

# Determinants of Financial Literacy Levels among Employees of Kenya Ports Authority in Kenya

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## Abstract

Employees face and tackle financial decisions be it, savings, insurance or investment projects. Furthermore, financial instruments have become increasingly complex and individuals are presented with new and ever-more sophisticated financial products. Access to credit is easier than ever before and opportunities to borrow are plentiful. However, there is evidence that many employees are not well-equipped to make sound financial decisions. It is against this background that this study investigates determinants of financial literacy levels among employees of Kenya Ports Authority in Kenya. A sample of 500 employees was randomly selected to reflect the population of working class. Sampling was done using stratified multi-stage sampling to ensure that demographic and socio-economic considerations were represented in the population. A survey methodology was adopted with the design of self-administered questionnaires to capture the relevant information from the employees. Findings of the study suggest that the overall financial literacy level of the employees is low. Financial literacy levels gets affected by gender, age, education levels, other wealth factors and sources of information & financial advice, whereas it does not get affected by occupation status & type, and personal income. Recommendations made in this study will help employers and policy makers to devise appropriate strategies targeted at increasing the level of financial literacy amongst the population as well as provide sources of reliable financial advice.

**Keywords:** Employees, Financial decisions, Financial education, Financial illiteracy, Financial literacy.

## 1. Introduction

Financial literacy means different things to different people, and this is reflected most clearly in the many definitions used in the literature. For some, it is quite a broad concept encompassing an understanding of economics and how household decisions are affected by economic conditions and circumstances. For others, it focuses quite narrowly on basic money management such as; budgeting, saving, investing and insuring (Worthington, 2006). Financial literacy can simply be defined as “the ability to make informed judgments and to take effective decisions regarding the use and management of money” (Schagen & Lines, 1996).

Surveys around the world consistently indicate that financial literacy levels are low in high income countries and even lower in middle and low income countries. Financial literacy surveys have been conducted in the U.K. (Atkinson et al., 2007), Austria (Fessler et al., 2007), Poland (Szafrańska & Matysik-Pejas, 2010), Fiji (Sibley, 2010), and Ireland (O'Donnell & Keeney, 2009). Findings from these surveys generally support the low level of financial understanding on an international level. FinScope surveys, which focus mainly on financial access and behavior but also measure a few aspects of financial literacy, have been widely implemented in the Africa region. Some of the findings from the most recent FinScope surveys in 14 countries generally indicate low levels of financial access. For instance, in Ghana, one of the higher-income countries in the region, only 56 percent of adults use any kind of financial product. This figure rises to 81 percent in Lesotho, but falls to just 22 percent in Mozambique. Awareness of basic financial products and concepts vary from country to country as well, but is generally also low, with many people never having heard of savings accounts. However, the financial literacy data from the FinScope surveys is limited in that it generally focuses only on awareness of financial products and providers, and not on other dimensions of financial literacy, such as numeracy or capability.

In Kenya also, the levels of financial literacy are very low despite the concerted efforts to raise literacy levels by the government and other stakeholders. The Kenyan government while admitting the seriousness of this problem said “education and training in Kenya today is facing various challenges that have negatively impacted on its economic development. Unless addressed immediately, these challenges are likely to affect unfavorably the current and future development in Kenya” (Ministry of Education Science & Technology, 2004). Findings from FinAccess national survey (2009) revealed that 60 per cent of the adult population in Kenya lacks

access to formal financial services including banking, insurance and mobile money transfer services. Access to formal financial services is not only important for individuals for risk transfer, but also for the economy at large in savings mobilization and capital allocation.

It can be concluded that financial literacy is a major challenge faced by all countries globally. Numerous surveys conducted around the world have consistently indicated that financial literacy levels are low in high income countries and even lower in middle and low income countries. This study focused on financial literacy among employees and examined how well-equipped they are to make financial decisions.

### 1.1 Problem Statement

Today's complex financial services market offers consumers a vast array of products and providers to meet their financial needs. This degree of choice requires that consumers be equipped with the knowledge and skills to evaluate the options and identify those that best suit their needs and circumstances. In order to understand risk and return associated with these products, a minimum level of financial literacy is a must. Financially literate individuals can make effective use of financial products and services; will not get cheated by people selling financial products not suited for them. Financial literacy aids in improving the quality of financial services and contribute to economic growth and development of a country. Low levels of financial literacy are associated with, and often cause adverse financial problems. Financial problems have clear negative consequences on a worker's health and job performance. Many researchers have found that financially troubled employees do bring their financial related stress to work and hence affecting the productivity, organization's overall profit figure and also the work culture in the long run. There is a significant relationship between financial problems and stress related illnesses (Sporakowski, 1979). Financial stress or strain occurs when individuals are unable to meet their financial responsibilities and one of the most significant causes of workers' stress is personal finance (Kim & Garman, 2006). Therefore financial problems and stress affect not only an employee's personal and family life, but is also a cost to the employers.

Financial literacy is a global concern. Complicated financial products, low level of awareness and lack of knowledge about financial matters makes the want of financial literacy significant. This therefore, calls for a study on the determinants of financial literacy levels among employees. The study's findings will help employers and policy makers to devise appropriate strategies in order to increase the level of financial literacy among population. In addition, most studies on financial literacy have been conducted in developed nations like US, Australia, UK and others. Very few research studies have been carried out in developing countries like Kenya. Furthermore, the target population in most of those studies is college students rather than adult population. To fill this gap, the study sought to find out the determinants of financial literacy among employees in Kenya.

### 1.2 Objective of the Study

The main objective of this study was to identify the determinants of financial literacy levels among employees. To achieve the general objective, the following specific objectives guided the study;

- i) To determine the effect of demographic characteristics on financial literacy levels among employees.
- ii) To investigate the effect of socio-economic factors on financial literacy levels among employees.
- iii) To establish the effect of the sources of information & financial advice used when making important financial decisions on financial literacy levels among employees.

## 2. Literature Review

The study reviewed selected literature that summarizes a diverse spectrum of views on determinants of financial literacy levels. This includes; theoretical review, conceptual framework and measurement of financial literacy.

### 2.1 Theoretical Review

The study reviewed key theories that provide an insight into the personal and social determinants of financial decision making.

#### 2.1.1 Social Learning Theory

Social learning theory illustrates how social factors (such as sources of information & financial advice) influence in shaping a person's behavior. The financial attitudes and values people have about money come from their environment. The effects of social interactions on individual behavior have been modeled, tested and applied to a wide variety of situations (Glaeser & Scheinkman, 2003). Social interaction may affect financial decisions as people receive and process information through interacting with others. In a US 401(k) pension plan participation study, Duflo & Saez (2002) 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. Moreover, beliefs about social norms will additionally influence employee decisions due to a desire to behave similarly to those in their social

group (Berkowitz, 2003).

### 2.1.2 Psychosocial Theory

Psychosocial theory focuses on developmental conflicts that are also relevant to financial behavior: trust, will power, and self-regulation. Financial security requires one to trust banks and other financial authorities in being responsible with one's money (FDIC, 2009). Guiso (2008) 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 preadolescents, 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. Falicov (2001) 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 et al., 2008).

### 2.1.3 Dual-Process Theories

Dual-process theories embrace the idea that decisions can be driven by both intuitive and cognitive processes (Evans, 2008). Although dual-process theories come in many different forms, they all agree on distinguishing two main processing mechanisms. One of the processes can be characterized as fast, non-conscious, and tied to intuition (System 1), and the other as slow, controlled, and conscious (System 2) Stanovich & West (2000). System 2 is responsible for analytical and rational thinking (Stanovich & West, 2000) which is needed to consistently implement a financially literate investment strategy. Goel & Dolan (2003), Sanfey et al. (2006) provide neuropsychological evidence for dual processes.

## 2.2 Conceptual Framework

Conceptual framework is a diagrammatic presentation of the relationship between dependent and independent variables (Mugenda & Mugenda, 2003). In this study, the dependent variable is financial literacy levels while the independent variables are the determinants of financial literacy i.e. demographic characteristics, socio-economic factors and sources of information & financial advice (see Fig.1 below).

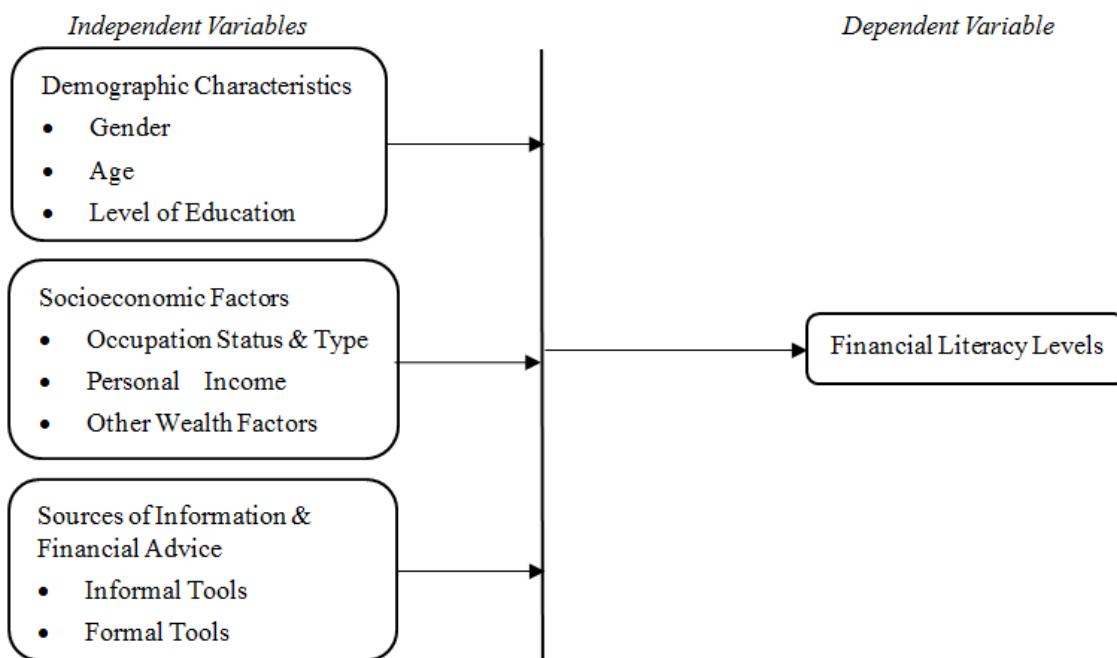


Figure 1. Determinant of Financial Literacy Levels (Author, 2014)

### 2.2.1 Demographic Characteristics

The study examined a number of demographic variables (gender, age and level of education) that have a direct effect on an individual's level of financial literacy. These factors comprise the first group of characteristics included in the conceptual framework as shown in Fig.1 above.

Gender differences play an important role in deciding individuals' levels of financial literacy. Numerous studies argue that men are more likely to perform better than women on various literacy tests (ANZ (2008),

Gallery et al. (2011), Almenberg & Säve- Söderbergh (2011), Lusardi & Mitchell (2008), van Rooij et al. (2007)).

Age has a significant association with financial literacy. A study on financial literacy by van Rooij et al. (2007) found the profile of basic literacy to be negatively skewed with regards to age. Literacy level is low among the young, highest among middle-age respondents (particularly 40 to 60), and declines slightly at an advanced age of 61 or over. Similar findings are reported in the Australian context with the youngest (18-24) and the oldest (70 & over) age groups displaying the lowest financial literacy scores (ANZ, 2008).

Level of education is positively correlated with financial literacy. Studies have consistently shown that individuals with higher levels of education are the most likely to be financially literate. Those individuals who completed university or college degree are more likely to be financially knowledgeable than those with low education level (Cole et al. (2008), Lusardi & Mitchell (2006, 2008), Almenberg & Säve-Söderbergh (2011)). In addition to that, Mandell (2004, 2008) has shown that the correlation between literacy and education is present at the early stages of lifecycle. He has discovered that children of college graduates perform better on numerical test.

### 2.2.2 Socioeconomic Factors

The study identified a number of socioeconomic variables that influence individuals' financial literacy levels. They include factors such as; occupation status & type, personal income and other wealth factors. They comprise the second group of factors included in the conceptual framework (see Fig.1 above).

Occupation status has an association with individuals' financial literacy levels. A survey by ANZ Survey (2008) and Worthington (2006, 2008) in Australia observed that financial literacy scores are typically higher amongst individuals' who are in professional and managerial occupations. Similarly, occupation type/field is also associated with individuals' financial literacy levels. A survey of United Arab Emirates investors found that individuals' who worked in the field of finance/banking or investment, generally display higher levels of financial knowledge than those in other occupations fields (Al-Tamimi & Bin Kalli, 2009).

Financial literacy scores have been found to be generally associated with personal income levels. Higher financial literacy scores are likely to be displayed by individuals with higher levels of personal income and lower scores by those with lower incomes (ANZ, 2008). In addition to that, Traut-Mattausch & Jonas (2011) found that the relationship between financial literacy levels and saving is moderated by the income levels. They found that income levels have a positive association with saving behavior.

Numerous studies suggest that other wealth factors (e.g. investment held) have 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), Peress (2004). Theoretical models were supported by various empirical findings that financial literacy increases with wealth (Guiso & Jappelli (2008), Lusardi & Mitchell (2008)). Wealth accumulation (e.g. investments held) increases financial literacy as individuals seek to increase their financial literacy in order to understand the investments they hold. Similarly, those with less wealth are less likely increase their financial literacy levels.

### 2.2.3 Sources of Information & Financial Advice

The study reviewed a number of sources of information and choice of financial advisors often relied on and their effect on individuals' literacy levels. They are informal tools (e. g. peers and family) and formal tools such as financial experts, T.V., newspapers, internet etc. They comprise the third group of variables included in the conceptual framework (Fig.1 above).

Lusardi et al. (2005) found that financial literacy correlates with tool use. Studies have shown that a high proportion of individuals with low financial literacy tend to rely on informal tools such as; family, friends and acquaintances for financial advice. A study on financial literacy and stock market participation by van Rooij et al (2007) found that households with low financial literacy tended to get advice from peers or family rather than formal sources.

On the other hand, individuals who display high levels of financial literacy are more likely to rely on formal tools such as; newspapers, consult financial advisors, and seek information on the internet rather than informal ones (van Rooij et al., 2007). Looking at the tools that consumers rely on and their level of financial literacy respectively, leads to the conclusion that financial advice influences financial decision making towards better saving and investment decisions. It is important to also note that, demographic and socioeconomic factors that directly impact on financial literacy levels may also indirectly affect the choice of financial advisors and information sources. It is hoped that the determinants of financial literacy can be more fully understood by taking into account these direct and indirect effects.

## 2.3 Measurement of Financial Literacy

The first step to improving financial literacy is to measure it. There are two major approaches of measuring financial literacy i.e. self-assessments and objective measures like test scores. The first approach relies on self-assessment where the respondents are asked to evaluate their literacy skills as well as to provide information

about their attitudes toward financial decisions, knowledge and information. The second approach relies on the objective test which assesses the respondents' knowledge of financial terms, understanding of various financial concepts and ability to apply numerical skills in particular situations related to finance. In order to achieve its main objective, the study adopted the objective test approach in measuring employees' levels of financial literacy. Moreover, the objective test has been found to better assess the respondents' financial knowledge than self-assessment (OECD, 2005).

### **3. Methodology**

This section gives a description of the methods that were used in an attempt to achieve the purpose of the study. The main objective of the study was to identify the determinants of financial literacy among employees. A descriptive research design was undertaken to meet this objective. A sample of 500 was randomly selected from employees of Kenya Ports Authority in Kenya, to reflect the population of working class. The sampling was done using stratified multi-stage sampling to ensure that demographic and socio-economic considerations were represented in the population. A survey methodology was adopted with the design of self-administered questionnaires to capture the relevant information from the respondents.

To measure the financial literacy level, fifteen statement-like questions on personal finance were asked from the respondents. The questions were asked to test respondents' knowledge on basic financial concepts such as; simple & compound interest, inflation, purchase power, sales discount and bond yield. The respondents were asked to rate their certainty about each statement on a 5-point scale that ranged from 100% strongly agree to 100% strongly disagree. A score of 1 means that the answer to a particular question is perfectly wrong and 5 is perfectly correct. Respondents' average score across all the questions were computed and further converted into percentage score. The resulting percentage score was interpreted as a proxy for the respondents' financial knowledge. Consistent with the existing literature (Danes & Hira (1987), Volpe et al. (1996)), the resulting percentage scores of the respondents were grouped into three categories: over 80%, 60-79% and below 60%. The first category represented a relatively high level of financial knowledge, while second category represented a moderate level of knowledge and the third category represented a relatively low level of knowledge.

The survey was used in a pilot study to refine the instrument. The validity and clarity of the survey were further evaluated by two individuals who are knowledgeable in personal finance. The quality and consistency of the survey were further assessed using Cronbach's alpha. The researcher involved three research assistants to help in distribution of questionnaires to the targeted respondents. The questionnaires were administered through drop and pick later method. Data analyses were performed on a PC computer using Statistical Package for Social Science (SPSS Version 20.0) for Windows. Analysis was done using frequency counts, percentages, means and standard deviation and the information generated was presented in form of graphs, charts and tables.

### **4. Findings**

This section presents the results (findings) and their interpretation as they were given by the respondents through their responses to the questionnaires. The questionnaires sought to find out the general information about the respondents as well as answers to the objectives of the study.

#### **4.1 Background Information**

Out of the 500 questionnaires sent out, 400 were returned, resulting in a useable response rate of 80%. Male participants represented 57% of the sample. Majority of the respondents (55%) fell in the age group 31-40 years while 26% were in the age bracket of 41-50 years and the rest were aged 30 years & below (8%) and 50 years & above (11%). In terms of education levels, 32% of the respondents' had bachelor's degree, 28% had college, 26% had high school education with the minority i.e. 8% and 6% having post graduate degree and below high school educational background respectively. With regard to respondents' occupation status; 25% were managers, 21% supervisors, 34% clerks and the rest (20%) were subordinate staff (i.e. office messengers, cleaners). 34% of the respondents earned a monthly income of between Kshs. 65,000-129,999 followed by 25% of the respondents with a monthly income of Kshs 195, 000 & over, and minority (20%) had a monthly income of Kshs 65,000 & below. The proportion of respondents working in the field of accounting/finance, operations, human resource management and marketing was; 20%, 25%, 20% and 15% respectively.

#### **4.2 Financial Literacy Levels of the Respondents**

The resulting percentage scores of the respondents on the fifteen statement-like questions asked to test their knowledge on basic financial concepts were grouped into three categories: over 80, 60-79, and below 60. Findings revealed that majority of the respondents 54.0% (n=216) displayed low levels of financial literacy (i.e. below 60%) while, 41.5% (n=166) reported average/moderate financial literacy (i.e. 60-79%), with the minority 4.5 % (n=18) of them reporting high levels of financial literacy (i.e. over 80%). The overall mean score for financial knowledge was 43, with standard deviation of 17.5. The reliability of the 15-question survey was 0.85

hence indicating that the questionnaire was reliable, which further increased its validity. The findings therefore suggest that employees' levels of financial knowledge are generally low.

#### 4.3 The Effect of Demographic Characteristics on Financial Literacy Levels

The study analyzed the effect of demographic characteristics (gender, age and education levels) on the respondents' financial literacy levels based on the results of the financial knowledge test questions.

##### 4.3.1 Gender

There is a significant association between gender and levels of financial literacy. Findings showed that a higher share of female respondents (7%), than male (2%), displayed high financial knowledge levels. Likewise, fewer women (36%), than men (49%), displayed low levels of financial knowledge. Gender seems to explain financial literacy level, which is in line with the existing literature, however, the study's findings that women are more financially literate than men contradicts the findings of ANZ (2008), Gallery et al. (2011), Almenberg & Säve-Söderbergh (2011), Lusardi & Mitchell (2008), van Rooij et al. (2007) who found that men are more likely to perform better than women on various literacy tests.

##### 4.3.2 Age

Age is a significant determinant of financial literacy. Findings with regard to the age of the respondents revealed that financial literacy scores were lowest among the young (below 30 years) and the old respondents (over 50 years), highest among youth respondents (31 to 40 years), and moderate among the middle-aged respondents (41 to 50 years). These results support the findings of van Rooij et al. (2007), ANZ (2008), who found the profile of basic literacy to be negatively skewed with regards to age.

##### 4.3.3 Education Levels

There is a positive correlation between education and financial literacy levels. The results for the entire survey clearly displayed high financial knowledge among respondents' with bachelor's degree & above, moderate literacy levels among those with college and secondary education levels and low literacy levels among those having below high school level of education. The findings support the results of Lusardi & Mitchell (2006, 2008), Almenberg & Säve-Söderbergh (2011), who found that level of education matters for the level of financial knowledge.

#### 4.4 The Effect of Socioeconomic Factors on Financial Literacy Levels

The study examined the effect of socioeconomic factors (occupation status & type, personal income and other wealth factors) on the respondents' literacy levels based on the results of the financial knowledge test questions.

##### 4.4.1 Occupation Status & Type

There is no significant association between occupation status and levels of financial literacy among the respondents who took part in the survey. High, moderate and low literacy scores were found among the managers, supervisors and clerks (with an exception of the subordinate staff). In other words, all the respondents, regardless of their occupation status, displayed an equal competitive performance in the financial knowledge test. The study suggested that the low literacy levels displayed by subordinate staff could have been influenced by other factors besides occupation status. Similarly, there is no significant association between occupation type and the respondents' levels of financial literacy. Findings revealed that all levels of financial literacy were evenly displayed by the respondents' regardless of their occupation type. Therefore, those respondents' who worked in the field of finance/accounting had the same probability of being financially literate as those who worked in other fields such as marketing or operations. The study's findings that occupation status & type are not significant in explaining the respondents' financial scores differences does not seem to be in line with the findings of ANZ Survey (2008), Worthington (2006, 2008), who found financial literacy scores to be typically higher amongst those who are in professional and managerial occupations. In addition, Al-Tamimi & Bin Kalli (2009), found that individuals who worked in the field of finance/banking or investment displayed higher levels of financial knowledge than those in other occupations.

##### 4.4.2 Personal Income

There is no significant association between personal income and financial literacy levels. The study used respondents' employment income to signify personal income. All levels of financial literacy were evenly displayed across all the income levels (with an exception of the subordinate staff) of the respondents. In other words, all the respondents, regardless of their income level, displayed an equal competitive performance in the financial knowledge test. The study suggested that the low literacy levels displayed by the subordinate staff could be attributed to their limited access to formal financial services (e.g. banking), which may lead to low knowledge on financial matters. Notwithstanding the low literacy levels displayed by the subordinate staff, the study's findings that, there exists no significant association between respondents' employment income and levels of financial literacy is inconsistent with previous research findings by ANZ Survey (2008), that found financial literacy scores to be generally associated with personal income levels, with higher financial literacy scores being displayed by individuals with higher levels of personal income and lower scores by those with lower incomes.

#### 4.4.3 Other Wealth Factors

Other wealth factors are positively correlated with financial knowledge levels. Findings showed that majority of the respondents who displayed high literacy levels, also held a high proportion of wealth in form of real assets (e.g. house, car, land, business) and/or financial assets such as investment in shares. In the same direction, the respondents with moderate & low literacy levels, held less wealth in form of real assets and/or financial assets. From the finding, it can be argued that the acquisition of financial knowledge may be motivated by the need to manage one's wealth. The results that wealth is an important determinant of financial knowledge is in line with theoretical models of Delavande et al. (2008), Peress (2004) that have been supported by various empirical findings of (Guiso & Jappelli (2008), Lusardi & Mitchell (2008)) that financial literacy increases with wealth.

#### 4.5 The Effect of the Sources of Information & Financial Advice on Financial Literacy Levels

From the results on financial knowledge test, the study assessed the effect of choice of financial advisors and information sources (informal & formal tools) on the respondents' financial literacy levels.

##### 4.5.1 Informal Tools (Peers & Family)

Analyses of the findings revealed that majority of respondents with low financial literacy rely very often on informal tools such as; family, friends and acquaintances for information and financial advice. The results support the findings by van Rooij et al (2007), who found that households with low financial literacy tended to get advice from peers or family than from formal sources.

##### 4.5.2 Formal Tools (Financial Experts & Other Sources)

Equally, findings showed that a high proportion of respondents with moderate to high levels of literacy consulted financial experts (e.g. an accountant or financial planner), and/or other sources (such as; newspapers, T.V. and Internet) for information and financial advice. The findings support the results of van Rooij et al (2007), who found that households with high financial literacy levels are most likely to use financial experts and/or financial magazines or internet to assist with their financial decision-making

### 5. Conclusions

Financial literacy is a global concern. Although the financial knowledge questions included in the survey were fairly basic, the overall mean of correct answers for the survey was about 43%. This shows that 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.

Complicated financial products, low level of awareness and lack of knowledge about financial matters makes the want of financial literacy significant. This therefore, calls for a study on the determinants of financial literacy levels among employees. This research is important for several reasons. Firstly, the conceptual framework developed in the study provides a cohesive basis for conducting further surveys to provide empirical evidence that will enhance understanding of the factors that influence financial literacy among employees. In doing so, this study contributes to the growing body of literature on financial literacy. Secondly, the findings about factors that explain differences in financial literacy levels are of particular use for employers and policymakers who aim to improve the financial knowledge among Kenyans, since the paper provides an overview of the population groups which are the most likely to be financially illiterate. Thirdly, most studies on financial literacy have been conducted in developed nations like US, Australia, UK etc. Very few research studies have been carried out in developing countries like Kenya. Furthermore, the target population in most of those studies is college students rather than adult population. To fill this gap, the study sought to find out the determinants of financial literacy among employees in Kenya.

More comprehensive research, investigating broader population and various workplaces is however needed to generalize the results of this study. Further research could focus on other components of financial matter such as saving behavior, financial problem and productivity and determine which are the most and least critical to financial success and sustainability. Several future research directions exist. Firstly, future research can use different methodologies, such as longitudinal studies, focus groups and interviews to identify the determinants of financial literacy levels among employees. Secondly, evidence exists that the relative importance and possible causal link between financial knowledge and better financial practices may differ across cultures (Hilgert, Hogarth & Beverly, 2003). Thus, the study can be replicated in different cultures to provide cross-cultural comparisons.

### 6. Recommendations

This study recommends the following measures which will help improve financial literacy levels among adult

population.

- i) Employers should provide financial education programs to employees. These programs can be implemented by introducing some seminars that will help employees understand the basics of financial responsibility. The need to launch financial education programs in the workplace is due to the serious condition of financial illiteracy among workers. The study findings suggest that 54% of the respondents had low literacy levels.
- ii) It is clear from the findings that financial literacy differs by gender and age. Understanding these differences will help employers and policy makers to design more effective financial education programs that address the specific education needs of the different groups of employees.
- iii) The findings suggest that friends, parents/families are the most relied on source of information and financial advice on financial matters. They could be educated on personal finance through TV programs, community workshops and seminars.
- iv) The Ministry of Education should also consider introducing financial education into the core curriculum of secondary, middle level and higher learning institutions to improve the level of financial literacy among students.

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