

**AN ANALYSIS OF PERSONAL FINANCIAL LITERACY AMONG
POLYTECHNIC STUDENTS- A CASE OF KUMASI POLYTECHNICS**

BY

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DEGREE OF**

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DECLARATION

I hereby declare that this thesis is my own work towards the Master of Business Administration (Finance Option), and to the best of my knowledge, it contains no materials previously published by another person nor materials which has been accepted for the award of any degree of the University or any other university, except where due acknowledgement has been made in the text.

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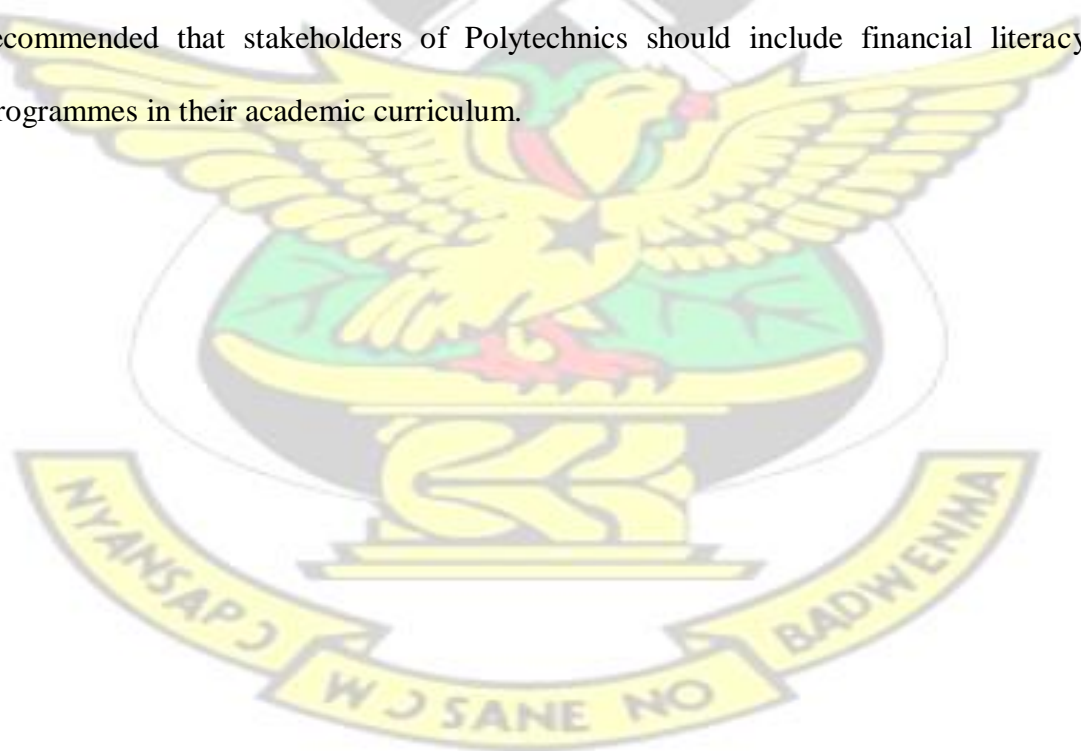
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ABSTRACT

The study assesses the level of financial literacy of Polytechnic students in the Kumasi Metropolis. The study surveyed 120 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 participants answered about 40.71% of the questions correctly. None of the mean scores for financial literacy categories were above 60%. The results also reveal that many of the students are familiar with issues relating to simple interest calculations and loan guarantee. In contrast, the students are less knowledgeable and inexperienced with issues concerning personal financial planning and budgeting, mutual funds and risk return associated with investment decisions. This led to the conclusion that the students are not well-informed about personal financial literacy issues. It is therefore recommended that stakeholders of Polytechnics should include financial literacy programmes in their academic curriculum.



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Early researchers in the area of financial literacy are not left out in the picture.

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To God is all the glory!

DEDICATION

This piece of work is dedicated mostly to my wife, Mercy Dzorshie and my children, Prestig, Zyl and Laura for the sacrifices made during this graduate programme. Your support, encouragement, and constant love have sustained me. I also dedicate it to my elder brother, William K. Tiboh who played parental role in my life to date and finally to my humble parent, Adjo Sofeda and E.Y. Tiboh (late) for the gift I was born with. I made it to this level out of twenty-one blood brothers and sisters not by might but by the power of God.



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CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND TO THE STUDY

The world has become a global village wherein no nation is self-sufficiently living on its own island unaffected by emerging phenomenon in other countries. Nations depend on each other and as such being affected by situations prevalent in one or more other countries. Globalization has resulted into complexities in the arena of finance making the global marketplace increasingly risky and unpredictable. That notwithstanding, new financial products are developed and made available to the financial market every now and then through all manner of promotion strategies. In recent times, a lot of efforts have been made to motivate people to involve themselves in investment activities directly through several fora including the internet while best financial strategic discussion has continuously become the everyday talk among well to do people (Beal and Delpachitra, 2003). Literacy programmes in Finance are therefore so paramount that, its effects on religions" wellbeing are well-documented (Badejo-Okusanyai, 2010). Our society for these reasons need to be well-informed about these developments not leaving out simple and basic financial knowledge essential to social and business lives. Due to the fact that sophistication in both capital and money markets has increased and families have now taken the challenge in the management their own financial resource, the education to acquire financial knowledge is necessary for the assurance of safeguarding the interest of both the investor and consumer as well as to ensure efficient workings, not only of funds markets, but the entire economic functioning (OECD, 2009).

Individuals are confronted with a wide-range of financial decisions every day that could impact their lives significantly now and in the future. They are faced with questions on their mortgages, savings and investments. Many financial difficulties among households, is due to the inadequate knowledge in financial matters, and thus affecting adversely productivity of a lot of firms (Fletcher, Beebout, and Mendenhall, 1997; Grable and Joo, 1998; Wechsler, 1997). In United States of America, the Federal Reserve Board took the challenge in attempt to address the low financial skills of college leavers in 1995 through funding the Jump\$tart Coalition for Personal Financial Literacy (www.jumpstart.org, 2002). However, a press statement in Washington, DC, 2008 on the Jump\$tart Coalition's biennial survey, funded by the Merrill Lynch Foundation, reported a decrease in literacy levels from previous survey conducted and thus emphasizing the need for a continuous literacy education programmes.

Financial literacy equipped individuals with the necessary knowledge, ability and tools to make informed financial decisions with confidence, to manage personal wealth with high degree of competency and heighten the efficiency in the demand for best financial products (Ali, 2013). When individuals acquire knowledge about savings and apply same, funds are made available to firms by means of loans from financial institutions. These loans are used to finance productions and it does not only increase the gross domestic product (GDP) but also create employments among many others.

On the contrary, the manifestations of insufficient personal financial literacy among the youth include the use of personal loans for irresponsible spending on items such as highly complex and costly phones and tablets. Other manifestations include unwholesome commitment of funds to acquire wealth rapidly, making risky

investments without much consideration to the requisite funding demanded and undertaking of wrong vehicle-leasing contracts, to mention but few (Oppong and Kasanba 2013). Inadequate Financial literacy may negatively influence the everyday life of society financial management and impair the drive to save for the future goals such as mortgage contracts, payments for advanced education, to mention but few.

Taking it from the angle of tertiary students and for that matter Kumasi Polytechnic students, it is obvious that decisions of students on financial matters while in school have a telling effect on their financial status thereafter. Furthermore, their academic life and performances is affected by financial situation whilst in school. Lyons (2003) reports that poor financial situation of one in three students is probable to a large extent affect his/ her potentials to run the course of a university degree. In another breath, Bodvarsson and Walker (2004) also report that, having control many factors that impact on students' academic output, those under partial sponsorship from their guardians for academic materials have high failure probabilities in courses, earn lower GPAs and placed on academic probation. Seeing the insufficient financial knowledge and management skill deprivation is worldwide issue which has attracted so much attention in western countries, it is therefore, timely for the youth in most developing countries like Ghana to undergo some form of personal financial literacy education. Though the concept of finance is broad, the basics necessary for day-to-day financial decision making in the lights of management of money, savings and borrowing, insurance as well as simple investments should be offered the youth.

The study assesses the financial literacy situations among Kumasi Polytechnic students.

1.2 STATEMENT OF PROBLEM

Efforts have been made by different researchers and academicians to investigate into the concept of financial literacy at the personal level. Most of these prior studies have been targeted at students and the elites in the society (see Chen and Volpe. 1998; McMillon 2004; Couturier and Cunningham. 2006). They reveal that limited financial knowledge has important implications for individual welfare. Notwithstanding, a lot has been done to create awareness of the Ghanaian financial system to encourage investment culture among tertiary students in the economy. In Ghana as of now, the ministry of finance and economic planning has set aside a week every year to educate the general public on the importance of financial literacy for poverty reduction and economic development. In line with current currency depreciation and macroeconomic instabilities, Atakora (2013), Oppong-Boakyie and Kansanba (2013) postulate that adequate financial knowledge and skills needs to be disseminated to students in the tertiary institutions to make informed judgments and decisions on managing their finances as well as understanding details of financial products and investments opportunities which has lasting potential in curbing the bizarre economic situation of our country.

Several financial literacy programs and researches have been centred on universities to the neglect of the Polytechnics in Ghana; meanwhile, all these students in both universities and polytechnics are confronted with financial decisions. Although, prior study may have not realized the financial literacy knowledge gap existing between the Ghanaian universities and the polytechnics clearly, much efforts needs to be put into examining the information gap since the polytechnic students are also confronted both directly and indirectly with financial issues in their daily activities. Hence, this study aims at determining the level of financial literacy among polytechnic students in

1.3 OBJECTIVES OF THE STUDY

The general objective of this study is to ascertain the level of financial literacy among polytechnic students in Kumasi. At the end of the study, the researcher expects to achieve the following specific objectives:

1. To examine the knowledge of Polytechnic students in money management.
2. To examine students' understanding of savings, borrowing, insurance and investment.
3. To examine factors that hinder the students access to acquire financial literacy information outside the classroom.

1.4 RESEARCH QUESTIONS

To achieve the aforementioned aims, the questions below must be answered:

1. What is the level of knowledge of the students in money management?
2. To what extent do the students understand the concept of savings, borrowing, insurance and investment?
3. What factors hinder students' access to acquire financial literacy information outside the classroom?

1.5 JUSTIFICATION OF THE STUDY

The Polytechnics' graduates like university graduates find themselves in the job market where many of them get lucrative jobs. It therefore meant that they receive good financial rewards that must be properly managed to have positive effect on our economy as a whole. Students must have a good experience in managing their personal finance before being entrusted with corporate funds as "charity begins at home". The study

ascertains the financial literacy level of Kumasi Polytechnic students and its benefits to various stakeholders.

As stated above, financial literacy is essential for the students. A financially literate student makes well-reasoned and informed financial decisions. To this end, the results of this study will come in-hand to aid students in financial matters.

Additionally, the study will assist the Polytechnic Council and the Academic Board in their decision making processes regarding financial literacy programmes implementations. As policy makers of the polytechnic, results from this study will provide basis for the decision making on programme outlines that will be designed, approved and implemented by the Polytechnic Council and the Academic Board.

Furthermore, the Kumasi Polytechnic Finance Directorate, with the aid of this study, will be enabled to device best strategies to reduce students' default rate and possible future bad debts. The results of the study will inform the finance directorate the students' level of financial literacy knowledge and related effects on their financial decision making processes. With such knowledge gathered from this study, the directorate can device appropriate mechanisms that can better serve the purpose of both the students and the school at large. The research also serves the first contribution and return to the Polytechnic for its full time sponsorship offered the researcher on the MBA programme.

Moreover, the study will bring students to best manage their students' loan repayment obligations with the Students Loan Trust (SLT) after graduation. This is possible when financial literacy gaps identified by the study are filled. The efforts needed by the SLT to recover students' loans subsequently will be minimal.

The education ministry shall be aided in its strategic decision making by the research as part of its effort in addressing generally low financial literacy level among the Ghanaian youth (Chowa et al, 2010). As the study unveil the financial literacy situation of the Polytechnic students, the Ministry may issue policy directives to improve the situation in relation to hours of credit the polytechnic must include in its curriculum to address financial literacy gaps.

Finally the results can serve as a guide for/to future researches and researchers in the area.

1.6 METHOD OF STUDY

The study is focused on financial literacy of polytechnic students in the Kumasi Metropolis. In order to achieve the objectives of this study, the students are categorized into three broad groups based on their programme of study. After which students are selected from each level of education. A total of one hundred and twenty students (120) are sampled from the overall population of the student body in the polytechnic, with forty (40) being selected from each category of the programmes of study. Questionnaires are then administered to them to solicit for information needed by the researcher. These responses served as the primary data source for the study. Secondary data from journals, articles, newspapers, internet materials and books were also relied on in drawing the conclusions of this study. The statistical technique used in the analysis is further discussed in chapter three.

1.7. SCOPE OF THE STUDY

The study is conducted in Kumasi Polytechnic located at the heart of the Ashanti regional capital, Kumasi, Ghana. Kumasi Polytechnic is one of the premier

Polytechnics with about ten thousand students” population. In 2014, Kumasi Polytechnic was adjudged the best polytechnic and eleventh best tertiary institution in Ghana, while it was positioned 194th globally (Tawiah, 2014). Thusly, Kumasi Polytechnic appears to spearhead polytechnic education in the country. To this end, it is very appropriate to restrict the study to this institution given the limited time for the research work. The institution is made up of six faculties and two institutes. It offers programmes including non-tertiary programmes like Diploma in Business Studies, Higher National Diploma (HND) and Bachelor of Technology (Btech) programmes. The study examines sample students across the various academic divisions

1.8 LIMITATIONS OF THE STUDY

The finding and conclusion of the study is arrived at based on data collected from a sample size of one hundred and twenty students selected from the various faculties out of the total students” population in the Polytechnic. The limitation inherent in this sample size is that, the responses might not be very representative of the population. To mitigate this limitation, the researcher adopts quota sampling technique. It is the researcher”s hope that future researchers will expand their sample sizes so as to minimise this limitation. Another inherent limitation is the scope of the study. The choice of Kumasi Polytechnic as the case study serves as a limitation. The results of this study conducted on this case study might not be readily replicable in other polytechnics within the country. Such phenomenon obstructs interpretations and analyses that can be made from the results and the generalization of the findings. In other words, the results cannot easily be generalized unless certain adjustments are made to account for unique characteristics of the various institutions under consideration.

Again, data is collected through questionnaire but not from the organization's existing records. So there is the possibility that some respondents provided false information. To mitigate the problem, questionnaires are administered to students by the researcher during lecture periods with the help of lecturers who engage the students during moment of questionnaire administration. Students are advised to leave out questions they have no idea about.

1.9 ORGANIZATION OF THE STUDY

The study is arranged in five chapters. The introduction to the study as well as problem statement, summary of the study objective, scope and justification including limitations all come under chapter one. Under chapter two review of literature in relation to the subject area under study is considered. The third chapter dealt with indepth methodology used to arrive at the conclusions. In Chapter four, the data collected is analysed, presented and discussed the results in respect of the objectives of the study. The fifth chapter which is also the last chapter presents the summary, conclusion and recommendations of the study.

CHAPTER TWO

LITERATURE REVIEW

2.0 INTRODUCTION

Chapter one focused on the general introduction and context of the research divided into study background, the problem statement of the study, objectives, and significance of the study, research questions, methodology, the scope of the study, limitation of the study, and lastly how the study is organized. Prior literatures on financial literacy relevant to study are reviewed in this chapter; its importance and other pertinent issues among students.

2.1 FINANCIAL LITERACY

Financial literacy means different things to different people, and this is reflected most clearly in the many definitions used in the literature (Wothington, 2006). To some people, financial literacy is a concept that widely encompasses insight to economic issues in relation to how decisions of household are influenced by economic matters. To other people, the same financial literacy focuses in narrow way on basic cash management: savings, investment insurance and budgeting (Hogarth, 2002).

Noctor, Stoney and Stradling (1992) define financial literacy as one's ability take effective decisions and make sound judgements concerning the use and best practices in handling money. Schagen and Lines (1996) extends this definition through their proposal that a person judged financially-literate when enjoys a range of skills and attitudes consisting of: an understanding of major concepts central to money management; a practical experience with financial institutions and their operations, a range of analytical and synthetical abilities, both specific and general; and behaviours that pave way for responsible management of financial affairs.

Regardless of the various differences in the various definitions, the consistencies are very notable. Hogarth (2002) describes the consistencies in behavioural terms, stating that individuals who are financially literate are: 1) knowledgeable, educated, and informed on the issues of managing money and assets, banking, investments, credit, insurance, and taxes; 2) understand the basic concepts underlying the management of money and assets; and 3) use that knowledge and understanding to plan and implement financial decisions.

However, Natalie, Newton and Chrisann (2010) also examine financial literacy as a simple way of managing money through the process of budgeting, saving and investment. Thus, financial literacy increases the awareness of the students to make effective money management decisions in every economic activity. As argued by Sandra (2011) personal finance knowledge increases the skill set as well as the attitudinal character inherent in an individual towards money management for his or her lifetime welfare. In line with this argument, Lusardi and Mitchell(2014) note that though being literate financially is vital for ones" welfare, the ability to understand the basic tenets concerning money management becomes an issue amongst modern day students since the curriculum of most educational institutions do not stress on the reality aspects of personal finance management.

Consequently, Remund (2010) examines that the understanding of fundamental financial concepts is imperative if students are to have the confidence and courage to manage their personal finances as well as make meaningful financial decisions for their welfare in the future. Even though there have been varied views on financial literacy from different individuals and institutions, they are all directed at how individuals can manage the various financial resources available to them for their own well-being and progress.

2.2 THE NEED FOR FINANCIAL LITERACY

The need for financial skills has grown rapidly over the last few decades because most financial markets on the global front have been deregulated and credit has become more accessible as financial institutions compete strongly with each other for market share“ (Beal and Delpachitra, 2003). Moreover, the development and marketing of financial products and services has grown rapidly. For example, credit cards have become more available, there is easier access to personal loans, interest free and other payment options, leading to an increase in spending on consumption and a rapid rise in both personal and household debt levels (Reserve Bank of Australia, 2005). As financial markets become more sophisticated and households assume a growing share of the responsibility and risk for financial decisions, financial education is necessary to ensure sufficient levels of investor and consumer protection as well as the smooth functioning, not only of financial markets, but also of the economy (OECD, 2009). Therefore, the need for financial literacy cannot be overstated. There are several compelling reasons that require financial literacy. An early grounding in financial literacy sets the stage for better financial decisions later in life. It is very essential to be financially literate before engaging in any financial contract but not afterwards. People do not retire many times or buy houses often. Without some basic knowledge, financial experience can be difficult for one to read and understand.

Globally, governments are encouraging their citizens to take and accept more responsibility for their retirement incomes and to move away from public pensions (Beal and Delpachitra, 2003). People need to be more knowledgeable about retirement funds and how they operate, including an understanding of their own and their employer“s responsibility, as well as the many options that are available to them (Abetz, 2005). There is a classical case in Ghana as labour unions have been seeking

information from the government about how the 2nd tier pension deductions are being invested. Young people in particular must understand the basics of investing and planning for the future, including the relationship between risk and return and the diversity between short-term and long-term investments, and the ramifications of not planning adequately for their retirement.

Possessing quality financial literacy skills is essential to avoid and solve a plethora of financial problems, and live a prosperous, healthy and happy life (Commonwealth Bank Foundation, 2004b). Financial problems are mostly the bedrock for divorce, mental illness and a variety of other unhappy experiences (Kinnunen and Pulkkinen, 1998; Yeung and Hofferth, 1998; Cleek and Pearson, 1985). In addition, financial hardship can increase isolation, emotional stress, depression and lower self-esteem, which, in turn, can generate or exacerbate marital tensions that lead to divorce (Wolcott and Hughes, 1999).

According to Duncan (2009), the survey from jumpstart coalition shows that the small groups of people who are deemed to be financially literate are disproportionately males from college education families. Data from the most wave of the National Longitude Survey of Youth (2009) shows that young adults (23-28 years old) who are financially literate have college educated mothers and have parents who stocked their retirement savings when these young adults were teenagers. While this might be good news for these limited geographic groups, it should be noted that everyone - even those without highly educated and financially sophisticated parents - is faced with financial decisions and as such we all need the skills to make sound decisions.

Some people are also of the view that financial literacy is only relevant to those who have accumulated wealth. This is indeed from a narrow point of view because

individuals must make decisions not only about their assets but also about their debt or liabilities. Moreover, debt is present, even pervasive, across all income strata. Thus, if a person is literate in this capacity, then he knows how it applies to his everyday life situations. Financial literacy helps to maintain a proper standard of living. When one knows how the „system“ works, then there would be less risk of screwing up one’s finances. By saving up for those luxurious items wanted but that one do not actually have the right to own them at that moment, one is able to get them overtime „without breaking the bank“. An individual can also choose that bank’s credit card or loan that will best serve the needs and still save most money.

On a positive note, financial literacy will continue to be a prominent research topic due to its unparalleled significance and it is anticipated that the focus will lean towards the implementation and evaluation of strategies to improve the financial literacy levels of certain cohorts of populations where a lack of financial knowledge and skill has been identified by previous research (Ray Morgan Research, 2003). Also, the increasing number of people with low levels of financial literacy poses a serious problem for both the economic well-being of nations and the personal wellbeing of such individuals (Morton, 2005; Ray Morgan Research, 2003). Research is required to determine appropriate and accurate benchmarks for the on-going measurement of financial literacy. In addition, continuing changes and advancements in technology, as well as requirements regarding saving, borrowing, investing, retirement, medical and insurance will provide further impetus for financial literacy research.

2.3 BENEFITS OF FINANCIAL LITERACY

Research has shown that financial literacy is beneficial for individuals and families. It is often said that financial literacy increases people’s chances for savings and

investment, getting out of debt, spending less than they earn, and living on their budget. However, prior studies on financial literacy reveal that financial education and skills motivate and encourage both consumers and investors to increase their understanding of products and service rendered by financial institutions in a country. Also, investors are able to overcome the problem of financial risks by investing their moneys in riskless ventures to secure their invested capital.

Moreover, the chances for people to be bankrupt and require government assistance are reduced through financial literacy. Joo and Grable (2004) find that financial education smoothen the playing field with respect to gender differences and it is effective in changing knowledge, attitudes, and behaviour. Increasing financial literacy is a way to increase empowerment and improve the quality of life (Knapp, 1991; Voydanoff, 1990).

More often than not, energy, thought, and time are spent pursuing money without limiting the unnecessary waste of money. However, when individuals gain more knowledge and more positive attitudes towards money, they tend to make better decisions which save resources and improve their situation. Financial literacy further promotes self-confidence, control and independence. This is partly due to the fact that when an individual knows how to function in a complex marketplace, he tends to feel in control. When consumers feel they are in control of their finances, they are more likely to participate in the marketplace (Knapp, 1991).

Another benefit of financial literacy to individuals is the enhancement of their physical, emotional and psychological well-being. According to Knapp (1991), financial literacy goes beyond knowledge about money to include being a wise consumer of food (increasing one's health) and other purchases such as cars (affecting their safety and

the environment). Thus increasing financial literacy can affect a person's physical health and safety as well as his psychological well-being.

Moreover, financial literacy can also lead to an increase in marital satisfaction. Kerkmann, Lee, Lown and Allgood (2000) discover from their research that behaviours and perceptions of finances, as well as problems and their perceived magnitude, are significantly related to marital satisfaction. Some researchers have suggested that financial problems are one of the leading causes of marital conflict and divorce (Amato and Rogers, 1997; Cleek and Pearson, 1985). Conger, Elder, Lorenz, Conger, Simons and Whitbeck, (1990) find that economic difficulties affected family relationships through increased hostility in marital interactions while limiting warm and supportive behaviours expressed by the couple. Financial behaviours are important in marriage because good financial behaviours such as budgeting, paying down debt, saving, and spending less than one earns increase marital satisfaction more than just what one earns (Kerkmann et al, 2000).

Consequently, Holzmann (2010) argues that financial literacy can increase financial inclusion in the society if the inhabitants are financial literate. Thus, familiarity to financial issues affords the individual the opportunity to utilize financial services and products for which financial illiterate may have difficulty in its use. For instance, awareness of interest rate issues in the financial sector may help a financial literate person to take advantage to earn more money whilst the financially illiterate may still hold to the currency when it is profitable to invest to earn a return. Thus, financial knowledge increases the dynamism and progress of an economy hence the growth and development of the people in terms of welfare.

Notwithstanding, findings from Jappelli (2010) studies reveal that informed people are able to understand and criticize government policies. Thus, the case where the populace are not financial literate the government can use its discretion to implement certain financial decision which may hinder or constrain economic activities hence growth and welfare of the people. Specifically, improving financial literacy increases the extent of financial deepening in a country since well-informed populace are going actively participate in the expansion of the financial market hence trickle down the benefit to other industries and sectors of the economy.

2.4 THE CONCEPT OF SAVINGS

Saving simply refers to the portion of income not spent (CFA Institute, 2015). In an expanded form, the concept of savings represents the portion of disposable income that is not spent on consumption of consumer goods but accumulated or invested directly in capital equipment or in paying off a home mortgage, or indirectly through purchase of securities. Also, savings represents deferred consumption. Depending on the aim for saving, you can defer current consumption over a short or long time, for example, saving for a fridge can take a number of months, while saving for retirement will take much longer, probably an entire working life.

Saving leads to financial freedom as one does not need to rely on other people or financial institutions for money. Saving also gives a person the power to make future purchases in cash, which is cheaper than buying on credit and also earn interest on invested funds with financial institution. Savings options include fixed deposits, savings club, and retirement/pension funds (superannuation funds). An individual may choose to save with banking institutions, through post office savings account, savings club, insurance companies (e.g. life insurance), or retirement/pension funds.

In a paper titled “Saving and the effectiveness of financial education”, Lusardi (2003) asserts that, by offering financial education, both financial and total net worth increase sharply, particularly for families at the bottom of the wealth distribution and those with low education. This assertion is made on the premise that, people with low education tend to save little. Williams-Harold and Smith (1999) reported a survey on 500 teenagers about saving and investing. About 70% of them had a savings account, 11% owned equities and about 30% had sought financial advice. Even though 56% had taken a money-management class, only 31% reported being able to balance a bank account, 23% were familiar with use of credit cards, 12% were confident of their ability to decide among various bank accounts, 7% were aware of current interest rates and 9% were familiar with debit cards.

Further, Lorgat (2003) assesses that saving rate is weakening amongst young adults in developed economies as a result of government benefits. Thus, he noticed that young adults including students in the tertiary institutions borrow more than they can sustainable hence increasing financial stress after their education. Consequently, Atkinson and Kempson (2004) argued that such situation is in existence because of inadequacies inherent in the preparation of academic curriculums of tertiary institutions to include personal finance and money management issues that are seen in reality (see Anthes 2004). To buttress this argument, Kidwell and Turrisi (2004) examine that current financial difficulties in developed economies are due to the fact that parents do not inculcate into their young ones the habit of staying within their means hence we tend to find most young people having financial issues or difficulties in the society and expecting benefits from the state to cushion their livelihood. However, Chen and Volpe (1998) emphasises that spending pattern and decision making amongst students are predetermined by the kind of parents and wealth since children from wealthy families

tend to have more knowledge financially than nonwealthy kids in the developed countries.

2.5 THE CONCEPT OF BORROWING

Borrowing refers to the act of receiving something of value in exchange, usually of financial worth, for an obligation to pay back something of usually greater value at a particular time in the future. Borrowing is the temporary acquisition of money with the intent to repay the amount borrowed (Brealey, Myers and Allen, 2011). Simply put, borrowing is the act of present consumption for which future obligation is to be made usually at a price (interest expense). The most common form of borrowing happens between a consumer and a lending party usually a financial institution, either via a loan or another form of credit, such as a credit card. A loan is a contract between two parties: one party, the borrower, borrows money from another party, the lender, on the premise of repayment of the principal at a future date. The principal is the initial amount borrowed from the lending party. The lending party normally charges interest, usually a percentage of the principal, in addition to the initial amount over the course of the loan. Interest is the price of money.

Borrowing is beneficial as it gives you instant satisfaction by allowing you to purchase something such as a car or a house whose price is above your current financial capacity. For example, if you are taking out a loan to buy a house, it means that you can live in the house as you pay off the loan instead of renting while trying to save for a house. Also, if you borrowed money to start a business, you could use some of the profits from the business to pay off the loan. Few people can pay for everything they need with money taken from savings. But many more people can afford those purchases when they include borrowing as part of a sound financial plan. By planning your borrowing carefully, you'll find you can afford more of the things that are important to you while

you protect yourself against owing more than you can easily afford to repay. Lusardi and Tufano (2009) suggest that low financial literacy is associated with negative credit behaviours such as high-cost borrowing. Thus, having knowledge of borrowing is crucial, yet one's level of financial literacy is paramount to his/her credit behaviour. If consumers misunderstand how interest compounds he may borrow excessively (Stango and Zinman 2009), financial institutions whose profits are tied to borrowing are not incentivized to educate consumers in a way that would correct consumers' lack of understanding.

2.6 THE CONCEPT OF INSURANCE

Insurance is the main way for businesses and individuals to reduce the financial impact of a risk occurring (Chance and Brooks, 2011). Insurance is a special type of contract between an insurance company and its client in which the insurance company agrees that on the happening of certain events the insurance company will either make payment to its client or meet certain costs (Dorfman, 2008). For example, in a car insurance policy, the insurance company agrees that if the car is damaged, the insurance company will pay the cost of repairing it. Under an income protection policy, the insurance company agrees that if its client is unable to work, the insurance company will pay its client an agreed amount.

Insurance is designed to protect the financial well-being of an individual, company or other entity when an insured loss occurs. Some forms of insurance are required by law (statutory pensions, third party vehicle insurance – in Ghana), while others are optional (for example, private pension schemes, comprehensive insurance). Agreeing to the terms of an insurance policy creates a contract between the insured and the insurer. In exchange for payments from the insured, called premiums, the insurer agrees to pay the policy holder a sum of money upon the occurrence of the insured event. In most cases,

the policy holder pays part of the loss (called the deductible), and the insurer pays the rest. Examples of insurance products include car insurance, health insurance, disability insurance, life insurance, and business insurance.

Running a business of any kind involves risks. In finance, risk is usually grouped into systematic and unsystematic risk. The unsystematic risk can easily be diversified through diversified portfolios or operations (Watson and Head, 2007). On the other hand, systematic risk cannot be diversified. Businesses can reduce their unsystematic risks through insurance products (Dorfman, 20009). Whether it is the risk of fire, the risk of damage to exported goods or the risk of natural disasters, all these incidents have a financial impact on businesses when they occur. Most businesses take small steps to manage the effects of such risks. However, business owners also want to protect themselves against the financial consequences of something unfortunate happening, and this is where insurance comes in. In effect, the business can transfer the risk away from themselves to others at a cost (CFA Institute, 2015). Cutler (1997) concludes that the American public is not well informed about financial matters, especially long-term issues such as insurance, social security and health care.

2.7 THE CONCEPT OF INVESTMENT

In simple terms, investment refers to purchase of financial assets. Brealey et al (2011) defines investment as the commitment of money or capital to purchase financial instruments or other assets in order to gain profitable returns in the form of interest, income, or appreciation of the value of the instrument. Investment is related to saving or deferring consumption. They further explain that an investment involves the choice by an individual or an organization such as a pension fund, after some analysis or thought, to place or lend money in a vehicle, instrument or asset, such as property,

commodity, stock, bond, financial derivatives (e.g. futures or options), or the foreign asset denominated in foreign currency, that has certain level of risk and provides the possibility of generating returns over a period of time.

When an asset is bought or a given amount of money is invested in the bank, there is anticipation that some return will be received from the investment in the future. According to personal finance theories, an investment is the implementation of money for buying shares, mutual funds or assets with capital risk. Investments could take one of two forms; fixed income investments such as bonds, fixed deposits, preference shares, and Variable income investments such as business ownership (equities), or property ownership. Financial literacy is predictive of investment behaviours including stock market participation (van Rooij, Lusardi and Alessie, 2011, Kimball and Shumway, 2006; Christelis, Jappelli and Padula, 2006), choosing a low fee investment portfolio (Choi, Laibson and Madrian, 2011; Hastings and Mitchell, 2011), and better diversification and more frequent stock trading (Graham, Harvey and Huang, 2009).

DollarSense (1996/97) reported a simple survey of 1001 investors to determine their knowledge of and skill in selecting financial products. Eight basic multiple-choice questions were used. Baby boomers (aged 32-50 years at the time) scored relatively well, but both younger and older people did poorly. Men outstripped women in the „very knowledgeable“ category, whilst 39% of women fell into the least knowledgeable category with fewer than 50% correct. About 44% of over-65 years olds scored less than 50%.

2.8 EMPIRICAL EVIDENCE

The ability to manage personal finances has become increasingly important in today's world. People need to plan for long-term investments for their retirement and children's education. They must also decide on short-term savings and borrowing for a vacation, a down payment for a house, a car loan, and other items. Moreover, they must manage their own medical and life insurance needs. Unfortunately, studies conducted on Americans have proved that they have inadequate knowledge of personal finances (KPMG, 1995; PSRA, 1996, Oppenheimer Funds/Girls Inc., 1997). They fail to make correct decisions because they have not received a sound personal finance education (Hira, 1993; Hira and Mugenda, 2000).

Prior studies of high school students consistently find that they are not receiving a good education in personal financial fundamentals and have poor knowledge (Bakken, 1967; HSR, 1993; Langrehr, 1979). In a recent study of 1,509 high school seniors from 63 schools, Mandell (1997) reports an average correct score of 57% in the areas of income, money management, savings and investment, and spending. His conclusion is that students are leaving schools without the ability to make critical decisions affecting their lives. Danes and Hira (1987) also surveyed 323 college students from Iowa State University using a questionnaire covering knowledge of credit card, insurance, personal loans, record keeping, and overall financial management. They find that the participants have a low level of knowledge regarding overall money management, credit cards, and insurance. They also find that males know more about insurance and personal loans, but females know more about issues covered in the section of overall financial management knowledge. Married students generally are more knowledgeable about personal finance.

Volpe, Chen, and Pavlicko (1996) focus on knowledge of investment. They survey 454 students from a state university in the Midwest and find that the average correct score of the participants is 44%, suggesting that they have inadequate knowledge. They also find that male students are more knowledgeable than female students, and business majors are more knowledgeable than non-business majors. Huddleston and Danes (1999) examined the impact of a high-school financial planning program on a national sample of students in the USA. They found that teaching personal finance (PF) in high schools can increase financial knowledge and have a positive impact on both teenage financial behaviour and subsequent behaviour as adults. Further, they urged that PF become a mandatory component of consumer education in schools (Huddleston and Danes, 1999). At that time, only seven states of the 50 in the US required such programs.

How about adults, do they have a good command of personal finance and investments? Results of several studies suggest that they do not. Princeton Survey Research Associates (1997) surveys 1,770 households nationwide on their financial knowledge and find an average correct score of 42%. This result shows that household financial decision makers do not have a good grasp of basic finance concepts. In another study of 522 adult women, 56% are found not very knowledgeable about investing (Oppenheimer Funds/Girls Inc., 1997). Workers do not save adequately for retirement and make investment decisions that are too conservative. A KPMG (1995) survey of 1,183 employers finds employees contribute only about 5% of their income to 401K plans, although the typical plan allows a 14% contribution. The evidence indicates that employees are not maximizing their benefits.

Among the group of papers that investigate financial literacy, Schagen and Lines

(1996) undertook an investigation of financial literacy in UK adults for the NatWest Group Charitable Trust. In selecting their sample, Schagen and Lines (1996) recognised that some groups were particularly susceptible to difficulties with debt. These groups were: (a) young people aged 16-21 years in work or training, (b) students in higher education and not living at home, (c) single parents on benefits and (d) families living in subsidised housing. The selected sample included one-sixth selected from each of the above groups and one-third selected from the general public.

In the Schagen and Lines (1996) study, respondents were asked about their attitudes to saving and borrowing, their use of banks and building societies, how they managed their transaction accounts, who managed the money in family groups, and about their confidence in handling money matters. In addition, they were asked questions to test their knowledge of financial markets and instruments, of financial decision-making, of solving financial problems and of financial planning. Generally, Schagen and Lines (1996) found the general public were committed to saving and to avoid borrowing more than they could afford to repay. The majority with bank transaction accounts claimed to keep detailed records and most others said they knew roughly their current balances. They were reasonably confident in dealing with financial affairs. In contrast, single parents were least likely to be committed to saving and to have bank accounts. Almost all students had such accounts, but few kept good records. Students were least confident in dealing with financial affairs.

2.9 DETERMINANTS OF FINANCIAL LITERACY

Financial illiteracy is not only widespread; it is particularly acute among specific demographic groups and across certain geographical jurisdictions. According to a study done by Lusardi, Mitchell and Curto (2009), financial literacy is low among the young

but strongly related to socio-demographic characteristics and family financial sophistication. Such findings have very strong implications for stakeholders. From the findings, it is clear that, as individual ages, he or she is expected to increase in financial literacy level. Demographically, similar demographic characteristics have strong bearing on an individual's literacy level. There are also sharp gender differences in financial literacy, with women displaying a lower level of knowledge than men, particularly with regard to risk diversification (Lusardi and Mitchell, 2008; Mireku, 2015). Lusardi and Mitchell (2008) examine this issue in more detail and warn about the difficulties women may face in making financial decisions, particularly after the death of a spouse.

Financial literacy and schooling attainment have been strongly and positively linked to household wealth accumulation (Behrman, Mitchell, Soo and Bravo, 2010). However, the level of financial literacy varies widely among education groups (Cole, S. and Gauri K.S., 2009). As indicated by Lusardi (2008), only half of respondents with less than a high school certificate correctly answered the question requiring a simple calculation of interest rates, and close to 20 percent stated they do not know the answer to this question. The majority of those without a college degree did not know or answered incorrectly the question about risk diversification. Survey conducted by Bhushan and Medury (2013) revealed that the characteristics of one's employment influences his level of financial literacy. For instance, workers at the bank and non-banking institutions are expected to be more proactive financially than miners since they are always bring out new and innovative financial products so they have adequate information on each product than the latter groups hence can make informed decision on their investment.

Lusardi and Mitchell (2007c) show that financial literacy is highly correlated with exposure to economics in school. Those who studied economics (in high school, college, or at higher levels) were much more likely to display higher levels of financial literacy later in life, a finding which is also present in data from other countries. They use this information to assess the impact of financial literacy on financial behavior later in life. Because financial literacy can be affected by experience with saving and investing, learning by doing, data on literacy early in life (or on other determinants of financial literacy) is necessary to evaluate the impact of literacy on financial behavior. Lusardi, Keller and Keller (2008) devised a survey asking explicitly about barriers to saving, sources of financial advice, and level of financial knowledge and attractive features of a pension plan. They conducted focus groups and in-depth interviews (with both employees and human resources administrators) to shed more light on the impediments to saving. The results of this program have implications for financial education programs and policies to foster saving. First of all, implementation of programs aimed at simplifying saving decisions may prove to be a cost-effective strategy. Second, individuals are most prone to decision-making in specific time periods. For example, the start of a new job pushes people to think about saving (often because they have to make decisions about their pensions), and it may be very important to exploit such “teachable moments.” Third, to be effective, programs have to recognize the many differences among individuals, not only in terms of preferences and economic circumstances but also of their existing levels of information, financial sophistication, and ability to carry through with plans.

CHAPTER THREE

METHODOLOGY AND ORGANISATIONAL PROFILE

3.0 INTRODUCTION

This study sought to assess the level of financial literacy among Polytechnic students in Kumasi. The study employs questionnaire designed to cover major aspects of personal finance management, investment and insurance. Thus, it included issues on general financial knowledge, savings and borrowing, insurance, and investments. The researcher used quantitative methods in the analysis of the data gathered. This section captures the research design, population, sampling procedure, sources of data, the method of data collection and analysis organisational profile.

3.1 RESEARCH DESIGN

The research employed an Explanatory research design. Explanatory research, according to Saunders et al (2012) establishes the causal relationship between variables. In this study, the approach was employed to establish how variables such as age, qualification, work experience and gender impact on Polytechnic students' financial literacy. Thus the main research strategy used in this study is a survey which allows quantitative data collection and analyses using descriptive and inferential statistics. Quantitative research methodology is also concerned with the collection and analysis of data in numeric form.

The study employs an all-inclusive questionnaire designed to cover major aspects of personal finance. It includes financial literacy on general knowledge, savings and borrowing, insurance, investments, decisions and opinions. Since the study was a case study of the Polytechnic students, several considerations were made in the selection of questionnaire items for the study. First, demographic data were included to investigate

participants association with financial literacy. The second consideration was to investigate participants' opinions and perceptions through their exposure to schooling and thirdly, questions related to cognitive knowledge is adapted to investigate participants' knowledge in the finance. The respondents were allowed a maximum of 38 questions including 25 on general finance knowledge, 3 questions on literacy avenues, and 10 questions on demographic data. The researcher designed and developed the questionnaire items to include both close and open-ended questions for the respondents to either tick or provide brief responses where appropriate.

3.2 POPULATION

The population refers to the complete set of individuals, subjects or objects or events having common observable characteristics in which the researcher is interested in. In this write up, the targeted groups are Polytechnic students in Kumasi. It is out of this population that the sample is drawn. Each of these students are selected from each of the three major groupings of academic programmes namely; business, engineering and applied sciences. The overall student population revolved around nine thousand, two hundred and four (9214).

3.3 SAMPLE SIZE AND SAMPLING TECHNIQUE

A sample is the sub-group of the entire population that is being studied. In view of the total population, manageability, time and resources available, an overall sample size of 120 was selected for the collection of data with 40 students from each of the three major programmes of study groupings. The researcher employed quota sampling technique in the study. This technique involves obtaining responses from specific respondents deemed appropriate and representative of the population for the study.

The advantage is to ensure balance in respondents when multiple groups are to be selected (Black, 1999).

3.4 DATA COLLECTION

In order to solve a problem, there is the need for facts to be established. The raw material base for undertaking this exercise is data. The researcher, therefore, sought for data to help attain the purpose of this study.

3.4.1 SOURCE OF DATA

The study employed mainly primary source of gathering data. This was obtained from the field survey mainly through questionnaires which were administered to the respondents and through observation by the researcher. The use of questionnaire as a means of collecting primary data was considered because it is always near its original form and relatively free from editing, alteration or any form of modification. Therefore, it tends to be free from external influence, judgment and bias of others, which often lead to unsound interpretation by the researcher.

3.4.2 DATA COLLECTION INSTRUMENTS

The main instrument used for this study was the questionnaire. The researcher opted for this instrument of data collection in order to obtain standard form of answers or responses that will give way to easy and accurate analyses. This study used a comprehensive questionnaire designed to cover major aspects of personal finance. It included financial literacy on general knowledge, savings and borrowing, insurance, and investments. The survey participants were asked to answer thirty-eight (38) questions in all. The survey is used in a pilot study to refine the instrument. Essentially, the questionnaire technique was used because of the numerous advantages offered to the researcher. Notable among them include the fact that it is less expensive and also

helped in covering a wider area than otherwise. It also offered greater anonymity which permitted more candid and objective replies/answers to be obtained for the achievement of the research purpose.

3.5 DATA ANALYSES

The responses from each participant were used to calculate the mean percentage of correct scores for each question, section, and the entire survey. Consistent with the prior studies (Danes and Hira, 1987; Volpe, Chen, and Pavlicko, 1996), the mean percentage of correct scores was grouped into (1) more than 80%, (2) 60% to 79%, and (3) below 60%. The first category represents a relatively high level of knowledge. The second category represents a medium level of knowledge. The third category represents a relatively low level of knowledge. This study provides evidence of differences in the literacy level of subgroups in the school using analysis of variance (ANOVA). The differences are further analyzed using logistic regression models.

The participants were classified into two subgroups using the median percentage of correct answers of the sample. Students with scores higher than the sample median (51%) were classified as those with relatively more knowledge. Relatively, those with scores equal to or below the median were classified as students with relatively less knowledge. This dichotomous variable is then used in the logistic regression as the dependent variable, which is explained simultaneously by all of the independent variables. The independent variables used in the logistic regression were variables such educational background, gender, programme category, work status, work experience, age and income. The coefficients represented the effect of each subgroup compared with a reference group, which is arbitrarily selected. For example, MAJOR is coded as 1 if a participant is a non-business major, 0 otherwise. The reference category is a

business major. If the logistic coefficient of the variable is negative, then it means that compared with business majors, the non-business majors are more knowledgeable about personal finance. The logistic model takes on the following form:

$$\log [p/(1 - p)] = B_0 + B_1(\text{MALE}) + B_2(\text{AGE1}) + B_3(\text{AGE2}) + B_4(\text{SHS_STUDY}) + B_5(\text{BUSINESS_MAJOR}) + B_6(\text{HND}) + B_7(\text{RANK1}) + B_8(\text{RANK2}) + B_9(\text{EXPER1}) + B_{10}(\text{EXPER2}) + B_{11}(\text{EXPER3}) + B_{12}(\text{EXPER4}) + B_{13}(\text{INCOME1}) + B_{14}(\text{INCOME2}) + B_{15}(\text{INCOME3}) + B_{16}(\text{SAVINGSACCOUNT}) + B_{17}(\text{CURRENTACCOUNT}) + \varepsilon$$

Where:

P = the probability of a student who is more knowledgeable about personal finance.

MALE = 1 if participant is male, 0 otherwise

AGE1 = 1 if a participant is in the age group of up to 20, 0 otherwise.

AGE2 = 1 if a participant is in the age group of 21-25, 0 otherwise.

SHS_STUDY = 1 if a participant is in the educational group of up to SHS, 0 otherwise.

BUSINESS_MAJOR = 1 if a participant is a business major, 0 otherwise.

HND = 1 if a participant is in the educational group of up to HND, 0 otherwise.

RANK1 = 1 if a participant is in level 100, 0 otherwise.

RANK2 = 1 if a participant is in level 200, 0 otherwise.

INCOME1 = 1 if the participant is in the income group of less than GH¢2000, 0 otherwise.

INCOME2 = 1 if the participant is in the income group of GH¢2000 to GH¢5000, 0 otherwise.

INCOME3 = 1 if the participant is in the income group of GH¢5000 to GH¢10000, 0 otherwise.

EXPER1 = 1 if a participant less than 2 years of experience, 0 otherwise.

EXPER2 = 1 if a participant has more than 2 to less than 4 years of experience, 0 otherwise.

EXPER3 = 1 if a participant has 4 to less than 6 years of experience, 0 otherwise.

EXPER4 = 1 if a participant has 6 to less than 8 years of experience, 0 otherwise.

SAVINGSACCOUNT = 1 if a participant has a savings account, 0 otherwise.

CURRENTACCOUNT = 1 if a participant has a current account, 0 otherwise. The data collected were edited, encoded and analyzed through the help of computer software called Statistical Package for Social Sciences (SPSS).

3.6 VALIDITY AND RELIABILITY

The researcher is convinced beyond doubt that the data collected is valid and reliable. The items applied in the questionnaire for measuring financial literacy were extracted from Chen and Volpe (1998). The validity of the questionnaire has been approved in a number of previous studies (Chen and Volpe, 2002; Lusardi, Mitchell and Curto, 2010). However, it was also subjected to the scrutiny and evaluation of the researcher's supervisor who has undertaken similar studies on financial literacy of university students in Ghana. After his approval, the questionnaires were printed and administered personally to the respondents in the selected Polytechnic.

3.7 PROFILE OF KUMASI POLYTECHNIC

Kumasi Polytechnic was established in 1954 as Kumasi Technical Institute (K.T.I.) to offer craft courses. In 1963, the Institute was converted to a non-tertiary Polytechnic status under the Ghana education Service to start offering in addition, technician, diploma and sub-professional courses.

The Polytechnic Law, 1992 (PNDCL.321) elevated the Polytechnic to a tertiary institution to provide high calibre skilled manpower with reference to manufacturing,

commerce, science and technology to act as a catalyst for technological development. The Polytechnic is one of the famous, elegant and vibrant Polytechnics in Ghana. It has within the period of its existence become an important centre for the training not only for Ghana but also for other African countries.

3.8 VISION AND MISSION STATEMENT KUMASI POLYTECHNIC

“To be a Centre of Excellence for tertiary level training of technical and professional human resource with entrepreneurial skills” is Kumasi Polytechnic vision statement while its mission statement is “to provide a favourable environment for teaching, research, skills and entrepreneurship training in science, technology, applied social sciences and applied arts for industrial and community development. It is positioned to attract students and scholars from local and international communities. It also provides consultancy services”.

To achieve its vision and mission as the number one polytechnic in Ghana, the Kumasi Polytechnic has since 2010 re-grouped its programmes under the three Faculties namely engineering, business and applied science under six Faculties as: Faculty of Engineering, Faculty of Built and Natural Environment, Faculty of Applied Sciences, Faculty of Business and Management Studies, Faculty of Medicine and Health Sciences, Faculty of Creative Arts and Technology, Institute of Entrepreneurship and Enterprise Development, Institute of Distance and Continuing Education, School of Graduate Studies, Research and Innovation.

Currently the polytechnic can brag of about student population of nine thousand, two hundred and four (9214) with staff strength of seven hundred and five (705).

Kumasi Polytechnic was chosen for the study since it was adjudged the best polytechnic and eleventh best tertiary institution in Ghana, while it was positioned 194th globally (Tawiah, 2014).

KNUST



CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND DISCUSSION OF FINDINGS

4.0 INTRODUCTION

The main focus of this chapter is to present and analyze the data to achieve the objectives of the study. As a means of achieving the objectives of this study namely;

(1) finding out the general knowledge of polytechnic students in money management, (2) examining the polytechnic students understanding of savings, borrowing, insurance and investment, (3) determining whether some group of these students are relatively more knowledgeable than others, and (4) examining the factors that hinder the students access to acquire financial literacy information outside the classroom. A hundred and twenty (130) questionnaires were administered out of which one hundred and one (120) were recovered. Therefore, the analyses are based on the responses from the 120 respondents.

4.1.1 DESCRIPTIVE CHARACTERISTICS OF RESPONDENTS

This section reports on the descriptive statistics of the sample and is exhibited in the table below:

Table 4.1a Descriptive statistics of the sample

	Number of Participants	Percentage
A. Education		
<i>(1) Academic Discipline</i>		
Non-Business Majors	76	63.3
Business Majors	44	36.7

(2) SHS Field of study

Business	39	33.3
General Arts with economics	6	5.1
General Arts without economics	36	30.8
Science	16	13.7
Visual Arts	20	17.1

(3) Degree

HND	112	93.3
Non-HND	1	0.8
BTECH	7	5.8

(4) Class Rank

Level 100	35	29.2
Level 200	29	24.2
Level 300	56	46.7

B. Demographic Characteristics

(1) Age

Up to 20	9	7.5
21 – 25	77	64.2
26 – 30	29	24.2
31 – 40	5	4.2

Table 4.1b Descriptive statistics of the sample

	Number of Participants	Percentage
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(2) Gender		
Male	81	67.5
Female	39	32.5
C. Work Experience		
Yes	83	70.9
No	34	29.1
(i) Length of experience		
Less than 2 year	58	65.9
2 to less than 4 years	18	20.5
4 to less than 6 years	6	6.8
6 to less than 8 years	4	4.5
8 and above	2	2.3
D. Income Level		
Less than GH¢ 2000	44	52.4
GH¢ 2000 to less than GH¢ 5000	27	32.1
GH¢ 5000 to less than GH¢ 10000	9	10.7
GH¢ 10000 and above	4	4.8
E. Financial account		
Savings	77	66.4
Current	11	9.5
Both saving and current	11	9.5
None	17	14.7

(Source: Field Survey, 2015)

.1.2 EDUCATIONAL CHARACTERISTICS

The defining educational characteristics of the sample in table 4.1 indicates that in terms of the choice of academic discipline, 36.7% of respondents are business majors whilst 63.3% of the remaining respondents are non-business majors, distributed evenly across the other educational disciplines. The table further reports that majority of the respondents representing 33.3% studied business courses in the senior high school. General Arts with Economics recorded 5.1% whilst General Arts without Economics recorded 30.8%. Science and Visual Arts students also record 13.7% and 17.1% respectively. Notwithstanding, the results provide further evidence suggesting that 93.3% of the respondents are HND students whilst 5.8% and 0.8% of the remaining respondents are Non-HND and Bachelor of Technology students. Majority of the students are level 300 students representing 46.7% of the sample size whilst the remaining are 29.2% and 24.2% for level 100 and level 200 students respectively. Thus, majority of the polytechnic students are believed to be literates who can read and write hence expected to make logical decisions.

4.1.3 DEMOGRAPHIC CHARACTERISTICS

Here, the demographic characteristics look at the gender composition of the participants as well as their age. In terms of gender composition, the results show that 67.5% of the sample is males with the remaining 32.5% representing females in the study. However, on the age characteristics of the respondents, the results reveal that 7.5% of the respondents are below 20 years whilst 64.2% of the respondents are between the ages of 21 years to 25 years. Also, 24.2% are between 26 years and 30 years of age whilst the remaining 4.2% are between 31 years to 40 years. This implies that the males are the dominant gender in the study hence an indication that there is

educational gap between male and female.

.1.4 WORK EXPERIENCE

Most of the respondents, 70.9% have some form of work experience. However, looking at the length of their experience, the results from the table show that 65.9% of the respondents have less than 2 years of working experience whilst 20.5% have between 2 years but less than 4 years of working experience. Also, findings from the table suggest that 6.8% of the respondents have between 4 years but less than 6 years of working experience. The remaining respondents who have 6 years but less than 8 years of experience represent 4.5% whilst eight and above represent 2.3% of the sample. This therefore suggest that most of the respondents have some level of work experience that is expected to guide their financial decisions hence influence their financial literacy to some appreciable level.

4.1.5 INCOME LEVEL

On the yearly average income level of the students, the results presented in table 4.1 show that 52.1% of the respondents have annual personal incomes less than GH¢ 2,000.00. 32.1% of the respondents also have annual personal income levels between GH¢ 2,000.00 to less than GH¢ 5,000.00. 10.7% of the respondents have between GH¢5,000.00 and GH¢10,000.00 whilst the remaining 4.8% of the respondents have annual personal incomes GH¢10,000 and above. However, inferring from the above statistics, it could be deduced that savings might be a difficult practice for the polytechnic students if their earnings per annum is not that substantial, even though they might have some basic savings knowledge.

.1.6 FINANCIAL ACCOUNTS

With respect to the type of financial accounts operated by the respondents, the table reports that about 14.7% don't have any financial account. 9.5% have current account whilst 9.5% also operate both current savings account. Notwithstanding, 66.4% of the respondents operate savings account. This situation is not surprising because the savings accounts operated by the students are mainly students' savings account to receive SSNIT Loans as well as that of Student Loan Trust. Hence, they could not better understand how these financial accounts operate. This is in line with the fact that exposure to all these account heightens one's knowledge on the best form of account to operate at any point in life through interactions with bank official through the quest for financial interest maximization.

4.1 PARTICIPANTS' KNOWLEDGE IN FINANCE

Table 4.2 below reports the percentage of responses of the participants in two folds. The first includes three categories: correct, incorrect and don't know. The second touches on questions concerning financial literacy grouped into four subgroups namely; the general financial knowledge, savings and borrowing, investment and insurance knowledge respectively. The aim is to determine students' understanding of these concepts. However, comparison was further made with Chen and Volpe's (1996; 2002) benchmark of financial literacy. The benchmark grouped percentage correct scores into three categories: over 80% (Highest), 60 – 79% (Medium) and below 60% (Low). The benchmark implies that correct score of 80% and beyond show a high financial knowledge whilst scores between 60 to 79% indicate fair knowledge in finance. Lastly, scores of respondent below 60% is an indication of low financial knowledge, the level that needs more financial literacy education.

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

	Correct	incorrect	Don't know
General Finance Knowledge			
<i>Primary source of income</i>	49.2	50.8	0.0
<i>Automated Teller Machine</i>	35.8	63.3	0.8
<i>Personal financial planning</i>	25.0	60.8	14.2
<i>Personal Budget</i>	36.7	55.8	7.5
<i>Asset Liquidity</i>	31.7	45.8	22.5
<i>Net asset value</i>	37.5	40.8	21.7
<i>Savings interest</i>	55.8	25.8	18.3
Mean	38.81		
Saving and Borrowing Knowledge			
<i>Higher interest</i>	50.0	37.5	12.5
<i>Loan Guarantee</i>	78.3	14.2	7.5
<i>Compound interest</i>	35.0	47.5	17.5
<i>High Borrowing interest</i>	41.7	45.0	13.3
<i>Overdraft</i>	35.8	32.5	31.7
<i>Most important lending factor</i>	41.7	44.2	14.2
<i>Simple interest</i>	22.5	48.3	29.2
Mean	43.71		
Investment Knowledge			
<i>Security trading</i>	33.3	35.8	30.8
<i>Short term investment</i>	45.8	30.0	24.2
<i>Mutual fund</i>	10.8	46.7	42.5
<i>Diversification</i>	25.8	37.5	36.7
<i>High risk investment</i>	51.7	25.8	22.5

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

	Correct	incorrect	Don't know
<i>Risk return</i>	11.7	88.3	0.0
<i>Dividend pay-out</i>	52.5	47.5	0.0
<i>Higher return</i>	28.6	44.5	26.9
Mean	32.3		
Insurance Knowledge			
<i>Pension contribution</i>	40.0	37.5	22.5
<i>Superannuation payments</i>	53.3	20.0	26.7
<i>Insurance policy</i>	50.8	48.3	0.8
Mean	48.03		
Overall mean	40.71		

(Source: Field Survey, 2015)

4.2.1 GENERAL FINANCE KNOWLEDGE

Regarding issues on general finance knowledge, table 4.2 reports correct (49.2%) and incorrect (50.8%) for responses on the question regarding primary source of income. However, question related to automated teller machine record correct (35.8%), incorrect (63.3%) and don't know (0.8%). Personal financial planning and personal budget record correct, incorrect and don't know percentage responses rate of (25%, 60.8% and 14.2%), and (36.7%, 55.8%, 7.5%) respectively. On questions concerning asset liquidity and net asset value; the results in table 4.2 show correct, incorrect and don't know percentage response rates of (31.7%, 45.8% and 22.5%) and (37.5%, 40.8% and 21.7%) respectively whilst saving interest rate question record correct (55.8%), incorrect (25.8%) and don't know (18.3%). Based on Chen and Volpe benchmarks, the overall average of 38.81% for correct scores exhibit that the average correct responses of the participants on the General financial knowledge falls below

60% implying that on the average the participants have inadequate financial knowledge which according to Chen and Volpe (1996) can be attributed to the lack of sound general financial education in the curricula of educational institutions.

4.2.2 SAVINGS AND BORROWING KNOWLEDGE

In examining the responses of participants relating to savings and borrowing knowledge, questions on higher interest and loan guarantee records correct, incorrect and don't know percent scores of (50.0%, 37.5% and 12.5%) and (78.3%, 14.2% and 7.5%) respectively. The table further reports correct, incorrect and don't know percentage response score of (35%, 47.5% and 17.5%), (41.7%, 45% and 13.3%) and (35.8%, 32.5% and 31.7%) respectively for questions on compound interest, high borrowing interest and overdraft. However, most important lending factor and simple interest questions scored correct, incorrect and don't percent scores of (41.7%, 44.2% and 14.2%) and (22.5%, 48.3% and 29.2%) respectively. The overall average correct score of 43.71% for savings and borrowing knowledge further affirms that the students' knowledge on savings related issues are low.

4.2.3 INVESTMENT KNOWLEDGE

On security trading and short term investment questions, table 4.2 shows correct, incorrect and don't know percentage scores of (33.3%, 35.8% and 30.8%) and (45.8%, 30% and 24.2%) respectively. The table further records percentage correct, incorrect and don't know scores of (10.8%, 46.7% and 42.5%), (25.8%, 37.5% and 36.7%) and (51.7%, 25.8% and 22.5%) for mutual fund, diversification and high risk investment questions respectively. Dividend pay-out record correct (52.5%) and incorrect (47.5%) whilst higher return related question report scores of (28.6%, 44.5% and 26.9%) for correct, incorrect and don't know respectively. The overall mean of correct percent

scores of 32.3% indicates that students' investment related knowledge is below 60%, hence low.

4.2.4 INSURANCE KNOWLEDGE

On insurance related questions, Table 4.2 records correct, incorrect and don't know percent scores for pension contribution as (40%, 37.5%, and 22.5%), superannuation payment as (53.3%, 20.0% and 26.7%), and insurance policy as (50.8%, 48.3% and 0.8%). However, the results indicate that the students lack insurance knowledge as indicated by the average percent correct score of 48.03%) which is below the minimum recommended by Chen and Volpe.

4.2.5 OVER ALL FINANCIAL LITERACY

The overall financial knowledge of the students in line with the overall mean percent correct scores for all the four major groupings depict that the financial literacy level of the students are below the minimum. This suggest that the youthful nature of the participants, as noted earlier in this study, do not afford them the necessary exposure to financial issues related to personal finance, investment and insurance. Even though they operate some form of financial accounts that is supposed to cushion their literacy level, most of their incomes are spent on consumption rather than on investment decisions making. The majority of them are in a very early stage of their financial life cycle. At this stage of the cycle, they are exposed to a limited number of financial issues related to general knowledge, savings and borrowing, and insurance. These factors may explain the differences in the mean percentages of correct answers for the sections of General Knowledge (38.81%), Savings and Borrowing (43.71%), Insurance (48.03%), and Investment (32.3%).

4.3 RELATIVE KNOWLEDGE OF POLYTECHNICS STUDENTS IN FINANCE USING ANOVA

The relationship between personal financial literacy and participants' education, work experience, income and other demographic background are examined. Analysis of variance (ANOVA) is consequently, used to detect if there exist mean differences in the level of knowledge of the participants under the various categories. Table 4.3 reports the mean percent correct responses for General Knowledge, Savings and Borrowing, Insurance, Investment and the entire Literacy level by the different subgroups.

Table 4.3a: Mean Percentage of Correct Responses to each section by characteristics of sample and results of ANOVA

	General Knowledge	Savings and borrowing	Investment	insurance	literacy
A. Education					
<i>(1) Academic Discipline</i>					
Non-Business Majors	31.77	39.47	24.18	43.42	34.71
Business Majors	50.32	51.30	47.73	55.30	51.16
F-statistics	(22.01)***	(6.39)**	(36.79)***	(3.73)*	(26.98)***
<i>(2) Degree</i>					
HND	38.27	43.62	32.14	46.43	40.11
Non-HND	14.29	28.57	12.50	66.67	30.51
BTECH	46.94	48.98	46.43	66.67	52.25
F-statistics	(1.06)	(0.33)	(1.63)	(1.43)	(1.60)
<i>(3) Class Rank</i>					
Level 100	37.14	48.57	33.21	41.90	40.21
Level 200	36.45	33.99	28.02	42.53	35.25

Table 4.3b: Mean Percentage of Correct Responses to each section by

characteristics of sample and results of ANOVA

	General Knowledge	Savings and borrowing	Investment	insurance	literacy
Level 300	40.56	45.92	35.04	54.17	43.92
F-statistics	(0.41)	(3.12)**	(0.87)	(2.03)	(2.17)
B. Demographic Characteristics					
(3) Age					
Up to 20	30.16	47.62	25.00	33.33	34.03
21 – 25	41.74	43.60	33.12	50.65	42.28
26 – 30	35.47	44.33	34.91	47.13	40.46
31 – 40	22.86	37.14	30.00	33.33	30.83
F-statistics	(1.95)	(0.19)	(0.44)	(1.11)	(1.06)
(4) Gender					
Male	39.33	44.09	35.19	49.79	42.10
Female	37.00	43.22	27.88	43.59	37.92
F-statistics	(0.28)	(0.03)	(2.60)	(0.94)	(1.35)
C. Work Experience					
Yes	38.21	43.20	34.19	50.60	41.55
No	40.34	46.64	31.25	43.14	40.34
F-statistics	(0.23)	(0.44)	(0.38)	(1.27)	(0.11)
(ii) Length of experience					
Less than 2 year	40.89	41.13	33.84	50.00	41.46
2 to less than 4 years	30.16	53.17	36.81	48.15	42.07
4 to less than 6 years	30.95	33.33	35.42	61.11	40.20
6 to less than 8 years	39.29	53.57	18.75	58.33	42.49
8 and above	57.14	57.14	43.75	50.00	52.01

Table 4.3c: Mean Percentage of Correct Responses to each section by

characteristics of sample and results of ANOVA

	General Knowledge	Savings and borrowing	Investment	insurance	literacy
F-statistics	(1.58)	(1.37)	(0.55)	(0.24)	(0.19)
D. Income Level					
Less than GH¢ 2000	40.26	49.03	37.78	48.48	43.89
	40.74	50.26	40.28	53.09	46.09
GH¢ 2000 to less than GH¢ 5000					
GH¢ 5000 to less than GH¢ 10000	41.27	41.27	25.00	66.67	43.55
GH¢ 10000 and above	46.43	28.57	12.50	66.67	38.54
F-statistics	(0.11)	(1.11)	(2.42)*	(1.22)	(0.28)
E. Financial account					
Savings	40.45	47.87	34.90	43.72	41.73
Current	41.56	33.77	37.50	81.82	48.66
Both saving and current	38.96	38.96	30.68	48.48	39.27
None	33.61	38.66	24.26	50.98	36.88
F-statistics	(0.47)	(1.59)	(1.15)	(4.81)***	(1.00)

*P<0.1, **P<0.05 and *** P<0.01 significance level.

(Source: Field Survey, 2015)

4.3.1 FINANCIAL LITERACY AND EDUCATIONAL BACKGROUND OF PARTICIPANTS

The findings from table 4.3 suggest that participants' knowledge varies with academic discipline such that the patterns in the percentages of correct responses from the business major participants (51.16%) are higher than the non-business majors (34.71%). This pattern persists among all sections including the overall results. The values of F-statistic suggest that these differences are highly significant hence, the

business majors are more financially literate than the non-business majors. However, the overall financial literacy is not significant for class rank and the type of degree the participants are pursuing despite the significant of investment knowledge with respect to class rank of the participants.

4.3.2 FINANCIAL LITERACY AND DEMOGRAPHIC CHARACTERISTICS AND WORK EXPERIENCE

Evidence from table 4.3 above suggests that respondents' demographic characteristics as well as their work experience have no significant influence on their financial knowledge. The F-statistics from the ANOVA results show that there is no clear-cut difference between the demographic characteristics of the participants and their financial literacy level. This finding is evident for work experience.

4.3.3 FINANCIAL LITERACY AND FINANCIAL ACCOUNT

The results reveal that ownership of financial account has significant influence on insurance knowledge. This finding may be attributed to the fact that the students consume some of their income on auto insurance related issues hence the significance in the differing knowledge on insurance. This is shown by the pattern of percent scores with current account holders (81.82%) being high than the other account; savings (43.72%) and both (48.48%), and non-account holders (50.98%). However, the overall score suggest that the financial accounts do not necessarily influence the financial literacy knowledge of these participants in the study.

4.3.4 FINANCIAL LITERACY AND PERSONAL INCOME

In terms of participants' personal annual income, the F-statistic suggests that there exist significant differences among the various income ranges in terms of their investment knowledge but not financial literacy. Incomes groups GH¢5000 and above have high

investment knowledge than the other income groups. This could be because they take measures to secure their wealth. However, the overall literacy level shows that there exists no significant difference in the financial literacy hence they are not different from each other.

4.4 RELATIVE KNOWLEDGE OF POLYTECHNIC STUDENTS IN FINANCE USING LOGIT ESTIMATION MODEL

Table 4 below displays the Logit estimation models for Polytechnics students' financial literacy level. This is to further determine whether the differences in the level of knowledge of students as determined by ANOVA really exist when examined further or not. The results of the Logit analysis are displayed in the table below, followed by detailed analysis of the results so presented.



Table 4.4a: Results of Logit regression Analysis for General Knowledge in Finance

	General Knowledge	Savings& Borrowing	Investment	Insurance	Financial Literacy
Business major	0.1216*	0.0871*	0.1879**	0.1700**	0.3246***
Male	0.0430	-0.0548	0.2017**	0.1625	0.0658
Age1	-0.0169*	-0.0466	0.0355	0.0236	-0.1430
Age2	-0.0789	-0.0359	-0.0086	0.1377*	0.1502
SHS study	0.0880	0.0445	0.1145	0.1819	0.0474
HND	0.0508	0.0093	0.0402	0.0716*	0.0962
Rank1	-1.1612	-2.3405	-1.553	1.411	-2.1325
Rank2	-1.1880	-2.303	1.623*	1.487	2.3530
Exper1	0.0523	0.0975	-0.0658	0.0159	0.0307
Exper2	0.0059*	0.4359***	0.0894	0.0102	0.1052
Exper3	0.0001*	0.0463	-0.0364	-0.0326	-0.0126
Exper4	0.1314	-0.0416	-0.1012	0.06783	0.0041
Income1	0.4713	0.0893	-0.1757	0.0667	0.1627
Income2	0.012*	0.0197*	0.0405	0.0791	0.0092*
Income3	0.0549*	0.0575*	0.0287	0.1187*	0.1808**
Savings account	0.0491	0.2043**	0.0485	0.1486**	0.0614
Current account	-0.0023	0.0541	0.3393***	0.01178	0.0669*

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

(Source: Field Survey, 2015)

Table 4.4b: Results of Logit regression Analysis for General Knowledge in Finance

Intercept	8.9541	13.2667	10.47146	-16.0007	11.4149
-2 log Likelihood	-34.2762	-61.8681	-54.187	-41.7407	-60.438
Wald Chi2 (17)	96.60	36.94	39.89	78.04	40.65
Prob>Chi2	0.0000	0.0081	0.0034	0.0000	0.0027
Pseudo R2	0.5849	0.2299	0.2690	0.4832	0.2516

Correct Classification	87.50%	74.17%	77.50%	86.67%	75.00%
Chance Classification	86.96%	68.18%	66.67%	84.78%	71.43%
Observation	120	120	120	120	120

(Source: Field Survey, 2015)

4.4.1 PARTICIPANTS' KNOWLEDGE IN GENERAL FINANCIAL KNOWLEDGE

From table 4.4 the results reveal that students with business major are more likely to have adequate general financial knowledge. Also the results suggest that students with ages less than 21 years are less likely to have more general financial knowledge than the other age groups in the study. The results further reveal that students with incomes between the ranges of GHC2,000 to GHC5,000 and GHC5,000 to GHC10,000 are more likely to exhibit higher levels of financial knowledge. This may be attributed to the fact that these individuals within these income ranges maybe prudent in their income spending hence have absolute knowledge concerning general finance. Notwithstanding, the results further exhibit that students with working experience between two to less than four years as well as between four to less than six years are more likely to have adequate financial knowledge than the other students. These findings imply that for an individual to be competent in financial matters one has to have some level of experience which is essential in cushioning his or her financial knowledge. The significant Chi-squared with an r-squared value of 0.5849 suggest that the predictive indicators in the study can predict to some extent about 58.49% of the changes in the general financial knowledge of the Polytechnic students.

4.4.2 PARTICIPANTS' KNOWLEDGE IN SAVINGS AND BORROWINGS

On the issue of the extent to which the predictive variables can influence the respondents' savings and borrowing knowledge, the results from the logit regression,

suggest that students who took business related courses are more likely to make informed decisions in terms of their savings and borrowing. Students with savings accounts are also more likely to have adequate savings and borrowing knowledge. This can be attributed to the fact that most of these students are workers hence receive income through their savings account. Also, it is noted that students are encouraged to own accounts in order to qualify for student loans hence can influence their savings and borrowing knowledge. These findings confirm the relationship between the income levels and the savings and borrowing relation. However, the table reports that students with some form of experience between 2 to 4 years are more likely to have some form of savings and borrowing knowledge since they always have to save portions of their income to cater for unforeseen contingencies. These findings can also be attributed to the fact that these students undertake internship which earns them some form of experience and income for savings for the future hence helps them in their savings and borrowing decisions. The significant Chi-square value of 36.92 with an estimated r-squared value of 0.2299 reveal that on the average changes in the literacy determinant variables contribute to about 22.99% changes in the savings and borrowing knowledge of the students in Polytechnics.

4.4.3 PARTICIPANTS' KNOWLEDGE IN INVESTMENT

According to the logit regression analysis, students who undertake business related courses are more likely to exhibit more knowledge in investments related issues. The results further show that males are more likely to have adequate investment knowledge than their female counterparts. Findings from the table also suggest that students with current account are also more likely to have more investment knowledge than the other subgroups. Consistent with findings in the savings and borrowing, the results report that

students in level 200 are more likely to have adequate investment related knowledge than the other subgroups. This can be attributed to the fact that these students invest their little incomes to take advantage of future contingencies. Furthermore, the significant Chi-squared value with an estimated r-squared value of 0.2690 suggest that changes in the independent variables employed in the model has about 26.90% influence on the changes in the investment knowledge of the students.

4.4.4 PARTICIPANTS' KNOWLEDGE IN INSURANCE

On insurance related issues, the results suggest that students operating savings accounts are more likely to have more knowledge in insurance related issues. Also, the results reveal that students with HND degrees are more likely to acquire more insurance related knowledge. This can be attributed to the fact that most of these HND students are studying insurance related courses in both the engineering and business areas hence have relative auto-related insurance knowledge. The results also reveal that business majors have more insurance related knowledge. This can be attributed to the fact that these business courses do feature insurance related component in the academic curricula at the Polytechnic level hence more likely to impact on decision of the students in terms of insurance issues. Further, the results also reveal that students with personal incomes between GHC5000 to GHC10,000 are more likely to have more knowledge than the other subgroups, suggesting that students who own vehicles are more likely to appreciate insurance issues than students without. The significant Chi-squared with an r-squared value of 0.4832 reveal that the predictors in the study can predict to some extent about 48.32% of the changes in the insurance knowledge of the Polytechnic students.

4.4.5 PARTICIPANTS' OVERALL LITERACY LEVEL

With regards to the level of financial literacy of the students on a whole, findings from the results presented in table 4.4 suggest that business major students at the Polytechnic are more likely to exhibit adequate financial literacy. Similar finding is found for students with income levels between GHC2000 to GHC5000. Also students with income levels between GHC5000 to GHC10000 are found to be financially literate. This suggests that the higher your income level the higher your willingness to understand and take advantage over financial related issues. Students with current accounts are found to exhibit adequate financial literacy levels since most of them are salaried workers hence are able to make informed decisions concerning their finances. The significant Chi-squared at 0.01% level with an estimated r-squared value of 0.2516 suggest that changes in the independent variables influence about 25.16% of the changes in the financial literacy of the Polytechnic students.

In conclusion, the result that respondents who are currently studying business-related courses are seen to be more knowledgeable than their counterparts is consistent with findings of previous research such as Chen, Volpe and Pavlicko (1996). Participant in level 200 are seen from the results presented in table 4.4, to be more knowledgeable than the other subgroups. This phenomenon can be attributed to the fact that these students may have benefited from internship programmes organized by the school during the second year of the students. Also the curriculum requirements progresses with the level of entry in the Polytechnic hence the higher one goes the more opportunities one gets to undertake business and finance related courses. Participants with higher income levels and operating current accounts are also found to be financially literate. This suggest that higher income level influences the financial

literacy of every individual since the more money one get the higher the tendency for that individual to enrich his or her financial status to accumulate more.

4.5 FACTORS THAT HINDER STUDENTS ACCESS TO ACQUIRE FINANCIAL LITERACY INFORMATION OUTSIDE THE CLASSROOM.

Here, the study tries to examine some challenges that influence the extent to which students access financial literacy information. The participants were regrouped into two categories using the highest and lowest correct scores of the entire survey. The Polytechnic students with overall percent correct scores equal or above 40 were categorized as students with more financial knowledge (financially literate) whilst students with percentage correct score below 40 were categorized as students with less financial knowledge (financially illiterate). A table (4.5) reports the corresponding results of the cross-tabulation analysis respectively.

Table 4.5: Factors that hinders students in accessing financial literacy information

	Language technicalities	clarifications	Total
Financially illiterate	40 64.52%	22 35.48%	62 100%
Financially literate	25 43.10%	33 56.90%	58 100%

Chi-square = 17.001, P < 0.01

(Source: Field Survey, 2015)

Table 4.5below reports participants' opinions regarding challenges they encounter in accessing financial literacy lessons from sources such as the news print media and financial institutions in view of the fact financial literacy programmes are not available in the polytechnic. The table exhibit that out of 58 students with more financial

knowledge, 43.10% report that technicalities in language influence the extent to which they are able to access financial literacy information. However, 56.90% were challenged by their inability to make further clarifications from the various avenues for the financial literacy information accessed. Comparatively, 64.52% of the 62 less financially literate students reveal that language technically used by the various avenues hamper the extent to which they appreciate financial literacy information. The table records Chi-square of 17.001 significant at 0.01 levels. This means that those students who are financially literate highly agree that some factors influence the extent to which one may appreciate financial literacy. This finding is evident for the financial illiterate students; hence the extent to which one become financially literate is dependent on the form of language used in the presentation of the information.



CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

This study surveyed 120 Polytechnic students in the Kumasi Metropolis on their knowledge of personal finance management, savings and borrowing, insurance and investment. This was to determine whether some groups of students are relatively more knowledgeable than others; and to examine the challenges students encounter in accessing financial lessons and how it influences their decisions and opinions on financial issues. The summary of the findings, conclusion and recommendations of the researcher are presented in this section.

5.1 Summary of Findings

From the outcome of the research, it can be observed that the students are dominated by males who constitute about 67.50%, while their counterpart females take on the remaining 32.50% of the total participants. In terms of educational background, most of the students are not studying business-related courses or programs.

It can also be inferred from the results of the research that most of the students have at least less than two years of working experience, with majority of them falling within the age group of 21 to 25 years. Thus, respondents are mostly youth. It was further revealed that most students currently earn below GH¢2000 per annum. This could be attributed to their youthful age and probably their inadequate years of working experience. However, only a few of the students (29.1%) are not working. Majority of the students are studying engineering and applied sciences course which are not related to the field of business.

Another interesting discovery from this study is that 66.4% of the total number of participants operate savings account whilst 9.5% operate current and both financial accounts, with only 14.7% having no financial account. However, the highest patronized account is the Savings account, probably because it is less costly to manage and more flexible to operate than the other class of financial accounts.

Findings from the results also reveal that lower levels of financial literacy are found among subgroups. They include those who are not business majors, have income levels less than GH¢5000 and do not hold any form of financial account. However, it is evident that participants' demographic characteristics and work experience as well as the type of degree they are pursuing, do not influence their financial literacy though, it may influence some components of the financial literacy indicators.

It is very apparent that individuals with less financial knowledge tend to hold wrong opinions and make incorrect decisions in the areas of general financial knowledge, savings and borrowing, insurance and investments decisions. While there is little difference in their opinions regarding insurance and investment, the less knowledgeable participants are more likely to act incorrectly hence increase their risk in their investment decisions. The predictive ability of personal finance knowledge shows that improving students' knowledge is important for them to excel in our current generation where everything fundamentally depends on financial issues.

Without adequate knowledge, they are more likely to make mistakes in the real world.

Lastly, it is also evident from the study that the students are hindered by language technicalities and clarities in accessing financial literacy information from avenues including the banks and the media.

5.2 Conclusion

The results suggest that students need to improve their knowledge of personal finance. Although, the questionnaire is set to include fairly basic questions, the overall mean of correct answers for the survey was about 40.71%. None of the mean scores for each area of general knowledge, savings and borrowing, insurance, and investments was above 60%. By far the weakest area is investment, where on average the participants answered about 32.3% of the questions correctly. A further look into the scores on individual questions shows that the students scored high on issues with which they are familiar with. For example, the students scored high marks on loan guarantee as many of the students are familiar with these issues because many of them are enrolled on SSNIT loans for their studies. The students also scored relatively high score on the question relating to simple interest and high interest practically because most of them operate a savings account. In contrast, the student show little knowledge and experience on issues regarding personal financial planning and budgeting, mutual funds and risk return associated with investment decisions. This contributed to their low scores in these areas. In conclusion, it is evident that the students are less inclined about personal finance. Their incompetency in this area will limit their ability to make informed financial decisions in the future if not properly addressed. In line with prior studies, the findings of this study suggest that there is a systematic lack of personal finance education in our polytechnic educational system in the country. The lack of financial knowledge will hamper the progress of the economy if not rectified by the appropriate authorities.

5.3 Recommendations

In reference to the findings from the study, the following measures are recommended for improving financial literacy among students.

Stakeholders of Polytechnics are encouraged to have as part of their academic curriculum financial literacy workshops or seminars for the students as a means of improving on their existing financial literacy level. As observed from the results of the study, the current level of students' financial knowledge is below average hence envisaged to have a toll on the decisions and opinions regarding financial issues.

Again, the polytechnics are recommended to include basic personal financial practices in the academic curriculum in order for the students to appreciate financial issues since we live in a world where every action is determined by financial issues.

Furthermore, financial institutions in collaboration with the Ministry of Education to increase financial health talks in Polytechnics as evident in similar institutions in developed countries like the UK where the students are given the opportunity to participate in internships with financial and insurance institutions to increase the practicality of the classroom activities.

Also, the key motivation to reduce financial literacy amongst students is for their instructors to teach interactively personal finance modules through activities such as a stock market game or other simulations. Also, the students must be encouraged to understand that they are responsible for their own future hence they need financial knowledge to exist happily in the future.

5.4 Recommendation for future studies

This study only concentrated on Polytechnic students in the Kumasi Metropolis with sample size of 120 students hence generalization cannot be made. Therefore, further studies are required on mass scale to determine the financial literacy level of Polytechnic students in Ghana. This will throw more light on the true state of affairs so far as the subject matter is concerned in Ghana.



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APPENDICES

APPENDIX 1

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF GRADUATE STUDIES

QUESTIONNAIRE FOR MBA THESIS ON “AN ANALYSIS OF PERSONAL
FINANCIAL LITERACY AMONG POLYTECHNIC STUDENTS –A CASE OF
KUMASI POLYTECHNIC”

INTRODUCTION

The researcher is a staff of Kumasi Polytechnic who is pursuing Master of Business Administration, Finance option at the Kwame Nkrumah University of Science and Technology. The study attempts to assess the financial literacy level of Kumasi Polytechnic students. Authorities of the institution will be aided to develop programmes to improve students’ financial literacy should the result of the study unveil any gap. Respondents are giving the highest assurance of confidentiality in respect of information provided. Thanks for participation.

NB. Please kindly leave out questions you have no idea about

PART 1: PERSONAL INFORMATION

- 1) Indicate your age bracket
 - A. 15-20
 - B. 21-25
 - C. 26-30
 - D. 31-40
 - E. 41 and above
- 2) What is your gender?
 - A. Male
 - B. Female
- 3) Which of the following best describes your status as a student?
 - A. I am an HND student

B. I am a Non-HND student

C. I am B. Tech student

4) What is your class standing?

A. Level 100

B. Level 200

C. Level 300

5) Which of the following best describes your major or area of interest in the Polytechnic?

A. Business

B. Engineering

C. Applied Science

6) What Programme did you study at the second cycle level (SHS, Technical School etc.)?

A. Business

B. General Arts including Economic

C. Science

D. Visual Arts

E. Others (General Arts without Economics, technical courses etc.)

7) Do you have any work experience?

A. Yes

B. No

8) If Yes, for how long?

A. Less than 2 years

B. At least 2 years but less than 4 years

C. At least 4 years but less than 6 years

D. At least 6 years but less than 8 years

E. At least eight(8) years

9) Can you value your income (loans, money from guardians, salary) the last year?

- A. Less than GH¢2,000
- B. At least GH¢2,000 but less than GH¢5,000
- C. At least GH¢5,000 but less than GH¢10,000
- D. At least GH¢10,000

10) What form of bank account do you have?

- A. Savings account only
- B. Current account only
- C. Both savings and current accounts
- D. I have no bank account but had one before
- E. I never own a bank account

PART TWO

Personal financial knowledge

11) Which of the following best describes the primary sources of income for most people age 20-35?

- A. Dividends and interest.
- B. Salaries, wages, tips.
- C. Profits from business.
- D. Rents.
- E. All the above

12). Which of the following statements is NOT correct about most ATM (Automated Teller Machine)?

- A. You can generally get cash 24 hours a day.
- B. You can generally obtain information concerning your bank balance at an ATM machine.
- C. You can get cash anywhere in the world with no fee.
- D. You must have a bank account to have an ATM Card.
- E. You can receive telephone prompt from ATM.

13) **Personal financial planning involves**

- A. 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 the above
- E. I don't know.

14) **A Personal budget will help you**

- A. allocate future personal income towards expenses
- B. scale your spending
- C. monitor the source of your income
- D. all of the above
- E. don't know

15) **Which of these can be converted into cash easily?**

- A. Money in a fixed deposit account.
- B. Money in a current account.
- C. A car
- D. A computer
- E. I don't know

16) **Your net income is**

- A. Total income less expenses
- B. Total income including expenses
- C. Gross income plus expenses
- D. The same total income
- E. I have no idea

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

- A. more goods today

- B. less goods today
- C. same as today
- D. I don't know

PART THREE. KNOWLEDGE ABOUT SAVINGS AND BORROWING

18) Which account usually pays the MOST interest?

- A. Fixed Deposit
- B. Saving Account
- C. Current Account
- D. Don't know

19) 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. Don't know

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

- A. more than a GH¢102
- B. exactly a GH¢102
- C. less than a GH¢102
- D. the same as your savings of GH¢100
- E. don't know

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

- A. SSNIT student loan Scheme
- B. Banks
- C. Private money lender
- D. Parents

E. don't know

22) 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

23) 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

24) The SSNIT student loan is charged an interest based on

- A. simple interest
- B. Compound interest
- C. Zero interest
- D. it depend on other conditions
- E. don't know

PART FOUR. KNOWLEDGE ABOUT INVESTMENT

25) In Ghana, listed/issue shares are traded on the

- A. Bank of Ghana
- B. Ghana stock exchange
- C. Securities and exchange commission
- D. Ghana investment market
- E. don't know

26) Which of these is a short-term investment?

- A. shares
- B. treasury bills
- C. bonds
- D. mortgage
- E. don't know

27) A type of professionally managed collective investment vehicle that pulls money from many investors to purchase securities is known as

- A. stock fund
- B. Bond fund
- C. Mutual fund
- D. Mortgage fund
- E. don't know

28) Do you think that the following statement is true or false? Buying a single company stock usually provides a safer return than a stock mutual fund.

- A. True
- B. False
- C. Do not know

29) An investment with a high return is likely to have higher than average risk

- A. True
- B. False
- C. don't know

30) High-risk and high-return investment strategy would be the most suitable for

- A. An elderly retired couple living on fixed income
- B. A middle-aged couple needing funds for their children's education in two years
- C. A young married couple without children
- D. All of the above because they all need high return

E. None of the above because they are equally risk averse

31) If each of 20 shareholders was paid a dividend of GH¢35, what is the total amount paid out in dividends?

- A. GH¢350
- B. GH¢700
- C. GH¢750
- D. GH¢20
- E. GH¢ 35

32) Considering a long time period (for example 10 or 20 years), which asset normally gives the highest return

- A. Savings Account
- B. Bonds
- C. Stocks
- D. Do not know

PART FIVE; KNOWLEDGE ABOUT INSURANCE

33) Employees cannot make pension contributions additional to any payments by their employer.

- A. True
- B. False
- C. Do not know

34) Employers are required by law to make superannuation payments on behalf of employees

- A. True
- B. False
- C. Do not know

35) Why would you buy an insurance policy

- A. Protect myself loss recently incurred
- B. Protect myself from sustaining future losses
- C. Protect myself from death

- D. Protect myself from troubles
- E. All the above

PART SIX; AVENUES FOR FINANCIAL LITERACY LESSONS

36) What channels do you use to get financial literacy knowledge?

- A. Media: print and online
- B. Classroom
- C. Financial institutions and other investment centers
- D. Others, please specify

37) How often do you use the above chosen channel(s)?

- A. Always
- B. Very often
- C. Rarely

38) What challenges do you face when using the channel(s)?

- A. Technicalities in the language used
- B. Inability to seek clarifications
- C. Others, please specify

Appendix 2: Student Enrolment by Department (2009/10 – 2014/15)

FACULTY/PROGRAMME	2009/2010			2010/2011			2011/2012			2012/2013			2013/2014			2014/2015		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
APPLIED SCIENCES																		
Computer Science / Info. Tech.	120	20	140	97	12	109	70	12	82	73	9	82	224	33	257	336	31	367
Hotel, Catering & Institutional Mgt	14	325	339	8	440	448	6	291	297	13	303	316	16	293	309	19	329	348
Statistics	65	41	106	87	15	102	78	11	89	62	11	73	49	7	56	57	8	65
BUILT & NATURAL ENVIRONMENT																		
Building Technology	204	7	211	191	2	193	236	3	239	281	4	285	281	9	290	379	12	391
Estate Management	197	61	258	202	60	262	177	55	232	149	140	289	249	82	331	234	71	305
Interior Architecture & Furniture Prod.	39	0	39	35	0	35	21	0	21	29	0	29	28	1	29	31	0	31
BUSINESS & MANAGEMENT																		
Accountancy	1831	903	2734	2018	1088	3086	2143	1088	3231	2167	1128	3293	1945	1071	3016	1971	990	2961
Marketing	714	482	1196	886	656	1542	841	622	1463	805	468	1273	556	375	931	518	350	868
Purchasing & Supply	449	224	673	514	261	775	482	261	743	503	296	799	522	380	882	523	361	884
Secretariatship & Management Studies	57	473	530	77	543	620	94	425	519	82	352	434	53	337	390	67	314	381
CREATIVE ART & TECHNOLOGY																		
Fashion Design & Textiles	147	249	396	153	244	397	97	99	196	94	154	248	98	189	287	161	260	421
ENGINEERING																		
Chemical	130	19	149	132	15	147	107	7	114	84	8	92	91	9	100	97	22	119
Civil	115	8	123	142	7	149	156	6	162	142	3	145	133	1	134	155	5	160
Electrical & Electronic	330	16	346	390	7	397	402	9	411	428	6	434	483	11	474	565	10	575
Mechanical (Automobile)	125	1	126	98	2	100	113	1	114	130	2	132	139	0	139	212	2	214
Mechanical (Plant & Production)	220	4	224	252	5	257	249	6	255	238	3	241	232	2	234	311	2	313
Mechanical (Metallurgy)	26	0	26	20	1	21	10	0	10	14	0	14	14	0	14	22	4	26
Access	0	0	0	0	0	0	314	7	321	217	7	224	64	11	75	37	10	47
ENTREPRENEURSHIP & ENTERPRISE DEVELOPMENT																		
Entrepreneurship & Finance	682	359	1041	685	343	1028	511	236	747	333	210	543	241	113	354	212	101	313
MEDICINE & HEALTH SCIENCE																		
Dispensing Technology	212	49	261	257	57	314	254	75	329	260	78	338	280	101	381	266	94	360
Medical Laboratory Technology																35	9	44
Industrial Laboratory Technology																14	7	21
TOTAL	5677	3241	8918	6244	3738	9982	6361	3214	9575	6104	3180	9284	5678	3005	8683	6222	2992	9214

Appendix 3 (Extract from Rector's 10th congregation report)

The Polytechnic

Kumasi Polytechnic was established in 1954 as Kumasi Technical Institute (K.T.I.) to offer craft courses. In 1963, the Institute was converted to a non-tertiary Polytechnic status under the Ghana Education Service to start offering, in addition, technician, diploma and sub-professional courses.

The Polytechnic Law, 1992 (PNDCL 321) elevated the Polytechnic to a tertiary institution to provide high calibre skilled manpower with reference to manufacturing, commerce, science and technology to act as a catalyst for technological development. The Polytechnic is one of the famous, elegant and vibrant Polytechnics in Ghana. It is a spectacularly beautiful institution, which is located at the heart of the Garden city of West Africa, the capital city of the Ashanti Region of Ghana (Kumasi). It has within the period of its existence become an important centre for the training not only for Ghana but also for other African countries.

Vision

To be a Centre of Excellence for tertiary level training of technical and professional human resource with entrepreneurial skills.

Mission

Kumasi Polytechnic provides a favourable environment for teaching, research, skills and entrepreneurship training in science, technology, applied social sciences and

applied arts for industrial and community development. It is positioned to attract students and scholars from local and international communities. It also provides consultancy services.

Core Values

Kumasi Polytechnic cherishes and upholds the following five core values which are deemed as central and basic to the institution's life and activities and influence all persons who work or pass through this institution. The core values of the Polytechnic govern the operations and conduct of management and staff as well as their relationships with the society at large.

The core values which the members of the Polytechnic cherish and uphold and therefore seek to building all those who work or pass through the institution are:

i. Integrity

The Polytechnic believes in integrity, which encompasses moral uprightness, honesty, reliability, and credibility. It has to do with self-control and discipline.

ii. Pace-Setting

The Polytechnic is committed to setting the pace for others to follow. This calls for competence, hard-work, sacrifice, diligence and conscientiousness. It involves striving to achieve excellence by continuously improving and innovating for the best possible outcomes. It calls for commitment and perseverance in the face of daunting hurdles.

iii. Good Stewardship

The institution believes in harnessing resources (physical, spiritual, intellectual and financial) and talents which will be dedicated to the efficient and effective use of same to achieve maximum results for all. In this vein, time is considered a valued resource and as such we uphold punctuality at work and studies. Therefore, lateness to work, lectures, meetings and other functions and events is not tolerated.

iv. Leadership by Example

The Polytechnic considers leadership by example as crucial in enhancing teaching and learning and for the proper conduct of its members. Staff are, therefore, to display maturity in their lifestyle and serve as models for our students in particular and the public at large.

v. Institutional Patriotism

Members are to project and market the positive image of the institution in all spheres of life. This calls for loyalty. This reinforces the noble idea that „the wellbeing of the institution is the well-being of all“.

Expansion

To achieve its vision and mission, the Polytechnic expanded from three Faculties and one Centre in 2010 to six Faculties, one School and two Institutes in 2011. The Polytechnic is currently organised into the following Faculties, Schools and Institutes:

- Faculty of Engineering
- Faculty of Built and Natural Environment

- Faculty of Applied Sciences
- Faculty of Business and Management Studies
- Faculty of Medicine and Health Sciences
- Faculty of Creative Arts and Technology
- Institute of Entrepreneurship and Enterprise Development
- Institute of Distance and Continuing Education
- School of Graduate Studies, Research and Innovation

The Polytechnic has also established an ICT Directorate headed by a Director and an Office for International Affairs and Institutional Linkages also headed by a Director.

