

## **Effect of Financial Literacy on Voluntary Retirement Planning Among Employees of State Corporations Under the Ministry of Health in Nairobi County, Kenya**

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### **Abstract**

**Purpose** - 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.

**Methodology** – This study adopted a descriptive study design and uses primary data collected using a questionnaire with 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. Data is analysed using means, percentages and frequencies. Multiple regression analysis was used to test the relationship between financial literacy and voluntary retirement planning.

**Findings** – Financial literacy was found to influence the level of voluntary retirement planning among the employees since they are able to make key decisions that involve money in such a way that there is minimal risk to them. The study also established that financial literacy has 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.

**Implications** – 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. There is therefore need to develop financial education programs that focus particularly on important financial planning aspects for employees that will help them strike a balance between consumption and saving.

**Value** – The findings of this study would also be valuable to the Retirement Benefits Authority and the Government of Kenya in development of policies and regulations

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governing retirement plans in Kenya in order to encourage more individuals to top up their retirement plan contributions voluntarily.

***Key Words:*** *Financial Literacy, Voluntary Retirement Planning*

## **Introduction**

### **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 Modigliani 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 (Lunenburger, 2011).

According to Githui and Ngare (2014), urbanization and modernization levels in Kenya have seen people too engaged in different aspects with the aim of 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).

### **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).

### **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 off 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.

### **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 life 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, and a better appreciation and application of the financial management practices.

### **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 balanced, 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.

### **Research Objective**

The this 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.

## Methodology

### 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.

### 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 1 below.

**Table 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



<b>Total</b>	<b>8,637</b>
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### Sample Size

Due to 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 2 below:

**Table 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
<b>Total</b>		<b>8,637</b>	<b>100.0</b>	<b>368</b>

### 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.

### Data Reliability and Validity

A pilot group of about 10 respondents was selected 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 computed Cronbach Alpha values were compared to the set minimum Cronbach Alpha minimum coefficients for determining the validity and reliability of the research instrument.

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

### Data Analysis

Data collected was analyzed through 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.

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

Y = Voluntary Retirement Planning

FL = Financial literacy

AGE = Age

GDR = Gender

MRS = Marital Status

ED = Education Level

$\epsilon$  = Error term/Erroneous variables

$\beta_0$  = the change in Y when the rest of the variables are held at a constant zero

$\beta$  = measure of the rate of change i.e.  $\beta_1$  measures the rate of change in Y as a result of a unit change in  $X_1$ .

### 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.

### Operationalization of Study Variables

**Table 3: Operationalization of the study Variables**

Variable	Measure
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<b>Dependent</b>	
Voluntary Retirement Planning	Adequacy of savings for retirement
<b>Independent</b>	
Time value of money	Ability to answer question correctly
Inflation	Ability to answer question correctly
Interest Compounding	Ability to answer question correctly
Age	Number of years since birth
Marital Status	Married = 1, Single = 2 Widowed = 3
Education Level	Highest level of education attained
Gender	Male = 1, Female = 2

## Results and discussions

### General Information of respondents

Table four, five, six, seven, and eight together with figure one below presents the general information of respondents.

**Table 4: 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
<b>Total</b>	<b>264</b>	<b>100.0</b>

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

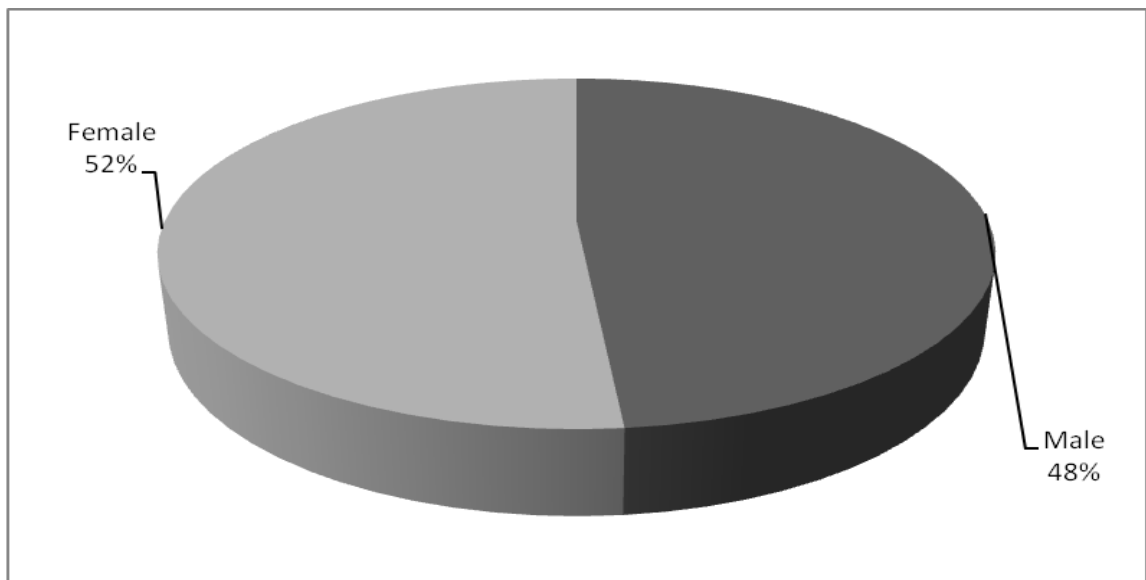
planning for lifestyle desired in retirement and thus provided relevant and reliable information.

**Table 5: Age Bracket**

	<b>Frequency</b>	<b>Percent</b>
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
<b>Total</b>	<b>264</b>	<b>100.0</b>

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.

**Figure 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.

**Table 6: Marital Status**

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

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.

**Table 7: Highest Level of Education**

	<b>Frequency</b>	<b>Percent</b>
Certificate	31	11.7
Diploma	86	32.6
Degree	84	31.8
Masters	63	23.9
<b>Total</b>	<b>264</b>	<b>100.0</b>

As shown in Table 7 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.

**Table 8: Financial Dependents**

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

The respondents were required to indicate the number of children under the age of 18 they are currently supporting. 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.

### Financial Literacy

Table nine presents the findings on various statements on financial literacy.

**Table 9: 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

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From the findings in Table nine 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.

### **Voluntary Retirement Planning**

Table ten presents the findings on voluntary retirement planning

**Table 10: Voluntary Retirement Planning**

	<b>Mean</b>	<b>Std. Dev</b>
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 10 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 and 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.

### **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 11 below:

**Table 11: 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 11 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 financial 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 11 above also reveal that there is a strong, positive correlation between gender and voluntary retirement planning, which was statistically significant ( $r = .0597, n = 264, p = .000$ ). This implies that the gender of the respondents affects voluntary retirement planning. The findings concur with Andrade, Bazalais 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 ( $r = .0602, n = 264, p = .007$ ). 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 ( $r = .0065, n = 264, p = .291$ ). Moreover, weak negative insignificant correlation exists between marital status and voluntary retirement planning ( $r = -.109, n = 264, p = .0078$ ). 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.

### 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 12: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.848 <sup>a</sup>	.719	.689	.03388

From the findings in Table 12 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 13: ANOVA**

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	4248.055	5	84.971	13.234	.000 <sup>b</sup>
Residual	1656.505	258	6.421		
<b>Total</b>	<b>2081.360</b>	<b>263</b>			

From the findings on Table 13 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 14: Coefficients**

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

The established regression equation becomes;

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

Where: Y= voluntary retirement planning, FL= financial literacy, AGE= Age, Gdr= Gender, MRS= Marital Status, ED= Education Level and  $\varepsilon$  = 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.

### 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 ( $r = .0597, n = 264, p = .000$ ). 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 ( $r = .0602, n = 264, p = .007$ ). 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 individual's 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 Kihui (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 struck a balance between consumption and saving. The finding concurs with the life cycle hypothesis theory by Modigliani and Brumberg in 1954 which explains the relationship between the propensity to consume and the propensity to save at various stages of an individual's 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.

### **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 not 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 confidence 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 study 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 study 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.

### **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.

### **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.

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