EFFECT OF FINANCIAL LITERACY ON FINANCIAL INDEPENDENCE AMONG RETIREES OF PUBLIC UNIVERSITIES IN WESTERN KENYA REGION.

BY

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DECLARATION

I declare that this work has never been submitted for award of a Master of Science in Finance in any other university.

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DEDICATION

This work is dedicated to my parents, Mr. Ernest Misuko and Mrs. Jane Onkware for ensuring that I got the best always. For your love, tireless efforts and sacrifices, I am forever indebted. A special dedication to my husband, Aloyce Manyura and children Godwin and Gabriella.

ABSTRACT

Financial Independence (FI) means an individual's capacity to control own finances, make decisions regarding money, support oneself financially through a job, savings, investments, or a combination of all three; without financial assistance from the government, family, friends, or credit card companies, supported by level of knowledge about how to manage finances to allow for competent decisions. Whereas the Pension schemes continue to improve investment opportunities for pension funds for retirees, it still remains unclear how pre and post retirement financial literacy programmes contribute to the retirees' Financial Independence. Financial Independence is measured by economic, psychological and family factors, in terms of income generation capacity of assets, money management efficiency, problem solving ability and socio-economic welfare. Existing literature points to Financial Literacy (FL); constituting skills, financial awareness, knowledge, attitude, financial awareness, and behaviours necessary to make sound financial decisions and ultimately achieve individual financial well-being as a significant determinant of Financial Independence. Retirees, especially from Universities remain a social focus in rural settings to offer opinions and guidance to socioeconomic and welfare progression. The purpose of this study was therefore to analyse the effect of financial literacy on financial independence among retirees from Public Universities in Western Kenya region. The specific objectives of the research were; to determine the association between financial literacy aspects and financial independence among retirees of public universities in Western Kenya Region, establish the effect of financial literacy on asset ownership among retirees of public universities in Western Kenya Region and to evaluate the contribution of financial literacy to savings adequacy among retirees of public universities in Western Kenya Region. The study adopted correlational research design, to allow for quantitative association and contribution of variables. The study area was Western Kenya Region with area coverage of 19,877.5km^2 and with six public universities. The study target population constituted approximately 160 retirees from the six Public Universities in Western Kenya for the years 2016 to 2020. Stratified Random sampling method was used to select sixty (60) respondents. The study was guided by the identity capital theory of financial independence and the continuity theory of retirement. Structured questionnaires were administered to collect information on financial literacy and financial independence. Validity and reliability of the questionnaire was established through pilot testing and Cronbach's alpha test respectively. ANOVA, multiple linear regression and correlation were employed in analysing the data collected. The results of the study were presented in terms of tables and figures. The study established that there is a strong positive correlation between financial literacy aspects and financial independence. The study also found out that financial literacy aspects significantly affect asset ownership and savings adequacy. The findings of this study contributes to the pension sector and to the existing knowledge body on financial independence.

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LIST OF ACRONYMNS AND ABBREVIATIONS

SSA - Social Security Administration

NSSF - National Social Security Fund

RBA - Retirement Benefits Authority

KNBS - Kenya National Bureau of Statistics

DC - Defined Contribution

DB - Defined Benefit

USA - United States of America

FF - Financial Freedom

SRME - Socially Responsible Market Economy

OECD - Organisation for Economic Co-operation and Development

VIF - Variance Inflation Factor

ANOVA - Analysis Of Variance

OPERATIONAL DEFINITION OF TERMS

Financial literacy- Being able to comprehend and utilise several financial skills such as individual financial management and investing.

Financial independence-The status of possessing sufficient income to cater for one's daily expenses without having to depend on others.

Retirement-Retirement is the withdrawal from an individual’s position from his/her active working life.

Pension Plan – A retirement scheme where the employer contributes to a set of funds specifically meant the future benefit of a worker which is then invested on behalf of the worker, and investments’ earnings brings income to the worker after retiring.

Public Universities- Are defined as institutions of higher learning owned by the government and mandated to provide education for its citizens.

Investments-Refers to an item or asset acquired for purposes of generating income.

Defined benefit- Is defined as a pension scheme where one’s salary and years of work determines the amount they are being paid.

Defined Contribution- A defined-contribution plan a plan for retirement where employees contribute part of their pay checks to an account for the purposes of financing their retirements.

Debt- Resources lended by one party to another. Firms and individuals make purchases that they cannot pay in normal circumstances. Through debt arrangement one is able to borrow funds on the condition that they will pay back with interest.

Budget- Refers to the estimated revenues and expenses usually specified over a given period of time in the future.

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CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Financial independence refers to being able to be in charge of your finances in a manner that there is enough money to live a lifestyle of your choice less assistance from friends and relatives. This means sufficient funds to meet all your financial needs working or not, since a job is someone else's assistance who is your employer. Financial independence does not mean you do not work, just that you do not need to. It removes the internal distraction of unpredictable employment. The goal of financial independence is to stop depending on others be it bosses or clients or a schedule or a pay check. True wealth is measured in terms of personal liberty and freedom, not monetary currency (Baid, 2020). (Xiao, Kim, & Chatterjee, 2014); opine that financial independence is more sophisticated than a mere income earning. Young people's financial wellbeing and independence depends on financial literacy.(Lacey, 2018); defines financial independence as the ability to take care of your lifestyle with not necessarily working. In the perspective of money, you can meet your costs without wages. With enough income generated by your assets that you can feed, house and cloth yourself to your liking. From the foregoing definitions, financial independence can be described as when an individual has income sufficient to pay his/her cost of living all his/her life when not depending on others or employed. Financial independence means that more choices and options are available to you.

Retirement can be defined as a time in one's life when they leave working. It is seen as leaving one's occupation or position from one's work life. An individual can semi-retire through cutting down workload or working time. In USA and a number of first world countries, the traditional retirement age is 65. These countries have in place some specific national pension or benefit system to boost earnings of the retirees. USA has the Social Security Administration (SSA) where retirees are given monthly Social Security income benefits from 1935. An Act of Parliament established the National Social Security Fund (NSSF) in 1965 in order to administer a provident fund scheme for all workers in Kenya. The retirement age in Kenya is 60 years but one can opt for pensionable early retirement upon attaining 50 years. In an effort to involve individuals' participation in their pension plans, there have been reforms across the world with the onset of "Defined Contribution" (DC) and the offset of "Defined Benefit (DB). DB is plan of retirement where the employee receives a certain amount of money from the employer, which is secured by the government and based on their years of service and remuneration. On the other hand, with DC plans, employees are required to be actively involved in the process of selecting their investment portfolios. The portfolios are not fixed but rather subject to losses, expenses, and gains (OECD, 2005). Although the defined contribution seems insecure, it grants individuals an opportunity to control their plans of retirement through determining the how much money they will require in retirement and this definitely necessitates the possession of some financial skills. A retiree is an individual that has left employment. A retiree often survives on the pension payable by the former employer as well as on his or her savings or returns from investments made. It is therefore understood that upon retirement an individual ceases to receive a monthly pay and relies on pension, savings and investment, social benefit schemes, family and well-wishers.

(Xiao, Kim, & Chatterjee, 2014); outline factors affecting financial independence in young adults as being economic factors, psychological factors and family economic factors. The economic factors are enumerated as young adult's earnings, assets, employment status and academic achievement. Factors of psychological dimensions are catalogued as economic self-efficacy, ability to manage money and problem ability to solve problems. Stock holding, income from parents and financial assistance comprise constitute family economic factors.(Lacey, 2018);outlines the reasons for financial independence as being a means of protecting oneself against death, divorce, disease and redundancy, as they are inevitable misfortunes of life. Financial independence is important because the future of work is uncertain and governments are shifting focus from defined benefit to defined contribution. The gender pay gap is also another reason that makes financial independence critical especially for the female workforce. Financial independence is also important in making life awesome, enjoyable and worry-free. Financial independence is achieved through one's prudent use of the financial resources at their disposal. It financial acumen therefore plays a great role in achieving financial independence.

Financial independence at retirement is a desired outcome in retirement. Financial independence in general is comprehended as a state of being limited to do as you please anywhere, any time as you want. Financial wellbeing has many benefits e.g. mental peace and the ability to help others in their financial needs (Khati & Vishvesh, 2013). The scholars concluded that for a comfortable life one should save sufficient funds. Financial freedom planning is a thrill and eventually leads to high life quality(Meir, Mugerma, & Sade, 2016); discussed pension literacy and numeracy skills as the financial literacy variables that affect retirement planning. The results show that undertakings of looking for information relating to finance and monitoring expenses of household dimensions, are associated with literacy of retirement in a positive way, and this after controlling for a number of demographic and behavioural variables. An individual is only able to achieve financial independence at retirement if they prudently saved for it.

(OECD, 2003) defines "financial education" as: "The process by which financial consumers/investors improve their understanding of financial products and concepts and, through information, instruction, and/or objective advice, develop the skills and confidence to become more aware of financial risks and opportunities to make informed choices, to know where to go for help, and to take other effective actions to improve their financial well-being." (Houston, 2011) notes that from 71 types of research, different definitions of financial literacy have been used. Other closely related terms to financial literacy are; financial education, financial awareness, good financial behaviour, financial experiences or financial knowledge. A number of studies zero in on being to make financial decisions, the information a person is having and the result in form of a well-informed investment or financial decision.

According to (Bungalow, 2020) financial literacy can be described as being able to lever skills/ knowledge for effective financial resource management in one's entire life of being sound financially. The five components of financial literacy as listed in this article are understanding one's pay check, creating a personal budget, determining one's financial goals, borrowing and asset protection through insurance. Financial literacy is hence explained as having knowledge and skill set permitting one to in making informed and effective decisions, all their financial resources included. In this study, financial literacy will be discussed under numeracy skills, financial planning, debt management and pension literacy. An analysis of these indicators seeks to establish a proper understanding of financial literacy.

1.2 Statement of the Problem

Financial independence enables one to comfortably maintain their socio-economic lifestyle after retirement. Financial independence is every retiree's desire but this is not always the case. Existing literature reveals that, in Africa, community and family share the risks associated with old age and retirement. This practice is however is waning because of the prevailing economic environment in Africa given her low family safety net. This has made retirees more vulnerable thus begging the need for knowledge on what contributes to financial independence. Financial literacy is a key composition of the agenda for building assets. Sponsors are increasingly attributing financial literacy programs with tax refunds, home buying and participation in welfare programs. Employees of public universities are offered financial literacy trainings during service, pre-retirement and post-retirement. Despite the increase in financial literacy programs, retirees are unable to effectively manage their assets. Literature relating to personal finance give importance to the fact that just a minority of households have confidence in regard to the sufficiency of their saving on retirement since not so much is clear about why people don't plan for retirement. Inability to accumulate adequate savings compromises retirees' financial security thus making them vulnerable. Lack of adequate savings and assets increases the dependence burden.

1.3 Objectives of the Study

The primary aim of the study was to find out the effect of financial literacy on financial independence among retirees of public universities in Western Kenya Region.

1.3.1 Specific Objectives

The study was guided by three specific objectives as below:

i. To determine the association between financial literacy aspects and financial independence among retirees of public universities in Western Kenya Region.
ii. To establish the effect of financial literacy on asset ownership among retirees of public universities in Western Kenya Region.
iii. To evaluate the contribution of financial literacy to savings adequacy among retirees of public universities in Western Kenya Region.

1.4 Research Hypothesis

H_{01}: No known association between financial literacy aspects and financial independence among retirees of public universities in Western Kenya Region.

H_{02}: No known effect of financial literacy on asset ownership among retirees of public universities in Western Kenya Region.

H_{03}: No known contribution of financial literacy to savings adequacy among retirees of public universities in Western Kenya Region.

1.5 Significance of the Study

The government is keen on fostering the welfare of its citizens and will find this study useful. Retirement and benefits scheme of public universities will utilise this study in offering pension plans that are most useful to its members. The study is also useful to the general public in helping them to understand how financial literacy affect their financial wellness during retirement. The public will get insightful thoughts on how numeracy skills, financial planning, debt management and pension literacy affects their financial freedom in retirement. This study will constitute a premise for advances studies.

1.6 Scope of the Study

This implies all stuff that the researcher will deal with in order to arrive at more logical findings and offer conclusive and satisfactory responses to the research problem. The scope describes the magnitude of material covered by research means. The research focussed on retirees of the six public universities within Western Kenya Region. The study zeroed in on retirees of the institutions from the years 2016 to 2020.

1.7 Conceptual Framework

Independent variable **Dependent variable**

Financial Literacy **Financial Independence**

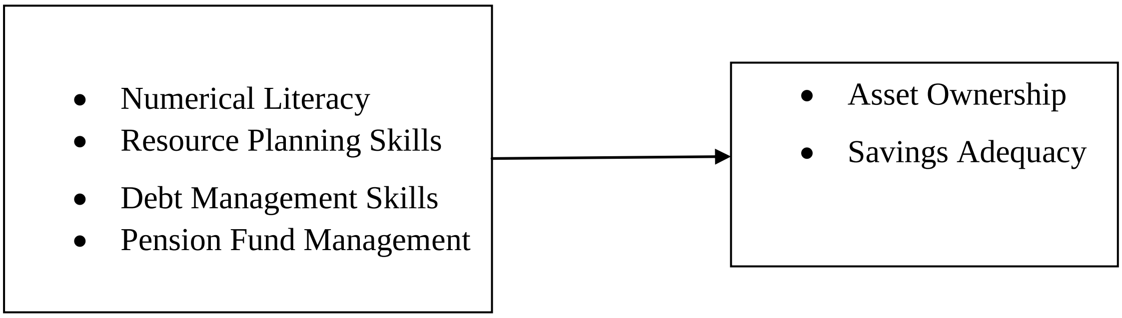


Figure 1.7: Conceptual Framework

CHAPTER TWO

LITERATURE REVIEW

This chapter addresses review of literature on the identity capital theory of financial independence and the continuity theory of retirement. The chapter also reviews some of the past international and local studies that relate to financial independence in retirement and financial literacy.

2.1 Theoretical Review

2.1.1 Identity Capital Theory of Financial Independence

In the year 1997, a scholar, James Côté, came up with a theory of financial independence named identity capital theory. It was a psychological-social response to identity creation. The concept elaborates the effort one makes in creating one's unique identity. Every effort consequently results in future benefits in creating a core form of self in the world of today. A passive acceptance and active adaptation as ways of identity formation was suggested by (Côté, 1997). A passive identity acceptance is defined as letting an individual to be defined by the world, whereas an active adaptation is about the person having a central role in their individual progression.

In the United States and other individualistic and contemporary societies, persons are should have a participatory place in showing what they made of and the way they will handle themselves in the world outside (Côté, 1997). For this to happen, an individual must first have a sense of self that is well grounded and supported by both social and technical skills. These skills are known as assets in this concept and are categorized into tangible and intangible assets.

This theory's key feature is that an individual's intangible assets and tangible assets utilize complexity and flexibility to adapt to contemporary world context with many dimensions. The flexibility permits an individual to have more exploration as they establish one's own identity. One's identity capital is a formation of strengths to assist them at any given scenario (Côté, 1997). According (Côté& Schwartz, 2002).This theory asserts that a reliable self-sense is enabled through a person's ability to manoeuvre daily situations by using their capabilities to overcome challenges and attain goals.

(Sarah, Bruce, & Campell, 2019), further explained the identity capital theory and highlighted that the initiation to adulthood is becoming hard in an increasing way. According to (Côté, 2002), this theory was first developed to overcome this hurdle. The theory opines that progressing into being an adult and identity creation is going to be smoother process depending on the level of intangible and tangible assets a person is having.

(Sarah, Bruce, & Campell, 2019), outlined tangible assets and intangible assets that improve a person's financial wellness thus leading to financial independence in attempting to analyse the Identity Capital Theory of financial independence. They listed tangible assets as financial knowledge, financial socialization and access to financial information. The intangible resources elaborated were independent decision-making and personal responsibility.

This theory will be used in this study to explain financial independence. A mixture of tangible assets and intangible assets contribute to financial wellness. The tangible asset that is elaborated in this study is financial knowledge as it relates to financial literacy. An interplay of these aspects shapes an individual's identity leading to independence. Financial independence is the most desired form of independence.

2.1.2 The Continuity Theory of Retirement

Atchley (1989) posits that the retirement theory heavily draws from the concept that old people keeping same lifestyle post retirement as they previously had it better psychological wellness. Bridge employment and a number of transitions into retirement gives older people the ability to keep uniformity and improve one's own image by activities that are constructive, Feldman &Beehr (2011). Gobeski&Beehr(2008) study on bridge employment uses the rudimentary continuity theory principles because people enjoying their jobs are have high chances of choosing same job bridge employment as is not the case in bridge employment in other fields which mostly occurs in response to job challenge. The continuity theory takes into account the demerits of absolute withdrawal from job and not taking part in other engagements.

(Pushkar*et al*, 2011) further examined this theory to ascertain whether adults that are older reduce the engagements they have as the frequency of activities that are constructive did not change. In addition, they assessed if positive impact was linked to persons indicating that tasks were important. The findings agree with this theory because older individuals kept the same involvement level in fun activities while reducing their involvement in less integral tasks thus improving psychological wellness.

This theory of retirement goes on to highlight how general wellness is impacted by decisions made by older individuals even with the shift in patterns of retirement. The theory has the flexibility to take into account non-majority status issue but it does do so. A case in point is when, (Atchley, 1989) had no cap on constructive assignments to employment, but included social activities maintenance, standards and leisure engagements as paramount. This theory resonates well with individuals from settings and backgrounds that are diverse.

This theory will be employed in this study to examine financial independence. In order to ensure continuity and maintenance of an individual's lifestyle into retirement, financial independence is important since it gives one an opportunity to engage in activities of their choice. Engaging in leisure activities and other such activities that are enjoyable in retirement concurs with the continuity theory of retirement. This can only be possible for retirees that have achieved financial independence since they are able to make financial decisions without relying on anyone. Financial independence provides a retiree with an opportunity for financial and mental wellness.

2.2 Empirical Review

2.2.1 Financial Literacy

It constitutes knowledge and awareness in finance, behaviours and skills key in making financial that are significant resulting in financial wellness (Hafema, 2018). Financial education is the way of improving comprehension of financial products and service by financial players. This is achieved by objective advice, developing the confidence and capabilities resulting in improved awareness of financial hurdles and chances of making more enhanced choices for improving financial wellness.

(Muizzuddi, Taufik, Ghasarma, Putri, & Adam, 2017) In their study explained ways of comprehending financial literacy by self-efficacy guidance concept and motivation concept of goal setting. The analysis started with behavioural finance concept which is linking financial aspects to behaviour. Second, the concept and measurement of a one's financial literacy. The results indicated that financial literacy is worth understanding and is a need for every individual for overcoming financial challenges.

(Lusardi & Mitchell, 2014), in their work evaluated a fast growing body of economic studies with particular interest on financial literacy. They first had theoretical research overview, revealing financial knowledge as a human capital investment form. When financial knowledge is personalized, tangible consequences on welfare become evident together with policies aimed enhancing financial knowledge level in a population far and wide. Recent studies have been conducted on how much ones is able to know and identify population subgroups that are not financially literate. The study revealed that while financial literacy costs and poverty costs are all phenomenal.

(Njehia, 2014); looked at how financial literacy affect personal financial management of Mumias Sugar Company Limited employees. Descriptive survey design was used to assess the association between different indicators. Regression analysis was used in analysing data gather by way of semi-structured questionnaire. Study results surfaced that the majority of employees interviewed had a hands-on knowledge on matters financial. In reference to their engagements on post retirement, it was surfaced that a good number employees moderately agreed that they are having retirement plans.

(Nolan & Doorley, 2019) Reported that challenges of monetary nature that a person faces as while advancing in their life cycle is becoming unbearable. A fall in the level and generosity of government schemes indicates that individuals should now assume the responsibility of a bigger share of their future beyond retirement saving and health costs. Financial literacy is a hands-on knowledge on primary financial concepts and being able to perform simple financial calculations. It is a primary skill necessary adequate financial cushioning during old age. The aimed at validating to what level financial literacy significantly determines financial protection in the older pre-retirement Irish populace. The results indicated that financial literacy is linked with greater total household wealth, minimal financial stress and greater expected income post retirement.

(Meir, Mugerma, & Sade, 2016), established that enhancing life expectancy not forgetting retirement savings market changes and job market reforms subject Israelis to great client, who are currently having pressing to plan for future retirement in a meticulous manner. Financial literacy is key in planning of retirement, specifically as result of financial products that are long-term, services and schemes advertised to investors. The research was on financial literacy and its relation to retirement financial planning ("retirement literacy"). It examines and catalogues two financial literacy aspects: knowledge on finance and behaviour with regard to decision-making as it relates to finance. The results showed that financial information searching activities and household expenses monitoring have a positive association with literacy on retirement after they controlled for different behavioural and demographic variables. In surprise, while controlling for other variables, there was significant association between financial knowledge or numeracy skills and retirement literacy. Financial literacy on retirement savings improves with one having an inclination to wittingly check periodic account statements and bills, while financial expertise is not a key determinant of higher retirement literacy.

(Maobe, 2017), indicated that nearly 90 pc of Kenyans are not planning for retirement and the trend is worrisome if not reversed. Retirement follows soon after leaving active employment and a huge transition in the life of a worker requiring financial planning that sis appropriate. Conventionally, in Africa, community and family share the risks associated with old age and retirement. This practice is however is waning because of the prevailing economic environment in Africa given her low family safety net. Kenya's economy nature-with heavy reliance on agriculture- exacerbates the above problem. The study was on workers in Kenyan informal sector commonly referred to as ‘Jua Kali’. Since they are not part government retirement scheme, formulation of a home-grown model by establishing financial literacy level and its influence on retirement planning. Additionally, no platform is able facilitate their attitudes on retirement saving. The findings showed that levels of financial literacy stagnated, while positively affecting retirement planning at the same time.

(Lusardi & Mitchell, 2011), argues that Economists are keen on finding out the factors that affect financial illiteracy in order to fully comprehend the insufficiency of retirement planning and why a good number of workers retire with very meagre or no wealth. The review surfaced that a great number of individuals don’t know the most rudimentary financial concepts key in making investment decisions. USA and other countries population are not informed on rudimentary financial calculations, with grave implications on saving, retirement planning, mortgages as well as other decisions. To ameliorate this, state and non-state actors have undertaken steps to boost financial literacy.

(Lang’at & Abdullah, 2019), did a study on how financial literacy influences personal financial management in KAA. Objectives of the study were to evaluate the influence of knowledge finance, attitude as it relates to finance and personal financial management behaviour in Kenya Jomo Kenyatta International Airport Airports Authority. Descriptive research design was in the study. The sample size consisted of 398 employees. A questionnaire was used in primary data collection. Data collected was analysed through SPSS. The study concluded that in developing sound and rational personal financial behaviours, an individual’s financial management is promoted. Sound behaviour regarding finance enabled JKIA staff when trying to balance their level of optimism, herd instinct, overconfidence on prior experience. It was concluded that personal financial planning significantly effects on financial management behaviour.

2.2.2 Financial Independence in Retirement

Financial independence is being able to control your money with the objective of possessing money have the lifestyle you desire and depending on others for financial assistance. This means funds that are sufficient for meeting all your needs whether working or not, since a job is just like being assisted by someone who is your employer (Cummuta, 2011). It is the status of having money sufficient enough to cater for individual's life expenses in his/her entire life. And this so when the individual is not depending on others.

(Bloom, Canning, & Moore, 2007), show two great influences on the optimal retirement age and on savings behaviour in the long run. First, when lifetime wages are high, the craving for leisure is leading to soon retirement with better savings. Second, greater longevity and high quality of life is leading to lower savings rates and greater consumption consistent increase in working life that is less-than-proportional. It was indicated that when life expectancy gets better, and disability onset delayed, the proportion of life spent in leisure and the level of optimal consumption is increased. The age of retirement increases than the increase in life expectancy less than proportionately.

(Financial capability and retirement, 2016) , provides a UK Adult Financial Capability Survey analysis in 2015 showing that individuals that are older (those over State Retirement Age or are already retired) when compared to other age groups, have higher confidence. It was found by this review that there is some evidence on how retirement planning impact confidence.eg, those buying annuity reporting great confidence were seeking the expertise of a professional adviser (despite the evidence not evaluating whether the participants had the right in having confidence in their decision making abilities); while DC savers having self-reported less financial confidence were predisposed to challenges of making decisions of retirement. There exists evidence indicating that an increasingly small minority of individuals are over-confident on levering housing equity as their basic income source during retirement. (Daryaei & Haghighat, 2017),levered the theory of justice in addressing the question of whether a market economy that is socially responsible is able to explain the phenomena in financial freedom, and its recent variance in different countries. Using yearly data from given countries in North Africa, Middle East, Oceania and Oceania, techniques of static panel estimation, provided evidence, suggesting that a number of market economies that are socially responsible components are Financial Freedom (FF) determinants. The results show that three aspects of SRME, viz. market organization as well as competition, private property and regime welfare have a positive association with FF that is significant. Bodies mandated with legislation are expected to legislate rules that are impartial, which allows them to develop the much need grounds for financial emancipation and the financial information transparency in financial markets that is subsequent. The conclusion was that economic development has social aspects and reducing inequality in society and creating economic wellbeing is one of its goals.

(Raval & Vyas, 2013), reported that financial freedom in general is seen in the light of the ability to do virtually anything as and when you want. Financial wellness has direct benefits that are not few e.g. mental peace and being able to help others with finances. Gender equality is an emerging phenomenon in the recent few and women can be seen in the light of having many roles, for example developing their own wealth. Each one is unique. Behavioural differences with gender dimension is observed daily. Female executives' experience of financial freedom is significant in studying against male Executives. Sample of 60 comprising 30 female and 30 male participants and was chosen. The participants were more 18 years in age. Respondents had different pursuits regarding employment with skewed towards production and trade all the time. They were drawn from Vapi, Navsari, Vadodara and Ahmedabad. Results showed that the participants score did have significant difference with regards to gender.

(Xiao, Kim, & Chatterjee, 2014), suggested that the youth are in a crucial transition period from depending on the parents financially to having financial independence. The study purpose is to establish determinants of perceived financial independence among youths in the USA aged 18-23. In an approach that is interdisciplinary, they hypothesize factors that are majorly contributing to the youths' financial independence include but not limited to economic, family and psychological factors. Data from the two data sets that are linked was used, the 2009 Transition into Adulthood and its parental companion data set, the 2009 Panel Study of Income Dynamics. It was observed that economic factors e.g. income of the youth, asset, status of employment, and academic achievement are positively related with financial independence.

Psychological factors e.g., ability to manage money, self-efficacy relating to economics, and ability to solve problems and financial independence were positively related. Family economic factors for example parental income, stock holding, and financial assistance make the financial independence young adults to be low. Subsequent analyses show that financial independence of college graduates is better compared to those who did not attend college or are in college presently, not differing from college drop outs. Universal and varied factors related with youths' financial independence are also observed among the four groups of education. The study results compel those educating consumers to create and execute financial education programs that is targeting youths aged 18-23 with varied academic attainments.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This section outlines the research methodology.

3.2. Research Design

This study adopted correlational research design, which is suitable for this study as it is useful in determining any association between study variables. The aim of correlational studies is discovering and possibly measuring the relationship between two or more variables ((Mertler, 2016).

3.3. Study Area

The study area refers to the geographical boundaries within which the study will be carried out. The study area was the six public universities operating in Western Kenya Region. Western Kenya Region consists of the former Nyanza and Western provinces. It lies to the west of the Great Rift Valley and is host to ten counties namely Kisumu, Siaya, Homabay, Kisii, Nyamira, Migori, Bungoma, Vihiga, Busia and Kakamega covering a total area of 19,877.5km^2.The public universities domiciled within the Region are Jaramogi Oginga Odinga University of Science and Technology, MasindeMuliro University of Science and Technology, Kibabii University, Kisii University, Maseno University and Rongo University.

3.4. Target Population

This study had the six public universities domiciled in Western Kenya Region as its target population. A list of the public universities is provided in the appendices. The public universities studied are six and representatives of all these universities were involved in responding to the questionnaire. The retirees of the years 2016 to 2020 from the listed public universities formed the target population.

3.5 Sample Size and Sampling Procedures

Representativeness of the sample is achieved through a sampling procedure that ensures inclusion of representative items in the study. Stratified random sampling was used in selection of respondents. According to Parsons, (2017) "Stratified random sampling is a sampling method in which a population group is categorized into distinct units – called strata – based on shared characteristics". The population was broken down into stratus being the universities in which they served. A sample size of 60 respondents were selected.

3.6. Data Collection and Sources of Data

The study used primary data. Questionnaires were administered to obtain primary data on the effect of financial literacy on financial independence among retirees of public universities in Western Kenya Region. The researcher personally administered the questionnaires. The questionnaire had two sections, with the first seeking to find out general information about the retirees of public universities and the second part relating to the effect of financial literacy on financial independence among retirees of public universities in Western Kenya Region.

3.7 Pilot Testing

Reliability test is a test of internal consistency of the study instrument. As per literature, the study consists of variables and they're respectively; Numerical Literacy (Independent Variable), Resource Planning Skills (Independent Variable), Debt Management Skills (Independent Variable), Pension Fund Management (Independent Variable), and Financial Independence (Dependent Variable). All the variables showed a Cronbach Alpha value above 0.7 indicating the tests to be strongly reliable.

Table 3.1: Reliability Statistics

	Reliability Statistics	
Construct	**Cronbach's Alpha**	**Number of Items**
Numerical Literacy	.782	11
Resource Planning Skills	.823	11
Debt Management Skills	.850	10
Pension Fund Management	.861	11
Financial Independence	.877	12

Source: Research Data (2021)

3.8 Data Processing and Analysis

The questionnaire was edited for uniformity and completeness. The collated data was analysed using SPSS. ANOVA, multiple linear regression and correlations were used to analyse the collected data. The study used OLS regression model in determining the relative significance of each explanatory variable in affecting financial independence. The data was run using SPSS version 2.0.Data was also be analysed using ANOVA to determine whether there is a relationship between the factors identified and financial independence. The research findings were presented in the form of tables, charts, figures and graphs.

3.8.1 Model Specifications

The regression model is as below:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where:

Y=Financial Independence

β_0= Intercept

β_1 , β_2, β_3 and β_4= Beta coefficients

X_1= Numeracy Skills

X_2= Financial Planning Skills

X_3= Debt Management Skills

X_4= Pension Fund Management

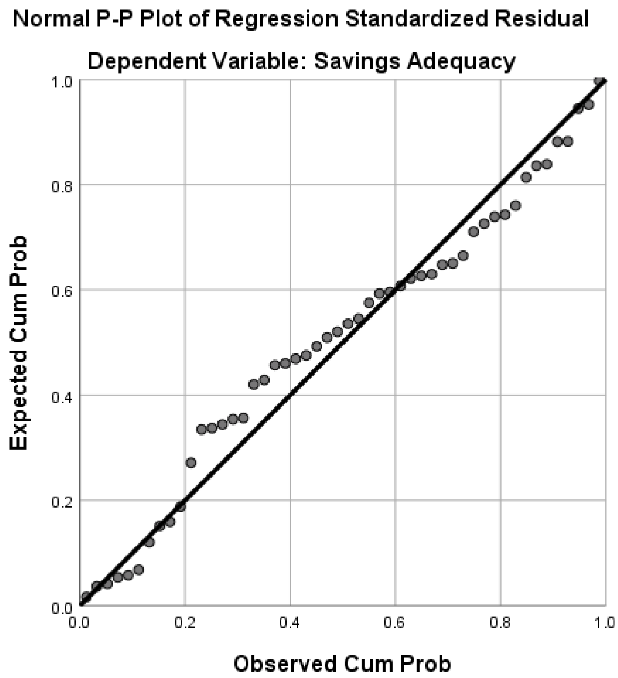
έ= error term

3.8.2 Tests of Regression Assumptions

3.8.2.1 Normality

The normality test for this study is as plotted below. The probability plot indicates that points are all scattered close to the plot. Normal distribution was observed indicating that data was obtained from a normally distributed population.

Figure 3.1: Normality Test



Source: Research Data (2021)

3.8.2.2 Multicollinearity

Multicollinearity is a situation whereby variables are related thus limiting the conclusions we can draw. Exact relations result from mistake or lack of understanding(Kumar, 2012). Multicollinearity is a matter of degree, not absence or presence. Multicollinearity is measured using tolerance and Variance Inflation factor. The degree of Multicollinearity when closer to 0 is more severe and a value close to 1 implies that there is little Multicollinearity. A VIF factor of more than 5 indicates that there is Multi-collinearity associated with that variable and thus poorly estimated.

The multicollinearity test for this study is as plotted below. Each variable had tolerance level of more than 0.1 and. All the VIFs were less than 10 an indication of no multicollinearity.

Table 3.2: Multicollinearity Test

	Collinearity Statistics	
Model	Tolerance	VIF
(Constant)		
Numerical Literacy	.698	1.432
Resource Planning Skills	.182	5.501
Debt Management Skills	.345	2.901
Pension Fund Management	.315	3.176

Source: Research Data (2021)

3.8.2.3 Autocorrelation

Autocorrelation arises as a result of values of same variables being based on related objects, thus violating the assumption of independence. It persists in time-series data that is from the same source as opposed to being randomly selected. The causes include: specification errors, data manipulation, persistent shocks and observational error. The researcher will use the New West method to determine the presence of autocorrelation.

The autocorrelation test results are as shown below.Durbin Watson of 1.5-2.5 is generally acceptable. This is indicative of the absence of autocorrelation (1.979).

Table 3.3: Autocorrelation Test

Model Summary[b]					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.965[a]	.932	.926	.15229	1.979

a. Predictors: (Constant), Pension Fund Management, Numerical Literacy, Debt Management Skills, Resource Planning Skills

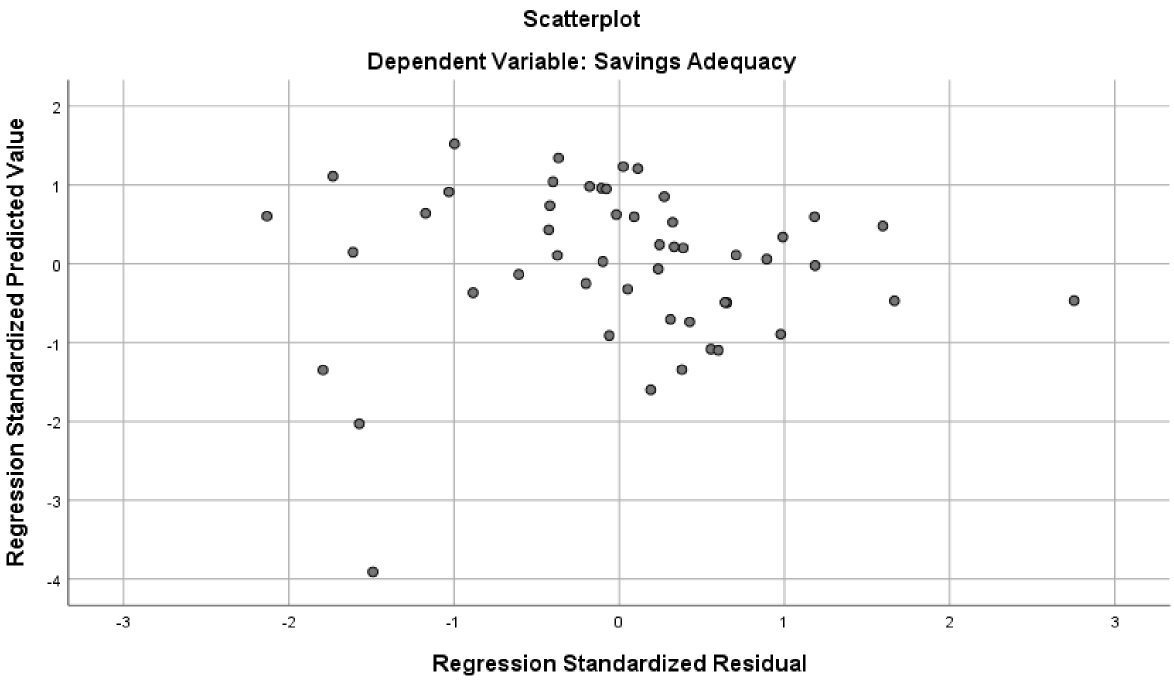
b. Dependent Variable: Savings Adequacy

Source: Research Data (2021)

3.8.2.4 Heteroscedasticity

Heteroscedasticity is defined as a systematic change in the spread of residuals over a range of the measured values. It assumes that all the residuals in a population have a constant variance and thus homoscedastic in nature. It will be tested using the Breusch-Pagan test which tests if the regression residuals' variance is a function of the of the independent variable values, if this is so, then heteroscedasticity is present. The heteroscedasticity test of this study is as shown below.

Figure 3.2:Heteroscedasticity Test



Source: Research Data (2021)

3.9 Ethical Considerations

This study endeavoured to obtain informed consent from participants before they could participate. Research objectives of the research were made known to the study participants for their informed consent. Confidentiality level on information that is obtained from the participants was great and the same was highlighted to the participants. The gathered information was just used for academic purposes and was not be given to third parties without the consent of the participants.

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSIONS

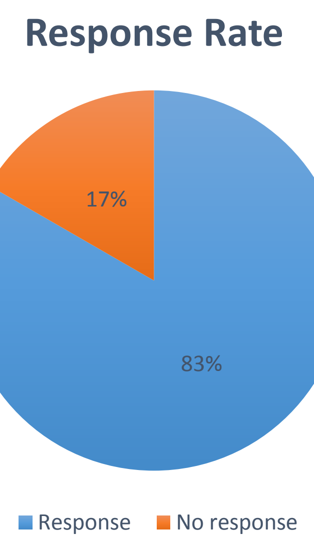
4.1 Introduction

This section a summary of the research's findings.

4.2 Response Rate

The study had a target population of 60 out of which50 participated and questionnaires were returned for analysis giving83% response rate. The good response rate was achieved by targeting retirees of public universities in Western Kenya Region. As well as good coordination of the data collection exercise which was supported by the pension and retirement benefits schemes of the respective universities. Figure 4.1 shows the response rate.

Figure 4.1: Response Rate



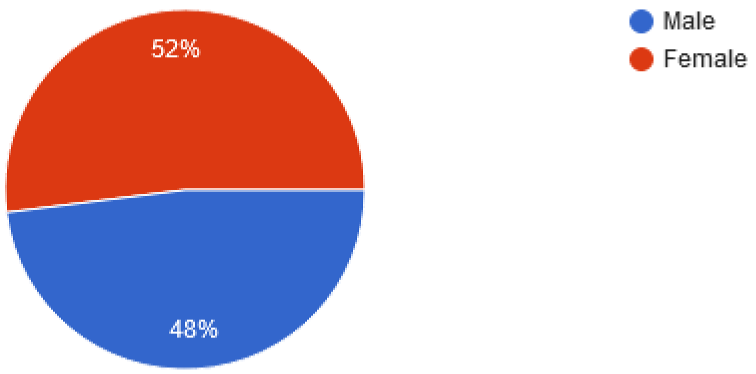
Source: Research Data (2021)

4.3 Demographic Information

4.3.1 Gender of the Participants

From the findings majority of the respondent were female with 52% while their male counterparts were at48%. All the genders were adequately represented in the study and in line with the Constitution of Kenya on the two thirds gender rule. Figure 4.2 shows gender wise distribution statistics.

Figure 4.2: Gender of Respondents

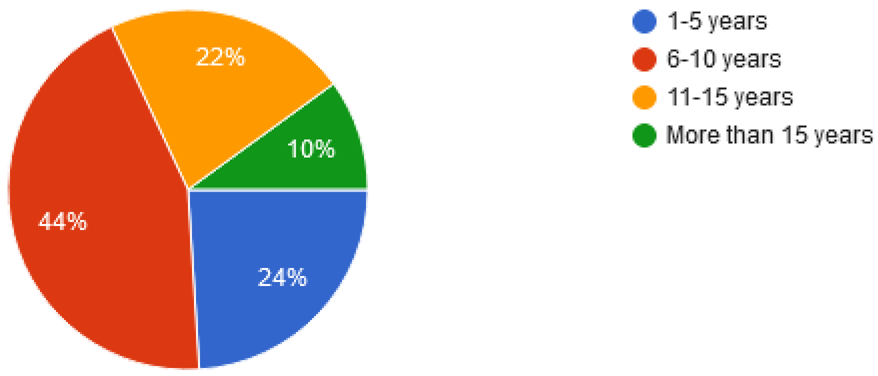


Source: Research Data (2021)

4.3.2 Length of service in public university before retirement

Figure 4.3 shows the number of years one served before retirement. Less than half of the study participants, 44% had been in service for between 6-10 years, 24% had been in service for between 1-5 years, 22% had been in service for between 11-15 years, 10% had been in service for more than 15 years. The least statistics was observed for those who had been in service for over 15 years at 10%.

Figure 4.3: Length of Service before Retirement

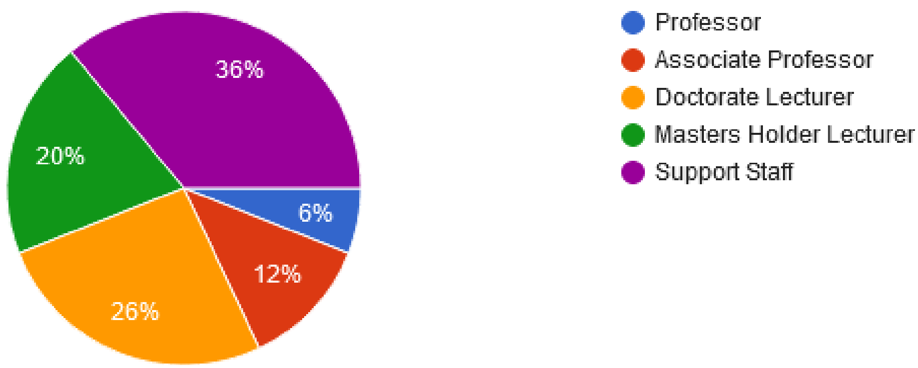


Source: Research Data (2021)

4.3.3 Position held in the University

Figure 4.4 shows the position held by the study participants in the university just before their retirement. Most were support staff at 36% followed by doctorate lecture at 26%. Masters holder lecturers comprised 20% while associate professors constituted 12%. The least statistic was observed for professors at 6%.

Figure 4.4: Position held in the University

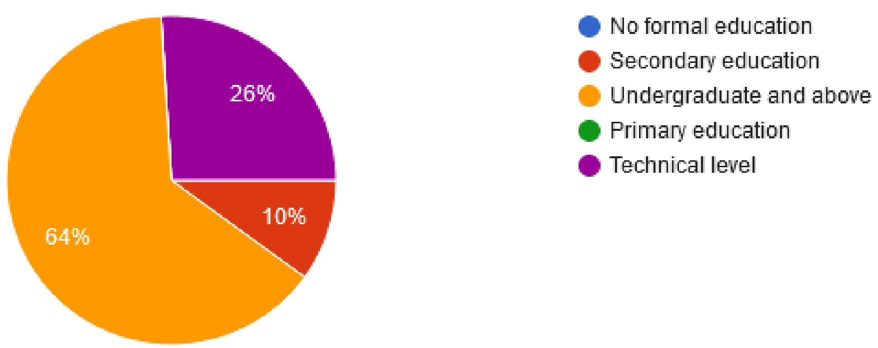


Source: Research Data (2021)

4.3.4 Level of Education of the Participants

Figure 4.5 indicates level of training of the participants. 64% of the participants had undergraduate and higher level of education while 26% had technical training. The least statistics was observed for those with secondary education at 10%. None of the respondents had primary education. All the respondents had a level of education since none had no formal education.

Figure 4.5: Level of Education of the Participants



Source: Research Data (2021)

4.4 Descriptive Statistics

Table 4.1: Descriptive Statistics

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Numerical Literacy	50	3.00	4.91	4.3982	.35656
Resource Planning Skills	50	3.27	5.00	4.2873	.42575
Debt Management Skills	50	2.90	5.00	4.2380	.49606
Pension Fund Management	50	2.82	5.00	4.3018	.45304
Financial Independence	50	2.67	5.00	4.3017	.46226
Asset Ownership	50	3.17	5.00	4.2700	.44530
Savings Adequacy	50	2.00	5.00	4.3333	.55838
Valid N (listwise)	50				

Source: Research Data (2021)

4.5 Inferential Statistics

The association between financial literacy aspects and financial independence (Correlation Analysis)

Using SPSS the following correlation analysis was derived. Accordingly Numerical Literacy, Resource Planning Skills, Debt Management Skills, Pension Fund Management and Financial Independence correlation coefficient values were listed as below:

Table 4.2: Correlation Analysis

		Numerical Literacy	Resource Planning Skills	Debt Management Skills	Pension Fund Management
Financial Independence	Pearson Correlation	.548**	.819**	.571**	.994**
	Sig. (2-tailed)	.000	.000	.000	.000
	N	50	50	50	50

Source: Research Data (2021)

There is a statistically significant positive association between Numerical Literacy and financial independence (p=0.000, r=0.548), resource planning skills and financial independence (p=0.000, r=0.819), debt management skills and financial independence (p=0.000, r=0.571) and pension fund management and financial independence (p=0.000, r=0.994).

This study established that there is a strong and positive association between financial literacy aspects and financial independence. A study by(Potrich, Vieira, & Kirch, 2015) sought to find out how persons are facilitated by financial literacy in making efficient and assertive decisions relating to their finances. The Logit and probit models to explain the study variables: “gender, marital status, dependent family members, occupation, age, educational level, father’s educational level, mother’s educational level, individual income, and family income”. The study found that incremental propensity were statistically significant and positive with the variables of the study at the normal variable level

(Njehia, 2014); did a study on how financial literacy affect personal financial management of Mumias Sugar Company Limited employees. He used descriptive survey design to assess the association between the different indicators. Regression analysis was used in analysing data gather by way of semi-structured questionnaire. Study results surfaced that the majority of employees interviewed had a hands-on knowledge on matters financial. In reference to their engagements on post retirement, it was surfaced that majority of the employees agreed to a moderate extent that they are having retirement plans.

(Nolan & Doorley, 2019) Reported that challenges of monetary nature that a person faces as while advancing in their life cycle is becoming unbearable. A fall in the level and generosity of government schemes indicates that individuals should now assume the responsibility of a bigger share of their future beyond retirement saving and health costs. Financial literacy is a hands-on knowledge on primary financial concepts and being able to perform simple financial calculations. It is a primary skill necessary adequate financial cushioning during old age. The results indicated that financial literacy is linked with greater total household wealth, minimal financial stress and greater expected income post retirement.

The effect of financial literacy on financial independence among retirees of public universities in western Kenya region

Multiple Linear Regression

The following was the analysis,

Table 4.3: Regression Analysis for Asset Ownership

Model Summary					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.949[a]	.900	.892	.14666	1.939

a. Predictors: (Constant), Pension Fund Management, Numerical Literacy, Debt Management Skills, Resource Planning Skills

b. Dependent Variable: Asset Ownership

Source: Research Data (2021)

Together, all the independent variables explain 90% variation in the dependent variable. The remaining 10% variation is unaccounted for.

Table 4.4: ANOVA for Asset Ownership

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.748	4	2.187	101.676	.000[b]
	Residual	.968	45	.022		
	Total	9.716	49			

Source: Research Data (2021)

a. Dependent Variable: Asset Ownership

b. Predictors: (Constant), Pension Fund Management, Resource Planning Skills, Debt Management Skills, Numerical Literacy

As per the ANOVA values, the model is adequate.

Table 4.5 : ANOVA Coefficients for Asset Ownership

Coefficients								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.398	.285		1.397	.169		
	Numerical Literacy	-.069	.070	-.055	-.985	.030	.698	1.432
	Resource Planning Skills	-.326	.115	-.312	-2.828	.007	.182	5.501
	Debt Management Skills	.362	.072	.404	5.036	.000	.345	2.901
	Pension Fund Management	.939	.082	.956	11.398	.000	.315	3.176
a. Dependent Variable: Asset Ownership								

Source: Research Data (2021)

$AO = 0.398 – 0.069_{NL} + 0.387_{RPS} - 0.326_{DMS} + 0.362_{PFM} + 0.285$

Numerical Literacy, Resource Planning Skills, Debt Management Skills and Pension Fund management had a statistically significant effect on financial independence ($p<0.005$).

(Maobe, 2017), indicated that nearly 90 pc of Kenyans are not planning for retirement and the trend is worrisome if not reversed. Retirement follows soon after leaving active employment and a huge transition in the life of a worker requiring financial planning that sis appropriate. Conventionally, in Africa, community and family share the risks associated with old age and retirement. This practice is however is waning because of the prevailing economic environment in Africa given her low family safety net. Kenya's economy nature-with heavy reliance on agriculture- exacerbates the above problem. The study was on workers in Kenyan informal sector commonly referred to as 'Jua Kali'. Since they are not part government retirement scheme, formulation of a home-grown model by establishing financial literacy level and its influence on retirement planning. Additionally, no platform is able facilitate their attitudes on retirement saving.

(Financial capability and retirement, 2016) , provides a UK Adult Financial Capability Survey analysis in 2015 showing that individuals that are older (those over State Retirement Age or are already retired) when compared to other age groups, have higher confidence. It was found by this review that there is some evidence on how retirement planning impact confidence.eg, those buying annuity reporting great confidence were seeking the expertise of a professional adviser while DC savers having self-reported less financial confidence were predisposed to challenges of making decisions of retirement. There exist an evidence indicating that an increasingly small minority of individuals are over-confident on levering housing equity as their basic income source during retirement.

From the foregoing it can be deciphered that financial literacy impacts financial independence, more so, asset ownership. Mastery of financial literacy skills like numerical skills, resource planning skills, debt management skills and pension fund management skills aid in equipping an individual with crucial information in choosing the assets to acquire. Proper management of assets is also made possible through utilisation of financial skills.

The contribution of financial literacy to savings adequacy among retirees of public universities in Western Kenya Region (Regression Analysis)

Table 4.6: Regression Analysis for Savings Adequacy

Model Summary					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.965[a]	.932	.926	.15229	1.979

Source: Research Data (2021)

a. Predictors: (Constant), Pension Fund Management, Resource Planning Skills, Debt Management Skills, Numerical Literacy

b. Dependent Variable: Savings Adequacy

Together, all the independent variables explain 93.2% variation in the dependent variable. The remaining 6.8% variation is unaccounted for.

Table 4.7: ANOVA for Savings Adequacy

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.748	4	1.687	11.054	.000[b]
	Residual	6.715	44	.153		
	Total	13.464	48			

Source: Research Data (2021)
a. Dependent Variable: Savings Adequacy
b. Predictors: (Constant), Pension Fund Management, Resource Planning Skills, Debt Management Skills, Numerical Literacy

As per the ANOVA values, the model is adequate.

Table 4.8 : ANOVA Coefficients for Savings Adequacy

Coefficients								
		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
Model		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	.040	.664		.060	.953		
	Numerical Literacy	-.453	.186	-.471	-2.429	.019	.301	3.318
	Resource Planning Skills	.387	.211	.331	1.833	.074	.347	2.883
	Debt Management Skills	.289	.196	.254	1.477	.147	.385	2.600
	Pension Fund Management	.777	.256	.564	3.035	.004	.328	3.048

a. Dependent Variable: Savings Adequacy
Source: Research Data (2021)

$SA = -7.757 + 0.150_{NL} + 0.559_{RPS} - 0.512_{DMS} + 0.977_{PFM} + 0296$

Numerical Literacy, Resource Planning Skills, Debt Management Skills and Pension Fund management had a statistically significant effect on financial independence (p<0.005).

(Bloom, Canning, & Moore, 2007), show two great influences on the optimal retirement age and on savings behaviour in the long run. First, when lifetime wages are high, the craving for leisure is leading to soon retirement with better savings. Second, greater longevity and high quality of life is leading to lower savings rates and greater consumption consistent increase in working life that is less-than-proportional It was indicated that when life expectancy gets better, and disability onset delayed, the proportion of life spent in leisure and the level of optimal consumption is increased. The age of retirement increases than the increase in life expectancy less than proportionately.

The findings show consistency with the results of a study by (Xiao, Kim, & Chatterjee, 2014), , who suggested that the youth are in a crucial transition period from depending on the parents financially to having financial independence. The study purpose is to establish determinants of perceived financial independence among youths in the USA aged 18-23. In an approach that is interdisciplinary, they hypothesize factors that are majorly contributing to the youths’ financial independence include but not limited to economic, family and psychological factors. Data from the two data sets that are linked was used, the 2009 Transition into Adulthood and its parental companion data set, the 2009 Panel Study of Income Dynamics. It was observed that economic factors e.g. income of the youth, asset, status of employment, and academic achievement are positively related with financial independence.

As evidenced in the foregoing studies, financial literacy has a positive impact on financial independence among individuals. Aspects of financial literacy discussed in this study, are paramount in achieving financial independence.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This section summarizes the findings of the study.

5.2 Summary of Major Findings

The study unearthed overwhelming evidence through data analysis supporting the fact that the financial literacy has significantly affects financial independence among retirees of public universities in Western Kenya Region.

Correlation analysis of all financial literacy constructs and financial independence showed a significantcorrelationbetweeneachvariable.Theanalysisshowedthatnumerical literacy had a statistically significant impact on financial independence effectively proving that computation and interpretation of simple interest, adequate knowledge on compound interest computations, concept of time value of money, inflation rate, investment's rate of return, interest rate on a debt facility, repayment period of a loan, timely loan and credit repayments, proper management of one's investment, changes and trends in financial markets and sound financial decisions were perceived to have greater effect on financial independence. The correlation of resource planning skills and financial independence was clear concluding that resource planning skills significantly affect financial independence. The results also showed that debt management skills and financial independence had a statistically significant association. This effectively proves that loan planning and loan restructuring have a positive effect on financial independence.

Regression analysis proved that pension fund management (a key construct of financial literacy) had a significant effect on asset ownership – a key construct of financial independence. In this vein, it confers that membership in a pension and benefits scheme, making monthly contributions to pension scheme, making voluntary additional contributions, periodic checking of one's pension statement, participation in supplementary pension programs, attending retirement trainings and transparent pension scheme affect asset ownership. Regression analysis of financial literacy on savings adequacy showed that numerical literacy and pension fund management had a significant effect on financial independence.

5.3 Conclusion

The study attests that financial literacy will most certainly affect financial independence. Thus it is concluded that without numerical literacy, resource planning skills and debt management skills and pension fund management skills, financial independence will not be achieved. However, if all of the above are present, there will be a great effect on financial independence.

5.4 Recommendations

Aspects of financial literacy such as numerical literacy, resource planning skills, debt management skills and pension fund management skills should be imparted among employees of public universities. This will enable them to grasp knowledge relating to computation and interpretation of simple interest, adequate knowledge on compound interest computations, concept of time value of money, inflation rate, investment's rate of return, interest rate on a debt facility, repayment period of a loan, timely loan and credit repayments, proper management of one's investment, changes and trends in financial markets. This is key in enabling them to make financial decisions and thus realize financial independence.

Public universities should play an active role in ensuring that all its employees are registered members of their pension and benefits schemes. Membership in a pension and benefits scheme, making monthly contributions to pension scheme, making voluntary additional contributions, periodic checking of one's pension statement, participation in supplementary pension programs, attending retirement trainings and transparent pension scheme will certainly help in building financial independence among its retirees. The pension schemes ensure that the members' welfare is well taken care of thus improving their overall wellbeing.

5.5 Suggestions for Further Studies

Financial independence is affected by an array of factors that have not been exhaustively covered in this study. The financial literacy aspects discussed in this study form some of the factors that affect financial independence. This study focussed on retirees of public universities as its target population. Further studies should be conducted on a different group of people such as those in active employment to determine whether the financial literacy aspects do impart their financial independent. Additional research can also be carried out focussing on a different industry such as manufacturing sector or banking sector and determine how financial literacy affects financial independence among these groups of people.

REFERENCES

Baid, G. (2020). *The Joys of Compounding.* Columbia University Press.

Bloom, D. E., Canning, D., & Moore, M. (2007). A Theory of Retirement.

Cummuta, J. (2011). The Myths & Realities of Achieving Financial Independence. *Nightingale Conant*.

Daryaei, A. A., & Haghighat, H. (2017). Financial Freedom and Socially Responsible Market Economy: An Analysis from Rawls's Theory of Justice . *Journal of Money and Economy*.

Dawn. (2019). Financial Independence: Why It's Important and How To Achieve It. *Stepping Stones to FI.*

Financial capability and retirement. (2016).

Gardner, C. (2020). Financial Planning: 6 Benefits of Financial Independence. *United Advisers*.

Hafema, M. (2018). Financial Literacy. *Toronto Centre*.

Jayantilal, D. A. (2017). *THE EFFECT OF FINANCIAL LITERACY ON PERSONAL FINANCE MANAGEMENT: A CASE STUDY ON EMPLOYEES OF BANK OF BARODA (KENYA) LIMITE.*

Ketentuan, S. d. (2017). 5 Signs You Are Financially Independent. *PT Bank HSBC Indonesia*.

Khati, A. V., & Vishvesh, R. (2013). Financial Freedom Experience of Indian Male and Female Executives.

Lacey. (2018). What is financial independence and why is it so important? *Money School*.

Lang'at, M. C., & Abdullah, A. (2019). EFFECT OF FINANCIAL LITERACY ON PERSONAL FINANCIAL MANAGEMENT IN KENYA AIRPORTS AUTHORITY . *The Strategic Journal of Business & Change Management*.

Lusardi, A., & Mitchell, O. S. (2011). Financial Literacy and Retirement Preparedness: Evidence and Implications for Financial Education Programs.

Lusardi, A., & Mitchell, O. S. (2014). The Economic Importance of Financial Literacy: Theory and Evidenc. *Journal of Economic Literature* .

Lusardi, A., & Mitchell, O. S. (2014). The Economic Importance of Financial Literacy: Theory and Evidence. *Journal of Economic Literature* .

Maina, M. J. (2010). EFFECT OF FINANCIAL LITERACY ON PERSONAL FINANCIAL MANAGEMENT PRACTICES: A CASE STUDY OF EMPLOYEES IN FINANCE AND BANKING INSTITUTIONS.

Maobe, A. (2017). Financial Literacy and Retirement Planning In Kenya.

Meir, A., Mugerma, Y., & Sade, O. (2016). FINANCIAL LITERACY AND RETIREMENT PLANNING: EVIDENCE FROM ISRAEL. *Israel Economic Review*.

Muizzuddi, Taufik, Ghasarma, R., Putri, L., & Adam, M. (2017). Financial Literacy; Strategies and Concepts in Understanding the Financial Planning With Self-Efficacy Theory and Goal Setting Theory of Motivation Approach. *International Journal of Economics and Financial Issues*.

Mwathi, A. W., Kubasu, A., & Akuno, N. R. (2017). Effects of Financial Literacy on Personal Financial Decisions among Egerton University Employees, Nakuru County, Kenya. *International Journal of Economics, Finance and Management Sciences*.

Nationa Social Security Fund. (2020). Retrieved from https://www.nssf.or.ke/about

Njehia, S. (2014). *EFFECT OF FINANCIAL LITERACY ON PERSONAL FINANCIAL MANAGEMENT OF EMPLOYEES OF MUMIAS SUGAR COMPANY LIMITED* .

Nolan, A., & Doorley, K. (2019). Financial Literacy and Preparation for Retirement.

OECD. (2003).

Potrich, A. C., Vieira, K. M., & Kirch, G. (2015). Determinants of Financial Literacy: Analysis of the Influence of Socioeconomic and Demographic Variable.

Raval, V., & Vyas, K. (2013). Financial freedom experience of Indian Male and Female Executive. *Munich Personal RePEc Archiv*.

Sarah, M. B., Bruce, R., & Campell, A. (2019). Attaining Financial Independence in Emerging Adulthood Through a Conceptual Model of Identity Capital Theory. *My Money and Me*.

(2020). *The Impact of Behavioural Finance on Pschology of Investing.* Transamerica Resources, Inc.

Xiao, J. J., Kim, J., & Chatterjee, S. (2014). Factora associated with Financial |Independence among Young Adults.

APPENDICES

Appendix 1: Questionnaire

The aim is to study the impact of financial literacy on financial independence among retirees of public universities in Western Kenya Region. The obtained data will be treated with confidentiality.

Guidelines

Please give objective responses to the questions below:.

Part A: Demographics

i) Retiree’s name

ii) Gender: □ Male □ Female

iii) Length of service in public university before retirement

□ 1-5 years □ 6-10 years

□ 11-15 years □ More than 15 years

iv) What position did you hold in the University?

□ Professor □ Masters Holder Lecturer

□ Associate Professor □ Support Staff

□ Doctorate Lecturer

v) Level of education

□ No formal training □ Primary education

□ Secondary training □ Technical level

□ University and above □ Others (Specify)……………………

vi)Which University did you retire from?

vii) Does your University have a Retirement and Benefits Scheme? If yes, are you a member?

Part B

Effect of Financial Literacy on Financial Independence among Retirees of Public Universities in Western Kenya Region

1. Numerical Literacy

Indicate to what level you concur with these statements.

1=Strongly disagree, 2=Disagree,3=Not certain, 4 =Agree, 5=Strongly agree

	Rate				
Narration	1	2	3	4	5
Computation and interpretation of simple interest aids in understanding the interest payable on an investment attracting simple interest					
Long term investments require adequate knowledge on compound interest computations					
The concept of Time Value of Money is essential in analyzing returns on savings and investments					
The inflation rate adversely affects the price of goods and services					
Calculating an investment's rate of return informs one's choice of investment					
Understanding the interest rate on a debt facility aids in estimating the amount of interest payable.					
The repayment period of a loan affects choice of a debt facility					
Making timely loan and credit repayments enables one to avoid additional interest					
Proper management of one's investment enables one to maintain their lifestyle					
Changes and trends in financial markets affect returns on investments					
Sound financial decisions enables an individual to continually improve their investment portfolio					

2. Resource Planning Skills

Indicate to what level you concur with these statements.

1=Strongly disagree, 2=Disagree, 3=Not certain, 4 =Agree, 5=Strongly agree

Narration	Rate				
	1	2	3	4	5
A good budget should enlist all incomes and expenses that an individual incurs					
Adherence to one's budget enables one to meet their financial goals					
Preparation of financial plans helps in monitoring of income and expenses					
An effective budget should have mitigating measures to cure any variances that may occur					
Periodic review of budgets aid in determining sustainability					
A good budget should include an emergency fund to take care of major unexpected expenses					
Diversification of investments aids in spreading of risks					
Clearly laid out long term and short term financial goals are essential in good financial management					
Financial investment opportunities should be carefully evaluated before execution					
Apt income estimation helps in determining resource availability beforehand					
Insurance of assets against risks is a good wealth protection tool					

3. Debt Management Skills

Indicate to what level you concur with these statements.

1=Strongly disagree, 2=Disagree, 3=Not certain, 4 =Agree, 5=Strongly agree

Narration	Rate				
	1	2	3	4	5
Analysis of suitability of a credit facility to its intended purpose influences choice of credit facility					
Money from a loan should be put into its intended use					
One should understand the terms and conditions of a loan before taking it up					
When facing financial difficulties one should embrace loan restructuring					
Secured debt attracts a lower interest rate as compared to unsecured debt					
In the invent of a windfall, one should offset their loan balance in order to reduce the repayment period and the interest payable					
Scrutiny and understanding of the repayment schedule for any debt advanced enables one to ensure compliance					
Proper loan planning enables one to maintain their lifestyle while repaying the loan					
Check off system is a more sustainable loan repayment model since it minimizes chances of default					
Taking multiple loans enables one to acquire enough fund to carry out development projects					

4. Pension Fund Management

Indicate to what level you concur with these statements.

1=Strongly disagree, 2=Disagree, 3=Not certain, 4 =Agree, 5=Strongly agree

Narration	**Rate**				
	1	2	3	4	5
Membership in a pension and benefits scheme is crucial in pension management					
Making monthly contributions to pension schemes ensures one is a member in good standing					
Making voluntary additional contributions into one's pension fund improves one's pension fund					
Periodic checking of one's pension statement enables one to keep track of their contributions					
Participation in supplementary pension programs boosts one's pension funds					
Attending retirement trainings well equips one for retirement planning					
A transparent pension scheme enables a retiree to estimate the value of his savings at any one point					
A good pension provider provides flexibility in terms of payout options and timing					
Monthly pension is sufficient to sustain monthly needs at retirement					
The list of beneficiaries in a pension fund should be up to date at all times					
Plans such as owning a home and having a kitchen garden helps reduce one's monthly expenses in retirement					

5. Financial Independence

Indicate to what level you concur with these statements.

1=Strongly disagree, 2=Disagree, 3=Not certain, 4 =Agree, 5=Strongly agree

Narration	Rate				
	1	2	3	4	5
Efficient management of assets enables the owner to enjoy maximum returns					
Ownership documents for all assets amassed should be available and in kept in safe custody					
Diversification of assets aids in risk reduction					
Income generating assets should generate enough income to sustain one’s lifestyle into retirement					
Full utilization of assets gives optimum returns from the assets					
Changes and trends in the financial markets affect the value of assets					
Savings should be kept in bank accounts that offer periodic interest on the deposits					
Savings should be adequate to take care of one' living expenses in retirement					
Savings stored in accounts that allow immediate access ensure liquidity in retirement					
Adequate savings enable timely payment of bills					
Sufficient savings enable one to support philanthropic projects of my choice					

My particulars are:

Name **:Sarah Misuko- 0718088137**

Appendix 2: List of Public Universities in Western Kenya Region

The following is a list of public universities domiciled in Western Kenya Region.

1. JaramogiOgingaOdinga University of Science and Technology
2. MasindeMuliro University of Science and Technology
3. Kibabii University
4. Kisii University
5. Maseno University
6. Rongo University

Appendix 3: Budget

The following is the approximated budget until the conclusion of the study:

Description	**Amount(KES)**
Printing charges	15,000.00
Binding	14,000.00
Transport & fuel	15,000.00
Stationery	12,000.00
Internet	18,000.00
Miscellaneous	12,000.00
Publishing	20,000.00
Total	**116,000.00**

Appendix 4: Work Schedule

The table below shows my work schedule during the entire study period.

	April 2021	May 2021	June 2021	August 2021
Proposal writing				
Presentation				
Correction &data collection				
Data Analysis & Review				
Publishing				