where 1= strongly disagree, 2= Disagree, 3= Neither agree nor disagree, 4= Agree, and 5 = Strongly Agree

	1	2	3	4	5
I have enough savings for my old age					
I have other forms of retirement packages apart from pension					
I am currently contributing to a pension plan over and above the mandatory deductions made by my employer					

APPENDIX II: KREJCIE AND MORGAN TABLE

TABLE 1

Table for Determining Sample Size from a Given Population

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

Note.—*N* is population size.
S is sample size.

APPENDIX III: LIST OF STATE CORPORATIONS UNDER THE MINISTRY OF HEALTH IN KENYA

1. Kenyatta National Hospital,
2. Kenya Medical Training College,
3. National Hospital Insurance fund,
4. Moi Teaching and Referral Hospital, Eldoret;
5. Kenya Medical Research institute,
6. Kenya Medical Supplies Authority
7. Radiation protection board
8. Medical Practitioners and Dentist Board
9. National Aids and Control Cousel

Source: (Government Press, 2015).