

## **Personal Finance Knowledge Level among Senior High School Students in Cape Coast Metropolis of Ghana**

Seyram Pearl Kumah,<sup>1</sup> Yakubu Awudu Sare<sup>2</sup>

<sup>1</sup>Department of Banking and Finance, Ghana Baptist University College, PMB, Kumasi, Ghana.

<sup>2</sup>Department of Banking and Finance, School of Business and Law, University for Development Studies, P. O. Box UPR 36, Wa-Ghana

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**ABSTRACT:** *The study examines the personal finance knowledge level among Senior High School students in the Cape Coast Metropolis. Specifically, the study investigated how students apply knowledge in personal finance management in their daily decision making processes. Cross-sectional research design was used. Self administered questionnaires and focused group interviews were the main instruments used to gather data from respondents. The stratified sampling technique was used in selecting the sample frame and size. The research findings showed that students in the Senior High Schools have low level of knowledge in personal finance management and therefore could not manage their personal finances properly.*

**KEYWORDS:** *personal finance, knowledge, level, SHS, students*

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### **I. INTRODUCTION**

Knowledge in Personal Finance is of relevance to every individual especially the senior high student and as such is receiving considerable attention from researchers and practitioners mostly in the developed economies in recent times. Most nations have realized that the poverty line of the population can be reduced by encouraging people to practice good personal financial management. Financial decision making vary from person to person depending on the individual and in which life cycle one finds himself/herself. Personal finance decisions include having additional sources of income apart from the fixed sources of income, how and where to invest our excess cash, which trust fund is appropriate for our retirement package and education funds that will meet our requirements and most importantly how to manage our daily financial commitments which can basically be classified into cash flow management, credit management, savings and investments management.

Extant literature on the subject appears to establish a correlation between financial knowledge and behavior even though the direction of the causality is not very clear. Respondents under most surveys who score higher on financial literacy tests are more likely to implement recommended financial practices like keeping monthly budget, creating emergency funds, saving for future needs and reconciling their cheque books every month. For example, in the work of Hilgert and Hogarth [11], it was evident that households classified as low on the cash flow index had lower overall financial knowledge scores. This position appears to be consistent with other financial practices that were examined under the survey which included credit management, saving and investment. This correlation, however, do not imply necessarily that an increase in knowledge improves behavior; instead the causality can be reversed where people may gain knowledge as they invest and accumulate wealth or there may be other influencing factors such as experience be it from family, field of study or even income level of individuals that affects both knowledge and behavior. The causality could flow in the other direction or even both ways. The effect of financial illiteracy is enormous that one cannot lose sight off. The negative costs incurred include lower academic performance, absenteeism and health care costs for stress-related illnesses. The increased interest in financial literacy has been prompted not only because of its relation to but also to better academic performance at school but because of the increasing complexity of financial products and responsibility on the part of individual for their own financial security. Well-informed, financially educated students are better able to make good decisions and thus are in a position to increase their economic security and well being which will eventually have a positive knock on effect of their education and consequently improving their standard of living. Abraham Maslow, a behavioral psychologist describes needs of individual into five levels; the first two levels being the things that are essential to physical survival: adequate income to provide food, clothing and housing and sufficient job security to feel safe and comfortable. The other three levels are motivators because accomplishments and recognition in these areas will lead to greater productivity and

satisfaction in employees. When an individual's financial well-being is not guaranteed, that is where the first two levels of needs for physical survival are not met. In most cases, students financial well being situation deteriorates fast because of improper personal financial management. The need for senior high students

to have adequate personal finance knowledge has arisen; however, very few empirical studies exist in this area especially in our part of the continent. Hence, this study is warranted to help bridge this gap and assist the population concerned to improve their standard of living.

## II. LITERATURE REVIEW

Personal finance has been defined by Madura [12] as the process of planning one's spending, financing and investing so as to optimize your financial situation. Garman and Fogue [8] also define personal finance as the study of personal and family resources considered important in achieving financial success; thus, Osei-Brobie [15] said it involves how people spend, save, protect and invest their financial resources. Investment is the current commitment of money or other resources in the expectation of reaping future benefits. To further expatiate it; it is setting aside today's consumption and put the resources in a place with the understanding that you will get a better return in the future. Investing on the other hand, is choosing what assets to hold in one's investment portfolio. One sacrifices something of value, expecting to benefit from that sacrifice later.

The general use of the term 'financial literacy' poses a problem to many researchers because of the different meanings attached to it with different understandings and interpretations. Various research studies Dopfer [7]; De Beer [6] have shown that the terminology is considered to be one of the primary obstacles in transcending meaning or interpreting the technical term. Dopfer [7] contends that disciplines such as economics suffer from a language deficit, which is a barrier in both theoretical expression and in communication of the theory of the particular discipline. It is necessary to distinguish between the general and specific meaning of the term 'financial literacy'. The term 'financial literacy' comprises the words 'financial' and 'literacy', both of which are used to represent a myriad of issues that can easily lose their relevance when used together. According to *Collins Dictionary and Thesaurus* (2005), the word 'financial' also relates to the words 'economic', 'business', 'commercial', 'monetary', 'fiscal' and 'pecuniary', each of which has its own meaning. 'Literacy', according to the same dictionary however, is synonymous with the ability to read and write; education, learning and knowledge. When these words are combined to form the single term, 'financial literacy', a whole new dimension emerges, which encompasses more than the individual terms listed. Widdowson and Hailwood [21] contend that for some, financial literacy is "a wide-ranging concept, incorporating an understanding of economics and how household decisions are affected by economic conditions and circumstances" while for others, it means "focusing quite narrowly on basic money management skills which include: – budgets, savings, and investment, insurance.

Although the word 'literacy' means to be 'learned' or 'skilled in reading and writing', Gouws and Shuttleworth [10], on International Literacy Day in September 2006, Koïchiro Matsuura, the Director-General of the United Nations Educational, Scientific and Cultural Organization (UNESCO), alluded to the fact that "literacy is not merely a cognitive skill of reading, writing and arithmetic, for literacy helps in the acquisition of learning and life skills that, when strengthened by usage and application throughout people's lives, lead to forms of individual, community and societal development that are sustainable". From Matsuura's message, one can infer that without basic literacy and specifically in personal finance, it becomes difficult to ensure a sustainable livelihood. Financial literacy however, is generally defined as the ability to make informed decisions and take appropriate actions on matters affecting one's financial wealth and well-being Piprek et al., [17]. Other researchers who have looked at this area considerably are Garman and Fogue [8]. They define financial literacy as knowing the facts and vocabulary necessary to manage one's personal finances successfully. It would therefore seem that literacy alone will not necessarily ensure sustainability, but that individuals should also be financially literate to be able to create wealth and promote their well-being. Wealth, according to Beinhocker [1], is the same thing as information, or rather, fit information – in other words, knowledge. Hence, while information on its own may be worthless, in this context, knowledge is information that can be used to create wealth. Education in economic and financial matters, like educating people to read and write, therefore affects the financial well-being of every individual, community and the government as a whole Gouws and Shuttleworth [10].

### 2.1 Relevant Financial Terms

#### Time Value of Money

This theory implies that money available at present is worth more than the same amount in the future due to its potential earning capacity. This means that, with time money loses its purchasing power that is "its real value". This theory is based on the premise of interest and inflation. Inflation reduces the value of money over time and so one must gain interest to restore its value. Present Value and Future Value concepts were developed from this theory. Berk and DeMarzo [2], refer to present value as the value of a cost or benefit computed in terms of cash today.

This is done by discounting the future cash flow or value into present terms using a discounting rate. Based on this, the term is normally called ‘discounting’. Future Value however, is projecting the value of cost or benefit in terms of cash into the future. This is done by compounding the value of the cost or benefit now by an interest rate to a particular time period in the future. The effect of time value of money must be considered extensively when making financial decisions like taking insurance policy, saving towards education and retirement, taking a mortgage and every other financial commitment since its impact on decisions taken today is very grave in the future.

### **Opportunity Cost**

Opportunity cost is the cost related to the next best choice available to someone who has picked between several mutually exclusive choices. This concept was developed first by John Stuart Mills which is now a key concept in economics. Opportunity cost is not restricted to monetary or financial cost but also the real cost of output forgone, lost time, pleasure or any other benefit that provides utility. It is not the sum of the available alternatives when those alternatives are, in turn, mutually exclusive to each other. However, most opportunity cost is difficult to compare. This theory is the premise upon which the marginal theory of value as well as the theory of time and money is based. The effect of understanding opportunity cost is relevant in making financial decisions with regards to many available financial choices like taking insurance policy, saving towards education and retirement, taking a mortgage and every other financial commitment because wrong choices could have irreversible damages.

### **Life Cycle Hypothesis of Saving**

This theory propounded by Franco Modigliani likens savings of an individual to a persons’ life cycle. It is an economic concept analyzing individual consumption and saving patterns. This has seen consistent modification from economists like Fisher and others. Unlike the Keynesian consumption function, which assumes consumption is entirely based on current income, life cycle hypothesis assumes that individual consumes a constant percentage of the level of present value of their life income. A stable consumption pattern was established by observing that, people will try to stabilize consumption over their life time. Also consumers save their income based on forward looking expectations. The future provides a rigorous connection between consumption expenses and the value of assets held by the consumer. Young people will save so that when they are old and can neither work nor wish to do any work, they will have money to spend. The life-cycle concept is one in which the wealth of the nation gets passed around; the very young have little wealth, middle aged people have more, and peak wealth is reached just before people retire. As they live through their golden years, retirees sell off their assets to provide for food, housing, and recreation in retirement. The assets shed by the old are taken up by the young who are still in the accumulation part of the cycle. Having a better understanding of this concept help the individual to appreciate when, where and how to use their incomes.

### **Discounted Utility Model**

This theory first introduced by Paul Samuelson in 1938 stipulates that the cost and benefit occurring at different times can be made comparable by discounting future utility by some constant factor. Utility is a relative satisfaction of an individual gains in consumption of a good or service. Economists assume that when a person is faced with a choice from among a number of possible options, the person will choose the one that yields the highest utility (Schuchardt et al., [18]. There are many disparate factors that can affect one’s willingness to trade off between current and future satisfaction which are summarized by a single number in the Discounted Utility model- the discount rate. This implies that an individual will want to postpone consumption into the future when after applying the discount rate to future consumption, realizes a gain. The model has received some criticisms as to whether people discount in the way implied by the Discount Utility (DU) model. To attest this, Thaler [19] was one of the first researchers to test the accuracy of the assumptions behind the DU approach. By asking a series of hypothetical questions, he attempted to estimate whether discount rates were similar in magnitude to the discount rates commonly assumed in applications of the DU model. In the study, college students were told to suppose they had been given an initial sum of money and were asked how much compensation would be necessary for them to agree to delay payment of the prize by various time intervals. The study found that when students were told they had won \$250, students were willing to delay payment by three months in exchange for receiving \$300 total, one year in exchange for \$350, and three years in exchange for \$500. These responses suggest that participants made decisions with implicit annual discount rates of 26 percent rather than remaining constant as the DU model assumes. The results suggest that discount rates decrease as delay length increases, implying that people care less about delays that are far off in the future than about delays that are closer in time.

### III. METHODOLOGY

The study is descriptive in nature and employed the cross-sectional research design. This type of research design examines a single point in time or takes a onetime snapshot approach of an issue being studied and is appropriate for large sample size especially in this study Nueman [14]. In order to find out how effective students apply personal financial knowledge in their daily activities, the study engaged the students in a focused group discussion. The researchers employed the question and answer technique during the discussion. A main question was posed to them as to how they managed their allowances with respect to consumption and savings. They mostly replied that allowances given them only cover transport fares and foods. As a result, parents decide what they should do with whatever money they were given. They added that, most of their expenditures were recurrent, so they did not see the need to plan their finances. These responses implied that budgeting; an integral feature of student life and hence one of the few areas where students can apply their financial knowledge was seen as an activity which's control was beyond their command and besides, some of them did not see the need for it.

#### 3.1 Data Type and Source

The empirical analysis is based on a sample of 200 Senior High School students in form three (3) and form four (4) selected from five senior high schools within the Cape Coast metropolis. The selected schools for the study include: University Practice Senior High School, Aggrey Memorial Senior High School, Marysons College, Ghana National College and Sammy Otoo Senior High School. A self administered comprehensive questionnaire and focused group interviews were the tools used to gather data from respondents. In order to determine the financial knowledge level among the selected Senior High School students, they were asked twenty questions under time value of money, scarcity, compound interest, opportunity cost, gross domestic product, inflation and interest rate. Questions under each of these concepts consisted of their definitions as well as their various measures and how they impact on their financial transactions. The purpose of the questions was to test their knowledge and understanding as well as their implications on financial transactions as they go about their daily activities.

### IV. RESULTS AND DISCUSSION

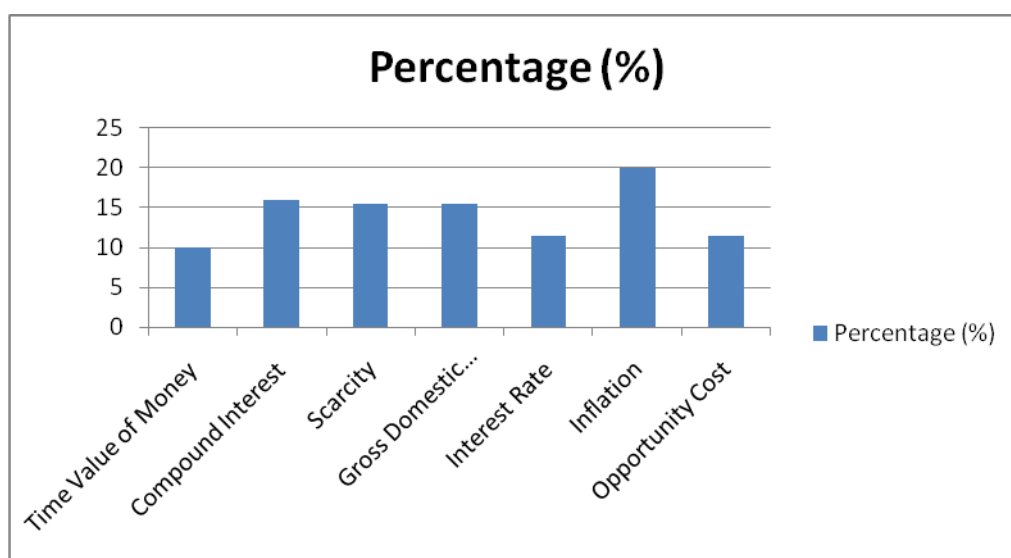
This section shows results of the students' responses on their level of understanding of relevant financial terms and macroeconomic factors. Because it is a survey study, additional indicators were also added; this was considered to be important apart from those reviewed in the literature. If one has deeper understanding on these variables, the decision the person will make will ultimately be informed by the implications on their outcome. Those who appear to have studied the area deeply are Garman and Forgue [8] and Osei-Brobie [15]. They all alluded to the fact that the individual understanding of the operations and implications of macroeconomic factors such as those in this study is equally important to identifying solutions to financial mismanagement at least, at the personal level.

**Table 4.1.1: Showing Students Level of Knowledge in Personal Financial Management**

| Financial Term         | Frequency | Percentage (%) |
|------------------------|-----------|----------------|
| Time Value of Money    | 20        | 10             |
| Compound Interest      | 32        | 16             |
| Scarcity               | 31        | 15.5           |
| Gross Domestic Product | 31        | 15.5           |
| Interest Rate          | 23        | 11.5           |
| Inflation              | 40        | 20             |
| Opportunity Cost       | 23        | 11.5           |
| Total                  | 200       | 100            |

Source: field data, April 2013

**Fig 4.1.2 Bar chart showing Students Level of Knowledge in Personal Financial Management**



On the average, the respondents indicated a low level of understanding of the various financial terms used for the study as indicated in the various recorded percentage scores. Inflation was the most well understood financial term out of the list of 7 terms used for the study. As indicated in table 4.1.1 and figure 4.1.2, the extent of respondents' understanding of inflation recorded a mean of (20%) which can still be classified as low because it did not reach 50% as a minimum score for one to say they have a fair knowledge on its operations and implications. Other financial terms which indicated similar level of understanding by the respondents were opportunity cost (11.5%), scarcity (15.5%), time value of money (10%), compound interest (16%), and gross domestic product (15.5%). The overall indication is that the understanding level with regards to these terms is very low and thus we do know such a low level of understanding and application of these factors has substantial consequences on the individual financial management and hence the standard of living.

These findings conform to the research findings of Osei-Brobie [15], who concluded in his study that Ghanaians have low level of knowledge on issues of personal finance. He concentrated on university workers and other studies done. They also used college students in subsequent studies and the findings were not significantly different from our findings. Chen and Volpe [3] and [4] had similar overall findings and concluded that the financial knowledge of college students was generally low. Markovich and De Vaney [13] also found that the overall financial knowledge of students in senior high schools was low. Volpe et al [20] focused primarily on investment knowledge and had similar overall findings to previous studies where students recorded a low average literacy score of 44%.

## V. CONCLUSION

It is evident from the study that students do not possess adequate knowledge in personal financial management. Also in terms of application of financial knowledge, the results showed that students on the average do not carry out good financial decision-making and as such their finances appear not to be managed properly. We recommend to our institutions and the second cycle institution authorities in particular to design a curriculum that will provide the young adult an opportunity to take a course in personal financial management before leaving those institutions. Personal finance should be a general subject for all students like how computer literacy has been made a compulsory subject in all schools. This is very essential because an individual who appears not to be managing his own personal finances well due to lack of knowledge will surely not be in a better position to manage the finances of companies and institutions they will be working for in future when given the opportunity.

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