ASSESSING FINANCIAL LITERACY AND CAPABILITY: THE CASE FOR INCLUSION OF FINANCIAL EDUCATION IN THE UNIVERSITY CURRICULUM

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Abstract

University students are confronted with decision situations that call for basic financial and economic concepts and skills. The student has to manage his scarce financial wherewithal, avoid falling into excessive debt, avoid ostentatious consumption, be frugal and if he has surplus funds invest. A student also needs to hone skills that will stand him in good stead in adult life. It is against this background that this study assesses financial literacy and capability among students of the Multimedia University of Kenya. A sample comprising slightly above 10% of the student population enrolled in the 2016/2017 academic year was randomly selected to reflect the population of university students. A three stage cluster sampling was adopted to ensure that faculty and level of education considerations were represented. Gender characteristics were also analyzed in the study. Findings of the study suggest that the overall financial literacy and capability of students differ across the various faculties as well as across the level of education. Financial literacy levels also get affected by the gender of the student. Recommendations made in this study will help devise and integrate appropriate university curriculum targeted at increasing the level of financial literacy and capability among university students.

Keywords: Financial Capability, Financial Education, Financial Literacy, MDG's, Vision 2030

INTRODUCTION

If there be knowledge that is so primary and fundamental, so universal and overarching, so urgent and necessary to help steer the perfidious terrain of the life of the 21st century and indeed for a people to achieve the MDG's and vision 2030, then without any doubt, one of such body of knowledge should be one that arms the citizens with an inventory of financial literacy



and numeracy skills. The present life is one that is characterized by a dominance and centrality of money. Finance concerns and considerations are in virtually all decisions and actions that an individual grapples with today. The station in life of the individual does not excuse him or her; be they old or young, a student or a worker, a farmer or an engineer, female or male, tall short or plump... so long as they bear responsibility for their decision, they have to reckon with implications that are financial in nature. Thus, in order to navigate modern life, citizens need an armory of financial literacy tools, maps and compasses so as to properly determine the direction to plot and the path to take. About financial literacy, Professor Annamaria Lusardi poignantly states: "Just as it was not possible to operate in an industrial society without print literacy ability to read and write – so it is not possible to live in today's world without being financially literate. To fully participate in society today, financial literacy is critical".

Research in the developed countries has found that financial literacy can have important implications for financial behavior. Lusardi and Tufano (2009) find that people with low financial literacy are more likely to have problems with debt while van Rooij, Lusardi, and Alessie (2007) find that such people are less likely to participate in the stock market. Hastings and Tejeda-Ashton (2008) documented that financially illiterate people are less likely to choose mutual funds with lower fees, while Stango and Zinman (2007); Hilgert et al (2003) find that less literate people are less likely to accumulate and manage wealth.

According to Lusardi et. al (2009) financial literacy is an important component of sound financial decision-making. Research finds that many young people wish they had more financial knowledge: 84% of college students said they needed more education on financial management topics, 64% would have liked to receive information about financial management topics in high school, and 40% would have liked to receive such information as college freshmen (Sallie M. 2009).

From the foregoing, understanding financial literacy among young people is of critical importance for policymakers in several arena: it can aid those who wish to devise effective financial education programs targeted at young people; it can also aid those who wish to devise legislation to protect younger consumers, and it will help determine which factors impede financial illiteracy and hence which segments of the college population are most vulnerable and need intervention.

Statement of the Problem

Financial literacy is associated with the health and well-being of individuals, families, communities and markets. Effective financial education can help individuals develop budgets, create savings plans, manage personal debt, formulate investment decisions and become



informed consumers. It helps make the market place efficient. Conversely, low levels of financial literacy may lead to poor health, decreased quality of life and lower college attainment levels. The cost of poor financial decision-making and planning often gets shifted on to other members of the community, state and nation through higher prices for financial products, the diversion of economic resources and greater use of public "safety net" programs.

Consumers, including students, are facing a more complex financial environment, with complicated products and processes. They face severe consequences for financial mistakes in decisions such as buying homes (mortgage), planning for retirement, paying for education, and overleveraging. These changes have been accompanied by steep price increases for investing in a college education, purchasing health cover and buying homes in some markets. A financially literate consumer can avoid a lot of agony by making correct decisions.

Studies in the developed countries have shown that financial literacy is generally low, especially in vulnerable populations. To illustrate this lack of basic financial awareness in the US, Dartmouth Professor Annamaria Lusardi included three basic financial literacy questions pertaining to interest rates, inflation, and risk diversification in the 2004 "Health and Retirement Survey". The survey found that many Americans are failing to meet existing financial demands, engage in little or no planning for future events and potential emergencies, have modest knowledge of their current financial portfolio, and do not have an acceptable understanding of the financial decision-making process. No statistics on the Kenyan situation are available, but it can only be far worse than that obtaining in US. Thus if financial literacy education is recommended for USA, the more it is for Kenya.

Low levels of financial literacy, combined with the changing consumer environment, have contributed to an increase in risky consumer behavior. The failure to pay mortgage on time, overuse of credit cards, record-low levels of savings and record-high levels of household debt, and the growing use of "alternative" lending outlets, are examples of risky financial practices that may be prompted in part by widespread financial illiteracy.

The researcher is not aware of any local study on this very critical subject. To compound the situation, a look at the curricula of public universities revealed that no common undergraduate course that imparts these necessary survival or life skills exists. The reality of the situation is that students are plunged in an overarching decision making environment that calls for a basic exposure to basic economic and financial concepts. They need also to be able to carry out and appreciate simple financial calculations for them to make choices that are optimal and rational. It was for this reasons that the research was carried out.



General Research Objective

The overall goal of this study was to assess the financial literacy and capability of university students.

Specific Research Objectives

- 1. To determine the influence of financial knowledge on financial capability among university students.
- 2. To establish the influence of financial attitudes on financial capability among university students.
- 3. To find out the influence of financial behavior on financial capability among university students.

Research Questions

In the light of the above objectives, the study attempted to answer the following questions:

- 1. Does financial knowledge have an influence on financial capability among university students?
- 2. Is there an influence of financial attitudes on financial capability among university students?
- 3. Does financial behavior have an influence on financial capability among university students?

Significance of the Study

This research brings about new knowledge that should foster institutional change in the way universities design and conduct campus wide university curriculum. This would foster institutional performance and ultimately the citizenry wellbeing. The study should therefore guide policy changes and innovations in the structure of academic programs offered by Kenyan Universities. The findings of this study therefore have a significant value addition to the existing pool of knowledge.

The Multimedia University of Kenya has a unique opportunity to provide leadership on this critical issue of weaving financial education in the fabric of its programs. By the design and delivery of value-adding financial literacy courses, the University can help nurture citizens armed with requisite life-skills, developing in them enduring and proper financial habits, and consequently contribute to the reduction of the social costs necessary for the support programs and safety nets needed when financial crises strike.



Scope of the Study

From a contextual point of view, the study was on assessing financial literacy and capability among university students. Three indicators of financial literacy were considered with a view of establishing the effect on financial capability among the students. The study period considered relevant for this research was a period of eleven months commencing August 2016 through June 2017 and restricted itself to the 5412 students enrolled in Multimedia University of Kenya in the academic year 2016/2017. Primary data was used towards the attainment of the objectives of this study.

Limitations

Research on the financial literacy and capability among students was lacking in Kenya and other developing countries. Lack of literature in Kenya and developing countries therefore denied us the opportunity to compare our work with what has been done locally as a basis of critic. This limitation was overcome by comparing with works done elsewhere

Restraints and confidentiality from potential respondents to the questionnaires was postulated. To overcome this limitation, the study established contacts and used an introduction that gave confidence to the respondents. The questions were read out to the respondents and the respondents identities were held in confidence.

LITERATURE REVIEW

This section reviewed literature by various scholars in the area of financial literacy, financial decision making and capability. It reviewed how students make financial decisions and what considerations inform their choices. It looked at the linkages among and between the study variables with a view of establishing the existing relationships. Empirical studies related to the study were reviewed with an aim of presenting the gaps in the literature requiring investigation. The study reviewed selected literature that summarizes a diverse spectrum of views on financial literacy and financial capability. This includes; theoretical review, conceptual framework and measurement of financial capability.

Theoretical Review

Camp (2010) defines a theory as a set of interrelated constructs (concepts), definitions and prepositions that present a systematic view of phenomena by specifying relations among variables, with the purpose of explaining and predicting phenomena. The study reviewed key theories that provide an insight into the personal and social determinants of financial capability.



The 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.

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. Social learning theory can be used to illustrate how social factors such as sources of information and financial advice influence in shaping a person's behavior. The financial attitudes and values people have about money come from their environment.

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). 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.

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



was financial capability while the independent variables were the determinants of financial literacy i.e. financial knowledge, financial behavior and financial attitudes. This study conceptualized a framework derived from theoretical review of both the dependent and independent variables as shown in the Figure below.



Empirical Review

Over the last two decades, researchers have started to explore whether individuals are well equipped to make financial decisions. Bernheim (1995, 1998) was among the first to document that many U.S. consumers display low levels of financial literacy. More recently, Hilgert, Hogarth, and Beverly (2003) report that most Americans fail to understand basic financial concepts, particularly those relating to bonds, stocks, and mutual funds. Moore (2003) finds that people frequently fail to understand terms and conditions of consumer loans and mortgages. This problem may persist for some time. The National Council on Economic Education's report (NCEE 2005) shows a widespread lack of knowledge regarding fundamental economic concepts among high school students, confirming similar findings by the Jump\$tart Coalition for Personal Financial Literacy (Mandell, 2008).

Lack of financial sophistication is not only an American problem: The 2005 report on financial literacy by the Organization for Economic Co-operation and Development (OECD) and Smith and Stewart (2008) document low levels of financial literacy in several countries. Similarly, the Survey of Health, Aging and Retirement in Europe (SHARE) shows that



respondents score poorly on financial numeracy and literacy scales (Christelis, Jappelli, and Padula, 2010).

One of the reasons for the interest in financial literacy is not only the increase in individual responsibility but also the debate on whether people are saving enough for their retirement, the reasons for the large increase in debt and in personal bankruptcy rates, and the incidence of financial mistakes (Campbell, 2006). Financial literacy has been linked to saving behavior and portfolio choice. For example, the less financially literate are found to be less likely to plan for retirement (Lusardi and Mitchell, 2006, 2008, 2009), to accumulate wealth (Stango and Zinman, 2009), and to participate in the stock market (van Rooij, Lusardi, and Alessie, 2007; Yoong 2008; Christelis, Jappelli, and Padula, 2010). Moreover, less literate individuals are less likely to choose mutual funds with lower fees (Hastings and Tejeda-Ashton, 2008).

According to Campbell (2006), individuals with lower incomes and lower education levels characteristics that are strongly related to financial literacy and are less likely to refinance their mortgages during a period of falling interest rates. Lusardi and Tufano (2009) show that individuals with lower levels of financial literacy tend to transact in high-cost manners, incurring higher fees and using high-cost borrowing. The less knowledgeable also report that their debt loads are excessive or that they are unable to judge their debt position. All of these papers raise warnings about the low levels of financial literacy.

Critique and Research Gaps

The main objective of this chapter was to review both the theoretical literature and empirical literature on financial literacy and capability among individuals. A lot has been written on financial literacy as shown in the foregoing. These studies have been carried out mainly in developed countries outside Africa. A critical review of literature show that several conceptual and contextual gaps exist in the discourse of this subject. The university is the fountain of knowledge for any economy and thus constitutes a backbone to a country's economic development. Thus, the contribution to the economic growth of this study is without any doubt enormous. Ignoring such an important element of economic growth and its contribution to the GDP would be detrimental for Kenya's vision of its millennium development agenda and vision 2030.

RESEARCH METHODOLOGY

Research Design

A step by step procedure indicating how the study objectives will be achieved is known as research design (Orodho, 2009). In the current study descriptive research design was used.



Mugenda and Mugenda (2008) defined descriptive design as a design which primarily seeks to describe respondent's characteristics. The design was appropriate for the current study since it sought to examine financial literacy and financial capabilities among university students. The goal was to describe the situation as it is on financial literacy as such to show case the need for its inclusion in university curriculum.

Target Population

A complete enumeration of all the elements under consideration is known as the target population (Mugenda&Mugenda, 2008). In the study, the target population was 5412 students who were registered in Multimedia University of Kenya in the 2016/2017 academic year.

Sampling Technique and Sample Size

A subset of the total population which can act as true representative is known as sample (Oso&Onen, 2009). Three stage cluster sampling and a probabilistic approach was used to select the sample of 545 students which is slightly above 10% of the population, consistent with Mugenda&Mugenda (2008). This is a multistage sampling technique where the population is grouped into clusters (faculties) in the first stage, then into sub clusters (levels of education) in second stage and finally randomly selecting sample of elements from each sub cluster as shown in the table below. This approach was used to recognize the fact that different faculties and levels of education have different levels of knowledge and exposure in financial matters.

				Education				
	Target	% o f	Sample	first	second	third	fourth	fifth
Faculty	Population	Target		year	year	year	year	year
Business and Economics	1589	28	154	32	28	37	57	0
Computing & IT	771	14	77	13	18	18	28	0
Engineering	413	7	42	12	5	14	6	5
Media & Communication	2098	40	217	51	61	55	50	0
Science & Technology	541	11	55	11	16	21	7	0
Total	5412		545	119	128	145	148	5

Table 1. Sample Size

Data Collection Instruments

In the current study the main tool for data collection was a questionnaire crafted in the English language. Prior to the actual data collection the research instruments were pretested among the



students. Mugenda&Mugenda (2009) argued that a research instrument is a data collection tool meant to measure, quantify or observe the data of interest. In this, study a questionnaire with both closed and open ended questions was used. The questionnaire had four sections; back ground information, financial knowledge, financial behavior and financial attitudes.

Validity and Reliability of Research Instrument

A research instrument is said to be valid if it can consistently yield similar results when administered to different groups of people (Kothari, 2004). Prior to the data collection the researcher discussed the data collection tool with experts drawn from other relevant disciplines like statistics. Advice and critique from the pool of experts was then used to improve the research instrument.

Reliability of an instrument is the measure of the degree to which a research instrument yields consistent results or data after repeated trials (Oso&Onen, 2009). In order to test the reliability of the instrument used in the study, a pilot study was carried out among the students.

Data Analysis

After data was collected, it was analyzed using descriptive and inferential statistics with the aid of Statistical Packages for Social Scientists (SPSS) version 21. According to Oso and Onen (2009), descriptive statistics are statistical tools used to summarize large volumes of data with very few figures. The proportions of respondents' answers towards various questions as posed by the researcher were majorly used in making conclusions. Chi square tests at 5% level of significance were used to make inferences on the significance or otherwise of the differences in attitudes, knowledge and behavior of respondents.

FINDINGS

Financial Knowledge

Table 2 shows the results of numeracy skills of respondents across faculties. It is evident that majority of respondents at 76.3% had sound numeracy skills since they were able to give the correct answer. Only 23.7% affirmed their lack of numeracy skills. The results negate the National Council on Economic Education's report (NCEE 2005) which showed a widespread lack of knowledge regarding fundamental economic concepts among high school students. They also contradict the Survey of Health, Aging and Retirement in Europe (SHARE) survey that showed that respondents score poorly on financial numeracy and literacy scales as put by Christelis, Jappelli, and Padula (2010). However, this disparity may be explained by the target population.



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The respondents from faculty of Business and Economics were the best in this analysis with 85.7% of them getting the correct answer. They were followed by faculty of Science and Technology with 78.2%, faculty of Computing and Information Technology with 77.9%, faculty of Media with 70.5% and finally faculty of Engineering with 66.7%. While there were differences in proportions of respondents across faculties in their solutions, the differences were significant at 5% level of significance since the p value for the Chi-square test was 0.002.

				Faculty			Total
	-	Business &	Computing	Engineering	Media &	Science &	-
		Economics	& IT		Communication	Technology	
Numeracy	>102000	85.7%	77.9%	66.7%	70.5%	78.2%	76.3%
	=102000	7.8%	11.7%	16.7%	15.2%	16.4%	12.8%
	<102000	5.8%	10.4%	11.9%	6.5%	5.5%	7.2%
	do not	.6%		4.8%	7.8%		3.7%
	know						
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100%
P value .002							

Table 2. Numeracy by Faculty Cross Tabulation

Table 3 shows the results of numeracy skills of respondents with their gender and education level. 79.1% of male respondents answered correctly while 72.5% of female got it right. Therefore the male students had superior numeracy skills than their female colleagues. In terms of education level, fourth year students had the best rating with 79.7% of them answering correctly. Of interest is the fact that fifth year students ranked last. This can be attributed to the fact that these are in the faculty of Engineering and may thus not have superior knowledge on financial literacy. At 5% significance level, the difference in proportions of respondents between genders was significant as the p value was 0.048. However the differences across levels of education were not significant since the p value was 0.291.

Table 3. Numeracy by Gender and Education Cross Tabulation

		Ger	Gender			Education			
		F	М	first	second	third	fourth	fifth	
				year	year	year	year	year	
numeracy	>102000	72.5%	79.1%	73.1%	76.6%	76.6%	79.7%	40.0%	76.3%
	=102000	14.4%	11.8%	12.6%	10.9%	13.8%	12.8%	40.0%	12.8%

	<102000	8.1%	6.2%	11.8%	6.3%	6.2%	4.7%	20.0%	7.2%	Table 3
	do not know	5.0%	2.8%	2.5%	6.3%	3.4%	2.7%		3.7%	
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
P values .04	48, .291									

As shown in table 4, 65.5% of respondents demonstrated their knowledge on inflation as they were able to answer the question on inflation knowledge measure. 11.6% of the respondents had no knowledge on inflation at all with the faculty of Engineering students topping the list. Of the 65.5%, faculty of Business and Economics students topped the rank with 81.2% of them answering correctly, followed by the faculty of Science and Computing, faculty of Media and Communication and faculty of Engineering students in that order. The differences in proportions of respondents across faculties in their solutions were however significant at 5% level of significance since the p value was 0.

Table 4. Inflation by Faculty Cross Tabulation

					Faculty			Total
		-	Business &	Computing	Engineering	Media &	Science &	-
			Econ.	& IT		Comm.	Technology	
Inflation	more t	than	7.1%	13.0%	16.7%	15.7%	5.5%	11.9%
	today							
	Exactly	the	7.1%	16.9%	9.5%	12.9%	7.3%	11.0%
	same							
	less t	than	81.2%	63.6%	54.8%	55.8%	70.9%	65.5%
	today							
	Do	not	4.5%	6.5%	19.0%	15.7%	16.4%	11.6%
	know							
Total			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
P value 0								

Table 5 shows the results of inflation skills of respondents along with their gender and education level. 65.7% of male respondents answered correctly while 64.9% of female got it right. Therefore the male students once again demonstrated their superior inflation knowledge than their female colleagues. In education level, fifth year students had the best rating with 80% of them answering correctly and first years came last. At 5% significance level, the difference in proportions of respondents between genders was not significant as the p value was 0.927 as well as the differences across levels of education with a p value of 0.158.



		Gen	der			Education			Total
	-	F	М	first	second	third	fourth	fifth	-
				year	year	year	year	year	
Inflation	more than	9.9%	13.4%	15.1%	10.2%	15.2%	8.1%		11.9%
	today								
	Exactly	11.7%	10.6%	14.3%	8.6%	13.1%	8.8%		11.0%
	the same								
	less than	64.9%	65.7%	55.5%	67.2%	62.8%	74.3%	80.0%	65.5%
	today								
	Do not	13.5%	10.3%	15.1%	14.1%	9.0%	8.8%	20.0%	11.6%
	know								
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
P values .	927,.158								

Table 5. Inflation by Gender and Education Cross Tabulation

Table 6 shows the results of interest rate knowledge measure along with faculties. 45.7% of the respondents got the correct answer while 54.3% did not answer as expected out of which 5.5% acknowledged having no answer. Top on the list of correct answer is faculty of Engineering with 50% of respondents getting the correct answer with the other faculties coming close with the last being faculty of Science with 38.2%. This disparity is not so huge and generally therefore the respondents seem to have same knowledge on interest rates. The differences in proportions of respondents across faculties were significant as the p value was 0 at 95% confidence level.

				Faculty			Total
	-	Business	Computing	Engineering	Media &	Science &	-
		& Econ.	& IT		Comm.	Tech.	
Interest	>200000	46.1%	37.7%	50.0%	49.3%	38.2%	45.7%
	=200000	41.6%	32.5%	38.1%	29.0%	43.6%	35.2%
	<200000	12.3%	24.7%	9.5%	11.1%	14.5%	13.6%
	Do not		5.2%	2.4%	10.6%	3.6%	5.5%
	know						
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
P value (0						

Table 6 Interest by Faculty Cross Tabulation



Table 7 shows the results of interest rate knowledge of respondents along with their gender and education level. While 48% of male respondents answered correctly only 42.3% of female got it right. Therefore the male students once again dominated their female colleagues. In education level, fifth year students had the best rating with 60% of them answering correctly with third years came last at 42.8%. At 95% confidence level, the difference in proportions of respondents between genders was not significant as the p value was 0.385 as well as the differences across levels of education with a p value of 0.909.

							Education	l		Total
			F	М	first	second	third	fourth	fifth	
					year	year	year	year	year	
Interest	>200	0000	42.3%	48.0%	48.7%	46.9%	42.8%	44.6%	60.0%	45.7%
	=200	0000	36.5%	34.6%	28.6%	34.4%	38.6%	37.8%	40.0%	35.2%
	<200	0000	14.9%	12.5%	15.1%	12.5%	13.8%	13.5%		13.6%
	Do	not	6.3%	5.0%	7.6%	6.3%	4.8%	4.1%		5.5%
	knov	v								
Total			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
P values .385, .909		.909								

Table 7. Interest by Gender and Education Cross Tabulation

Financial Behavior

As shown in table 8 below, 19.3 % of respondents had very mean behavior of spending perhaps to boost their savings with 30.5% being somehow moderate. This means cumulatively 49.8% of the respondents had a culture of savings. In contrast, only 34% leaned towards spending culture with 16.3% unsure of their behavior. Again faculty of Business and Economics topped the chart of savings culture with faculty of Science ranking last. Since majority of respondents are at maturing stage the understanding on the purpose of savings for the future may not augur well with them, in any case youth is more interested in consumption than savings. While in the overall the respondents demonstrated their good financial behavior (savings culture), that behavior is significantly different across faculties since the p value at 95% confidence level was 0.007.



				Faculty			Total
		Business	Computing	Engineering	Media &	Science	-
		& Econ.	& IT		Comm.	& Tech.	
fb1	very thrifty	15.6%	16.9%	19.0%	25.8%	7.3%	19.3%
	somewhat thrifty	37.7%	29.9%	26.2%	26.7%	29.1%	30.5%
	neither	17.5%	15.6%	19.0%	15.2%	16.4%	16.3%
	somewhat thrifty	20.1%	20.8%	16.7%	20.3%	34.5%	21.5%
	very spending oriented	9.1%	16.9%	19.0%	12.0%	12.7%	12.5%
Tota	l	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
P va	lue .007						

Table 8. Spending Behavior by Faculty Cross Tabulation

In table 9, approximately 57% of female respondents demonstrated the culture of savings with only 43% of male doing so. This shows that men are heavy spenders. Across education levels, fifth year students ranked first with 60% of respondents showing a savings culture followed closely by fourth years. This show that as people mature, they discover who they are, become more aware and responsible and hence spend less to save more for may be future investments. This results mirror psychosocial theory which posit that the engagement in positive financial decisions is dependent on the positive identity, self-confidence and independence that develops during adolescence and continues into adulthood. In sum, the difference in behavour between gender is significant but across levels of education not significant as the p values were .007 and .165 respectively.

		Gen	der			Education			Total
		F	М	first	second	third	fourth	fifth	
				year	year	year	year	year	
fb1	very thrifty	26.6%	13.7%	16.8%	18.8%	20.7%	20.3%	20.0%	19.3%
	somewhat thrifty	30.2%	30.8%	37.0%	25.0%	23.4%	36.5%	40.0%	30.5%
	neither	15.8%	16.8%	14.3%	22.7%	16.6%	12.8%		16.3%
	somewhat thrifty	19.8%	22.7%	21.0%	18.8%	24.8%	21.6%		21.5%
	very spending oriented	7.7%	15.9%	10.9%	14.8%	14.5%	8.8%	40.0%	12.5%
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Pvalu	ues.007,.165								

Table 9. Spending Behavior by Gender and Education Cross Tabulation



As shown in table 10 below, 13.8% of respondents said they have invested in stocks, 0.9% in corporate and government bonds, 0.7% in commercial papers, and 3.7% in mutual funds. An overwhelming majority at 73% said they have not invested in any security. Engineering group topped the list with 85.7% with computing and information technology ranking last at 66.2%. This results are expected as majority of respondents are at maturing stage where the understanding on the purpose of savings for the future may not augur well with them. They are likely to be more interested in immediate consumption than savings for the future. No wonder the difference in the investment behavior across faculties is null since the p value is 0.233.

Another reason for this occurrence is the diminished purchasing power associated with the group of respondents. Many are likely to be relying on parents or guardians and hence the luxury of excess wealth to invest is not in existent. The results agree with Lusardi and Mitchell (2006, 2008 & 2009) who posit that the less financially literate are found to be less likely to plan for retirement, to accumulate wealth (Stango and Zinman, 2009), and to participate in the stock market (van Rooij, Lusardi, and Alessie, 2007; Yoong 2008; Christelis, Jappelli, and Padula, 2010).

				Faculty			Total
		Business &	Computing	Engineer	Media &	Science	<u>.</u>
		Econ.	& IT	ing	Comm.	& Tech.	
fb2	stocks	20.8%	13.0%	11.9%	10.1%	10.9%	13.8%
	certificate of deposit	1.3%	3.9%		2.8%	1.8%	2.2%
	money market	1.3%	1.3%		1.4%		1.1%
	account						
	government bonds		2.6%		1.4%		.9%
	corporate bonds	1.3%	1.3%		.9%		.9%
	commercial paper	.6%	1.3%		.9%		.7%
	mutual funds	4.5%	2.6%	2.4%	4.6%		3.7%
	multiple	.6%	7.8%		5.5%	1.8%	3.7%
	none	69.5%	66.2%	85.7%	72.4%	85.5%	73.0%
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Pvalu	es .233						

Table 10. Investment Behaviour by Faculty Cross Tabulation



In table 11, 15% of male invested in stocks while 11.7% of female did so not withstanding that this is the preferred security by respondents. More female respondents at 76.1% did not invest in any security as opposed to male at 71%. This generally shows that the male gender has more appetite for investment than female. Across levels of education, 82.4% of first years followed by 80% of fifth years had not invested in any stock yet 20% of fifth years had invested in stocks with mere 8.4% of first years investing in stocks. As much as there is no pattern across levels, their investment behavior is not significantly different between gender and across levels of education since the p values are .801 and .98 respectively at 5% risk level.

						Education			Total
		F	М	first	second	third	fourth	fifth	
				year	year	year	year	year	
fb2	Stocks	11.7%	15.0%	8.4%	10.9%	13.8%	20.3%	20.0%	13.8%
	certificate of	2.7%	1.9%	.8%	3.1%	2.1%	2.7%		2.2%
	deposit								
	money market	.9%	1.2%	.8%	.8%	1.4%	1.4%		1.1%
	account								
	government	.5%	1.2%		.8%	1.4%	1.4%		.9%
	bonds								
	corporate bonds	.9%	.9%	1.7%	1.6%		.7%		.9%
	commercial	.9%	.6%			2.1%	.7%		.7%
	paper								
	mutual funds	4.1%	3.4%	3.4%	3.1%	4.8%	3.4%		3.7%
	multiple	2.3%	4.7%	2.5%	3.9%	3.4%	4.7%		3.7%
	none	76.1%	71.0%	82.4%	75.8%	71.0%	64.9%	80.0%	73.0%
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
P va	llues .801, .98								

Table 12 shows the purported financial beliefs of the respondents as measured by feelings of control of financial situation. 28.8% extremely believed that they feel in control of their financial situation. In total, 81.5% believed in their control as opposed to 18.5% who were either not sure or had no belief on their financial control. The belief is more entrenched in the faculty of Media and Communication at 84.4% with the faculty of Science ranking last with 72.7%. Their beliefs



across faculties are however similar as the p value is 0.103 to imply non-significant differences in the beliefs.

				Faculty			Total
		Business &	Computing	Engineer	Media &	Science &	_
		Econ	& IT	ing	Comm.	Tech.	
fb3	not at all true	11.0%	5.2%	2.4%	6.9%	9.1%	7.7%
1	neither true nor false	9.7%	14.3%	9.5%	8.8%	18.2%	10.8%
	somewhat true	21.4%	26.0%	33.3%	24.4%	29.1%	25.0%
	true	22.1%	36.4%	28.6%	30.0%	21.8%	27.7%
	very true	35.7%	18.2%	26.2%	30.0%	21.8%	28.8%
Tota P Va	alues 099 481	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 12. Financial Situation Control by Faculty Cross Tabulation

As shown in table 13, almost the same proportions of male and female had beliefs or no beliefs in control. Across education levels, the entire 100% of fifth years had financial beliefs in control while almost the same proportion of the rest had no belief at approximately 20%. These beliefs in financial control were generally the same between gender and across levels of education as the p values are .097 and .748 respectively tested at 5% risk level.

Table 13. Financial Situation Control by Gender and Education Cross Tabulation

						Education	า		Total
		F	М	first	second	third	fourth	fifth	-
				year	year	year	year	year	
fb31	not at all true	8.1%	7.5%	9.2%	6.3%	9.0%	6.8%		7.7%
	neither true nor	10.4%	11.2%	10.1%	14.1%	11.0%	8.8%		10.8%
	false								
	somewhat true	21.2%	27.4%	27.7%	28.9%	23.4%	20.3%	40.0%	25.0%
	True	35.6%	22.1%	29.4%	25.8%	26.2%	29.1%	40.0%	27.7%
	very true	24.8%	31.8%	23.5%	25.0%	30.3%	35.1%	20.0%	28.8%
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
P valu	ue .097,.748								



In table 14, 90.8% of respondents felt capable of achieving their financial goals and hence belief, 9.2% however were either not sure or did not at all feel so. The faculty of Media and the faculty of Computing topped the chart of this belief while the faculty of Engineering came last. Their belief in achievement of financial goals across faculties is the same as the p value at 95% confidence level is .172.

			Faculty						
		Business &	Computing	Engineeri	Media &	Science &			
		Econ	& IT	ng	Comm.	Tech			
fb32	not at all true	2.6%	2.6%	2.4%	4.1%	5.5%	3.5%		
	neither true nor false	7.1%	6.5%	14.3%	2.3%	7.3%	5.7%		
	somewhat true	9.1%	15.6%	21.4%	18.4%	12.7%	15.0%		
	true	31.2%	28.6%	19.0%	28.6%	27.3%	28.4%		
	very true	50.0%	46.8%	42.9%	46.5%	47.3%	47.3%		
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		
P valu	ue .172								

Table 14. Financial Goals Achievement by Faculty Cross Tabulation

In table 15, 91.6% of the male students had belief in achieving their financial goal as opposed to 89.6% of female students. The entire 100% of fifth years had belief in achieving their goals while the rest had almost similar results with minimal differences. Overall however the differences in the beliefs in achieving the financial goals between gender and across levels of education were not significant as the p value were 0.945, 0.72 for gender and education levels respectively.

				Education					Total
		F	М	first	second	third	fourth	fifth	_
				year	year	year	year	year	
fb32	not at all true	3.2%	3.7%	5.9%	3.1%	3.4%	2.0%		3.5%
	neither true nor false	7.2%	4.7%	5.9%	7.0%	4.1%	6.1%		5.7%
	somewhat true	14.9%	15.3%	14.3%	14.8%	18.6%	12.2%	20.0%	15.0%
	true	27.5%	29.0%	30.3%	28.1%	23.4%	33.1%		28.4%
	very true	47.3%	47.4%	43.7%	46.9%	50.3%	46.6%	80.0%	47.3%
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
P value 0.945, 0.72									



As shown in table 16, 92.9% of the respondents felt capable of handling their financial future, only 7.1 % were not very sure or were indifferent of their capability. This demonstrated the respondents' bias towards their financial belief in handling their future. The faculty of Media and Communication category led the pack with only 5 % not sure or being indifferent. The differences in the faculties were however not significant as the p value was .247 at a risk level of 5%.

				Faculty			Total
	-	Business	Computing	Engineering	Media &	Science &	-
		&Econ	& IT		Comm.	Tech	
fb33	not at all true	3.9%	2.6%	7.1%	1.8%	1.8%	2.9%
	neither true	4.5%	2.6%	9.5%	3.2%	5.5%	4.2%
	nor false						
	somewhat	11.7%	22.1%	11.9%	18.9%	10.9%	16.0%
	true						
	true	20.8%	26.0%	19.0%	25.8%	32.7%	24.6%
	very true	59.1%	46.8%	52.4%	50.2%	49.1%	52.3%
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
P valu	ue .247						

Table 16. Financial Goals Handling by Faculty Cross Tabulation

In table 17, 93.1% of male students had belief in handling their financial future as opposed to 92.8% of female students. The entire 100% of fifth years had belief in handling their financial future while the rest had almost similar results with minimal differences. Overall however the differences in the beliefs of handling the future between gender and across levels of education were not significant as the p value were 0.015, 0.484 for gender and education levels respectively, at 95% confidence level.

Table 17.	Financial	Goals F	landling b	y Gender	and	Education	Cross	Tabulation
-----------	-----------	---------	------------	----------	-----	-----------	-------	------------

					Education					
		F	М	first	second	third	fourth	fifth	_	
				year	year	year	year	year		
fb33	not at all true	3.2%	2.8%	4.2%	.8%	3.4%	3.4%		2.9%	



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										Table 47
	neither true	4.1%	4.0%	5.9%	2.3%	4.8%	4.1%		4.2%	Table 17
	nor false									
	somewhat true	14.0%	17.4%	20.2%	13.3%	16.6%	14.9%		16.0%	
	True	24.3%	24.9%	24.4%	32.8%	21.4%	20.9%	20.0%	24.6%	
	very true	54.5%	50.8%	45.4%	50.8%	53.8%	56.8%	80.0%	52.3%	
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

As shown in table 18, the proportion of those who discriminate lenders when borrowing are higher than those who do not across all faculties. Only 33.4% of respondents were very sure of the discrimination compared with 32.3%, who do not discriminate, with 19.1% being indifferent. This differences were however not significant since the p value was .284. This generally shows that people are aware of different costs charged by borrowers to different products and their implication in purchasing power and hence the need for comparison. By comparing, results agree with Lusardi and Tufano (2009 that individuals with lower levels of financial literacy tend to transact in high-cost manners, incurring higher fees and using high-cost borrowing.

				Faculty			Total
		Business	Computing	Engineering	Media	Science &	<u>.</u>
		&Econ	& IT		&Comm	Tech	
fb34	not at all true	37.7%	27.3%	38.1%	30.9%	36.4%	33.4%
	neither true	e 22.1%	14.3%	14.3%	20.3%	16.4%	19.1%
	nor false						
	somewhat	14.9%	19.5%	23.8%	11.1%	20.0%	15.2%
	true						
	True	6.5%	9.1%	4.8%	9.7%	9.1%	8.3%
	very true	18.8%	29.9%	19.0%	28.1%	18.2%	24.0%
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
P valu	ue .284						

Table 18. Discrimination When Borrowing Behavior by Faculty Cross Tabulation

In table 19, 34.2% of female students compared with 32.7% of male students committed to discrimination. More female students were indifferent. None of the fifth year students committed to discrimination as opposed to the rest. Indeed a high proportion of fifth years (80%) posit that they do not discriminate lenders. This is unusual as being the senior most colleagues; one



would have expected them to discriminate lenders when borrowing at least with regard to interest rates. The differences in the behavior of discrimination of lenders between gender and across levels of education were not significant as the p values were 0.099, 0.481 for gender and education levels respectively, at 95% confidence level.

				Education							
		F	М	first	second	third	fourth	fifth			
				year	year	year	year	year			
fb34	not at all true	34.2%	32.7%	32.8%	29.7%	36.6%	35.1%		33.4%		
	neither true nor	20.7%	18.1%	14.3%	19.5%	20.7%	20.9%	20.0%	19.1%		
	false										
	somewhat true	9.0%	19.6%	14.3%	16.4%	15.2%	13.5%	60.0%	15.2%		
	True	10.8%	6.5%	10.1%	10.2%	6.2%	7.4%		8.3%		
	very true	25.2%	23.1%	28.6%	24.2%	21.4%	23.0%	20.0%	24.0%		
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		
P Val	ues0.099, 0.481										

Table 19. Discrimination When Borrowing Behavior by Gender and Education Cross Tabulation

Financial Attitude

Table 20 shows results on the feelings of the ability to manage ones finances. Majority of the respondents at 40.9% were somewhat sure with 23.7% being very sure. Only 27.9% of the respondents were not too sure with 7.5% being not sure at all. This implies that most of the students understood what they are required to know in terms of money management. The 27.9% also shows the desire by many to know more on management of money. The differences in opinions across faculties are significant since the p value is .02 at 5% level of significance.

			Faculty								
	-	Business	Business Computing		Media &	Science &	_				
		&Econ	& IT		Comm.	Tech					
fa1	not sure at	1.9%	7.8%	11.9%	10.1%	9.1%	7.5%				
	all										
	not too	22.7%	35.1%	33.3%	27.6%	29.1%	27.9%				
	sure										



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somewhat	42.9%	39.0%	45.2%	38.7%	43.6%	40.9%	Table 20.
sure							
very sure	32.5%	18.2%	9.5%	23.5%	18.2%	23.7%	
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
P value .02							

Table 21 shows results of financial attitude ability to manage own funds against gender and across levels of education. This results show that 26.2% of female students are very sure of their abilities compared with 20.3% of female students. On desire to know more of management of funds, female students (29.3%) are more than female students (27.1%) though marginally. This differences are however not significant since the p value is .769. In terms of education level, none of the fifth years were sure while 60% expressed confidence in understanding what they are supposed to know. Fourth years lead the pack amongst those who were very sure of their abilities at 35.1%. These differences were significant as the p value was .001at 95% confidence level. There is need therefore to institute programs that bestow confidence amongst students to bridge the gap in abilities to manage finances.

			Education								
		F	М	first	second	third	fourth	fifth			
				year	year	year	year	year			
fa1	not sure at	7.2%	7.8%	10.1%	9.4%	6.2%	5.4%		7.5%		
	all										
	not too sure	29.3%	27.1%	38.7%	25.0%	32.4%	17.6%	20.0%	27.9%		
	somewhat	43.2%	38.9%	38.7%	45.3%	37.2%	41.9%	60.0%	40.9%		
	sure										
	very sure	20.3%	26.2%	12.6%	20.3%	24.1%	35.1%	20.0%	23.7%		
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		
P value.769,.001											

Table 21. Attitude Abilit	vb	v Gender	and E	Education	Cross	Tabulation
	, ~.	,			0.000	1 ab alation

As shown in table 22, majority of respondents at 72.3% demonstrated their desire to increase their financial knowledge. Only 3.7% were uninterested with 0.6% of the same being very uninterested. This desire was highest with Business and Economics students with 81.2% being very interested to gain knowledge and least with fifth years at 65.5%. Overall, this results show



a positive attitude towards financial literacy. The differences in the desires across faculties are however not significant since the p value is .136 at 5% level of significance.

				Faculty			Total
	-	Business	Computing	Engineer	Media	Science &	_
		&Econ	& IT	ing	&Comm	Tech	
fa2	very uninterested	3.2%	3.9%	2.4%	2.3%	5.5%	3.1%
	somewhat				.9%	1.8%	.6%
	uninterested						
	not sure		2.6%	7.1%	2.8%	3.6%	2.4%
	somewhat	15.6%	27.3%	14.3%	24.9%	23.6%	21.7%
	interested						
	very interested	81.2%	66.2%	76.2%	69.1%	65.5%	72.3%
Tota	 	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
P Va	ilue . 130						

Table 22. Attitude to Knowledge by Faculty Cross Tabulation

Results in table 23 show more female student respondents at 5.4% than male students at 1.6% being very uninterested in acquiring more knowledge in financial matters. Those who were very interested stood at 72.5% for female and 72% for male. In terms of education level, none of fifth years was uninterested or not sure of gaining knowledge. In fact 80% were very interested and this would be expected since they are nearly completing their bachelors to join the job market hence the desire. Going by the same argument, no wonder first years are not very interested in increasing knowledge. This differences between gender and across levels of education are however not significant at 5% risk level as the p values are .779, and .401 respectively.

Table 23.	Attitude to	Knowledge I	by Gender	and Edu	cation Cros	s Tabulation

			Education								
		F	М	first	second	third	fourth	fifth			
				year	year	year	year	year			
fa2	very interested	5.4%	1.6%		3.1%	6.9%	2.0%		3.1%		
	somewhat uninterested	.5%	.6%	.8%	.8%	.7%			.6%		
	not sure	2.3%	2.5%	3.4%	1.6%	2.8%	2.0%		2.4%		



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	somewhat	19.4%	23.4%	26.9%	18.0%	21.4%	20.9%	20.0%	21.7%	Table
	interested									
_	very interested	72.5%	72.0%	68.9%	76.6%	68.3%	75.0%	80.0%	72.3%	
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

Table 24 shows ones feeling on control of financial situation. In total, 58.9% of respondents held such feelings as true and very true with 26.6% as somewhat true, 8.4% were indecisive while 6.1% were apprehensive that they do not feel in control. Of note is the high proportion (27.2%) of respondents in faculty of Science and Technology who were not in control or were not sure of being in control. This is almost double what was reported by the other faculties. Overall though, the differences were significant across faculties since the p value is .002 at 5% risk level.

			Faculty						
	-	Business	Computing	Engineer	Media	Science &			
		&Econ	& IT	ing	&Comm	Tech			
fa31	not at all true	5.2%	7.8%	2.4%	5.1%	12.7%	6.1%		
	neither true nor	9.1%	6.5%	9.5%	6.9%	14.5%	8.4%		
	false								
	somewhat true	20.1%	32.5%	33.3%	25.8%	34.5%	26.6%		
	true	20.8%	31.2%	28.6%	33.6%	21.8%	28.1%		
	very true	44.8%	22.1%	26.2%	28.6%	16.4%	30.8%		
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		
P valu	e .002								

Table 24. Control Attitude by Faculty Cross Tabulation

Results in table 25 show more male student at 6.9% than female students at 5% being very not sure at all on the attitude on control of their financial matters. Those who felt in control fully stood at 29.3% for female and 32.1% for male. These results are fairly balanced between male and female. In terms of education level, none of fifth years felt not in control. In essence, 20% felt that they were fully in control while 60% of them, almost twice the other groups, held true to the fact of control. Other perceptions are relatively the same across all the levels of education. This differences between gender and across levels of education are however not significant at 5% risk level as the p values are .832 and .333 respectively.



			Gen	der			Education			Total
			F	М	first	second	third	fourth	fifth	
					year	year	year	year	year	
fa31	not at all t	true	5.0%	6.9%	9.2%	8.6%	3.4%	4.1%		6.1%
	neither	true	8.6%	8.4%	9.2%	10.2%	9.7%	5.4%		8.4%
	nor false									
	somewha	t true	26.6%	26.5%	26.9%	28.9%	28.3%	23.0%	20.0%	26.6%
	true		30.6%	26.2%	27.7%	24.2%	30.3%	28.4%	60.0%	28.1%
	very true		29.3%	32.1%	26.9%	28.1%	28.3%	39.2%	20.0%	30.8%
Total			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
P valu	ies.832,.33	3								

Table 25. Control Attitude by Gender and Education Cross Tabulation

Table 26 shows how finances are a significant source of worry or "hassle" to respondents. A positive financial attitude is demonstrated by the fact that only 20.6% of respondents did not care at all or were indifferent. The rest at 79.4% somehow cared and hence the assertion of positive attitude. Across faculties, engineering students seemed to care more since only 16.7%, the lowest of all, did not care or were indifferent. The differences across faculties on this attribute were significant since the p value at 95% confidence level is .039.

Table 26. Worry Attitude by Gender and Education Cross Tabulation

				Faculty			Total
		Business	Computing	Engineering	Media	Science &	-
		&Econ	& IT		&Comm	Tech	
fa32	not at all true	13.6%	6.5%	11.9%	11.5%	9.1%	11.2%
	neither true nor false	8.4%	11.7%	4.8%	8.3%	16.4%	9.4%
	somewhat true	18.8%	18.2%	11.9%	22.6%	14.5%	19.3%
	True	22.1%	29.9%	38.1%	15.2%	12.7%	20.7%
	very true	37.0%	33.8%	33.3%	42.4%	47.3%	39.4%
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
P val	ue .039						



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Table 27 shows how finances are a significant source of worry or "hassle" between gender and across levels of education. More men seem to care more since 20% of them compared with 21.7% of female either did not care or were indifferent. In terms of education level, all fifth years cared since the entire 100% is biased towards care. Other levels reported almost similar results. The differences between gender and across levels of education are not significant at 5% risk level as the p values are .844 and .428 respectively.

						Education			Total
		F	М	first	second	third	fourth	fifth	
				year	year	year	year	year	
fa32	not at all true	13.1%	10.0%	16.8%	10.2%	11.7%	7.4%		11.2%
	neither true nor false	8.6%	10.0%	10.9%	13.3%	6.9%	7.4%		9.4%
	somewhat true	18.9%	19.3%	17.6%	18.0%	19.3%	21.6%	20.0%	19.3%
	true	20.3%	21.2%	19.3%	24.2%	17.2%	21.6%	40.0%	20.7%
	very true	39.2%	39.6%	35.3%	34.4%	44.8%	41.9%	40.0%	39.4%
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
P valu	ies.844,.428								

Table 27. Worry Attitude by Gender and Education Cross Tabulation

Table 28 show results of respondents' degree of uncertainty about their expenditure. Only 32.3% of respondents were very conscious of their expenditure patterns, with 12.5% not sure. Cleary, majority of respondents showed a negative financial attitude in relation to expenditure pattern. Business and Economics cared more since 46.1% showed consciousness with Computing and Information Technology group ranking last with only 18.2%. These results demonstrate the need to inculcate culture of care attitude on people while spending. The differences across faculties on this attribute were significant since the p value at 95% confidence level is .008.

Table 28. Expenditure Attitude by Faculty Cross Tabulation

				Faculty			Total
		Business	Business Computing Engineer Media Science &				
		&Econ	& IT	ing	&Comm	Tech	
fa33	not at all true	46.1%	18.2%	26.2%	28.6%	32.7%	32.3%
	neither true nor false	11.0%	15.6%	11.9%	11.5%	16.4%	12.5%



	somewhat true	12.3%	26.0%	11.9%	15.7%	14.5%	15.8%	Table 28
	True	14.9%	22.1%	28.6%	18.4%	14.5%	18.3%	_
	very true	15.6%	18.2%	21.4%	25.8%	21.8%	21.1%	_
Tota	al	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
P va	alue .008							

In Table 29, more male students seem conscious of their expenditure pattern since 34.9% of them compared with 27.9% of female did show full care. In terms of education level, none of fifth years cared while 40% were indifferent. As opposed to the other groups, fifth years seemed more not to care leading the pack with 60%. Other groups reported almost close results. The differences between gender and across levels of education are not significant at 5% risk level as the p values are .32 and .204 respectively.

						Education			Total
		F	М	first	second	third	fourth	fifth	
				year	year	year	year	year	
fa33	not at all true	27.9%	34.9%	29.4%	29.7%	33.1%	37.2%		32.3%
	neither true nor	10.4%	14.0%	10.1%	16.4%	9.0%	13.5%	40.0%	12.5%
	false								
	somewhat true	20.3%	12.8%	13.4%	16.4%	17.2%	16.2%		15.8%
	True	17.6%	19.0%	17.6%	21.1%	17.9%	16.2%	40.0%	18.3%
	very true	23.9%	19.3%	29.4%	16.4%	22.8%	16.9%	20.0%	21.1%
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
P valu	ies.32,.204								

Table 29. Expenditure Attitude by Gender and Education Cross Tabulation

As shown in table 30, 79.5% of respondents felt that credit cards are relatively safe and risk free, 11% felt the cards are not safe while 9.5% were indifferent. This possibly indicates the respondents' preference to hedge their risks associated with cash transactions. Across faculties, science and technology lead the pack with only 3.6% feeling that such cards do not are not safe as well as 47.3% of the same agreeing fully to safety and risk free concept. The other groups have reported results that have marginal differences. The differences across faculties on this attribute are however not significant since the p value at 95% confidence level is .196.



				Faculty			Total
		Business &	Computing	Engineering	Media	Science &	
		Econ	& IT		&Comm	Tech	
fa34	not at all true	15.6%	10.4%	7.1%	10.6%	3.6%	11.0%
	neither true nor	9.7%	10.4%	16.7%	8.3%	7.3%	9.5%
	false						
	somewhat true	14.3%	13.0%	23.8%	22.1%	10.9%	17.6%
	true	25.3%	27.3%	26.2%	22.6%	30.9%	25.1%
	very true	35.1%	39.0%	26.2%	36.4%	47.3%	36.7%
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
P valu	ue.196						

Table 30. Risk Attitude by Faculty Cross Tabulation

In table 31, more male students seem agreed to safe and risk free attitude towards credit cards since 39.3% of them compared with 32.9% of female answered in affirmation. In terms of education level, none of fifth years agreed to safety and risk free card concept as well as agreeing fully to the concept while 40% were indifferent. First years outweighed the rest in agreement to the safe and risk free card concept with 41.2% agreeing fully. The differences between gender and across levels of education are not significant at 5% risk level as the p values are .416 and .575 respectively.

Table 31. R	Risk Attitude by	Gender	and Education	Cross	Tabulation
-------------	------------------	--------	---------------	-------	------------

		Ge	nder			Education			Total
		F	М	first	second	third	fourth	fifth	-
				year	year	year	year	year	
fa34	not at all true	11.3%	10.6%	10.1%	11.7%	11.0%	11.5%		11.0%
	neither true nor false	10.8%	8.7%	6.7%	11.7%	9.7%	8.8%	40.0%	9.5%
	somewhat true	18.9%	16.8%	13.4%	16.4%	21.4%	18.2%	20.0%	17.6%
	True	26.1%	24.6%	28.6%	25.8%	21.4%	25.0%	40.0%	25.1%
	very true	32.9%	39.3%	41.2%	34.4%	36.6%	36.5%		36.7%
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
P valu	ies.416,.575								



Table 32 show the extent of happiness on purchases of items by respondents. It is evident from the results that generally people feel satisfied on acquisition of items since only 15.4% were either not happy or were indifferent. Faculty of Engineering group were the most happiest with 66.7% agreeing fully to the query and science and technology most reserved with only 38.2% agreeing fully to the query. The differences across faculties on this attribute are however significant since the p value at 95% confidence level is .042.

				Faculty			Total
	-	Business	Computing	Engineeri	Media	Science &	-
		&Econ	& IT	ng	&Comm	Tech	
fa35	not at all	7.8%	6.5%	2.4%	4.1%	9.1%	5.9%
	true						
	neither true	8.4%	11.7%	7.1%	6.9%	21.8%	9.5%
	nor false						
	somewhat	20.1%	14.3%	14.3%	16.1%	10.9%	16.3%
	true						
	True	19.5%	14.3%	9.5%	16.1%	20.0%	16.7%
	very true	44.2%	53.2%	66.7%	56.7%	38.2%	51.6%
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
P valu	ies. 042						

Table 32. Purchasing Attitude by Faculty Cross Tabulation

From table 33, the same proportion of men and women did not agree at all to being happy on purchasing things. More women (59%) fully agree to happiness than men (46.4%). In terms of education level, none of fifth years was indifferent or was not happy on purchases. The differences between gender and across levels of education are not significant at 5% risk level as the p values are .111 and .932 respectively.

Table 33. Purchasing Attitude by Gender and Education Cross Tabulation

		Gei	nder		Education				
	-	F	F M		second	third	fourth	fifth	_
				year	year	year	year	year	
fa35	not at all true	5.9%	5.9%	5.9%	4.7%	6.2%	6.8%		5.9%
	neither true nor	5.4%	12.5%	10.9%	7.8%	9.0%	10.8%		9.5%
	false								



	somewhat true	14.4%	17.4%	10.9%	19.5%	19.3%	14.9%	20.0%	16.3%	Table 34
	True	15.3%	17.8%	17.6%	16.4%	15.2%	16.9%	40.0%	16.7%	
	very true	59.0%	46.4%	54.6%	51.6%	50.3%	50.7%	40.0%	51.6%	
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Pvalu	ies.111,.932									

As shown in table 34, 93.2% of the respondents felt capable of handling their financial future, only 6.8 % were not very sure or were indifferent of their capability. This demonstrated the respondents' bias towards their financial belief in handling their future. Engineering category led the pack with only 2.4 % not sure and none being indifferent. The differences in the faculties were however not significant as the p value was .463 at a risk level of 5%.

				-				
					Faculty			Total
		-	Business	Computing	Engineering	Media	Science &	
			&Econ	& IT		&Comm	Tech	
fa36	not at all tr	t all true 1.9%		2.6%	2.4%	2.8%	7.3%	2.9%
	neither	true	4.5%	5.2%		4.1%	1.8%	3.9%
	nor false							
	somewhat	true	8.4%	13.0%	9.5%	13.8%	10.9%	11.6%
	True		25.3%	33.8%	21.4%	25.8%	32.7%	27.2%
	very true		59.7%	45.5%	66.7%	53.5%	47.3%	54.5%
Total			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
P value .463								

Table 34. Future Handling Attitude by Faculty Cross Tabulation

In table 35, 94.1% of male students had belief in handling their financial future as opposed to 91.9% of female students. The entire 100% of fifth years had belief in handling their financial future while the rest had almost similar results with minimal differences. Overall however the differences in the beliefs of handling the future between gender and across levels of education were not significant as the p value were 0.36, 0.208 for gender and education levels respectively, at 95% confidence level.



		Ger	nder	er Education					Total
		F	М	first	second	third	fourth	fifth	-
				year	year	year	year	year	
fa36	not at all true	3.6%	2.5%	4.2%	3.9%	3.4%	.7%		2.9%
	neither true nor	4.5%	3.4%	5.9%	2.3%	4.1%	3.4%		3.9%
	false								
	somewhat true	6.8%	15.0%	15.1%	11.7%	6.9%	12.2%	40.0%	11.6%
	True	29.7%	25.2%	18.5%	31.3%	29.7%	29.1%		27.2%
	very true	55.4%	53.9%	56.3%	50.8%	55.9%	54.7%	60.0%	54.5%
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
P valu	ies 0.36, 0.208								

Table 35. Future Handling Attitude by Gender and Education Cross Tabulation

Table 36 shows the respondents feelings of putting away money each month for savings or investments. Overwhelming majority at 84% agreed wholly with the statement which implies a positive attitude on financial matters. Faculty of Engineering group topped the chart with 95.3% with the faculty of science and technology students coming last with 92.7%. The differences in the faculties were however not significant as the p value was .357 at a risk level of 5%.

		Faculty						
	-	Business	Computing	Engineer	Media	Science &	-	
		&Econ	& IT	ing	&Comm	Tech		
fa37	not at all true	2.6%	5.2%		2.8%	5.5%	3.1%	
	neither true nor	2.6%	5.2%	4.8%	2.3%	1.8%	2.9%	
	false							
	somewhat true	6.5%	3.9%		10.1%	7.3%	7.2%	
	True	21.4%	28.6%	16.7%	24.0%	21.8%	23.1%	
	very true	66.9%	57.1%	78.6%	60.8%	63.6%	63.7%	
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
P valu	ue .357							

Table 36 Savings Attitude by Faculty Cross Tabulation

In table 37, 94.1% of male students had a savings attitude as opposed to 93.7% of their female counterparts. The entire 100% of fifth years had a positive savings attitude while the rest had



almost similar results with minor differences. Overall however the differences in the attitude towards savings between gender and across levels of education were not significant as the p values are 0.677 and 0.768 for gender and education levels respectively, at 95% confidence level.

		Gender Education				Total			
		F	М	first	second	third	fourth	fifth	
				year	year	year	year	year	
fa37	not at all true	2.7%	3.4%	2.5%	2.3%	4.1%	3.4%		3.1%
	neither true nor	3.6%	2.5%	4.2%	3.1%	3.4%	1.4%		2.9%
	false								
	somewhat true	8.1%	6.5%	4.2%	5.5%	10.3%	8.1%		7.2%
	True	27.0%	20.2%	26.9%	23.4%	17.2%	25.7%	20.0%	23.1%
	very true	58.6%	67.3%	62.2%	65.6%	64.8%	61.5%	80.0%	63.7%
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
P valu	ies.677,.768								

Table 37. Savings	Attitude by	Gender and	d Education	Cross	Tabulation
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In table 38, majority of respondents at cumulative 86.7% feel having life insurance is an important way to protect loved ones as opposed to 13.3% who felt otherwise or were indifferent. This is an indicator of the positive financial attitude that people exhibit in securing the wellbeing of their loved ones. The faculty of Engineering group had the highest positive attitude with only 9.5% being either indifferent or not in agreement with the statement. The differences across the faculties were however not significant as the p value is .846 at a risk level of 5%.

Table 38. Protection Attitude by Faculty Cross Tabulation								
				Faculty			Total	
	-	Business	Computing	Engineer	Media	Science &		
		&Econ	& IT	ing	&Comm	Tech		
fa38	not at all true	6.5%	6.5%	2.4%	6.0%	7.3%	6.1%	
	neither true nor	6.5%	7.8%	7.1%	7.4%	7.3%	7.2%	
	false							
	somewhat true	16.9%	14.3%	4.8%	13.8%	10.9%	13.8%	



	True	20.8%	28.6%	23.8%	21.2%	16.4%	21.8%	Table 38.
	very true	49.4%	42.9%	61.9%	51.6%	58.2%	51.2%	_
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	_
P val	ue.846							

From table 39, 86.6% of male students exhibited a positive protection attitude to dependents as opposed to 86.7% of female students. Second years lead in the attitude with only 11% either not agreeing with the statement or being indifferent. There is a concern however on the huge proportion of fifth years that were indifferent at 20% compared with the rest. Overall however the differences in the attitude towards protection between gender and across levels of education were not significant as the p values are 0.781 and 0.315 for gender and education levels respectively, at 95% confidence level.

				•					
				Education		gen	der	Total	
		first	second	third	fourth	fifth	F	М	
		year	year	year	year	year			
fa38	not at all true	2.5%	5.5%	7.6%	8.1%		5.9%	6.2%	6.1%
	neither true	9.2%	5.5%	4.8%	8.8%	20.0%	7.2%	7.2%	7.2%
	nor false								
	somewhat	11.8%	11.7%	14.5%	16.9%		13.1%	14.3%	13.8%
	true								
	True	16.0%	23.4%	26.2%	20.9%	20.0%	25.7%	19.0%	21.8%
	very true	60.5%	53.9%	46.9%	45.3%	60.0%	48.2%	53.3%	51.2%
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Pvalu	ies 0.781, 0.315								

Table 39. Protection Attitude by Gender and Education Cross Tabulation

In table 40, enjoyment in discussing money management issues with all people results indicate that 17.4% of respondents were indifferent while 28.6% completely do not engage in such discussions. This means only 54% entertain money management issues. This results show a divided opinion on money matters perhaps due to the security issues involved therein. By extension, this observation agree with social interaction theory which hold that social interaction may affect financial decisions as people receive and process information through interacting with others. The faculty of engineering group seems to care more on discussing money



management issues with people as 52.3% of the respondents did not like the discussion or were indifferent. While there were differences in opinions across the faculties, such differences are however not significant as the p value is .121 at a risk level of 5%.

			Faculty						
		Business	Computing	Engineer	Media	Science &	-		
		&Econ	& IT	ing	&Comm	Tech			
fa39	not at all true	24.7%	19.5%	33.3%	31.3%	38.2%	28.6%		
	neither true nor false	18.2%	15.6%	19.0%	18.9%	10.9%	17.4%		
	somewhat true	18.2%	33.8%	21.4%	17.1%	21.8%	20.6%		
	True	13.6%	13.0%	16.7%	10.1%	12.7%	12.3%		
	very true	25.3%	18.2%	9.5%	22.6%	16.4%	21.1%		
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		
P valu	ues.121								

Table 40. Management Attitude by Faculty Cross Tabulation

From table 41, 45.7% of male students had a negative attitude towards discussing money management issues as opposed to 46.4% of female. Fifth years seem more cautious with 60% either not agreeing with the money management discussion with others or being indifferent. Overall however the differences in the attitude towards money management discussion with others between gender and across levels of education were not significant as the p values are 0.263 and 0.817 for gender and education levels respectively, at 95% confidence level.

|--|

		Education					Gender		Total
		first	second	third	fourth	fifth	F	М	
		year	year	year	year	year			
fa39	not at all true	29.4%	28.1%	29.7%	27.7%	20.0%	29.3%	28.3%	28.6%
	neither true nor false	12.6%	20.3%	18.6%	16.9%	40.0%	17.1%	17.4%	17.4%
	somewhat true	21.8%	20.3%	18.6%	22.3%		22.5%	19.3%	20.6%
	True	11.8%	12.5%	11.7%	12.2%	40.0%	13.1%	11.5%	12.3%
	very true	24.4%	18.8%	21.4%	20.9%		18.0%	23.4%	21.1%
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0	100.0%	100.0%
Pvalue	es.263, 0.817						%		



SUMMARY AND CONCLUSIONS

Generally, majority of the respondents were right in answering questions of all the three parameters that were used to measure knowledge and therefore it is worth concluding that they had some financial knowledge and by extension financial capability. It is also worth noting that the male respondents outshined their female colleagues in all the three areas of financial knowledge measure and hence worth concluding that female students are inferior in their financial capabilities. In addition, literacy across faculties differed significantly with those in faculty of Business and Economics domineering the rest. Literacy across levels of education and gender were generally however not significant. It is therefore concluded that financial literacy imputed across faculties is different.

With regard to financial behavior, the respondents presented mixed results. Many respondents were not enthusiastic about savings for the future but rather immediate consumption perhaps to satisfy their current needs. Female students were found to be better savers than their male counterparts. Financial behavior across faculties was however significantly different. Similarly many respondents demonstrated ignorance on investments in various instruments that are traded at the securities market. It is therefore concluded that the respondents' financial behavior is not sound for many.

On financial attitude, the respondents showed positive attitude towards many parameters of its measure. They were particularly emphatic on their desire to increase their financial knowledge. Across faculties, between gender and across levels of education there was no significant difference in all the parameters. It is therefore worth concluding that the respondents' financial attitude was positive and hence financial capability.

RECOMMENDATIONS

From the above, it is recommended that financial education be enhanced in all the faculties and more so outside the faculty of Business and Economics, to improve on financial literacy that shall go along with improving financial decision making. Financial literacy programs can also be extended to all university employees and the society at large. Campus-wide, coordinated financial literacy program directed toward students, faculty and staff can be developed as well as offering low-cost, noncredit personal finance courses that are open to students and members of the community.

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APPENDICES

APPENDIX I. OPERATIONAL DEFINITION OF TERMS

Financial Capability

Scholars and practitioners in the United Kingdom and Canada pioneered the use of the term "financial capability," to describe people's financial knowledge and their confidence and motivation to manage personal finances (Atkinson et al., 2006).

Financial Education

OECD (2005) defines financial education as the process by which individuals improve their understanding of financial products and concepts; and through information, instruction and/or objective advice develop



the skills and confidence to become more aware of financial risks and opportunities, to make informed choices, to know where to go for help, and to take other effective actions to improve their financial wellbeing and protection.

Financial Literacy

Financial literacy is a combination of awareness, knowledge, skills, attitude and behaviors necessary to make sound financial decisions and ultimately achieve individual financial wellbeing (Atkinson and Messy, 2012).

APPENDIX II. QUESTIONNAIRE

PART I:

Demographic Characteristics of the Respondent

1. Gender:	Male	[]
	Female	[]
2. Age Bracket:		
18-20	[]	
21-23	[]	
23-25	[]	
Over 25	[]	
3.Level of Education:		
First Year	[]	
Second Year	[]	
Third Year	[]	
Forth Year	[]	
Fifth Year	[]	
4. Faculty:		
Business and Economics		[]
Computing and Information Te	chnology	[]
Engineering	[]	
Media and communication	[]	
Science and Technology	[]	
PART II:		

Financial Knowledge and Financial Capability

1 Numeracy skills:

Suppose you had Sh. 100,000 in a savings account and the interest rate was 2% per year. After 5 years, how much do you think you would have in the account if you left the money to grow?

- (i) More than Sh. 102,000;
- (ii) Exactly Sh. 102,000;
- (iii) Less than Sh. 102,000;



(iv) Do not know;

2. Inflation Knowledge

Imagine that the interest rate on your savings account was 1% per year and inflation was 2% per year. After 1 year, how much would you be able to buy with the money in this account?

- More than today; (i)
- (ii) Exactly the same;
- (iii) Less than today;
- (iv) Do not know;

3. Interest rate calculation

Suppose you had Sh.100,000 in a savings account and the interest rate is 20% per year and you never withdraw money or interest payments. After 5 years, how much would you have on this account in total?

- (i) More than Sh. 200,000;
- (ii) Exactly Sh. 200,000;
- (iii) Less than Sh. 200,000;
- (iv) Do not know;

Financial Behavior and Financial Capability

1) Spending among individuals can be described as very thrifty, have a culture of saving when an opportunity arises while others are more oriented to spending. Kindly classify yourself?

	Tick
Very thrifty, saving money whenever I can	
Somewhat thrifty, often saving money	
Neither thrifty nor spending oriented	
Somewhat spending-oriented, seldom saving money	
Very spending-oriented, hardly ever saving money	

2) (i) Have you heard of any of the following types of accounts operated in the stock market?

Stocks ()	Ce	rtificate of deposit () Mo	one	y market account () Government bonds ()	Corporate
bond	()	Commercial paper	()	Mutual funds ()	

(ii) In the last two years, which of the following types of accounts have you operated (personally or jointly), whether or not you still hold them. Please do not include products that were renewed automatically.

Stocks () Certificate of deposit () Money market account () Government bonds () Corporate () Commercial paper () Mutual funds () bond



On a five point scale how can you best describe your financial belief. (1 =not at all true of me and 5 =very true of me).

Financial Belief	1	2	3	4	5
I am in control of my financial situation.					
I am capable of achieving my financial goals.					
I am capable of handling my financial future.					
I do not discriminate lenders when borrowing.					

Financial Attitude and Financial Capability

Please insert a check mark ($\sqrt{}$) in the appropriate column to indicate your ranking of the importance of each of the following statements in regard to financial attitudes and preferences.

1. How sure do you feel about your ability to manage your own finances?

Not sure at all -I wish I knew a lot more about money management

Not too sure -I wish I knew more about money management

Somewhat sure -I understand most of what I'll need to know

OVery sure -I understand money management very well

2. Are you interested in increasing the level of financial knowledge?

Very uninterested	Somewhat uninterested	Not sure	Somewhat interested	Very interested
1	2	3	4	5

3. Rate the following items on a scale of 1-5 (1 =not at all true of me and 5 =very true of me).

Item	1	2	3	4	5
I feel in control of my financial situation					
My finances are a significant source of worry or "hassle" for me					
I am uncertain about where my money is spent					
I feel credit cards are safe and risk free					
Purchasing things is very important to my happiness					
I feel capable of handling my financial future (e.g. buying insurance or investments)					
I feel putting away money each month for savings or investments is important					
I feel having life insurance is an important way to protect dependents					
I enjoy discussing money management issues with all people.					

