

ASSESSING THE EFFECT OF FINANCIAL LITERACY ON SAVING
BEHAVIOUR: A CASE STUDY OF SMALL SCALE MINERS IN MANSO
ATWERE IN AMANSIE WEST DISTRICT.

KNUST

By

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DECLARATION

I hereby declare that this thesis is a work I have personally done towards my award of MASTER OF BUSINESS ADMINISTRATION (MBA) and it does not contain previous publications by another people, except those which due acknowledgement has been made in the text.

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DEDICATION

All glory and honour go to the Almighty God for granting me the strength and courage to bring this work to a successful completion.

I dedicate this work to my beloved father, the Late Mr. Bernard K. Amponsah.



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The completion of this study has been made possible because of important contribution from my supervisor and my family.

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ABSTRACT

The main objective of the study is to assess the effect of financial literacy on saving behaviour in Manso Atwere in Amansie West. Descriptive and explanatory research designs are used with survey employed to collect information from small scale miners by asking questions to describe the sample. A sample size of 155 is drawn from the population by the used of quota and purposive non-probability sampling method with data from primary source. The quantitative data is analyzed through descriptive statistics and qualitative with content analysis. Statistical Packages for Social Science (SPSS version 21) and multiple regression analysis are employed with ANOVA to establish the significance level of the regression model using f statistic value of p less than 5%. Significance value of 5% is also used to interpret the t statistics. The ages of the respondents fall between 18 and 50, with majority of the respondents been married with children. Financial literacy is found to have an effect on individual saving behaviour. The findings show high level of financial illiteracy among the respondents. This could be due to their educational level with majority of them having elementary/basic school education up to SHS. The common place of saving among them is their various homes due to savings challenges faced. The researcher recommends that government should include financial literacy in the educational curriculum of the basic or elementary schools and higher learning institutions. The financial institutions especially the banks to organize financial literacy programmes to create awareness. They should also provide many saving outlets and their financial products should be tailored to individual needs.

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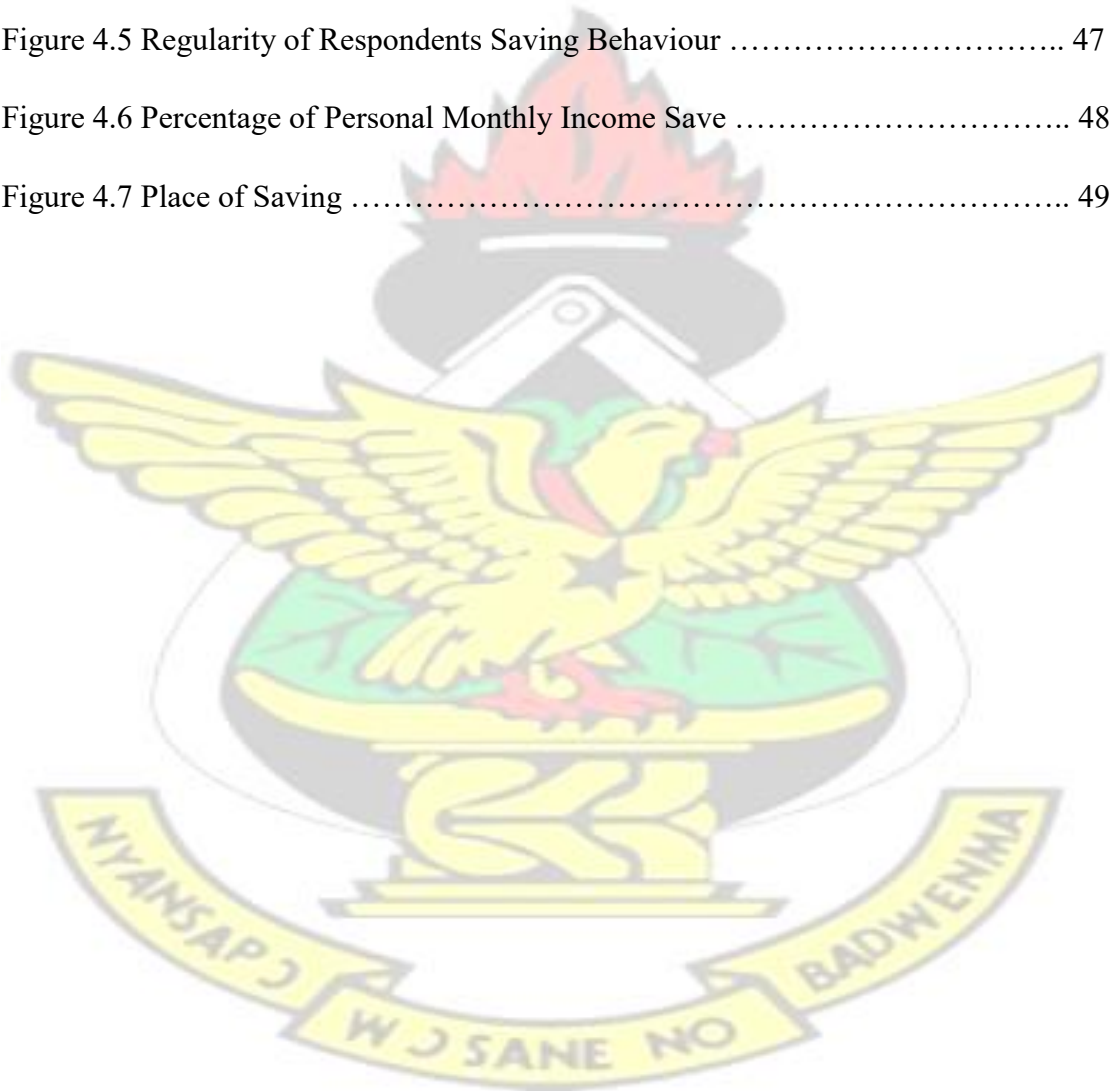
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CHAPTER ONE

INTRODUCTION

1.0 BACKGROUND OF THE STUDY

Innovations within the current technological banking has make millions of people in the world now have access to financial services. But, most of these individuals are not ready to cooperate with the growing complexities of financial products and services. From Lusardi and Mitchell (2014), results from both developed and developing countries indicate low financial literacy level; low skills and knowledge on basic individual financial management concepts and banking practices.

Research connect financial education to savings outcomes in both advanced and developing nations. Bruhn, et al. (2013) look at financial education which has been included in high school curriculum in Brazil and report an impact on financial literacy, attitudes, and change in behavior. Cole, et al. (2011) also look at the effect of financial education on saving in Indonesia and find no substantial effect on savings behavior.

Savings means different things to different individuals from different economic status. To a group of people, saving is keeping money in a bank. To other it means buying stocks, securities, jewelries, real properties, pension plan or insurance. People sometime believe that individual with high incomes save more than those with small income. A study by Karlan and Morduch (2009) to find the difference among the rich and the poor in terms of savings shows that, though the poor have fairly low income, it does not imply that they are unable to save at all. Saving is very essential and there is a lot of

evidence to demonstrate its benefits to individuals and households, not excluding low income earners (Chowa et al., 2010).

According to GLSS5 report, 30 percent of all households in Ghana have members owning savings account. Rural areas have the highest number of individuals who do not have saving accounts (78%) as compare to urban areas (61%). Among vicinities, savannah individuals have the highest of 85% without savings accounts, with coastal and forest having about 75% and 73%, respectively. Males have higher percentage of savings (59%) with the highest percentage in forest (64%). The saving behaviour of the individual is influence by capita income, interest rate, fiscal policy and government savings. Studies also indicate that the saving behaviour of the individual is influence by financial literacy (Banks et al. 2009; Jappelli and Padula 2011).

Generally, there is low level of financial literacy in Ghana. A study in Ghana on adult, in 2009 about their financial literacy reveals a financial literacy level of 38% in the North, 44% in the middle belts and 51% in the Southern (Ghanadot.com, August 19, 2009). From the report, it is essential for the public to be educated on the financial opportunities that are there for the people to be able to access and invest in businesses, pay school fees and secure properties. Also, it is essential for the individuals to recognize the benefits that are there in saving their money with financial institutions rather than putting them in their various houses where they will be exposed to stealing, fire or unnecessary spending.

Due to low rate of financial literacy in Ghana, the Ghana government has policy on financial literacy. The Ghana government has approved on the National Financial Sector Strategic Plan in 2003 which aims at: Creating awareness and educating

individuals on access to financial services; Making individuals recognize their rights and responsibilities as customers of financial services; and Changing the attitudes to translate knowledge into behaviour.

For these objectives to be achieved, financial literacy week is launched in September 2008 under the topic: „Financial Literacy: Knowledge Is Money“. Then Vice President of the country, Alhaji Aliu Mahama, in his speech during the launching stated: „There is a large section of our people who know very little about investing, about mutual funds, about private pension and about compound interest... I will go further to suggest that financial literacy should be taught in our schools, starting from the basic schools.“ (Ghana News Agency, 22 September 2008)

1.1 STATEMENT OF THE PROBLEM

From Lipsey and Harbury (1992), the three main motives for which individuals demand money are; transaction motive- for current transaction of the people; precautionary motive-for meeting unforeseen or unpredictable contingencies; and speculative motive-for the purpose of financial gain. Precautionary and speculative purposes induce people to save money. A well institutionalized savings provide several benefits for the individual (Loayza et al 2000). These benefits include interest earn on incomes, induce investment purposes, building of credit rating and as collateral security, achieve the feeling of self-reliance, security for the family.

According Singh (2009), the growth in savings also stimulates economic growth and development (as a whole) through investment. Even though people benefit from savings, most individual still do not access proper financial services. This is because most of the financial institutions are inaccessible in terms of proximity, time and

procedures needed to complete transactions which are too much for the individuals. Those who manage to save do so in risky investments like jewelry, gold, animals and in informal saving services which sometimes need time to be converted into money. The following factors are likely to influence savings behaviour: government monetary and fiscal policy, social security system, economic growth, development of financial market, terms of trade, macroeconomic stability, demographics and financial literacy. Mwangi and Kihui (2012) examine a study on the impact of financial literacy on access to financial services in Kenya. Hinga (2014) examines the relationship of financial literacy on individual savings of employees of postal corporation of Kenya based in Nairobi. Alessie et al (2008) and Almenberg et al (2011) have studies on financial literacy, retirement planning and household wealth. Ansong et al (2010) also have studies on financial literacy among students. Ziorklui and Barbie (2003) study the effect of financial sector reforms on savings. Even though there have been researches on financial literacy and on saving behaviour, there is a gap on financial literacy and saving behavior especially with small scale mining workers. The study seeks to fill the gap by assessing the effects of financial literacy on saving behaviour on small scale mining workers. The study will again find out the attitude of mining workers toward savings and also the challenges they face in their saving behaviors”.

1.2 OBJECTIVE OF THE STUDY

The main objective of the study is to examine the relationship between financial literacy on saving behaviour among small scaled miners in Manso Atwere in Amansie West District. However, the sub-purpose of the study includes:

1. To determine the level of financial literacy among the small scale miners.

2. To describe the saving behaviour among the small scale miners.
3. To determine the relationship between financial literacy and saving behaviour among the small scale miners.
4. To find out the challenges the small scale miners face in saving.

1.3 RESEARCH QUESTION

1. Are the small scale miners well-informed about common financial terms?
2. What are the attitudes of the small scale miners towards saving?
3. Is there any existing relationship between financial literacy and saving behaviour?
4. What are the determinants of savings behaviour among the small scale miner?
5. What are the challenges that the small scale miners face in saving?

1.4 RELEVANCE OF THE STUDY

The study will help policy makers to have civic educational policies for the individuals which will ensure that individuals are aware of financial institution and know the financial products that are available for them. This will help the individuals to make the right choice of financial product that is tailored to their various needs.

People in the academia are also beneficiaries of the findings of the study as the study adds up to the existing stock of literature on the financial literacy and saving behaviour in various communities. It then serves as a source of literature to people who intend to conduct a similar research either in Ghana or elsewhere in the world.

Financial institutions will also gain from the findings of this research since it will expose them to reasons for dissaving and the challenge individuals encounter when saving. The opportunity can be used to provide individual communities with financial literacy and savings outlets which will enable these businesses also make profit from the savings of the individuals.

Individuals who are not inclined towards saving due to lack of awareness could improve their financial behavior to ensure their financial security and general wellbeing.

1.5 SCOPE OF THE STUDY

Geographically, this study covers randomly selected small scale mining operators in Manso Atwere and some nearby communities of Manso Atwere in the Amansie West District of the Ashanti Region. The study will review literature on the following concepts: financial literacy and factors influencing it, attitudes toward savings, relationships between financial literacy and savings behaviour, determinants of savings behaviour and challenges in savings of the small scaled miners in the community.

1.6 LIMITATIONS OF THE STUDY

Questionnaires are administered among the small scale miners at Manso Atwere; therefore the results and findings cannot be generalized to other economic activities in the town.

There is also a problem of getting access to data and records on the small scaled miners due to inappropriate techniques of keeping records. The records would have helped support the literature review.

1.7 ORGANIZATION OF THE STUDY

The study is made up of five chapters. Chapter one forms the introduction. This consists of a general background to the study, problem statement, objectives, research questions, relevance of the study, scope of the study, limitation and organization of the study. Second chapter focuses on literature on concepts appropriate to the study such as financial literacy and factors influencing it, attitudes toward savings, relationships between financial literacy and savings behaviour, determinants of savings behaviour and challenges in savings of the small scale mining operators in the community. Chapter three discusses the methodology of the study. The findings of the study and discussion of the findings of the research are presented in chapter four. Chapter five offers summary of the findings, conclusion, recommendations and area for further research.

CHAPTER TWO

REVIEW OF THE LITERATURE

2.0 INTRODUCTION

This chapter reviews literature on key study variables. It examines works on the concept of financial literacy and individual savings. The specific areas covered here are various definitions for financial literacy, factors influencing financial literacy, general overview of saving behaviour, approaches in determine the level of financial literacy, determinants of savings, relationship between financial literacy and saving behaviour and challenges face in saving.

2.1 DEFINITIONS FOR FINANCIAL LITERACY

Financial literacy is define by Remund (2010) as a measure of the degree of 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.

Huston (2010) recommends that financial literacy should also include application of financial knowledge. So Huston (2010) defines financial literacy as a skill that can help people to make financial decisions effectively. People who are financially literate should have basic understanding of the financial concepts such as interest rate, inflation rate, compound interest, and risk (Huston, 2010).

Servon and Kaestner (2008) also give a simple definition of financial literacy, referring to it as a person's ability to understand and make use of financial concepts.

2.2 FACTORS INFLUENCING FINANCIAL LITERACY

Studies show that, factors that influence financial literacy are: age, gender, educational level, marital status, personal income and employment status (Lusardi & Mitchell, 2009, 2011). These factors are being discussed as follow:

2.2.1 Age

Lusardi and Mitchell (2006) add that individuals within the ages of 51 to 56 years are the least financially literate. They would not work out simple interest-rate calculations and are unaware of the concepts of inflation and risk diversification. A further study by

Lusardi, Mitchell, and Curto (2010) find that, less than 33% of their respondents understand interest rates, inflation and risk diversification.

Almenberg and Säve-Söderbergh (2011) observe in their study in Sweden that, the ages between 35 and 50 demonstrate the highest levels of financial literacy and those from 65 years and above have the poor performance.

2.2.2 Gender

Studies have argued that men perform well in literacy tests than women (Goldsmith and Goldsmith (1997); Lusardi and Mitchell (2006); Mandell (2008); Monticone (2010); Almenberg and Säve-Söderbergh (2011)).

According to Goldsmith and Goldsmith (1997), women get grade worse than men in their assessment test since women are not very much interested in investment and personal finance issues. Chen and Volpe (1998) add that men are well-informed when it comes to insurance and personal loans as compare to women who are conversant in financial areas like taxes, personal financial planning, spending and saving.

Kent (2010) also makes it clear that, as far as markets and investments are concerned, men are more knowledgeable than women. Women also possess less awareness about financial market and investment avenues.

2.2.3 Education

Financial literacy can be said to be the ability to understand finance. A study by Valentine and Khayum (2005) on individual financial literacy in Southwestern Indiana, concludes there is deficiency of financial literacy in the midst of high school students. Generally, the ordinary student who has completed high school lack basic financial

skills and so, most of these high school graduates are not ready to discuss financial matters (Johnson and Sherraden, 2007).

Ansong (2011) also investigates the knowledge level of university freshmen business students in University of Cape Coast, Ghana and finds that there is a widespread financial illiteracy among them.

Studies have found out that individuals who completed university are more likely to be financially well-informed than those with low level of education (Lusardi and Mitchell (2006, 2008); Almenberg and S  ve-S  derbergh (2011)).

2.2.4 Marital Status

Study by Marzieh et al., (2013) reveals that married persons are more financially literate than those who are single. To them, higher level of financial literacy brings about better financial well-being.

2.2.5 Employment Status

Professionals, executives, business owners can be said to demonstrate higher level of financial literacy than unemployed and non-working. Monticone (2010) notes that, in Italy, white-collars, managers and self-employed are the most literate population groups.

2.3 GENERAL OVERVIEW ON SAVING BEHAVIOUR

Ahmed (2002) says saving is keeping money aside for future use. He explains that saving is the result of careful management of income and expenditure, so that there is something left to be kept aside for future use.

According to Miller and VanHoose (2001), saving is a forgone consumption. To them, forgone consumption is when one does not spend all the income that is earned within a given period. They explain that, once part of what is earned today is left for future use, there is a saving. So savings can be defined as absence of spending.

2.3.1 Types of Savings

Economists have established a relationship between income and savings. Based on income accessible to the individuals, firms and corporate bodies, saving can be classified as household sector saving, private sector saving and public sector saving.

Household savings consist of savings done by individuals in household. Individuals saving behavior are made up of money in cash and financial assets.

Private sector saving is savings made in the private owned corporations. The sector consist of non-government non-financial companies; commercial banks and insurance companies; co-operative banks, credit societies and non-credit societies; and nonbanking financial companies.

Public sector savings include government savings, and savings made by the public sector in the form of internal resources.

2.3.2 Nature of Saving

Savings is a forgone consumption. It is also cash or physical products put aside for future utilization. Previously, individuals saved in products like grains- millet, beans, groundnut, maize; livestock- goats, pigs, chickens, cows; and processed food- millet flour, smoked fish, smoked beef. Those in low-income communities usually saved in undisclosed places like roof, pot, walls, underground and under a bed. Other saved

through traditional credit rotation groups, gold and land. Nowadays people normally save in durable goods and financial products like shares, stocks, mutual funds, treasury bills, certificate of deposit and bonds.

2.4 DETERMINING THE LEVEL OF FINANCIAL LITERACY

Two major approaches for determine the level of financial literacy can be found.

These are self-assessments and objective measures like test scores.

With self-assessment method, respondents assess their literacy skills and also give information about their attitudes toward financial knowledge, information and decisions.

Jappelli (2010) uses the method to perform an international comparison of literacy levels of 55 nations. The researcher supports it with the indicator of financial literacy given by IMD World Competitiveness Yearbook (WCY). Management and professionals, were demanded to assess themselves on 0-10 scale. The issues was „Economic literacy among the population is generally high“.

The objective test approach measures the respondents“ knowledge on financial terms, understanding of various financial concepts and ability to apply numerical skills in a particular situation related to finance. Various researchers have used the objective test in different ways to measure financial literacy.

Lusardi and Mitchell (2006) develop three questions to test the understanding of respondents on inflation, compound interest and risk diversification. According to them, these concepts are vital in saving decisions and investment activity.

Klapper and Panos (2011); Almenberg and S  ve-S  derbergh (2011) examine financial literacy in Russia and Sweden respectively by using similar questions. Alessie et al. (2008) extend methodology of Lusardi and Mitchell (2006) by using Dutch DNB Household Survey, and add two extra questions about time discounting and money illusion.

Dewey and Prince (2005) study financial literacy based on The Survey of Health, Age and Retirement in Europe (SHARE) made for eleven European countries. They measured financial literacy by testing respondents' capability to work out simple mathematical tasks and understand simple economic terms.

Mandell (2008), Mandell and Klein (2007) use questions from Jump\$tart Coalition for Personal Financial Literacy Survey to test financial skills among high school student. The survey is made up of multiple-choice questions on income, saving and investing, money management and spending, and credit. Chen and Volpe (1998) also measure financial literacy among the US college students by questioning them on general financial knowledge, insurance, investing, saving and borrowing.

2.5 DETERMINANTS OF SAVINGS

The decision to save is affected by many determinants. Some of the determinants are discussed below:

2.5.1 Social Security Systems / Retirement

Social security system is usually a governmental programme with the purpose of given basic necessities to residents who are retired, unemployed, or unemployable due to a disability or disadvantage. It is financed generally by obligatory payroll contributions from employees, employers and government's tax revenue. Social security systems

have the potential to replace saving motive – provision for retirement. This makes the individual saves for the sake of retirement in the future. It can be used to encourage saving because they create awareness of the need to provide for retirement. Social security schemes have a major impact on private saving in some developed as well as developing countries (Edwards, 1995).

In Akpokodje et al (2004) study find out that, saving for retirement is not important among Nigerians. It can be deduced that most of the Nigerians believe to be in their own private businesses after retirement.

2.5.2 Personal Income

Personal income involves the entire wage and salary payments, labour income, proprietor's income (rental income), transfer payments, dividend and interest income to the individuals. Personal income of individual demonstrates to be the principal determinant of saving rate. Increase in the income of an individual tends to increase the consumption pattern and also improves the part which is left out to be saved to secure the unforeseen future.

2.5.3 Interest Rates

A rate charged or paid for the use of money is interest rate. It is expressed as an annual percentage of the principal. Financial institutions encourage people to save with an anticipation of giving a substantial amount of interest rate on their saving amount. The rate of interest can determines the saving rate of the individuals. High rate of interest motivates people interest to save rather than to invest. Low interest rate discourages people from saving; rather people are likely to invest more with an expectation of getting more rate of return. Savings is directly related to rate of interest. In South Africa,

Bertran et al. (2010) test the importance of interest rates on individuals' decision to open saving account.

2.5.4 Fiscal Policy and Government Savings

Fiscal policy comprises the decisions that a government makes concerning the collection of revenue through taxation and about spending the revenue. Government savings are general government revenue less current expenditure. Fiscal policy can potentially affect saving through revenue policy (tax structure, tax incentives), expenditure policy (transfers, income redistribution), and the degree of government saving. A high rate of tax imposed on the individual will decrease the personal income and also affect the amount left for saving.

2.5.5 Demographics Factors

Demographics factors include all the socioeconomic characteristics of a population given to age, sex, religion, marital status, educational level, income, job, birth rate, death rate, family size and marriage age. Demographics factors demonstrate to be one of the principal determinants of saving rate. In the study of Akpokodje et al (2004) on the determinants of household savings in Nigeria, detected that, the influence of demographic factors is significant in savings.

The life cycle model in the study of Attanasio and Banks (2001) postulates that age composition of the population has a significant bearing on savings behaviour in developing nations. The youth and the aged have low incomes and low savings. Those in middle age have higher productivity, income and save more to repay past obligations and to finance their retirement.

In Ghana, an analysis of the GLSS 3 and 4 shows the mean savings balance of individuals increased significantly between the two periods with children and the elderly having higher savings than the working population. Consequently, aggregate savings can be affected by the age distribution of the population.

2.5.6 Dependency Ratio

Dependency ratio can be explain as the age-population ratio of those not in the labour force (the dependent) and those in the labour force. The dependents are those people who are too young; below the ages of sixteen and those people who are too old above the ages of sixty-four.

Akpokodje et al (2004) tested the impact of dependency ratio in Nigeria and find that it has a strong negative influence on savings. Loayza et al. (2000) also find that high dependency ratios have negative impact on savings. Whereas Manzocchi (1999) finds a positive relationship between dependency ratios and private savings.

2.5.7 Financial Market Development

Obviously, the developments of financial markets increase the availability of saving instruments and also the return that savers get on saving. It can also makes it easier for individuals to borrow more, than to save.

In financial market development, the total assets (or employees) of financial institutions and the geographical density of banking outlays affect individuals savings. Edwards (1995) finds a positive coefficient relationship between financial market development and private savings in their study.

2.5.8 Urbanization

When more and more people begin to live and work in urban areas, the centre area becomes urbanized. Urbanization is also identified as a significant factor influencing private saving in developing countries. According to Akpokodje et al. (2004) in the study, „the savings trends and behaviour in Nigeria“, observe that an increased urbanization can be negatively related to savings owing to the increase or better availability of consumer and other goods in the urban areas. To them, the same urbanization could also has a positive effect on savings by providing urban dwellers an increased access to financial instruments that increase savings rates.

From Olson and DeFrain (2000) point of view, the key objectives for family saving are to be ready for the likelihood of financial crisis, calamities, sickness, pregnancy, loss of job, divorce and many other crisis, with financial consequences. To them, the fact that money saved stands a chance of increasing substantively in amount is one of the motives why people may also want to save. Their argument is also advanced by Ahmed (2002). He adds that savings take careful planning and careful budgeting but the result is a relative financial gain and security.

Families may also save money to accumulate funds for down payment for homes, purchase expensive item in future and for educational purpose.

2.6 RELATIONSHIP BETWEEN FINANCIAL LITERACY AND SAVING BEHAVIOUR

Absence of financial literacy can be said to hinder the capability of persons to make well-informed financial decisions. Due to this, positive relationships that exist between financial knowledge and financial behaviour have been acknowledged by Hilgert et al., (2003).

A study by Hilgert et al., (2003) provide some connection between financial knowledge and financial behaviors. Their research indicates that persons with higher level of financial knowledge are likely to involve themselves in financial products and services, cash flows management, saving and investment. Not only does financial literacy predicts savings at individual levels, it also predicts savings at cross-country level.

Jappelli and Padula (2011) examine reports from 39 nations and find that financial literacy is a factor that determine the level of national savings. Analyzing individuals' behaviors in developed countries reveal that financial literacy has critical implications for retirement arrangement and saving decisions. It is revealed by Lusardi and Mitchell (2006) that financial illiterate in developed countries are less likely to save for retirement. This argument is been supported by Lusardi and Mitchell (2009) and Banks et al. (2009) who observed that the more financially individuals are more likely to be ready to retire and have higher retirement income.

A study on developing nations by Klapper and Panos (2011) examine the impact of financial literacy on the retirement saving in Russia. They discovery that higher financial literacy is positively related to retirement planning.

Numerous works also reveal low financial literacy translates into lack of retirement planning (Alessie et al. (2008); Lusardi and Mitchell (2009)). Hastings and Mitchell (2011) explain through their studies that there is strong correlation between investment in low cost fund and financial literacy. To them, individuals with high literacy level consider more about the fund expenses and more likely to choose low cost funds.

2.7 CHALLENGES IN SAVINGS

Apart from savings being influenced by factors like social security systems, real per capita income, interest rates, dependency ratio, fiscal policy and government savings; individuals willing to save face challenges in savings. Challenges that the individuals face in savings are been discussed below:

2.7.1 Financial Product Design

Financial products are the mechanisms that help individuals to save, invest and get insurance or a mortgage. Financial products can be classified in terms of their type, the underlying asset, volatility, risk and return. Examples of these products are shares, bonds, treasury bills, mutual fund, options and certificate of deposit.

From Meyer (2002) and Hudon (2004), indication from Asia and Latin America illustrate that, the main limitation for savings is product design. Financial products are not tailored toward the needs of the person. The individuals especially those with low income may need flexible and inexpensive products that match their capability to save, and address their needs for them to cope with. Even though the persons may be capable of saving, the financial products available to them may not be of their interest.

2.7.2 Inflation

Inflation happens when there is a sustained increase in the aggregate or general price level in a country. This general price increase creates a feeling of uncertainty and pessimism about the future among the individuals. Inflation can erode the purchasing power of a person who saves if the current bank interest rate does not match the rate of inflation. Apart from inflation being among financial risks, it also competes with saving.

2.7.3 Transaction Cost

Transaction costs related to opening, maintaining and withdrawing money from accounts can be an obstacle to savings especially for low income earners. These charges incurred for access saving services influence individuals' choice to save. A high transaction cost can prevent the individual from saving. Apart from fee and minimum requirement to operate saving accounts, the individual also incurred the cost of time spent to have access to savings in financial institution. People prefer to save in undisclosed places like underground, roof and under a bed rather than spending all their precious time in a financial institution.

2.7.4 Proximity

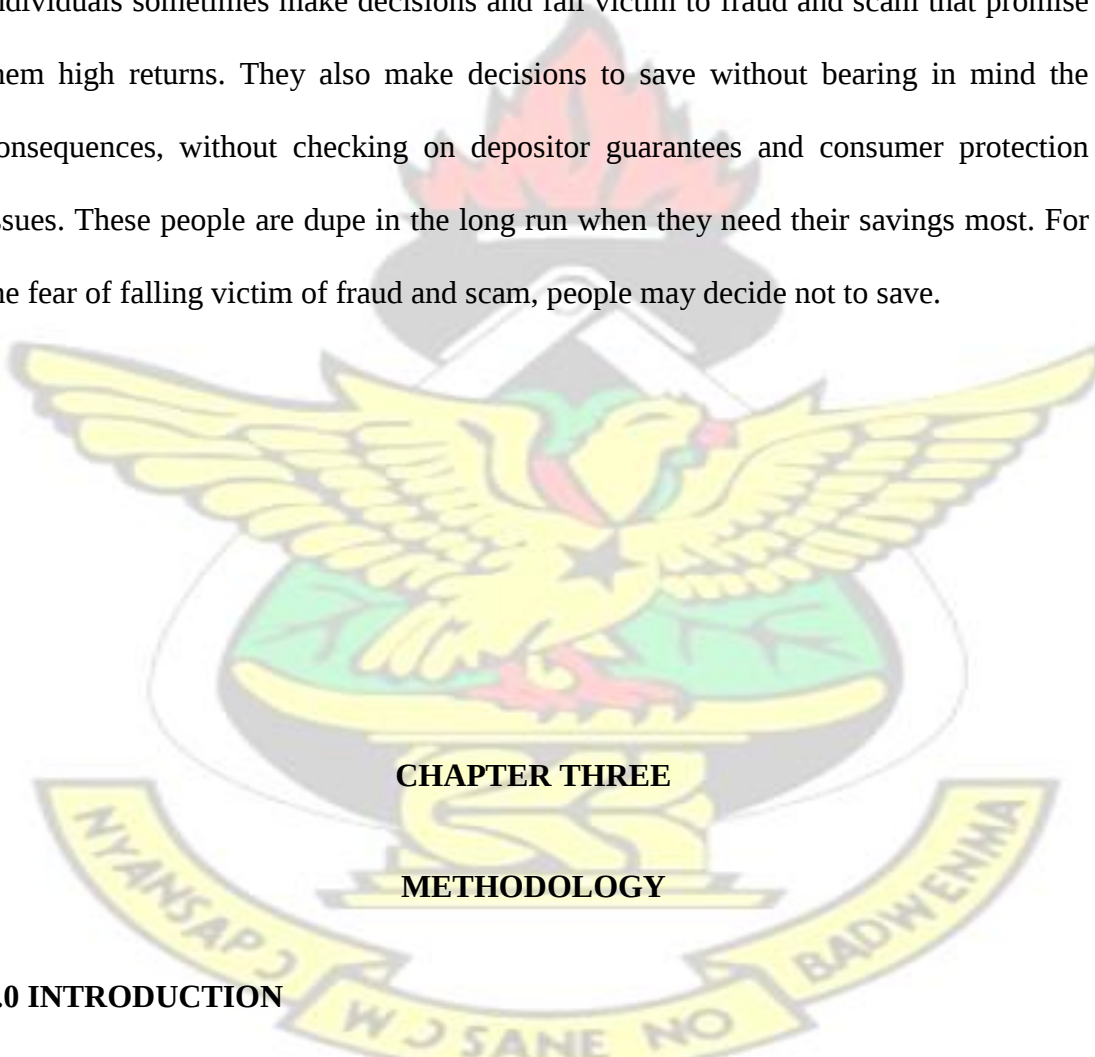
The distance between individuals and financial institutions influences the extent to which people conduct transactions with their financial institution. Even though there is technological advancement that has brought about the development of online banking and automated teller machines (ATMs), the individual may like to do transactions in person, rather than by other means (e.g., telephone, mail or online). If

the transportation costs are not so small, then they will tend to forget about saving in the financial institution especially the low income earners.

Rahman (1998) demonstrates that, proximity is one of the main causes for which individuals do not deposits with financial organizations.

2.7.5 Fear of Fraud and Scam

Individuals sometimes make decisions and fall victim to fraud and scam that promise them high returns. They also make decisions to save without bearing in mind the consequences, without checking on depositor guarantees and consumer protection issues. These people are dupe in the long run when they need their savings most. For the fear of falling victim of fraud and scam, people may decide not to save.



CHAPTER THREE

METHODOLOGY

3.0 INTRODUCTION

This chapter describes the methodological approach used for the study. It describes the research design, population of the study, sample size and sampling techniques, data collection, data analysis, reliability and validity of data and ethical consideration.

3.1 RESEARCH DESIGN

The study uses descriptive and explanatory research designs to determine the level of financial literacy among the small scaled miners and how it influences their individual savings. According to Mugenda, (2008), descriptive research design determines and reports the way things are. He suggests that, the design describe possible behaviour, attitudes, values and characteristics. The explanatory research design also refers to as analytical research design aims at identifying the causal links between the factors or variables (financial literacy and saving behaviour) that pertain to the research problem.

The researcher uses survey to collect information from respondents by asking questions in order to describe the characteristics of the population-sample. There is direct administration of questionnaires to ensure that respondents who need assistance in answering the questionnaires get them. The questionnaire is made up of both openended and closed-ended questions. Open-ended questions are to allow the respondents the freedom to express themselves in their own way and in their own words. The closed-end is to give the respondents alternative.

Both qualitative and quantitative methods are used. The quantitative method with a well structure questions is used. This will help to quantify attitudes, opinions, behaviours and other defined variable by way of creating statistical data that can be changed into useable statistics. The qualitative method with semi structured questions is used to provide insight into financial literacy and saving behaviour. It will also help to develop ideas or hypothesis to help support the quantitative method.

3.2 POPULATION OF THE STUDY

People who work in small scale mining – galamsey operators are the target population. This is because these operators are the people who have the first hand information about their saving behaviour. The population represents an age group of 18-50years since they are the economically active population.

3.3 SAMPLE SIZE AND SAMPLING TECHNIQUE

Sample size of one hundred and fifty-five is used for the study. The quota and purposive sampling techniques under the non-probability sampling method are used in selecting the respondents. Non- probability sampling is used since the probability of selection cannot be accurately determined. Quota sampling technique is first applied to help to decide how many of respondents are needed to the sample. Purposive sampling technique is used to access the desired sample size. Purposive sampling technique is ideal in this study owing to the fact that the respondents will be able to give specific information needed. In this sampling technique, the researcher purposely chooses respondents who in the researcher's opinion is thought to have relevant information for the study.

3.4 DATA COLLECTION

Primary source of data collection method is adopted in order to obtain a reliable data to help achieve the stated objectives of this study. Primary data is collected by means of structured questionnaires. This form of data collection is chosen because it provides an efficient means by which statistical quantifiable information could be collected. It also allows easy access to respondents within a given time frame.

In order to get accurate and quick data, the researcher engages two researcher assistants to help in the data collection process. The two researcher assistants selected by the researcher are oriented on the objective of the research and how to fill the questionnaires before going to the field. Researcher assistants are insisted not to draw their own conclusions, but record exactly the respondent's response in order to control individual bias.

3.5 DATA ANALYSIS

The quantitative data is analyzed through descriptive statistics which comprise of frequency tables, mean and standard deviation. The data is presented using tables for ease of comparison and understanding. Qualitative data is analyzed using content analysis techniques and coded for entering into Statistical Packages for Social Scientists. The study also uses multiple regression to establish the relationship between financial literacy and saving behaviour.

3.5.1 Model Specification

The following regression model is used to establish the relationship between dependent and independent variables:

$$Y = B_0 + B_1X_1 + B_2X_2 + B_3X_3 + B_4X_4 + B_5X_5 + B_6X_6 + e.$$

Where,

Y= dependent variable (individual saving behaviour) measured by the rate of savings regularity in relation to individual personal income earnings.

B_0 = the constant term or Y-intercept.

$B_1, B_2, B_3, B_4, B_5,$ and B_6 = coefficients to be determined.

e = the error term.

X_1 = the gender index measured by the respondent's classification as male or female.

X_2 = the age index measured in respondent's age in years.

X_3 = the education index measured by the respondent's highest level of education.

X_4 = the marital status index measured by the respondent's current marital status.

X_5 = the income index measured by the monthly personal income earnings of the respondent.

X_6 = the financial literacy index measured by financial attitude and knowledge.

ANOVA is used to establish the significance level of the regression model using f statistic value of p less than 5%. Significance value of 5% is also used to interpret the t statistics.

3.6 RELIABILITY AND VALIDITY OF DATA

Reliability helps to enhance the degree of consistency or accuracy with which an instrument measures the attribute it is designed to measure. In testing the reliability, internal consistency technique is applied using Cronbach's Alpha. Coefficient of 0.6 to 0.7 is accepted indicating acceptable reliability and 0.8 or higher indicated good reliability (Mugenda, 2008). Test-retest reliability in which test is administered to a group of respondents and then the same test is administered again to the same respondents at a later date is used. The researcher picks a pilot group of 5 persons from

the target population to test the reliability of the research instruments. The findings from the pilot testing will not be added to the final study.

Validity helps to indicate the degree by which an instrument measures what it is supposed to measure. The questionnaires are structured to ensure that it remains focused, accurate and consistent in the course of the study. The researcher establishes validity of the data by seeking opinions of experts in the field of study especially the supervisors.

3.7 ETHICAL CONSIDERATION

In the administration of the questionnaire, permission is sought from those in authority of the miners. The researcher first introduces the self and issues out an introductory letter to the small scaled miners. The respondents are then given as much information as is needed to help them make a comprehensive decision about whether they will participate in the study or otherwise. The respondents are not in any position force or pressure to participate. This is done to prevent coercion and deception. They are assured of confidentiality with the explanation that the study is purely for academic purpose. Small scaled miners are entreated to give unbiased responses to the question items.

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CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.0 INTRODUCTION

The study is based mainly on primary data, so the results of the research can provide new database on financial literacy and saving behaviour particularly on small scaled miners. This chapter analyses and discusses the findings on the study. It deals with background of the respondents, their level of financial literacy, their saving behaviour, the relationship between financial literacy and saving behaviour, and the challenges face in saving.

4.1 RELIABILITY

The test-retest in reliability test conducted on the main dependent and the independent variables has Cronbach's Alpha value of 0.782 which exceeds the acceptable rules of thumb of 0.6 to 0.7 that indicates acceptable reliability. So the level of reliability of the research tool is moderately good.

4.2 BACKGROUND OF RESPONDENTS

It deals mainly with the socio-demographic characteristics of the respondents. These include gender, age, education, marital status and personal income.

4.2.1 Gender

From the findings, more than two-third of the respondents which is 109 are males. This constitutes seventy point three percent (70.3%) of the respondents who answered the questionnaires. The female respondents are 46 which constitutes 29.7% of the respondents. One main reason that accounts for this, is the energetic nature of the work-small scaled mining. It is sometimes consider as work mostly for the males. The mean of the gender is 1.70 with standard deviation of 0.458. The gender distribution of the respondents" is shown in the table 4.1 below:

Table 4.1 Showing Gender of Respondents

Gender	Frequency	Percent
Male	109	70.3
Female	46	29.7
Total	155	100.0

Source: Field Data, 2015.

4.2.2 Age

The ages of respondents of the study fall between 18 and 50 years. An attentive analysis of the age distribution shows that more than one-third of the total sample fall within the 21 to 30 years age group. They are 61 respondents which constitutes 39.4% of the total

sample. The ages between 31 to 40 years is the second highest frequency with 40 respondents constituting 25.8% of the total sample. 28 respondents that is 18.1% fall below age 21 and the remaining 26 of the respondents have ages between 41 to 50 years. They also constitute 16.8% of the sample size. The mean age is 24.1 which falls between the age group of 21 to 30. It has a standard deviation of 0.972. One reason that can be attributed to more respondents of the ages of 21 to 30 is due to vigorous nature of activities that take place at the working place. Mostly those age group have more energy to burn. The table 4.2 illustrates the age distribution of the respondents.

Table 4.2 Age Distribution of Respondents

Age Group	Frequency	Percent
below 21	28	18.1
21-30	61	39.4
31-40	40	25.8
41-50	26	16.8
Total	155	100.0

Source: Field Data, 2015.

4.2.3 Education

Most of the respondents that is 120 out of the total sample have gotten formal education ranging from the basic or elementary school to degree level. But this does not mean there are no illiteracy, 35 of the respondents have no formal education at all. The group with no formal education has frequency of 35 which represents 22.6% of the total sample. 71 of the respondents have other form of formal education in which 31 (which

form 43.7% of other and 20% of sample size) are primary or elementary school leavers; 27 (which form 38% of others and 17.4% of sample size) from Junior High School (JHS); 10 (which form 14.1% of others and 6.5% of sample size) from O Level and the 3 (which form 4.2% of other and 1.9% of sample size) from A Level. Those from Senior High School are 25 constituting 16.1% of the sample. Certificate/Diploma has 14 respondents (9%) of total sample with degree having 10 respondents constituting 6.5% of the sample size. The mean education is 1.31 with the standard deviation of 1.114. Table 4.3 below shows the educational level.

Table 4.3 Level of Education of Respondents

Level of Education	Frequency	Percent
None	35	22.6
Other	71	45.8
Senior High School	25	16.1
Certificate/Diploma	14	9.0
Degree	10	6.5
Total	155	100.0

Source: Field Data, 2015

4.2.4 Marital Status

Of the 155 respondents, 45 (29%) are never married (single); 11 (7%) are married with no children; 2 (1.3%) are widows; 9(5.8%) are officially divorced; 18 (11.6%) are not divorced but each couple stays a separate way and the remaining 70 (45.2%) which has the highest respondents are married with children. Table 4.4 shows the marital distribution of the respondents.

Table 4.4 Marital Status of Respondents

Marital Status	Frequency	Percent
Single/ never marry	45	29.0
Married no children	11	7.1
Widow	2	1.3
Divorced	9	5.8
Separated	18	11.6
Married children	70	45.2
Total	155	100.0

Source: Field Data, 2015.

4 .2.5 Occupation Status

Even though all the respondents are small scaled miners, the results of the findings show that only 72 (46.5%) of the respondents are full-time workers. The remaining 83 (53.5%) are part-timers who are full time petty traders, farmers, food vendors, carpenters, seamstresses, technicians, teachers and office clerks. They normally take the job as part-time during weekends and when their economic activities slow down.

4.2.6 Income Status

Majority of the respondents have personal monthly income between GH¢ 500 to GH¢ 1,000. Those respondents are made up of 120 (77.4%) of the sample size. 21 (13.5%) out of the total respondents have personal monthly income of GH¢ 1001 to GH¢ 1,500 with only 1 (0.6%) respondent with an income above GH¢ 1500. Respondents with income below GH¢ 500 constitute 13 (8.4%) of the total sample size. Table 4.5 shows the income distribution of respondents in Ghana cedis.

Table 4.5 Personal Monthly Income of Respondents

Income in Cedis (GH¢)	Frequency	Percent
below 500	13	8.4
500 to 1000	120	77.4
1001 to 1500	21	13.5
above 1500	1	0.6
Total	155	100.0

Source: Field Data, 2015.

4.3 LEVEL OF FINANCIAL LITERACY

Respondents rate themselves to assess their attitude toward financial decisions, knowledge and information.

4.3.1 Financial Information and Decision

On the statement about management of one's own finance, 83 (53.5%) of the respondents manage their own finances at a very large extent. Out of the 83 respondents, 69 (44.5%) are males and 14 (9%) are females. 58 (37.4%) of the respondents manage their finances at a large extent. 29 (18.7%) of the large extent group are males and 29

(18.7%) females. 14 (9%) of the sample size fall within the reasonable extent group. They are made up of 11 (7.1%) male and 3 (1.9%) female. Even though the sample consists of more males than females, it can be observed that men (males) manage their own finance more than women (female). There is no “low extent” and “not at all” group. The figure 4.1 illustrates that. **Figure 4.1**

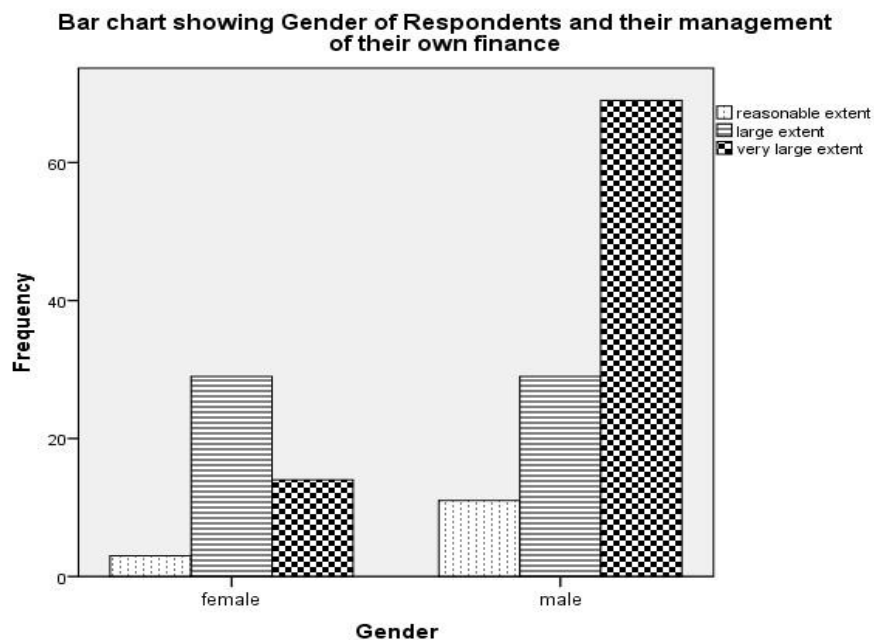


Table 4.6 also shows the cross tabulation of management of one's own finances under the various age groups. From table 4.6, almost all respondents from 41 years and above manage their own finances at a very large extent.

Table 4.6 Age Groups of Respondents who Manage their own Finances

Age Group	Management of one's own finances			Total
	reasonable extent	large extent	very large extent	
below 21	12	9	7	28
21-30	1	34	26	61
31-40	1	12	27	40
41-50	0	3	23	26
Total	14	58	83	155

Source: Field Data, 2015.

Table 4.7 also shows respondents level of education and their management of their finance.

Table 4.7 Respondents Educational Level and their Management of their finance

Educational level	Management of one's own finance		Total level	reasonable extent
	large extent	Very large extent		
None	1	16	18	35
Others	10	27	34	71
SHS	3	12	10	25
Cert/Diploma	0	1	13	14
Degree	0	2	8	10
Total	14	58	83	155

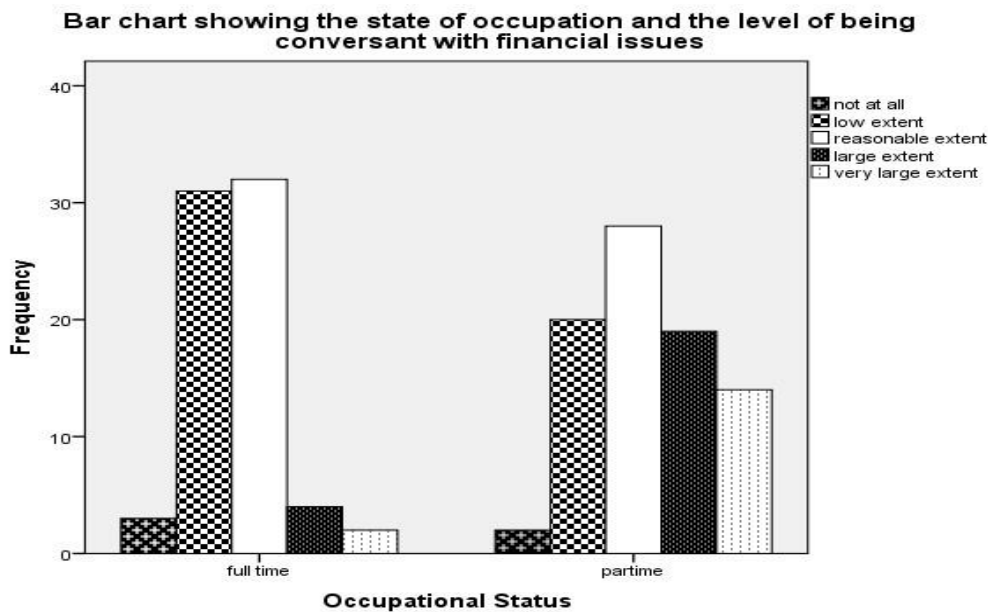
Source: Field Data, 2015.

The educational level of the respondents has no greater influence on their level of managing their own finances from table 4.7 as compare to age and gender that have

influence on respondents' level of management of finance. Most of the respondents, no matter the educational level manage their own finances at a very large extent.

The study wanted to know how knowledgeable respondents are when it comes to matters relating to financial issues. 16 (10.3%) of the respondents happen to be at a very large extent conversant with matters relating to financial issues; 23 (14.8%) are at a large extent; 60 (38.7%) are at reasonable extent; 51 (32.9%) are at low extent and 5 (3.2%) are not conversant with financial matters at all. The occupational status – full time and part-time are used to compare with the respondents level of being conversant with financial matters. This is illustrated by figure 4.2.

Figure 4.2



From figure 4.2, it can be observed that the seasonal workers (part-time) which is made up of teachers, office clerks, technicians, petty trader and food vendors are more knowledgeable about financial matters than the full-time workers.

Respondents are asked about their level of confidence in making financial or saving decisions. 11 (7.1%) of the respondents are at a very large extent confident in making financial decision; 34 (21.9%) are large extent confident; 74 (47.7%) are reasonable extent and the remaining 36 (23.2%) are at low extent confident in making financial/saving decision. None of the respondents fall into not at all group. The table 4.8 shows the various age groups and their level of confidence in making financial decision.

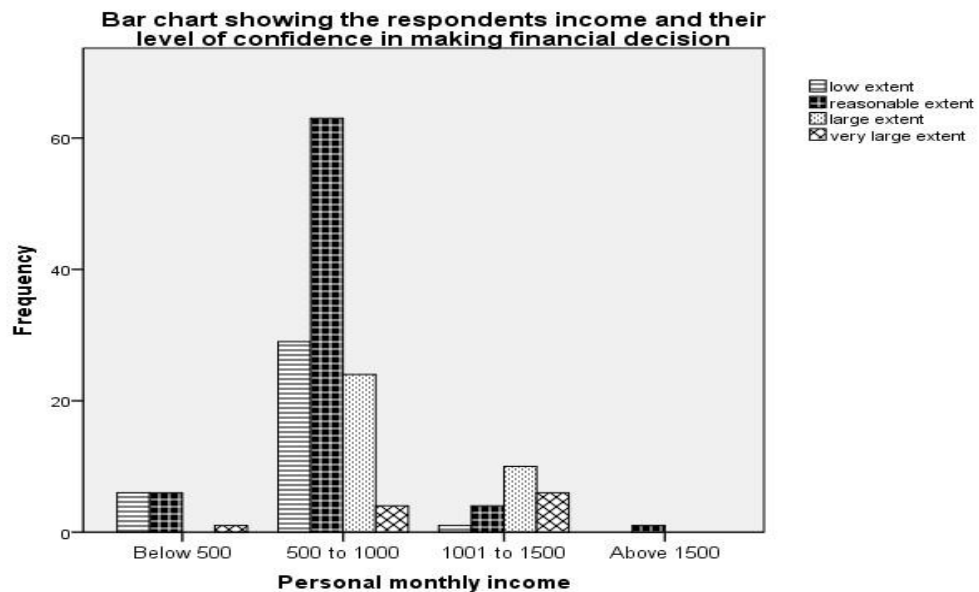
Table 4.8 Age Groups and their Level of Confidence in making Financial Decision

Age Group	Confidence Level in making Financial Decision				Total
	low extent	reasonable extent	large extent	Very large extent	
below 21	10	15	1	2	28
21-30	16	36	8	1	61
31-40	5	14	16	5	40
41-50	5	9	9	3	26
Total	36	74	34	11	155

Source: Field Data, 2015.

From the table, only 3 (1.94%) under „below age 21“ group have extremely confidence in making financial decision. Even though group 21 to 30 have the highest respondents of 61 (39.4%) only 9 (5.8%) are extremely confidence when it comes financial decision making. Figure 4.3 also gives a different picture of confidence level in making financial decision.

Figure 4.3



It can be observed from figure 4.3 that those respondents whose salaries fall between 500 and 1,500 (Ghana cedis) have confident in making financial decision.

Table 4.9 also shows the educational level of respondents and their level of confidence in making financial decision. From the table, it is realized that most of the respondents do not have the confident when it comes to making of financial decision no matter the educational level of the respondents.

Table 4.9 Educational Level of Respondent and Level of Confidence in making Financial Decision

Educational Level	Confidence Level in making Financial Decision				Total
	low extent	reasonable extent	large extent	very large extent	
None	15	15	5	0	35
Others	20	36	13	2	71

SHS	0	20	4	1	25
Cert/Diploma	0	2	9	3	14
Degree	1	1	3	5	10
Total	36	74	34	11	155

Source: Field Data, 2015.

Table 4.10 also shows gender of respondents and their level of confidence in making financial decision. From the table, it can be observed that male respondents have higher level of confidence when it comes to financial decision than female respondents even though most of the respondents are males.

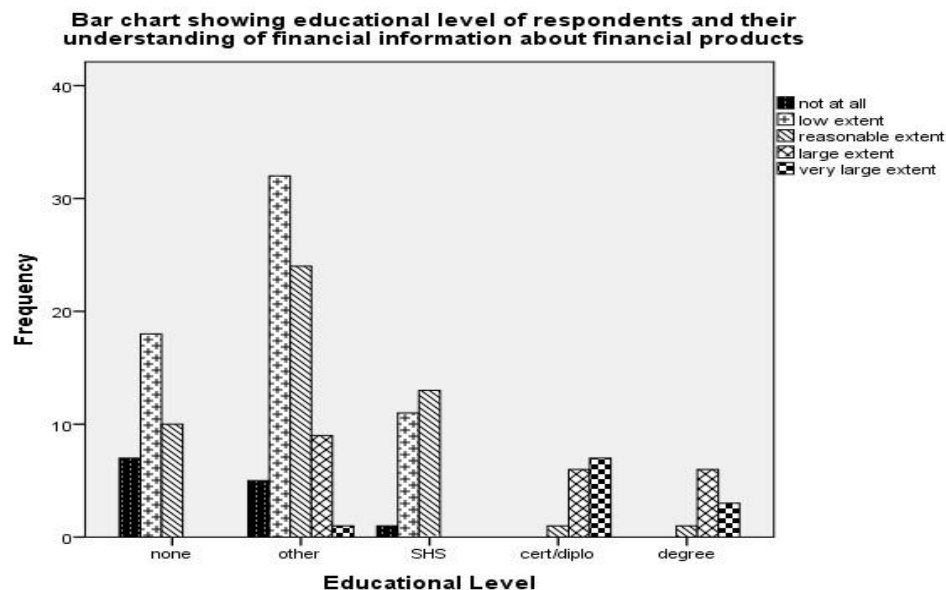
Table 4.10 Gender of Respondents and their Confidence Level in making Financial Decision.

Gender	Confidence Level in making Financial Decision				Total
	low extent	reasonable extent	large extent	very large extent	
female	16	26	4	0	46
male	20	48	30	11	109
Total	36	74	34	11	155

Source: Field Data, 2015.

Respondents are asked to rate themselves concerning their understanding of financial information received on financial products. 11 (7.1%) of the respondents at a very large extent understand information received concerning financial products; 21 (13.5%) at large extent; 49(31.6%) at reasonable extent; 61 (39.4%) at low extent and the remaining 13 (8.4%) do not understand financial information received concerning financial products. A pictorial view of respondents understanding of financial information about financial products and their educational level is shown in figure 4.4:

Figure 4.4



From figure 4.4, education has an influence on respondents understanding of information received on financial products. Respondents with certificate/diploma and degree have the greatest understanding of information about financial products than the rest of the respondent. Most of the respondents who have no educational background have problem understanding financial information received. 122 (78.7%) of the respondents are able to give out financial products that they are familiar with when they are asked to name them. Financial products like shares, treasury bills, bonds and certificate of deposit are mentioned.

Gender of respondents and their level of understanding of financial information about financial product is also observed. It is also observed that, the female respondents do not understand financial information on financial products well as compare to their male counterparts. Table 4.11 shows the gender of respondents and their level of understanding of financial information about financial products.

Table 4.11 Gender of Respondents and Level of Understanding of Financial Information concerning Financial Product

Gender	Level of Understanding of Financial Information and Products					Total
	not at all	low extent	reasonable extent	large extent	very large extent	
female	7	26	10	3	0	46
male	6	35	39	18	11	109
Total	13	61	49	21	11	155

Source: Field Data, 2015.

Table 4.12 also shows the age groups of respondents and their level of understanding of financial information concerning financial products. It is observed from the table that

most of the respondents above 30 years have more understanding on financial information and products than those in 30 and below age groups.

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Table 4.12 Age Group of Respondents and Level of Understanding of Financial Information concerning Financial Products.

Age of Respondents	Level of Understanding of Financial Information and Products					Total
	not at all	low extent	reasonable extent	large extent	very large extent	
below 21	4	16	7	1	0	28
21-30	7	28	19	6	1	61
31-40	2	10	13	9	6	40
41-50	0	7	10	5	4	26
Total	13	61	49	21	11	155

Source: Field Data, 2015.

Those respondents who seek out financial information and advice are 66 (42.6%). 89 (57.4%) have never sought out financial information and advice before. Out of those who seek financial information and advice; 11 (7.1%) have no educational background; 27 (17.4%) have other form of education in the form of elementary/primary, JHS, O level and A level; 6 (3.9%) are SHS; 13 (8.4%) are certificate/diploma and 9 (5.8%) are degree holders. When grouped under marital status; 8 (5.2%) are single; 3 (1.9%) are

married with no children; no widow; 7 (4.5%) are divorced; 9 (5.8%) are separated and 39 (25.2%).

Out of those who do not seek out financial information and advice; 24 (15.5%) have no educational background; 44 (28.4%) have other form of education; 19 (12.3%) have SHS; 1 (0.6%) is certificate/diploma and 1 (0.6%) is also a degree holder. When grouped under marital status; 37 (23.9%) are single; 8 (5.2%) are married with no children; 2 (1.3%) are widow; 2 (1.3%) are divorced; 9 (5.8%) are separated and 31 (20%) are married with children. From the above statistic it can be observed that most of those who seek out financial information and advice are those married with children. Those who do not seek financial advice and information are those single and never married.

The 66 (42.6%) respondents who seek out financial advice and information acquire them from financial institutions (46 respondents), relatives (12 respondents) and friends (8 respondents). All the 66 respondents who seek out financial information believe the financial information influence their decision to save.

4.3.2 Financial Knowledge

The objective test approach is applied to test the respondents' knowledge and understanding of financial terms and their ability to apply numerical skills in situations related to finance. Objective test questions are been asked concerning liquidity, inflation and interest rate, risk and return. On liquidity, items are given for respondents to indicate or tick which one of them can be easily turned into cash. 16 (10.3%) of the total respondents are not sure; 16 (10.3%) indicated excavator machine; 33 (21.3%) for

radio set; 17 (11%) for money in fixed accounts and 73 (47.1%) for money in current accounts.

On the issue of inflation and interest rate, the researcher wanted to know from respondents what the effect on purchasing will be like after a year if interest rate on savings accounts is 10% per year and inflation rate is 12% per year. The following findings are been gathered; 5 (3.2%) are not sure what the effect will be like; 10 (6.5%) believe one can buy the same with the money in the account; 26 (16.8%) believe one can buy more with the money in the account and 114 (73.5%) believe one can buy less with the money in the account.

On risk and return, 121 (78.1%) of the respondents answer that an investment with high return is likely to have high risk. 19 (12.3%) believe there will be low risk; 11 (7.1%) believe there will be no risk and 4 (2.6%) are not sure.

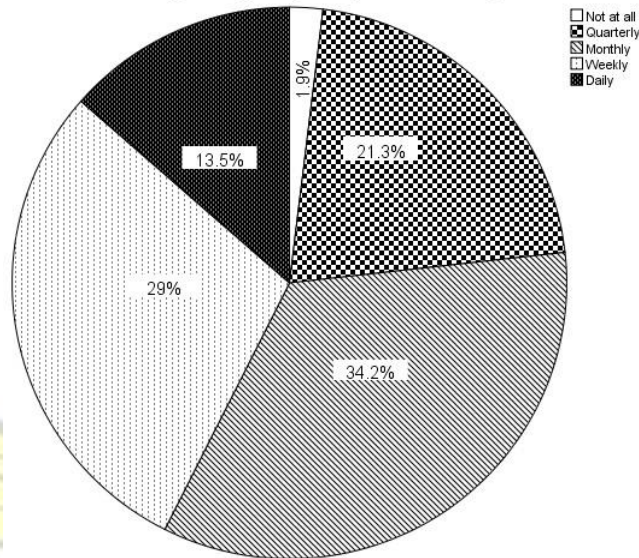
4.4 SAVING BEHAVIOUR

Respondents answer questions to help to know the pattern of saving behaviour. 152 (98.1%) of the respondents deliberately save part of their personal monthly income. Only 3 (1.9%) of the respondents do not save at all.

On regularity of saving, apart from the 3 (1.9%) who do not save at all, no respondent save on yearly bases. 33 (21.3%) of respondents save quarterly very year; 53 (34.2%) save monthly; 45 (29%) save weekly and 21 (13.5%) save daily. A pictorial view of the regularity of saving behaviour of respondents" shows that, more of the respondents save on monthly bases. The detail is shown in figure 4.5:

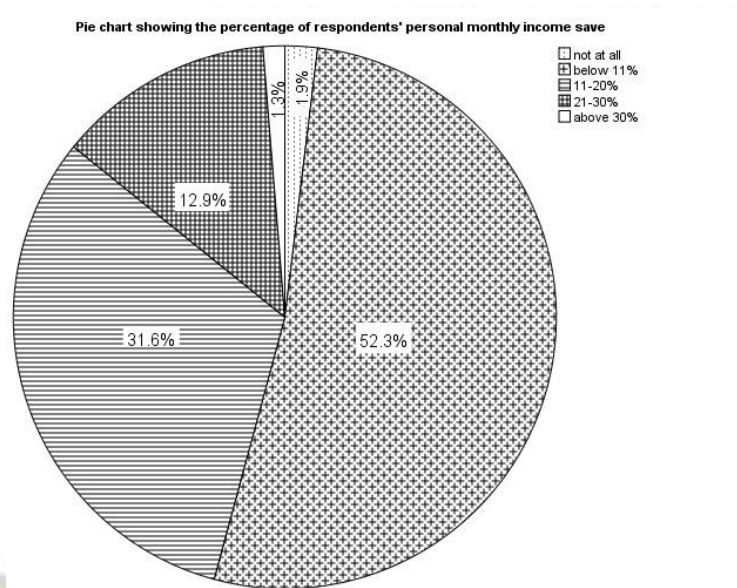
Figure 4.5

Pie chart showing the regularity of respondents saving behaviour



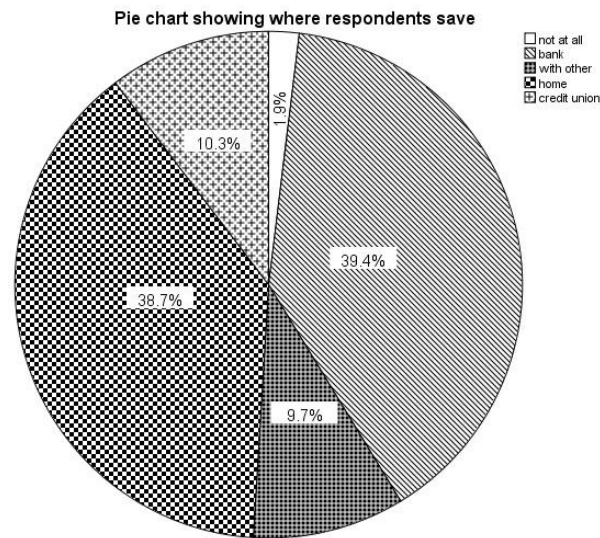
From the respondents who save, 81 (52.3%) of them save 10% and below of their personal monthly income; 49 (31.6%) save between 11-20%; 20 (12.9%) save between 21-30% and 2 (1.3%) do save above 30% of their personal income. 3 (1.9%) of the respondents do not save at all. This is illustrated by figure 4.6:

Figure 4.6



It is found out that 61 (39.4%) of the respondents save with Banks; 60 (38.7%) save in their various Homes; 16 (10.3%) save with Credit unions; 15 (9.7%) save with others in a group and the remaining 3 (1.9%) do not save at all. No respondent save with insurance company and pension contributions. It can be due to unavailability of insurance company and pension contributions in the area. There is a rural bank and credit unions in some of the churches in the area. Figure 4.7 shows a pictorial view of where respondents save.

Figure 4.7



Respondents are asked to rate themselves on the degree of agreement and disagreement about the purpose of saving. Table 4.8 shows respondents' view:

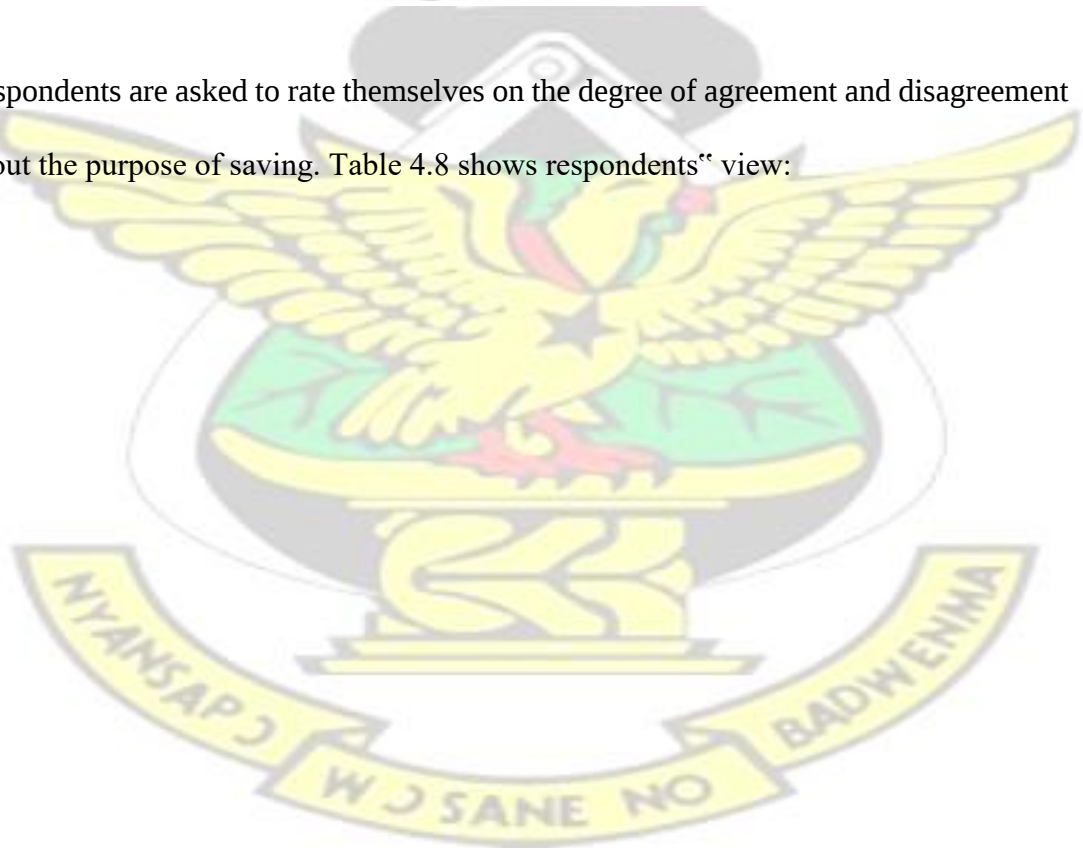


Table 4.13 showing the Purpose of Saving among Respondents

	Save to meet emergencies		Depend on it during retirement		Education of children		Financial gain in future		Buy expensive item		Easy access to financial information	
Level of Agreement	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Do not save at all	3	1.9	3	1.9	3	1.9	3	1.9	3	1.9	3	1.9
Strongly disagree	0	0	36	23.2	16	10.3	4	2.6	1	0.6	26	16.8
Disagree	0	0	60	38.7	35	22.6	70	45.2	10	6.5	82	52.9
Not sure	0	0	14	9.0	4	2.6	17	11.0	7	4.5	18	11.6
Agree	34	21.9	34	21.9	84	54.2	44	28.4	55	35.5	20	12.9
Strongly agree	118	76.1	8	5.2	13	8.4	17	11.0	79	51.0	6	3.9
Total	155	100.0	155	100.0	155	100.0	155	100.0	155	100.0	155	100.0

Source: Field Data, 2015.

From Table 4.8, 3 (1.9%) do not save at all; 34 (21.9%) agree to save to meet emergencies and 118 (76.1%) strongly agree to that. This shows that all the respondents who save have the purpose of saving to meet emergencies in life. They save to prepare for the possibility of sickness, loss of job, accidents, financial crisis and other crisis with financial consequence.

On the purpose of saving to depend on it during retirement, apart from 3 (1.9%) who do not save, 36 (23.2%) strongly disagree to that; 60 (38.7%) disagree; 14 (9%) are

uncertain on that; 34 (21.9%) agree and 8 (5.2%) strongly agree. It can be observed that most respondents are not concern about their retirement and has no retirement plan. Only 42 (27.1%) have retirement plan but they too do not save with insurance or pension contribution companies. This can be due to the absence of insurance companies and pension contribution in the area. Some save at home, with others, banks and credit unions.

For the purpose of educating their children, 16 (10.3%) strongly disagree to it; 35 (22.6%) disagree; 4 (2.6%) are indifferent; 84 (54.2%) agree and 13 (8.4%) strongly agree. Most of the respondents agree to the purpose of educating their children. This is not a surprise since most of them are married with children as shown in the result on marital status.

4 (2.6%) of the respondents strongly disagree on saving for financial gain; 70 (45.2%) do disagree; 17 (11%) are not sure about that; 44 (28.4%) agree and 17 (11%) strongly agree. Most of the respondents have not intension of saving for financial gain. This can be one of the reasons why they save at home and in groups with others. These two places of saving do not have any financial gain.

Almost all the respondents save for the purpose of buying expensive item in future. 79 (51%) strongly agree to use their saving to buy expensive item in future; 55 (35.5%) agree to that; 7 (4.5%) are not sure; 10 (6.5%) disagree and only 1 (0.6%) strongly disagree.

It seems respondents are not interested in financial information. Respondents are asked to state their level of agreement on saving as a purpose of easy accessibility to financial

information. 26 (16.8%) strongly disagree; 82 (52.9%) disagree; 18 (11.6%) are not sure; 20 (12.9%) agree and 6 (3.9%) strongly agree.

4.5 RELATIONSHIP BETWEEN FINANCIAL LITERACY AND SAVING BEHAVIOUR

In establishing the relationship between financial literacy and saving behaviour correlation and regression are competed.

4.5.1 Coefficient of Correlation

Karl Pearson's coefficient of correlation (r) is used to establish the relationship between the variables under studied. It also indicates the direction and how much relationship exist between the variables. The value of correlation lies between positive one to negative one. Table 4.12 shows the correlation between variables.

From the table 4.12, there is a positive correlation between Gender and Individual Savings Behaviour. It is shown by a correlation figure of 0.158; Age and Individual Savings Behaviour have a correlation figure of 0.453; Education and Individual Savings Behaviour have a correlation figure of 0.381; Marital Status and Individual Savings Behaviour have a correlation figure of 0.336; Personal Monthly Income and Individual Savings Behaviour have a correlation figure of 0.382; and there is also a positive relationship between Financial Literacy and Individual Savings Behaviour. They have a correlation figure of 0.635. This shows a strong positive relationship than the other variables.

Table 4.14 Showing correlation between variables

Gen.	Age	Educ.	Marital Status	Per. Income	Fin. Lit.	Saving Behav.
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	Pearson r	1	.218**	.346**	-.195	.143**	.319**	.158**
Gender	Sig.(2-tailed)		.006	.000	.015	.076	.000	.050
	Pearson r	.218**	1	.037	.510**	.351	.389	.453
Age	Sig.(2-tailed)	.006		.647	.000	.000	.000	.000
	Pearson r	.346**	.037	1	-.160**	.460	.696	.381
Education	Sig.(2-tailed)	.000	.647		.046	.000	.000	.000
Marital	Pearson r	-.195*	.510**	-.160*	1*	.192**	.176**	.336*
Status	Sig.(2-tailed)	.015	.000	.046		.017	.029	.000
Personal	Pearson r	.143	.351**	.460	.192	1**	.501**	.382**
Income	Sig.(2-tailed)	.076	.000	.000	.017		.000	.000
Financial	Pearson r	.319**	.389**	.696**	.176**	.501**	1**	.635**
Literacy	Sig.(2-tailed)	.000	.000	.000	.029	.000		.000
Saving	Pearson r	.158	.453**	.381**	.336	.382**	.635**	1**
Behaviour	Sig.(2-tailed)	.050	.000	.000	.000	.000	.000	

Source: Field Data, 2015. ** Correlation is significant at the 0.01 level (2-tailed). N=155

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

4.5.2 Coefficient of Determination

Table 4.10 shows the coefficient of determination of 0.689 which implies there is a fairly positive relationship between the variables under studied. The R square (R^2) is the explanatory power which shows that 0.474 of saving behaviour is explained by gender, age, educational level, marital status, personal monthly income and financial literacy. Table 4.10 shows the detailed:

Table 4.15 Showing the Coefficient of Determination

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	F	df1	df2	Sig.	F Change	R Square Change	Adjusted R Square Change
	.689 ^a	.474	.453	3.643	.474	22.243	6	148 ^a	.000		

Source: Field Data, 2015.

a. Predictors: (Constant), financial literacy, marital status, gender, personal monthly income, age, level of education.

4.5.3 ANOVA (Analysis of Variance)

The study used ANOVA to establish the level of significance of the regression with f statistic value of p less than 0.05 with confidence level above 95%. Table 4.11 shows the ANOVA.

Table 4.16 Showing the ANOVA^a

	Sum of Squares	df	Mean Square	F	Sig.
Regression	1771.620	6	295.270	22.243	.000 ^b
Residual	1964.676	148	13.275		
Total	3736.297	154			

Source : Field Data, 2015.

a. Dependent Variable: saving behaviour

b. Predictors: (Constant), financial literacy, marital status, gender, personal monthly income, age, level of education.

4.5.4 Multiple Regression

From Table 4.15, the regression equation can be established as:

$$Y = 11.699 - 0.338X_1 + 0.884X_2 + 0.224X_3 + 0.351X_4 + 0.189X_5 + 0.537X_6 + e.$$

Where,

Y= dependent variable (individual saving behaviour)

X₁ = the gender

X₂ = the age

X₃ = the education

X₄ = the marital status

X₅ = the personal income X₆

= the financial literacy

e = the error term.

Table 4.17 Showing the Regression Coefficients^a

Unstandardized		Standardized	t	Sig.	95.0% Confidence	
Coefficients		Coefficients				
B	Std. Error	Beta			Lower Bound	Upper Bound

(Constant)	11.699	2.104		5.560	.000	7.542	15.857
Gender	-.338	.743	-.031	-.455	.650	-1.806	1.130
Age	.884	.414	.174	2.136	.034	.066	1.702
Education	.224	.433	.051	.517	.606	-.632	1.079
Marital St.	.351	.171	.157	2.048	.042	.012	.689
Per. income	.189	.737	.019	.257	.798	-1.267	1.646
Fin. literacy	.537	.105	.505	5.115	.000	.329	.744

Source: Field Data, 2015.

a. Dependent Variable: saving behaviour

From the regression equation, if all factors are taking constant at zero, the individual savings behaviour will be 11.699. The findings also show that if all other independent variables are taking at zero; in gender, if the respondent is a male, will tend to decrease 0.338 of the individual savings behaviour but female respondents have no decrease effect; a unit increase in age will lead to a 0.884 increase in individual savings behaviour; a unit increase in education will lead to a 0.224 increase in individual savings behaviour; in marital status (if the person is married) will tend to have an increase of 0.351 in individual savings behaviour; a unit increase in personal income will lead to a 0.189 increase in individual savings behaviour; a unit increase in financial literacy will lead to a 0.537 increase in individual savings behaviour.

According to the equation, gender has a negative relationship with individual savings behaviour. Age, education, marital status, personal income and financial literacy also have a positive relationship with individual savings behaviour with age and financial literacy contributing most to the dependent variable. But the p-values for gender, education and personal income are greater than the common alpha level of 0.05, which

indicates that they are statistically insignificant. The predictor variables of age, marital status and financial literacy have variables coefficients statistically significantly since their p-values are less than the common alpha level of 0.05.

4.6 CHALLENGES OF SAVING

This part deals with the constraints or the things that hinder the respondents' effort to save. The respondents state their level of agreement on the challenges face in saving. 11 (7.1%) of the respondents state that they strongly disagree on the statement that transacting with financial institution is time consuming and 42 (27.1%) also disagree to that. So 53 (34.2%) of the respondents believe, it is not time consuming transacting with financial institution. Out of the 53 (34.2%), 50 (32.3%) of the respondents save at banks and the remaining 3 (1.9%) save with credit unions. 12 (7.7%) of the respondents are not sure if transacting with bank is time consuming. Out of the 12 (7.7%), 11 (7.1%) save with banks and 1 (0.6%) saves at home. 35 (22.6%) of them agree to it that, it is time consuming transacting with banks. None of the 35 (22.6%) save at banks; 6 (3.9%) save in groups with others; 18 (11.6%) save at homes; and 11 (7.1%) save with credit unions. 52 (33.5%) of the respondents strongly agree that transacting with bank is time consuming. Out of the 52 (33.5%), 3 (1.9%) do not save at all; none save with banks; 8 (5.2%) save with others in groups; 39 (25.2%) save at homes; 2 (1.2%) save with credit unions.

On the issue concerning the saving outlet, 73 (47.1%) strongly agree that, there are inadequate financial institution's saving outlet; 45 (29%) agree; 6 (3.9%) are indifferent; 26 (16.8%) disagree and 5 (3.2%) strongly disagree. Those who believe that saving outlet is a challenge (strongly agree and agree groups-118 (76.1%)), 3 (1.9%) of

them do not save at all; 27 (17.4%) save with banks; 15(9.7%) save in groups with others; 57(36.8%) save at homes; and 16 (10.3%) save with credit unions. Disagree (strongly disagree and disagree-31 (20%)) groups have 30 (19.4%) who save in banks; no credit union and 1 (0.6%) respondent saves at home.

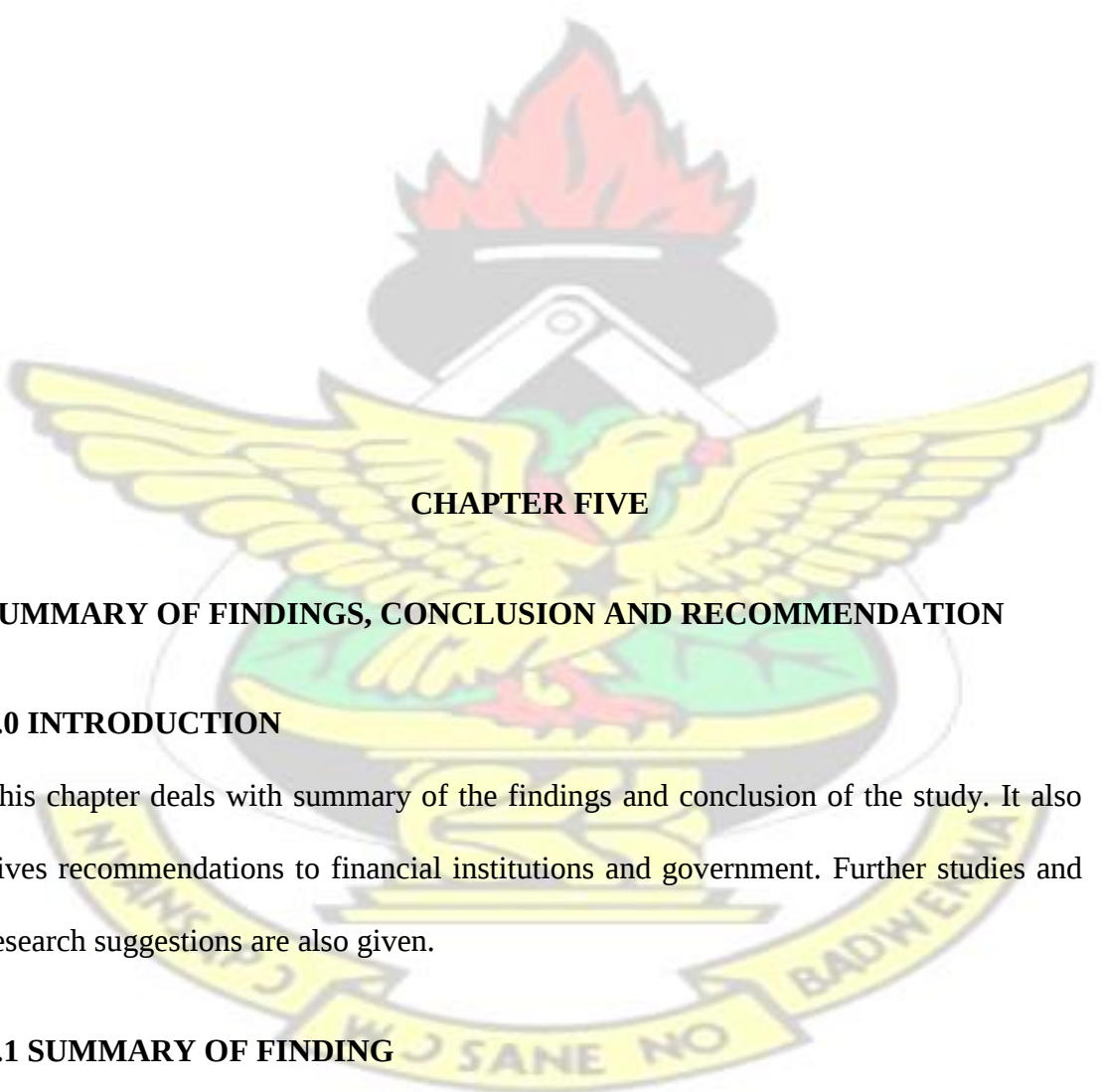
58 (37.4%) strongly agree that bank operations are too complicated for the individuals; 39 (25.2%) agree; 3 (1.9%) are indifferent; 43 (27.7 %) disagree and 12 (7.7%) strongly disagree.

Inflation happens to be one factor that can influence savings. 66 (42.6%) of the respondents strongly agree that the real value of money is influence by the rate of inflation and this is one of the challenges sometime they face in saving. 59 (38.1%) agree; 13 (8.4%) are unresponsive; 16 (10.3%) agree and 1 (0.6%) strongly disagree.

The study finds out if financial institutions charges also pose a challenge. 51 (32.9%) strongly agree that financial institutions cost of transaction- fee charge and minimum requirements are too high; 45 (29%) agree; 8 (5.2%) are unresponsive; 35 (22.6%) disagree and 16 (10.3%) strongly disagree.

One the issue of if financial products are tailored to the needs of the individual, 39 (25.2%) strongly disagree; 57 (36.8%) disagree; 6 (3.9%) are indifferent; 34 (21.9%) agree and 19 (12.3%) strongly agree that financial products are tailored to individual needs.

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The logo of Kenya Methodist University (KNUST) is centered in the background. It features a yellow eagle with its wings spread, perched on a green shield. Above the eagle is a black altar with a red flame. A yellow banner at the bottom contains the text 'SANE NO BADWENIA' in black capital letters.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATION

5.0 INTRODUCTION

This chapter deals with summary of the findings and conclusion of the study. It also gives recommendations to financial institutions and government. Further studies and research suggestions are also given.

5.1 SUMMARY OF FINDING

Saving is very important for both short and long term development and economic growth of a country. The study has examined the effect of financial literacy on saving behaviour, small scaled mining context.

The study on socio-demographic characteristics of the respondents show male respondents more than female respondents. The greatest number of the respondents fall between the ages of 21 to 40. Most of the respondents have basic education ranging from elementary/primary school to SHS. Majority of the respondents are married with children. There are more part-time (seasonal) workers than the full timers. Majority of the respondents receive personal monthly income of GHC 500 to GHC 1000.

On the level of financial literacy, majority of the respondents manage their own finances with greater number of them not knowledgeable with matters relating to financial issues. Most of the respondents are not confidence in making financial decisions and sometimes find it difficult to understand financial information received concerning financial products. They again, do not seek out financial information and advice. Majority of the respondents have answered 2 out of the 3 objective test correctly.

On the saving behaviour, most of the respondents save part of their income. This is done mostly on monthly bases with majority saving below 11%. Greater number of the respondents save their money in their homes. Most of them do not save for retirement purpose, financial gain and ease accessibility to financial information. They rather save for their children education, buy expensive items in the future and to meet emergencies.

In establishing the relationship between independent and dependent variables, Karl Pearson's coefficient of correlation (r) is used. All the independent variables (gender, age, education, marital status, personal monthly income and financial literacy) have a positive relationship with saving behaviour with financial literacy having the greatest of 0.635. The study has coefficient of determination (R) of 0.689 with R square of (R^2) of 0.474. The regression equation established shows if all factors are taking constant at

zero, the individual savings behaviour will be 11.699. The findings also show that if all other independent variables are taking at zero; in gender, if the respondent is a male, will tend to decrease 0.338 of the individual savings behaviour but female respondents have no decrease effect; a unit increase in age will lead to a 0.884 increase in individual savings behaviour; a unit increase in education will lead to a 0.224 increase in individual savings behaviour; in marital status (if the person is married) will tend to have an increase of 0.351 in individual savings behaviour; a unit increase in personal income will lead to a 0.189 increase in individual savings behaviour; a unit increase in financial literacy will lead to a 0.537 increase in individual savings behaviour. According to the equation, gender has a negative relationship with individual savings behaviour. Age, education, marital status, personal income and financial literacy also have a positive relationship with individual savings behaviour with age and financial literacy contributing most to the dependent variable. But the p-values for gender, education and personal income are greater than the common alpha level of 0.05, which indicates that they are statistically insignificant. The predictor variables of age, marital status and financial literacy have variables coefficients statistically significantly since their p-values are less than the common alpha level of 0.05.

On the constraints on the effort to save, most of the respondents believe is time consuming saving with financial institutions especially banks; there are inadequate saving outlets; banks operations are too complicated; financial institution charges and minimum requirements are too high and financial products are not tailored to respondents needs.

5.2 CONCLUSION

One objective is to determine the level of financial literacy among respondents. The findings show that the respondents are financially illiterate and this negatively affected their saving behaviour. This shows that financial literacy has an effect on the saving behaviour of the individual.

The study shows that gender, education and personal income have statistically insignificant influence on saving behaviour. Due to low level of education which reflects itself in high level of financial illiterate most respondents use informal way to save. That is saving in undisclosed places in their homes. The low education again reflects itself in low personal monthly income earned.

Age, marital status and financial literacy have statistically significantly influence on saving behaviour. It could be due to the fact that most of the respondents fall between the ages of 21 to 40, and are married with children with the main purposes of savings as to meet emergencies and educate their wards.

5.3 RECOMMENDATION

Since financial literacy has received greater attention in recent times, it is believed that an increase in financial literacy will help the individuals to make better decision concerning the financial service. Since it is low in Manso Atwere (Ghana), more financial literacy programmes should be organized by the financial institution to create awareness. The government should also include financial literacy in the educational curriculum of the basic or elementary schools and higher learning institutions.

The financial institutions should create financial products which are tailor to various individual needs. Again, those institutions should create many outlet. These would prevent them from saving in their homes and rather save with financial institutions.

Since savings do not benefit only the individual but the economy as a whole.

The government should also create conducive working atmosphere to help individual generates more income. The individual can save more if more is earned.

Government and environmental agencies should put in environmental measures to check the rate at which the minerals source are improperly extracted from the soil. The various sites of the miners have created death trap with many of the water bodies around the sites polluted.

5.4 AREA FOR FURTHER RESEARCH

The study focuses on the relationship between financial literacy and saving behaviour of small scaled miners in Manso Atwere. It is recommended that a study of financial literacy and saving behaviour should be carried out in most of the small scaled mining areas in the country.

Also the research should be done in other areas of economic activities in the country. The results will help to know whether there is consistency on effect of financial literacy on individual saving behaviours among respondents in the various economic activities.

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APPENDIX I

QUESTIONNAIRE

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF BUSINESS STUDIES

TOPIC: ASSESSING THE EFFECT OF FINANCIAL LITERACY ON SAVING
BEHAVIOUR: A CASE STUDY OF SMALL SCALED MINERS IN MANSO
ATWERE IN AMANSIE WEST DISTRICT.

INTRODUCTION

This questionnaire is designed to assist in collecting data to determine the relationship between financial literacy and individual savings. The findings of this research are only

meant for academic purposes and all the responses will be treated with utmost confidentiality.

DIRECTIONS: Please read the instructions given and answer the questions as appropriately as possible. It is advisable you answer or fill in each section as provided.

SECTION A–SOCIAL DEMOGRAPHICS

1. What is your Gender? Male ☐ Female ☐

2. How old are you?
Below 21years ☐ 21-30years ☐ 31-40 years ☐ 41–50years ☐

3. What is your highest level of education?
High School ☐ Certificate/Diploma ☐ Degree ☐
Post Graduate ☐ Others ☐ specify.....

4. What is your current marital status?
Single, never married ☐ Married without children ☐ Divorced ☐
Separated ☐ Married with children ☐ Widowed ☐

5. What is your occupational status?
Full time ☐ Part time ☐

6. If part time, what is your full time occupation?
.....

7. Which of the following best describes your personal income (salary and other source of income- example monies from relatives) earn at the end of each month in GH cedis?

Below 500 [] 500-1,000 [] 1,001-1,500 [] Above 1,500 []

SECTION B–FINANCIAL LITERACY

8. How do you rate the following statements? Please tick in the appropriate box.

	Very large extent (5)	Large extent(4)	Reasonable extent (3)	Low extent (2)	Not at all (1)
I manage my own finances					
I am well conversant when it comes to matters relating to financial issues					
I feel confident in making financial or saving decisions					
I understand information receive concerning financial products.					

9. What financial product are you familiar with?

10. Have you ever seek out financial information and advice?

Yes [] No[] Not sure []

11. If Yes, where did you seek out the financial information or advice from?

Friends [] Relatives [] Financial planner (professional) []

Media [] Others [] specify.....

12. Does the financial information or advice you receive has any influence on your decision to deliberately save?

Yes [] Not sure [] No []

13. Which of the following can you easily turned into cash?

Excavator [] Money in current account [] Money in fixed account []

Radio Set [] Not sure []

14. What will be the effect after a year if interest rate on your savings account is 10% per year but the inflation rate is 12% per year?

One can buy more with the money in the account []

One can buy the same with the money in the account []

One can buy less with the money in the account [] Not sure []

15. An investment with very high return is likely to have.....

High risk [] Low risk [] No risk [] Not sure []

SECTION C –SAVINGS ATTITUDE

16. Do you deliberately save part of your personal income?

Yes [] No [] Not sure []

17. Which statement better explains your savings regularity in relation to the above?

Daily [] Weekly [] Monthly []

Quarterly [] Yearly [] Not sure []

18. What percentage of your personal income do you save?

Below 11% [] 11-20% [] Above 20% [] Not sure []

19. Where do you usually save your money?

Bank [] Insurance plan [] Credit union [] Pension contributions []

Home [] With other peoples [] Others [] Specify.....

20. State your level of agreement and disagreement with the following statements about the purpose of saving by ticking the appropriate box.

	Strongly Agree (5)	Agree (4)	Not sure (3)	Disagree (2)	Strongly Disagree (1)
help to meet emergencies					
Depend on it during retirement					
Education of children					
Financial gain					
Help buy expensive items in the future					
Easy accessibility to a financial information					

SECTION D-CHALLENGE IN SAVINGS

21. Do you face any difficulty saving money?

Yes []

No []

Not sure []

22. State your level of agreement and disagreement with the following statements about challenges in saving by ticking the appropriate box.

	Strongly Agree (1)	Agree (4)	Not sure (3)	Disagree (2)	Strongly Disagree (1)
It is time consuming transacting with financial institution (example banks).					
There are inadequate financial institution's saving outlet					
Bank operations are too complicated for individuals.					
The real value of money is influence by the rate of inflation.					
Financial institutions cost of transaction-fee charge and minimum requirements are too high					
The financial products are tailored to the needs of the individual					

APPENDIX II:

DETAILED DESCRIPTIVE STATISTICS

Statistical Description of Respondents Background

Gender	level of education	Marital status	Full time or part time	Age	Monthly income

Respondents	155	155	155	155	155	155
Mean	1.70	1.31	2.99	.54	2.41	2.06
Std. Error of						
Mean	.037	.089	.177	.040	.078	.040
Median	2.00	1.00	4.00	1.00	2.00	2.00
Std. Deviation	.458	1.114	2.205	.500	.972	.493
Variance	.210	1.241	4.864	.250	.945	.243
Minimum	1	0	0	0	1	1
Maximum	2	4	5	1	4	4

Source: Field Data, 2015

Statistical Description of Respondents' Purpose of Saving

	save to meet emergency	depend on it during retirement	buy expensive item in future	financial gain	education of children	easy asses to financial information
Frequency	155	155	155	155	155	155

Mean	4.68	2.41	4.24	2.94	3.14	2.28
Std. Error of	.063	.101	.085	.097	.111	.086
Mean						
Median	5.00	2.00	5.00	3.00	4.00	2.00
Std. Deviation	.779	1.258	1.063	1.207	1.384	1.074
Variance	.607	1.582	1.131	1.458	1.915	1.153
Minimum	0	0	0	0	0	0
Maximum	5	5	5	5	5	5

Source: Field Data, 2015

The Regression Coefficients^a

Unstandardized		Standardized	t	Sig.	95.0% Confidence	
Coefficients		Coefficients			Interval for B	
B	Std. Error	Beta			Lower Bound	Upper Bound

(Constant)	11.699	2.104		5.560	.000	7.542	15.857
Gender	-.338	.743	-.031	-.455	.650	-1.806	1.130
Age	.884	.414	.174	2.136	.034	.066	1.702
Education	.224	.433	.051	.517	.606	-.632	1.079
Marital St.	.351	.171	.157	2.048	.042	.012	.689
Per. income	.189	.737	.019	.257	.798	-1.267	1.646
Fin. literacy	.537	.105	.505	5.115	.000	.329	.744

Source: Field Data, 2015. a. Dependent Variable: saving behaviour X1= time consuming transacting with financial institutions (example banks).

X2= Inadequate financial institutions" outlet.

X3= Complicated bank operations.

X4= inflation affects the real value of money saved.

X5= High charges on banks" fee and minimum requirement.

X6=Financial products are tailored to individual needs.

Statistical Description of Respondents Savings Challenges

	X1	X2	X3	X4	X5	X6
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Frequency	155	155	155	155	155	155
Mean	3.48	4.00	3.57	4.12	3.52	2.59
Std. Error of Mean	.111	.098	.114	.079	.113	.112
Median	4.00	4.00	4.00	4.00	4.00	2.00
Std. Deviation	1.379	1.217	1.423	.987	1.411	1.390
Variance	1.901	1.481	2.026	.973	1.992	1.931
Minimum	1	1	1	1	1	1
Maximum	5	5	5	5	5	5

Source: Field Data, 2015.

