FINANCIAL LITERACY AMONG SENIOR HIGH SCHOOL STUDENTS

EVIDENCE FROM GHANA

BY

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(BA ECONOMICS AND GEOGRAPHY)

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DECLARATION

I hereby declare that this submission is my own effort towards the attainment of Masters of Business Administration and as a result contains no material which has been published by another person nor material which has been accepted for the award of any other degree of the University, except where due acknowledgement has been made in the text.

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ABSTRACT

The study assesses the level of financial literacy of Senior High School students in the Kumasi Metropolis. The study surveyed 320 students to investigate their level of financial literacy through the administration of questionnaires. Findings from the study reveal that students need to improve their personal finance knowledge. The results show that the students answered about 48.7% of the questions correctly. The results also reveal that many of the students are seen to be familiar with issues relating to simple interest, compounding and loan guarantee. In contrast, the students are less knowledgeable and inexperienced with issues concerning personal financial planning, budgeting and overdraft. The incompetency exhibited by the senior high school students therefore limits their ability to make sound financial decisions and hence more likely to have financial related issues in the real world. The low level of financial literacy could also make small financial issues become overwhelming which could turn into financial stress and consequently affects the other aspects of live such as personal relationships or performance at work. The low level of financial literacy and its consequences then shows the need for stakeholders in educational system to put policies in place to ensure that the level of financial literacy among senior high students in Ghana is improved since financial literacy has essential implication for future behavior. It is recommended that personal finance literacy course is well elaborated in the academic curriculum of senior high schools. Also, the national financial literacy week should be extended to school as workshops to encourage student’s participation in financial literacy.
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<td>ANOVA</td>
<td>Analysis of variance</td>
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<tr>
<td>SPSS</td>
<td>Statistical Package of Social Scientist</td>
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<tr>
<td>OECD</td>
<td>Organization for Economic Co-Operation and Development</td>
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<td>HOD</td>
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CHAPTER ONE

INTRODUCTION

1.0 BACKGROUND OF THE STUDY

Financial literacy has become one of the most concerned issues in the developed countries in recent years especially after the economic crisis of 2008 since the effects of personal finance are significant to societies. Prior to the economic crisis of 2008, studies on financial literacy were scarce in academic journals, but governments of many developed countries however gave the needed attention to the issue of financial literacy after the crisis. For instance, there was an advisory committee on personal finance which was put in place to encourage financial literacy awareness among Americans after the economic crisis. The idea of personal finance has been described in the literature as the awareness and use of financial knowledge in our day to day economic activities. It is therefore the application of financial knowledge and terminologies by individuals in order to make a rational decision. Many academic researchers in the field of personal finance have chosen to define the concept as “the ability to make informed and efficient judgment regarding the use and management of money (Schagen and lines, 1996).

Personal finance literacy is however conceptualized on certain critical areas in finance such as savings and borrowing, interest rate, budgeting and financial knowledge (Chen and volpe, 1998; Remund, 2010). Past Studies have revealed that Americans tend to have a higher rate of consumption compared to their savings rate. This consequently led the country into a total negative savings rate (Sullivaa et al, 2008). This then calls for the need for United States government to inculcate financial literacy among Americans and thus explains why educators, policy makers and
university officials have paid much attention to college student’s financial behavior in recent times. For instance, several empirical researches have been conducted on use of credit cards by college students and the results are that college students tend to accrue a significant amount of debts which put them at greater risk for financial problems after graduation (Allen and Jover, 1997). The need for financial literacy becomes inevitable since today’s world markets are full of complicated products. Considering the spending habit of people and the desire to have every material thing, it is therefore imperative to inculcate financial literacy among people. Senior high school and college students in recent times tend to have easy access to funds, but on the contrary have proven to have inadequate financial literacy and as a result have become impulsive buyers (Danes, Huddleston and Boyce, 1999). The inadequate personal finance among Senior High School students then has undesirable effects on students’ decision making. The issue of personal finance therefore must be given the needed attention as students would be facing the realities of economic hardships after school. This implies that there is the need for senior high students to be equipped with financial literacy in order to achieve some degree of financial autonomy.

Several researches conducted globally to measure financial literacy among adults have proven that adults tend to exhibit insufficient level of financial literacy. A large number of the research however focus on gender as an essential characteristic of financial literacy and have documented a persistent gender gap (Hanna, Hill, and Perdue, 2010). The level of financial literacy therefore varies among gender as males tend to have understanding and ability to apply financial concepts in their financial decision compared to females. Senior high school students in Ghana are not exposed to basic personal finance literacy before completion as the school curriculum places emphasis on getting admission to tertiary institutions rather than inculcating financial
literacy such as money management, investments, mutual funds, insurance and taxes into the syllabus. “As the world faces further economic uncertainty, it is important that we equip our children with the financial literacy skills they need to make wise decision about how they spend and save their money.” Simon Martin, Head of Group Corporate Sustainability at HSBC.

1.1 STATEMENT OF THE PROBLEM

The importance of promoting financial literacy among high school students cannot be understated. High school students and young adult have shown to lack even the most basic understanding of topics such as interest rate, inflation and risk diversification (Mandell, 2008; Lusardi and Mitchell, 2008). A few academic works conducted on the topic in the country have indicated that there is inadequate financial literacy among Ghanaians especially the youth (Ansong, 2011, Chowa et al 2010, Gyabaah, 2009). The dynamic nature of the country’s financial environment brings about more financial products onto the market, but most Ghanaians are not able to access these products due to lack of information. For instance, only 29% of the adult population of Ghana had a bank account whereas only 16% of Ghanaians had saved at a financial institution in 2011 (Jaising, 2013). This shows that most Ghanaians are not aware of the numerous financial and investment opportunities that exist in the financial environment. The government of Ghana in an attempt to expose the Ghanaian public to the various financial and investment opportunities introduced the ‘financial literacy week’ in the country.

In spite of all the efforts by the government to inculcate financial literacy among the citizens, the financial literacy week is centered on the general public rather than on senior high school students. Inculcating financial literacy among senior high school
students is very eminent as they tend to develop their habit during that stage and thus enable them to develop good money management behavior as working adults (Dahlia et al, 2009). This study therefore seeks to research into the level of financial literacy among high school students in Ghana.

1.2 OBJECTIVES OF THE STUDY

The purpose of this study is to provide evidence of personal finance literacy among Senior High Students in Ghana. To achieve this, the research will be conducted around the following specific objectives.

1. To examine students understanding of and knowledge in money management, budgets, savings and borrowing.
2. To examine whether some group of students are relatively more knowledgeable than others.
3. To examine how a student’s knowledge influences his or her opinions and decisions on personal finance.

1.3 RESEARCH QUESTIONS

1. What accounts for students understanding of and knowledge in money management, budgets, savings and borrowing?
2. What makes some group of students relatively more knowledgeable than others?
3. How does a student’s knowledge in personal finance influence his or her opinions and decisions?

1.4 JUSTIFICATION OF THE STUDY

The study of this topic is very much significant as senior high students are susceptible to irrational financial decisions which can lead to the habit of borrowing
indiscriminately. Scholars in the field of personal finance have diverse views as to the timing of the concepts but most of them have the opinion that personal finance literacy education should commence at infancy so as to prevent individuals from forming unacceptable habits and consequently become financially illiterate adults. This study will expose the students to the need of financial literacy concepts like money management, budget, inflation rates and interest rates and the importance of it in financial decision making. Past studies show that students with high level of financial literacy are more able to reduce their debts. This study therefore aims to inform, enlighten and create understanding of the need of personal finance so as to prevent senior high students from being engaged in deceitful transactions (Comptroller of the currency, 2011).

This study will also inform the government and other stakeholders in education the financial literacy level among senior high students in Ghana. Findings of this study would enable the government and other stakeholders to formulate and implement policies that would improve financial literacy level of the students. The findings would then guide the government to tailor educational programs that meet the unique needs of students. This study would also expose parents to the need of financial literacy and why parents ought to inculcate financial literacy into their children. This then suggests that parents who lack financial literacy should equip themselves in order to guide their children.

1.5 SCOPE AND LIMITATION OF THE STUDY

The focus of this study is to conduct an empirical overview of financial literacy among Senior High School students. This study however focuses on some selected Senior High School in Kumasi metropolis since the area is full of people with diverse
background and as a result gives the true reflection of personal finance literacy of senior high school students in Ghana. Some constraints encountered during the survey include the inadequate time period or duration for the study. The study needed to have been conducted within one academic year.

This study is also centered on some selected Senior High Schools in the Kumasi metropolis which is a handful to give the true reflection of financial literacy level of senior high students in Ghana. In addition, only first and second year students are used for this survey due to the fact that the third year students had completed school before the questionnaire was administered. The questionnaire used in this study is inherently limited in scope. However, the needed information required for the survey was collected irrespective of the above mentioned limitation.

1.6 ORGANISATION OF THE STUDY

The study is organized into five (5) chapters. Chapter one (1), Introduction gives a brief background into financial literacy among Senior High Students. The chapter also presents the statement of the problem, objectives of the study, Justification of the study and the scope and limitations of the study. Chapter two (2) stresses on a detailed review of the relevant literature on financial literacy. Chapter three (3) presents the methodology of the study. Thus, a detailed review of the processes through which the study will be carried. Chapter four (4) presents the analysis of the data. It also discusses the findings and the result of the analysis. Chapter five (5) contains the summary, recommendations suitable for policy formulation and future research and conclusion.
CHAPTER TWO

LITERATURE REVIEW

2.0 INTRODUCTION

This chapter does a review on relevant literature from articles, journals, books and publications on financial literacy among senior high students. This chapter also forms the theoretical and empirical basis upon which the study is conducted. The chapter therefore considers the academic theories and the various views expressed by scholars on the topic.

2.1 MEANING OF KEY CONCEPTS

This column explains the various academic concepts in literature upon which the concept of financial literacy is built. Critical areas of interest in finance such as financial literacy, money management, savings and spending are reviewed to provide detailed information which forms the basis of the topic. The key concepts however form part of the theoretical review of the study.

2.1.1 Financial literacy

Although the concept has been defined in various contexts in the literature, the definitions however differ in relation to what the definition seeks to achieve. This implies that there is no specific definition for financial literacy or there is few generally-accepted definitions and conceptual framework of personal finance. According to (Noctor, Stoney, and Stradling; 1992), financial literacy is the ability to make sound decisions regarding the use and management of money. Thus, effective decisions taken in relation to the use and control of money (Schagen and Lines 1996). Defining the concept in this context suggests that the definition is narrowed as emphasis is placed on management of money.
The concept can also be looked at from a broader perspective as OECD (2005) defines financial literacy as “the process by which individuals improve their thought about financial concepts through communication and instruction to make individuals confident and aware of financial risks and opportunities so as to achieve financial well-being. Remund (2010) tries to conceptualize the definition of personal financial literacy into five categories which include; knowledge of financial concepts, ability to communicate about financial concepts, aptitude in managing personal finances, and skill in making appropriate financial decisions, and confidence in planning effectively for future financial needs. This implies that financial literacy goes beyond the effective use and management of money and considers other important areas in finance.

U.S. Financial Literacy and Education Commission (2007) have also defined financial literacy as the capacity to apply ideas and skills to effectively manage financial resources in order to achieve a long lasting financial soundness. Thus, the ability to manage individuals’ finances efficiently so as to make prudent financial decisions in an attempt to achieve financial well-being (American Institute of Certified Public Accountants, 2003). The definitions given by the institutions reiterate that financial literacy makes individuals focused and directs them towards the attainment of financial autonomy. Garman and Forgue (2000) defined financial literacy as significant information and terminology required in managing individuals’ personal finances successfully. Thus, the basic information that citizens need so as to live in modern society (Kim, 2001).
For the purpose of this study, financial literacy is defined as the combination of awareness, understanding, knowledge and use of financial concepts to make sound financial decisions.

2.1.2 Financial Education

According to OECD (2005), financial education is the process in which consumers advance their thought about financial products and ideas based on information and objective advice so as to make decisions on the basis of good information in order to improve their wealth. An education that helps populace to develop the skills necessary to make informed decisions and also suggests measures that improve their financial well-being (Arnone, 1999). Financial education then provides knowledge, information and data which equip individuals to make sound choices which improve their economic wellbeing. Financial education is consistently becoming an essential issue being encountered by most economies due to the dynamic and complexity nature of the financial markets.

2.1.3 Financial behavior

According to White (1999), financial behavior is defined as the process of how individuals understand and act on financial knowledge so as to make sound investment decisions. It then explains how human beings are able to apply financial ideas, concepts and knowledge in their actions or inactions. Financial behavior therefore is the effects of financial literacy on the behavior of consumers or people.

2.1.4 Financial wellbeing and financial wellness

Financial well-being is defined as the situation of individuals’ financial status. Thus, how financially sound or happy ones’ financial situation is (Joo and Grable 2003). Porter (1990) defined financial well-being as apparent conditions of one’s financial
situation. The concept is measured on the basis of one’s total satisfaction of his or her financial situation. Financial wellness on the other hand is defined as the actual situation of individuals’ financial standing. This is often indicated by a persons’ low level of debt, active savings level and a sound spending plan.

2.1.5 Money management

Money management is a concept that explains how financial assets are managed. Money management encompasses critical areas in finance like investment, budgeting, banking and taxes. It is therefore a strategy used to ensure that investment assets yield the highest interest value. Several academic works indicate that money management skills play an essential role as it influences the spending habits of students on campus. Students enter colleges without the basic knowledge of money management which arises from inadequate financial knowledge (Ibrahim et al., 2009). This implies that students without money management skills whose enter colleges may experience financial difficulties while at college.

2.1.6 Savings

According to Warneryd (1999), saving is defined as the variation between net worth at the end of the period and the net worth at the beginning of the period which should equal the excess of income over consumption expenditure in the same period. Savings is therefore explained as money or physical assets allocated for future use. It is a very essential factor responsible for meeting any unforeseen events ensued by individuals, households or firms. Saving is then meant for meeting unexpected contingencies and could also serve as a form of investment. Literature suggests the need to instill the “culture of saving” in children at the early age (Comeau and Rhine 2000).
2.1.7 Borrowing and spending habit

Several empirical studies have proven that large number of college students borrows to finance their college education and as a result they tend to accrue a significant amount of debts which put them at greater risk for financial problems after graduation (Allen and Jover, 1997). This reiterates the fact that senior high school and college students in recent times have easy access to funds but on the contrary have shown to have inadequate financial literacy and as a result have become impulsive buyers (Danes, Huddleston and Boyce, 1999). This calls for urgency to shape the attitudes and spending habits of senior high school and college students during their stay on campus.

2.2 IMPORTANCE OF FINANCIAL LITERACY

Financial literacy equips people with requisite information and ideals needed to make sound decisions with accuracy to manage financial resources and to improve financial capability to call for better financial services (Ali, 2013). The concept then enables people to be prudent in all financial engagements. A persons’ level of education does not necessarily correspond with how individuals understand and apply the concept in their human endeavors. It is therefore prudent for all and sundry to pay attention to personal finance literacy since an in-depth knowledge in financial literacy tends to have a direct impact on the management of the economy (World Bank, 2009).

Financial education is one of the most concerned issues confronted by many economies since financial decisions have become very difficult to make or challenging. The proliferation of financial products available on the market then urges consumers to make informed choices in order to achieve a maximum satisfaction. This calls for consumers to be more financially literate in order to improve decision
making. Financial literacy and its education then become imperative since consumers are faced with intriguing financial decisions or complicated products. In general, learning financial literacy earlier in life could lead to essential benefits in the long run as it enables individuals to withstand any financial distress that would be encountered.

Studies have shown that inadequate financial literacy can lead to marital distress which may increase the chance of people losing their marriage. Couple’s financial discipline then plays a vital role in the survival of their relationship. Thus, the ability to live within planned budget, reduce debt and increase savings helps to promote marital happiness (Kerkmann et al., 2000). This shows that financial literacy issues transcend across marital relationships and for that matter, couples need to be abreast of financial literacy in order to sustain their marriage.

An in-depth knowledge in personal finance helps individuals as well as the communities to improve their decision-making capacity. According to Bruine de bruin et al. (2010), people who are not inclined in financial literacy tend to have higher anticipation for inflation which consequently affects their whole being since inadequate personal finance knowledge will limit a person’s ability to make well-versed financial decisions and eventually engaged in impulse buying.

2.3 DETERMINANTS OF FINANCIAL LITERACY

Financial literacy is alarmingly affected by demographic characteristics such as age, education level, gender, parents, peers etc. several academic works have been conducted across countries to confirm it. Literature has shown that there is a direct correlation between a person’s age and his or her personal finance understanding. The personal finance understanding of children and the youth tend to be low compared to the old age. The acquisition of financial literacy therefore tends to increase with age
and experience. Hogarth and Hilgert (2002) reveals that students within the ages 18 – 24 years are those that are financially least knowledgeable whilst those within the ages 36 – 40 years are more likely to budget their expenditure.

Several empirical studies on financial literacy reveal that there is financial literacy gap between women and men as men tend to be equipped with knowledge, information, instruction and ability to apply ideas and concepts relating to finance more than women. It has been generally established that females display much lower knowledge and use of financial literacy than the males due to several reasons. Among the reasons include the fact that women have limited access to capital compared to men and also risk averse during investment decisions. From the literature, men tend to perform creditably well in most personal finance quizzes compared to the women. This consequently urges men to take more financial risk which puts them in higher debt accumulation in relation to women (Davies and Lea, 1995). Men have the perception that having enough money will make them well respected in the society.

A person’s education level has consistently found to have a direct effect on person finance. The level of education tends to have a positive relationship with personal finance. However, there is a contraction as many university graduates have proven to have inadequate personal finance (Van Rooiji, Lusardi and Alessie, 2007). This implies that having the University education does not necessarily mean that one has high financial autonomy. Individuals who are illiterate have proven not to appreciate the basic financial concepts such as risk diversification (Lusardi and Mitchell 2006).

Many scholars in the field of personal finance have indicated that parents have essential impact on their children consumption pattern as it has been shown in the literature that children tend to develop their money management processes from
parents (Pinto et al., 2005). Students then learn from their parents how to manage their finance. This implies that parents are principal agent on the consumer socialization of their children (Alhabeeb, 1999). Parents then influence the way children handle money and instill the attitudes their children have towards savings (Eikmeier, 2007). According to Palmer et al. (2001), parents are able to pass their choice for goods and services to their kids as they learn the consumption pattern of their parents through socialization. Children become consumers of specific products as they grow older and thus reiterates the fact that parents are the principal source of learning since they are the first point of learning for children.

Another factor that influences the behavior of children is the peer group influence although children are influenced by the attitudes of their parents. Peer influence however becomes more significant when they reach adolescence stage. The interaction with the peers exposes the youth to the current trends of fashion and consequently affects the consumption and the buying pattern of the youth. The impact of peer groups on children is however centered on the attitude of the children as literature has shown that peer group influence impacts positively towards the learning behavior of children in relation to money management (Hayta, 2008).

### 2.4 FINANCIAL LITERACY IN GHANA

Although there are several empirical studies on financial literacy in most advanced economies, there is limited research and evidence on financial literacy and its effects on financial decision in most developing economies including Ghana. There is therefore a financial literacy gap between the advanced economies and developing economies. Personal finance tends to be inadequately low in Ghanaians especially among dwellers in the northern part of the country. Academic research work among
Ghanaian adults in 2009 indicates that the level of personal finance is about 38% which is relatively lowest compared to other parts of the country (Ghana dot. Com, August 19, 2009). Another study conducted by the United States Agency for International Development Competitive Export Economy (TIPCEE) also reveals that there is low level financial literacy in the country. Academic research works conducted in the country therefore conclude that there is the need for citizens to become aware of the various financial and investment opportunities in the financial landscape for them to access (source: www.ghanawed.com).

Financial literacy is therefore seen as a means by which Ghana can achieve accelerated development especially when it has been revealed that the country’s personal finance is extremely low among citizens. Financial literacy is then described as a critical tool for development due to the fact that a well-informed financial decision on budgets, savings, investments and management of debts plays a vital role in economic growth and development. This explains why most developed countries like U.S.A, U.K, etc have given serious attention to financial literacy.

The government of Ghana in the quest of bridging the financial literacy gap has launched a financial literacy week in the country. The idea behind the program is to improve the understanding and awareness of Ghanaians on the needs for finance literacy. The financial literacy week in Ghana is therefore seen as a platform to instill citizenry with the adequate personal finance education required to make sound decisions on investments, savings, household budgets and management of debts for themselves and the family (source: www.ghanawed.com)
2.5 FINANCIAL LITERACY AMONG HIGH SCHOOL AND COLLEGE STUDENTS

Many empirical studies on personal finance literacy tend to center on high school students. Danes and Hira (1987) are the first scholars to undertake academic work on financial literacy on senior high school students. Avard et al. (2005) reveals that graduates from high schools lack the understanding of basic personal finance issues. This emphasizes that most students find it difficult to balance a checkbook and lack the basic principles in finance (Avard, Manton, English and Walker, 2005). Another academic work conducted by A National Council on Economic Education study (2005) indicates that 53 per cent of senior high students performed woefully on the basic quiz on economics and personal finance in the United States. This stresses that there is inadequate personal finance among senior high students and that have had a negative effect on their financial decisions and behavior. High school students therefore leave school without the basic skills to manage their personal financial affairs, putting them at a high risk for not being able to plan responsibly for their financial future. The ability of senior high school students to deal with financial difficulties is dependent on financial exposure gained before entering college (Lyons, Scherp, and Roberts, 2006).

2.6 FINANCIAL LITERACY AMONG ADULTS

Several empirical studies of financial literacy on adults have been conducted in many areas in the world. Most of the studies have proven that adults tend to have inadequate personal finance globally. Hilgert and Hogarth (2002) revealed that U.S adults tend to have inadequate personal finance as indicated in the survey conducted using data from the University of Michigan. Financial literacy quiz used for the study was centered on basic money management. Worthington (2006) used logit regression
models to forecast personal financial literacy of Australian adults. The study reveals that personal finance tends to be adequate among individual with ages aged between 50 and 60 years, professionals, business and farm owners.

This survey also indicates that personal finance tends to be lowest for unemployed and woman. Another study by Almenberg and Soderbergh (2011) tries to find out whether there is the essential difference between planners and non-planners of Swedish adults in terms of personal finance. The study concluded that there is inadequate personal finance among older people, women and those with low education or earnings.

2.7 FINANCIAL LITERACY AND FINANCIAL BEHAVIOR

The existing literature in the field of personal finance has established the link between financial literacy and financial behaviors. Bernheim (1995, 1998) concludes that Americans lack the basic personal financial literacy and consequently deploys crude rules of thumb when measuring saving behavior. Several empirical studies have proven that a positive relationship exists between personal financial literacy and financial behavior. Hilgert, Hogarth and Beverly (2003) develop “Financial Practices Index” which places emphasis on basic concepts in money management. The results of the index indicate that there is a direct relationship between personal finance knowledge and financial behavior. Personal finance literacy therefore has an important effect on financial behavior. It is therefore an important factor which plays a vital role in sound decision-making and youth of today wish they had in abundance.

2.8 FINANCIAL EDUCATION AND FINANCIAL BEHAVIOR

Although financial behavior tends to have direct relationship with financial literacy, the impact of financial education on personal finance behavior is not certain. This
means that there are some doubts as to how financial education affects financial behavior (Lyons, Palmer, Jayaratne, and Scherpf, 2006). This shows that there is variation in opinion with respect to effects of financial education and its consequences on financial behavior. According to Bernheim, Garrett and Maki (2001) students who studied financial management course in high school have proven to have higher propensity to save compared to others. Mandell (2006) on the other hand indicated that well-planned high school personal finance course tends to have less significance on students behavior especially from 1 to 5 years after completion.

2.9 COST OF FINANCIAL IGNORANCE

Financial literacy has become an important component in financial decision-making after the emergence of the world financial crisis in 2008. The world however gave the needed attention to the issue after the financial crisis and its distribution impacts. Personal finance is then seen as the means to ensure accelerated economic growth and development. Societies which are equipped with personal financial issues are confident in dealing with financial issues they may encounter. Hence, it stands to reason that people with low financial literacy are not able to participate actively in the stock market (Rooij, Lusardi, and Alessie, 2007) and tend to accumulate more debt without planning (Lusardi and Turfano, 2009). The low level of financial literacy could make small financial issues become overwhelming which could turn into financial stress and consequently affects the total being of the people.
CHAPTER THREE

METHODOLOGY

3.0 INTRODUCTION

Methodology refers to the strategies employed in conducting a research. They include data collection instruments such as questionnaires, interviews or observation as well as sampling procedures and statistical techniques for organizing and interpreting unstructured data (Bryman, 2008). The strategies adopted for a particular study then explain the validity and reliability of the study. Methodology of a research must therefore follow scientific procedure so as to reduce the level of biases in the study. This chapter explains the approach used to answer the research questions so as to meet the research objectives. This chapter then makes emphasis on the research design, population of the study, size of the sample, data collection, validity and reliability of the research.

3.1 RESEARCH DESIGN

The general blue print adopted by the researcher which is used to collect answers to research questions. Research design is therefore the summary of how the survey is to be conducted right from the collection of data to data analysis (Sullivan, 2001). Research design then stresses on what is to be done (cooper and schinder, 2003). The research design employed for this study enables the researcher to find out the students understanding in personal finance using the personal characteristic of gender, age, course study etc. Secondly, the research design enables the researcher to examine how the students’ level of personal finance affects their opinions and decisions. This study therefore uses exploratory method as it enables the researcher to find out how students understand and apply personal finance. The research design for this study also uses
explanatory method as the researcher tries to establish the relationship between certain demographic factor such as academic course, age, gender, and financial literacy. Explanatory study is normally used when the researcher wants to establish a causal relationship between variables. The research strategy employed for this study is the survey strategy which allows an efficient way to gather the needed information from the population of the study. Survey strategy is usually used for exploratory and explanatory research as it establishes reasons for relationships between variables. Survey strategy uses questionnaire in collecting the data and also allows the researcher to analyze the data quantitatively using descriptive and inferential statistics. This study then uses the quantitative approach in analyzing the data. Quantitative approach is used for data collection technique that uses numerical data. It therefore employs questionnaire, graphs or statistics in its analysis.

3.2 POPULATION OF THE STUDY

Population of a study refers to the total unit in which the sample size is drawn (Saunders et al, 2001). Population is therefore all possible cases of interest (Mason et al, 1997). For the purpose of this study, the institutional population consists of all Senior High Schools in Kumasi metropolis. The total number of senior high schools in Kumasi metropolis is nineteen (19) with the total population of 33,279 students. The population of this study is centered on only the government assisted senior high schools in Kumasi metropolis. It however excludes privately owned senior high schools in Kumasi metropolis.

3.3 SAMPLE SIZE AND SAMPLE TECHNIQUE

As suggested by many researchers, sampling is a vital component of any research. It is very difficult and impossible to use the general population for any scientific
research. This is due to the fact that researchers would find it difficult in getting access to the entire target population as a result of time constraints and the cost involved. It is therefore prudent for the researchers to use sample size for research especially in the case where the population size is too large. However, the general population size could be used when the study population itself is small and also not very scattered. Sample size is defined as a subgroup or part of a larger population (Saunders et al, 2007). It is therefore a set of unit chosen from a larger population which gives a true reflection of the population (Mason et al, 1999). The confidence in data analysis in research and the extent to which one can generalize would therefore depend on the suitability of the sample size and the way it is chosen. For the purpose of this study, the population of the study is all Senior High Schools in Kumasi metropolis. The sample size of the study is 320 students which are selected from the chosen schools. However, the 320 students are selected based on availability and accessibility of the respondents.

Sampling techniques on the other hand refer to mechanisms employed in research to lessen the data required for the study by considering some of the relevant data from the entire population. Sampling techniques come in two forms. These are probability or representative sampling and non-probability or judgmental sampling. Probability sampling techniques when employed in research allow each unit of the population to be selected randomly and the chance of being selected is known. These techniques allow researchers to answer research questions and to achieve research objectives by making statistical inference from the features of the population studied. Non-probability sampling techniques on the other hand do not select the units randomly and the chance of each unit being selected is unknown. The inference drawn from the population is therefore not based on statistical grounds.
Stratified random sampling technique is however adopted for this study. Stratified random sampling is the adaptation of random sampling in which the researcher categorizes the population into several important strata based on certain characteristics (Saunders et al, 2007). Thus, population of the study is divided into a number of strata in which each stratum gives the true representation of the population. Some major routes of Kumasi are used in dividing Kumasi metropolis which is the population into four strata. The major routes linking Sunyani, Accra, Mampong and Lakeside are used to divide Kumasi metropolis into four strata where two senior high schools are selected from each stratum. Simple random sampling is however used to select two senior high schools from each stratum due to the scattered location of the schools. A total number of eight senior high schools are then selected to form the sample frame from which the sample size of 320 students is selected.

The students are selected from the chosen schools based on their program studied. The students are stratified into science students, business students, general arts students with economics and general arts students without economics. This strategy enables the researcher to solicit views from all categories of students. Forty questionnaires are given to each school which form the total sample size of 320 students when the eight schools are considered

3.4 DATACOLLECTION

This study is conducted using primary data and other relevant literature data sources. The primary source is used in collecting the data since the information obtained is very near to its originality and relatively free from modification, judgment and biases of external influence. For the purpose of this study, a field research is conducted to collect data from the chosen senior high schools through the use of questionnaires.
Questionnaire refers to the data collection instruction in which respondents are allowed to answer the same set of questions in a prearranged manner (deVaus 2002).

The questionnaire for this study is designed to cover major aspect of personal finance which included financial literacy on general knowledge, savings and borrowing and money management. The respondents are asked to answer 41 questions which covered 25 multiple-choice questions, 8 questions on financial opinions and decisions and 8 questions on demographic data. Some of the questions are assessed using likert scale. Questionnaire is usually used in survey strategy as it provides an efficient means of gathering large data or responses from the chosen sample frame and therefore appropriate for descriptive or explanatory research as it enables the researcher to identify and describe variables in different contexts or enables the researcher to investigate and establish the relationships between variables.

Questionnaire for this study is made up of both the closed and open ended types of questions. In the case of closed ended questions, answers are provided for respondents to choose from and thus make it easy to handle and analyze. Open ended questions are not provided with answers so as to enable respondents to provide their own answers since it is difficult sometimes to know exactly how the respondents will react to certain questions. The questionnaire is however self-administered and delivered by hand to the various students examined. Secondary data which reviewed the most relevant literature of previous studies about the topic are used to support the work. The secondary data used for this study originated from journals, text books and other sources to support the study so as to produce accurate results.
3.5 DATA ANALYSIS

Data analysis is seen as the most demanding and fascinating component of research. Data analysis refers to the process of deriving a useful meaning from the field work. Data analysis can be done quantitatively or qualitatively. Quantitative data analysis is when statistical approach is used in deriving useful meaning from the data collected. This implies that quantitative data in its raw form produce little meaning unless they are processed and analyzed. The quantitative analysis techniques used in survey help to find out, present, describe and establish relationships between the variables in order to produce information. Qualitative data analysis on the other hand does not make use of statistical approach in its analysis. For the purpose of this study, the data collected are edited, coded and analyzed with an SPSS program. This study uses logistic regression (logit model) to analyze the variation in the financial literacy among the senior high students. The following logit model used by Chen and Volpe (1992) is adopted for this study:

\[
\log \left[ \frac{p}{1-p} \right] = B_0 + B_1(BUSINESS\_MAJOR) + B_2(CLASSRANK1) + B_3(GENDER) + B_4(AGE1) + B_5(MALES) + B_6(FATHERS\_OCCUPATION) + B_7(MOTHERS\_OCCUPATION) + B_8(FATHER\_EDUCATION1) + B_9(FATHER\_EDUCATION2) + B_{10}(MOTHERS\_EDUCATION1) + B_{11}(MOTHERS\_EDUCATION2) + B_{12}(CAPITAL\_TOWN) + B_{13}(DISCUSS\_FINANCE) + e_i
\]

Where \( p \) = the probability of a student who is more knowledgeable about personal finance.

BUSINESS\_MAJOR = 1 if the student is a business major, 0 otherwise.

CLASS\_RANK 1 = 1 if the student is in form one, 0 otherwise.

MALES = 1 if the student is a male, 0 otherwise.
AGE1 = 1 if the student is 20 years or below, 0 otherwise.

FATHERS_OCCUPATION = 1 if the students’ father is employed, 0 otherwise

MOTHERS_OCCUPATION = 1 if the students’ mother is employed, 0 otherwise.

CAPITAL_TOWN = 1 if the student has stayed in a capital town, 0 otherwise

FATHERS_EDUCATION1 = 1 if the students father has SHS/Training education, 0 otherwise

FATHERS_EDUCATION2 = 1 if the students father has degree, 0 otherwise

MOTHERS_EDUCATION1 = 1 if the students mother has SHS/Training education, 0 otherwise

MOTHERS_EDUCATION2 = 1 if the students mother has degree, 0 otherwise

DISCUSS_FINANCE = 1 if the student discusses financial issues with peers, 0 otherwise

3.6 VALIDITY AND RELIABILITY

The accuracy of a study to a large extent depends on the validity and reliability of the study. Saunders et al (2007) are of the view that validity and reliability form the basis of standard academic work. Validity explains whether the survey is able to achieve what intends to achieve (Saunders et al, 2007). According to Neumann (2006) validity is the ability to come out with what is actually pertaining on the field. The validity of a study is therefore dependent on effectiveness and efficiency of the method used to achieve the reality. Reliability stresses on how the academic works are able to achieve consistency in their results. Reliability of a study attempts to find out the extent to which the methodology employed in the survey achieves consistency overtime whether the research is done by different researchers at different locations or at the same location when the same procedures are followed. Academic research with strong
reliability shows a high consistency in the results of the study (Crocker & Algina, 1986).

For the purpose of this study, the primary data collected is centered on both single sex schools as well as mixed sex schools in Kumasi metropolis in order to ensure high validity. The questionnaire for this study is however adopted from past research as much as possible and pre-tested to remove biases from the study in order to increase the validity and reliability of the instruments. The ‘I don’t know’ component of the answers also enables respondents to be truthful to the researcher especially when respondents are not aware of the correct answer and thus ensures validity of the study.
CHAPTER FOUR

RESULTS AND ANALYSIS

4.0 INTRODUCTION

To achieve the underlying objectives of the study, the current chapter reports the empirical findings from the analysis. Thus, the researcher sought to answer three key questions on financial literacy of students in the senior schools in the Kumasi Metropolis. Specifically, the study is to investigate; (1) the general knowledge of senior high students in terms of money management, (2) the extent to which the students appreciate issues concerning savings and borrowing, (3) their exposure to financial issues. Three hundred and twenty (320) questionnaires are administered to solicit for the respondents views. The rest of the chapter is dedicated to examining the financial literacy of senior high students. Summaries from findings and conclusion will be provided for policy recommendations.

4.1 DESCRIPTIVE STATISTICS

This chapter provides evidence on the descriptive statistics on the respondents of the survey in terms of educational and demographic characteristics and exposure to financial issues.

4.1.1 Educational characteristics

On the educational characteristics of the students, the results from Table 4.1 report that 60% of the students’ are non-business majors whilst the remaining 40% are students’ pursuing business related courses in the senior high school. On the field of study, the results show that 25% of the students are studying businesses courses. Students studying General Arts with Economics background record 15% whilst non-economics students in the General Arts courses constitute 10% of the sample. The
results reveal further that about 39.4% of the students’ are pursuing Science-related courses whilst 10.6% are Visual Arts students. Notwithstanding, majority of the respondents in the survey are in their second year representing 53.1% of the sample size whilst the remaining are 46.9% of the respondents are in first year in the senior high school. Therefore, it is expected that the respondents can make logical decision since it is perceived that they are literates who can read and write.

4.1.2 Demographic characteristics

On their demographic characteristics, the results show that most of the students in the survey are males representing about 62.8% of the sample size with the remaining 37.2% being female students. In examining the respective ages of the students in the survey, the results reveal that 82.6% of the students are 20 years and below whilst 17.5% are between the ages of 21 to 25 years. On the basis of the students’ ages, it can be inferred that the students are in their youthful age and hence there is the tendency to be influenced by their peers in their decision making.

4.1.3 Exposure to financial issues

On the exposure to financial issues, the results show that 75% of the students are living or have lived in capital town whilst 25% of the students have not. Notwithstanding, the results show that on fathers’ education, 13% either have no formal education or have been educated up to JHS/Middle School education level whilst 55% have up to SHS education. The results further show that 7% of the student’s fathers have been educated through training college education/nursing and polytechnic whilst 23% and 3% have bachelors and masters/professional degrees respectively.
Similarly, the results show that 34% of the student’s mothers either have no formal education or have been educated up to JHS/Middle School whilst 38% have up to SHS education. Mothers educated through training college/ Nursing/Polytechnics record 11% whilst student’s mothers with bachelors and masters/professional degree record 16% and 2% respectively. It can be inferred that the more the students are exposed to city life or the higher the academic attainment of the students’ parents, the more likely the students will be exposed to financial issues and hence makes informed financial decisions.

The results presented in Table 4.1 report the summary of the descriptive statistics of the sample.
Table 4.1 Descriptive statistics of the sample

<table>
<thead>
<tr>
<th></th>
<th>Number of Participants</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) <strong>Academic Discipline</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Business Majors</td>
<td>192</td>
<td>60.0</td>
</tr>
<tr>
<td>Business Majors</td>
<td>128</td>
<td>40.0</td>
</tr>
<tr>
<td>(2) <strong>SHS Field of study</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business</td>
<td>80</td>
<td>25.0</td>
</tr>
<tr>
<td>General Arts with economics</td>
<td>48</td>
<td>15.0</td>
</tr>
<tr>
<td>General Arts without economics</td>
<td>32</td>
<td>10.0</td>
</tr>
<tr>
<td>Science</td>
<td>126</td>
<td>39.4</td>
</tr>
<tr>
<td>Visual Arts</td>
<td>34</td>
<td>10.6</td>
</tr>
<tr>
<td>(3) <strong>Class Rank</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level 100</td>
<td>150</td>
<td>46.9</td>
</tr>
<tr>
<td>Level 200</td>
<td>170</td>
<td>53.1</td>
</tr>
<tr>
<td><strong>B. Demographic Characteristics</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) <strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Up to 20</td>
<td>264</td>
<td>82.5</td>
</tr>
<tr>
<td>21 – 25</td>
<td>56</td>
<td>17.5</td>
</tr>
<tr>
<td>(2) <strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>201</td>
<td>62.8</td>
</tr>
<tr>
<td>Female</td>
<td>119</td>
<td>37.2</td>
</tr>
<tr>
<td><strong>C. Exposure To Financial Issues</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(3) <strong>Capital Town</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>240</td>
<td>75.0</td>
</tr>
<tr>
<td>No</td>
<td>80</td>
<td>25.0</td>
</tr>
<tr>
<td>(4) <strong>Fathers Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>None/JHS/MSE</td>
<td>40</td>
<td>13%</td>
</tr>
<tr>
<td>SHS/Equivalent</td>
<td>175</td>
<td>55%</td>
</tr>
<tr>
<td>Training College/Nursing/</td>
<td>23</td>
<td>7%</td>
</tr>
<tr>
<td>Polytechnic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td>74</td>
<td>23%</td>
</tr>
<tr>
<td>Masters/Doctorate/Professional</td>
<td>degree</td>
<td>8</td>
</tr>
<tr>
<td>(5) <strong>Mothers Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>None/JHS/MSE</td>
<td>110</td>
<td>34%</td>
</tr>
<tr>
<td>SHS/Equivalent</td>
<td>120</td>
<td>38%</td>
</tr>
<tr>
<td>Training College/Nursing/</td>
<td>35</td>
<td>11%</td>
</tr>
<tr>
<td>Polytechnic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td>50</td>
<td>16%</td>
</tr>
<tr>
<td>Masters/Doctorate/Professional</td>
<td>degree</td>
<td>5</td>
</tr>
</tbody>
</table>

Source: Field study
4.2 PERCENTAGE RESPONSES OF PARTICIPANTS’ KNOWLEDGE IN FINANCE

Table 4.2: Descriptive findings on Knowledge in Finance (in percentages)

<table>
<thead>
<tr>
<th>General Finance Knowledge</th>
<th>Correct</th>
<th>Incorrect</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal financial literacy</td>
<td>42.2</td>
<td>58.8</td>
<td>0.0</td>
</tr>
<tr>
<td>Personal financial planning</td>
<td>25.8</td>
<td>63.3</td>
<td>10.8</td>
</tr>
<tr>
<td>Personal Budget</td>
<td>26.2</td>
<td>55.8</td>
<td>18.0</td>
</tr>
<tr>
<td>Asset Liquidity</td>
<td>52.7</td>
<td>25.4</td>
<td>21.9</td>
</tr>
<tr>
<td>Savings interest</td>
<td>55.1</td>
<td>27.2</td>
<td>17.7</td>
</tr>
<tr>
<td><strong>Mean</strong></td>
<td>40.4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Saving and Borrowing Knowledge                   |         |           |            |
| Higher interest                                  | 74.0    | 20.5      | 5.5        |
| Loan Guarantee                                   | 62.3    | 28.2      | 9.5        |
| Compound interest                                | 80.5    | 10.6      | 8.9        |
| High Borrowing interest                         | 52.5    | 35.0      | 12.5       |
| Overdraft                                        | 10.9    | 62.5      | 26.6       |
| Credit worthiness                                | 61.8    | 34.2      | 4.0        |
| **Mean**                                         | 57.0    |           |            |
| **Overall mean**                                 | 48.7    |           |            |

Results in Table 4.2 above illustrate the percentage score of responses of the students employed in the survey. The table is delineated in two sub-categories. The initial aspect looks at the scores that are correct, incorrect and don’t know. The second aspect emphasizes on the respective questions asked under each of the financial literacy components namely; general financial knowledge and savings and borrowing. This is to ascertain the understanding of the students of the financial literacy components. In comparison to Chen and Volpe’s (1996) benchmark of financial literacy, the percentage correct scores are regrouped into three categories: over 80% (Highest), 60 – 79% (Medium) and below 60% (Low) to make informed decision on the students level of financial literacy.
4.3 GENERAL FINANCE KNOWLEDGE

On the general finance knowledge, six major questions are asked including personal financial literacy, personal financial planning, personal budget, asset liquidity and savings interest. The summary of the results is presented in Table 4.2. The findings from the table show that 42.2% are correct whilst 58.8% are incorrect on the question regarding personal financial literacy. On the issue of personal financial planning, the results show that 25.8% had it correct, 63.3% incorrect and 10.8% didn’t know the answer to the question. Also, the results show that 26.2% scored correctly the question on personal budget whilst 55.8% scored incorrect and 18% chose don’t know. However, results on asset liquidity reveal that 52.7% scored correctly whilst 25.4% had incorrect and 21.9% chose don’t know. On savings interest, the results show 55.1% for correct score, 27.2% for incorrect and 17.7% for don’t know. In line with Chen and Volpe benchmarks, the results show that the overall mean score percentage for the correct responses is 40.4% for the students’ general financial knowledge which falls below the 60% benchmark. Hence, on the average, the students can be said to exhibit inadequate financial knowledge. This can be attributed to the fact that at this level the students are not exposed to higher levels of financial management concepts and hence lack personal finance education.

4.4 SAVINGS AND BORROWING KNOWLEDGE

On savings and borrowing, issues such as high interest rate, loan guarantee, compound interest, borrowing interest, overdraft and credit worthiness questions are asked. The results as reported in Table 4.2 above indicate that on the question regarding higher interest, 74% scored correctly whilst 20.5% were incorrect and 5.5% chose don’t know. Loan guarantee records the following score; correct (62.3%), incorrect (28.2%) and don’t know (9.5%). However, further evidence from the results
show that 80.5% scored correct in the compound interest question whilst 10.6% and 8.9% were incorrect and chose don’t know respectively. On the issue of high borrowing interest, the results report correct (52.5%), incorrect (35%) and don’t know (12.5%). The results also record the following correct, incorrect and don’t know percent scores (10.9%, 62.5% and 26.6%) and (61.8%, 34.2% and 4%) for overdraft and credit worthiness respectively. The overall mean correct score of 57% reaffirms that the students’ knowledge on savings and borrowing issues are low.

4.5 OVERALL FINANCIAL LITERACY

In line with the overall mean for the students correct score on the two sub-categories of the financial literacy portray that the students’ financial literacy level are below expectations. This suggests that the students are not exposed to personal finance and savings and borrowing issues. Even though the students have financial management courses in their curriculum, it is not enough to cushion their understanding of money management issues in our current financial world. This finding may affirm the differences in the correct scores for the sections of general finance knowledge (40.4%) and savings and borrowing (57%).

4.6 RELATIVE KNOWLEDGE OF SENIOR HIGH SCHOOL STUDENTS IN FINANCE USING ANOVA

Here, the researcher tries to examine the association between the respondents’ educational background, demographic characteristics influence on their personal financial literacy. The Analysis of variance (ANOVA) is used as the fundamental tool to examine the mean differences inherent in the knowledge levels of the students under general financial knowledge, savings and borrowing and their overall financial literacy. The summary of the findings is reported in Table 4.3 below.
Table 4.3: Mean Percentage of Correct Responses to each section by characteristics of sample and results of ANOVA

<table>
<thead>
<tr>
<th></th>
<th>General Knowledge</th>
<th>Savings and borrowing</th>
<th>Literacy</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>C. Education</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(4) <strong>Academic Discipline</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Business Majors</td>
<td>40.77</td>
<td>39.47</td>
<td>30.71</td>
</tr>
<tr>
<td>Business Majors</td>
<td>50.32</td>
<td>59.30</td>
<td>51.16</td>
</tr>
<tr>
<td>F-statistics</td>
<td>(12.01)*</td>
<td>(26.39)**</td>
<td>(16.98)***</td>
</tr>
<tr>
<td>(5) <strong>Class Rank</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level 100</td>
<td>47.14</td>
<td>48.57</td>
<td>41.21</td>
</tr>
<tr>
<td>Level 200</td>
<td>76.45</td>
<td>50.68</td>
<td>52.25</td>
</tr>
<tr>
<td>F-statistics</td>
<td>(40.41)***</td>
<td>(9.33)**</td>
<td>(2.17)</td>
</tr>
<tr>
<td><strong>D. Demographic Characteristics</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(6) <strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Up to 20</td>
<td>35.16</td>
<td>49.62</td>
<td>34.53</td>
</tr>
<tr>
<td>21 – 25</td>
<td>46.78</td>
<td>68.01</td>
<td>49.28</td>
</tr>
<tr>
<td>F-statistics</td>
<td>(4.95)</td>
<td>(10.1)***</td>
<td>(1.06)</td>
</tr>
<tr>
<td>(7) <strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>57.34</td>
<td>44.09</td>
<td>45.10</td>
</tr>
<tr>
<td>Female</td>
<td>62.40</td>
<td>30.22</td>
<td>51.21</td>
</tr>
<tr>
<td>F-statistics</td>
<td>(34.28)***</td>
<td>(0.83)</td>
<td>(4.35)*</td>
</tr>
<tr>
<td><strong>E. Fathers Occupation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unemployed</td>
<td>48</td>
<td>34</td>
<td>42</td>
</tr>
<tr>
<td>Employed</td>
<td>52</td>
<td>47</td>
<td>48</td>
</tr>
<tr>
<td>F-statistics</td>
<td>(0.58)</td>
<td>(0.13)</td>
<td>(1.54)</td>
</tr>
<tr>
<td><strong>F. Father Education</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>38</td>
<td>48</td>
<td>45</td>
</tr>
<tr>
<td>SHS/Training/Polytechnic</td>
<td>56</td>
<td>50</td>
<td>71</td>
</tr>
<tr>
<td>Bachelor/Masters</td>
<td>48</td>
<td>42</td>
<td>52</td>
</tr>
<tr>
<td>F-statistics</td>
<td>(12.28)*</td>
<td>(0.72)</td>
<td>(45.35)***</td>
</tr>
<tr>
<td><strong>G. Mothers Occupation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unemployed</td>
<td>38</td>
<td>49</td>
<td>42</td>
</tr>
<tr>
<td>Employed</td>
<td>56</td>
<td>52</td>
<td>68</td>
</tr>
<tr>
<td>F-statistics</td>
<td>(10.81)***</td>
<td>(4.23)</td>
<td>(21.54)**</td>
</tr>
<tr>
<td><strong>H. Mothers Education</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>52</td>
<td>38</td>
<td>47</td>
</tr>
<tr>
<td>SHS/Training/Polytechnic</td>
<td>64</td>
<td>70</td>
<td>56</td>
</tr>
<tr>
<td>Bachelor/Masters</td>
<td>48</td>
<td>42</td>
<td>44</td>
</tr>
<tr>
<td>F-statistics</td>
<td>(32.80)**</td>
<td>(9.72)*</td>
<td>(45.35)***</td>
</tr>
<tr>
<td><strong>I. Capital Town</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>72</td>
<td>54</td>
<td>63</td>
</tr>
<tr>
<td>No</td>
<td>39</td>
<td>37</td>
<td>48</td>
</tr>
<tr>
<td>F-statistics</td>
<td>(45.10)***</td>
<td>(9.12)**</td>
<td>(15.38)***</td>
</tr>
</tbody>
</table>

*P<0.1, **P<0.05 and *** P<0.01 significance level.
4.6.1 Educational background of participants

Results presented in Table 4.3 reveal that in terms of academic discipline, students with business major have upper hand over non-business students regarding their personal financial knowledge. For instance, findings from the table indicate that the percentage scores for business majors (50.32%) are higher than the percentage score of non-business majors (40.77) in the survey. This pattern of response and percentage score are eminent amongst all the other sections including the savings and borrowing as well as the overall financial literacy. The test statistics indicate that these differences amongst the student’s responses are highly significant. Hence, the business majors are more financially literate than the non-business majors. This finding may be attributed to the fact that at the senior high school level, the business majors are exposed to certain concepts of financial management which inherently impacts on their understanding of certain financial literacy issues, although not in absolute terms. Concerning the class ranking of the students, though the overall literacy level is not significant, the results show that there are some disparities in their responses on the general finance and savings and borrowing questions. This suggests that the higher the students go on the educational ladder, the higher we expect the student to be familiar with financial management concepts.

4.6.2 Demographic characteristics

On the difference between the students age groupings on their financial literacy knowledge, the results show that there is no significant difference between the knowledge of students 20 years and below as against that of the students between the ages of 21 and 25 years. This may be attributed to the fact that since they are all learning from the same academic curriculum and do not have any work experience; we cannot expect them to have any higher knowledge above their peer. Consequently,
the ANOVA results show that there is evidence for disparity between financial literacy of males and females, though not strong in terms of significance at 10%. But the result shows that the percent responses of the students on general knowledge vary significantly at 1% level.

4.6.3 Exposure Variables

On the difference between how the student’s parents’ occupation influences their financial literacy knowledge, the results show that there is no significant difference between student’s father’s occupations. However, the results show that fathers who have attained some formal education have influence on the student’s general knowledge and their financial literacy. The results further show that there are disparities between students with employed mothers and unemployed mothers. Students with employed mothers tend to exhibit higher knowledge in financial literacy than students with unemployed mothers. The results also show that attainment of education of the mother influences the knowledge of the students at 1% significance level. However, findings from the results show that students who have stayed or are living in the capital town are more knowledgeable than their peers who have not lived in the city before. This however is expected to influence how students make informed financial decisions.

4.7 RELATIVE KNOWLEDGE OF SENIOR HIGH STUDENTS IN FINANCIAL MANAGEMENT

To establish the relative financial literacy of the senior high students, the researcher conducts regression analysis using the logit estimation model to confirm findings from the ANOVA results presented in Table 4.3. Summary report of the findings from the logit regression models are presented below in Table 4.4.
Table 4.4: Results of Logit Analysis for General Knowledge in Finance Management

<table>
<thead>
<tr>
<th></th>
<th>General Knowledge</th>
<th>Savings &amp; Borrowing</th>
<th>Overall Financial Literacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business major</td>
<td>4.170***</td>
<td>0.109***</td>
<td>8.579***</td>
</tr>
<tr>
<td>Male</td>
<td>-0.0854***</td>
<td>-0.205</td>
<td>-0.107**</td>
</tr>
<tr>
<td>Age1</td>
<td>-0.0169</td>
<td>-0.0411**</td>
<td>-0.140</td>
</tr>
<tr>
<td>Class_rank1</td>
<td>-1.862***</td>
<td>-10.451*</td>
<td>-2.135</td>
</tr>
<tr>
<td>Fathers_occupation</td>
<td>0.287</td>
<td>8.012</td>
<td>5.241</td>
</tr>
<tr>
<td>Mothers_occupation</td>
<td>1.763**</td>
<td>4.871**</td>
<td>8.123***</td>
</tr>
<tr>
<td>Fathers_education1</td>
<td>0.011**</td>
<td>0.018</td>
<td>0.482**</td>
</tr>
<tr>
<td>Fathers_education2</td>
<td>1.142*</td>
<td>-0.036</td>
<td>0.029*</td>
</tr>
<tr>
<td>Mothers_education1</td>
<td>0.090***</td>
<td>0.119***</td>
<td>0.094***</td>
</tr>
<tr>
<td>Mothers_education2</td>
<td>0.046***</td>
<td>0.054***</td>
<td>0.058***</td>
</tr>
<tr>
<td>Discuss_finance</td>
<td>-0.025</td>
<td>-0.142</td>
<td>-0.017</td>
</tr>
<tr>
<td>Capital_town</td>
<td>0.044**</td>
<td>0.801**</td>
<td>0.092***</td>
</tr>
<tr>
<td>Intercept</td>
<td>4.510</td>
<td>8.796</td>
<td>10.211</td>
</tr>
<tr>
<td>-2 log Likelihood</td>
<td>-330.770</td>
<td>-312.161</td>
<td>-424.824</td>
</tr>
<tr>
<td>Wald Chi2 (17)</td>
<td>106.10</td>
<td>91.61</td>
<td>50.95</td>
</tr>
<tr>
<td>Prob&gt;Chi2</td>
<td>0.0005</td>
<td>0.0181</td>
<td>0.0220</td>
</tr>
<tr>
<td>Pseudo R2</td>
<td>0.7909</td>
<td>0.8219</td>
<td>0.756</td>
</tr>
<tr>
<td>Correct Classification</td>
<td>67.50%</td>
<td>72.57%</td>
<td>74.00%</td>
</tr>
<tr>
<td>Chance Classification</td>
<td>76.68%</td>
<td>65.89%</td>
<td>79.43%</td>
</tr>
<tr>
<td>Observation</td>
<td>320</td>
<td>320</td>
<td>320</td>
</tr>
</tbody>
</table>

*P <0.1, **P<0.05 and ***P<0.01, coefficients represents marginal effects

4.7.1 Students’ relative knowledge in General Financial Knowledge

Evidence from the results indicates that student’s field of study influence students’ knowledge. Results from Table 4.4 show that students undertaking business major are more likely to exhibit adequate knowledge in general finance than the non-business majors at 5% level. Also, the results reveal that male students in the survey have less knowledge in general finance than their female counterparts at 1% significance level.
This finding can be attributed to the fact that since most females are always around their mothers, they are more likely to learn money related issues than their male counterpart. On the ages of the students, the results indicate that knowledge of students 20 years and below does not differ much from the students between 21 to 25 years. This may be attributed to the fact that at this level of education most of the students do not have work experience and consequently have little financial experience. Also, the results show that class rank matters such that the higher the class ranks, the higher the general finance knowledge of the students. Evidence from the analysis suggests that father’s occupation does have substantial influence on the students general finance knowledge. In addition, the higher the mother’s occupation, the more likelihood of the students attaining higher general finance knowledge. This can be attributed to the fact that working parents motivate or influence their children to cultivate financial management since they have adequate knowledge concerning money management. These findings suggest that parent’s occupation have significant influence on student’s competency in financial management. The table further reveals that students whose fathers’ have SHS form of education positively correlate with their general knowledge. Similarly, the results show that students with fathers who have tertiary level of education are more likely to be knowledgeable than students whose fathers do not have any formal education. This is similarly reported for students whose mothers have some form of education and training. On capital town residence, the results record positive impact for students residing in capital towns indicating that they are more likely to have adequate general knowledge. However, the results find no evidence for the impact of financial discussion on the student’s general knowledge. The significant Chi-square with an r-squared value of 0.7809
indicates that the independent variables used in the model can predict 78.09% of the changes in the student's general financial knowledge.

4.7.2 Students’ relative knowledge in Savings and Borrowings

On the influence of students’ characteristics on the relative savings and borrowing knowledge of the students, the results from the logit analysis indicate that students with business related courses are more likely to make savings and borrowing decisions adequately than non-business students. Evidence from the results shows that difference between the savings and borrowing knowledge of males and females do not have significant impact on their savings and borrowing knowledge. Also, students 20 years and below are less likely to have adequate knowledge than students between 21 to 25 years. Similarly, students’ class rank also shows that students at the lower level are less likely to exhibit adequate savings and borrowing knowledge than level 200 students. This may be attributed to the fact that students’ savings knowledge increases as they progress on the educational ladder since they have to save to cater for their future education. Unlike, mother’s occupation, the results report that father’s occupation does not influence the savings and borrowing knowledge of students since the students believe that their fathers are around so they are likely to always get money from them when they inquire. The results find no evidence for students whose fathers’ have some form of education but students whose mothers have some form of education and training are seen to exhibit more savings and borrowing knowledge. On capital town residence, the results record positive impact for students residing in capital towns indicating that they are more likely to have adequate general knowledge. However, the results find no evidence for the impact of financial discussion on the student’s general knowledge. The significant Chi-square value of 86.41 with an estimated r-squared value of 0.8219 suggest that on the average,
changes in the savings and borrowing of the students are explained by 82.19% of the 
changes in the determinants of the students savings and borrowing.

4.7.3 Students’ overall financial literacy level

Finally, on the overall financial literacy of the students, the results show that students 
studying business courses are more likely to exhibit adequate financial literacy than 
non-business students at 1% significance level. However, evidence from the results 
show that male students exhibit less financial literacy knowledge than their female 
counterparts. The results further report that students with working mothers have 
adequate financial literacy knowledge than students with non-working mothers. This 
suggest that the since working mothers are more incline to financial issues, their 
children are being consequently taught fundamental of financial management, hence 
likely for them to take advantage over financial related issues. The table further 
reveals that students whose fathers’ have SHS form of education positively correlate 
with their general knowledge. Similarly, the results show that students with fathers 
who have tertiary level of education are more likely to be knowledgeable than 
students whose fathers do not have any formal education. This is similarly reported 
for students whose mothers have some form of education and training. On capital 
town residence, the results record positive impact for students residing in capital 
towns indicating that they are more likely to have adequate general knowledge. 
However, the results find no evidence for the impact of financial discussion on the 
student’s general knowledge. The significant Chi-square with an estimated r-squared 
value of 0.756 indicates that changes in the financial literacy can be explained by 
75.6% of the changes in the student’s academic and demographic characteristics.
In conclusion, evidence from the findings show that students studying business courses are more knowledgeable than students studying non-business related courses. This confirms findings of Chen, Volpe and Pavlicko (1996). Student’s class rank is seen to determine the financial literacy of students such that the higher the student’s attainment, the more likely the students tend to be knowledgeable. This phenomenon can be attributed to the fact that these students may have benefited from basic financial management courses in the academic curriculum and workshops organized by the school for students. Also, the environment for which the students find themselves influences their knowledge level such that residing in capital town allows the students to make informed financial decisions.

**4.8 THE IMPACT OF STUDENTS’FINANCIAL KNOWLEDGE ON THEIR OPINIONS, DECISIONS AND PRACTICE**

The researcher further tries to ascertain how student’s financial knowledge influences their opinions, decisions and practice. The students’ knowledge is categorized into financially literate and financially illiterate from the overall percent correct scores of the responses. Results from tables 5a to 5e report the summary of the opinions of the students.

**4.8.1 Students maintaining adequate financial records**

<table>
<thead>
<tr>
<th></th>
<th>very unimportant</th>
<th>unimportant</th>
<th>not sure</th>
<th>important</th>
<th>very important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financially illiterate</td>
<td>32</td>
<td>7</td>
<td>15</td>
<td>62</td>
<td>34</td>
</tr>
<tr>
<td>Finanacially literate</td>
<td>21.33%</td>
<td>4.67%</td>
<td>10.00%</td>
<td>41.33%</td>
<td>22.67%</td>
</tr>
<tr>
<td>Financially literate</td>
<td>25</td>
<td>20</td>
<td>18</td>
<td>79</td>
<td>28</td>
</tr>
<tr>
<td>Financially literate</td>
<td>14.71%</td>
<td>11.76%</td>
<td>10.59%</td>
<td>46.47%</td>
<td>16.47%</td>
</tr>
</tbody>
</table>

Chi-square = 48.05, P < 0.01
On the issue of students maintaining adequate financial records, the results show on the average 26% of the financially illiterate students do not maintain adequate financial records. However, 10% are not sure whilst 64% of the students find maintaining adequate financial records very important. Comparatively, 26.47% of the financially literate students do not feel maintaining adequate financial records are important. Students with financial knowledge representing 62.94% of the financially literate students however find maintaining adequate financial records very essential. The significant Chi-square at 1% level suggests that it is essential for students to maintain adequate financial records.

**4.8.2 Students spending less than their income**

<table>
<thead>
<tr>
<th></th>
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<th>Unimportant</th>
<th>not sure</th>
<th>important</th>
<th>very important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financially illiterate</td>
<td>20</td>
<td>62</td>
<td>25</td>
<td>13</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>13.33%</td>
<td>41.33%</td>
<td>16.67%</td>
<td>8.67%</td>
<td>20%</td>
</tr>
<tr>
<td>Financially literate</td>
<td>5</td>
<td>0</td>
<td>2</td>
<td>103</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>3%</td>
<td>0.0%</td>
<td>1.0%</td>
<td>61%</td>
<td>35%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>very unimportant</th>
<th>Unimportant</th>
<th>not sure</th>
<th>important</th>
<th>very important</th>
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</thead>
<tbody>
<tr>
<td>Financially illiterate</td>
<td>20</td>
<td>62</td>
<td>25</td>
<td>13</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>13.33%</td>
<td>41.33%</td>
<td>16.67%</td>
<td>8.67%</td>
<td>20%</td>
</tr>
<tr>
<td>Financially literate</td>
<td>5</td>
<td>0</td>
<td>2</td>
<td>103</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>3%</td>
<td>0.0%</td>
<td>1.0%</td>
<td>61%</td>
<td>35%</td>
</tr>
</tbody>
</table>

Chi-square = 134.21, P = 0.01

On the issue of students spending less than their income, the results show that on the average, 54.67% of the financially illiterate students feel it’s not important whilst 16.67% are not sure. 28.67% of the students agree to the fact that spending less than their income is important. However, 96% of the financially literate students agree that spending less than one’s income is very important but only 3% and 1% of the students believe that spending less than one’s income is not important and not sure respectively. The significant Chi-square recorded from the table shows those
financially literate students opinions differ substantially from the financially illiterate opinions.

4.8.3 Students planning and implementing regular investment program

Table 5c: Students planning and implementing regular investment program

<table>
<thead>
<tr>
<th></th>
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<th>unimportant</th>
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<th>important</th>
<th>very important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financially illiterate</td>
<td>73</td>
<td>28</td>
<td>8</td>
<td>25</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>48.67%</td>
<td>18.67%</td>
<td>5.33%</td>
<td>16.67%</td>
<td>10.67%</td>
</tr>
<tr>
<td>Financially literate</td>
<td>12</td>
<td>2</td>
<td>28</td>
<td>54</td>
<td>74</td>
</tr>
<tr>
<td></td>
<td>7.06%</td>
<td>1.18%</td>
<td>16.47%</td>
<td>31.76%</td>
<td>43.53%</td>
</tr>
</tbody>
</table>

Chi-square = 34.75, P > 0.05

The students are asked to rate their opinions on the importance of planning and implementing a regular investment programs. From the result, 67.34% of the financially illiterate students perceived this opinion to be unimportant whilst 5.33% were indifferent. However, the results further reveal that 27.34% of the financially illiterate students agreed on the need for planning and implementation for regular investment programs. On the side of the financially literate students, a minimal number representing 8.24% did not agree with the subject matter but 75.29% of students perceived to the issues to be of relevance to their financial knowledge. The differences in their opinion was significant at 5% level suggesting that adequate planning and implementation of regular investment programs is essential for students to improve upon their financial literacy.
4.8.4 Setting aside money each month for Savings

Table 5d: Students setting aside money each month for savings

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Rarely</th>
<th>Often</th>
<th>very often</th>
<th>always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financially illiterate</td>
<td>66</td>
<td>22</td>
<td>18</td>
<td>32</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>44%</td>
<td>15%</td>
<td>12%</td>
<td>21%</td>
<td>8%</td>
</tr>
<tr>
<td>Financially literate</td>
<td>0</td>
<td>0</td>
<td>20</td>
<td>92</td>
<td>58</td>
</tr>
<tr>
<td></td>
<td>0.00%</td>
<td>0.00%</td>
<td>1.67%</td>
<td>60%</td>
<td>38.33%</td>
</tr>
</tbody>
</table>

Chi-square = 124.012, P < 0.01

The students were further asked if they set aside money each month for savings. The results from the findings show that 59% of the financially illiterate hardly set aside money each month for savings whilst 29% of them agreed to the fact that they do set aside money each month for savings. However, the results further reveal that out of the 170 financially literate students 98.33% of them agreed to the fact that they put aside money for savings each month. The chi-square also shows that there are significant differences in the financial literacy of this group at 0.01. Therefore, their financial literacy levels have impacted differently on their savings practices.

4.8.5 Students employ spending plan or budget

Table 5e: Spending plan or budget

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Rarely</th>
<th>often</th>
<th>very often</th>
<th>always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financially illiterate</td>
<td>58</td>
<td>34</td>
<td>25</td>
<td>5</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>38.67%</td>
<td>22.67%</td>
<td>16.67%</td>
<td>3.33%</td>
<td>18.67%</td>
</tr>
<tr>
<td>Financially literate</td>
<td>61</td>
<td>36</td>
<td>28</td>
<td>35</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>35.88%</td>
<td>21.18%</td>
<td>16.47%</td>
<td>20.59%</td>
<td>5.88%</td>
</tr>
</tbody>
</table>

Chi-square = 28.02, P<0.05
Results from table 5d show that on the average 61.34% of the financially illiterate students never or rarely use spending plan or budget whilst only 22% acknowledged the use of spending plan or budget to cut down on excesses. Similarly, findings from the results also suggest that about 57.06% of the financially literate students do not use spending plan as expected. Whilst only 26.47% agreed to have used spending plan or budget. These differences inherent in the student’s responses are significant at 5% level which suggests that spending plan on the average is not well utilized by the students and hence influences the extent of their money management.

4.8.6 Students keep track of expenditure and income

Table 5f: Keeping track of expenditure and income

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Rarely</th>
<th>Often</th>
<th>very often</th>
<th>always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financially illiterate</td>
<td>25</td>
<td>31</td>
<td>51</td>
<td>5</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td>16.67%</td>
<td>20.67%</td>
<td>34.00%</td>
<td>3.33%</td>
<td>25.33%</td>
</tr>
<tr>
<td>Financially literate</td>
<td>54</td>
<td>2</td>
<td>25</td>
<td>32</td>
<td>57</td>
</tr>
<tr>
<td></td>
<td>31.76%</td>
<td>1.18%</td>
<td>14.71%</td>
<td>18.82%</td>
<td>33.53%</td>
</tr>
</tbody>
</table>

Chi-square = 52.28, P<0.01

Students are asked if they keep tracks of their expenditures and income. Findings from the results show that 37.33% of the financially illiterate students do not keep track of their spending and income whilst 28.67% assumed to have kept track of their incomes and spending patterns. On the financially literate students, the results show that 52.35% do keep track of their finances whilst 32.94% do not or rarely keep track of changes in their spending pattern. The significant chi-square reveals that there are substantial differences in their responses at 0.01. This may be attributed to the fact that most of these students are in the boarding houses and hence have to manage their
expenses and income well since they are not allowed to go home as frequent as the non-boarding students.

4.9 WHERE STUDENTS’ WANT TO IMPROVE THEIR FINANCIAL KNOWLEDGE

Students asked where they intend to learn or increase their financial knowledge. The results show that most of the students like to learn from the schools or books as part of their academic training. However, the results further show that only 40 of the students agree to learn from their parents. These findings can be attributed to the fact that most parents are busy and hence do not create the opportunity for their wards to discuss financial issues with them. Also, 16 and 78 of students prefer to learn from the media and financial institutions.

<table>
<thead>
<tr>
<th>Table 7: Where students expect to learn financial knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents</td>
</tr>
<tr>
<td>Financial institutions</td>
</tr>
<tr>
<td>Media</td>
</tr>
<tr>
<td>Job/ life experience</td>
</tr>
<tr>
<td>School/ books</td>
</tr>
</tbody>
</table>
CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATION

5.0 INTRODUCTION

The aim of the study is to assess the financial literacy of senior high school students within the Kumasi Metropolis. With emphasis on the personal finance literacy including general knowledge and savings and borrowing, 320 students are selected for the survey for which they are asked to answer basic money management questions. In addition, the study examines whether some group of students are relatively more knowledgeable than others. Finally, the study examines how a student’s knowledge influences his or her opinions and decisions on personal finance.

5.1 SUMMARY OF FINDINGS

Using survey data on 320 senior high school students, the findings show that out of the 320 respondents, 62.8% are male students whilst 37.2% are female students respectively. The results also show that in terms of student’s educational background, majority of them are non-business majors representing 60% whilst the remaining 40% are business students pursuing business course and economics.

From the ANOVA perspective, the findings reveal that there are significant disparities in the extent to which students’ academic background, class rank, age and gender influence their general knowledge, savings and borrowing as well as their overall financial literacy. The results show that business students are more financially literate at 1% significance level. Although the results show that class rank does not influence their overall financial literacy, it has an impact on the general knowledge, savings and borrowing. Also, on the age differences, the results show that student’s age influences their savings and borrowing knowledge but not their general knowledge since they do
not have work experience to cushion their financial literacy level as evidenced in Chen, Volpe and Pavlicko (1996). The results also suggest that the students lack the basis of money management. For instance, the results on the percent score show that the students scored more in savings and borrowing questions than the general knowledge questions. This finding can be attributed to the fact that most of the savings and borrowing questions are basic business knowledge that are in the academic curriculum such as computation of interest rate, loan guarantee, compound interest and credit worthiness. The overall students’ performance in the questions is below average as the overall mean of 48.7% is below the benchmark of Chen, Volpe and Pavlicko (1996). To complement the ANOVA findings, logit regression is used and the findings from it confirm findings of the ANOVA suggesting that in most case students’ academic rank influences their financial literacy. This can be that as the student progresses, the student becomes exposed to certain financial management issues that are treated in the curriculum. Unlike fathers’ occupation, the results on the student’s mother’s occupation have influence on the students’ financial literacy. Chen and Volpe (1992) note that students from wealthy homes are exposed to money management and hence expected to make prudent financial decisions.

On the students opinions concerning whether financial management and practice, personal finance opinions and exposure to financial and monetary issues are observed, the results show that most of the financially illiterate students to not observe any of these practices. However, few of the financially literate students are found to disagree with most of the statements. In terms of spending plan or budgeting, the findings show that almost all the students both financially literate and illiterate do not spend within their budgets. This however may influence their future financial lifestyle and
decision making. This will therefore increase the tendencies for them to make mistakes in the real world.

5.2 CONCLUSION

From the findings of this study, a conclusion can be drawn that senior high students in Ghana are not knowledgeable about personal finance. This study then suggests that senior high school students in Ghana lack adequate financial literacy which is consistent with the findings of several academic works conducted on the topic globally. Several studies have acknowledged very low levels of financial literacy among senior high school and college students as they tend to fail financial literacy test (Avard et al., 2005). The incompetency exhibited by the senior high school students therefore limits their ability to make sound financial decisions. As indicated in the literature, people with low financial literacy are more likely to have financial related issues in the real world (Lusardi and Turfano, 2009). The low level of financial literacy could also make small financial issues become overwhelming which could turn into financial stress and consequently affects the other aspects of live such as personal relationships or performance at work. The low level of financial literacy and its consequences then show the need for stakeholders in educational system to put policies in place to ensure that the level of financial literacy among senior high students in Ghana is improved since financial literacy has essential implication for future behavior (Lusardi and Mitchell 2006).

5.3 RECOMMENDATIONS

The findings from this study indicate that there are some doubts on the curriculum used in senior high schools as to whether the curriculum exhaust personal finance management as a course studied in senior high schools. Although the government has
indicated the need for personal finance course in senior high schools, the time is due for stakeholders in the educational system of the country to introduce more and elaborated personal finance courses in the academic curriculum so as to expose the students to the basic financial concepts which would enable them to improve their financial decision making later in life. Also, since most of the students want to learn through the schools, on the job training and from financial institutions, it is recommended that the students are given the chance to undertake internship courses with the financial institutions to build their financial knowledge capacity. Workshops through collaborations with the Ministry of education and financial institutions can be facilitated to provide seminars on the need for financial literacy amongst senior high students.

In addition, parents are advised to have adequate time to discuss financial issues with their wards as “charity begins at home”. Exposing students to the importance of financial literacy would enable them to instill that discipline into the students at early age. The government must therefore use the financial literacy week introduced in the country as a platform to educate parents on the need for financial literacy.

This study could also be extended to other parts of the country so as to assess the level of financial literacy among senior high students from different perspective. Although this study gives the true reflection of the level of financial literacy among senior high students, the study focused on Kumasi metropolis. It is therefore important that any future study on the topic should be carried out in some new areas of the country and also a larger sample size must be used for the study.
REFERENCES


Public Economics, 80, 435-465


the Journal of Consumer Affairs, 40, 208-235.


APPENDIX
KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF GRADUATE STUDIES
MBA QUESTIONNAIRE

TOPIC: FINANCIAL LITERACY AMONG SENIOR HIGH SCHOOL STUDENTS: EVIDENCE FROM GHANAPREAMBLE

The main purpose of this study is to assess the financial literacy of senior high school students in Ghana. The study is mainly for academic purposes. Participants are assured of utmost confidentiality regarding information provided by them. This survey is intended to measure senior high school students' knowledge of personal finance. The results will be used to help students improve their knowledge and senior high schools improve their curricula.

DIRECTIONS: Please indicate your response to each question by selecting the most appropriate answer for each question.

I. ABOUT YOURSELF

1. Indicate the name of your school.................................................................

2. What category does your school fall? Public school [ ] Private school [ ]

3. What is your class rank?
   A. 1st Year
   B. 2nd Year
   C. 3rd Year
4. What is your age?

5. What is your gender?
   A. Male   B. Female

6. What is your field of study at Senior High School?
   A. Business
   B. General arts with economics
   C. General arts without economics
   D. Sciences
   E. Visual Art

II. GENERAL PERSONAL FINANCE KNOWLEDGE

7. Personal finance literacy can help you
   A. Avoid being victimized by financial scams.
   B. Learn the right approach to invest for your future needs and buy the right kind of insurance.
   C. Lead a financially secure life through forming healthy spending habits.
   D. Do all of the above.
   E. Don't know

8. Personal financial planning involves
   A. Establishing an adequate financial record keeping system.
   B. Developing a sound yearly budget of expenses and income.
   C. Preparing plans for future financial needs and goals.
   D. All of the above.
   E. Don't know.

9. A personal budget will help you
   A. allocate future personal income towards expenses
   B. prioritize your spending
   C. monitor the sources of your income
   D. all of the above
   E. don't know
10. **Which of these can be turned into cash easily?**

A. Money in a fixed deposit account.
B. Money in a current account.
C. A car.
D. A computer.
E. Don’t know.

11. Imagine that the interest rate on your savings account was 10% per year and inflation was 11.5% per year. After a year you will be able to

A. buy more than today with the money in this account
B. the same as today with the money in this account
C. less than today with the money in this account
D. buy more of some goods and less of others
E. don't know

**III. YOUR KNOWLEDGE OF SAVINGS AND BORROWING**

12. **Which account usually pays the MOST interest?**

A. Fixed Deposit
B. Savings Account
C. Current Account
D. Don't Know

13. If you guarantee a loan for a friend, then

A. You become responsible for the loan payments if your friend defaults
B. It means that your friend cannot receive the loan by himself
C. You are entitled to receive part of the loan
D. You are in a better position to earn a personal loan
E. Don't Know
14. Suppose you had a GH₵100 in a savings account and the interest rate was 10 percent per year. After 1 year, how much do you think you would have in your account?

A. more than a GH₵110  
B. exactly a GH₵110  
C. less than a GH₵110  
D. the same as your savings of GH₵100  
E. don't know  

15. You need to borrow some money. Which of these sources is likely to charge a higher interest on the loan?

A. Borrowing from the SSNIT Student Loan Scheme.  
B. Borrowing from the established Banks.  
C. Borrowing from a private money lender  
D. Borrowing from parents  
E. Don’t know.  

16. An overdraft

A. Occurs when you write a GH₵1,000 cedi cheque when you have GH₵500 in your account.  
B. Is a stop-payment order written by the payee?  
C. Will result in fines.  
D. All of the above.  
E. don't know  

17. The MOST important factor that a lender/bank uses when deciding whether to approve a loan

A. Marital Status  
B. Education and Occupation  
C. Bill-paying record and income  
D. Age and gender  
E. Don't Know
VI. YOUR PERSONAL FINANCE OPINIONS, DECISIONS AND PRACTICE

PERSONAL FINANCE OPINION - Tick as appropriate using ×

Using the scale given below please rank the importance of the items numbered from 18 to 20

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Unimportant</td>
<td>Unimportant</td>
<td>Not Sure</td>
<td>Important</td>
<td>Very Important</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Opinion</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 Maintaining adequate financial records</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19 Spending less than your income</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 Planning and implementing a regular investment program</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

PERSONAL FINANCE DECISIONS

21. You have saved GHS 12,000 for your university expenses by working part time. Your plan is to start university next year and you will need all of the money you have saved. Which of the following is the safest place for your university money?

A. locked in her wardrobe at home
B. stocks
C. corporate bond
D. treasury bills
E. none of the above
22. Many people put money aside to take care of unexpected expenses. If you want to put money aside for emergencies, in which of the following forms would it be of LEAST benefit to you if you needed it right away?

A. invested in a down payment of the house  
B. current account  
C. stocks  
D. savings account  
E. treasury Bills

23. You have just graduated from university and found a job earning GH¢28,000 per year. You will pay GH¢600 per month for five years for student loans. What should you do to improve your financial health?

A. Cut expenses and use your savings to pay down debt  
B. Keep the same spending pattern as in the past  
C. Apply for a consumer loan for a new car  
D. Eliminate debt by filing personal bankruptcy  
E. Use your earnings to pay for a holiday abroad

PERSONAL FINANCIAL MANAGEMENT PRACTICES - Tick as appropriate using ×

<table>
<thead>
<tr>
<th>Practice</th>
<th>Never</th>
<th>Rarely</th>
<th>Often</th>
<th>Very Often</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>24 I regularly set aside money each month for savings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25 I set aside money for future needs/wants</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26 I compare prices when shopping for major</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
expenses

27. I use a spending plan or budget

28. I always keep track of my expenditure and income

VII. EXPOSURE TO FINANCIAL AND MONEATARY ISSUES

29. Which of the ten regions of Ghana have you lived most of your life? *(If you are foreign student, please write foreign and ignore)*

30. Have you lived MOST of your life in the Capital Town of the region in Q33 above?

   Yes [ ] NO [ ]

31. What is the highest level of schooling your father has completed?

   [ ] None/Junior Secondary School or Middle School
   [ ] Senior High School or equivalent
   [ ] Training college, Nursing training college, Polytechnic or equivalent degree
   [ ] Bachelor's degree
   [ ] Masters, doctorate, or professional degree like medical doctor, veterinarian, or lawyer
   [ ] Other (specify): ..........................................................

32. What is the highest level of schooling your mother has completed?

   [ ] None/Junior Secondary School/Middle School/below
   [ ] Senior High School or equivalent
   [ ] Training college, Nursing training college, Polytechnic or equivalent degree
   [ ] Bachelor's degree
   [ ] Masters, doctorate, or professional degree like medical doctor, veterinarian, or lawyer
   [ ] Other (specify): ..........................................................
33. What kind of financial accounts do you have? (Check all that apply)

None [  ] savings [  ] current account [  ] fixed deposit [  ] mutual fund [  ] stock [  ] bond [  ]

Other(s) (specify):............................................................................................................................

34. Father's main occupation currently or before retirement

Unemployed [  ] Self Employed [  ] Employee of an organization/somebody [  ]

35. Mother's main occupation currently or before retirement

Unemployed [  ] Self Employed [  ] Employee of an organization/somebody [  ]

36. How often did your family (parents/guardian) discuss finances in the house?

Never [  ] Rarely [  ] Often [  ] Very Often [  ] Always [  ]

37. What kind of financial accounts do your peers have? (Check all that apply)

None [  ] savings [  ] current account [  ] fixed deposit [  ] mutual fund [  ] stock [  ] bond [  ]

Other(s) (specify):............................................................................................................................

38. How often did your peers discuss money management with you?

(I.e. investment, savings, borrowing, budget)

Never [  ] Rarely [  ] Often [  ] Very Often [  ] Always [  ]

39. Do you enjoy discussing with your peers about money management issues?

Never [  ] Rarely [  ] Often [  ] Very Often [  ] Always [  ]

40. Do your peers influence you in making financial decision?

Never [  ] Rarely [  ] Often [  ] Very Often [  ] Always [  ]

41. Where do you like to learn/increase your financial knowledge? (Check all that apply)
Parents [ ] Friends [ ] School [ ] Books [ ] Media [ ] Job [ ] Life experience [ ]
Financial institutions [ ] Other(s):..........................

THANK YOU VERY MUCH FOR PARTICIPATING IN THIS SURVEY