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EFFECT OF FINANCIAL LITERACY ON EMPLOYEES INVESTMENT DECISIONS AT KENYA PORTS AUTHORITY, MOMBASA KENYA

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ABSTRACT
The objective of this research was to establish the effect of financial literacy on investment decisions making among employees of Kenya Ports Authority. The target population was 326 staff working at KPA offices in Mombasa. A structured Likert scale questionnaire was used for data collection. The study also utilized secondary data. A pilot study was carried out to refine the data collection instrument. Data analysis was done with the help of Statistical Package for Social Science (SPSS) version 23. The findings indicated that an increase in the skills of finance by one unit would lead to a positive increase in investment decisions. Also an increase in the knowledge of debt management by one unit would lead to a positive significant increase in investment decisions. Further the results showed that an increase in savings knowledge by one unit would lead to a positive increase in investment decisions and that an increase in the knowledge of budgeting by one unit would lead to a positive increase in investment decisions. The study concluded that Kenya Ports Authority offerred financial training to employee oftenly. Further, the study concluded that KPA employees lacked adequate knowledge on debt management. The study finally concluded that KPA employees had a financial goal on a monthly basis. The study recommended that the employees of Kenya Ports Authority should be trained on how to manage their finances wisely. The study recommended that the management of KPA should educate employees on how to manage their debt in a realistic manner and understand the cost of their borrowing by use of financial knowledge in understanding the time value of money and its effect on the borrowings.

Key Words: *Cash Management, Debt Management, Savings, Budgeting, Investment Decision Making*

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INTRODUCTION

Over the past decade, the stability of the world economy has declined and the recession has caused increasing inflation, unemployment and reduction in income levels. The complexity of financial decisions and economic recession has threatened the quality of individual lives and work, and has made researchers to investigate ways to deal with them (Taft, Hosein, Mehrizi and Roshan, 2013). The ability and knowledge to manage ones' personal finance has become increasingly important today. According to Vitt *et al,.* (2014) the greatest advantage of financial literacy education is reducing employees' financial problems and encouraging them to be responsible for their own financing, which will in turn help increase efficiency in the organization. Financial education can reduce absences in the organization and keep valuable employees (Champion, 2013).

Financial literacy is a measure of the degree to which one understands key financial concepts and possess the ability and confidence to manage personal finances through appropriate short-term decision-making and sound, long-range financial planning, while mindful of life events and changing economic conditions (Nye & Hillyard, 2013). Though conceptually, financial literacy refers to skills, existing measures of financial literacy are dominated by measures of objective knowledge. Lusardi (2012) asserts that basic financial knowledge is the working of interest compounding, basics of risk diversification and the difference between nominal and real values. Financial literacy has gained the interest of various groups including governments, bankers, employers, community interest groups, financial markets, and other organizations, especially in developed countries. The importance of improving financial literacy has increased due to various factors which include; the development of new financial products, the complexity of financial markets, and the changes in political, demographic, and economic factors (Obamuyi, 2013).

In developed countries, after the financial crisis in 2008, the consumers became aware about the value of money management. Research shows that, when the economy was booming, the personal savings rate in the United States dipped below 0% and did not rise above 0% until 2008 on the onset of the financial crisis (U.S. Department of Commerce, Bureau of Economic Analysis, 2013). Other studies conducted in the US and Canada, mostly investigated financial literacy levels among the general public and college students. A study by Joo and Garman (2012) focused on the relationship between personal financial wellness and worker job productivity. According to a study on the financial literacy of US working adults, Volpe, Chen and Liu (2012), revealed that working adults are not knowledgeable about personal finance topics.

Globally, the financial crisis in the United States made the government set up the President's Advisory Council on Financial Literacy in January 2008, charged with promoting programs that improve financial education at all levels of the economy and helping increase access to financial services. In the United Kingdom (UK), the Financial Services Authority has developed a national strategy for financial capability of individuals to reduce levels of problem-debt, increase savings, facilitate the appropriate choice of insurance products, and reduce welfare dependence. Responsibilities for leading financial capability in the UK have been assigned to the Consumer Financial Education Body (CFEB).In the developing world, the Indonesian government declared 2008 the year of financial education, with a stated goal of improving access to and use of financial services by increasing financial literacy. Similarly, in India, the Reserve Bank of India launched an initiative in 2007 to establish Financial Literacy and Credit Counseling Centers throughout the country which would offer free financial education and counseling to urban and rural populations. The World Bank also hasn't been missing out on the trend it approved a $15 million Trust Fund on Financial Literacy (Bandi & Ravindran, 2013).

In Malaysia, a study conducted by Boon, Yee and Ting (2013) studied the link between financial literacy and personal financial planning. The primary data was collected from Klang Valley via a self-administered questionnaire survey, and the relationship was examined using a cross tabulation method. The findings suggest that in contrast to their non-financially literate counterparts, the readiness of the financially literate individuals is reflected in their involvement in the multiple aspects of personal financial planning. However, further study of public perception revealed that despite many see the significance of setting financial goals and objectives in life, there remains a knowledge gap at an individual level that hinders one from effectively managing their financial affairs. It was also found that the public appeared to be hesitant to rely on professional advice on financial practices to realize their goals.

Large segments of the African population including Kenya face low financial literacy levels despite the benefits associated with financial literacy. Several countries have been promoting financial education as a tool of fighting poverty. The countries include: Egypt, Uganda, Ghana, South Africa, Tanzania, and Kenya have shown effort in educating their citizens on matter related to financial literacy (African Development Bank, 2014). In Kenya also, the levels of financial literacy are very low (Trizah & Abdullah, 2014). Findings from FinAccess national survey (2016) revealed that 17.4 per cent of the adult population in Kenya lacks access to formal financial services including banking, insurance and mobile money transfer services as a result of lack of financial literacy. 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 (Kenyoru, 2013).

Financial institutions such as banks now give financial advice to their customers and avail all the sources of information available so that they can make informed decision. The government also offers education on financial literacy to all its employees so that they can make informed decision (Njoroge, 2013). Financial literacy skills empower individuals to make well-versed decisions on how to spend financial resources while minimizing the risk of being hoodwinked on financial matters (Jonubi, 2013). As observed by Lusardi, and Tufano, (2015) persons of low literacy are highly likely to depend on friends and family members as their main source of financial advice and are less likely to invest in stocks.

The Kenya Ports Authority's mandate is to maintain, operate, improve and regulate all sea and inland waterway ports in Kenya. Other ports include Lamu, Malindi, Kilifi, Mtwapa, Kiunga, Shimoni, Funzi and Vanga. It is only the port of Mombasa which is fully developed with modern equipment hence making it the principal port in the region. At the port of Mombasa, the Kenya Ports Authority's core business is to provide: aids to navigation pilotage, tuggage, mooring, stevedoring and shore handling. The Port of Mombasa is the key entry and exit point for cargo belonging to a vast hinterland that include Kenya, Uganda Rwanda, Burundi, Democratic Republic of Congo, Tanzania, South Sudan, Somalia and Ethiopia.

Statement of the Problem

Financial literacy affects not only individual welfare and saving behavior, but also the nature of products offered in financial markets (Lusard, 2012). In Kenya, levels of financial literacy are low despite the concerted efforts to raise literacy levels by the government and other stakeholders (FinAccess, 2016). Financial literacy has been discussed by many researchers from different aspects.

Despite the significance of financial literacy on personal investment decisions, limited studies on individual investment decisions have taken place in Kenya. For instance, a study conducted by Nyamute and Maina (2012) on the effect of financial literacy on personal financial management practices of employees of financial and banking institutions found that financial literacy indeed influences personal financial management practices and higher financial literacy leads to better personal financial management practices. Olima (2013) conducted a study on the effect of financial literacy on personal financial management on Kenya Revenue Authority employees and found similar results. A similar study was conducted by Kimani (2014) on SACCO members and found that financial literacy helps manage debt, personal finance and retirement planning. A study similar to Nyamute and Maina (2012), was conducted by Obago (2014) on the effect of financial literacy on management of personal finances among employees of commercial banks in Kenya, the study revealed that most participants were financially literate however, a larger percentage rated their personal finance management as poor which was a result of poor financial discipline. However, these studies have concentrated on area of financial literacy but few have narrowed down to its effects on employees' investment decision which is critical in financial investment decision.

Kenya Ports Authority encourages its employees to attend meetings that educate them on proper personal financial management. Despite numerous scheduling of such meetings, employees are still faced with numerous challenges on how to manage their finances. According to Bandari Sacco annual report (2017), majority of port employees are burdened by debts from both formal and informal financial institutions. Further, the report by Bandari Sacco asserts that many employees prefer to practices small scale businesses whose returns have little or no impacts in the welfare. Literally, port employees are one of the most fairly remunerated. Despite of this, they don't take up investment opportunities available in the financial markets. This could be attributed partially to lack of financial literacy. However, inspite of extant literature having focused on financial literacy, there is scanty literature of financial literacy in government agencies and particularly Kenya Ports Authority. Hence the current study sought to investigate the effect of financial literacy on employees' investment decisions at Kenya Ports Authority.

Research Objectives

The general objective of the study was to examine the effect of financial literacy on employees' investment decisions at Kenya Ports Authority. The specific objectives were:-

- To determine the effect of cash management literacy on employees' investment decisions at Kenya Ports Authority
- To establish the effect of debt management literacy on employees' investment decisions at Kenya Ports Authority
- To determine the effect of savings literacy on employees' investment decisions at Kenya Ports Authority
- To investigate the effect of budgeting literacy on employees' investment decisions at Kenya Ports Authority

Research Hypotheses

- **$H_0$1**: There is no significant effect of cash management literacy on employees' investment decisions at Kenya Ports Authority
- **$H_0$2**: There is no significant effect of debt management literacy on employees' investment decisions at Kenya Ports Authority
- **$H_0$3**: There is no significant effect of savings literacy on employees' investment decisions at Kenya Ports Authority
- **$H_0$4**: There is no significant effect of budgeting skills on employees' investment decisions at Kenya Ports Authority

LITERATURE REVIEW

Theoretical Framework

Decision Theory

Decision theory was developed by Warner in 1968. It is a theory about people's actions. It has both a prescriptive and a descriptive version. The prescriptive version says that a person should choose the action that maximizes expected utility. The description version says that a person does choose the action that maximizes expected utility. Real estate decisions are made by a variety of actors pursuing a broad range of objectives. These actors include home buyers and renters, builders, brokers, bankers, and the public agencies that provide physical networks and services such as streets, utilities and schools.

Property managers also face every day critical risk management decisions as determining the price for sell or rent of a property, choice of financing, investment analysis, real estate portfolio management, real estate valuation. In these cases a decision support system can be very valuable in order to minimize the risk of potential losses due to wrong decisions.

Life Cycle Model

The starting points for much neoclassical economic research on saving and asset accumulation have been the life cycle hypothesis (LCH) by Ando and Modigliani in 1957. The point of departure of the life cycle model is the hypothesis that consumption and saving decisions of households at each point of time reflect a more or less conscious attempt at achieving the preferred distribution of consumption over the life cycle, subject to the constraint imposed by the resources accruing to the household over its lifetime. In theory, as long as people are earning more than is required to meet basic needs, they may choose to transfer funds from periods of high income to periods of low income. This so called smoothing of lifetime income is probably the most commonly understood reason for saving for retirement during employment. It is based on the idea that it is easier to save when there is more money from which a contribution may be put aside. This idea is important because there is a less than perfect correlation between people's expenditure and their income. At both ends of the adult life cycle, comparatively low incomes are topped up through borrowing in younger years, and by drawing on savings, pensions and investments in retirement.

The life cycle model is built on several assumptions about human behavior. The lifecycle model hypothesizes that individuals are forward looking in choosing how much of the resources that they receive and consume in each period over their lifetime. This brief statement incorporates four powerful assumptions about people: they are forward looking across the span of their lifetimes; they can predict the financial resources they have over their lifetime (i.e. lifetime income); they understand something about the financial resources they need in successive periods of their lives; they make informed choices about the use of their financial resource. The simplest life cycle consumption theory posits that consumers save so as to transfer resources life stages where the marginal utility of consumption is highest. Given concavity of the utility function, consumers seek to transfer resources from periods of their lives where they earn substantial income, to periods where they earn less. These income paths are estimated separately for workers prior to age 65 and retirees age 65+; education groups refer to household heads having completed less than a high school education, high school graduates, and those with at least some college education.

Mental Accounting Theory

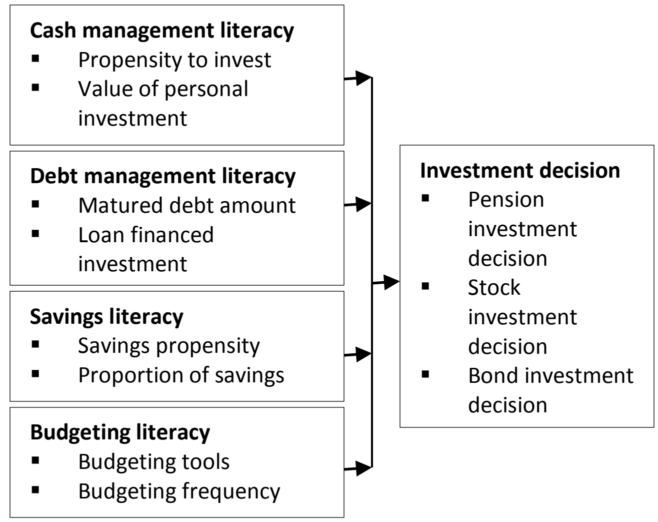
This theory was developed by Thaler in 1985. In mental accounting theory, framing means that the way a person subjectively frames a transaction in their mind will determine the utility they receive or expect. According to Jordan and Miller (2011), investors maintain a separate mental account for each asset and unknowingly, have a personal relationship with each. As a result, it becomes difficult to sell one of them.

According to Shefrin and Statman (2012), the main idea underlying mental accounting is that decision makers tend to segregate the different types of gambles faced into separate accounts. When a new stock is purchased, rather than evaluating the whole investment, a new mental account is opened. The asset purchase price is used as the reference point. A running score is then kept on this account indicating gains or losses relative to the purchase price. Investors find it difficult to close mental accounts at a loss, a situation termed as "the break-even effect". Investors may resist the realization of a loss because it stands as proof that their first judgment was wrong.

Institutional Theory

The theory posits that individuals and households are faced with institutional-level factors that make it impossible or difficult to save. It is based on works of Beverly and Sherraden in 1999. The main hypothesis of institutional theory assumes that low-income individuals and families are unable to save and accumulate assets primarily because they do not have the same institutional opportunities that higher income individuals and households receive. Otherwise, given access to the same institutional support for saving and asset building that their wealthier counterparts use, low-income families can be in a position to save and accumulate assets. Institutional theory hypothesizes that institutions affect worldviews, which in turn, affect financial behaviors and decisions. This theory supports the study variable of savings literacy which is greatly impacted by institutional-level factors which makes it difficult for employees to save. These institutional-level factors included wage rate and probability of pay rise.

Conceptual Framework



Independent Variables Dependent variable

Figure 1: Conceptual framework

Source: Author (2019)

Empirical Review

Various studies have been carried out to determine the relationship between financial literacy and investment decisions. For instance, Sarah (2014) investigated the effect of financial literacy on investment decision making by pension funds managers in Kenya, concluded that the financial literacy is far from the needed level, their findings shows that the financial literacy level was found to have a significant effect on investment decision making by fund managers. Since these decisions are ongoing, requiring members to periodically monitor and evaluate the performance of their chosen fund and investment option, and decide whether to switch to another fund and/or investment option. To achieve optimal outcomes in this complex decision-making environment requires decision-makers to have adequate levels of financial knowledge and skills.

Noor, Nurfadhilah, Ramesh and Mior (2012) in their study to examine the financial literacy among university students, the study sample consisted of 384 students and the target population of the study

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was from Universities of Malaysia. Convenience sampling method was used in collecting the data and the results compiled by using SPSS software system. The results revealed that the spending habit and year of study have a significant positive relationship with the financial literacy, whereby the age and gender are negatively associated with the financial literacy.

Walstad, Rebeck and MacDonald (2013) investigated the effects of a financial education program on high school students' knowledge of personal finance. A comparison of pre-test and post-test scores achieved on a reliable and valid thirty-item instrument suggested that the curriculum used increased financial knowledge across many concepts. The scores increased regardless of the course in which the curriculum was used and across student characteristics. Their assessment contributed to the growing literature showing that a well specified and properly implemented program in financial education can positively and significantly influence the financial knowledge of high school students.

In a study conducted in Russia by Klapper, Lusardi and Panos (2013) that examined the effect of financial literacy on financial behavior, and financial and real outcomes in Russia. The study used an individual level survey data collected from sample Russians in 2008 and 2009 to measure financial literacy in terms of personal finance basics and financial service awareness, financial behavior, outcomes across socioeconomic profiles. With respect to outcomes of financial literacy, they found that high level of financial literacy was related to high spending capacity and high amount of unspent income during the financial crises. The result of the above study shows the relationship that financial literacy has with different financial management behavior, such as financial management practices: financial planning, saving, credit management, which enables individuals to maintain stable financial status even during the time of financial crises.

Natalie (2012) conducted an exploratory study on factors influencing investment decisions of potential investor. The study used a questionnaire of a sample of business students in an undergraduate institution. It was found that attitude, subjective norms, perceived behavior control, and risk propensity were significant predictors of investment intentions. It was also found that risk propensity did not moderate the relationship between the variables and the investment intentions. The findings showed that the education in business finance can help to influence the investment decision.

A study conducted by Nyamute and Maina, (2012) examined the debt management practices from 192 employees using a structured questionnaire. The results showed a high debt management from both groups and high financial literacy. The results also showed that the non-financially literates were found to be more sensitive in sorting out their bills in time. Amisi (2012) investigated the effect of financial literacy on investment decision making by pension fund managers in Kenya. The study was based on a sample of 16 fund managers. The study revealed financial literacy and investment decisions have a significant relationship. The study concluded that financial literacy positively influences investment decision making.

Olima (2013) conducted a study on the effect of financial literacy on personal financial management on employees at Kenya Revenue Authority in Nairobi, the study was to establish the level of financial literacy among its employees and how the literacy has impacted on their skills to management finances. The findings from the study indicated that financial literacy impacts to a great extent on the financial management because of financial education guide programs. He asserts that programs should be developed aimed at increasing the level of financial literacy on the aspects considered in the study, which included retirement planning, estate planning, management of credit and other liabilities, insurance and tax planning.

METHODOLOGY

The study adopted a descriptive survey in collecting the data from the respondents. Kothari (2012) defines a descriptive survey as a design that describes a phenomenon's characteristics of interest by providing factual findings. The population of interest was 326 employees of Kenya Ports Authority drawn from port operations department. The population selected was considered to have a higher level of information disclosure. The study adopted simple random sampling in selection of appropriate sample size without biasness. Primary data was collected using semi structured questionnaires. The researcher used self-administered questionnaire as a research tool to collect data from the respondents. Secondary data was obtained from existing records in the library, internet sources, journals, books, and papers by authorities in the areas of research. Data was analyzed using quantitative techniques. The SPSS (version 23) computer software was used in the analysis. Correlation analysis was carried out using Pearson correlation coefficient. A multiple regression analysis was applied to establish independent variables influence dependent variable. The model specification was as follows:

$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon$

Where

β_0: is a constant term,

ε: is stochastic term.

Y: investment decision.

X_1: cash management literacy

X_2: debt management literacy

X_3: savings literacy

X_4: budgeting literacy

Hypothesis was tested at 95% confidence level (α = 0.05). A two tailed test was carried out.

Table 1: Hypothesis testing

Hypothesis Statement	Hypothesis Test	Decision Rule
$H_0$1: Cash management literacy has no significant effect on investment decisions	H0: $\beta1 = 0$ HA: $\beta1 \neq 0$ -To conduct F-test to assess overall model significance	Reject $H_0$1 IF P-value ≤ 0.05 otherwise fail to reject $H_0$1 if P-value is > 0.05
$H_0$2: Debt management literacy has no significant effect on investment decisions	H0: $\beta2 = 0$ HA: $\beta2 \neq 0$ -To conduct F-test to assess overall model significance	Reject $H_0$2 IF P-value ≤ 0.05 otherwise fail to reject $H_0$2 if P-value is > 0.05
$H_0$3: Savings literacy has no significant effect on investment decisions	H0: $\beta3 = 0$ HA: $\beta3 \neq 0$ -To conduct F-test to assess overall model significance	Reject $H_0$3 IF P-value ≤ 0.05 otherwise fail to reject $H_0$3 if P-value is > 0.05
$H_0$4: Budgeting literacy has no significant effect on investment decisions	H0: $\beta4 = 0$ HA: $\beta4 \neq 0$ -To conduct F-test to assess overall model significance	Reject $H_0$4 IF P-value ≤ 0.05 otherwise fail to reject $H_0$4 if P-value is > 0.05

RESULTS

Effect of cash management literacy on investment decisions

With a view to establish the effect of cash management literacy on investment decisions, the study sought the views of respondents on the extent to which the given aspects of cash management literacy affect individual investment decisions as indicated by their level of agreement. A likert scale data was collected rating the extent of agreement in a scale of 1 to 5 where 1 was the strongly disagree whereas 5 was the strongly agree indicator. The mean score for each item was calculated and the findings were shown in table 2 below.

Table 2: Cash management literacy

Cash management literacy	Mean	Std. Deviation
My organization offers financial trainings to employees on how to manage cash	4.34	.642
I have adequate knowledge to manage my personal finances	4.04	.581
I have control over my personal finances	4.15	.333
I have adequate financial knowledge to make investment decision	4.20	.435

From table 2 above, the respondents agreed that Kenya Ports Authority offerred financial training to employee on how to manage cash as indicated by a mean of 4.34 and standard deviation of 0.642. The respondents further agreed that they had adequate knowledge to manage their personal finances as shown by a mean of 4.04 with a standard deviation of .581. Findings also showed that majority of respondents (mean = 4.15; std. dev. = .333) had control over their personal finances. Finally, majority of the respondents agreed that they had adequate financial knowledge to make investment decision as indicated by a mean of 4.39 and a standard deviation of .291. The findings agreed with Natalie (2010) who conducted an exploratory study on factors influencing investment decisions of potential investor. The findings showed that the education in business finance can help to influence the investment decision.

Effect of debt management literacy on investment decisions

With regard to the effect of debt management literacy the data that was collected through the likert scale measuring the level of agreement of the respondents with respect to the given aspects of debt management literacy. The results are as presented in Table 3 below.

Table 3: Debt management literacy

Debt management literacy	Mean	Std. Deviation
I have never secured a credit facility from any financial or informal lending institution	4.13	.844
I pay my debt obligation when it is due	4.39	.275
I have lack of knowledge on debt management	4.35	.339
My firm does not offer debt management literacy program	4.04	.369

As shown in the table 3, the respondents agreed that they had never secured a credit facility from any financial or informal lending institution as indicated by a mean of 4.13 and standard deviation of 0.844. The respondents agreed that they paid their debt obligation when it was due as shown by a mean of 4.39 and a standard deviation of 0.275. The findings agreed with study by Nyamute and Maina, (2011) who examined the debt management practices from 192 employees using a structured questionnaire. The results showed that the non-financially literates were found to be more sensitive in sorting out their bills in time. Further, the respondents agreed to a moderate extent that they have lack of knowledge on debt management (mean=4.35). The findings resonated with study by Lusardi and Tufano (2015) who found that people with low financial literacy were more likely to have problems with debt. Finally the respondents agreed that KPA does not offer debt management literacy program to employees as indicated by a mean of 4.04 with a standard deviation of 0.369. The findings were corroborated by Stango and Zinman (2010) who concluded that those unable to correctly calculate interest rates out of a stream of payments ended up borrowing more and accumulating less wealth.

Effect of savings literacy on investment decisions

The study sought to determine the effect of savings literacy. The results are presented in table 4 below.

Table 4: Savings literacy

Savings literacy	Mean	Std. Deviation
I operate a savings account with my preferred financial institution	4.12	.586
I have no adequate information about saving	4.35	.369
My personal income is too little to have a saving plan	4.21	.473
My firm offers savings literacy program	4.19	.638

As shown in the table 4, the respondents agreed that they operated a savings account with my preferred financial institution as indicated by a mean of 4.12 with a standard deviation of 0.586. Further respondents agreed that they had no adequate information about saving as indicated by a mean of 4.35 with a standard deviation of 0.369. Respondents also agreed that their personal income was too little to have a saving plan as indicated by a mean of 4.21 and standard deviation of 0.473. The findings resonated with Modigliani and Brumberg (1954), worked out a theory of spending based on the general idea that people make choices about their spending at each age, limited only by the resources available over their lives. This theory suggests that individuals follow a hump-shaped saving pattern over their lifetime. During high earning periods of employment, individual savings increase while, during low earning periods, individuals use up savings to fund their needs. Finally respondents agreed that Kenya Ports Authority offers savings literacy program as indicated by a mean of 4.19 and standard deviation of 0.638. The findings resonated with Smit (2012) who focused on personal savings and personal debt with relation to investment and argued that personal savings is one way for the single most important variable in investment, he therefore noted that excessive debt and very low savings can be destructive and growth hindrance of investments.

Effect of budgeting literacy on investment decisions

The section presented the study results on how budgeting literacy affects individual investment decisions. The results were on means and standard deviation presenting the level of agreement of the respondents on the given aspects of budgeting literacy. These were as presented in table 5 below.

Table 5: Budgeting literacy

Budgeting literacy	Mean	Std. Deviation
I have a financial goal on a monthly basis	4.35	.369
My financial goals are influenced by personal income	4.11	.558
My personal attitude towards money management makes me budget	4.12	.386
My organization trains employees on how to budget	3.80	.648

Findings presented in table 5 showed that they had a financial goal on a monthly basis. As indicated by a mean of 4.35 and standard deviation of 0.369. Findings further showed that employee financial goals were influenced by personal income as indicated by a mean of 4.11 and standard deviation of 0.558. The findings also showed that majority of the respondents agreed that personal attitude towards money management makes them budget (mean = 4.12; std. dev. = .386). Finally respondents agreed that Kenya Ports Authority trains employees on how to budget (mean = 3.80; std. dev. = .648). The findings resonated with Sebstad (2011) who argues that a budgeting knowledge should include the purpose, elements of the budget, the benefits accrued of tracking cash flow and a spending plan, money beliefs and financial goals. The outcome for a proper budgeting process would be commitment towards a financial goal, following the budget, discipline to stick to the spending plan, confident about money and confidents about managing money and motivate on to plan ahead.

Investment decisions

The study results on investment decisions are as presented in Table 6. The findings were on means and standard deviation showing the extent of the respondents' agreement on investment decisions aspects given.

Table 6: Investment decisions

Investment decisions	Mean	Std. Deviation
I have undertaken investment in bonds	4.46	.219
I trade at the stock exchange by buying of shares	4.22	.442
I have invested in pension schemes	4.13	.385

According to the findings in table 6, majority of respondents agreed that they had undertaken investment in bonds as indicated by a mean of 4.46 and standard deviation of 0.219. The respondents further agreed that they traded at the stock exchange by buying of shares as indicated by a mean of 4.22 and 4.42 respectively. The findings resonated with study by Nagy and Obenberger (2008) who in their study examined the factors which influence investor behavior and their study findings suggested that the idea of wealth maximization criteria is very important to investors, despite employing diverse criterion when making a choice for stocks to invest in. Finally, majority of the respondents agreed that they have invested in pension schemes as indicated by a mean of 4.13 and standard deviation of 0.385. The findings resonated with Amisi (2012) who investigated the effect of financial literacy on investment decision making by pension fund managers in Kenya and concluded that financial literacy positively influences investment decision making.

Correlation Analysis

Table 7: Pearson correlation coefficient

		Cash management	Debt management	Savings literacy	Budgeting literacy	Investment decisions
Cash management	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	171				
Debt management	Pearson Correlation	.679**	1			
	Sig. (2-tailed)	.000				

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	N	171				
Savings literacy	Pearson Correlation	.605**	.716**	1		
	Sig. (2-tailed)	.000	.000			
	N	171	171			
Budgeting literacy	Pearson Correlation	.609**	.499**	.518**	1	
	Sig. (2-tailed)	.000	.000	.000		
	N	171	171	171		
Investment decisions	Pearson Correlation	.552**	.561**	.586**	.338	1
	Sig. (2-tailed)	.000	.000	.000	.052	

**. Correlation is significant at the 0.01 level (2-tailed).

Table 7 indicated that there was a moderate positive correlation of (r=0.552, P=0.000) between cash management literacy and investment decisions indicating that knowledge of cash management had a strong positive relationship on individual investment decisions. Further there was also a moderate correlation of (r=0.561, P=0.000) between debt management literacy and investment decisions of an individual. Further there was a positive correlation of (r=0.586, P=0.000) between savings literacy and individual investment decisions. The study finally found out that there is a weak correlation of (r=0.338, P=0.052) between budgeting literacy and individual investment decisions.

Regression Analysis

Table 8: Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.727[a]	.529	.518	1.768

a. Predictors: (Constant), Cash management, Debt management, Savings literacy, Budgeting literacy

Table 9: Analysis of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	582.755	4	145.689	46.632	.000[b]
	Residual	518.625	166	3.124		
	Total	1101.380	170			

a. Dependent Variable: Investment decisions
b. Predictors: (Constant), Cash management, Debt management, Savings literacy, Budgeting literacy

Table 10: Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	7.032	.903		7.785	.000
	Cash management	.371	.068	.445	5.500	.000
	Debt management	.133	.062	.182	2.139	.034
	Savings literacy	.236	.046	.413	5.171	.000
	Budgeting literacy	.407	.064	.438	6.334	.000

a. Dependent Variable: Investment decisions

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Discussion

The study sought to achieve a number of objectives. First, the study sought to establish the effect of cash management literacy on investment decisions by employees of Kenya Ports Authority. This was established by determining Pearson correlations of refined data. The results showed that there was a strong positive significant correlation between cash management literacy and investment decisions ($r = 0.552$, $P<0.05$). Regression analysis conducted proved that there was a positively significant effect of cash management literacy on investment decisions as indicated by the values $\beta_1 = 0.371$, $t = 5.500$, $p<0.05$. Hypothesis testing conducted at 95% confidence level on cash management literacy confirmed its significant effect on investment decisions hence the Null hypothesis was rejected.

Establishing the effect of debt management literacy on investment decisions of employees in Kenya Ports Authority was another objective. Pearson correlation was conducted and the findings indicated that there was also a strong significant correlation between debt management literacy and investment decisions ($r = 0.561$, $P<0.05$). Regression analysis was also conducted and the results postulated that there was positively significant effect of debt management literacy on investment decisions as indicated by the values $\beta_2 = 0.133$, $t = 2.139$, $p<0.05$. Further hypothesis testing conducted at 95% confidence level on debt management literacy confirmed that it had a statistical significant effect on individual investment decisions hence the Null hypothesis was rejected.

Further, the study sought to establish the effect of savings literacy on investment decisions of KPA employees. Pearson correlation was conducted and the findings indicated that there was a strong significant correlation between savings literacy and investment decisions ($r = 0.586$, $P<0.05$). Regression analysis was also conducted and the results proved that there was positively significant effect of savings literacy on investment decisions as indicated by the values $\beta_3 = 0.236$, $t = 5.171$, $p<0.05$. Hypothesis testing was also conducted on this variable at 95% confidence level and it was found out that savings literacy had a statistical significant effect on investment decisions of employees in Kenya Ports Authority hence the Null hypothesis was rejected.

Finally the study sought to investigate the effect of budgeting literacy on investment decisions of KPA employees. The findings through Pearson correlation analysis concluded that there was a moderately strong significant correlation between budgeting literacy and investment decisions ($r = 0.338$, $P<0.05$). Regression analysis conducted afterwards confirmed that there existed a positively significant effect of budgeting literacy on individual investment decisions as indicated by the values $\beta_4 = 0.407$, $t = 6.334$, $p<0.05$. Conducting Hypothesis testing on this variable at 95% confidence interval concluded that budgeting literacy had statistically significant effect on investment decisions of employees in Kenya Ports Authority hence the Null hypothesis was rejected.

Table 11: Hypothesis tests

Hypothesis Statement	Test Model	Results
Cash management literacy	$Y= \beta_1X_1+ \mathcal{E}$	P<0.05 Rejected
Debt management literacy	$Y= \beta_2X_2+ \mathcal{E}$	P<0.05 Rejected
Savings literacy	$Y= \beta_3X_3+ \mathcal{E}$	P<0.05 Rejected
Budgeting literacy	$Y= \beta_4X_4+ \mathcal{E}$	P<0.05 Rejected

CONCLUSIONS

From the research findings, the study concludes that Kenya Ports Authority offers financial training to employees on how to manage cash. The study also concluded that employees have adequate knowledge to manage their personal finances and employees have control over their personal finances. Finally, the study concludes that KPA employees have adequate financial knowledge to make investment decision.

The study concludes that few employees have never secured a credit facility from any financial or informal lending institution and majority of employees pay their debt obligation when it is due. The study concludes that many sampled employees lack adequate knowledge on debt management. Finally the study concluded that KPA does not offer debt management literacy program to employees.

The study also concluded that KPA employees operate a savings account with their preferred financial institution. The study concludes that they have no adequate information about saving and that their personal income is too little to have a saving plan. Finally the study concludes that Kenya Ports Authority offers savings literacy program.

The study finally concluded that KPA employees have a financial goal on a monthly basis. The study concludes that employee financial goals are influenced by personal income and that personal attitude towards money management makes them budget. Finally the study concludes that Kenya Ports Authority trains employees on how to budget.

RECOMMENDATIONS

The study recommended that the employees of Kenya Ports Authority should be trained on how to manage their cash prudently. The employees should be given finance skills on quarterly basis so as to make prudent investment decisions.

The study recommended that the respondents should manage their debt in a realistic manner and understand the cost of their borrowing by use of financial knowledge in understanding the time value of money and its effect on the borrowings.

There is significant evidence that financial literacy affects savings, and that personal savings will also affect the national savings. It is therefore important for employees and furthermore the national government to encourage savings and promote savings culture through financial literacy workshops. Finally the study recommends that the respondents should be consciously saving in various avenues rather than a single avenue.

Finally, the study recommends that the management of KPA should train employees on how to develop financial goal and budgeting. This will enable employees to manage their finances prudently. The management should pay the employees reasonable wages since it was established that employee financial goals are influenced by personal income.

Areas of Further Research

This study focused on the relationship between financial literacy and investment decisions Kenya Ports Authority employees. Since only 52.9% of results was explained by the independent variables in this study, it is recommended that a study be carried out on other factors that affect individual investment decisions, specifically, a study on relationship between behavioural factors and individual investment decision making from across the country should be carried out in order to pick out other variables not covered in the current study.

The study also recommended for further study in the relationship between the psychological factors and financial literacy in influencing investment decision making. Finally, this study concentrated on employed people, further study should be done on self-employed population, in order to find out whether the same result can be replicated with self-employed population.

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