

**DETERMINANTS OF FINANCIAL LITERACY AMONG MILLENNIAL
EMPLOYEES: A CASE STUDY OF KILIFI COUNTY GOVERNMENT**

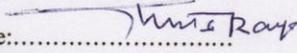
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**A Research Project Submitted in Partial fulfillment of the Requirements for the
Degree of Master of Business Administration of Pwani University**

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DECLARATION

This research project report is my original work and has not been submitted for a degree in any other University or Institution of Learning.

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DEDICATION

This research project report is dedicated to the Almighty God who gave me both the spiritual and physical strength to undertake and complete the project.

ACKNOWLEDGMENT

I acknowledge my lecturers for their tireless effort in imparting knowledge and skills in me. I also acknowledge my fellow students for their moral support and sincerely thank my supervisors Dr. Ronald Koech and Dr. Abdullah Ibrahim Ali for assisting me in the writing of this research project. Moreover, I would like to thank my family members for their endless support and encouragement extended to me in the course of writing this research project.

ABSTRACT

Background: The purpose of the study was to determine financial literacy among millennial employees of Kilifi county government. The study was guided by the following research objectives; knowledge level of literacy among the millennial employees, demographic characteristics of millennial employees and socio-economic factors of millennial employees. The study sought to determine the financial literacy among Kilifi County Government millennial employees in Kenya.

Methodology: Across-sectional survey design was used. A sample of 144 millennial employees was randomly selected to reflect the population of Kilifi County Government millennial employees. Stratified random sampling (a sampling technique where strata are identified and sample units obtained randomly through proportional allocation) was used to ensure that demographic and socio-economic considerations are fairly represented in the sample. Questionnaires were used to collect data from the employees. The explanatory variables under this study were included; gender, age, marital status, education levels, employment status, personal income, and financial education/knowledge while the response variable includes financial literacy (investment held, savings and portfolio held) were also added. Regression analysis was used to find out the relationship between financial literacy and financial education.

Results: The study found out that, financial literacy level among the millennials vary with gender, where men are seen to be at 63% and women 51.5% levels of financial literacy among millennials. Both formal and non-formal sources of information play a vital role in determining the financial literacy level of millennial employees, however, experience with financial matters is a major determinant. The influence from Education

level, culture, income level, and marital status was statistically insignificant (0.08) when tested at 0.05 level of significance.

Conclusion: Financial literacy is a global concern. In Kenya people are still not much aware about their finance related issues. The results suggest that level of financial literacy varies significantly among respondents based on various demographic and socio-economic factors. Similarly, sources of information & financial advice influence individuals' level of financial literacy and investment choice decisions. It can therefore be concluded that financial literacy level gets affected by gender, age, education, other wealth factors and sources of information & financial advice, whereas it does not get affected by occupation status, occupation type and personal income.

TABLE OF CONTENTS

DECLARATION.....	ii
DEDICATION.....	iii
ACKNOWLEDGMENT	iv
ABSTRACT.....	v
LIST OF TABLES	x
LIST OF FIGURES	xi
ABBREVIATIONS.....	xii
DEFINITION OF TERMS.....	xiii
CHAPTER ONE:	1
INTRODUCTION.....	1
1.1 Background of the study	1
1.2 Problem Statement	5
1.3 Research Objectives	6
1.3.1 General Objective	6
1.3.2 Specific Objectives	6
1.4 Justification of the study	6
1.5 Research Questions	7
1.6 Significance of the Study	7
1.7 Scope of the Study.....	8
CHAPTER TWO:.....	9
LITERATURE REVIEW	9
2.1 Introduction	9
2.2 Theoretical literature	9
2.2.1 Social learning theory	9
2.2.2 Consumer Socialization Theory	11
2.2.3 Psychosocial Theory.....	13
2.3 Review of Variables	15
2.3.1 Financial Education	15
2.3.2 Demographic characteristics.....	16
2.3.3 Socio-Economic factors.....	17
2.3.4 Financial Literacy	20
2.4 Empirical Literature Review	22

2.5 The Research Gaps	23
2.6 Conceptual Framework	23
CHAPTER THREE:.....	25
RESEARCH METHODOLOGY	25
3.1 Introduction	25
3.2 Research Design	25
3.3 Population of the Study	25
3.4 Sampling Technique.....	26
3.5 Sample Size	27
3.6 Data Collection Procedure	28
3.7 Pilot Study	29
3.7.1 Validity of Instrument	29
3.7.2 Reliability of Instrument.....	29
3.8 Data Analysis and Presentation.....	30
CHAPTER FOUR.....	32
RESULTS AND DISCUSSION	32
4.1 Data	32
4.1.1 Reliability test Results	32
4.1.2 Descriptive statistics	34
4.1.3 Diagnostic checks	35
4.2 Determining the effects of financial education on millennial employees	36
4.3 Determining the effects of gender on the financial literacy level among the millennial employees.....	37
4.4 To investigate the effect of social factors on financial literacy levels among millennial employees.....	39
4.5.1 Fitting the regression model	40
4.5.2 Statistical significance	41
CHAPTER FIVE	45
SUMMARY, CONCLUSION AND RECOMMENDATION.....	45
5.1 Summary	45
5.2 Conclusions	45
5.3 Recommendations	46
5.4 Suggestion for Further Research	47
REFERENCES.....	48

APPENDIX I: QUESTIONNAIRE ON FINANCIAL LITERACY AMONG EMPLOYEES	53
APPENDIX II: RELIABILITY TEST; ITEM -TOTAL STATISTICS.....	56

LIST OF TABLES

Table 1: Sample size determination.....	28
Table 2: Reliability test.....	33
Table 3: Descriptive statistics	34
Table 4:Diagnostic checks	35
Table 5: Effects of financial Education	37
Table 6: Effects of gender on Financial Literacy.....	38
Table 7: Relationship between social factors and financial literacy.....	40
Table 8: Goodness of fit.....	41
Table 9: Statistical significance	42
Table 10: Model Coefficients	42

LIST OF FIGURES

Figure 1: Conceptual frame work 24

Figure 2: Relationship between gender and saving 39

ABBREVIATIONS

SPSS	Statistical Package for Social Sciences
MMCL	Millennium Management Consultants Limited
SBCC	Social and Behavior Change Communication
PACFL	President's Advisory Council on Financial Literacy
PISA	Program for International Students Assessment
OECD	Organization for Economic Co-operation and Development

DEFINITION OF TERMS

Financial literacy: According to PISA ,2012, has been defined as the knowledge and understanding of financial risk and concepts and the skills motivation and confidence to apply such knowledge and understanding in order to make effective decisions across a range of financial contexts to improve the financial well-being of individuals and society and to enable participation in economic life.

Financial education: According to PACFL, 2008, defines financial education as "the process by which people improve their understanding of financial products, services, and concepts, so they are empowered to make informed choices, avoid pitfalls, know where to go for help and take other actions to improve their present and long-term financial well-being."

Millennial Cohorts-Neil Howe and William Strauss, authors of the 1991 book *Generations: The History of America's Future, 1584 to 2069*, are often credited with coining the term. Howe and Strauss define the millennial cohort as consisting of individuals born between 1982 and 2004. The age limit for the millennial employees is 13 to 35 years as at the time of this proposal, 2017.

CHAPTER ONE: INTRODUCTION

1.1 Background of the study

The terms financial literacy, financial knowledge, and financial education often have been used interchangeably both in the academic literature and in the popular media (Huston, 2010). Kim (2001) defines financial literacy as a basic knowledge that people need in order to survive in modern society. Financial literacy involves knowing and understanding the often-complex principles of spending, saving, and investing. Financial literacy is also the ability to use knowledge and skills to manage financial resources effectively for a lifetime of financial well-being (Lusardi, 2006). It has also been defined as an individuals' ability to evaluate both new and complex financial instruments with a view to making informed judgments in both choices of instruments and their use for long-run interests Monticone, (2010).

Huston (2010) argues that "A lack of financial literacy can hamper the ability of individuals to make well-informed financial decisions". Financial literacy has been recognized as a key skill for individuals who are embedded in an increasingly complex financial scenario. Despite its significance, many studies around the world indicate that much of the world's population still suffers from financial illiteracy and that measures to remedy the problem are urgently needed (Lusardi *et. al.*, 2010; Atkinson and Messy, 2012).

Financial literacy surveys have been conducted in the U.K. Atkinson and Messy, (2012), Austria Garman *et al.*, (2007), Poland Moschis and Churchill, (2010), Fiji Lusardi *et. al.*,

(2010), and Ireland Greenspan, (2005). Findings from these surveys generally support the low level of financial understanding on an international level. The Organization for Economic Co-operation and Development (OECD, 2013) conceptualizes financial literacy as a combination of awareness, knowledge, skill, attitude, and behavior required to make financial decisions.

Financial literacy plays a major role in financial independence as it helps individuals to make decisions on their finances. Financial independence is the state of having sufficient personal wealth to live, without having to work actively for basic necessities. For financially independent people, their assets generate income and/or cash flow from dipping into the assets that are at least as great as their expenses. Studies based on the financial knowledge and behavior for millennial's, born between 11th January 1982 to 11th September 1997 contribute to financial literature since this is the first generation to have access to the internet technology in their formative years and is expected to be the engine of the Kenyan economy.

Studies around the world show that developing countries face low levels of financial literacy (Ade, 2013). In India, for example, more than half of laborers surveyed indicated that they store cash at home while borrowing from moneylenders at high rates of interest. This pattern of behavior (high-interest loans and no-interest savings, with the attendant high risk of theft or “frittering away” of savings) worsens their financial situation. Lack of financial literacy is often tied to lack of access to financial products or failure to use them even when they are available.

In Zambia, Democratic Republic of Congo, Guinea, the Kyrgyz Republic, Turkmenistan, Yemen and Cambodia, only 29 percent of adults have a bank account and 50 percent use

no financial products at all (Monticone, 2010) In South Africa, a recent survey found that nearly 60 percent of the people surveyed do not understand the term “interest.” In Zambia, more than two-thirds of people are unfamiliar with basic financial products and tools such as checking accounts, automated teller machines, and debit cards. Access to formal financial services is not only important for individuals for risk transfer, but also to the economy at large in savings mobilization and capital allocation.

Kilifi County is one of the six Counties in Coast region of Kenya. The population of the county was estimated to be 1,217,892 in 2012 as projected in the Kenya Population and Housing Census (2009) composed of 587,719 males and 630,172 females. The population was projected to rise to 1,466,856 in 2017 respectively at a growth rate of 3.05 percent per annum. The literacy level of the population aged 15 and above remains low. Those with the ability to read and write stands at 65.5 percent while 34.5 percent cannot. The adult literacy level in the county is 65.3 percent. For the county to be competitive it requires its workforce to adhere to the values of the County that emphasizes good governance, integrity, transparency and accountability and the vision to be a leading, prosperous and secure county for quality life.

Who are millennials?

Millennial Generation (also known as Gen Y, Millennials, Echo Boomers, Why Generation, Net Generation, Gen Wired, We Generation, DotNet, Ne(x)t Generation, Nexters, First Globals, iPod Generation, and iYGeneration) is a new generation—the children of the boomers (Shimoda & Barton, 2019). In the 1960s, the generation gap was over differences in lifestyles and ideology between parents and their children. Similar to their parents, Millennials are not defined by demographics alone, but rather by a combination of their demographic cohort, values, life experiences, and buying behaviors

(Leung, 2003). Past generations worked mainly to secure comfort and livelihood with the goal of making life better prosperity. The focus was mainly on family and providing a comfortable life for them. On the flip side, Millennials have been much slower to get married and begin families. Majority of this generation are still single, demographers and scholars have noted that perhaps other goals and priorities have out-shined the focus of older generations on the family and home. Gen Y is the first generation that does not need any authority figure to gain access to information, resulting in a unique and advanced group of workers. They are the first global generation connected by the Internet, and social media (Imron, 2019). Millennials have been leading technology enthusiasts. For them, these innovations provide more than a bottomless source of information and entertainment, and more than a new ecosystem for their social lives. They also are “a badge of generational identity.” Many Millennials say their use of modern technology is what distinguishes them from other generations. A majority of Millennials think technology helps people use their time more efficiently, some Millennials have created a social networking profiles. Millennials are more likely than older adults to use their cell phones to send and receive text messages. Even Millennials are categorized into groups as 29% Hip-ennial (I can make the world a better place), 22% Millennial Mom (I’m too busy taking care of my business and my family to worry about much else), 13% Gadget Guru (It’s a great day to be me), 10% Clean and Green Millennial (I take care of myself and the world around me), 9% and 10% Old School Millennial (Connecting on Facebook is too impersonal, let’s meet up for coffee instead) (Shimoda & Barton, 2019).

1.2 Problem Statement

In the recent past, financial services gave consumers varied arrays of products to meet their financial needs. What determines one to identify the best option required financial education based on gender and social factors suiting their circumstances. Millennials are characterized by their love of tangible things like gadgets and advanced technology, this is quite understandable with the advent of the technological boom, items which are easily purchased and shipped seamlessly between countries with the payment hassle being solved by online platforms e.g. use of either a credit or debit card.

With the consumer driven nature of the world and societal pressures, the millennial biggest problem lies in planning for their future. Millennials live for the moment and think the future will take care of itself. Millennials have poor financial planning skills, and feel that they are still young and healthy to be bothered with life insurance, health insurance, income protection cover or even home insurance.

This study was therefore conducted with the aim of generating useful information in the subject area and focused on how financial awareness, gender and social factors determined financial literacy. Without determining financial literacy levels among Millennials, departments would continue to lose reputation and trust during their tenure of work.

In Kilifi county government, in order to understand problems associated with financial issues, a minimum level of financial literacy is a must. Indeed, what level and how of financial literacy among Millennials in Kilifi County government remains undocumented. This makes it difficult to determine the social and gender factors for an effective and efficient mitigating problem of financial literacy. It was against this background that this

study aimed at bridging the knowledge gap through determining the financial literacy among millennial employees in Kilifi county government.

1.3 Research Objectives

1.3.1 General Objective

The main objective of the study is to determine the financial literacy level of millennial employees in the County Government of Kilifi.

1.3.2 Specific Objectives

The following are the specific objectives of the study;

- i. To determine the effects of financial education on the financial literacy level on millennial employees.
- ii. To determine the effect of gender on the financial literacy level among the millennial employees.
- iii. To investigate the effect of social factors on financial literacy levels among millennial employees.

1.4 Justification of the study

The main goal of this study was to determine the financial literacy level of millennial employees in the County Government of Kilifi, anchored on three specific objectives, the study sought to determine the level of financial knowledge of millennial's at work in the County, to determine the effect of demographic characteristics on financial literacy on the millennial employees, to investigate the effect of socio-economic factors on financial literacy levels among millennial employees.

It is important for an individual to come into picture on the best practice to save, invest and improve on the level of understanding on the role of financial knowledge in one's

economic well-being. The tragedy is relating all factors that would otherwise determine the financial literacy level of an employee. What envisions this study is the behavior and financial authority of millennials as employees of the County Government of Kilifi. This justifies determination of the social and economic factors for an effective and efficient mitigation of financial literacy. It was against this background that this study aimed at bridging the knowledge gap through determining the financial literacy among millennial employees in Kilifi county government

1.5 Research Questions

- i. What are the effects of financial education on the financial literacy level on millennial employees?
- ii. What is the effect of gender on the financial literacy level among the millennial employees?
- iii. What is the effect of social factors on the financial literacy level of millennial employees?

1.6 Significance of the Study

The findings will be important not only to millennial employees in Kilifi but also to the management in identifying the need to train their staffs in financial management. Also, the management will be in a position to identify the level of financial literacy among their employees.

The findings will be useful and crucial to researchers as it will contribute to knowledge in finance for better personal financial management and at the same time a new source of information will have been made available for the literature review.

To the policymakers, this research can be used to formulate policies and programs that will promote financial literacy that will lead to prudent saving, debt and credit

management, pension plans in readiness for retirement and also shade light on financial literacy in their personal financial management.

1.7 Scope of the Study

The study targeted the millennials employed by the County Government of Kilifi. The unit of analysis was restricted to millennial employees, in the departments of Public Service Management, Public Service Board, Trades, Water, Education, Health, Agriculture, Roads, and Public Works, ICT, Finance and Executive in Kilifi county government which are distributed across the seven Sub-Counties (Kilifinorth, Malindi, Magarini, Kilifisouth, Ganze, Kaloleni and Rabai). Since the onset of devolution, the county government has been employing staff of different age brackets and gender across its different offices. Some of these officers were seconded from the national government and the defunct municipalities. In the interest of our study, all staff in the cohort of millennials recognized by the directorate of human resource in the county formed the target population.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter presents a review of the literature on the theoretical foundation of the study, financial knowledge, financial awareness, financial education, financial stability, financial wellness, empirical studies, and finally a summary and the Research gap.

2.2 Theoretical literature

A theory is a set of systematic interrelated concepts, definitions, and propositions that are advanced to explain and predict phenomena (Cooper and Schindler, 2011). For the purpose of this study, the areas to be assessed are demographic characteristics, financial education, and socioeconomic factors. These determinants of financial literacy will be guided by the following theoretical framework and model theories as summarized below:

2.2.1 Social learning theory

Social (or Observational) Learning Theory stipulates that people can learn new behaviors by observing others. Earlier learning theories emphasized how people behave in response to environmental stimuli, such as physical rewards or punishment. In contrast, social learning emphasizes the reciprocal relationship between social characteristics of the environment, how they are perceived by individuals, and how motivated and able a person is to reproduce behaviors they see happening around them. People both influence and are influenced by the world around them.

Social Learning Theory has been applied to a variety of topics including compulsive behavior (Banks, 2010), financial behavior Harinie et al., (2017); (Marcolin & Abraham, 2006) and children's socialization Bianchi, (2018); (Murendo & Mutsonziwa, 2017).

People learn behavior through the process of socialization; similarly, consumer research suggests that consumer socialization is the process "by which young people acquire skills, knowledge, and attitudes relevant to their functioning in the marketplace" (Cranmer, 2018). The definition has been extended beyond general consumer behavior to include values, attitudes, norms, skills, behaviors, motives, and knowledge that contribute to financial skills and understanding (Bartholomew and Gutter, 2000; Gutter *et al.*, 2009). Several researchers have applied consumer socialization theory to the study of college students' financial knowledge, behavior, and well-being (Shim *et al.*, 2009; Shim *et al.*, 2010; Gutter *et al.*, 2010). Along with social learning theory, consumer socialization provides the theoretical underpinning for this research.

Social learning theory, therefore demonstrates how social factors (such as sources of information & financial education) influence in shaping a person's behavior. The financial approaches and values people have about money come from the environment they are in. The effects of social interactions on individual behavior have been modeled, tested and applied to a wide variety of situations (Glaeser and Scheinkman, 2003). Social interaction may affect financial decisions as people receive and process information by interacting with others. In a US 401(k) pension plan participation study, (Duflo & Saez, 2003) found that peer effects influenced retirement savings decisions because many people had not carefully thought through the advantages and disadvantages of particular plans for themselves. Many employees used information from peers when deciding on participation as they may lack their own reasoned information for making sound retirement investment decisions.

The application of social learning theory in financial literacy among millennial are explained when children and adolescents develop, they experience diverse behavioral,

cognitive and environmental factors that play a role in shaping individual achievement (Bandura, 1977). Martin and Oliva (2001) indicated that children, adolescents, and young adults learn personal financial skills from their parents through observation. Their research identified a number of experiences in which the Social Learning Theory (SLT) could be applied to financial education opportunities. These experiences include: exposure to money is through parents, observation of the importance of working to earn money to meet needs; learning money provides access to products and services that are wanted, learning to imitate behaviors and attitudes of parents, and learning saving and spending patterns. Through social learning theory, millennials can reflect and influence behavior when employed.

Weakness of Social learning theory

The theory has much strength as discussed above, however there are weaknesses associated with it which include the following;

The theory puts too heavy of an emphasis on what happens instead of what the observer does with what happens. It does not take into account physical and mental changes of the parties in a society. This is a major drawback to the theory. As a result, not all behaviours and behavioural differences are explained by the theory. Another major limitation of the theory is that it does not take into account that what one person views as a punishment another person may view as a reward (Lee, 1989)

2.2.2 Consumer Socialization Theory

Consumer socialization is usually broadly defined to refer to processes by which individuals learn to participate effectively in the social environment. Huston, (2010) use

the term this way: Socialization is a broad term for the whole process by which an individual develops, through a transaction with other people, his specific patterns of socially relevant behaviors and experience. "Socialization" frequently refers to the learning of social roles and the behavior associated with those roles. Thus, studies have examined the socialization of newly married couples (Gerrans & Hershey, 2017), new employees (Cranmer, 2018) and prison inmates (Harinie et al., 2017). While "socialization" refers to processes affecting present and eventual behavior (e.g., parental influences on a child's achievement motivation and his later striving in the work environment), "anticipatory socialization" refers particularly to implicit, often unconscious learning for roles which will be assumed sometime in the future (Nome, 2017) identify three types of anticipatory socialization.

First, children acquire attitudes and values about adult roles which have limited relevance for the child but which form the basis for subsequent learning of specific behavior. Second, anticipatory socialization can refer to information which cannot be applied until later life: a child may have a rudimentary understanding of "life insurance," but such information is normally not relevant until adulthood. Third, the concept can refer to general and specific skills which can be practiced in the immediate childhood situation, and which will be "called into play throughout life when appropriate occasions arise" (Gaudecker, 2015). "Consumer socialization" is defined here as processes by which young people acquire skills, knowledge, and attitudes relevant to their functioning as consumers in the marketplace. Several aspects of this definition deserve some explanation. First, the focus here is on childhood socialization (although not exclusively), recognizing that not all learning takes place during this period of time and that the impact of new roles such as those adopted during adolescence may greatly alter patterns of

earlier learning. Second, the discussion is limited to marketplace transactions, even though it is recognized that these are only a subspecies of transactions in general. That is, the focus is on consumption of relevant skills, knowledge, and attitudes, so the content of learning differentiates interest in consumer socialization from an interest in other aspects of socialization. Third, a distinction is necessary between skills, knowledge, and attitudes that are directly relevant to consumer behavior and skills, knowledge, and attitudes that are indirectly relevant to consumer behavior. Directly relevant skills, knowledge, and attitudes are those which are necessary for enactment of the consumer role, for example, skills at budgeting, pricing, knowledge of brand attitudes and shopping outlets, and attitudes toward consumption

Weaknesses of Consumer Socialization Theory

The theory over looked the role of children in influencing decisions in a family. It assumed parents have the final decision making. Theoretical frameworks on consumer socialization need to be updated amidst contemporary societal changes. The theory does not cover the debt behavior in relation to socializing agents (Mikeska et al., 2017)

2.2.3 Psychosocial Theory

The Psychosocial theory focuses on developmental conflicts that are also relevant to financial behavior: trust, willpower, and self-regulation. Financial security requires one to trust banks and other financial authorities in being responsible for one's money (FDIC, 2009). (Guiso et al., 2018) found that mistrusting individuals were less likely to buy stocks, and, if they did, they bought less. As evidenced by the recent financial crisis, the ability to ascertain who to trust is critical to making appropriate financial sound decisions. Psychosocial theory supports financial literacy education for pre-adolescents, the stage at which will power and self-regulation is hypothesized to develop.

According to this theory, the engagement in positive financial decisions is dependent on the positive identity, self-confidence, and independence that develops during adolescence and continues into adulthood. Here the role of primary caregivers is critical, but the social and cultural norms of the family and community are also important. Raunig, (2007), concluded that the social context of family life, individual boundaries, and human interactions play a significant role in how money is viewed among Latinos and Anglo-Americans. This is illustrated by research showing that the percentage of stock ownership in a community makes an individual more likely to participate themselves (Brown & Graf, 2013).

Weaknesses of psychosocial theory

Psychosocial theory has been credited by many scholars, researchers and academicians for its strengths in articulating societal behaviors, However there are a number of loop holes identified with the theory; the theory use society as a measure of identity. This encourages the development of conformity as opposed to individuality particularly within a historical and cultural context. The theory does not give attention toward emotional and cognitive development with vague causes of development (Batra, 2013)

Summary of theories

Many learning theories exist. I chose eclectic model of social learning theory, consumer socialization theory and psychosocial theory due to my belief that much of financial literacy seems to be linked to environment than education. These mixes of theories brought synergy in determining financial literacy among millennial employees in Kilifi county government.

Independent variables were set and included financial knowledge, demographic characteristics (gender, age and education level) and socio-economic factors. Other

decisions were made to use these theories for further understanding the dependent variables as shown in figure 1.

2.3 Review of Variables

2.3.1 Financial Education

The word education has been put forward by different scholars to suit their environment and intended purpose. According to Peters (2010), the skill and character of an individual together with knowledge development defines education. Financial education, on the other hand, has been defined as any skill, knowledge, and program that can educate and improve an individuals' financial literacy (Zaimah *et al*, 2013). It is also measured in three different ways (Wagner, 2015); estimation of the effects of financial education on an individuals' financial literacy level, individuals' short-term financial behavior due to the effects of financial education and thirdly estimation of the individuals' different long-term financial behavior resulting from the effects of financial education.

Traditionally, workplace financial education focused on investment and retirement information. Although workplace financial education covers different topics, it is often limited to topics relevant to retirement planning and investment, such as basic investment terminology, asset allocation principles, risk tolerance and risk-return tradeoffs, effects of Inflation, estimation of retirement income needs and retirement income sources, retirement strategies, and the impact of pre-retirement withdrawals on retirement income (Bergheim and Garrett, 1996).

The objectives of financial education often focus on a) how to design a personal financial plan, b) how financial markets work, c) how to select among various savings and

investment options, d) how to find and use investment information, e) how to recognize and victim-proof yourself against investment fraud, and f) the importance of ethical behavior in buyer and seller relationship (National Association of Securities Dealers, Inc., 199). Workplace financial education more broadly refers to any information, education, and/or services provided by an employer to help its employees make informed financial decisions on 1) retirement plans, 2) employee benefits, 3) credit and money management, and 4) consumer rights (Garman, 1997).

Many researchers have asserted the need for workplace financial education (Atchley, 1998;

(Cooper, 1987); Blair and Sellers, 1995; Garman, 1997; “Management briefing”, 1997; The 1998 National Summit on Retirement Savings, 1998; Pomeroy, 1997). Financial education can be beneficial to both employees and employers. “Management Briefing” (1997) reported that employee investment education has become a priority for employers. It asserted that employee financial education should be offered.

2.3.2 Demographic characteristics

According to Guiso et al., (2018) Guiso and Hidajat, (2015) being male is associated with greater financial knowledge in Italy while women possess low financial literacy (Bucher-Koenen et al, 2016). However, according to Filipiak and Walle (2015) in India male are not more financial literate than women by nature but rather than the way men are natured (involvement in taking financial decisions) that made them more financially knowledgeable than women.

A recent study by Shim et al., (2009) on financial well-being among young adults found that there are direct links between financial knowledge, financial attitude, and financial

behavior, but did not find a direct relationship between financial knowledge and financial well-being. The Gender gap in financial literacy existed among young adults (23-28 years) in the U.S.A (Lusardi *et al.*, 2010). According to Cole *et al* (2009) low levels of financial literacy were evident in families with female heads; however, gender did not predict financial literacy in India. According to Lusardi *et al*, (2011) whenever asked questions on financial matters to their families' women are more likely to say they do not know as opposed to men. Women assess their financial literacy levels more conservatively and this finding is similar to women in all categories of countries, both developed and third world countries. Studies conducted by Lusardi *et al*, (2011) extend enough evidence that women have greater difficulty in doing calculations that involve finances this impact negatively on their ability to make informed decisions on financial matters. This difference may be explained by the aspect of socialization. According to Edwards *et al*, (2007) parents have the tendency of maintaining different expectations from their sons and daughters. Higher expectations for work and savings have been directed to sons while daughters have been accorded the education on being financial dependent since they receive a lot of financial support from family members compared to sons. Thus this significant difference in financial literacy levels by men and women can be attributed to the fact that men view money as power while women have a passive approach to money (Calamato, 2010).

2.3.3 Socio-Economic factors

The focus is on both social factors and economic factors that in one way or the other determine or tell the level of financial literacy of an individual. According to (Brown & Graf, 2013) in their research on the role of marital status in financial decisions, singles have significantly lower financial literacy levels compared to married individuals.

Generally, people with low levels of financial literacy make poor decisions that may result in debts that may, in the long run, result in endangering the well-being of their relationships (Calamato, 2010).

In line with this (Dew, 2008) discovered that consumer debt is a major threat to marriages and their satisfaction and hence married individuals have higher levels of financial literacy.

An individual's occupation tells much on his or her level of financial literacy. According to (Chen & Volpe, 1998), individuals with longer working experience have undergone varied financial situations hence they have acquired financial knowledge that allows them to analyze complex problems for decision making. On the other hand, according to Greenspan (2005), unskilled or semi-skilled staffs tend to show lower performance due to their limited encounter with financial matters at the institutions. Further research has shown that financial illiteracy has been associated with low job performance productivity (Kim & Garman, 2004). Higher financial literacy is always experienced in individuals with higher education levels and prompts access to financial information.

Matters of income have a direct relation to the level of financial literacy. According to (Atkinson & Messy, 2012) individuals with low-income levels have low literacy levels. Monticone, (2010) found out that the amount of wealth accumulated by an individual has a little but positive impact on the literacy level. Individuals with higher financial literacy level when making better financial decisions have higher financial income than individuals with a low level of financial literacy.

Numerous studies suggest that wealth has a positive impact on financial literacy since the acquisition of financial knowledge may be motivated by the need to manage own wealth.

This idea was induced by theoretical frameworks of Delavande *et al.*, (2008) and Peress (2004). Delavande *et al.*, (2008) study financial literacy in production function with human capital. They postulate that the stock of financial literacy determines the expected return household receives on his/her investment into the risky assets. Moreover, the amount of wealth held in risky assets matters for the return on investment in financial literacy.

Peeress (2004) models theoretically the investment of individuals in financial information. He argues that investment in financial education allows investors to improve portfolio allocation and receive higher risk-adjusted returns. Individuals make their decisions to invest into obtaining new information upon the condition that marginal cost of information acquisition will be equal to marginal benefit from investing, which is expressed as a function of wealth, risk tolerance and expected share ratio. Peress (2004) suggests that below certain wealth threshold marginal costs outweigh marginal benefits so that investors have no incentive to invest in financial knowledge.

There is some evidence that financial literacy is a critical factor of wealth accumulation (Guiso and Jappelli (2008), Lusardi and Mitchell (2007), (Lusardi & Tufano, 2015) Alessie *et al.*, (2007, 2008)). This leads to an endogeneity issue. Jappelli and Padula (2011) have developed a theoretical model of the consumer's investment in financial literacy. They show that literacy and wealth are mutually determined and are correlated over the life of the consumer.

Monticone, (2010) approaches their verse causality problem empirically by using instrumental variables such as interest rates on deposits to determine whether a household has a self-employed parent and if household lives in a house received as an inheritance or a gift. She finds that wealth predicts financial literacy, however, the effect of wealth is minor and only households with a considerable amount of wealth are motivated to learn more. Next, the review of the studies focused on some aspects of the relationship between financial literacy and saving is given.

Kemps *net al.*, (2008) carried out a study on Measuring and improving financial capability to know more about current levels of financial capability in Kenya, to understand the potential approaches that could be taken to measure financial capability in a less developed nation where the vast majority of the population does not use formal banking services and to explore levels of financial inclusion in Kenya. It relied on the ways in which financial capability has been measured in various countries, and to review evidence from Kenya and elsewhere on the most appropriate objectives of financial education and consider how financial capability education could be prioritized in Kenya to ensure the largest gains.

In Kenya, Mbarire and Ali (2014) conducted a study on determinants of financial literacy levels among employees of Kenya Ports Authority in Kenya. The findings of the study suggested that the overall financial literacy level of the employees is low.

2.3.4 Financial Literacy

According to OECD (2013) financial literacy has been given a worldwide recognition by the G20 countries. It has been identified as a significant element of economic growth and financial stability as approved in the high- level meeting. However, there are gaps identified in some aspects involving financial literacy. This is witnessed by the use of the

term financial literacy as a synonym for financial knowledge or financial education. Since the two are conceptually different, this can easily mislead as financial literacy goes beyond financial education. According to Huston (2010), financial literacy has been viewed from dimensions; personal financial knowledge or education referred to as the dimension of understanding and the application of financial knowledge to manage personal finances termed as the use of financial literacy knowledge or education.

According to Lizard and Mitchel (2011), it is hard to explore the way individuals process their financial information although it is worth assessing how they are financially literate. This is founded on the aspect of financial literacy which covers financial awareness, financial knowledge, and a financial capability which makes it difficult to capture all this in logical research duration. There has been a lot of research conducted in the field of financial literacy and something to note is the consistency in its definition that has been very little. Several authors have assigned the definition differently using different connotations (Hung *et al.*, 2009).

According to Robb *et al.*, (2012), there has been an ambiguous case of the constructs, financial knowledge and financial education where the distinction is based on the fact that financial literacy outlines the ability to understand financial information and using it to make informed decisions. On the other hand financial education simply underlines recalling facts. In summary financial education is anchored on knowledge while financial literacy moves a notch higher to focus on an individuals' financial attitude and behavior. Thus as stated by Huston (2010), financial literacy goes beyond the primary idea of financial education. OECD (2013) defines financial literacy as an element that is comprised of skill, attitude, knowledge, awareness, and behavior that allows an individual to make sound decisions on matters of finance.

2.4 Empirical Literature Review

In Southern Italy, Monticone, (2010) carried out a study on people living in Southern Italy that possess worse financial literacy skills. The main result was that financial literacy increases the probability of asking for professional advice but reduces that of delegating. Lusardi and Mitchell (2006) revealed that minorities in the United States, mainly Black and Hispanic, have the worst financial preparation. Worthington (2004) observed that people from a non-English speaking background in Australia are less likely to be financially literate.

Lusardi *et al.*, (2011) who used household survey data to investigate the effects of education on total saving, both inside and outside of pension plans, found that males and whites perform better on both financial and macroeconomic questions. Being male is associated with greater financial knowledge also in Italy (Guiso *et al.*, 2018), the Netherlands (van Rooij *et al.*, 2007), Australia (Australia and New Zealand Banking Group, 2008), and in other US studies, such as Lusardi and Mitchell (2006, 2008) and Lusardi *et al.*, (2010), using the National Longitudinal Survey of Youth. Ethnic minorities perform worse on financial literacy tests (Lusardi and Mitchell, 2007a). Lyons *et al.*, (2007) find that Hispanics are significantly less knowledgeable than whites about credit scores and reports.

In Australia, individuals of aboriginal descent display lower financial literacy (Australia and New Zealand Banking Group, 2008). There is some evidence of an inverse U-shaped age profile of financial knowledge, meaning that middle-aged adults report higher scores

than both their younger and older counterparts, without controlling for cohort effects (Australia and New Zealand Banking Group, 2008).

In Africa, Atakora (2013) conducted a study on measuring the effectiveness of financial literacy programs in Ghana. The study established the relationship between financial literacy and certain demographic characteristics. The findings indicated that traders with a high level of education display a higher literacy level than non-educated.

2.5 The Research Gaps

From the above previous research reviewed, much of the work has focused on the staff in general and college students. Studies have been done by scholars that include

(Mbarire & Ali, 2014) who determined the level of financial literacy among employees of the Kenya Ports Authority who found out that the overall financial literacy level of employees was low. However, though studies have been carried out on financial literacy, little has been done on millennial employees. Therefore, the researcher sought to find out the determinants of financial literacy among Kilifi County Government millennial employees, in Kenya.

2.6 Conceptual Framework

The study was based on the below outlined conceptual framework. This gave the study an outline on which the determinants of the response variable were measured. The explanatory variables were also given a notch for a quick glimpse to the reader and researcher. It provided the platform on which the study was anchored.

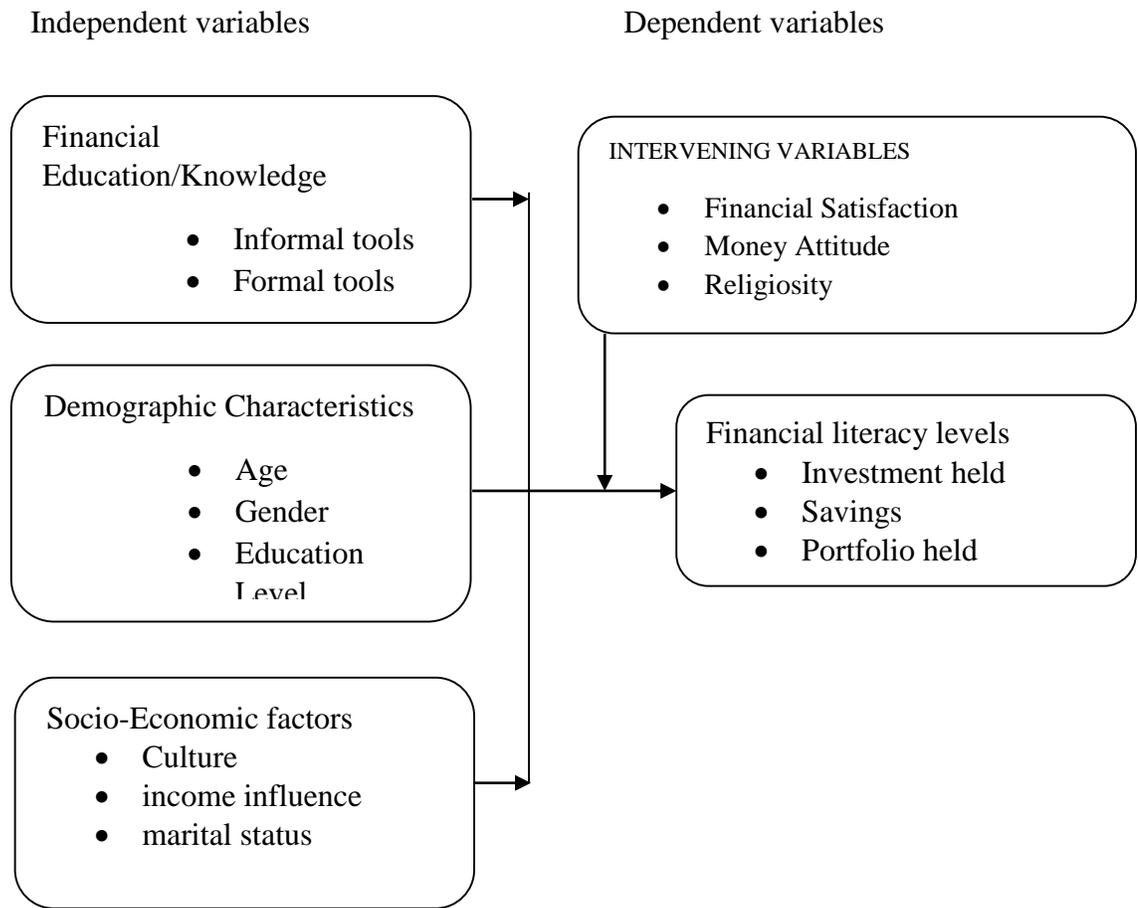


Figure 1: Conceptual frame work

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the research methodology which includes the research design, population of study, sampling design, data collection, data analysis, and presentation.

3.2 Research Design

A research design is a structure within which the research is conducted. It constitutes the blue print for the collection, measurement and analysis of data (Rust, 2014). This study employed a cross-sectional survey (case study research design). Eisenhardt (1989) defines case study as a research design that focuses on the dynamics present within a single setting. This design was chosen since it allows a thorough, meticulous and systematic data collection on the research problem (Yin, 1994). It also gives a deep understanding of the issues, and allows data collection using in-depth key informant method, interview and questionnaires. The study utilized mixed methodology of quantitative and qualitative techniques. Campbell et al (2004) observes that mixed methods are a powerful way of enhancing validity of results. McKim (2016) argues that any bias inherent in one particular method would be neutralized by the other method. Also, it has been observed that data produced by combined methods enhance the validity and reliability of research findings (Bulmer *et.al* 1984).

3.3 Population of the Study

The target population is one to which the researcher wants to generalize the results of the study (Rust, 2014). According to (Creswel, 2009), a population is the total collection of elements about which we wish to make inferences. This study targeted the millennial

employees of the County Government of Kilifi. The targeted population was, therefore, 1,837 persons which was the population of millennials in the County Government as at January, 2017.

3.4 Sampling Technique

The study used stratified random sampling to sample the millennial staff of the County Government of Kilifi who form the targets of the study while simple random sampling was used to obtain the sample units for each. Different departments have different staff establishments, to ensure all departments are represented in the study without bias, stratified random sampling was used. Stratified sampling has the characteristic of providing different members of the target population with different features a chance of being included in the study while at the same time keeping the size manageable. Stratified sampling has more even spread over the entire population, it is easier, inexpensive and is convenient to use over large populations (Kothari, 2004). The main factor that was considered in determining sample size was to keep it manageable while being representative enough of the entire population under study. The use of the Stratified sampling methods as opposed to other sampling designs was informed by the need for respondent specificity and also the need for introducing randomness to reduce bias.

The departments formed the strata then simple random sampling was done at the stratum level to obtain the units to represent in the sample proportional to the size of the stratum (department). Respondents were identified by their departments and proportional allocation;

($n_i = \frac{nN_i}{N}$, where i runs from one to the 11th department) used to determine the sample size across the population strata. The purpose of the method was to maximize survey precision, and presentation of employees from the different departments in the sample size.

3.5 Sample Size

The Yemane (1967:886) method for determining sample size was used. Stratified sampling technique was then used to sample target responses for each of the eleven departments was obtained totaling to the desired sample of the study.

Sample size $n = \frac{N}{1 + N(e)^2}$, where;

N = is the target population size

e = is the margin of error

n = sample size to be determined

$$n = \frac{1837}{1 + 1837(0.08)^2}$$

$$\approx 144$$

This results in 144 respondents

Table 1: Sample size determination

s/n	Department	Population	Sample size $(n_i = \frac{nN_i}{N}), i=1,2,3...11$
1	Agriculture, Livestock, and Fisheries	261	20
2	Devolution, Public Service, and Disaster Management	197	15
3	Education and ICT	142	11
4	Culture, Social Services, and Sports	129	10
5	Lands, Energy, Housing and Physical Planning	165	13
6	Trade, Industrialization, Cooperative, Tourism, and Wildlife	128	10
7	Transport and Public Works	137	11
8	Water, Environment, Minerals and Natural Resources	203	16
9	Health Services	147	12
10	Finance and Economic Planning	123	10
11	Executive	210	16
	TOTAL		144

3.6 Data Collection Procedure

The study used primary data collected using semi-structured questionnaires. The collection was done through the drop and pick criteria to increase the chances of response within the stipulated time of the study. The questionnaire consisted of two sections,

Section A and B. Section A contained the background information to profile the respondent while section B I contained items focusing on the study.

3.7 Pilot Study

To enhance validity and reliability, a pilot study was done in the same area (Kilifi County Government) but by taking the instruments to randomly selected respondents targeting millennials who are employees of different institutions. It further enhanced making the necessary adjustments to the questionnaire based on the pilot study. The reliability and validity of the research instruments for this study were as discussed below:

3.7.1 Validity of Instrument

Validity refers to the degree of congruence between the explanations of the phenomena and the realities of the world (Schumacher 2006) and it seeks to establish if the instrument measures what it is purported to measure. The researcher ensured continuous refinement of the sampling and data collection techniques throughout the process. The expert opinion of a professional in research, as well as the supervisors, was considered. To enhance validity convergent validity was put to use. Convergent validity can be established when there is a high degree of correlation between two different sources responding to the same measure.

3.7.2 Reliability of Instrument

The reliability of a measure is established by testing for both consistency and stability of a research instrument. Consistency indicates how well the items measuring a concept hang together as a set. Cronbach's alpha is a reliability coefficient that indicates how well the items in a set are positively correlated to one another Bryant et al. (2010). The researcher used the scale coefficient technique. Since this reflects the correlations

between two halves of a set of items, the coefficients obtained varied depending on how a scale was split. Sometimes split-half reliability was obtained to test for consistency when more than one scale, dimension, or factor, was assessed. The items across each of the dimensions or factors are split, based on some predetermined logic. In almost every case, Cronbach's alpha is an adequate test of internal consistency reliability. Cronbach's alpha is computed in terms of the average inter-correlations among the items measuring the concept. The closer Cronbach's alpha is to 1, the higher the internal consistency reliability. The data in this study was tested for reliability which gave a (Cronbach's α) of 0.87 which is a good level of reliability and internal consistency.

3.8 Data Analysis and Presentation

Data obtained was organized, coded and analyzed. Data presentation was done using frequency tables and percentages. Descriptive statistics were used to classify the frequency of distribution of the data and measures of central tendency mean and mode, and measures of dispersion standard deviation. Conclusions and recommendations were made for decision-making purposes from the correlation and regression analysis. Statistical Package for Social Sciences (SPSS) was used to carry out analysis of the data. The study results were presented in form of frequency distribution and summarized in relation to the objectives of the study. Regression models and analysis were fitted with financial literacy being the response variable, while the demographic factors, financial knowledge and socio-economic factors used as the independent variables.

This was achieved using the following model;

$$y = b_0 + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + b_5x_5 + e .$$

The functional form of this model is $y = a + bx + e$, b represent the change in Y (in units of y) that will occur as x changes one unit

Where,

Y = financial literacy

b_0 = constant

b_i ($for\ i=1-5$) = Regression coefficients

x_1 = Gender of respondent

x_2 = formal sources of education

x_3 = informal sources of education

x_4 = culture (yes=1, No=0)

x_5 = level of income

e = error term

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Data

The data for this study was obtained through administering of questionnaires. Out of the 144 samples targeted, 12 were incomplete, while 10 were refusals this made the working to be based on the remaining 122 questionnaires. Giving a response rate of 84.7%. Data entry was done using SPSS IBM version 21. To take care of the non-response (15.3%), imputation (ascription) was conducted to the data. Imputation is a statistical process that statisticians, survey researchers, and other scientists use to replace data that are missing from a data set due to item nonresponse. Multiple imputations can lead to valid inferences from imputed data. For unit non-response, t-test on significance of the difference between response and non-response units was conducted at $\alpha=0.05$ yielding a p-value of 0.2988. The results showed that the difference was not statistically significant and hence minimal bias. Analysis was done with respect to the objectives of the study.

4.1.1 Reliability test Results

The reliability of a questionnaire was tested by computing the Cronbach's alpha which is an established method to work out on the internal consistency. The Cronbach's alpha provides a coefficient of inter-item correlations that is the correlation of each item with the sum of all other items. The higher the coefficients the better the measuring tool. The closer the Cronbach's alpha is to 1, the higher the internal consistency. A reliability value of at least 0.7 is acceptable (Bryant et al. 2010). It allows measuring internal consistency amongst items and is used for multi-item scales. Reliability is a measure of internal consistency of a questionnaire by establishing if certain items measure the same construct. Cronbach's alpha was established for the objectives in order to determine if

each objective would produce consistent results should the research be done later. The study consisted of three dependent variables as per the objectives and twenty five independent variables giving a total of twenty eight items. SPSS Version 21 was used to find the reliability of the variables and the results are as shown in table 2 below. The reliability test gave an overall Cronbach's α of 0.867 which is a good level of reliability and internal consistency. (Table 2 below). Item total reliability results have been attached in appendix ii.

Table 2: Reliability test

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.867	.840	28

4.1.2 Descriptive statistics

Below are descriptive statistics for the independent variables.

Table 3: Descriptive statistics

Descriptive statistics					
	N	Minimum	Maximum	Mean	Std. deviation
Gender	122	1	2	-	-
Informal sources of information	122	0	5	1.921645	0.063
Formal sources of information	122	0	5	3.177570093	0.043
Culture	122	0	5	2.56074766	0.138114345
Level of income	122	11,500	89,000	17,250	4,250

The targeted respondents were 144 millennial employees however the completed questionnaires were 122. This gave a response rate of 84.7%. Any data that follows a normal distribution has the mean greater than the standard deviation. A closer scrutiny of the descriptive statistics above reveals that for the five variables, the mean values are higher than the standard deviation. The minimum and maximum values are based on the Likert scale. However the mean and the spread are based on the scores from the scale.

For the variable *level of income* the data was continuous. It can be noted that the information from the descriptive statistics shown truly gives a vivid picture of the data collected and analyzed for the project.

4.1.3 Diagnostic checks

Data exploration is fundamental for any research work this can be done using several strategies; normality test, correlation, multicollinearity, Shapiro tests among others. The researcher goes for a strategy of his convenience. In this study the data was explored for normality test to justify use and analysis of the data for the project. Kolmogorov-smirnov and Shapiro tests of normality were conducted and the results were as shown below;

Table 4:Diagnostic checks

Tests of Normality							
	Variable	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Financial	Gender	.392	18	.000	.624	18	.000
literacy	Source of information	.394	45	.000	.633	45	.000
	Culture	.390	45	.000	.622	45	.000
	Level of income	.345	43	.000	.637	43	.000

a. Lilliefors Significance Correction

The above table presents the results from two well-known tests of normality, namely the Kolmogorov-Smirnov Test and the Shapiro-Wilk Test. The Shapiro-Wilk Test is more appropriate for small sample sizes (< 50 samples), but can also handle sample sizes as

large as 2000. For this reason, we used the Shapiro-Wilk test as our numerical means of assessing normality.

Considering the variables above; Gender, Source of information, Culture and level of information have their Shapiro-Wilk test statistics as 0.624, 0.633, 0.622 and 0.637 which are all above 0.05. Hence the data is normal and fit for use in realizing the objective of the project.

4.2 Determining the effects of financial education on millennial employees

To achieve this objective, aspects of saving, trading with shares, investing in different avenues and nature of scheme were of interest. The relationship between these factors and financial education formed an important opinion on the effects of financial education on millennial employees. It can be seen that over 70% of those who had financial education actively involved themselves with saving and other forms of businesses as opposed to approximately 30% who did not have financial education even though they were actively involved in the business of buying shares, real estate businesses, saving their monies in different forms of accounts. According to Wagner, (2015), financial education is measured in three different ways one of them being an individual's short-term or long term financial behavior as a result of financial education. This is confirmed by the 30% who were saving without financial knowledge. A chi-square test conducted to determine the independence of the several factors that come as effects of financial education on millennial employees revealed that these factors have high level of interdependence and as a result the emergency of one factor would result to another. Any millennial employee who would start saving had a very high chance of investing in other businesses.

Table 5: Effects of financial Education

Test Statistics				
	I get a lot of financial information from peer groups I associate myself with	I have invested a lot in shares in the stock exchange	I have invested in real business	I understand the benefits of saving
Chi-Square	22.028 ^a	69.804 ^a	73.393 ^a	99.411 ^a
Df	5	5	5	5
Asymp. Sig.	.001	.000	.000	.000

0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 17.8.

It can be seen that all these factors have a very strong rate of interdependency and a correlation analysis using Kendall's tau gave a coefficient of 0.826 on saving and financial education. This is a very strong positive relationship that tends to speak loud on the effects of financial education on millennial employees.

This could be as a result of work place financial education as put forward by Blair and Sellers, 1995; Garman, 1997; "Management briefing", 1997; The 1998 National Summit on Retirement Savings, 1998; Pomeroy, 1997 that financial education is important to both the employers and the employees.

4.3 Determining the effects of gender on the financial literacy level among the millennial employees

For this objective to be achieved, financial literacy was captured from different angles where gender was seen to have influence. It was found out that gender played a major

role on the financial literacy level of millennial employees in the county. Out of the many millennial employees interviewed, 80% of those who strongly agreed that they were saving in different banks and other financial institutions were female. Access to informal tools and sources of information was dominated by women. To determine whether saving, investment in real business and shares were independent of gender influence, the results from a chi-square test of dependence revealed that there was a high dependence between gender and saving, investment and access to formal sources of information on financial literacy.

Table 6: Effects of gender on Financial Literacy

Test Statistics	I have invested a lot in shares in the stock exchange	I have invested in real business	I understand the benefits of saving	My gender has played role in my current level of education
Chi-Square	69.804 ^a	73.393 ^a	99.411 ^a	20.458 ^a
Df	5	5	5	5
Asymp. Sig.	.000	.000	.000	.001

a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 17.8.

To ascertain that gender has a major role in influencing the financial literacy levels on millennial employees, below is a pie chart for Gender on Saving. The percentage of women who save is much way lower than that of male employees. This is in line with what Lusardi *et al*, (2011) found out on the role and behavior of women on financial matters. That women are more likely to say they do not know as opposed to men when asked questions on financial matters. Women asses their financial literacy levels more conservatively which is similar to women in all categories of countries, both developed and third world countries. This study extends enough evidence that women have greater

difficulty in doing calculations that involve finances thus impacting negatively on their ability to make informed decisions on financial matters.

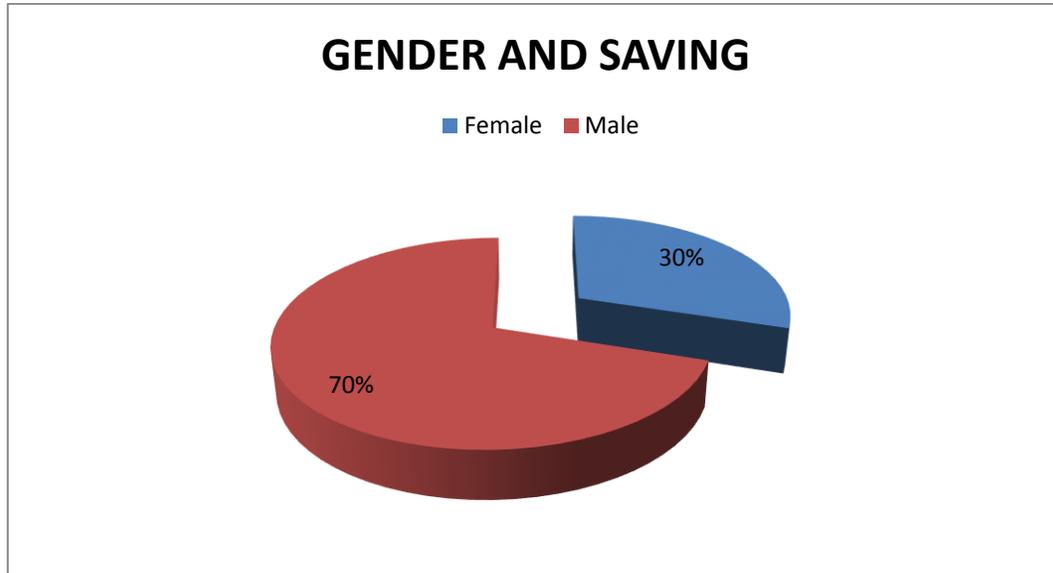


Figure 2: Relationship between gender and saving

4.4 To investigate the effect of social factors on financial literacy levels among millennial employees

This objective was attained through the consideration of all the possible social factors that seem to have an effect on the financial literacy level of the millennial employees. Factors including culture, beliefs marital status formed a basis in making this objective attainable. When analyzed on the dependence of financial literacy level on social factors, it was evident that not all social factors influence level of financial literacy; however factors like culture and beliefs played a key role in financial literacy level of millennial employees. Social factors play a major role in dictating the financial literacy level of millennial employees. This is in line with (Brown & Graf, 2013) on the role of marital status in financial decisions, that singles have significantly lower financial literacy levels compared to married individuals. He further argues that, people with low levels of

financial literacy make poor decisions that may result in debts that may, in the long run, result in endangering the well-being of their relationships. This is supported by (Calamato, 2010).

The occupation of an individual tells much on his or her level of financial literacy as put forward by (Chen & Volpe, 1998). From the responses analyzed also, it is evident that the impact of one social factor might be minimal but a joint effect is highly felt and is of great effect on the financial literacy level of a millennial employee. The chi-square values below show the dependence of the social factors on their effects to financial literacy level.

Table 7: Relationship between social factors and financial literacy

Test Statistics	I have invested a lot in shares in the stock exchange	I have invested in real business	I understand the benefits of saving	My culture has influenced my amount of savings
Chi-Square	69.804 ^a	73.393 ^a	99.411 ^a	22.477 ^a
Df	5	5	5	5
Asymp. Sig.	.000	.000	.000	.000

a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 17.8.

It is evident that social factors have an effect on both directions in the financial literacy level of employees.

4.5.1 Fitting the regression model

The first step was first determining how well the model fits the data. Below is a table showing the model summary of good fit.

Table 8: Goodness of fit

Model summary			
Model	R	Adjusted R-square	Standard error of the estimate
1	0.760	0.559	5.69097

Predictors (Constant), Gender, formal Source of information, informal sources of information, culture, level of income

The "**Adjusted R-square**" column shows a value of *0.559*, the *multiple correlation coefficient*. It's considered to be one measure of the quality of the prediction of the dependent variable. A value of *0.559*, as shown in the table above, indicates a good level of prediction. The "**Adjusted R-square**" (also called the coefficient of determination), represents the proportion of variance in the dependent variable that can be explained by the independent variables (technically, it is the proportion of variation accounted for by the regression model above and beyond the mean model). You can see from our value of *0.559* that our independent variables explain 55.9% of the variability of our dependent variable, financial literacy level.

4.5.2 Statistical significance

The *F*-ratio in the **ANOVA** table (see below) tests whether the overall regression model is a good fit for the data. The table shows that the independent variables statistically significantly predict the dependent variable, $F(4, 95) = 32.393, p < .0005$ (i.e., the regression model is a good fit of the data).

Table 9: Statistical significance

ANOVA					
Model	Sum of squares	Df	Mean square	F	Sign
1 Regression	4196.483	4	1049.121	32.393	0.000 ^b
Residual	3076.778	95	32.387		
Total	7273.261	99			

Table 10: Model Coefficients**Estimated Model Coefficients**

ANOVA						
Model	Unstandardized coefficients		t	sig	95.0% confidence interval for B	
	Std.error	B			Lower bound	Upper bound
Constant	6.385	-.176	13.756	.000	75.155	100.506
Gender	0.063	-.677	-2.633	.000	-.290	-.041
formal sources of information	0.043	-.252	-8.867	.000	-.471	-.299
Informal sources of information	0.032	.748	-3.667	.000	-.182	-.054
Culture	1.344	.325	9.824	.000	10.539	15.877
Level of income	0.324	.126	1.336	.000	3.113	6.002

Unstandardized coefficients indicate how much the dependent variable varies with an independent variable when all other independent variables are held constant. Consider the effect of gender. The unstandardized coefficient, B_3 for informal sources of information is equal to **0.748** (table 6). This means that for every change in informal sources of information, there is an increase in financial literacy level of **0.748**

Statistical significance of the Independent variables

A multiple regression was fitted to model financial literacy level from gender, formal sources of information, and informal sources of information, culture and level of income. These variables statistically significantly predicted financial literacy level, $F(4, 95) = 32.393$, $p < .0005$, $R^2(_{adj}) = .559$. All five variables were statistically significantly to the prediction, $p < .05$.

After carrying regression analysis to determine the relationship and effects of the independent variables on financial literacy, a regression model of the form shown below was obtained;

financial literacy level

$$= -0.176 - 0.677x_1 - 0.252x_2 + 0.748x_3 + 0.325x_4 + 0.126x_5$$

Where,

Financial literacy level = response variable

-0.176=constant

$b_{i(\text{for } i=1-5)}$ =Regression

coefficients

x_1 =Gender of respondent

x_2 =formal sources of education

x_3 =informal sources of education

x_4 =culture(yes=1,No=0)

x_5 =level of income

It can be seen that informal sources of education (0.748), culture (0.325) and level of income (0.126) have a positive determination on the level of financial literacy among millennials as put forward by Lusardi, (2006). What it means is that there exist a positive correlation between financial literacy and informal sources if education, increase in level of informal education result to an increase in financial literacy level. A unit increase in informal sources of education result to an increase in level of financial literacy by 0.748. Like wise to culture and level of income this was a confirmation of a study by OECD (2013). While Gender (-0.677) and formal sources of education (-0.252) have an inverse determination on the financial literacy level among millennials. The bottom line here is that gender and financial literacy level move in opposite direction. The effects of gender will have a negating impact, i.e. an increase in financial literacy level results to decreased effects of gender among the millennial employees.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Summary

A substantial content of insight has been made available regarding the level of financial literacy among millennial employees in Kilifi County which include long-term interventions. All this content is from the rigorous research work from the project. These research works provide sound basis for conclusions about the level of financial literacy among the millennials and they can help inform key decisions regarding lasting effects, who to serve and how designs should be made in improving financial literacy.

5.2 Conclusions

Effects of financial education on millennial employees are evident and can be filled from a wide range. It can be seen that over 70% of those who had financial education actively involved themselves with saving and other forms of businesses as opposed to approximately 30% who did not have financial education even though they were actively involved in the business of buying shares, real estate businesses, saving their monies in different forms of accounts. Any millennial employee who would start saving had a very high chance of investing in other businesses. From the regression model, financial education has a positive effect on the financial literacy of millennial employees. With coefficient of 0.748, informal sources of education will influence every unit change in financial literacy of millennial employees.

Effect of gender on the financial literacy level among the millennial employees, It was found out that gender played a major role on the financial literacy level of millennial employees in the county. Out of the many millennial employees interviewed, 80% of those who strongly agreed that they were saving in different banks and other financial

institutions were female. Access to informal tools and sources of information was dominated by women. However since gender has been defined by the roles in a society, a coefficient of -0.677 units of financial literacy account for every change in gender of the millennial employees in the county as depicted in the regression model.

Effect of social factors on financial literacy levels among millennial employees dependence of financial literacy level on social factors, it was evident from the regression model that indeed there exist a positive relationship between social factors and financial literacy of millennial employees. For every change in social factors, the financial literacy level is influenced by 0.325 units among millennial employees. This means again that not all social factors influence level of financial literacy; however factors like culture and beliefs played a key role in financial literacy level of millennial employees.

5.3 Recommendations

From the findings of the study it can be recommended that; millennial employees need to access more formal sources of financial information to guide them on more prudent investment strategies. Aboard of members from the human resource be formed which will monitor and ensure that millennial employees access more formal sources of financial education with an aim of improving their financial literacy level. Authorities need to sensitize millennial employees on the need to cut-off cultural and social practices that compromise their financial knowledge. Encourage millennial employees not to consider gender (their roles in the society) on matters access to financial sources of education both formal and informal. This would ensure the effect of gender on financial literacy level is not skewed to either gender in the society.

Millennial employees need to take advantage of the social factors that favor their financial wellbeing and sustainability. This will in the long run exploit all the available opportunities in matters finance.

5.4 Suggestion for Further Research

Since this study was carried out in one county only, it is suggested that a similar study be carried out in other counties especially the neighboring Counties like Lamu, Kwale and Tana River. For the purposes of comparing the results for counties in the coast region. This is aimed at improving the financial well-being of millennials across the country.

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**APPENDIX I: QUESTIONNAIRE ON FINANCIAL LITERACY AMONG
EMPLOYEES**

Section i: Respondents' Profile

1. Gender:

Male Female

2. What is your age bracket (in Years):

15-20 20-25 25-30 30-35

3. What is the highest educational level that you have attained?

- a) University-level education
- b) Technical/vocational education beyond secondary school level
- c) Secondary school level
- d) Primary school level
- e) No formal education

4. Do you maintain records of income and expenditures?

a. Yes, I keep records of everything, entering all revenues and all expenditures

b. Yes, I keep records of everything, but not all revenues and expenditures are entered

c. No, I don't keep records of everything, but I know in general how much money is received and spent during a month.

d. No, I do not keep records of family's resources, and I don't have even a vague idea of how much money is received and spent during a month

Section ii: Financial Literacy

Rate the following statements on a scale of 5-1 (Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree)

	a. Statements	5	4	3	2	1
1	I save much of my income with the bank					
2	I have invested in real estate business					
3	My personal income is above Ksh. 100,000 per month					
4	I understand the benefits of saving					
5	I have invested a lot in shares in the stock exchange					
6	I have not at all made any investment.					

Section iii. Financial Education

Rate the following statements on a scale of 5-1 (Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree)

	b. Statements	5	4	3	2	1
1	I get a lot of financial information from the peer groups I associate myself with					
2	From childhood, my parents have kept on telling me about planning and budgeting for money held					
3	Radios and televisions help me acquire more financial information					
4	I get most of the financial information from financial journals					
5	Newspapers do inform me a lot on financial matters					
6	Financial workshops organized by banks help disseminate financial knowledge.					

Thank you for your time.

APPENDIX II: RELIABILITY TEST; ITEM -TOTAL STATISTICS**Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
gender of respondent	71.79	320.552	-.166	.398	.870
age bracket for respondents	70.07	318.236	-.037	.508	.870
highest level of education for respondents	71.82	320.900	-.150	.475	.871
do you maintain records of income and expenditure	72.01	319.471	-.114	.396	.870
I save much of my income in the bank	70.06	293.343	.472	.450	.861
i have invested in real business	71.37	302.736	.323	.549	.865
my personal income is above Ksh. 100,000 per month	71.67	307.955	.194	.534	.868
i understand the benefits of saving	69.35	296.461	.406	.485	.863
i have invested a lot in shares in the stock exchange	71.29	302.360	.298	.445	.865
i have not at all made any investment	71.02	306.557	.201	.358	.868
i get a lot of financial information from peer groups i associate myself with	70.15	295.053	.405	.409	.863

from childhood my parents have been telling me on the importance of planning and budgeting	69.83	285.778	.581	.569	.857
radios and televisions help me acquire more financial information	69.92	283.340	.681	.736	.855
i get a lot of information from financial journals	70.55	295.384	.471	.557	.861
Newspapers do inform me a lot on financial matters	70.29	284.341	.703	.649	.855
Financial workshops organized by banks help disseminate financial knowledge	70.74	295.520	.348	.395	.865
My partner encourages me to save	69.94	281.612	.629	.611	.856
Apart from my salary, i have other sources of income	70.34	281.054	.670	.686	.854
In cases of financial difficulties, my parents support me	70.34	285.997	.546	.613	.858
My culture has influenced my amount of savings	70.76	291.741	.490	.680	.860
iam satisfied with the salary i earn	71.63	299.543	.416	.395	.862
I do part-time jobs to supplement my salary/wages	70.93	293.582	.434	.537	.862

iam an employee aged above 30 years	70.46	297.058	.283	.509	.867
my education level has influenced my financial knowledge	69.58	291.169	.457	.623	.861
iam a holder of a first degree level of education	70.23	290.140	.415	.665	.863
my gender has played role in my current level of education	70.74	287.366	.560	.466	.858
my age has influenced the amount of savings i have	70.89	286.718	.586	.591	.857
as a holder of a secondary level of education and below, i perform most of the manual jobs	71.46	301.231	.332	.343	.864