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Financial Literacy Among Tertiary Students In Ghana: A Study Of University Of Mines And Technology

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Abstract
This study assessed the level of fiancial literacy among tertiary students on the bases of their financial attitude and their level of knowledge on some financial products.To achieve these results 295 students of University of Mines and Technology were surveyed through stratified and convenient sampling techniques. The study found a moderate level of financial literacy among University of Mines and Technology students. Specifically, about 52.3% of the respondents portrayed proper financial attitude and behaviour and had good knowledge in the selected financial products tested. In assessing the extent of influence of gender and educational growth level on the level of financial literacy, one-way ANOVA and independent samples t-test were conducted in connection with Pearson's correlational. Findings from this analysis revealed that males are financially literate than females. Furthermore, there is a positive correlation between educational growth level (Level 100 to 400) and financial literacy, with higher tiers exhibiting higher levels of financial knowledge. The moderate level of financial literacy and its consequences then shows the need for stakeholders in educational system to put policies in place to ensure that the level of financial literacy among tertiary students in Ghana is improved since financial literacy has essential implication for future behavior. It is recommended that personal finance literacy course is well elaborated in the academic curriculum of tertiary institutions. Also, the national financial literacy week should be extended to school as workshops to encourage student`s participation in financial literacy.

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I. Introduction

Background of the Study

Financial literacy has assumed greater importance in the recent years, as financial markets have become increasingly complex and there is also an information asymmetry leading to making informed choices more and more difficult for the common person (Lusardi, Mitchell & Curto, 2010).Recognizing the need for financial literacy, many countries, both developed and developing, have launched financial education or financial literacy programmes for their people (OECD, 2012).These financial literacy programmes are intended to improve individual's ability to manage personal finances in today's world as well as plan for long-term investments for their retirement and children's education (Ansong &Gyensare, 2012).They must also decide on short-term savings and borrowing for a vacation, education, emergency, a house, a car loan, and other items. Additionally, they must manage their own medical and life insurance needs (Chen & Volpe, 1998).

According to Sarigul (2014), the understanding of financial terms and concepts includes an understanding of key financial concepts central to investing and managing funds to increase wealth and security and individuals also require an awareness of features available for borrowing and investing. This awareness includes the understanding of prospectus and annual statements, compound interest calculations and delaying the use of funds for consumption (Sarigul, 2014). According to Greenspan (2003), today's financial world is highly complex when compared with that of a generation ago. This calls for some level of financial literacy, especially amongst students as they prepare for the future ahead.

Financial literacy is a measure of the degree to which one understands key financial concepts and possesses the ability and confidence to manage personal finances through appropriate, short-term decision-making and sound, long-range financial planning, while mindful of life events and changing economic conditions (Remund, 2010). Financial literacy is fast becoming an indispensable part of an individual's life with the fast spate of evolution in financial sectors worldwide. Recent studies demonstrate that both young and older adults lack the basic knowledge needed to make good financial choices (Mandell & Klein, 2009). Most of these young and older adults can however be found in most of our tertiary institutions.

Some symptoms of insufficient personal financial literacy among students include using personal loans for irresponsible spending or overspending on consumables, irrational commitment to get-rich quick schemes among young people, making high-risk investments inconsistent with required capital stability and entering inappropriate vehicle-leasing contracts (Oppong-Boakye &Kansanba, 2013). They posit that such financial literacy deficiencies can affect an individual's or family's day-to-day financial management and ability to save for long-term goals such as buying a home, seeking higher education, or financing retirement and can also result in behaviours that make consumers vulnerable to severe financial crises. It is therefore very important that financial literacy of individuals is improved, specifically, students at the university level so they would have positive cash management attitudes before they enter the job market so as to have better financial management practices.

This current study investigates the level of financial literacy among students of the University of Mines and Technology, Tarkwa.

Statement of the Problem

The increasing cases of financial fraud in Ghana and the world over is indeed a major cause of worry to investors and the public at large. People are losing hard-earned money in investments to fraudulent individuals and investment houses who promise them higher rates of return. Others lose their entire life savings to internet fraudsters.

The recent case of investment tragedy, which took the entire news headlines in Ghana, was the case involving DKM and God is Love Microfinance. Joy News, represented by Dormedzui (2016), reportedthat majority of those victimized were young employees and students of the various tertiary institutions who had no other lucrative investment availableand hence their imprudent investment decision with DKM and 'God is Love' Microfinance. It can be deduced from the scenario that most of these investors were oblivious of the higher risk levels that accompanied such higher yielding investment packages. Taking cognizance of the ever-increasing need for financial literacy among students, tertiary students have been a central focus. Some of these students apply for financial support from organizations and family members, but due to their lack of adequate financial knowledge end up misappropriating these funds (Lusardi, Mitchell & Curto (2010).

It is speculated that tertiary students complete their programme of study without adequate knowledge in finance. It is therefore very important that such a problem is given immediate attention and the situation remedied. This can be achieved if the gravity or level of the problem is ascertained and then recommendations can be made. Hence, this research sought to assess the level of financial literacy among students of the University of Mines and Technology. A person's ability to manage his/her finances is essential to being successful or unsuccessful in life (Marson, 2016). This study focuses on budgeting skills, risk diversification, compound interest and inflation in assessing tertiary students' financial literacy at the University of Mines and Technology, Tarkwa. This research bridges the literature gap on previous studies among University students in Ghana, since previous studies failed to consider students who do not read business related courses and also did not give much attention to institutions without business programs. This study therefore considered students who read various courses and are from different departments of the University of Mines and Technology.

Purpose of the Study

The purpose of the study was to assess the level of financial literacy among students of the University of Mines and Technology, Tarkwa.

Specific Objectives

The specific objectives of this study were to:

1. Assess the overall level of financial literacy among students of University of Mines and Technology, Tarkwa.
2. Assess the influence of education on the level of financial literacy of students.

3. Assess the relationship between gender and the level of financial literacy among students of University of Mines and Technology, Tarkwa.

Research Questions

The researcher sought to answer the following questions through this study:

1. What is the overall level of financial literacy among students of University of Mines and Technology?
2. What is the level of financial literacy across students of various educational level in University of Mines and Technology?
3. What is the influence of gender on students' level of financial literacy in the University of Mines and Technology?

Significance of the Study

It is perceived by many that those who have reached tertiary level of education have had some form of financial coaching or are financially literate especially those who read courses related to accounting and finance.

This study will be of benefit to many stakeholders such as students, the general public, the government and policy formulators and implementers.

First, this research will cover the literary gap of research on financial literacy among students of the University of Mines and Technology. These students being made aware of the real situation of their financial knowledge and taking into consideration the recommendations made by the study, will be able to better equip themselves with financial knowledge. Then they will be able to make better financial decisions with relation to saving, spending and their investment habits.

Also, this research will serve as a reference to policy makers and implementers. The findings of this study is going to paint a vivid picture of the level of financial literacy among our university students, hence, it will be easier for policies to be drafted to remedy the situation.

This study upon completion will also contribute to the literature on financial literacy among the tertiary students and can be used as reference for future studies.

Finally, this research will also be of immense benefit to students and authorities from different tertiary institutions and not only to the University of Mines and Technology, Tarkwa.

Limitation of the Study

The survey instrument adopted in this study (i.e. questionnaire) limited the reliability of the findings of this study. In that, the questionnaire items constructed did not measure the true financial knowledge of the respondents. This suggested that, some respondents might have responded to the test items as though they possess good financial attitude and behaviour or have adequate knowledge on the various financial products tested. However, this limitation was controlled or managed by highlighting the implications of their responses to the findings of this study. Also, the respondents were guided closely to minimize potentially inappropriate responses.

Organisation of the Study

This study was structured into six (VI) Chapters. Chapter one (I), the introduction, was made up of details of the background to the study, the statement of the problem, objectives of the study, and the relevance of the study.

Chapter two (II) consisted of literature review (both theoretical and empirical literature), operational definitions, rationale of the study, and the key variables.

Chapter three (III) was made up of the methodology which examined the research design, population of the study, sample of the study, instruments and procedure for data collection.

Chapter four (IV) also included the analysis of the data collected for the study.

Chapter five (V),the discussion of findings and finally,

Chapter six (VI) included conclusions which were drawn from the analyses of the data collected as well as the recommendations and the limitations of the study.

II. Literature Review

Introduction

This section reviews relevant theories and works, covering: financial literacy's meaning and importance, its determinants, retirement plan intention, key elements, and the dangers of financial illiteracy. In this direction, the chapter provides broad discussion and review of the meaning of various terminologies relating to financial literacy and empirical evidence by prior researchers regarding the objectives of the study.

Overview of Financial Literacy

There has been a rising interest in financial literacy from academic, the community, international organizations and governments recently (Olga, 2011). Many of the recent studies have concentrated on the financial planning of university students because empirical evidences have demonstrated that most of them fail to plan their expenditure and unexpectedly experience financial problems. University students report having high debt, serious credit card usage, and high stress, as well as low financial satisfaction due to lack of financial management skills (Nellie, 2002; Norvilitis, Szablicki, & Wilson, 2003;Norvilitis, Merwin,Osberg, Roehling, 2006). Young adults may be unprepared to effectively manage the psychological costs associated with financial problems such as increased levels of stress and decreased levels of well-being (Norvilitis& Santa, 2002; Roberts & Jones, 2001).

However, it is generally accepted among organisationsuch as Organization for Economic Co-operation and Development, Zucchi and Garman that, financial education is the key to decrease financial problems, especially among young adults. The President's Advisory Council on Financial Literacy (PACFL, 2008), convened to "improve financial literacy among all Americans," defines financial literacy and financial education as follows:

Financial literacy**:** the ability to use knowledge and skills to manage financial resources effectively for a lifetime of financial well-being.

Financial education*:* the process by which people improve their understanding of financial products, services and concepts, so they are empowered to make informed choices, avoid pitfalls, know where to go for help and take other actions to improve their present and long-term financial well-being.

Servon and Kaestner (2008, p.273) defines financial literacy as "a person's ability to understand and make use of financial concepts". According to Huston (2010, p.306), financial literacy such as health or general literacy might be conceptualized with two main dimensions - understanding personal finance knowledge and using it. Hence, it could be described as "measuring how well an individual can understand and use personal finance-related information".

It is also added that this description is coherent not only with other literacy concepts but also with definitions in the extant financial literature. On the other hand, it would be better to remunerate some prior research. Albeit the absence of an exact or explicit definition, few authors have identified this concept with its important aspects. To exemplify, Wachira andKihiu (2012, p.42) states that financial literacy helps consumers in being prepared for difficult times by determining risk mitigant strategies, and in using financial products effectively, most importantly in making plausible decisions. Also, in another study, becoming financially literate refers to possessing knowledge and craft in order to handle money well (Howlett, Kees, Kemp 2008, p.231).

Norman (2010) defined financial literacy as having the right set of skills, knowledge and sufficient understanding on the use of money and its importance. Financial literacy is the ability to understand finance. Such skills and knowledge helps an individual to make effective and informed decisions of their finances.

A narrow definition of financial literacy focuses on basic money management tools such as budgeting, saving, investing and insurance (Gallery, Newton & Palm, 2011).

As observed by Hogarth (2002), there is a consistent theme running through most definitions of financial literacy including:

i. Being knowledgeable, educated and informed on the issues of money and assets, banking, investments, credit, insurance and taxes;
ii. Understanding the basic concepts underlying the management of money and assets (e.g. the time value of money in investments and the pooling of risks in insurance);
iii. Using that knowledge and understanding to plan and implement financial decisions.

Despite the various differences in definitions, the consistencies are notable. Hogarth (2002, pp. 15-16) described the consistencies in behavioral 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. While many recent studies have focused on the financial planning of university students, a significant portion of research aimed at directly measuring the impact of financial literacy has targeted high school students. Every two years, the JumpStart Coalition for Personal Financial Literacy administers a written 45-minute exam to 12th graders in schools across the United States and reports the outcome. The test first was administered in 1997 and continued in 2000, 2002, and 2004. Each year, students average a failing grade; the mean score was 52.3% in 2004. While the JumpStart exam has not been administered to college students, Chen and Volpe (1998) assessed the financial literacy of

924 college students who scored 53% on average;non-business majors, women, students in the lower academic years, those under age 30, and those with little work experience had the lowest scores.

Importance of Financial Literacy

Research has shown that financial literacy is beneficial to individuals and families (Blalock, Tiller, & Monroe 2004). Thus, financial literacy is not only important to the individual household and family, but also to their communities as well (Hogarth &Hilbert, 2002). It increases students' chances for saving and investing, getting out of debt, spending less than they earn, and living on a budget. It also decreases their chances for bankruptcy, receiving government assistance (Bauer, Braun, & Olson 2000); (Huston, Miller, Richburg-Hayes, Duncan, Eldred, Weisner & Lowe 2003), and making poor consumer decisions (Hayhoe, Leach, Turner,Bruin & Lawrence 2000). Students who lack financial knowledge have increased financial difficulties that continue into later years (Hira, 2002). Chen and Volpe (1998), find that students with less financial knowledge have more negative opinions about finances and make more incorrect financial decisions. They point out that having a low level of financial knowledge limits students' ability to make informed decisions.

They fail to make correct decisions because they have not received a sound personal finance education (Hira, 1993; Hira & Mugenda, 2000). Danes (1994) mentions that a higher level of financial education influences financial knowledge, attitudes, and behaviours. Financial education increases financial knowledge and affects financial attitudes (DeVaney, Gorham, Bechman &Haldereman 1996, Grable & Joo 1998).

Grable and Joo (1998) find that financial education "levels the playing field" with regard to gender differences and "is effective in changing knowledge, attitudes, and behaviours". Moreover, increasing financial literacy is a way to increase empowerment and improve the quality of life (Knapp, 1991). Energy, thought and time are spent pursuing money and limiting the unnecessary waste of money. Thus, when students gain more knowledge and more positive attitudes toward money, they make better decisions, which save resources and improve their situation (Knapp 1991).

Financial literacy also promotes self-confidence, control, and independence (Allen, Edward, Hayhoe & Leach 2007). This comes by feeling in control and knowing how to function in a complex market place. When consumers feel they are in control of their finances, they are more likely to participate in the market place (Knapp 1991).Norvilitis, Szablicki and Wilson (2003) found out that perceived financial well-being in college students appears to be related to psychological well-being, an ability to be more in control of their lives, and having lower levels of dysfunctional attributes.

Elements of Financial Literacy

Topic such as budgeting, savings, record keeping and personal finance as used in financial literacy are considered more important to individuals in the lower-income brackets. According to Toussaint-Comeau and Rhine (2000), this seems to suggest that the focus of financial educators should be two-fold: how to save and also why it's important to save.

Saving and Retirement Planning

Financially literate people have a greater capacity to save for retirement (Garman, 1997). However, researchers have found that individuals do not save enough for retirement (Bernheim, Skinner & Weinberg 2001). This is achieved by financial efficiency which results in saving money, making an effort to set aside money and an enhanced ability to set realistic retirement goals and select suitable investments to realize those retirement goals. A better-informed consumer will save for the future, for retirement and for unforeseen circumstances and emergencies.

A Survey, conducted by the Employee BenefitResearch Institute (EBRI, 2010) in the United States, realized that financial literacy is useful in life stages where important decisions are made, and as such financial education at these stages can successfully alter behaviour relating to retirement planning and saving. Financially literate people were more inclined to save regularly, possess a savings account and pay off credit cards. Financial literacy increases students likelihood to save, invest, get out of debt, spend less than they earn, and live on a budget (Bauer et al., 2000). Danes (1994) finds that a higher level of financial knowledge was positively correlated to a higher level and regular source of income as well as a higher savings rate.

Life Skills and Bargaining Power

The realisation of good financial behaviour is achieved through the development of knowledge and skills, which provides the basis for making informed decisions (Chen & Volpe, 1998). The financial habits students have while in college tend to carry on into adult life. The better their financial literacy is when they leave college, the fewer financial hardships they may have in life (Grable & Joo, 1998). A skillful and knowledgeable person with a good attitude is in the best position to make the most of life's opportunities and to budget and plan spending (Bell & Lerman 2009). The European Commission (2010) has recognized that financial literacy gives consumers greater bargaining power through understanding finance and terms in consumer contracts.

Consumers can gain better deals and demand more from service providers. In light of the fact that contact with financial institutions is necessary for a normally productive and enjoyable life, the ability to understand financial institutions and the products they offer is an important benefit of financial literacy.

Wealth Accumulation and Financial Literacy

If financial illiteracy leads to poor or no planning, it may also affect wealth accumulation. Research by Lusardi (2003) showed that those who plan accumulate more wealth before retirement and are more likely to invest in stocks. Moreover, planners are more likely to experience a satisfying retirement, perhaps because they have higher financial resources to rely on after they stop working.

Financial Efficiency

Financial literacy results in financial efficiency (Capuano & Ramsay, 2011). Financial efficiency refers to the use of financial products and investing without waste and unnecessary cost. Financial literacy therefore gives consumers the ability to live more efficiently, without unnecessary cost and waste. Financial efficiency can include selecting the best value product on the market, and the lowest possible price on the market for a particular product or service.

Financial efficiency is achieved by comparison shopping, an attribute of financially literate consumers. Comparison shopping leads to savings by purchasing the best value products. The European Commission (2010) noted that people who understand financial issues make better choices of financial services for their particular needs. They are less likely to purchase products they do not need, be tied into products that they do not understand, or take risks that could drive them into financial difficulty. Financial literacy prevents students from making poor consumer decisions (Grable & Joo, 1998; Hayhoe et al., 2000).

Increasing financial literacy is a way to financially empower people and improve their quality of life (Voydanoff, 1990). Effort, mental resources, and time are devoted to earning and managing money wisely, avoiding unnecessary expenses. Thus, when students gain more knowledge and more positive attitudes toward money, they make better decisions, which save resources and improve their situation (Knapp, 1991).

Determinants of Financial Literacy

The financial services sector has become highly complex and specialized and consumers who are desirous of managing their finances effectively need to constantly keep up with the activities of the sector. The advent of new technology has increased competition, market innovation and the sophisticated tastes and preferences of consumers have led to the creation of a wide range of financial products and services. This requires that consumers need a broad spectrum of financial knowledge to be able to actively participate in the financial market. This section discusses the factors that determine the level of financial knowledge such as gender, age, educational level, profession, level of wealth, geographical location and ethnic background.

Age

Most researches conducted have established age to be an essential determinant of an individual's knowledge in financial literacy. Worthington (2004) finds that among Australians, aged between 50 to 60 years are less likely to be financially literate. In Sweden, Almenberg and Säve-Söderbergh (2011) find that people between 35 to 50 years have the highest level of financial literacy while those older 65 had the least. Most Americans, aged 51 to 56 are the least literate, financially (Lusardi & Mitchell, 2006).

Cole and Fernando (2008), also finds a similar relationship in India and Pakistan. In their study, age had a non-linear effect on financial literacy and peaks at age 40 in India and age 45 in Pakistan. According to the study conducted by Worthington in 2004, it was brought to light that an older person is likely to have a higher financial literacy than the young ones. The study showed that those between the ages of 40 – 69 are financial literate than those between the ages of 18 – 39. This was so because the study focused on older people.

Gender

On the issue of gender, most researchers have found out that men score better on various financial literacy tests (Mandell, 2008; Cole et al., 2008), Worthington (2004), Monticone (2010), Volpe, Chen and Pavlicko (1996), Goldsmith and Goldsmith (1997), explain that in Swedish societies, men mainly make the household's economic decisions and that explains why women are less financially literate than men. Goldsmith and Goldsmith (1997) also argued that men are more financially literate because they are more interested in the issues of finance and personal investment and therefore tend to seek more information about these topics.

According to the research conducted by Monticone (2010), females performed on average, worse than males. This means that males were financially literate than females. This finding was so since 68.2% of respondents used for the study were males and 37.2% were females.

Education

As compared to those with low education level, those with a university or college degree tend to have more financial knowledge (Cole et al. (2008), (Worthington 2004). Moreover, Mandell (2008) also finds that a positive correlation exists between education and literacy even at the early stages of the life cycle. In a numeracy test, children of college graduates performed better than children of people with lower education.

Furthermore, several researches also show a positive correlation between financial literacy and major study. Researches by Lusardi and Mitchell (2007), Almenberg and Säve-Söderbergh(2011), Beal and Delpachitra (2003), Chenand Volpe (2002), and Alessie, Rob, Annamaria Lusardi, and Van Rooij. (2008), suggest that people who studied business or economics have a wide knowledge in financial matters.

According to Monticone (2010), people with higher education are financially literate than those with low level of education, probably because individuals with more general education experience less difficulty acquiring financial knowledge and therefore incur lower learning cost. This study will either support or debunk these findings.

Occupation

Another important determinant of financial literacy as found by many researchers is occupation. Among Australians, executives, business owners, farm owners and professionals were found to have the highest level of financial literacy while the unemployed had the least financial knowledge. Almenberg and Säve-Söderbergh (2011) and Monticone (2010) found same for Sweden. In Italy, those with white collar jobs, the self-employed and managers are the most literate (Monticone 2010). Cole et al. (2008) found that among Indonesia, those who owned a non-farm enterprise had the most financial knowledge.

The research conducted by Monticone (2010) established a positive relationship between employment and financial literacy in the sense that employed individuals had a high financial literacy than unemployed individuals. This finding could be as a result that a greater fraction of the respondents for the study were employed, hence the findings of this study will support or debunk this finding.

Area of Residence

Guiso andJappelli (2003) argue that one's areas of residence determine the intensity of information the individual gets as regards the stock market. In a study by Monticone (2010), residents in Southern Italy are worse off in financial literacy skills than those in Northern part.

There have also been studies to see the impact of area of residence in financial literacy. According to Cole et al. (2008), rural inhabitants have the lowest level of financial literacy. This could be because those in rural areas do not have equal access to information as compared to those in urban areas.

Nationality and Ethnic Background

With regards to ethnic background and financial literacy, Lusardi & Mitchell (2006) found that in US universities, Blacks and Hispanics were less knowledgeable about finance. In Australia, Worthington (2004) found that those with a non-English speaking background were less likely to be financially knowledgeable. In Malaysia, a study of university students found that those from rural areas, Chinese students, and senior-year students had higher scores on their knowledge about their educational loans.

A separate study of 934 adolescents in Malaysia suggested that Chinese youngsters were less fashion-conscious, brand-conscious, and less recreational-oriented compared to Malay youngsters. This was due to the fact that the study was conducted in China. These studies findings were so because the studies were conducted in the home countries of those who were perceived to be financially knowledgeable. This study will bring to light if nationality and ethnic background has an influence on financial literacy.

Wealth

As found by Delavande, Rohwedder, and Willis, (2008) and Peress (2004), the need to be able to manage one's own wealth has a positive effect on financial literacy. Wealthy people therefore tend to be more financially knowledgeable than those who are not wealthy.

Peress (2004), showed a direct relationship between wealth and financial literacy. This means that wealthy people have higher level of financial literacy than poor individuals. This was so because 65% of the respondents of the study were rich, 15% were poor and 10% of them were neither rich nor poor. Hence the study conducted by Peress in 2004 was skewed towards the rich. This study will either support or debunk the assertion of Peress that wealthy people have higher financial literacy than the poor.

Personal and Family Background

Researchers have found that male college students are more financially literate than female college students (DeVaney etal., 1996; Chen & Volpe, 1998, 2002). It also finds out that a student's major subject also affects his level of financial knowledge as those who major in business subjects were more financially literate than those who major in non-business subjects. Moreover, those from educated families scored higher in the financial literacy tests than those from families with less educational background. A Survey conducted in the Jumpstart College, by Mandell (2008) finds that parent's educational level was constantly related to one's financial knowledge.

Retirement Plan Intention

Several researchers (Agnew &Szykman, 2005; Al-Tamimi & Bin Kalli, 2009; Arrondel, Debbich, & Savignac, 2013; Fornero &Monticone, 2011; Joo & Grable, 2000; Lusardi & Mitchell, 2007) have studied the link between retirement planning, financial literacy and savings in developed countries. Van Rooij, Lusardi and Alessie, (2007), finds that in the Netherlands, those who are financially knowledgeable plan towards their retirement and therefore found a strong positive correlation between retirement planning and financial knowledge. Lusardi (2008), using data from the SAVE survey to examine financial literacy in Germany, investigated the relationship between retirement planning and financial literacy and through that developed an instrumental variable strategy to be used across various regions to measure the financial knowledge of peers.

Financial Satisfaction

According to Falahati and Paim (2011), one's financial status affected one's personal financial satisfaction. Various researchers have found a relationship between financial satisfaction and financial behavior, attitude, literacy and strain. Joo and Grable, (2000), investigate the variables that determine financial satisfaction and concluded that financial satisfaction relates, either directly or indirectly, to financial knowledge, financial behavior and financial solvency. Bell et al, (2009), conclude that an individual's overall satisfaction in retirement is enhanced by his financial planning.

Technological Changes and Market Innovation

According to Akoto 2015, the advancements made in the technological field have greatly influenced how financial services and products, are marketed, processed and delivered. The wide use of the internet as a communication delivery tool has led to the effective and efficient marketing of financial products and better customer service. Technology makes it possible to serve a large number of customers more speedily and more efficiently in less time without any limits to their geographical locations. The amounts of information available to individual consumers have greatly increased.

However, to be able to benefit from these technological advancements and innovations consumers need to have working knowledge of finance as this will help them identify and access relevant financial information as well as evaluate how credible these information sources are. Technology has also made it possible to design specific products and services targeted at specific households and markets to match their peculiar needs and characteristic.

These promote competition and hence improve customer service. However, there is the downside to technological advancement. Unscrupulous lenders can take advantage of customers' vulnerability to defraud them. Some customers may also be induced to buy products and services that do not meet or are not appropriate to their circumstances.

Changes in Personal Finances

Changes in personal finance have prompted more attention to the concept of personal financial education. Increases in consumer debt levels, and in personal bankruptcy filings as well as a decline in personal savings rates are all factors that have increased the need for more awareness on financial education. For example, outstanding household debt grew at an established 8.75% in 2011, although consumers' credit in 2001 was lower than that of 2000. However, borrowing by households was greater than personal incomes in 2001. These statistics calls for a greater interest to be shown in individuals' financial literacy programmes.

Available Financial Advisors

In developed economies, financial advisors are one of the main avenues to seek financial information especially where the individual want advice on mutual funds and other investment advice (Alexander, Jones & Nigro, 1998). However, in spite of all the benefits individuals get from the advice of these financial advisors as per their financial decisions, it has been demonstrated that only a few of investors' fund that information delivered by financial advisors have lower risk-adjusted returns, higher trading frequency, portfolio turnover and higher portfolio risk. It can therefore be concluded that financial advisors offer benefit to investors which, although are important, are vague. These benefit may include helping the investor to manager their time more effectively and customizing their portfolio. It must be stated that unit trust consultants play a major part in the decision of individuals to invest their retirement savings in such trusts. Members who have a high regard for such consultant are more likely to invest in such unit trust.

Activity in Financial Markets

Financially literate consumers have been seen to possess more financial products and be productive investors (Capuano & Ramsay, 2011). Limited financial market participation, or inertia, may be a consequence of low levels of financial literacy.

VanRooij, Lusardi, and Alessie, (2007) found out that people with low levels of financial literacy are significantly less likely to hold shares and stocks. Financial literacy does not only enhance participation, but also encourages sound investment strategies such as diversification. The assumption is that financial illiteracy causes anxiety when dealing with financial products. Accordingly, financially illiterate people avoid financial products which are perceived to be difficult to understand. As a result, the optimal approach for a person who is financially illiterate is to abstain from market participation, and avoid purchasing costly products or borrowing. However, in the long term financial exclusion may be extremely costly and cause a person to miss the benefits and opportunities offered by the financial system. Financial literacy can increase financial inclusion which eventually will promote economic growth.

A financially literate consumer will be more confident when making decisions about finance, thereby increasing participation in the market. Consumers benefit from investment in financial because their stock of financial knowledge allows them to increase the returns on their wealth (Jappelli& Padula, 2013). Financial literacy can influence the types of products selected, and the types of investments made. The fast moving nature of financial markets means that individuals who understand product features and market environments are best placed to make an informed decision about their financial needs. This also leads to consumers avoiding unnecessary costs. An improved understanding of financial products and services develops greater financial confidence in consumers, who select the most appropriate products and organize those products (such as by diversification strategies, for example) in the best possible way.

Consumer Rights and Regulatory Intervention

Education in consumer laws and fraudulent schemes is a component of financial literacy. This knowledge gives people the tools and understanding to identify and avoid fraudulent schemes and reduce the severity of falling victim to such schemes. This translates into lower levels of regulatory intervention because consumers are better able to take care of themselves. Kempson (2010) writes that a financially capable person knows where to go for help.

Greater Competition, Innovation and Quality Products

According to Capuano and Ramsay (2011), Alessie, Van Rooij and Lusardi (2011), Worthington (2006) and Braunstein and Welch (2002), financially literate consumers are more financially efficient. Seeking and purchasing better, cheaper and more appropriate products and services can drive efficiencies in the financial industry. This leads to increased competition, better quality products and greater innovation and diversity in the market.

Knowledge of consumer rights and contracts also allows consumers to evaluate products more carefully and as a result demand more from suppliers. Also, Hall (2008) promotes the view that financial literacy bolsters market discipline, which is the collective consumer influence on financial institutional behaviour, making these institutions are more likely to operate in a safe, sound and efficient manner". As a result, better informed consumers are collectively able to influence the ways that financial institutions are managed, and thus reward those institutions which offer better quality products and services, at the best value.

Coverage of Risk

Financially literate consumers have a greater appreciation of risk, and therefore the problem of under coverage of risk (for example, underinsurance) is not prevalent in markets in which people are financially educated (EMN, 2010). A greater appreciation of risk translates into the purchasing of appropriate insurance and careful investment decisions, therefore reducing the burden on the financial system from under coverage of risk and underinsured ventures, reducing costly insolvencies, bankruptcies and business inefficiency. It is possible that an increased level of financial literacy could lead to more entrepreneurial activity and a decrease in new venture failures.

Self-Funding of Retirement

The increased saving and retirement planning resulting from increased financial literacy also has positive effects on the financial system and economy, by reducing the burden on the state to provide pensions and government funding for people experiencing financial hardship (Capuano & Ramsay, 2011). Instead, people are more willing to build wealth during their working lives to fund retirement.

Financial Inclusion

Greater financial understanding and knowledge allows those members of society who are otherwise excluded from the main stream financial sector to get the opportunity to use financial products and services (Capuano & Ramsay, 2011). For example, knowledge of a term deposit may prompt a person to earn more interest, whereas no knowledge of the existence of such a product will result in less interest being earned and an opportunity lost. Financial literacy provides the understanding required to access particular products which allows people to borrow and also become financially active. The European Commission (2010) notes that those who have received some form of education on financial matters are far more likely to be engaged with the mainstream financial industry, and not have to rely on higher-cost and higher risk fringe providers or loan sharks. It can encourage citizens, even those on low incomes, to plan and save some part of their incomes. It can help to develop the skills to form the financiers of tomorrow.

Understanding of Government Financial Policies

Financially literate people are also able to better assess financial policies of governments and the actions of financial institutions. This creates better informed citizens who are able to make sense of policy reform to the financial sector.

Financial literacy promotes understanding and acceptance of important political reforms, such as health care or pension reforms. While many political reforms are highly complex, transparent financial sector reforms which can be understood by an informed public are important because they give the public the ability to critique government policies (Capuano &Ramsay, 2011).

According to OECD (2005), financially educated consumers can help ensure that the financial sector makes an effective contribution to real economic growth and poverty reduction. Financial literacy is also crucial for more developed economies, to help ensure consumers save enough to provide an adequate income in retirement while avoiding high levels of debt that might result in bankruptcy and foreclosures.

Therefore, knowledge in Finance is relevant for both household, individuals, businesses and the nation as a whole. It is evident from the review above that financial literacy is very beneficial to the individual, community, financial system and economy as a whole.

Dangers of Financially illiteracy

Obviously, the less knowledge people have, the more they run into trouble. People with low level of financial literacy are likely to make costly financial planning mistakes. A study by economists at the Atlanta Fed finds that thirty per cent of people in the lowest quartile of financial literacy thought they had a fixed-rate mortgage when in fact they had an adjustable-rate. Lusardi and Tufano (2008) in their work find that people with lower debt literacy end up paying higher fee and generally have higher borrowing costs. People fail to make correct decisions because they have not received a sound personal finance education (Hira, 1993; O'Neill, 1993).

Financial literacy deficiencies can affect an individual's or family's day-to-day money management and ability to save for long-term goals such as mortgage decisions, seeking higher education, or financing retirement. Ineffective money management can also result in behaviours that make consumers vulnerable to severe financial crises. People with low financial literacy are more likely to have problems with debt (Lusardi & Tufano,2009). They are also less likely to participate in the stock market (VanRooij, Lusardi, &Alessie, 2007) and less likely to choose investment products with lower fees (Hastings & Tejeda-Ashton, 2008). The financially illiterate person is less likely to accumulate wealth and manage wealth effectively (Stango & Zinman, 2007; Hilgert, Hogarth, and Beverly, 2003), and less likely to plan for retirement (Lusardi & Mitchell, 2006, 2007, 2009).

Students who lack financial knowledge have increased financial difficulties that continue into later years (Danes & Hira, 1987; Hira, 2002). Chen and Volpe (1998) find that students with less financial knowledge had more negative opinions about finances and made more incorrect financial decisions. Having a low level of financial knowledge limits students‟ ability to make informed decisions (Jorgensen, 2007).

The consequences of financial illiteracy cannot be down played since it has very daring effect. The negative effects of financial illiteracy transcend from the individual consumer to the nation as a whole.

Empirical Review on Financial Literature

This section reviews the findings of prior studies on financial literacy. This section is very crucial as it forms the basis for discussions of the study's findings.

Cameron, Calderwood, Cox, Lim, and Yamaoka, (2014) assessed the determinants of financial literacy among students of New Zealand. The sample selected was surveyed on the basis of earning income, the economic way of thinking, saving, spending and using credit, and money management, and also measured the students' level of financial risk tolerance. The students' financial literacy was appraised using the Financial Fitness for Life-High Schools (FFFL-HS) developed by the National Council on Economic Education (NCEE) to provide an up-to-date assessment tool that measures high school students' level of understanding in personal finance. It was found that financial literacy was lowest among financially poorer students, those with less English ability, and those with less mathematical ability. However, relative poverty and lower English ability were not related to financial literacy at the highest cognitive level of application. They also found that high school students who are less risk averse are also less able to apply their knowledge to personal financial situations, depicting an inverse relationship between financial risk tolerance and financial literacy. Overall, these authors found that the level of financial literacy is low among the surveyed students.

Albeerdy and Gharleghi (2015) also investigated the factors affecting the financial literacy of university students in Malaysia. Here, 105 students were surveyed by administering questionnaires using a convenient sampling technique. Findings from their study reveal that, despite the low level of financial literacyidentified, there are significant relationships between education and money attitude (independent variables) and financial literacy (dependent variable). However, there was no relationship between family socialization agents and financial literacy. In their conclusion, these authors recommended that efforts be put in place to strengthen the significant influences of education and money attitude in order to increase the financial literacy rate among university students in Malaysia.

Arceo-Gómez and Villagómez (2017) also assessed the level of financial literacy among Mexican high school students. About 941 students (with only 889 effective responses) were surveyed using the survey instruments developed by OECD (thus, financial knowledge, financial behavior, and financial attitude) and Lusardi and Mitchell (thus, risk diversification, compound interest and inflation). These authors found that students have relatively high knowledge in inflation than risk diversification and compound interest. In details, 60% of the respondents understood the concept of inflation, 34.1% understood risk diversification and 31.7% also understood the concept of compound interest. Also, 20% of the students did not understand basic financial management concepts like risk diversification, compound interest and inflation, and around 6.6% understood all these concepts depicting a lower level of financial knowledge in these aspects of financial literacy. The study further showed that almost 20% had understanding of basic financial concepts (financial knowledge), 57% got high scores on financial behavior, and about 70% have positive financial attitudes. In conclusion, Arceo-Gómez and Villagómez (2017) posited that the overall level of financial literacy among tertiary students is low.

In Ghana, Oppong-Boakye and Kansanba (2013) conducted a study among undergraduate business students of Kwame Nkrumah University of Science and Technology. These authors adopted stratified sampling techniques to sample 203 students and administered questionnaires thereof. They found formal education to be the major source of financial literacy of undergraduate students, followed by parents, the media, and peers. Their findings further revealed, among others, that level 400 undergraduate students are financially literate followed by level 300, level 100, and level 200. Insightfully, their studies went further to theorize that financial literacy is highest among accounting students followed by banking and finance, marketing, and human resource management students.

On the basis of the positive relationship between financial knowledge and financial behavior identified, Oppong-Boakye and Kansanba (2013) concluded that business students of KNUST are financially literate although empirical literature indicates the overall level of financial literacy among tertiary students in Ghana to be low.

Mireku (2015), in his assessment of financial literacy among tertiary students in Ghana, surveyed 3,932 students from six private (using simple random sampling) and six public (using purposive sampling) universities in Ghana including, among others, Kwame Nkrumah University of Science and Technology, University of Ghana (Legon), University of Cape Coast etc. This study explored the literacy of the students in money management, savings and borrowing, investment and insurance. Furthermore, the study used an econometric model to assess the determinants of financial literacy and also assessed how the students' level of financial literacy affected their ability to make optimum financial decisions.

Mireku (2015) found that the level of financial literacy among tertiary students in Ghana is low. Precisely, students have moderate level of knowledge in savings and borrowings than investment, money management and insurance. Also, gender, work experience, and mother's level of education were significant determinants of financial literacy, by astoundingly indicating that students whose mothers have low educational level are more financially literate than their counterparts whose mothers have higher educational level. Mireku (2015) further stated that students with high level of financial literacy are more likely to make sound judgements about financial issues, informed financial decisions as well as sound personal finance practices. Consistently to the findings of Oppong-Boakye and Kansanba (2013) class rank had a significant impact on students' financial knowledge. Thus, levels 400 and 300 students were financial literate than levels 200 and 100 students (Mireku, 2015).

A more recent study on financial literacy by Quainoo, Fianko, Weliko, and Nomo-Newman, (2017) examined the level of financial literacy among students of Kwame Nkrumah University of Science and Technology on risk diversification, compound interest and inflation. About 710 students were surveyed and it was found that tertiary students lack financial knowledge on risk diversification, compound interest and inflation. Specifically, only 31.3% of the students were financial literate. However, on average, 37.0%, 27.8%, and 29.2% of the students have adequate knowledge on inflation, compound interest, and risk diversification respectively. The study further revealed that, males are more financial literate than females. Also, there was significantly positive relationship between financial literacy and some students' demographics, including: level of education, academic performance, programme of study. However, age, income, religious affiliation, ethnic background, and previous type of school had statistically insignificant relationship with financial literacy.

Conceptual Framework for Financial Literacy

Figure 1 presents the logical relationships among financial literacy components. The mutual relationship between financial knowledge, skills and behaviour are important concepts in the theory of financial literacy. Financial knowledge, in particular, forms a basic part in financial literacy. It, in turn, reflects the individual's financial skills and behaviour. However, Akoto (2015) noted that, actual financial behaviour depends on the individual's financial knowledge and financial skills.

The experiences gained by the individual through financial skill also feeds and boost the individual's financial knowledge. Yetthe influences of other factors,including demographics, render the relationship between financial knowledge, skills and financial literacy unlikely to be perfect (Akoto, 2015).

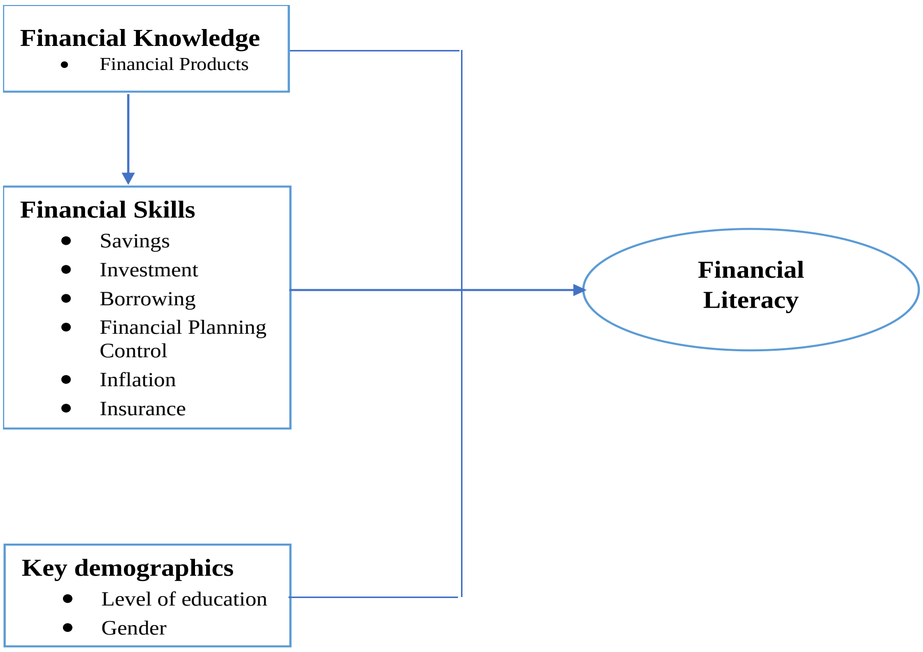

Figure 1: **Conceptual Framework for Financial Literacy**

Chapter Summary

This section of the research looked at the relevant review of theories and related works which was subdivided into the meaning and overview of financial literacy, importance of financial literacy, determinants of financial literacy, Retirement Plan Intention**,** elements of financial literacy, and dangers of being financially illiterate as well as a conceptual framework

III. Research Methods

Introduction

This chapter described the information on the description of the study area. It looked at the procedure and techniques employed in assessing the level of financial literacy among students of the University of Mines and Technology, Tarkwa. It also described the location and size of the study area, the research design, the target population, the sample size and sampling procedure, data collection instruments, and how the instruments were used. This chapter further described the statistical tools and methods used in the data analysis and various problems that were encountered.

Research Design

The research design selected for this study is descriptive survey. The design was appropriate for the study to meaningfully analyze the information provided by the respondents through the completion of questionnaires. The descriptive survey method was concerned with the condition or relations that existed such as determining the nature of prevailing conditions, practices and attitudes (Miller, &Brewer, 2003). The descriptive survey was used because it allowed gathering in-depth information that may be either quantitative or qualitative in nature. Also, subject or participants were observed in a natural and unchanged environment.

Study Area

The study was conducted at the University of Mines and Technology which is located in Tarkwa a town found within the Tarkwa Nsuaem Municipal District in the Western region of Ghana (www.wrcc.gov.gh; accessed on 08/02/2018). The study area has a total population of 1,624 out of which 253 are females and 1,371 are males. The population of the University of Mines and Technology is youthful with about 80% aged between 20 - 30 years old (www.umat.edu.gh; accessed on 08/02/ 2018).

Research Paradigm

The behaviour of every researcher is guided or informed by some basic and fundamental assumptions about the perception of the area of the research. These assumptions and perceptions serve as the intellectual framework within which the research is conducted. This is what was referred to as the research paradigm. According to Saunders (2009), there are two main philosophical thoughts which differentiate existing research paradigms. These are quantitative (positivism) and qualitative (phenomenology).

One of the most distinguishing features of quantitative research is that it is singular and objective (Saunders, 2009). There is no created avenue for the researcher to influence his or her own opinions or values and therefore the independence of the researcher and the research results from such opinions is assured. Although qualitative words are used in the description of variables and finding of the research, the discussions are based on specific and set definitions and the discussion is also formal. The processes that the research goes through are usually deductive and can therefore be easily used to establish a cause and effect relationship between the variable used. This relationship can then be used to predict future occurrences and explain and understand occurred incidences which involve the variables under study. Research through quantitative usually proves highly reliable, accurate and valid and can be replicated to have similar results if the same parameters and circumstances are present.

Close ended questions are usually used when using the quantitative method for the research. This gives the researcher the advantage of having a numerical data which when processed, is more observable, reportable and can be reported to quantifiable units.

In qualitative research, on the other hand, the researcher is free to interact with the research sample and also give his opinions about the research topic and problem. This makes the qualitative research method very subjective. Multiple means are also used to gather information from the respondents. These include open ended questions, interviews, observations and other interactive activities involving both the researcher and the respondent. As opposed to quantitative research, qualitative research centers, on emerging decisions and design and is very informed. It is also premised on theories and patterns in order to fully understand the research problem. However, the reliability, validity and accuracy of qualitative research method rely on verification. The quality of the research method depends on the quality and depth of the data gathered, hence quantitative research is the best for the study.

The quantitative research method was employed for this study. The method afforded the researcher the convenience of designing a single research study that had the two critical features of establishing relationship between the measurable variables used and also answer questions about the complex nature of the phenomenon from the view point of the participants.

The quantitative method was adopted for this research because it provides the most appropriate means of gathering information and measuring the parameters being considered in this study. Moreover, the quantitative method provides more areas of strength and fewer weaknesses as compared to the qualitative method. However, the strengths and weaknesses of this method are relative to the manner and framework within which the researcher studies the phenomenon involved and is therefore not obsolete. Moreover, the nature of the research being conducted calls for the establishment of verifiable and reliable relationships between the variables involved so as to be able to give clear and concise recommendations.

Target Population

The population of any research gives readers the relevant information on the communities, organizations, groups or individuals on which the research is been conducted. The sample used for the research is taken from the population (Saunders, 2009). Cohen et al. (2011) describes population as the subject of a particular research within a group of people.

For this research, the target populations were the students of the University of Mines and Technology. The estimated population for this study was 1,624 out of which 253 were females and 1,371 were males. The population of the University of Mines and Technology is youthful with about 80% aged between 20-30 years old and they fall within the working class (www.umat.edu.gh.Accessed08/02/ 2018). The target populations constitute individuals from different cultural, religious and educational background.

Sample size and Sampling procedure

A good research must have a plan to obtain a sample from the population given. This study is not an exception. Sampling, as used in this study is the method the researcher uses in selecting variables as his sample. Samples are a sub-group or part of a population in a study (Akoto, 2015).

The representative sample with consultancy from Krejcie and Morgan (1970) sample size determination with a 95% confidence level and a confidence interval of 5% was three hundred and eleven respondents but as a result of limited time and lack of funds the researcher used a sample size of three hundred (300) students, all of whom are students of the University of Mines and Technology. The study employed stratified random sampling method in selecting the 300 students since the research was conducted for all students and there are four levels thus level 100, 200, 300 and 400. The researcher divided the population into five strata that is according to levels (level 100, 200, 300, 400 and post graduate level). From there 50, 56, 70, 80 and 44 students were selected from each stratum respectively using simple random sampling procedure. This gave an equal opportunity and fairness to both male and female students at all levels to participate in the survey.

Data Collection Instrument

This study made use of questionnaires in eliciting information from the students of the University of Mines and Technology. The questionnaire was used because it has advantage of removing the undue influence that the presence of the researcher might impose on the respondents. The researcher adopted the questionnaire due to the scattered nature of the respondents. Questionnaires were distributed to the students that were selected for the study. A combination of closed and open-ended questions was used for this research. The choice of questions for achieving the aim of this study was influenced by the research questions and objectives.

The advantages of using questionnaires for this study are that, the researcher was able to collect enough data from large number of respondents in a way that was cost effective and required a short time period. Moreover, the researcher could easily and efficiently quantify and analyze the result of the questionnaires provided in a more objective way.

Data Collection Procedure

The researcher only used primary data for the study. The data for the study was collected from the population mainly through the use of questionnaires. The questionnaire was administered face to face to respondents. This was time consuming but had the advantage of ensuring a higher response rate of 98% than mailing. The time requirement of this mode of questionnaire administration was taken care of through the recruitment and training of 5 data collection assistants to help in the questionnaire administration.

Data Processing andAnalysis

Following data collection is statistical analysis of data. According to Kothari (2004), computation of certain measures and the search for relationships or patterns existing among data groups is termed as analysis. During analysis, relationships or variances in support of or which conflict with original or new hypothesis are subjected to statistical test of significance to establish how validly the data can be said to indicate any conclusion (Kothari, 2004).

The collected data was analyzed using the computer software programme, Statistical Package for Service Solution (SPSS version 20). The data was analyzed using descriptive statistical tools such as tables and charts with frequencies and percentages. In assessing the level of financial literacy, frequencies and percentages were used to describe the level of financial literacy.

However, correlational analysis and other applicable hypothesis testing techniques such as independent samples t-tests and one-way ANOVA tests wereconducted to assess the influence of gender, level of study, employment status and marital status on the level financial literacy among students of University of Mines and Technology.

IV. Results And Discussion

Introduction

This chapter dealt with the presentation, analyses and discussion of research data collected from the field. The chapter is subdivided into five sections which include socio-demographic information of respondents, level of financial literacy among male and female students, level of study influence on financial literacy, how department students belong to influence their financial literacy, influence of employment status on level of financial literacy. Two hundred and ninety-fivequestionnaires were received out of the three hundred questionnaires distributed which represent 98.3% of the total questionnaire issued.

Socio-demographic Information of Respondents

This section provides distributive information on gender, age, marital status, educational status, employment status and the respective departments of the surveyed respondents. This information is summarized in Table 1.

Gender Distribution of Respondents

It can be seen from Table1 that 78.0% of the students who responded the questionnaire were males and 22.0% were females. The outcome of this data indicates that the male students were willing to partake in answering the questionnaire than female students as at the time data was been collected.

Table 1: Demographic Profile of Respondents

Categories		n	%
Gender	Male	229	77.6
	Female	66	22.4
Age			
	18-24	189	64.1
	25 to 31	96	32.5
	32 to 38	9	3.1
	39-45	1	0.3
	Above 45	0	0.0
Marital Status			
	Single	281	95.3
	Married	14	4.7
	Divorced	0	0.0
Level			
	Level 100	56	19.0
	Level 200	62	21.0
	Level 300	75	25.4
	Level 400	81	27.5
	Post-graduate	21	7.1
Department			
	Computer Science and Engineering	25	8.5
	Electrical and Electronics	25	8.5
	Environmental and Safety	23	7.8
	Geological Engineering	31	10.5
	Geomatics	33	11.2
	Mathematics	37	12.5
	Minerals Engineering	37	12.5
	Petroleum Engineering	34	11.5
	Mechanical Engineering	16	5.4
	Mining Engineering	34	11.5

Employment Status	Employed	35	11.9
	Unemployed	234	79.3
	Self-employed	26	8.8

Note: *n=295*
Source: Field Survey, 2018

Age distribution of respondents

As shown in Table 1 most of the respondents (64%) fall between the ages of 18-24, 32.5% of the respondents fall between the ages of 25-31 and only 0.3% fall between the ages of 39-45. This shows that a large percentage of the students in the University of Mines and Technology who responded to the questionnaire form the active working class of the population. This also means that majority of the respondents who are responsible for taking their financial decisions are in the working class. This is an active age group where most major decisions concerning the future of any individual are taken.

Educational Growth level of Respondents

From Table 1 and Figure 1, it can be noted that 19% of the respondents were level 100 students, 21% of the respondents were level 200 students, 25% of the respondents were level 300 students, 27% were level 400 students and only 7% of the respondents were post graduate students. The outcome of the respondents who were post graduate students is low because they were not willing to partake in responding to the questionnaire. This shows that students from each of level were given equal opportunity to partake in the research. This will also give a vivid detail as to whether various tertiary levels of students actually influence their level of financial literacy.

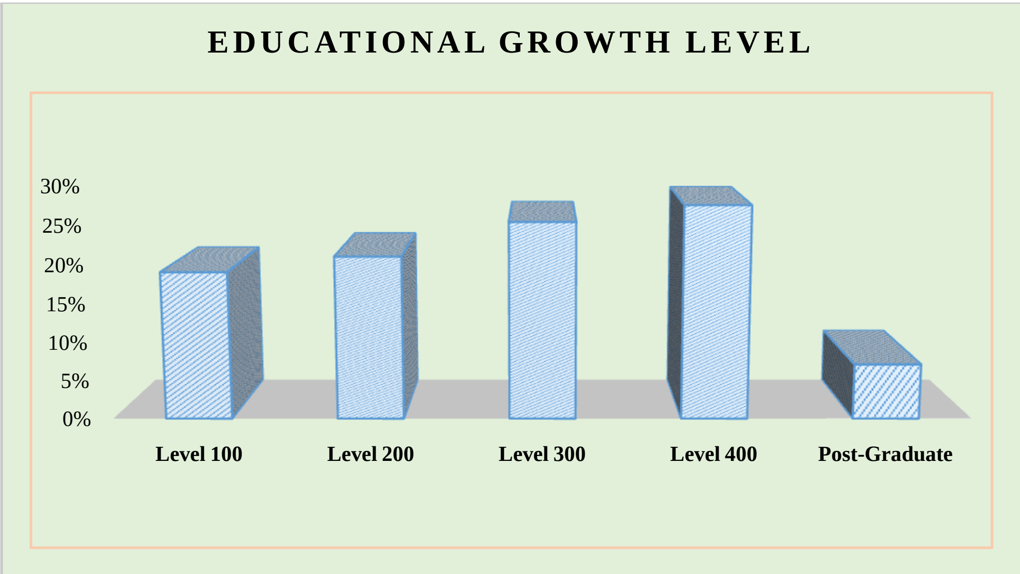

Figure 2: Level of Educational Growth Level
Source: Field Survey, 2018

Department of Respondents

From table 1 and figure 2, 8.5% each of the respondents were members of computer science, electrical and electronic and environmental and safety engineering department, 11.5% of the respondents each belonged to the mathematics, petroleum engineering and mining engineering department, 12.5% of the respondents were members of the mineral engineering department, 10.5% of the respondents were members of Geomatics, 10% were students from the geological engineering department and only 5.4% were students from the mechanical engineering department. This shows that students from each of the departments were given equal opportunity to partake in the research. This will also give a vivid detail as to whether the department student belong to actually influence their level of financial literacy.

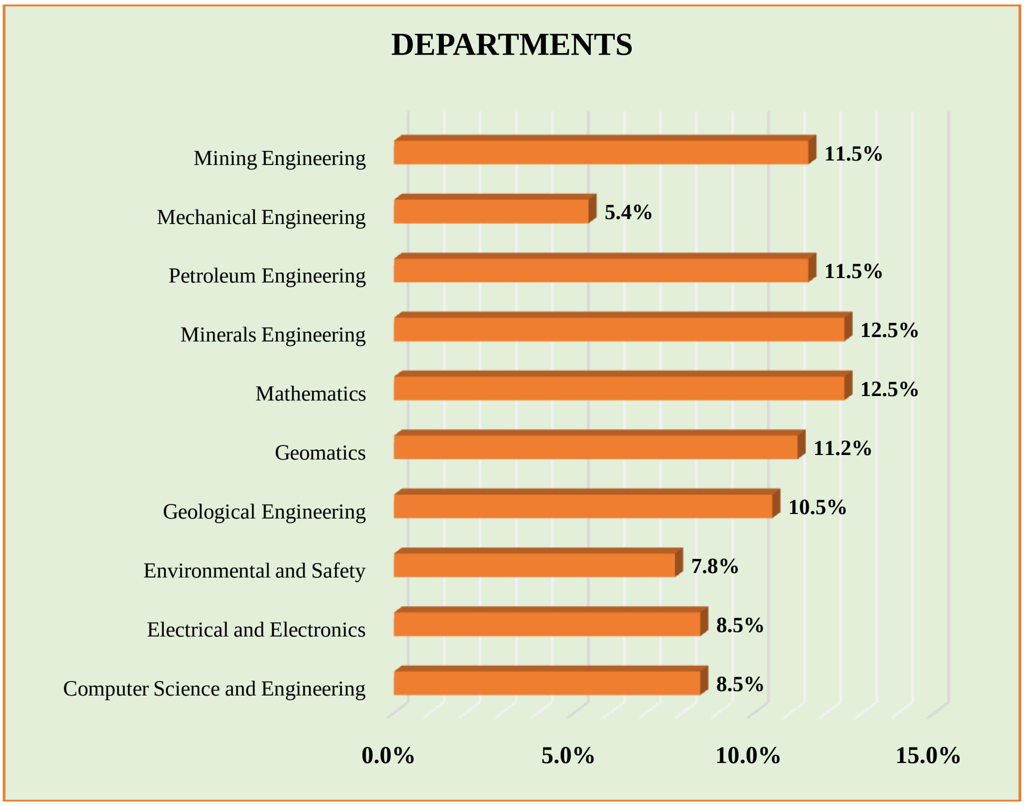

Figure 3: Departments of Respondents
Source: Field Survey, 2018

Financial Attitude

As part of assessing the level of financial literacy among tertiary students in UMAT, the financial attitudes of the students were assessed. This is illustrated in table 2. It can be seen that, 15.3% and 20.7% of the respondents strongly agree and agree respectively to the assertion that it is more satisfying to spend than to save. Notwithstanding, a total of about 49.5% of the respondents do not agree that it is more satisfying to spend than to save.

Table 2: Financial Attitude

Items	1	2	3	4	5	Mean	SD
i. It is more satisfying to spend than to save	15.3	20.7	14.6	25.8	23.7	3.22	1.408
ii. I tend to live for today and let tomorrow take care of itself	10.2	23.4	23.1	28.5	14.9	3.15	1.227
iii. I think money is to be spent	36.6	33.6	17.3	10.5	2.0	2.08	1.068
iv. I keep close personal watch on my financial affairs	39.3	31.9	18.6	9.2	1.0	2.01	1.020
v. I consider several products from different companies before making the decision to buy it	29.8	28.1	18.0	18.3	5.8	2.42	1.248
vi. Before buying something I carefully consider whether I can afford it	30.8	34.6	18.0	11.5	5.1	2.25	1.160
vii. I usually run out of money	3.7	32.0	10.2	40.7	13.2	3.27	1.156
viii. Borrowing from friends is the best thing to do when I run out of money	26.4	23.7	25.4	15.6	8.8	2.57	1.273
ix. An investment with a high return is likelyto be of high risk	35.6	27.1	20.3	11.9	5.1	2.24	1.200
x. It is good to have a budget to follow	25.8	28.8	16.9	20.7	7.8	2.56	1.284
xi. It is good to manage your everyday revenue	30.5	31.5	18.6	14.2	5.1	2.32	1.192
xii. High inflation means the cost of living is increasingly high	15.3	30.2	12.9	30.5	11.2	2.92	1.290
COMPOSITE AVERAGE	**24.5**	**28.8**	**17.8**	**19.8**	**9.0**	**2.60**	**1.128**

Note: *1=Strongly Agree; 2=Agree; 3=Neutral; 4=Disagree; 5=Strongly Disagree All figures are in %*
Source: Field Survey, 2018

However, 14.6% of the respondents are indifferent on whether or not it is more satisfying to spend than to save. On the average, the students of UMaT are indifferent as to whether or not it is more satisfying to spend than to save (given that, mean=3.22; SD=1.408).

Also, 10.2% and 23.4% of the respondents strongly agree and agree respectively to the fact that individuals must live for today without taking cognizance of the needs of ensuing days. About 43.4% of the respondents are not in agreement with this attitude of just thinking to live for today only. However, 23.1% of the respondents are neutral on this. In other words, 23.1% of the respondents are indifferent on whether to live for today and let tomorrow take care of itself. On the average, the respondents are neutral as to whether to live for today and let tomorrow take care of itself (given that, mean=3.15; SD=1.227). It is also obvious from table 2 that, 36.6% and 33.6% of the respondents strongly agree and agree respectively to the assertion that money is to be spent. Notwithstanding, a total of about 17% of the respondents are not in agreementto the fact that money is to be spent. However, 17.3% of the respondents are indifferent on whether or not money is to be spent. On the average, the students of UMaT are in agreementto the assertion thatmoney is to be spent (given that, mean=2.08; SD=1.068).

Following from the extent to which individuals keep close personal watch over their finances, 39.1% and 31.9% of the respondents strongly agree and agree respectively to this statement. About 10.2% of the respondents are not in agreement with this attitude of keeping close personal watch over their financial affairs. However, about 18.6% of the respondents are neutral on this. In other words, 18.6% of the respondents are indifferent on whether to keep close personal watch over their financial affairs. Averagely, the respondents agree individuals should keep close personal watch over their financial affairs (given that, mean=2.01; SD=1.020).

Further, 29.8% and 28.1% of the respondents strongly agree and agree respectively to the fact that several products from different companies should be considered before making the decision to buy it. Also, 18.3% and 5.8% of the respondents strongly disagree and disagree respectively to the fact that several products from different companies should be considered before making the decision to buy it. On neutral grounds, 18% of the respondents are indifferent on whether or not different products should be considered before making decisions to buy. On the average, the respondents agreeto consider diverse products before finalizing on which to buy (given that, mean=2.42; SD=1.248).

In addition, 30.8% and 34.6% of the respondents strongly agree and agree respectively to the fact that before making purchases the ability to pay should be considered. 11.5% and 5.1% of the respondents strongly disagree and disagree respectively to the fact that one’s ability to pay for a product should be considered before making purchases. However, 18% of the respondents are indifferent on whether or not one’s ability to afford should be considered before making decisions to buy. On the average, the respondents agree to consider their ability to afford before buying something(given that, mean=2.25; SD=1.160).

Table 2again indicates that, 3.7% and 32% of the respondents strongly agree and agree respectivelythat they usually run out of money. On the other extreme end, 40.7% and 13.2% of the respondents strongly disagree and disagree respectively that they usually run out of money. However, 10.2% of the respondents neither agree nor disagree to whether or not they usually run out of money. Averagely, the respondents are indifferent as to whether or not they usually run out of money (given that, mean=3.27; SD=1.156).

With the respondents’ opinion on whether borrowing from friends is the best thing to do when one is out of money, 26.4% and 23.7% of the respondents strongly agree and agree respectively. 15.6% and 8.8% of the respondents strongly disagree and disagree respectively to the fact that borrowing from friends is the best thing to do when one is out of money. However, 25.4% of the respondents are indifferent on whether or not borrowing from friends is the best thing to do when one is out of money. On the average, the respondents to larger extent are indifferenton whether borrowing from friends is the best thing to do when one is out of money (given that, mean=2.57; SD=1.273).

Following from assessing the extent to which individuals agree or disagree to the fact that investments with high return is likely to be of high risks, 35.6% and 27.1% of the respondents strongly agree and agree respectively to this. Approximately17% of the respondents are not in agreement to the fact that investment with a high return is likely to be of high risk. However, about 20.3% of the respondents are neutral on this. In other words, 20.3% of the respondents are indifferent on whether investment with a high return is likely to be of high risk. Averagely, the respondents agree that investment with a high return is likely to be of high risk (given that, mean=2.24; SD=1.20).

Moreover, 25.8% and 28.8% of the respondents strongly agree and agree respectively it is good to have a budget to follow. On the other extreme end, 20.7% and 7.8% of the respondents strongly disagree and disagree respectively that having a budget to follow is good. However, 16.9% of the respondents neither agree nor disagree to whether or not having a budget to follow is good. Averagely, the respondents are indifferent as to whether or not having a budget to follow is good (given that, mean=2.56; SD=1.284).

Again 30.5% and 31.5% of the respondents strongly agree and agree respectively that managing everyday revenue is good. On the other end, 14.2% and 5.1% of the respondents disagree and strongly disagree respectively that managing everyday revenue is good.However, 14.2% of the respondents neither agree nor disagree to whether or not it is good to manage everyday revenue.On the average, the respondents agreeto the fact that it is good to manage your everyday revenue (given that, mean=2.32; SD=1.192).

Last but not least, 15.3% and 30.2% of the respondents strongly agree and agree respectively that high inflation means the cost of living is increasingly high. On the other extreme end, 11.2% and 30.5% of the respondents strongly disagree and disagree respectively that high inflation means the cost of living is increasingly high. However, 12.9% of the respondents neither agree nor disagree to whether or not high inflation means the cost of living is increasingly high. On the average, the respondents are indifferent as to whether high inflation means the cost of living is increasingly high (given that, mean=2.92; SD=1.290).

Knowledge on Financial Products

The knowledge of respondents on the financial products available also indicates how financially literate they are. In so doing, the knowledge of respondents on some financial products including credit card, pension fund, current account, savings account, bonds, insurance etc. was assessed. Table 3 shows the descriptive results of the responses received.

With the knowledge of the respondents on investment accounts, 23.1% and 33.2% of them have excellent and good knowledge on investment account. Also, 21.7% and 6.1% of them had poor and virtually no knowledge on the how investment accounts are operated. However, 15.9% of the respondents have moderate knowledge on the operation of investment accounts. On the average, the respondents have moderate knowledge on how investment account operates (given that, mean=2.55; SD=1.230). With the respondents' awareness or information on mortgages, most the respondents (i.e. 39.0%) have excellent knowledge on how mortgages work. Also, 29.8% of the respondents have good knowledge on mortgages. At the extreme end, 14.9% and 2.0% of the respondents have poor and no knowledge on mortgages. However, 14.2% of the respondents have moderate knowledge on mortgages. On the average, the respondents have good knowledge on mortgages and how it works (given that, mean=2.11; SD=1.142). With the knowledge of the respondents on credit cards, 30.2% and 28.8% of them have excellent and good knowledge on credit cards. Also, 19.0% and 4.1% of them had poor and virtually no knowledge on the how credit cards works. However, 18.0% of the respondents have moderate knowledge on credit card's usage. On the average, the respondents have good knowledge or better information on how credit cards operate (given that, mean=2.38; SD=1.211).

Table 3: Financial Products

Finance Products	1	2	3	4	5	Mean	SD
Investment Account	23.1	33.2	15.9	21.7	6.1	2.55	1.230
Mortgage	39.0	29.8	14.2	14.9	2.0	2.11	1.142
Credit Card	30.2	28.8	18.0	19.0	4.1	2.38	1.211
Current Account	34.6	31.2	15.6	13.6	5.1	2.38	1.22
Pension Fund	13.9	32.5	13.2	30.2	10.2	2.90	1.259
Savings Accounts	12.5	22.4	21.4	27.5	16.3	3.13	1.281
Bonds	26.8	28.1	14.9	19.7	10.5	2.59	1.344
Insurance	28.8	25.4	21.0	18.0	6.8	2.48	1.264
Microfinance Loans	23.1	27.5	20.7	23.7	5.1	2.60	1.219
COMPOSITE AVERAGE	**25.8**	**28.8**	**17.2**	**20.9**	**7.4**	**2.57**	**1.240**

Note: *1=Excellent Knowledge; 2=Good Knowledge; 3=Moderate; 4=Poor Knowledge; 5=No Knowledge All figures are in %*

Source: Fieldwork, Mensah (2018)

With the respondents' awareness or information on their understanding of current accounts, most the respondents (i.e. 34.6%) have excellent knowledge on how current account operate. Also, 31.2% of the respondents have good knowledge on current account. At the extreme end, 13.6% and 5.1% of the respondents have poor and no knowledge on current accounts. However, 15.6% of the respondents have moderate knowledge on current accounts. On the average, the respondents have good knowledge on current accounts and how it works (given that, mean=2.38; SD=1.22).

In addition, 13.9% and 32.5% of the respondents have excellent and good knowledge on pension funds. Also, 30.2% and 10.2% of them had poor and virtually no knowledge on the how pension funds work. However, 13.2% of the respondents have moderate knowledge on pension funds. On the average, the respondents have moderate knowledge or better information on how pension funds operate (given that, mean=2.90; SD=1.259).With the respondents' awareness or information on their understanding of savings accounts, most the respondents (i.e. 27.5%) have poor knowledge on how savings accounts operate. Also, 22.4% of the respondents have good knowledge on savings accounts. At the extreme ends, 12.5% and 16.3% of the respondents have excellent and no knowledge on savings accounts. However, 21.4% of the respondents have moderate knowledge on savings accounts. On the average, the respondents have moderate knowledge on savings accounts and how it works (given, mean=3.13; SD=1.281).

Table 3 further shows that, 26.8% and 28.1% of the respondents have excellent and good knowledge on bonds. Also, 19.7% and 10.5% of them have poor and no knowledge on the how bonds operate. However, 14.9% of the respondents have moderate knowledge on bonds. On the average, the respondents have moderate knowledge on how bonds operate (given that, mean=2.59; SD=1.344).

With the knowledge of the respondents on insurance, 28.8% and 25.4% of them have excellent and good knowledge on insurance and how it works. Also, 18.0% and 6.8% of them have poor and virtually no knowledge on the how insuranceoperates. However, 21.0% of the respondents have moderate knowledge on how insurance operates. Averagely, the respondents have good knowledge or better information on how insurance works (given that, mean=2.48; SD=1.264).

Last but not least, 23.1% and 27.5% of the respondents have excellent and good knowledge on microfinance loans. Also, 23.7% and 5.1% of the respondents have poor and no knowledge on how microfinanceloans. However, 20.7% of the respondents have moderate knowledge on microfinance loans. On the average, the respondents have moderate knowledge on how microfinance loans operate (given that, mean=2.60; SD=1.219).

Measure of Financial Literacy

In assessing the overall level of financial literacy, the simple average of the right responses of the respondents on the key financial literacy dimensions adopted in this study (i.e. savings, financial planning, borrowing, investment, inflation, and insurance) was computed as shown in table 4. Again, in computing the literacy of the respondents on savings, financial planning and control, borrowing, investment, inflation and insurance, the simple/arithmetic average of the group of items measuring each financial literacy dimension was determined. For example, in measure the level of literacy of the respondents on borrowing a simple average of the respondents' extent of knowledge on microfinance loans, bonds, mortgages and other sources of borrowing was computed. Appendix II shows the level of financial literacy on each test item.

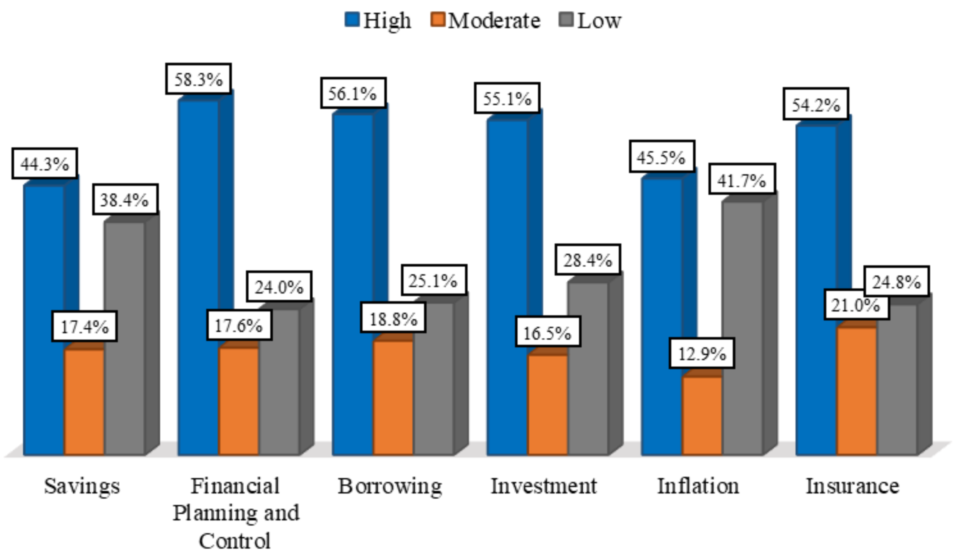

Figure 4: Dimensions of Financial Literacy
Source: Fieldwork, Mensah (2018)

Savings

In assessing the level of financial literacy of the respondents on savings, a simple average of the proportion of the respondents who have high, low and moderate level of financial literacy for each test item of savings was determined. In this case, the level of information or knowledge on the use of credit cards, current accounts, savings accounts and attitude towards savings and spending was adopted, as seen from Appendix II. From figure 3 and table 4, it is clear that most of the respondents (i.e. 44.3%) have high financial literacy in savings. Also, 17.4% and 38.4% of the respondents have moderate and low levels of financial literacy in savings.

Financial Planning and Control

In assessing the level of financial literacy of the respondents on financial planning and control (i.e. budgeting and budgetary control), a simple average of the proportion of the respondents who have high, low and moderate level of financial literacy for each test item of budgeting skills was determined. In this case, the level of information or knowledge on the extent of keeping close personal watch on financial affairs, consideration of available substitutes of products before making buying decisions, the need to draft a budget and manage daily revenue was adopted, as shown in Appendix II. From figure 3 and table 4, it is clear that majority of the respondents (i.e. 58.3%) have high financial literacy in financial planning and control. Also, 17.6% and 24.0% of the respondents have moderate and low levels of financial literacy in financial planning or budgeting.

Borrowing

In assessing the level of financial literacy of the respondents on lending and borrowing, a simple average of the proportion of the respondents who have high, low and moderate level of financial literacy for each test item for borrowing was determined. In this case, the level of information or knowledge on the sources of borrowing including mortgages, bonds, microfinance loans and borrowing from friends and how they operate was adopted, as seen from the attached Appendix II. From figure 3 and table 4, majority of the respondents (i.e. 56.1%) have high financial literacy in borrowing. Also, 18.8% and 25.1% of the respondents have moderate and low levels of financial literacy in lending and borrowing.

Investment

In assessing the level of financial literacy of the respondents on investment, a simple average of the proportion of the respondents who have high, low and moderate level of financial literacy for each test item on investment was determined. In this case, the level of information or knowledge on how investment accounts operate, risk-return relationship of investment, and the operation of pension funds were adopted, as seen from the attached Appendix II. From figure 3 and table 4, majority of the respondents (i.e. 55.1%) have high financial literacy in investment. Also, 16.6% and 28.4% of the respondents have moderate and low levels of financial literacy in investment.

Inflation

In assessing the level of financial literacy of the respondents on inflation, a simple average of the proportion of the respondents who have high, low and moderate level of financial literacy for each test item on inflation was determined. In this case, only one test items was measured to assess the respondent's knowledge in inflation. That is, 'high inflation means the cost of living is increasingly high', as seen from the attached Appendix II. From figure 3 and table 4, most of the respondents (i.e.45.5%) have high financial literacy on inflation. Also, 12.9% and 41.7% of the respondents have moderate and low levels of financial literacy on inflation.

Insurance

In assessing the level of financial literacy of the respondents on insurance, a simple average of the proportion of the respondents who have high, low and moderate level of financial literacy for each test item on insurance was determined. In this case, the respondents were assessed on the extent of information or knowledge they have in insurance, as seen from the attached Appendix II. From figure 3 above and table 4, majority of the respondents (i.e.54.2%) have high financial literacy on insurance. Also, 21.0% and 24.8% of the respondents have moderate and low levels of financial literacy on insurance.

Table 4: Level of Financial Literacy

Dimensions of Financial Literacy	High	Moderate	Low
Savings	44.3%	17.4%	38.4%
Financial Planning and Control	58.3%	17.6%	24.0%
Borrowing	56.1%	18.8%	25.1%
Investment	55.1%	16.5%	28.4%
Inflation	45.5%	12.9%	41.7%
Insurance	54.2%	21.0%	24.8%
Financial Literacy	**52.3%**	**17.4%**	**30.4%**

Source: Field Survey, Mensah(2018)

Overall Measure/ level of Financial Literacy

In measuring the overall level of financial literacy among the respondents, a simple average of the literacy in savings, borrowing, investment, financial planning and control, inflation and insurance was computed as shown in table 4 and figure 4. From figure 4, majority of the respondents (i.e. 52.3%) have high level of financial literacy. Also, 17.4% of the respondents have moderate level of financial literacy. However, 30.4% of the respondents have low level of financial literacy.

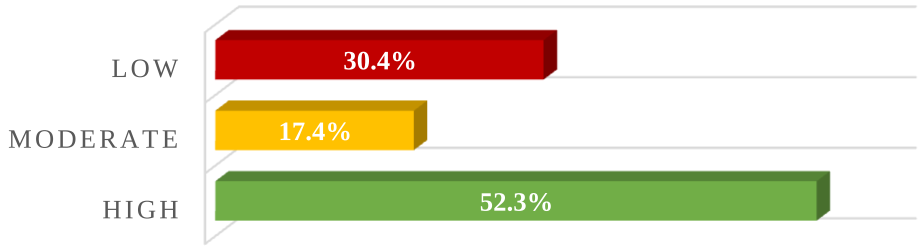

Figure 5: Level of Financial Literacy
Source: Field Survey, Mensah (2018)

Measurement of Constructs

The measurements of the constructs being tested in this study is crucial as far as correlational analysis is concerned. This is because, most of the variables measured are categorical variables other than continuous variables. As such, Table 5 gives a summary of the coding system adopted before the correlational analysis was proceeded.

Table 5: Construct operationalization (measurement/ coding)

Construct	Operationalisation (code)
Financial literacy	*Composite (sum) score:* simple average of the extent of financial attitude and behaviour and knowledge on financial products
Financial attitude and behaviour	Composite average on all test items
Knowledge on financial products	Composite average on all test items
Gender	1=Male; 0=Female
Age	*Age (years):* 1=18 to 24; 2=25 to 31; 3=32 to 38; 4=39 to 45; 5=Above 45
Level	*Number of years in school:* 1= 1; 2= 2; 3= 3; 4= 4
Marital Status	1=Single; 0=Others
Employment Status	1=Employed; 0=Others
Source: Field survey, Mensah (2018)	

Determinants of Financial Literacy

In assessing the influence of gender, age, level, marital status and employment status on financial literacy, one-wayANOVA test and independent samples t-tests were conducted in connection with Pearson's correlational analysis as shown in the tables below.

Educational Level

The correlational results as shown in table 9indicates that, there is a very weak positive relationship between the level of study of the respondents and their level of financial literacy (given, r=0.017). However, this weak positive relationship between educational level and financial literacy is statistically insignificant (p>0.05). This implies that, the financial literacy levels across the different educational levels might have occurred by chance or due to sampling error.In exploring the impact/influence of the respondent's level of education on financial literacy, a one-way ANOVA test was conducted as highlighted in table 6 below. In this case, participants were divided into five groups, namely: level 100; level 200; level 300; level 400 and post-graduate level. It was found that, there was no statistically significant difference in the level of financial literacy across the various educational levels, given that F (4, 290) =0.285, p>0.05.

Table 6: ANOVA Test of Level of Study (Educational Level) on Financial Literacy

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	.147	4	.037	.285	.887

Within Groups	37.320	290	.129		
Total	37.467	294			

Source: Field survey, Mensah(2018)

Age

The correlational results as shown below in table 11 indicate that, there is a very weak negative relationship between the age of respondents and their level of financial literacy (given, r=-0.087). However, this weak negative relationship between age and financial literacy is statistically insignificant (p>0.05). This implies that, the financial literacy levels across the different age groups might have occurred by chance or due to sampling error. In exploring the impact/influence of the respondent's age on financial literacy, a one-way ANOVA test was conducted as highlighted in table 7. In this case, participants were divided into four groups according to their ages, namely: young adults (18-24 years); middle aged adults (25-31 years), adults (32-38 years), and mature adults (above 38 years). It was found that, there was no statistically significant difference in the level of financial literacy across the various age groups, given that F (3, 291) =0.919, p>0.05.

Table 7: ANOVA Test of Age on Financial Literacy

	Sum of Squares	Df	MeanSquare	F	Sig.
Between Groups	.352	3	.117	.919	.432
Within Groups	37.115	291	.128		
Total	37.467	294			

Source: Field Survey, 2018

Gender

Table 11 further shows that there is a very weak positive relationship between the gender and the level of financial literacy (given, r=0.077). This means that, males are financial literate than females. However, this weak positive relationship between gender and financial literacy is not statistically significant (p>0.05). This implies that, the financial literacy levels across the gender groups might have occurred by chance or due to sampling error.

Table 8: Independent Sample t-test (Gender)

		F	Sig.	T	df	Sig. (2-tailed)	Mean Diff.	Std. Error Diff.
Financial Literacy	A	1.617	.205	1.323	293	.187	.066	.050
	B			1.226	95.287	.223	.066	.054

Note: A= Equal variances assumed; B= Equal variances not assumed

Source: Field survey, Mensah (2018)

In assessing the influence of gender on the level of financial literacy across students of UMaT, an independent samples t-test was conducted as shown in table 9. It was observed that, there was no statistically significant difference in financial literacy between males and females, given that t(293)=1.226, p>0.05, two-tailed.

Table 9: Correlational Results

	1	2	3	4	5	6	7	8
1. Level	1							
2. Age	-0.06	1						
3. Employment Status	-0.1	-0.035	1					
4. Gender	-0.02	-.199**	0.096	1				
5. Marital Status	0.047	-0.097	0.033	.148*	1			
6. Financial Literacy	0.017	-0.087	0.063	0.077	.157**	1		
7. Finance Attitude and Behaviour	0.065	-0.113	0.099	.214**	.168**	.652**	1	
8. Literacy on Financial Products	-0.04	-0.008	-0.01	-0.1	0.048	.697**	-0.1	1

Correlation is significant at the 0.01 level (2-tailed)**

Correlation is significant at the 0.05 level (2-tailed)*

Source: Field survey, Mensah(2018)

V. Discussion Of Findings

This section provides comparative discussions on the findings of this study based on the specific objectives of this study.

Level of Financial Literacy

In measuring the overall level of financial literacy among the respondents, a simple average of the literacy in savings, borrowing, investment, financial planning and control, inflation and insurance was computed as shown in table 4 above. Findings of this study reveal that majority of the respondents (i.e. 52.3%) have high level of financial literacy. Also, 17.4% of the respondents have moderate level of financial literacy. However, 30.4% of the respondents have low level of financial literacy. This implies that, majority of the students of UMaT are financially literate. This deduction on the level of financial literacy is better than many findings on financial literacy in Ghana. For instance, Quainoo *et* al. (2017) found that approximately 31.3% of the surveyed students of Kwame Nkrumah University of Science and Technology were financially literate. This shows that the level of financial literacy among UMaT students is higher than KNUST students. This low level of financially literacy has been reported by Oppong-Boakye and Kansanba (2013) and Mireku (2015). In Malaysia, Albeerdy and Gharleghi (2015) also found that the level of financial literacy among students is low. Arceo-Gómez and Villagómez (2017), in their study in Mexico, also found similar findings of low level of financial literacy among Mexican students.

Gender and Financial Literacy

As seen in table 1, the respondents of this study were widely distributed with approximately 78% male and 22% female.In assessing whether gender influences the level of financial literacy, correlational analysis was performed and it was found that there is a very weak positive relationship between the gender and the level of financial literacy (given, $r=0.077$). This implies that males are more financial literate than females. However, this weak positive relationship between gender and financial literacy is not statistically significant ($p>0.05$). This implies that the gender differential in financial literacy might have occurred by chance or due to sampling error.This was thus confirmed by the independent samples t-test performed. That is, there was no statistically significant difference in financial literacy between males and females [given that, $t\ (293) = 1.226$; $p>0.05$]. This finding is inconsistent with the findings of many studies across the globe. For instance, Lusardi and Mitchel (2014) found that gender has statistically significant relationship with financial literacy, with males having more financial knowledge than females. These authors further revealed that females are less financially literate than males because they leave all the financial management issues in the hands of their husbands. Quainoo *et* al. (2017) and Mireku (2015) also found a statistically significant relationship between gender and financial literacy, where males were seen as more financially literate than females.

Level of Study (Education) and Financial Literacy

As seen in table 1, the respondents of this study were evenly distributed with approximately 19% level 100, 21% level 200, 25.4% level 300, 27.5% level 400 and 7.1% post-graduate. The correlational results as shown in table 6 indicate that, there is a very weak positive relationship between the level of study of the respondents and their level of financial literacy (given, $r=0.017$). This means that, level 300, 400 and postgraduates students are more financially literate than level 100 and 200 students. However, this weak positive relationship between educational level and financial literacy is statistically insignificant ($p>0.05$). Findings from the one-way ANOVA tests performed indicated that, there is no statistically significant difference in the level of financial literacy across the various levels of education [given that, $F\ (4, 290) = 0.285$; $P>0.05$. This implies that, the financial literacy levels across the different educational levels might have occurred by chance or due to sampling error. Oppong-Boakye and Kansanba (2013) and Mireku (2015) also found similar findings. But with these authors, the relationship between class rank/educational levels has statistically significant relationship with financial literacy. However, Ansong and Gyensare (2012) found the opposite that, there is a statistically significant negative relationship between level of study and financial literacy

VI. Summary, Conclusions And Recommendations

Introduction

This final chapter of the study summarizes all the issues looked at and conclusions drawn from the findings. It also outlines the recommendations made based on the major findings and suggestions for further studies.

Summary of the Research Process

The study assessed the level of financial literacy among students of UMaT by examining their knowledge on diverse financial products and also their attitude towards savings, financial planning, borrowing etc. The study further assessed the influence ofgender and educational level the student's level of financial literacy. To achieve these objectives, stratified and simple random sampling techniques were employed to survey 300 students using questionnaire. The data gathered from the survey was analyzed using SPSS. Specifically, frequencies, bar charts, tables and percentages were used to present the descriptive results (including the socio-demography of the respondents). For the inferential statistics, one-way ANOVA and independent samples t-test were used to assess the influence of gender and educational level on the level of financial literacy among UMAT students.

Summary of Findings

The study sought to find out the influence gender, educational level, and department have on the level of financial literacy among students of the University of Mines and Technology, Tarkwa.

In general, the level of financial literacy recorded among the students of UMaT is quite good (i.e. 52.3%) compared to other institutions like KNUST (i.e. 31%). The following were other key findings from the study.

i. To be precise, the study unfolded that although males are more financially literate than females, which is a result of men being more interested in finance and personal investment issues, and therefore tend to seek more information about these topics, this gender differential in financial literacy was not statistically significant.

ii. The study also showed a weak positive relationship between the level of study (educational level) of UMaT students and their level of financial literacy. This means that the higher a students' level of education the higher his/her financial literacy. However, this positive relationship between level of study and level of financial literacy is not statistically significant.

iii. This research further showed that employment status has weak positive associationwith students' level of financial literacy since majority of the employed students who took part in the research showed that they were financially literate than unemployed students. That is, it was discovered from the study that majority of the employed respondents were positive about saving, investment and were careful when making decision to buy an item. Despite all these findings, the employment status of the students was tested as not statistically related with the students' level of financial literacy.

Conclusion

This study examines the financial literacy level of tertiary students in Ghana, based on the research findings the students of University of Mines and Technology level of financial literacy was moderately low. This finding was relatively inconsistent with the studies of the researchers like Quainoo *et al*., (2017), Cameron *et al*. (2014), Albeerdy and Gharleghi, (2015) which was found that the overall level of financial literacy was relatively low among the surveyed students.

Further, considering the financial literacy level on gender, it was found that males are financially literate than females which is as a result that men are more interested in the issues of finance and personal investment and make household's economic decisions, this relationship is not statistically significant. This finding is consistent with prior studies (see Quainoo et al., 2017; Mireku, 2015) who also found that males are financially literate than females.

The study also established a positive correlation between students' level of education and financial literacy. This means that the higher a students' level of education the higher his/her financial literacy. However, this positive correlation between educational level and financial literacy is not statistically significant. This finding was also inaccordant with the empirical review on (Oppong-Boakye &Kansanba 2013; Mireku, 2015) thus levels 400 and 300 students were financial literate than levels 200 and 100 students. The level of education had a significant impact on students' financial knowledge.

Recommendations

From the study it was found out that the level of financial literacy among students of UMaT is influenced by their gender, tertiary level and their employment status. It is therefore recommended that:

1. The authorities of UMaT introduce compulsory university/institution wide core courses in basic finance in their curriculum.
2. Also, I recommend that educational institutions make financial literacy relevant, real, and practical through field trips, internship programmes, and classroom simulations for students to gain an appreciation of the real

world applicability of personal finance. Since students' associations normally organizeprogrammes for students, the dean of students' office or units in charge of students' affairs to make it mandatory for all associations to add financial education to their major programmes.

3. The educational authorities of Ghana (Ministry of Education, Ghana Education Service, National Council for Tertiary education etc.) should collaborate to add a mandatory course or subject on financial education to the course structure of schools from basic school to tertiary level.
4. Since students' associations normally organiseprogrammes for students, I recommend to the dean of students" office or units in charge of students affairs to make it mandatory for all associations to add financial education to their major programmes.
5. The national financial literacy week should be deepened and the government should play a key role in involving the citizenry in the national financial literacy week. Especially, tertiary students can be involved in the activities of the financial literacy week by organizing some of the activities on campus. Since the launch of the national financial literacy week in 2008, public sensitization of the programme has been very appalling. Majority of the populace are still ignorant of the national financial literacy week.
6. The consumer rights advocacy groups like consumer advocacy center, as matter of urgency include financial education in their advocacy activities. Financial literacy is often viewed as a complement to consumer protection (Xu & Zia, 2012). One of the primary goals of financial education is therefore to equip individuals with the capability to navigate through a complex array of financial products, including pensions and mortgages, and to make sound financial decisions. I therefore recommend that consumer rights advocacy groups like consumer advocacy center, as matter of urgency include financial education in their advocacy activities.
7. Financial Institutions should make a conscious effort to educate their consumers, UMaT student on basic financial matters.They should continually, design products that will provide incentives and enrich students financial knowledge. So financial institutions on campus as part of their corporate social responsibility, should design comprehensive financial education programmes for students.

It is hoped that these recommendations, when considered for actions by the government, University authorities, the various financial stakeholders and the students themselves would help address the issue of low level of financial literacy among them.

Suggestions for further studies

The study is limited to only the students of the University of Mines and Technology; the researcher suggests that more financial literacy studies should be carried in other Universities and Polytechnics throughout the country.

Also, further studies should be carried out among students of UMaT to assess the reasons for financial literacy being influenced by the marital status of the students.

Further, a comparative study should be conducted across students of UMaT, KNUST and other tertiary institutions using different survey instrument to measure their respective levels of financial literacy.

References

[1] Agnew, J.R. &Szykman, L.R. (2005). Asset Allocation And Information Overload: The Influence Of Information Display, Asset Choice, And Investor Experience. Journal Of Behavioral Finance, 6, 57-70

[2] Akoto, G. O. (2016). An Analysis Of Personal Financial Literacy Among Cocoa Farmers In Ghana (Doctoral Dissertation).

[3] Albeerdy, M. I., &Gharleghi, B. (2015). Determinants Of The Financial Literacy Among College Students In Malaysia. International Journal Of Business Administration, 6(3), 15-24.

[4] Alessie, R., Lusardi, A., & van Rooij, M. (2008). Financial literacy, retirement planning, and household wealth. NBER Working Paper, No. 15350

[5] Alessie, R., Van Rooij, M., & Lusardi, A. (2011). Financial Literacy And Retirement Preparation In The Netherlands. Journal Of Pension Economics And Finance, 10(4), 527-545.

[6] Allen, M. W., Edwards, R., Hayhoe, C. R., & Leach, L. (2007). Imagined Interactions, Family Money Management Patterns And Coalitions, And Attitudes Toward Money And Credit. Journal Of Family And Economic Issues, 28(1), 3-22.

[7] Almenberg, J., & Säve-Söderbergh, J. (2011). Financial Literacy And Retirement Planning In Sweden. Journal Of Pension Economics & Finance, 10(4), 585-598.

[8] Alexander, G. J., Jones, J. D., & Nigro, P. J. (1998). Mutual Fund Shareholders: Characteristics, Investor Knowledge, And Sources Of Information. Financial Services Review, 7(4), 301-316.

[9] Ansong, A., &Gyensare, M. A. (2012). Determinants Of University Working-Students' Financial Literacy At The University Of Cape Coast, Ghana. International Journal Of Business And Management, 7(9), 126-135.

[10] Arrondel, L., Debbich, M., & Savignac, F. (2013). Financial Literacy And Financial Planning In France. Numeracy, 6(2), 8.

[11] Bauer, J. W., Braun, B., & Olson, P. D. (2000). Welfare To Well‐ Being Framework For Research, Education, And Outreach. Journal Of Consumer Affairs, 34(1), 62-81.

[12] Beal, D. J., &Delpachitra, S. B. (2003). Financial Literacy Among Australian University Students. Economic Papers: A Journal Of Applied Economics And Policy, 22(1), 65-78.

[13] Bell, E., & Lerman, R. I. (2005). Can Financial Literacy Enhance Asset Building? (Vol. 6). Urban Institute, Labor And Social Policy Center.

[14] Bernheim, B. D., Skinner, J., & Weinberg, S. (2001). What Accounts For The Variation In Retirement Wealth Among US Households? American Economic Review, 91(4), 832-857.

[15] Blalock, L. L., Tiller, V. R., & Monroe, P. A. (2004). "They Get You Out Of Courage:" Persistent Deep Poverty Among Former Welfare- Reliant Women. Family Relations, 53(2), 127-137.

[16] Braunstein, S., & Welch, C. (2002). Financial Literacy: An Overview Of Practice, Research, And Policy. Fed. Res. Bull., 88, 445.

[17] Braunstein, S., & Welch, C. (2002). Financial Literacy: An Overview Of Practice, Research, And Policy. Federal Reserve Bulletin, 88, 445.

[18] Cameron, M. P., Calderwood, R., Cox, A., Lim, S., & Yamaoka, M. (2014). Factors Associated With Financial Literacy Among High School Students In New Zealand. International Review Of Economics Education, 16, 12-21.

[19] Capuano, A., & Ramsay, I. (2011). What Causes Suboptimal Financial Behaviour? An Exploration Of Financial Literacy, Social Influences And Behavioural Economics. University Of Melbourne Legal Studies Research Paper No. 540.

[20] Chen, H., & Volpe, R. P. (1998). An Analysis Of Personal Financial Literacy Among College Students. Financial Services Review, 7(2), 107-128.

[21] Chen, H, And Ronald P. Volpe. 2002. Gender Differences In Personal Financial Literacy Among College Students. Financial Services Review 11 (March): 289-307

[22] Cohen, M., & Nelson, C. (2011). Financial Literacy: A Step For Clients Towards Financial Inclusion. Global Microcredit Summit, 14-17.

[23] Cole, S., & Fernando, N. (2008). Assessing The Importance Of Financial Literacy. ADB Finance For The Poor, 9(2), 1-6.

[24] Danes, S. M. (1994). Parental Perceptions Of Children's Financial Socialization. Financial Counseling And Planning, 5(1), 127-149.

[25] Danes, S. M., & Hira, T. K. (1987). Money management knowledge of college students. Journal of Student Financial Aid, 17(1), 4-16.

[26] Delavande, A., Rohwedder, S., & Willis, R. J. (2008). Preparation For Retirement, Financial Literacy And Cognitive Resources.

[27] Devaney, S. A., Gorham, E. E., Bechman, J. C., & Haldeman, V. A. (1996). Cash Flow Management And Credit Use: Effect Of A Financial Information Program. Journal Of Financial Counseling And Planning, 7, 71.

[28] Dormedzui C. D. (2016). "The DKM Madness And The Business Of Microfinance".[Internet source: Https://Www.Myjoyonline.Com/Business/2016/March-15th/The-Dkm-Madness-And-The-Business-Of-Microfinance.Php. Accessed: 2nd February 2018

[29] European Microfinance Network (EMN, 2010). Financial Education Retrieved From Http://Www.Europeanmicrofinance.Org/Financial-Education_En. Php#Bene Fits> As At 15 December 2010.

[30] Falahati, L., & Paim, L. (2011). Gender Differences In Financial Well-Being Among College Students. Australian Journal Of Basic And Applied Sciences, 5(9), 1765-1776.

[31] Fornero, E., &Monticone, C. (2011). Financial Literacy And Pension Plan Participation In Italy. Journal Of Pension Economics & Finance, 10(4), 547-564.

[32] Gallery, N., Newton, C., & Palm, C. (2011). Framework For Assessing Financial Literacy And Superannuation Investment Choice Decisions. Australasian Accounting, Business And Finance Journal, 5(2), 3-22.

[33] Garman, E. T. (1997). Personal Finance Education For Employees: Evidence On The Bottom-Line Benefits. Journal Of Financial Counseling And Planning, 8(2),1.

[34] Ghana Statistical Service. (2014). District Analytical Report Of Tarkwa Nsuaem Municipality.

[35] Goldsmith, R. E., Goldsmith, E. B., & Heaney, J. G. (1997). Sex Differences In Financial Knowledge: A Replication And Extension. Psychological Reports, 81(3_Suppl), 1169-1170.

[36] Grable, J. E., & Joo, S. (1998). Does Financial Education Affect Knowledge, Attitudes, And Behavior? An Empirical Analysis. Personal Finances And Worker Productivity, 2(2), 213-220.

[37] Greenspan, A. (2003). Remarks By Chairman Alan Greenspan At The 33rd Annual Legislative Conference Of The Congressional Black Caucus. Washington, DC, September, 26, 2003.

[38] Guiso, L., &Jappelli, T. (2008). Financial Literacy And Portfolio Diversification.

[39] Hall, K. (2008). The Importance Of Financial Literacy. Speech Delivered To The Conference On Deepening Financial Capacity In The Pacific Region, Sydney, 25 August 2008.

[40] Hassan Al-Tamimi, H. A., & Anood Bin Kalli, A. (2009). Financial Literacy And Investment Decisions Of UAE Investors. The Journal Of Risk Finance, 10(5), 500-516.

[41] Hayhoe, C. R., Leach, L. J., Turner, P. R., Bruin, M. J., & Lawrence, F. C. (2000). Differences In Spending Habits And Credit Use Of College Students. Journal Of Consumer Affairs, 34(1), 113-133.

[42] Hilgert, M. A., Hogarth, J. M., & Beverly, S. G. (2003). Household Financial Management: The Connection Between Knowledge And Behavior. Fed. Res. Bull., 89, 309

[43] Hira, T. K. (1993). Financial Management Knowledge And Practices: Implications For Financial Health. Personal Economic Summit, 93.

[44] Hira, T. K. (2002). Current Financial Environment And Financial Practices: Implications For Financial Health. Journal Of Family And Consumer Sciences, 94(1), 1.

[45] Hira, T. K., & Mugenda, O. (2000). Gender Differences In Financial Perceptions, Behaviors And Satisfaction. Journal Of Financial Planning-Denver, 13(2), 86-93.

[46] Hogarth, J. M. (2002). Financial Literary And Family & Consumer Sciences. Journal Of Family And Consumer Sciences, 94(1), 14.

[47] Hogarth, J. M., & Hilgert, M. A. (2002). Financial Knowledge, Experience And Learning Preferences: Preliminary Results From A New Survey On Financial Literacy. Consumer Interest Annual, 48(1), 1-7.

[48] Howlett, E., Kees, J., & Kemp, E. (2008). The Role Of Self‐ Regulation, Future Orientation, And Financial Knowledge In Long‐ Term Financial Decisions. Journal Of Consumer Affairs, 42(2), 223-242.

[49] Huston, A. C., Miller, C., Richburg-Hayes, L., Duncan, G. J., Eldred, C. A., Weisner, T. S., & Lowe, E. (2003). New Hope For Families And Children: Five-Year Results Of A Program To Reduce Poverty And Reform Welfare.

[50] Huston, S. J. (2010). Measuring Financial Literacy. Journal Of Consumer Affairs, 44(2), 296-316.

[51] Jappelli, T., & Padula, M. (2013). Investment In Financial Literacy And Saving Decisions. Journal Of Banking & Finance, 37(8), 2779-2792.

[52] Jorgensen, B. L. (2007). Financial Literacy Of College Students: Parental And Peer Influences (Doctoral Dissertation, Virginia Tech).

[53] Jumpstart Coalition, (2005). Making The Case For Financial Literacy [Online], Available: Http://Www.Jumpstart.Org/Download.Cfm [Accessed: 7th February, 2017]

[54] Kempson, E. (2010). Measuring Levels Of Financial Literacy At An International Level. OECD Working Paper.

[55] Knapp, J. P. (1991). The Benefits Of Consumer Education. A Survey Report.

[56] Kothari, C. R. (2004). Research Methodology: Methods And Techniques. New Age International.

[57] Lusardi, A. (2003). Savings And The Effectiveness Of Financial Education. Pension Research Council. Working Paper WP2003-14. Washington, DC.

[58] Lusardi, A., & Mitchell, O. S. (2006). Financial Literacy And Planning: Implications For Retirement Wellbeing.

[59] Lusardi, A., & Mitchell, O. (2007). Financial Literacy And Retirement Planning: New Evidence From The Rand American Life Panel.

[60] Lusardi, A., Mitchell, O. S., & Curto, V. (2010). Financial Literacy Among The Young. Journal Of Consumer Affairs, 44(2), 358-380.

[61] Lusardi, A., & Tufano, P. (2015). Debt Literacy, Financial Experiences, And Overindebtedness. Journal Of Pension Economics & Finance, 14(4), 332-368.

[62] Mandell, L. (2008). Financial Education In High School. Overcoming The Saving Slump: How To Increase The Effectiveness Of Financial Education And Saving Programs, 257-279.

[63] Mandell, L., & Klein, L. S. (2009). The Impact Of Financial Literacy Education On Subsequent Financial Behavior. Journal Of Financial Counseling And Planning Education, 15, 15-24.

[64] Marson, D. (2016). Conceptual Models And Guidelines For Clinical Assessment Of Financial Capacity. Archives Of Clinical Neuropsychology, 31(6), 541-553.

[65] Miller, R. L., & Brewer, J. D. (Eds.). (2003). The AZ Of Social Research: A Dictionary Of Key Social Science Research Concepts. Sage.

[66] Mireku, K. (2015). Financial Literacy Among University Students: Evidence From Ghana (Doctoral Dissertation).

[67] Monticone, C. (2010). How Much Does Wealth Matter In The Acquisition Of Financial Literacy?. Journal Of Consumer Affairs, 44(2), 403-422.

[68] Nellie, M. (2002). Undergraduate Students And Credit Cards: An Analysis Of Usage And Trends.

[69] Norman, A. S. (2010). Importance Of Financial Education In Making Informed Decision On Spending. Journal Of Economics And International Finance, 2(10), 199-207.

[70] Norvilitis, J. M., & Maria, P. S. (2002). Credit Card Debt On College Campuses: Causes, Consequences And Solutions. College Student Journal, 36(3), 357-364.

[71] Norvilitis, J. M., Merwin, M. M., Osberg, T. M., Roehling, P. V., Young, P., & Kamas, M. M. (2006). Personality Factors, Money Attitudes, Financial Knowledge, And Credit‐ Card Debt In College Students 1. Journal Of Applied Social Psychology, 36(6), 1395-1413.

[72] Norvilitis, J. M., Szablicki, P. B., & Wilson, S. D. (2003). Factors Influencing Levels Of Credit‐ Card Debt In College Students 1. Journal Of Applied Social Psychology, 33(5), 935-947.

[73] OECD. (2012). PISA 2012 Financial Literacy Framework. Retrieved April 13, 2015, From http://Www.Oecd.Org/Finance/Financial-Education PISA 2012 Frameworkliteracy.Pdf

[74] O'Neill, B. (1993). Assessing America's Financial IQ: Reality, Consequences, And Potential For Change. Personal Economic Summit, 93. Paper Presented At The Personal Economic Summit '93, Washington, D.C.

[75] Oppong-Boakye, P. K., &Kansanba, R. (2013). An Assessment Of Financial Literacy Levels Among Undergraduate Business Students In Ghana. Research Journal Of Finance And Accounting, 4(8).

[76] Peress, J. (2003). Wealth, Information Acquisition, And Portfolio Choice. The Review Of Financial Studies, 17(3), 879-914.

[77] President's Advisory Council On Financial Literacy (PACFL, 2008). 2008 Annual Report To The President. Accessed March 11, 2009 At Http://Www.Treas.Gov/Offices/Domesticfinance/Financialinstitution/Fineducation/Council/Index.Shtml

[78] Quainoo, R., Fianko, E., Weliko, E., & Nomo-Newman, N. (2017). Financial Literacy Among Tertiary Students In Ghana: Gender Gap, Personality Traits And Cognitive Abilities: Evidence From KNUST (A Thesis Submitted To The Department Of Accounting And Finance). Kwame Nkrumah University Of Science And Technology (KNUST).

[79] Remund, D. L. (2010). Financial Literacy Explicated: The Case For A Clearer Definition In An Increasingly Complex Economy. Journal Of Consumer Affairs, 44(2), 276-295.

[80] Roberts, J. A., & Jones, E. (2001). Money Attitudes, Credit Card Use, And Compulsive Buying Among American College Students. Journal Of Consumer Affairs, 35(2), 213-240.

[81] Sarigül, H. (2014). A Survey Of Financial Literacy Among University Students. Journal Of Accounting & Finance, 64, 207-224.

[82] Saunders, L. (2009). Business Research Methods. 2nd Ed. Prentice Hall.

[83] Servon, L. J., & Kaestner, R. (2008). Consumer Financial Literacy And The Impact Of Online Banking On The Financial Behavior Of Lower- Income Bank Customers. Journal Of Consumer Affairs, 42(2), 271-305.

[84] Stango, V., & Zinman, J. (2007). Fuzzy Math And Red Ink: When The Opportunity Cost Of Consumption Is Not What It Seems. Working Paper.

[85] Toussaint-Comeau, M., & Rhine, S. L. (2000). Delivery Of Financial Literacy Programs (No. 2000-7). Federal Reserve Bank Of Chicago.

[86] Van Rooij, M. C. J., Lusardi, A., &Alessie, R. J. M. (2007). Financial literacy and stock market participation. Journal of Financial Economics, 101(2), 449-472.

[87] Volpe, R. P., Chen, H., &Pavlicko, J. J. (1996). Personal Investment Literacy Among College Students: A Survey. Financial Practice And Education, 6(2), 86-94.

[88] Voydanoff, P. (1990). Economic Distress And Family Relations: A Review Of The Eighties. Journal Of Marriage And The Family, 1099-1115.

[89] Wachira, M. I., &Kihiu, E. N. (2012). Impact Of Financial Literacy On Access To Financial Services In Kenya. International Journal Of Business And Social Science, 3(19).

[90] Worthington, A. C. (2004). The Distribution Of Financial Literacy In Australia (No.185). School Of Economics And Finance, Queensland University Of Technology.

[91] Worthington, A. C. (2006). Debt As A Source Of Financial Stress In Australian Households. International Journal Of Consumer Studies, 30(1), 2-15.

[92] Xu, L., & Zia, B. (2012). Financial Literacy Around The World: An Overview Of The Evidence With Practical Suggestions For The Way Forward. The World Bank Development Research Group, Finance And Private Sector Development Team, Policy Research Working Paper 6107.