



RELATIONSHIP BETWEEN DEMOGRAPHIC FACTORS AND FINANCIAL LITERACY AMONG RESIDENTS OF IMENTI NORTH SUB-COUNTY, IN MERU COUNTY, KENYA

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ABSTRACT

In recent years, financial literacy has come to play an important role in financial reforms across the world. Modern technological developments and market liberalization have resulted in complicated financial products. The objective of the research was to examine and analyze the determinants of financial literacy level among residents in North Imenti Sub County in Meru County, Kenya. The determinants studied were; Gender and Age. The descriptive research design was employed in conducting the study where Primary data was collected using closed-ended questionnaires while secondary data was collected from the relevant books and journals. The target population for the study was 102,501 people in North Imenti Sub-county, while the accessible population was 30,804 people in Meru Municipality. A sample of 400 residents was used. Data were analyzed using Descriptive statistics (frequencies and percentages) chi-square test and inferential statistics such as Pearson Correlation. The study found that gender did not have a great significant association with financial literacy. Age had a significant effect on the level of financial knowledge the student's financial knowledge, which develops over time as they grow older. Comparatively, age had a stronger relationship with financial literacy than gender. The recommended that all stakeholders should support current digital literacy programs as it will play a vital role in increasing literacy level since it incorporates technology in learning and multimedia teaching methods.

INTRODUCTION

Financial literacy is a mixture of understanding, knowledge, skills, attitudes, and behaviors essential in making well-informed financial choices and eventually achieving personal financial well-being. This is also the process by which individuals learn the distinctiveness of dissimilar products and services provided in the financial markets and use the knowledge and skills to making logical

sound choices in making gains or profits (Seth, Patel, & Krishna, 2011). When properly applied, the knowledge will help families in meeting their financial duties and responsibilities by wisely planning the resources allocations to get utmost utilization (Mwangi & Kihui, 2012).

Today, in both the developing and developed economies there is increasingly many cases of the financial crisis, together with rapidly changing financial setting. Financial literacy, therefore, facilitates education and empowerment of individuals to have knowledge on financial matters with relevancy to their life. This enabled them to apply the skills and knowledge obtained

to evaluating financial matters and having sound decision-making (Mwangi & Kihui, 2012). Surveys worldwide indicate that financial literacy level is lower in developing economies compared to developed economies. Hussein and Hassan (2012) in the United Arab Emirates found that financial literacy level had not reached the required level and this greatly attributed to the changing demographics among its citizens.

The Financial Literacy and Education Commission (FLEC) constituted under the Fair and Accurate Credit Transactions Act of 2003, developed a National Policy in 2006 then ensured its enhancement in the year 2011. Kenya falls under the developing countries category, and the government has not ignored this. In fact, the government has put great effort in developing user-friendly financial systems such as the I-TAX for revenue collection, Huduma centers for personalized services, provided massive training and education on the importance of tax returns and payments as this contributes to the overall economic growth of the Country and consequently its counties, Meru is one of them (Miller, Godfrey, Levesque, & Stark, 2009).

The Kenyan government has developed fiscal policies that promote the creation and existence of Cooperative societies, these include the fact that they can lend money to their members at a reduced rate than the market rate. They also are more lenient to their customers than the commercial banks since people in the same category such as the Bankers Sacco Association and the Police Sacco form these Saccos although we have some that encourage public participation such as the Kenya Power Sacco, in North Imenti Sub- County, in Meru County, we have Lewa Sacco in Buuri Sub-County. These Saccos also provide education, consultation, advise, training and financial materials to their members, hence contributing to financial literacy (Onyango, 2014).

More studies have shown that improving financial literacy contributes positively to the economy as financially educated people help financial markets to efficiently. In Kenya, the NSE members have also held forums where they educate the people on investments. Just recently, the government established a mobile phone accessible bond trading where Kenyans including the Meru people are able to trade on these bonds (Onyango, 2014).

Funds have been set aside for specific segments of the population. Such segments include women banks such as K-rep and KWFT (Kenya Women Finance trust). These banks have branches all over the country Meru included (Onyango, 2014). Furthermore, the government has also had the fund for the youth, the Youth Fund, providing financial services to those with ideal business ideas that have formed groups. It has also provided employment to the youth, giving them a source of income such as in the NYS (National Youth Service). Peng (2008) suggestion was that a government's mandate should require that a specified course on personal finance is covered so as have a considerable and favorable effect on the learners financial literacy. The county also has business studies offered in secondary schools. Mathematics and English as compulsory in both primary and secondary schools as these are vital when it comes to understanding financial terms. School clubs also help promote financial literacy.

In Kenya Methodist University Finance and Accounting Students Association, providing financial information, advice, insights, training, guidance, educations trips and career forums for the members (Onyango, 2014). Moreover, employers are required to register their employees for the NSSF (National Security Saving Fund) and NHIF (National Health Insurance Fund) (Wanjiru, 2017)

Kenya's financial market is fast becoming complicated since financial products are increasing and becoming more easily accessible in the markets, hence the requirement for normal individuals need to understand these financial matters in the markets. Various organizations, financial institutions, and governments are determined to satisfy the desires of individuals by creating more complicated products and services. This has led to the common people being misled, feeling lost and confused about their investment options and spending. Therefore, for survival issues in these financial markets, improvement of Financial Literacy Level is essentially and crucially required (Onyango, 2014).

In North Imenti Sub- County, in Meru County, just like the rest of the world, we notice that lack of financial literacy may result to and be as a result of variations in the opportunity to gain information, understanding, knowledge and being exposed to financial issues. It can lead to under-saving due to poor financial planning, poor investment choices hence less efficient markets due to illiterate consumers. There has been ambiguity created for those that their financial illiteracy makes them unable to comprehend the newer financial products and lack of knowledge on how to prepare for retirement (Onyango, 2014).

For financial literacy, individuals could have exposure on financial education guidelines and programs to raise individual knowledge on financial issues as financial education improves consumers understanding about dynamic financial products, concepts, and risk from the financial information, instructions and objective advice. Therefore, an individual ends up developing the required skills, self-confidence in financial risks and investment opportunity awareness making sound decisions, accessing necessary assistance and taking efficient actions in improving individual financial wellness (Onyango, 2014).

The necessity of financial literacy has vigorously increased due to the rise and increase of bankruptcies, household debt, and globalization of financial products. This includes; the Euro Bond, dynamic modern technology such as mobile financial packages like M-Shwari from Safaricom, varied investments, and liberalization that have created the varied financial products and services. This leaving majority of the people less equipped to make sound financial decisions and evaluation of complicated financial products and poor investments, hence we are forced to recognize the need for improving Financial Literacy Level (Onyango, 2014).

Statement of the Research Problem

The variant financial crisis is faced by all generations in the past and today who are expected to make and take increasingly vital and complex choices on budgeting for consumption, savings and investing,

taxation and handling crisis. Technology in this modern times, globalization and liberalization have resulted to newer products and services in finance, that is generally accessible leaving the majority of the people lesser prepared to making sound decisions in finance and in evaluating difficult financial products (Lusardi & Mitchell, 2007). Consequently, there is a problem of limited, inadequate, lack and low levels of financial literacy hence creating the basis of this research. Consequently, government, financial institutions, and non-profit making organizations have dedicated massive resources to promote and facilitate educational plans on finances, targeting to access many people in years to come. However, the problem remains unresolved (Sloan, 2012). The role of variant demographics in the strive to promote literacy levels among Meru residents remain unexplored. Therefore, this study examined the relationship between demographic factors and financial literacy in North Imenti Sub- County, in Meru County.

Research Hypotheses

Ho₁: There is no significant relationship between Demographic factors and financial literacy in North Imenti Sub- County, in Meru County.

LITERATURE REVIEW

Theoretical Review

Transformative Learning Theory

Transformative learning theory explains the way human beings do revision and reinterpretation meanings through a perspective transformation process in three dimensions: First, it is based on psychology, belief and understanding self-changes. Secondly, Convictional based on convictions, attitudes, and belief in oneself by revising and thirdly, Behavioral base one's behavior, emotional reactions and lifestyle changes (Khabanyane, Maimane, & Ramabenyane, 2014). Adults are said to have the tendency of rejecting any ideas that do not correspond with their particular values, associations, and concepts. This theory clearly explains age and gender of individuals tend to influence their attitudes and belief towards financial planning. The theory explains the role of demographics in the study and its relation to financial literacy.

Bounded Rationality Theory

Bounded rationality is distinguished from the perfect human rationality, which suggested in the classical and neoclassical economic theories and the reality (actuality) of human behavior as viewed in economical life (Simon, 1992). The behavior assumed of bounded rationality embody dismissal of perfect knowledge and optimized economical factors, that characterize the treatments of rationality in neoclassical economics and alternatively involve the element of limitation or restriction (Bruin & Hartle, 2003). From the theory, it is evident that in reality many individuals seem to have limited information and imperfect knowledge. Older and experienced individuals are aware of precedent performances and prior experiences hence trying to relating the present situations to past, this makes the older more financially literate than the younger group (Bruin & Hartle, 2003). The relevancy of the theory is evident as it clearly illustrates financial literacy based on the demographic factors thus Age and Gender.

Empirical Review

Age and Financial Literacy

Age is regarded as the length, span or period of time that a person lives or a thing exists (Cambridge English dictionary). In this case, we have the young (18-40), the middle-aged (40-60) and the old individuals (over 61 years). Researchers have found out that Age affects financial knowledge level of the many student financial knowledge, which develops over time, as they grow older. This seems to be evident, just as in other areas and aspects of life, where we gain more knowledge of finances in the course of our lives. In addition, as they grow older, young adults more frequently find themselves in situations such as taking out a loan and buying a real property that helps expand their financial knowledge (Luksander, Béres, Huzdik, & Németh, 2014).

Studies show that family background also influences the financial knowledge value achieved by the young people in the family especially if some of their parents and grandparents have a higher degree. The association between levels of financial literacy and age groups was highest at ages 45 in Indonesia and 40 years in India (Xu & Ziaa, 2012). Age was suggested to have a positive relationship with financial literacy levels, a study on financial literacy levels suggested that basic financial literacy profile is negatively skewed in terms of age. The financial literacy level has been suggested to be lower amongst the young, highest among middle-age respondents especially ages 40 – 60 years then decline at the ages of 61 and over years (van Rooij, Lusardi, & Alessie, 2007).

Similarly, in Australia, their youngest age group 18-24 years and oldest age of 70 years & over group displayed lower financial literacy levels scored (ANZ, 2008). In one of Worthington's (2004), studies on financial research, his conclusion was that financial literacy levels of the old people of Australia aged 51-60 years was lower than the young group of 21-49 years. Almenberg (2011), agrees with the resultant findings where financial literacy levels amongst many individuals of age group of 35 -50 was higher in comparison to the individuals aged 65 years and above in Sweden. The curve had its peak at ages 35 and its lowest at ages 65. Similarly Lusardi and Mitchell (2006), found out that there was 5% improvement in financial literacy levels tested scores of performance at the key ages of 25-65 years group compared the ones below the 25 years and above age 65. The U.S retirees who were in their ages of 51 -56 years group had minimal financial literacy levels. Accordingly, researches in both India and Indonesia identified that higher financial literacy level was highest at ages 40 years in India and 45 Indonesia (Cole, Sampson, & Zia, 2008).

Lusardi et al. (2006), revealed that retirement age influenced Financial Literacy Level of individuals aged 51-56 years who had low level of financial literacy amongst all age groupings. Finke *et al*, (2011), similarly when researching expounded that older ages were largely connected to low levels of financial literacy worldwide and indicated that it was due to intellectual process decline in faster rating at this age, hence affects their capability of remembering significant features of

finances. Financial Literacy level has been found as lower amongst the young, higher amongst the middle-aged participants of 40-60 years then has a slight decline for those with 61 and over years.

Gender and Financial Literacy

Food and Agriculture Organization (FAO), (1997) defined gender in the relationship between women and men in society and mostly directs the processes of reproduction, production, distribution, and consumption. Gender also is seen as the situation of either being a male or a female in reference tousing under social-cultural differences instead of basing on biological differences

Gender as a forecaster to financial literacy has been done by many researchers around the world. Researchers including Mandell (2008), Almenberg and Save Soderbergh (2011) and Lusardi et al. (2008), conclude that generally men's tend to performance is superior to women on varied financial literacy examinations. Explaining how low financial literacy was more visible in women compared to men due to the fact that financial decisions are done by men in households in Sweden. Goldsmith and Goldsmith (1997) elaborated that because women are naturally not interested in financial matters for the house, then they obviously scored worse than men in topics dealing with personal finance.

According to the several findings, men performed better on the test measuring financial knowledge than women hence it is assumed that men are more interested in financial matters than women and as a result, they are better informed. Ford and Kent (2010), suggested that the distinguish amid men's and women's financial literacy levels the fact that; women do not have an interest in financial matters done at the financial markets. Also, they feel demoralized due to the complication of the investments in financial markets and that do not have situations understanding and knowledge of financial instructions and information. These factors cause a lack of curiosity to individuals financial management, therefore, leading women to have no interest in the functions of the financial markets eventually.

Fonseca *et al.* (2009), specifies that because women are recognized to living long years methodically and a smaller proportion having professionalized occupations, therefore, they have lower financial literacy levels making them vulnerable financially. He emphasizes that financial education is an essential factor in expounding the reasons men hold higher financial literacy levels. He upholds that when many women particularly would be allowed to pursue and advance their education, especially in developing countries then eventually gender based differences would be minimal on financial literacy levels.

There is a crisis in under developing countries, since socio-economical structures and barriers deprived women the opportunity of basic education since the level of illiterate women was high than for men, for instance financial literacy rate in Bangladesh is 43% and 55% for women and men respectively. Illiteracy excluded women from opportunities in accessing adequate financial

information where they could access and identify various opportunities on entrepreneurship. This included financial information and resources as their capability in exploiting opportunities was hindered hence women were unable to have the skills of reading, writing and counting subjects. This was regrettably many cases for business women in developing countries, in Asia and Africa Continents, since the mixture of higher levels of financial illiteracy and lower societal positions exposed women to higher risks of being exploited, hostility and brutality cases Fonseca et al., (2009).

RESEARCH METHODOLOGY

Research Design: The study employed the descriptive survey research design. The target population comprised of all individuals residing in North Imenti, in Meru County, 102,501. The Accessible population for the study was 30,804 residents of Meru Municipality.

Sampling: The study used a non-probability sampling method which of the convenience sampling technique. A sample size of 400 was selected from the total accessible population of 30,804 individuals in Meru Municipality. This is due to the fact that with a confidence level of 95% and a population of 30,804, the sample size has to be 400 people. Respondents were chosen from group meetings and training, Salons and barbers, Market places such as Gakoromone Market, Main Matatu Stages, Financial institutions and schools as they comprised of individuals with different characteristics.

The formula recommended by Mohamed (2014) for calculating sample size. A 95% confidence level and $P=0.05$ are assumed

$$n = N / (1 + N(e^2))$$

Where;

n is the required sample, N is the total population
 e^2 is the probability error, $n = 30,804 / (1 + 30,804(0.05^2))$
 $= 30,804 / (1 + 77.01) = 395$ thus

Data collection: A questionnaire with both open and closed ended questions was used when collecting data. For closed ended questions multiple choice questions were used to collect the data from respondents. Prior to the collection of data, the instruments were subjected to validity checks and reliability tests. A pilot test was organized to measure the reliability of the questionnaire and the test model. .

Data Analysis and Presentation: The data that was collected was summarized and categorized according to common themes, then analyzed using frequency distribution tables and measures of central tendencies such as mean since descriptive statistics was used to describe the general characteristics of the population. The measure of association used here was chi-square as the chi-square test highlighted the relationships and differences of the variables. For further processing of the presentation of data results, the Statistical Package for Social Sciences (SPSS) version 21.0 was used. Finally, the data was then presented in terms of tables, graphs and figures for summary purposes.

RESULTS, ANALYSIS AND PRESENTATION

4.4 Sample Characteristics

It can be observed that; Knowledge of Compound interest and simple interest had 50.7% of the respondents, those with insurance policies were only 36%, those that work with budgets were only 28.7%. This means that the Financial Literacy Level is quite low since those that are financially illiterate are more from the data.

Knowledge of Compound interest and simple interest had 50.7% of the respondents, those with insurance policies were only 36%, those that work with budgets were only 28.7%. This means that Financial Literacy Level is quite low since those that are financially illiterate are more from the data above.

The study shows that 49.3% of the respondents do not have the idea of the compound and simple interest concepts, but they have had about interest. For those that had about both interests 90% was learnt in schools and this was mostly for those that attended secondary school. More over 64% do not have insurance policies, and 71.3 % do not use domestic budgets on spending. The trend is relatively the same when it comes to personal ratings on savings which is at 30% as poor saving habits and riskiness to fraud and being misguided on investment decisions being at 50%. This is a worrying trend that the government together with concerned parties should take into consideration.

Demographic factors and Financial Literacy Age Factor

From a total of 300 respondents, 11.7% were 18-30 years, 59.7% were 30-45 years, 23.7% were 46-60 years and 5% were 61 and over years. The question used here was 12. Majority of the respondents were 30-45 years of age thus 59.7% of the respondents, This is an active stage where many are preparing for future by investing in their own businesses, most are thinking of investing for retirement purposes. The test depicted that the financial literacy level of respondents aged between 59.7% aged between 30-45 years will only 5% for those above 61 years were literate

Gender Factor

From the respondents that were randomly selected for sampling purposes 55.7% of the respondents were male while 44.3% were female. The question used here was 13. Income level had 13.7% as high income earners with above 80,000, 46.0% as medium income earners with 30,000-79,000 and 40.3% as low income earners with 29,000 and below per month.

Research Hypothesis

Ho₁ Demographic factors have no significant relationship with financial literacy in North Imenti Sub-County, in Meru County.

Results obtained in Chi Square Analysis - Age against Financial literacy

Table 1: Chi-Square Tests of Age against Financial literacy

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.597	1	0.058

Table 2: Symmetric Measures of Age against Financial literacy

	Value	Approx. Sig.
Nominal by Phi	0.109	0.058
Nominal Cramer's V	0.109	0.058

From the results in Table 4.9, the null hypothesis was

rejected, $\chi^2 (1) = 3.597, p \leq 0.05$.

Since 0.058 is slightly greater than Alpha 0.05 it reveals that the result is some weak significant between age and Financial Literacy, hence we reject the null hypothesis thus, there is fairly significant association between the variables that is age and financial literacy. Table 4.10 above indicates the strength of the relationship with Phi value which is similar to the Pearson's R which in this case was found to be 0.109. This value indicates a moderate effect of the relationship between the two variables. Phi defines perfect association as predictive monotonous and defines the null relationship as statistical independence. In this case, the percent difference with financial literacy independent (column) is 10.9%, and with age as independent is 10.9%. Phi is the mean percent difference between financial literacy and age with either considered as to be resulting in the other. According to Almenberg (2011), financial literacy among the 35-50 years old group was higher when compared to the 65-year-old group in Sweden.

Results obtained in Chi-Square Analysis - Gender against Financial literacy

Table 3: Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	0.706	1	0.401

Table 4: Symmetric Measures of gender against Financial literacy

	Value	Approx. Sig.
Nominal by Phi	0.048	0.401
Nominal Cramer's V	0.048	0.401

From the results in Table 4.11, the null hypothesis was accepted, $\chi^2(1) = 0.706, p \geq 0.05$. Since 0.401 is greater

than Alpha 0.05, it shows that there is highly no significance, hence we accept the null hypothesis thus H_0 , no significant association between the variables that is Gender category and financial literacy. Table 4.12 above indicates the Phi value which is similar to the Pearson's R which in this case was found to be 0.048. This value indicates totally no effect of the relationship between the two variables. The percent difference with financial literacy independent (column) is 4.8%, and with gender as independent is 4.8%. Phi is the mean percent difference between financial literacy and gender with either considered as to be causing to the other. The analysis indicates that Gender did not have a great significant association with financial literacy as gender was rated fourth among the variables studied. There seems to be a balance between the financial literacy of man and women, this could be attributable to the fact that both women and men are now being subjected and exposed to equality measures of education, sources of financial information and even being involved in the budgeting of domestic spending.

CONCLUSIONS

Generally, in terms of financial information from education, the government, financial institutions and other stakeholders such as parents have been trying to instill financial education to the youth and other citizens to promote financial literacy in Kenya. However, the method of implementation or teaching is a set back to the achieving the maximum financial literacy levels goals aimed at equipping the individuals to make informed choices of the dynamic financial products being catalyzed by globalization today. It can be concluded that education can be taught in all sectors and sections of the country in trainings, seminars and all academic levels, however, the method of learning the new skills is crucial.

RECOMMENDATIONS

Transformative learning should be taught in schools to explore the educational theory, practice, research and demonstrate how learning frameworks guide and assist in shaping the curricula and teaching strategies which enable the students to cultivate vital

integrative and expansive learning capabilities throughout their lifetimes.

The current digital literacy program initiative by the government will play a vital role if adopted by all children in North Imenti Sub- County, in Meru County. This is due to the fact that, information technology skills will be cultivated into our children at a younger age and they will be able to integrate these skills and transforming them as they develop throughout their lives.

The county government in conjunction with the government should audit the current teaching methods and policies and improve them to make them more effective.

Money management programs should be financed and advocated for to enhance public participation and promote money management habits such as savings and budgeting prior to spending. In addition, retirement schemes should be funded by the county government to provide insightful benefits of savings for purposes of retirement.

The public should be reminded more frequently and made aware of risks exposure dangers and the importance of insuring against them.

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