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The undersigned certify that they have supervised the student Manganda James A. Dissertation entitled: **The impact of financial literacy on the uptake of commercial bank products and services in Zimbabwe**submitted in partial fulfillment of the requirements of the Bachelor of Commerce (Honours) degree in Banking and Finance at Midlands State University.

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DEDICATIONS

This dissertation is dedicated to my mother for her unwavering support

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Thanks and praise is given to the most high for the guidance and strength to achieve this dissertation. The process of dissertation writing has been a wonderful learning experience in my academic life and the completion of this study leads to a new beginning and a step forward towards attaining my first degree. I also acknowledge the assistance of my supervisor Ms Kaja for her guidance and support. Through her commitment and patience she contributed to the success of this research. I would also like to extend my special thanks to all my colleagues for their assistance.

ABSTRACT

Research has proven that financial literacy improves the knowledge, attitude towards and uptake of financial products and services. It is in this context that this research assessed the level of financial literacy amongst commercial bank clients in Zimbabwe. Moreover, given the failure in the past by the Zimbabwean banking sector to perform its role effectively due to issues such as bank failures, operational failures and the provision of expensive inappropriate products, the researcher examined the effect of financial literacy on the uptake of commercial bank products Zimbabwe. In order to achieve these main objectives, the researcher also looked at the effect of income and education on financial literacy and measured the level of uptake of commercial bank products in Zimbabwe.The researcher reviewed both theoretical and empirical literature on financial literacy and bank product uptake in order to make inferences and provide the basis for a strong analysis. Studies carried out in both developing and developed countries were incorporated in the empirical literature review and theories such as diffusion of innovations were used to provide a theoretical premise for this study.The researcher employed a descriptive research design in order to generate conclusive on the subject matter by using both qualitative and quantitative data. A sample of 87 bank clients and 5 bank personnel was drawn using both convenience and simple random sampling. The researcher found out that the general level of financial literacy amongst commercial bank clients in Zimbabwe is fairly high. The research also showed to a larger extent that income has a positive effect on individuals' level of financial literacy. However this is not always the case as some respondents with low income demonstrated high levels of financial literacy. It was also noted that increased levels of education are associated with high levels of financial literacy also has a positive effect on individuals'. A fairly low uptake of banking products and services in Zimbabwe was discovered in this study although some of the bank personnel indicated high levels of uptake of their banks' products and services. The major finding of this research was that financial literacy has a positive impact on the uptake of commercial bank products and services in Zimbabwe. However it was noted that other factors such as income, age and product costs also affect the uptake of bank products. In order to improve the uptake of products and services, commercial banks should incorporate financial literacy in their advertising complemented by incentive programs such as promotions and tailor made products. Furthermore, the study recommends the

development and implementation ofa financial literacy framework by a mandated authority for the improvement of the generallevel of financial literacy in Zimbabwe.

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LIST OF ACRONYMS

ATM Automated Teller Machines

CAPM Capital Asset Pricing Model

CCZ Consumer Council of Zimbabwe

NCEE National Council on Economic Education

OECD Organization for Economic Corporation and Development

UNDPUnited Nations Development Program

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CHAPTER ONE: INTRODUCTION

1.1Introduction

Financial literacy is vital for the proper functioning of the financial systems' role of intermediation. It entails the awareness and understanding of financial products, concepts and the ability to make decisions that may improve ones' financial well-being. The process of financial education begins with awareness of products and concepts, acquiring necessary skills to understand these, developing a positive attitude and changing financial behavior. As noted by the OECD (2014) the general level of financial literacy in developed countries is high and financial literacy programs are meant to protect consumers. Indeveloping countries the level of financial literacy is low and financial literacy programs are conducted mainly to increase awareness of the products being offered in these countries.

The use of technology, financial innovation and recent developments in the global and local financial arena has necessitated the use of and implementation of financial literacy programs as a way of survival for financial institutions. This research will look at the impact of financial literacy on the level of consumer confidence in the Zimbabwean banking sector. This chapter encompasses the background of the study, problem statement, objectives, research questions, significance of the study, limitations, delimitations, assumptions and organisation of the study

1.2 Background of the Study

Financial literacy is a process in which consumers are provided with knowledge and skills of understanding financial products and conceptsenabling these consumers to apply this understanding to make informed financial choices that improve their financial well-being as noted by the Organisation for Economic Corporation and Development (OECD)(2014).

The increasing complexity of financial markets and products has necessitated the implementation of financial literacy programs. Due to deregulation the Zimbabwean banks have expanded their operations to include those of asset management firms, discount houses and merchant banks. Service provision has also evolved and banking can now be done on ATMs, over the internet or using cell phones. Financial literacy like any other type of education is meant to empowerconsumers with the ability to navigate through this array of complicated financial products and services.

Financial literacy helps to improve the efficiency and quality of financial services. Consumers' need basic financial understanding in order to evaluate and compare financial products offered from one bank to another. Financially literate consumers will choose the best product in terms of pricing and quality hence challenging bankers to develop products that satisfy their needs and will in turn improve savings, investment and economic growth. As noted by the Consumer Council of Zimbabwe (2012) banks have a moral responsibility to inform and educate consumers about the soundness of their banks from time to time so as to allow them to make informed choices about who to bank with, as well as enable them to access fair financial services.

Consumers that are financially literate are aware of their financial capability and will conduct financial planning and money management taking into consideration their financial capabilities. This reduces over-indebtedness amongst consumers in a country like Zimbabwe where consumers can obtain multiple loan facilities from different institutions (both financial and non-financial) beyond their financial capabilities in the absence of a credit reference bureau. Banks also benefit in the sense that financially literate customers pose less risk and provide a market for sustainable financial services.

The level of financial literacy in most developing countries is high and financial literacy programs in these countries are aimed at ensuring that consumers understand financial products offered by banks and are able to choose the right product that suits their individual needs and financial capability. This is essential as it protects consumers from fraudulent financial service providers and from accepting products that do not match their financial capacity as was the case with subprime mortgages during the financial crisis. In developing countries financial outreach is limited especially for the rural population and this implies that sophisticated financial products are accessible to the elite. In this regard financial literacy in developing countries is meant to increase access and uptake of financial products

According to United Nations Development Program (UNDP), Zimbabwe is considered to have the highest literacy rates in Africa at 90.1%. Recent studies on financial literacy have proven that individuals with high levels of education have scored higher on financial literacy tests. However it is important to note that not only do most individuals lack financial literacy but they also believe that they are by far more literate than they actually are. This overconfidence encourages consumers to make irrational decisions that may be detrimental to their financial wellbeing.

The Zimbabwean banking sector has in the past failed to effectively perform its primary role of financial intermediation due to bank closures, customer service deficiencies, high bank charges, high interest on loans and low returns on deposits. This has had negative impact on the general public's perception towards Zimbabwean banks According to Miller et al 2012, after acquiring financial skills a financially literate individual is likely to develop a positive attitude towards financial services and will result in increased consumption of financial products and services. It is against this background that this research seeks to investigate the impact of income and education on financial literacy and its impact on the uptake of financial products and services.

1.3 Statement of the Problem

The failure of the Zimbabwean banking sector to live up to its mandate in the past due to bank failures, operational failures and the provision of expensive inappropriate products has had a negative impact on its customers' perception of it. Research has proven that financial literacy increases an individual's understanding of financial products, concepts and will ultimately increase the consumption of financial products and services. It is based on these realities that the researcher seeks to examine the impact of financial literacy on the uptake of products and services in the Zimbabwean banking sector. In line with the main objective, the researcher measured the level of financial literacy and product uptake amongst commercial bank clients. Additionally the researcher also seeks to examine the impact of education and income on the level of financial literacy given the high levels of educational literacy in Zimbabwe.

1.4 Objectives

The main objective of this research is to investigate into the impact of financial literacy on the uptake of commercial bank products and services in Zimbabwe. In line with the main objective, the researcher sought to;

- To determine the level of financial literacy amongst commercial bank clients
- To examine the effect of education on the level of financial literacy.
- To determine if income affects the level of financial literacy.

- To assess the level of uptake of commercial bank products

1.5 Research Questions

The research problem has given rise to the following questions:

- What is the impact of financial literacy on the uptake of commercial bank products and services in Zimbabwe?
- What is the level of financial literacy amongst commercial bank clients in Zimbabwe?
- How does education affect the level of financial literacy
- Does income affect the level of financial literacy
- What is the level of commercial bank product uptake in Zimbabwe?

1.6 Significance of the Study

The purpose of this study is to add understanding to various stakeholders such as policy makers, bankers, the society and researchers with regards to financial literacy amongst commercial bank consumers in Zimbabwe. The results of this study will provide regulatory authorities with information pertaining to the level of financial literacy amongst bank customers in Zimbabwe and will provide the basis for the implementation of policies that are inclined towards the improvement of financial literacy in Zimbabwe. Bankers are also expected to use the findings of this research in improving the uptake of their financial products and services by enhancing their customers' financial literacy where deficiencies are noted. This research will provide the society with a mirror reflection of their financial capabilities and will deter them from assuming financial prowess and seek professional financial advice where needed for the betterment of their financial well being

1.7 Delimitations of the sturdy

The researcher will establish the impact of education and income on financial literacy and its impact on the uptake of financial products and services of commercial banks in Zimbabwe. Other variables which might affect financial literacy and the uptake of financial products and services will not be considered in this research since they fall out of the scope of this study. The respondents to this research will be adult consumers of commercial banks' products and services since they are considered as the legal clients of banks. This research will be conducted from 2013 to 2014 as this period coincides with the time frame of the research.

1.8 Limitations of the Study

- The limited literature on financial literacy and product uptake in Zimbabwe posed a major challenge to the researcher however the researcher used literature from both developed and developing countries to make inferences to the case of Zimbabwe. Also theoretical frameworks were used to add value to the research
- Time and financial constraints impeded the capturing of a wide spectrum of the population given the expansiveness of the target population (bank clients). However the researcher mitigated this challenge by incorporating both probability and non-probability sampling to ensure the capturing of a true representative of the target population using limited resources.

1.9 Assumptions of the Study

Given the delimitations noted above, the researcher has made the following assumptions in order to give meaning to the study

- The uptake of financial products and services in Zimbabwe is determined by the level of financial literacy holding other factors constant.
- Income and education will be the only determinants of financial literacy to be considered and other determinants will be held constant.

1.10 Organisation of the Study

This chapter introduced financial literacy and its impact on product uptake as the subject matter under discussion in the background. The problem statement was crafted from this background spelling out the motivation behind carrying out the study. The objectives of this research were derived from the problem statement which were aimed at determining the impact of financial literacy on the uptake of financial products and services by assessing the level of financial literacy and uptake of bank products in Zimbabwe. This will enable stakeholders to assess their understanding of financial products, concepts and enable them to take corrective measures where deficiencies are noted. It was also noted that the study would limit the determination of uptake of bank products to financial literacy by assuming that financial literacy is only affected by financial literacy holding other factors constant.

The rest of the study is organised as follows; Chapter two provides a comprehensive review of both theoretical and empirical literature on the impact of financial literacy on bank product uptake. Chapter three discusses the methodology used to carry out the study. Chapter four presents data, analyses and interprets the findings of the research. Chapter five concludes the study by giving conclusions, recommendations and suggestions for further research arising from this research.

CHAPTER TWO:LITERATURE REVIEW

2.1 Introduction

This chapter reviews both theoretical and empirical underpinnings of this study. Literature on various studies from both developed and developing countries on financial literacy, impact of income and education on financial literacy and the impact of financial literacy on the uptake of financial products and services are examined to give lessons to the current study. Theoretical review analyses the theoretical premises that are relevant to this study.

2.2. Definition of Financial Literacy

According to Hung, Parker and Yoong (2009), existing literature on financial literacy shows that financial literacy can be variably defined as specific financial knowledge, ability to apply financial knowledge, rationale financial behavior or financial experiences. Various scholars have defined financial literacy as a specific form of financial knowledge and these include Hilgert, Hogarth, & Beverley (2003) who defined financial literacy as financial knowledge. This view was also shared by the National Council on Economic Education (NCEEE) (2005) who defined financial literacy as financial knowledge but went further on to define the financial knowledge as the understanding of basic economic principles, key economic terms and the US economy.

As stated by Moore (2003) financially literate individuals are competent and demonstrate application of financial knowledge. More so Lusardi and Mitchell (2013) defined financial literacy as the peoples' ability to process economic information and make informed decisions about financial planning, wealth accumulation, pension and debt. The concept of financial knowledge application was also noted in the financial literacy definition of the Bank of Zambia (2013) which defined it as the ability to make informed decisions and take appropriate actions on matters affecting one's financial wealth & well-being. Xu and Zia (2012) includes financial skills such as the ability to calculate simple or compound interest payments and time value of money as part of financial literacy.

Other authors like Mandell (2007) emphasized on financial behavior in their definitions of financial literacy as he defined it as an individual's ability to evaluate complex financial instruments and make informed decisions with regards to the choice and use of those instrument in the individuals' best interests. Lursadi and Tufano (2008) agreed with the above stated definitionof which included product evaluation but differed only in the sense that they focused on simple decisions rather than the complex financial instruments stated by Mandell (2007). ANZ Bank (2008) in Schagen (2007) also had a definition inclined towards financial behavior as they defined financial literacy as the ability to make knowledgeable judgments and to take effective decisions regarding the use and management of money.

The major concepts that surfaced from the definitions of financial literacy by different scholars include financial awareness, knowledge, skills, attitude and behavior. Xu and Zia (2012) postulated that financial literacy incorporates concepts such as financial awareness and knowledge of financial products and concepts; ability to calculate interest; and financial management. These concepts were also used by the Atkinson and Messy (2012) in their survey instrument used in an international pilot sturdy on measuring financial literacy. They however grouped these concepts into financial knowledge, attitude and behavior. Moreso the OECD Toolkit for measuring financial literacyincorporated these concepts in the questionnaires used to measure financial literacy and like Atkinson and Messy (2012) they only used financial knowledge, attitudes and behavior.

Financial literacy and financial education are closely related but different concepts. Hung, Parker and Yoong (2009) differentiated the two by defining financial education as the process by which individuals improve their understanding of products and concepts and financial literacy as the improvement of one's financial wellbeing by the application of knowledge and skills to effectively utilize financials resources. A similar differentiation was made by Miller et al (2009) who defined financial literacy as the understanding of financial products and concepts and taking actions that improve an individuals' financial wellbeing. Whilst they highlighted that financial education entails the empowering individuals financially so that they are better able to analyze diverse financial choices. Having noted the above, it can be suggested that financial literacy is a product of financial education since one becomes financially literate after receiving some form of financial education.

After looking at the financial literacy definitions by numerous scholars the researcher adopted a comprehensive financial literacy definition cited by OECD (2013) which defined financial literacy as the consumers understanding of financial products and concepts, ability to appreciate financial risks and opportunities and to make informed actions to improve one's financial wellbeing. Hence for the purpose of this study financial literacy will be defined as the consumers' knowledge of financial products and concepts; and the willingness and ability to make informed financial decisions based on the financial knowledge to improve one's financial wellbeing.

2.2.1 Importance of Financial Literacy

Lusardi and Mitchell (2013) have stated that existing financial products and services have proven to be complex and difficult to comprehend for investors who are not financially literate. They also noted that while financial innovation has increased access and tailor making of financial products, it imposed greater responsibility of selection and evaluation of financial products and services. This was reiterated by Braunstein and Welch (2002) in an overview of practice, research, and policy of financial literacy. They highlighted that due to deregulation the expansion of financial products offered by banking organizations, like asset management and insurance, needs consumers who are aware of the distinction between these products and traditional banking products. There is also need to recognize that financial products that are now offered by financial institutions do not relay the same consumer protections and rights as traditional banking products.

Financial literacy helps to improve the efficiency and quality of financial services. Miller et al (2009) suggest that consumers who financially are literate help to improve the efficiency and quality of financial services by exerting competitive pressures on financial institutions. These consumers will choose the best product in terms of pricing and quality hence challenge bankers to develop products that satisfy their needs. Pressure is also exerted on regulatory authorities to provide market standards and perform appropriate oversight of the financial system. The Consumer Council of Zimbabwe (CCZ) (2012) in Muza (2013) also shared the same sentiments in a statement on the placement of Interfin Bank under curatorship, where they highlighted that bank regulators have a moral obligation to educate consumers of banking products on the soundness of their financial institution regularly in order for them to make informed choices when choosing banking products thereby enabling access to fair financial services

Increased consumer responsibility in terms of product choice and extent of use posed by new financial products has increased the need for financial literacy. Braunstein and Welch (2002) noted an increase in consumer responsibility for credit and investment due to improved competition and more flexible underwriting standards in the US. They also noted that the offering of defined contribution retirement plans in which the employee has to direct the investments of their funds also increased the financial responsibility of the employees.Lusardi and Mitchell (2013)suggest that consumers who acquired subprime mortgages in the recent global financial crisis were in the unusual position of being able to decide how much they wanted to borrow and this view was supported by Miller et al (2013) who indicated that if most of these consumers had been more financially literate they would have ended up better off at the end of the crisis.

Financial literacy also ensures that individuals are equipped with financial understanding and practice good financial behavior such as making household budgets, savings and making strategic investments that will ensure the meeting of short term obligations whilst maximizing long term financial wellbeing (Greenspan, 2002). This view was also shared by Cohen and Sebstad (2003) who wrote a working paper on financial education for the poor. They stated that the objectives of financial education were to educate people on money management and skills related to saving, budgeting, expenditure and investing but they however noted that the relevance of these concepts depend on the needs, financial environment, age and other factors affecting individuals.

Most economic theories are based on some form of assumption and one of the assumption made is that individuals are rational and fully informed. As noted by Glaser and Walther (2013), the conventional economic theory of saving and consumption assumes that a rational and knowledgeable consumer will smooth out consumptions throughout their lifetime by saving in times of excess and replenishing with savings when income falls. Furthermore, the capital asset pricing model (CAPM) by Markowitz (1952) and Sharpe (1964) in Reilly and Brown (2003) assumed rationale investors that are mean variance optimizers in predicting equilibrium returns on risky-assets. Hence financial literacy might be viewed as an essential basis for the applicability of economic theories.

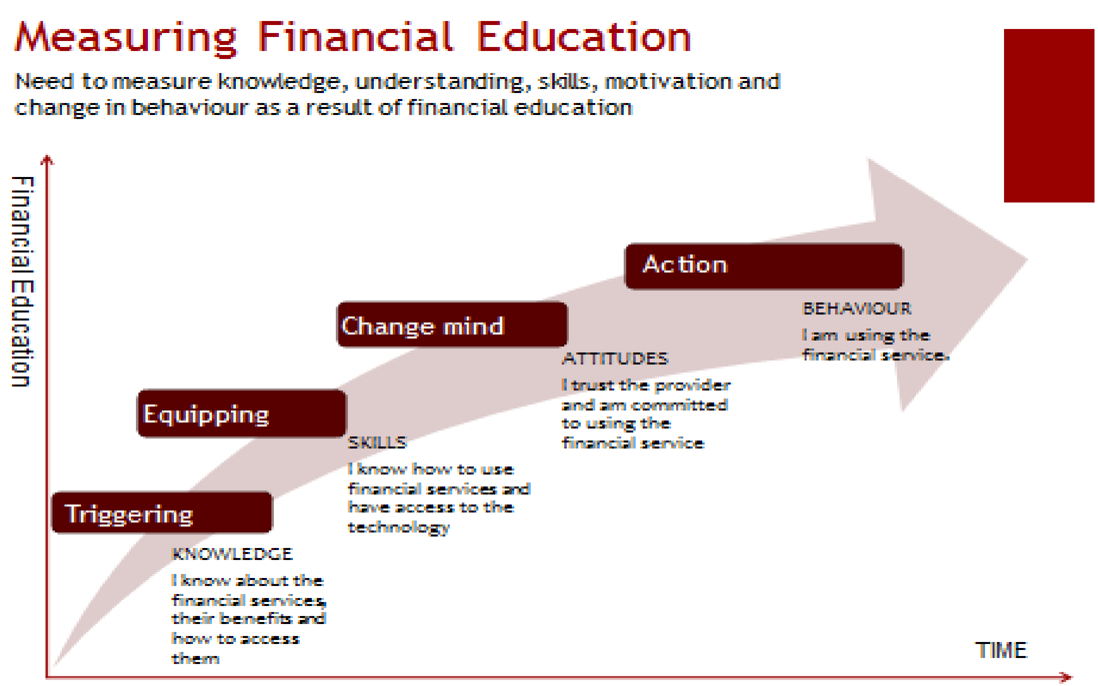
According to Glaser and Walther (2013), the dual processes theory of intuition and cognition might help explain the behavior of some individuals with high levels of financial literacy. Their research focused on the reasons for the deviation from rationale investment strategies by financially literate individuals. They found out that financially literate individuals are likely to digress from their normal investment strategy if they trust in their intuitions and also that this intuitive behavior reducesthe risk-adjusted performance of such individuals. This implies that the financial behavior of individuals may not always be explained by the level of financial literacy but by other factors as discussed above. This theory was also incorporated in the studies conducted by Godek and Murray (2008) but they did not look at it in the sense of investment behavior as was done by Glaser and Walther (2013).

In as much as most research done on financial literacy alludes to the benefits of financial literacy, some researcher put more emphasis on the downside of it. Willis (2008) made a major critic of financial literacy in an article entitled “against financial literacy”, where they pointed out that the velocity of change in the financial markets has resulted in regulators struggling to keep abreast with new developments. This information lag results in the regulators providing outdated financial education that inhibits individuals’ ability to navigate the complex financial systems. Hence such information asymmetry between the providers and end users of financial products results in financial education not being able to effectively achieve its objective of improving individuals’ financial wellbeing.

According to Willis (2008), literature on the effectiveness of financial education programs is limited and instead notes that evidence from past researches show that financial literacy poses costs that may overwhelm its benefits.In some cases, financial education resulted in increased consumer confidence without improving ability and this led to consumers making worse decisions than they would have made before the financial education. The issue of overconfidence was also cited by Atkinson and Messy (2012) whose results indicated that certain respondents are over-confident, in that they have given incorrect responses rather than admitting that they do not know the answer

2.2.2Measurement of Financial Literacy

In their study on the economic importance of financial literacy, Lusardi and Mitchell (2013) identified three fundamental concepts of measuring financial literacy namely numeracy and interest related calculations, understanding inflation, ad understanding diversification. Having noted difficulty in translating these into measurable financial literacy metrics, they adopted a set of standard questions developed by Lusardi and Mitchell(2008). These questions were crafted on the basis of simplicity, relevance, brevity and the ability to differentiate the levels of financial literacy amongst individuals to allow comparison.



Financial literacy can be measured by analyzing the component parts of financial literacy namely awareness, knowledge, skill, attitude and behavior (Atkinson and Messy 2012). They however examined awareness and skill under knowledge as these components complement each other.

2.2.2.1 Knowledge

Financially literate individuals possess basic financial knowledge of key financial concepts and the ability to apply numeracy skills where need arises. These concepts relate to issues such as simple interest, compound interest, inflation, risk and return as proposed by Atkinson and Messy (2012). In their study on measuring financial literacy in both developed and developing countries Atkinson and Messy (2012) tested the knowledge of their participants by using a questionnaire with eight questions. These questions queried the participants' knowledge in terms of division, time value of money, interest on loan, calculation of interest plus principal, compound interest, risk and return, calculation of inflation and diversification.

Lusardi and Mitchell (2013) also used interest calculation, inflation and risk diversion in their measurement of knowledge. However they did not include division and time value of money. Some of these questions allowed the respondents to give free answers whereas others required them to choose responses from the list given.In order to improve the reliability of the questionnaire, respondents were allowed to indicate if they didn't know the answer to the question thereby reducing the risk of capturing lucky guesses

Even though some the questions were modified to increase suitability in different countries, an analysis of the responses indicated that the knowledge questions adequately identified high and low achievers in all countries. To enhance robustness of the questionnaire Atkinson and Messy (2012) used factor analysis to confirm that all the questions captured the underlying phenomenon and thereby assigned equal weighting to each question as they have been identified as important by experts .

2.2.2.2 Attitude

The attitude of an individual is an important part of their financial literacy as it determines their financial behavior. Individuals who prefer short term needs to long term security are less likely to demands long term financial products and this affects the uptake of these financial products (Atkinson and Messy (2012)). They focused their three attitudinal questions on consumer attitudes towards money and planning for the future.Carpena et al. (2011) also incorporated financial attitudes in addition to awareness and numeracy skills in a bid to provide a broad measure of financial literacy

Although Lusardi and Mitchell (2013) examined the knowledge of consumers, they did not look at attitudinal components of financial literacy which makes their measurement of financial literacy limited as attitude defines behavior. This was also criticized by Huston (2010) who cited their limited scope as in adequate in capturing the breadth of human behavior with respect to personal finance. Hence the inclusion of attitudes in measuring financial literacy is crucial.

2.2.2.3 Behaviour

The ultimate impact of financial education is indicated by the financial behavior of an individual as they apply the knowledge and skills obtained backed by the positive attitude gained to improve their financial wellbeing. As noted by Miller et al (2009) financial literacy is critical for promoting access to finance by creating incentives and environments that promote desired financial behaviorssuch as saving, budgeting, or using credit wisely. Atkinson and Messy (2012) focused on a wide range of behaviors with emphasis on those that enhance or reduce financial wellbeing. The questions employed in assessing behavior included issues like money management, financial planning, borrowings, choice of financial products budgeting and savings.However behavior was omitted by Carpena et al. (2011) and Lusardi and Mitchell (2013) who also measured financial literacy

Atkinson and Messy (2012) ranked financial behavior scores from 0 to 9 with a point being allocated to individuals who ranked themselves between 4 and 5 on considered purchase, timely bill payment,keeping watch offinancial affairs and long term financial goalsetting. Points were also awarded to individuals who have a budget, any type of active savings and had tried to gather information before choosing a product. Two points were awarded for those who actually gathered independent information and used it in choosing products. A score of 0 was awarded where individuals borrowed o make ends meet and a score of 1 if they borrowed for any other reason.

2.2.3 The level of financial literacy

Xu and Zia (2012) indicate that in low income countries financial outreach is limited and sophisticated consumer products are typically accessible only to a small percentage of the population. Hence the role of financial literacy in these countries is much more focused on increasing access to and take-up of financial products and servicesMiller et al cited (2009) that developing countries have low levels of financial literacy as indicated by half of farm laborers surveyed in India who store their cash at home and borrow from money lenders at high interest. This behavior is associated with individuals who have low levels of financial literacy.Xu and Zia

(2012) postulate that in high income countries, financial literacy is viewed as a complement to consumer protection. The complexity of financial products has necessitated the furnishing of individuals with the capability to make sound financial decisions as underscored by the global financial crisis.

Atkinson and Messy (2012), pointed out that most people have very basic financial knowledge and knowledge of financial concepts such as compound interest and diversification lacks amongst a significantproportion of the population in both developed and developing countries in which the researchers measured financial literacy. This view was also shared by Lusardi (2008) who noted widespread financial illiteracy especially amongst women and individuals with low education. She also recorded low correct responses on the question pertaining to compound interest.

As noted by Xu and Zia (2012) financial literacy is highest amongst middle aged adults and is usually very low amongst the young and the elderly population. This view was supported by Finke et al who attributed this low level of financial literacy among the elderly to a decline in the cognitive abilities associated with old age. Lursadi and Mitchell (2011) made a deeper examination of financial literacy and found out that the difficulty of distinguishing between age and cohort effects in a single cross-section, but hypothesize that individuals likely accumulate knowledge over time which then decays as they age.

2.2.4The impact of education on the level of financial literacy

According to the United Nations Development Programme (UNDP) Zimbabwe has the highest literacy rates in Africa at 90.1 percent. Past researches have highlighted that high educational attainment is associated with high levels of financial literacy. Lusardi and Mitchell (2011) found out that individuals with lower educational attainment in the U.S. are less likely to respond correctly, and are more likely to say they don’t know the answer. They however indicated that education may be a weak proxy for financial literacy as both education and financial literacy were both significant when included in regression on variables like retirement planning.

Atkinson and Messy (2012) identified a relationship between increased levels of education and high financialliteracy scores in both developing and developed countries. In Germany, Malaysia and Poland there is a clear pattern with higher educated individuals more likely to have high financial literacy scores.This initial analysis suggests that general levels of education impact on more than just knowledge. However, it should also be noted that some people have achievedhigh scores despite low levels of education, indicating that high levels of financial literacy levels arepossible even amongst those who have not completed formal education.

In Indonesia, Zia (2009) found that financial literacy only has a positive effect for uneducated and financially illiterate households. Although the effects of the financial literacy program are negligible for the general population, we do find that ex-ante uneducated and financially illiterate households do benefit from such programs, in that providing such households with financial literacy education does induce them to open formal bank accounts: the likelihood of unschooled and financially illiterate household heads opening a bank savings account as a result of financial literacy training is 12% and 5%, respectively.

2.2.5The Effect of Income on the Level of Financial Literacy

Atkinson and Messy (2012)cited that high levels of financial literacy are possible at all income levels. Income itself does not impact on the ability of someone to gain knowledge, to form attitudes conducive to their own financial wellbeing or to exhibit positive behaviours. However, low income is often seen as an explanation for certain behaviours such as borrowing to make ends meet, and used as a reason not to undertake actions such as saving or making long term plans. They also indicatedthat respondents from high income households in each country they surveyed were more likely to be in the high scoring segments. However, in Armenia and Ireland, middle income consumers were, on average, the most financially literate though very little difference was found between the middle and high income consumers.

Jappelli and Padula (2011) showed that wealth and financial literacy are jointly determined and correlated over the life cycle of an individual. These results were obtained by estimating an intertemporal investment model.In a study conducted by Behrman et al. (2010) in which a nationally representative data set was to examine the relationship between financial education and wealth accumulation. They used instrumental variables regression analysis to confirmthat financial literacy a stronger effect on wealth than educational attainment. They also showed that financial literacy has causal effect on wealth accumulation in the U.S.

2.3 Uptake of Bank Products and Services

As noted by the Finscope survey Zimbabwe (2011), only 38% of the Zimbabwean population is formally banked and the uptake of these banking products and services is driven by transactional and savings products. It was also noted that the urban population had a higher uptake at 47% than the rural population who had only 24%. According to Finscope survey (2013), the major reason for the low uptake of formal banking products in Zimbabwe amongst Micro Small to Medium Enterprises (MSMES) was mainly attributed to the expensive nature of the products offered by banks in Zimbabwe.

2.3.1 Diffusion of Innovations Theory

Rogers (2003) defined adoption as an individual process detailing the series of stages one undergoes from first hearing about a product to finally adopting. He identified the five stages followed by individuals in the process of adopting innovation as knowledge, persuasion, decision, implementation, and confirmation. These stages are similar to the stages in the process of making an individual financially literate. He then classified individual adopters on the basis of innovativeness within a social system as innovators, early adopters, early majority, late majority, laggards and leapfroggers. These are explained in the table below.

Table 2.1 Diffusion of Innovations

Category	Characteristics
Innovators	These are the first to adopt innovation, risk takers and have great financial liquidity. Might adopt innovations which may ultimately fail.
Early adopters	The second fastest adoption category. These have a higher social status, highest degree of opinion leadership financial liquidity, advanced education, and are more discrete in adoption choices than innovators.
Early Majority	Their time of adoption is significantly longer than the innovators and early adopters. They have above average social status and seldom hold positions of

	opinion leadership in a system
Late Majority	These will adopt an innovation after the average member of the society. They have high degree of scepticism, below average social status, very little financial liquidity, very little opinion leadership.
Laggards	These are the last to adopt an innovation. They have little to no opinion leadership. These individuals are resistant to change, have lowest social status, lowest financial liquidity and are oldest of all other adopters.

Source: Rogers (2003)

The relative speed with which members in a social system adopt innovation is determined by the individuals' adopter category as explained in the table above. The critical mass is the point in time within the adoption curve that the number of individual adopters ensures that continued adoption of the innovation is self-sustaining. Figure 2.2 below shows successive groups of consumers adopting the new technology (shown in blue), its market share (yellow) will eventually reach the saturation level.

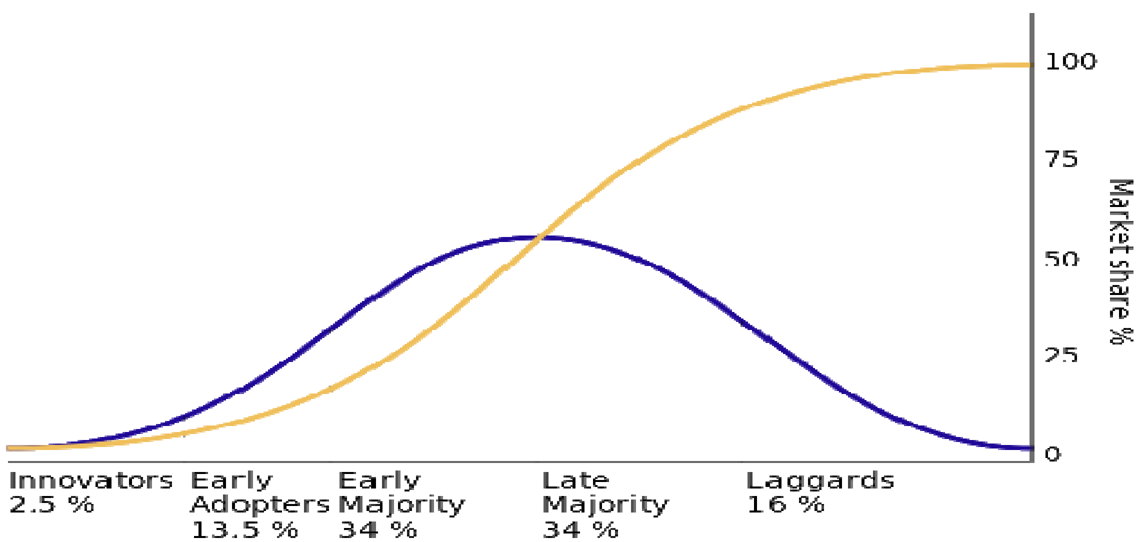


Figure 2.2 The Diffusion of Innovations, (Rogers (2003)).

Market shareTechnology adoption

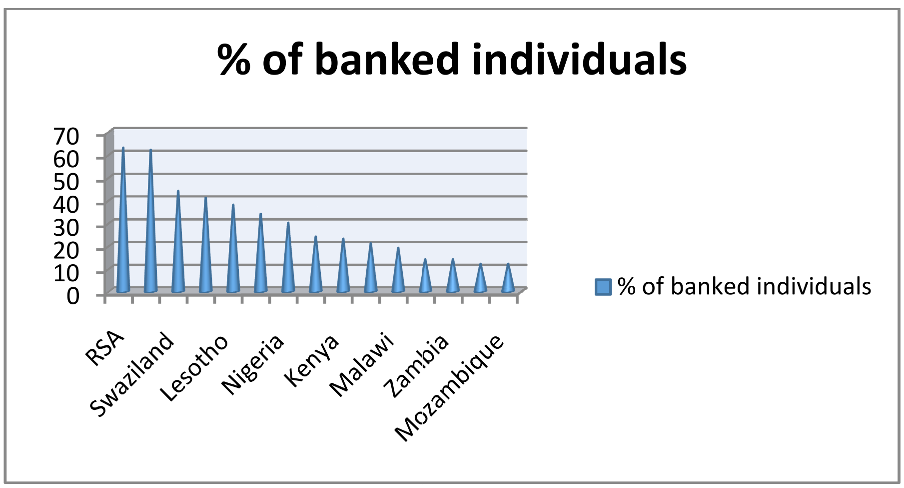
Source: Rogers (2003)

In as much as Rogers (2003) tried to explain factors surrounding the adoption of innovation, his theory is limited as most of the evidence he collected to support his theory came from agricultural methods and medical practice. Hence this may not always apply to financial products and services

2.3.2 Uptake of Bank Accounts

According to FinScope (2011) the major reasons cited for the lack of bank accounts in developing countries are lack of income, inability to maintain minimum balance rather than lack of financial knowledge. These reasons were also cited in Malawi where only 19 percent of the population had bank accounts. However the possibility that the perceptions of lack of income and inability to maintain minimum balance may not be correct was also noted as 80 % of the respondents had never heard of savings accounts or did not know what they were. Evidence from Tanzania also showed that respondents did not know how open an account.

Figure 2.3 Percentage of Banked Individuals in Africa



Source: FinScope survey data (2O11)

2.4 The Impact of Financial Literacy on the Uptake of Financial Products and Services

Financial literacy is associated with the uptake of financial products and services. This is supported by Zia (2009)who carried out a survey in Indonesia in collaboration with the World

Bank Jakarta office on valuing financial literacy and noted thathouseholds who lack financial literacy do not plan for retirement, borrow at higher interest rates, buy less assets and are less involved in the formal financial system as compared to their more financially-literate counterparts. They also determined that in Indonesia financial literacy is a powerful predictor of demand for formal savings, loans and insurance services. Miller et al (2009) notes that financially literacy increases consumers' demand and responsible use of financial products and services which in turn helps to underpin financial market stability, and contribute to wider economic growth and development

Financial literacy is associated with long term financial planning. Zia (2009) found out that households with low levels of financial literacy tend not to plan for retirement.Clark et al. (2010) found lack of retirement related-knowledge to be widespread amongst employees in the U.S. Employees nearing retirement were found to have limited knowledge of company retirement benefits and misconceptions regarding their expected age of retirement. This was supported by Greenwald et al (2010) who reported low levels of knowledge regarding Social Security in the U.S as well.In a study in the US Lusardi and Mitchell (2011) found out that lack of retirement planning is widespread and correlated to financial literacy. Theyalso identified causal effects of financial literacy on retirement after using high school financial education mandates as instruments. Similar results were observed using instrumental variables by studies conducted by Fornero and Monticone,(2011) in Italy, Alessie et al (2011) in the Netherlands.

Various scholars have highlighted evidence that indicates correlation between financial literacy and investment behavior. In Netherlands Rooij, Lusardi and Alessie (2007), found a causal effect of financial literacy on stock market participation, in an analysis of country survey data.Bucher-Koenen and Ziegelmeyer (2011) found that in Germany, investors with lower levels of financial literacy were less likely to invest in the German stock exchange, and therefore less likely to have experienced losses in the financial crisis. However they were also more likely to realize losses on the assets they did sell. In a survey of Portuguese investors, Abreu and Mendes (2010) highlighted that higher levels of education and financial literacy have a positive impact on portfolio diversification whilst Guiso and Jappelli (2009)realized similar resultsfor Italian investors.

Conclusively,it was noted that despite the snags highlighted by some scholars associated with financial education and financial literacy, the social and economic benefits by far outweigh its limitations and hence its implementation would be much more recommended. It was also noted that limited literature exist on financial literacy and there is little evidence to suggest implementation of financial education programs in Zimbabwe. It was also revealed that income and education affects the level of financial literacy despite the fact that high levels of financial literacy are attainable at all levels of income and education.

2.5 Summary

This chapter examined the underlying theoretical and empirical underpinnings of the study in line with the research objectives. Financial literacy was defined leading to the discussion of its importance, evaluation and measurement based on theories and literature from other countries given the lack of literature in Zimbabwe on the subject matter. The uptake of bank products was also looked at with reference to such publications as Finscope Survey Zimbabwe and other researches from other countries. In order to meet the major objective of the research, the researcher explored literature on the impact of financial literacy on the uptake of banking products from both developed and developing countries to give lessons to the current study. From the literature available the researcher determined that the benefits of financial literacy are much better as compared to the limitations associated with it. The next chapter will discuss the research methodology to be used to carry out the study.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter examines the methods and techniques used in collecting data pertaining to the impact of income and education on financial literacy and its impact on the uptake of financial products and services. The chapter will outline the way in which the research will be conducted so as to ensure the validity and reliability of the data collected and the results thereof. It outlines research design, subjects, target population, sampling units, size and techniques, research instruments and data collection procedures.

3.2 Research Design

The researcher employed a descriptive research design in order to generate conclusive data on the impact of financial literacy on the uptake of financial products and services. The measurement of financial literacy and evaluation of the impact of income and education on financial literacy in Zimbabwe is allowed by this research design. This design also permits the use of both qualitative and quantitative data hence the use of questionnaires and interviews as the data collection tools.

3.3 Research Population

The target population are the adult consumers of bank products and services, that is 18 years and older since these are legally considered as bank clients. Responses will also be solicited from bank personnel in order to obtain expert opinions on financial literacy and the uptake of bank products.

3.4 Research Sample

Due to the expansiveness of the target population, the researcher will use a representative sample to make inferences on the target population.

Table 3.1 Target Population

	Percentage	Number of respondents
Bank customers	**94%**	**87**
Customer relations officers	**6%**	**5**
Total	**100%**	**92**

Source: primary data

3.4.1 Sample Size

According to Cochran (1963) in Israel (2009), assuming a normal distribution for a large population, a representative sample is a function of the confidence level, the desired level of precision and the estimated proportion of an attribute in the population as illustrated in the equation below.

$$n_0 = \frac{Z^2pq}{e^2}$$

Where n_0= representative sample

Z^2 = confidence level

p = estimated proportion of an attribute in the population

q = (1-p)

e = desired level of precision (sampling error)

This model will be used by the researcher in determining the research sample for bank clients taking into consideration the expansiveness of the target population. The researcher assumed a normal distribution of the population and will use 95% confidence level as prescribed by the central limit theory. A sampling error of 5% will be used and the estimated proportion of attributes in the population will be 94% bank customers and 6% bank branch customer relations officers. In this context, p represents bank customers and q represent bank personnel. Hence a sample of 87 will be used as shown below

$$n_0 = \frac{1{,}96^2 \times 0.94 \times 0.06}{0.05^2}$$

$$= 86.666496$$

$$\cong 87$$

3.4.2 Sampling Techniques

The researcher employed both convenience and simple random sampling techniques. Convenience sampling will ensure that time and financial constraints are mitigated since it allows the researcher to collect data conveniently. In this respect the researcher will solicit responses from bank clients in Kwekwe and Gweru so as to incorporate clients of all banks currently operational in Zimbabwe. However this sampling technique is prone to researcher bias since responses are obtained from readily available respondents at the discretion of the researcher. The researcher will also use simple random sampling to complement convenience sampling and counteract the sampling bias posed by convenience sampling. Simple random sampling as a probability sampling may not capture the intended target population which justifies the use of convenience sampling technique.

3.5 Data Collection Methods and instruments

The researcher made use of both primary and secondary sources in collecting relevant data to be used in answering research questions and achieving the set research objectives.

3.5.1 Primary data

Primary data will be collected and used in assessing the level of financial literacy amongst consumers of commercial banks' products and services in Zimbabwe as it provides first-hand information which is relevant and specific to the subject matter. This will be achieved through the use of questionnaires and structured interviews.

3.5.1.1 Questionnaires

Questionnaires will be used to measure the level of financial literacy and the uptake of commercial banks' products and services because they provide respondents with ample time to give well thought responses. Structured questionnaires will be used as they are a cheap research instrument as compared to other instruments and are important in providing uniform data that is easy to interpret and analyze. Both open ended and close ended questions will be used in obtaining responses from the interviewees. Having noted the inability of respondents to seek clarification when responding to questionnaires, the researcher will use face to face interviews as a complement to the questionnaires.

3.5.1.2 Interviews

Interviews will be conducted to complement the work done by questionnaires as they allow for the interaction between the researcher and the respondents thereby enabling the researcher to unearth fundamental reasons for the respondent's attitude as stated by Sekaran (1992). This research instrument will reduce the risk of misinterpretation as they enable the researcher to clarify areas that the respondents may be failing to comprehend.

3.5.2 Secondary data

To enhance the quality and authenticity of this research, the researcher will make use of published secondary data on the uptake of bank products in Zimbabwe and financial literacy levels in other countries from organizations like FinScope Survey, ZIMSTAT, OECD and other relevant published material to make inferences to this study.

3.6 Validation and Reliability

To ensure that the questionnaires achieves their objectives by providing valid and reliable data, pilot questionnaires will be designed and distributed amongst fellow students. From this pilot study the researcher will make adjustments to the questionnaire to ensure their effectiveness in measuring the intended variables. The researcher also reduced bias of responses by giving respondents the chance to indicate if they did not know or did not want to answer thereby limiting lucky guesses on close ended questions. More so, the researcher will ensure that reliable information is obtained from the research by checking responses to linked questions for consistency and removing those responses from respondents who lack consistency.

3.7 Data Presentation and Analysis Plan

This research encompasses both primary and secondary data hence the researcher will use tables, graphs and diagrams for the presentation and analysis of the data acquired through interviews, questionnaires and other published data. Data analysis software such as Excel and Stata 11 will also be used to provide a comprehensive statistical analysis of the data. Tables will be used to aid the comparison of data whereas graphs will be helpful in visualising interrelationships amongst research variables

3.8 Summary

This chapter discussed the descriptive research design used by the researcher in assessing financial literacy and its impact. The researcher also noted the target population of the research and justified the sample size and techniques used in carrying out the study. Questionnaires and interviews were highlighted as the major data collection instruments as the research is more qualitative than quantitative. However other secondary data sources such as published articles from FinScope Survey, ZIMSTAT, and OECD were also cited to cater for the quantitative part of the research. Also a preview of data analysis and presentation to be done in chapter 4 was looked at and it was noted that Excel and Stata 11 will be used for analysing data which will be presented in tables, graphs and diagrams.

CHAPTER FOUR: DATA PRESENTATION AND ANALYSIS

4.1 Introduction

Having looked at the background, literature review and research methodology of the study, the researcher intends to present, analyze and interpret the results of the research on the impact of financial literacy on the uptake of financial products and services amongst commercial banks' clients in Zimbabwe. A comprehensive approach to data analysis will be utilized as responses from both bank clients and bank personnel will be analyzed. Responses from both interviewsand questionnaires will be analyzed for bank personnel responses. The researcher used data analysis software packages such as Excel and Stata 12 to analyze primary data collected using questionnaires and interviews. Relevant secondary data was also used to make comparisons with the data obtained from primary research. Presentation and analysis of the data collected will be done using graphs, tables, pie-charts and descriptive statistics.

4.2 Analysis of Response Rate

This research was carried out by distributing ninety questionnaires. Eighty seven of these questionnaires were circulated amongst consumers of commercial bank products and services in Zimbabwe. The remaining questionnaires three questionnaires were distributed to commercial banks personnel who constituted mainly of customer service personnel. A 72% response rate was obtained on the questionnaires distributed to bank clients and a 100% response rate on bank personnel questionnaires. Two out of three interviews were conducted with bank personnel. An overall response rate of 73% as illustrated in table 4.1, is sufficient enough to justify the use of the responses in the research (Bryman and Bell, 2003)

Table 4.1 Response Rate

Respondents	Distribution	Response	Response rate
Bank clients	**87**	**63**	**72%**
Bank personnel(Questionnaire)	**3**	**3**	**100%**
Bank personnel(interviews)	**2**	**1**	**50%**
Total	**92**	**67**	**73%**

Source: primary data

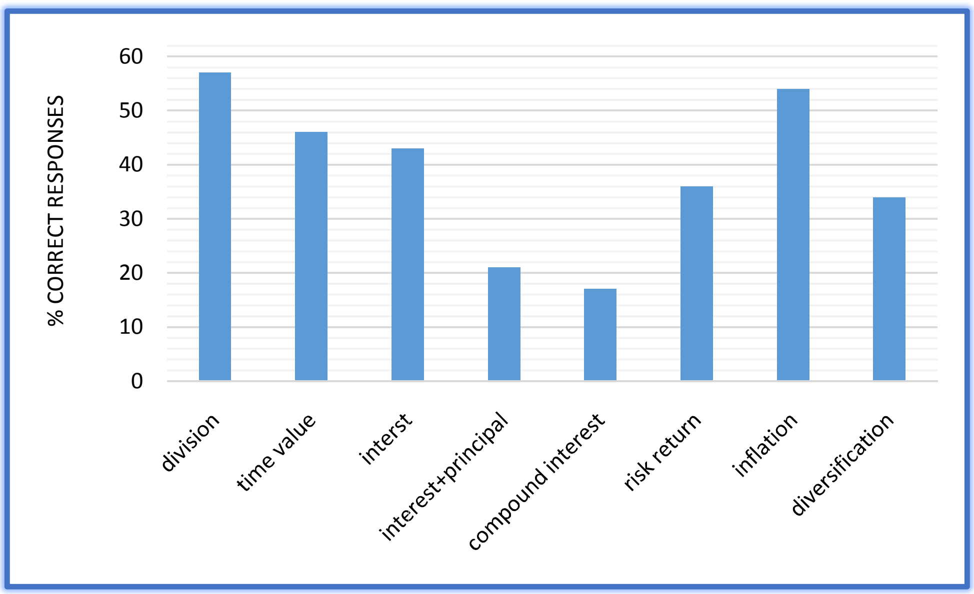
4.3 Level of financial literacy amongst bank clients

Assessment of the level of financial literacy amongst bank clients was done by investigating the clients' financial knowledge, financial attitude and their financial behavior as they form the components of defining financial literacy (OECD, 2013)

4.3.1 Financial Knowledge

The knowledge questions in the bank customers' questionnaire tested basic financial concepts including division, time value of money, interest plus principal, inflation, risk and return, diversification and financial products knowledge. Equal weighting was given for the knowledge questions and a point was awarded for a correct response with the exception of the product knowledge question where a point was given for acknowledging less than five products, two points for up to ten products and three points for more than ten products.

Figure 4.1 Correct Knowledge Responses



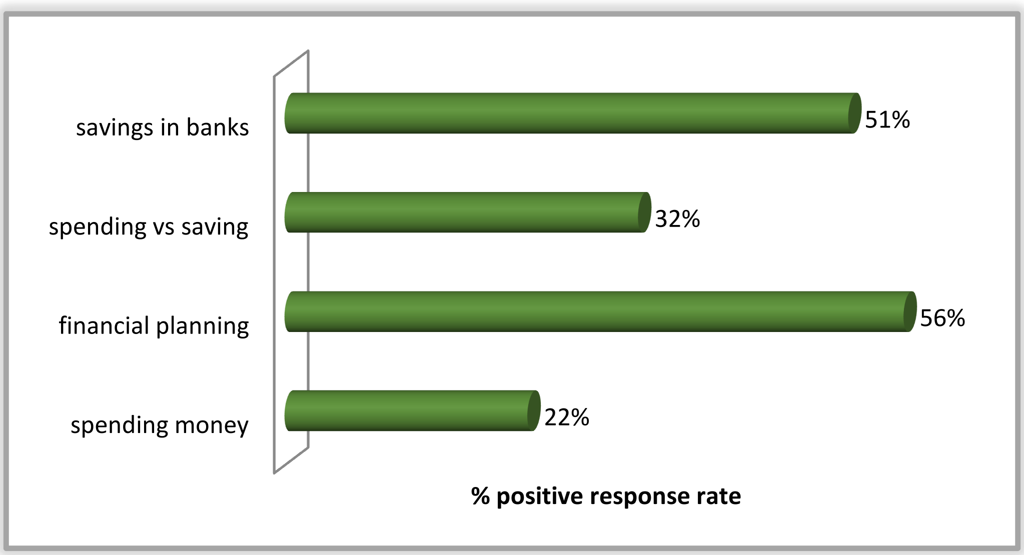
Source: primary data

From bank clients' responses 58% of the respondents had an above average score in basic financial knowledge. Most respondents answered correctly the division question and the lowest correct responses were obtained from the question on compound interest. This low correct response rateon compound interest question is in line with what Atkinson and Messy (2012) found. Figure 4.1 indicates the distribution of correct responses from knowledge questions excluding product knowledge question. Almost all the respondents ticked at least a single product on the product knowledge question and this implies that all the respondents had at least basic appreciation of bank products attributed to the high literacy rates in the country.

4.3.2Attitude

Attitudinal questions measured the respondents' feelings and perceptions towards financial matters as noted by the OECD (2014). They also established clients' perceptions towards saving in commercial banks. Equal weighting was given to the attitude questions with a single point being awarded to positive attitudinal responses and the volume of positive responses is illustrated in figure 4.2. Respondents with an attitude score of two and above constituted 54% of the respondents. The respondents who indicated the desire to save money in a commercial bank constituted 51% of the total respondents and the respondents who did not want to save their funds in banks highlighted issues such as operational failures, high bank charges and low interest on savings as the justification for their responses. In response to the question on spending money, 78% of the respondents within the 18-30 years range ticked yes and had the highest yes response rate as depicted in the table below. This age group is associated with low levels of responsibility and risk rating according to the life cycle hypothesis.

Figure 4.2 Positive Response Rate on Attitude Questions

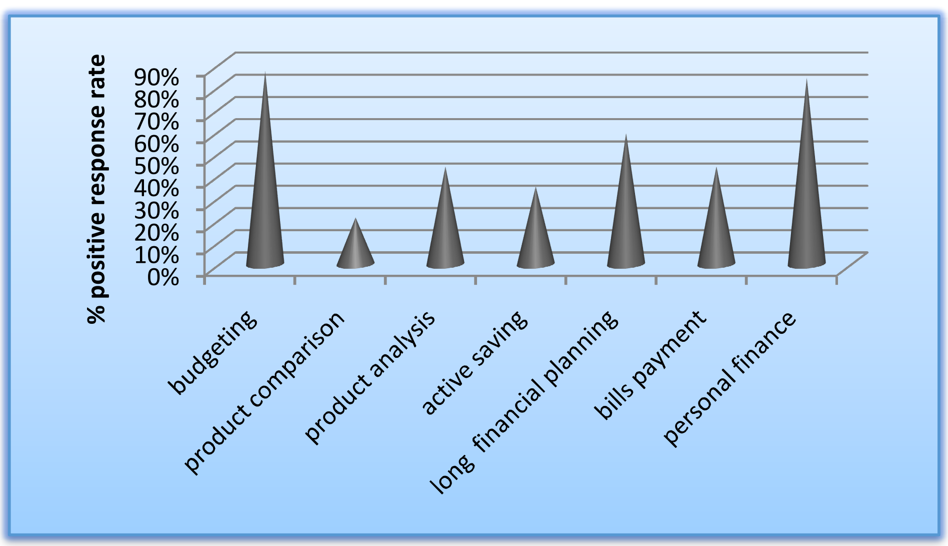


Source: primary data

4.3.3 Financial Behavior

Financial knowledge and attitude is reflected in the financial behavior of an individual. Financial behavior questions focused on assessing the financial behavior of individuals in particular those that increase or decrease financial welfare (Atkinson and Messy, 2012). Equal weighting was given to the questions as they were all deemed equally important and a single point was given to a positive response. From the responses 58% scored four points and above with the highest positive response rate on the household budgeting question since it requires minimal expertise to craft and the lowest positive response rate on the product comparison and analysis questions as they require in depth financial knowledge to carry out. Moreso low positive response rates were noted on active saving which may be explained by the low disposable income with the bulk of the respondents with an income of below $500 and the poverty datum line above $500. All this is illustrated in figure 4.3 below.

Figure 4.3 Positive Behavioral Response Rates



Source: primary data

4.3.4 Comprehensive financial literacy measure

The scores of the components of financial literacy discussed above have different maximum values and as such have different weighting to the overall measure of financial literacy. Financial knowledge and behavior were given the largest weighting with 80% as these are the key components of financial literacy and are the main targets of financial literacy programs. As noted by Atkinson and Messy (2012), factor analysis states that financial behavior and knowledge should be given more weight than attitude and as such only 20% weight was given to the attitudinal questions. The questionnaires distributed to bank clients show that 63% of bank clients are financially literate or scored a combined score of eleven and above and 37% of these respondents scored less than eleven and are considered as financially illiterate. From the questionnaires distributed amongst bank personnel and the interviews conducted, it was noted that 75% of bank personnel consider their clients' level of financial literacy as average whereas 25% of the bank personnel responses indicated that their bank clients' level of financial literacy is low and it was noted that none of the respondents described the level of financial literacy of their clients as high. At 63%, the level of financial literacy in Zimbabwe is generally high as most developing countries have very low levels of financial literacy as postulated by Miller et al (2009)and this might be attributed to the high literacy rates in the country.

4.4 Effect of education on financial literacy

According to the UNDP (2014), Zimbabwe has the highest literacy rate in Africa at 90.1% and in line with this notion this research found out that 95% of the respondents to bank clients questionnaires indicated that they had at least primary education. Most of the respondents attained secondary education with some reaching tertiary education as highlighted in table 4.2.

Table 4.2 Frequency of Respondents According To Education Level

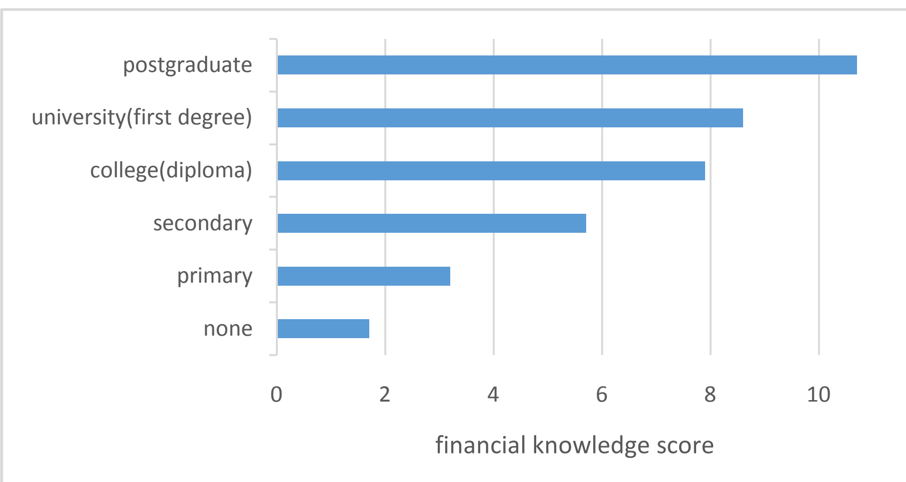
Education level	Frequency	Percent
None	3	4.76
Primary	6	9.52
Secondary	29	46.03
College (diploma)	10	15.87
University (first degree)	12	19.05
Postgraduate	3	4.76

TOTAL	63	100

Source: primary data

The knowledge scores indicate increased financial knowledge with increased levels of education. Figure 4.4 shows that the mean score for the knowledge questions for respondents in the postgraduate educational level category is the highest at 10.6 whereas those of the respondents with no education at all is the lowest at 1.6 since increased education is associated with increased knowledge and the converse is equally true. In line with Atkinson and Messy (2012), responses to attitude questions also follow this trend with the highest percentage of positive responses amongst those respondents who achieved college and postgraduate qualifications at 80% and 100% respectively whilst the lowest positive responses were noted in the primary to none educational level at 33% and 0%.

Figure 4.4Effect of Education on Financial Knowledge



Source: primary data

All the respondents with a postgraduate qualification had an above average financial behavior score. More than 55% of respondents with educational qualifications of secondary, college and university education had above average financial behavior scores and those with primary and no education did not have any positive responses to behavioral questions. Since financial behavior is a function of financial knowledge and attitude, respondents with no to primary education who had low knowledge and attitude scores emanating from their low educational background also had low financial behavioral scores. The overall effect of education on financial literacy follows the trend of shown by components discussed above. The level of financial literacy increases as the educational level from respondents with no education to those who attained postgraduate qualifications. As shown in table 4.3, the highest financial literacy score mean of 21.3 was obtained from postgraduate respondents whilst the lowest mean was of 3.33 was obtained from respondents with no education at all. The lowest standard error was recorded on the postgraduate group implying that the financial literacy scores of individuals with high educational levels deviated to a lesser extent from their mean of 21points.

Table 4.3 Effect of education level on financial literacy score

Over	**Mean**	**Std. Err**	**95% Conf**	**Interval**
Financial literacy				
None	**3.33333**	**0.6666667**	**2.000686**	**4.665981**
Primary	**5.833333**	**.8724168**	**4.089397**	**7.57727**
Secondary	**10.65517**	**.7247827**	**9.206352**	**12.10399**
College	**14.8**	**.8406347**	**13.1196**	**16.4804**
University	**14.5**	**.7537784**	**12.99322**	**16.00678**
postgraduate	**21.33333**	**.3333333**	**20.66701**	**21.99966**

Source: primary data

4.5 Effect of income on financial literacy

The distribution of the respondents in terms of their household income was dominated by the below \$500 income level group at 59% of the total number of respondents. The above \$1000 income level group had the lowest frequency as demonstrated in table 4.4 below. Responses to knowledge questions indicate a decrease in knowledge scores as household income decreases.

All the respondents in the above $1000 income range had below average knowledge scores whilst those in the $500-$1000 group had the highest number of above average knowledge scores at 89% of their total respondents. The group of bank clients with a household income of below $500 had a considerable number of above average knowledge scores with a positive response rate of 57%. It is also worth noting that respondents with high income also had high educational levels.Hencethis might be the explanation for the high knowledge scores since increased education is associated with increased knowledge as discussed in the previous section

Table 4.4 Distribution of Respondents in Terms of Income

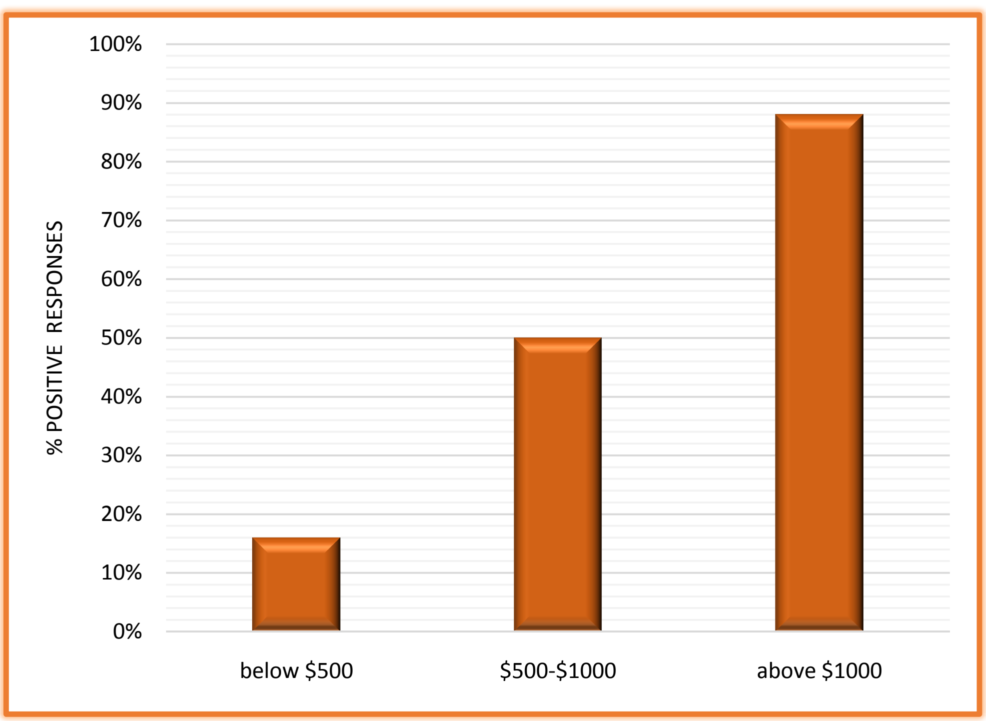
Income group	Number of respondents	$\frac{respondents\ in\ group}{total\ number\ of\ respondents}$
Below $500	37	59 %
$500-$1000	18	29%
Above $1000	8	12%
Total	63	100%

Source: primary data

The responses to the attitude question on individual preference on spending rather than saving, display a similar trend as that of the knowledge scores in terms of household income. High number of positive responses were obtained from the below $500 income group with considerable to low positive responses in the $500-$1000 and above $1000 income groups respectively. However the overall attitudinal responses indicate that all the respondents in the above $1000 category had an above average financial attitude score. Those in the $500-$1000 category also had a high level of above average scoring at 72% of their total and the least positive response rate was noted in the below $500 income category.

Most of the respondents indicated the presence of budgets and monitoring of personal financial issues in their households with positive response rate of above 80% in both questions and all the income categories. It was also noted that product analysis and comparison had the least positive response rate amongst behavioral questions. The lowest positive response rate was recorded in the below $500 category with a positive response rate of below 25% on both questions since these respondents' low income restricted them to a few transactional banking products with low volumes of use (probably once every month). Both the $500-$1000 and the above $1000 categories had a high positive response rate of above 70% in terms of product comparison and analysis as these respondents had less financial restrictions in terms of product selection and frequency of bank products use. This trend was also observed on responses pertaining to long term financial planning where above 75% of the $500-$1000 and above $1000 income groups' respondents indicated positive responses. High income respondents (above $1000) indicated high levels of active saving with 88% positive response rate. This was followed by the $500-$1000 category who had a 50% positive response rate and lastly the low income group (below $500) at only16%. Some of the reasons highlighted by respondents for lack of long term financial planning were that with an income of below $500, it is difficult to make long term financial plans considering a poverty datum line of above $500.

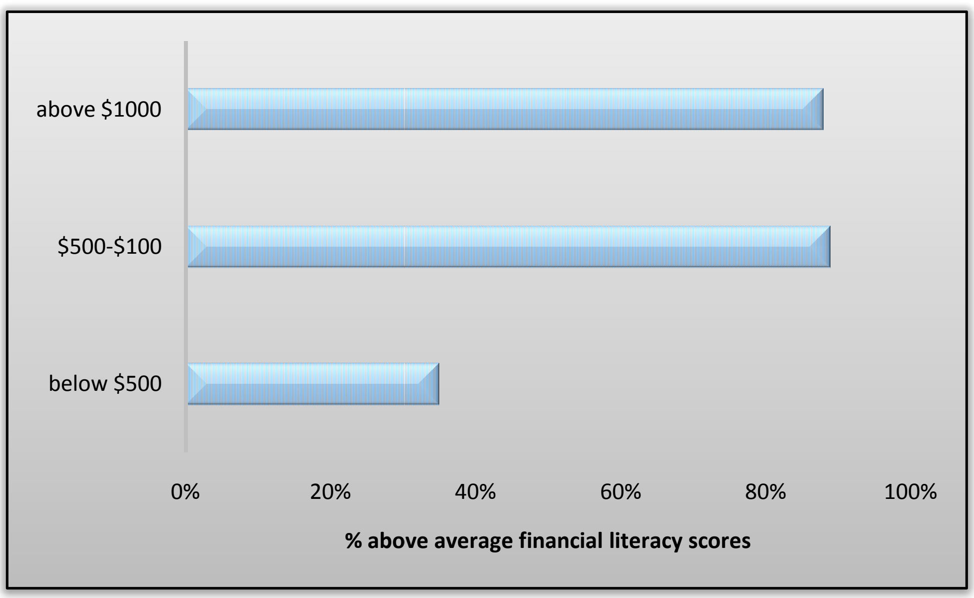
Figure 4.5 Active Saving



Source: primary data

As depicted in figure 4.5 above, respondents with an income level of above $1000 had the highest level of active saving at 88%, followed by the $500-$1000 group at 50% and lastly the below $500 group at only 16%. This differential in savings across the income categories was largely attributed to differentials in excess incomes. The low income group indicated that instead of saving they were borrowing as funds could not sustain them whereas some of the high income earners had excess funds to save.In terms of the overall measure of financial literacy from the responses obtained, the $500-$1000 group and the above $1000 group had the highest level of financial literacy with an above average score rate of 89% and 88% respectively as indicated in the graph below. Only 35% of the low income respondents had an above average financial literacy score. The distribution of above average financial literacy scores by income depicted by figure 4.6, demonstrates high rate of above average respondents amongst high income respondents as they have high behavioral scores attributed to their high incomes emanating from high active saving, product comparison and analysis

Figure 4.6 Distribution of Above Average Financial Literacy Score Rates



Source: primary data

4.6Uptake of Commercial Bank Products

An uptake of commercial bank products and services in Zimbabwe of 46% was recorded from the respondents who had above average uptake scoring. Those individuals who had below average uptake scores cited issues such as low disposable income and negative perceptions of the banking sector as the main factors deterring them from increasing their uptake of these products and services. A detailed analysis of the uptake of bank products and services is done below.

4.3.2.1 Bank Account

From the results of this study, 51% of the respondents had bank accounts in line with the 47% prescribed by FinScope Consumer Survey Zimbabwe (2011). From this banked population, 57% of male respondents had bank accounts and 55% of female respondents did not have bank accounts. The distribution of bank accounts in terms of education level indicated an increase in bank account ownership with an increase in the level of education. All the respondents who had attained a postgraduate qualification had a bank account.Thosewho attained a university degree and a college diploma had 83% and 70% respectively indicating that they had a bank account. Low rate of bank account ownership were indicated by respondents with secondary education level and respondents with primary or no education at all did not have bank accounts.

Table 4.5 Distribution of Bank Account Ownership by Gender

Gender	Bank account holder		Total
	yes	no	
Male	17	13	30
Female	15	18	33
Total	32	31	63

Source: primary data

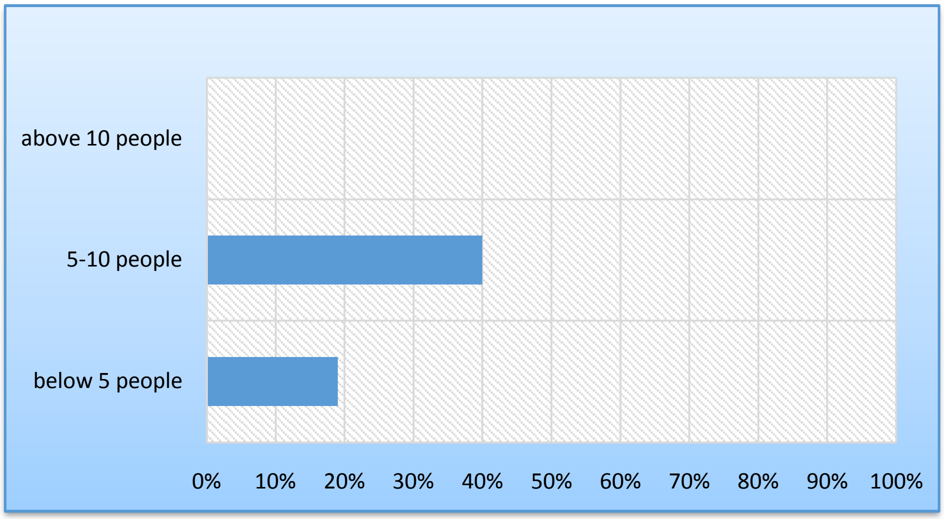
4.3.2.2 Technological Products

The uptake of technology based products by commercial bank clients as highlighted by this research is high. The positive responses on the question on the uptake of technology based products amounted to 71% of the responses. In all the age groups more than half the respondents indicated that they had used technology based products. Only 17% of male respondents did not use technology based products whilst 42% of female respondents did not use technology based products. Respondents with an education level of secondary and above had very high uptake of technology based financial products with more than 80% uptake for the above mentioned categories. The use of technology based products such as mobile banking is now a requirement in most financial institutions for security reasons and this might have implications on the high uptake.

4.3.2.2 Loans products

Only 25% of the respondents indicated that they had acquired a loan in the past year. High income earners (above $1000) had the highest uptake of loan products with 75% of the respondents having acquired a loan in the past year. Low levels of loan product uptake were recorded in the $500-$1000 and below $500 category at 33% and 11% respectively. Respondents from households with more than 10 people did not use loan products and it was noted that 83% of these respondents resided in rural areas. Most of these respondents indicated no uptake of loan products due to inability to meet loan requirements such as collateral, regular cash flows or formal employment. Respondents with 5-10 people in their households had the highest uptake of loan products at 40% whilst those with below 5 people in their households had only 19% uptake.

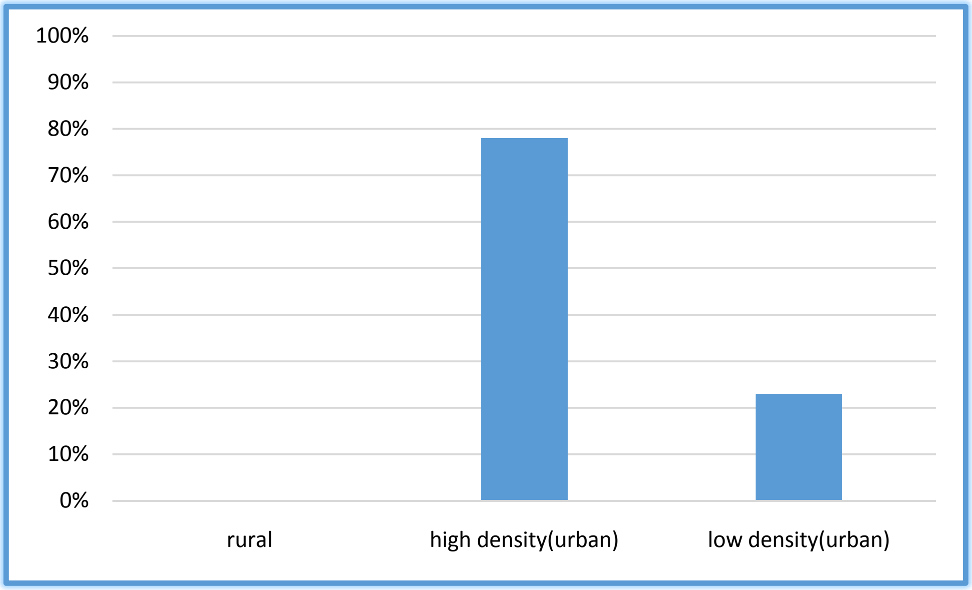
Figure 4.7 Loan Product Uptake



Source: Primary data

The respondents who indicated that they preferred transmitting or receiving funds from abroad through banks were 63% of the respondents. As indicated in figure 4.9, 70% of the respondents from urban areas prefer using banks for their foreign remittances whereas their rural counterparts prefer other means of receiving their funds as they cited accessibility problems emanating from lack of banks in rural areas. Financial advice was only used by only 24% of all the respondents. An increasing trend in the uptake of financial advice is demonstrated as the level of educational increases. The primary and none educational categories have zero uptake of financial advice and only 7% uptake was recorded for respondents with secondary education. High uptake was recorded for postgraduate and university degreed respondents with 67% and 58% financial advice uptake respectively. Those respondents who did not use advisory services indicated lack of knowledge of the existence of such a product.

Figure 4.8 Uptake of Remittance Services



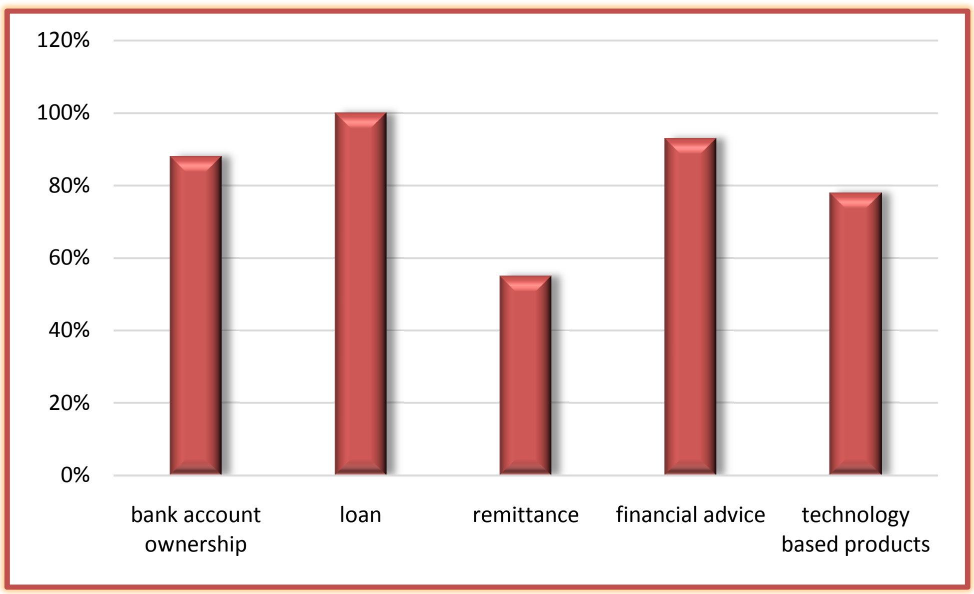
Source: primary data

4.7 Impact of financial literacy on the uptake of commercial banks' products

From the study, 90% of the positive responses on the uptake of financial products were obtained from respondents who had above average financial knowledge scores. The highest rate of positive uptake responses by above average respondents in terms of financial knowledge was noted on the uptake of financial advice at 93% since this type of product requires high levels of financial literature and is a rather less popular financial products a found in the research. It is also worth noting that 40% of the respondents who opted receiving or transmitting funds through banks had below average financial knowledge scoring but indicated issues such as security and convenience in conducting their transactions as the main driving factors. The rest of the uptake questions had more than 60% of positive responses from above average respondents in terms of financial knowledge scoring.

Furthermore, 76% of the positive responses on the uptake of financial products were obtained from respondents who had above average financial attitude scores. Individuals attitudes affect the demand of banking products since short term preferences in terms of banking products results in the demand for short term products and the converse is equally true (Atkinson and Messy (2012)).All the respondents who used loan products had an above average financial attitude scoring however 38% of the respondents who used loan products indicated that they preferred to save money elsewhere rather than in a bank highlighting high bank charges and low interest on savings. This might be a contributing factor to the high loan to depositor's ratio at 78.29% in December 2013 as stated in the January 2014 monetary policy statement. The rest of the uptake questions had more than 55% of positive responses from respondents with an average financial attitude scoring.

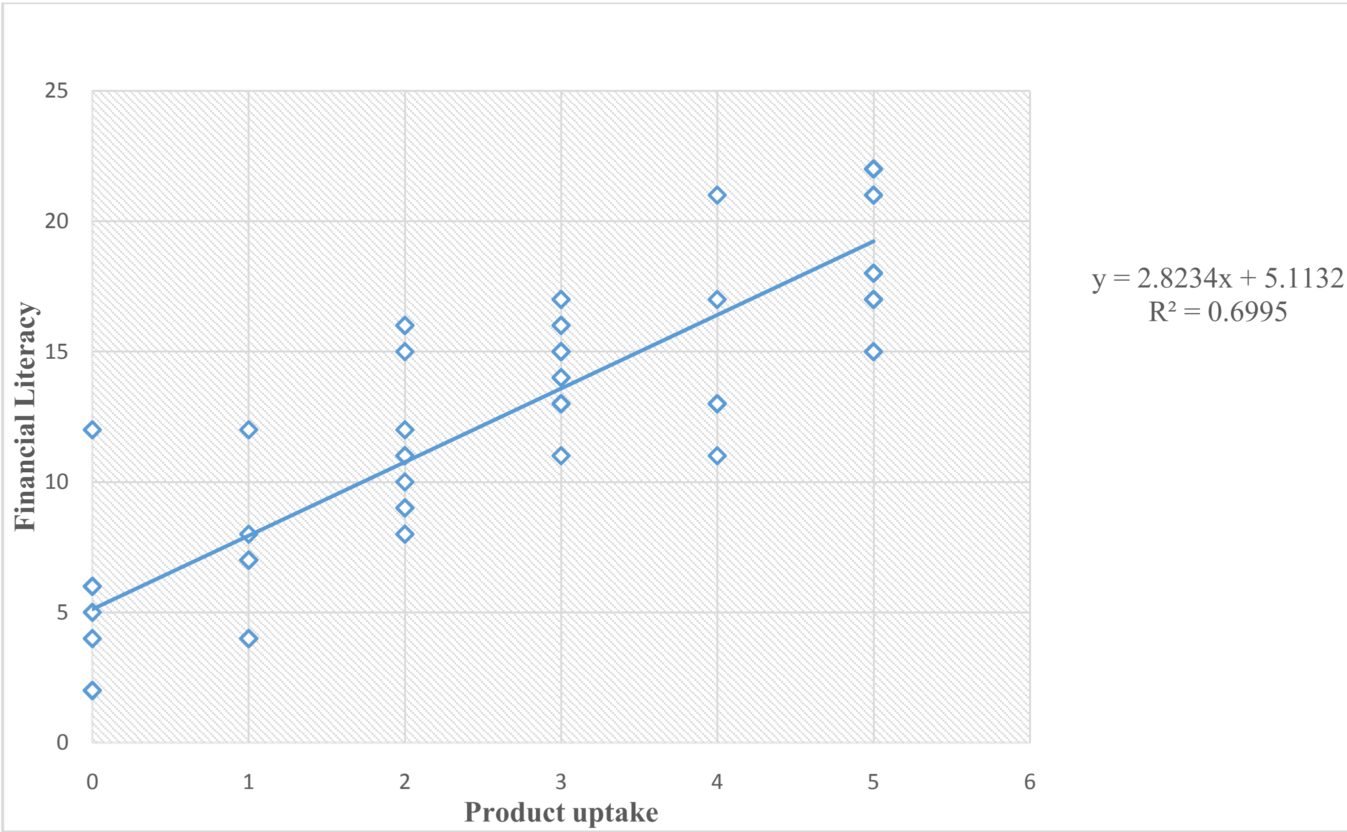
Figure 4.9 Product Uptake by Respondents with Above Average Behavior Scores



Source: primary data

More so, 90% of the positive responses on the uptake of financial products were obtained from respondents who had above average financial behavior scores as financial behavior measured such as saving, budgeting and long term financial planning fosters the use of financial products such as savings accounts, retirement planning and insurance products. All the respondents who used loan products had an above average financial behavior scoring. The rest of the uptake questions had more than 55% of positive responses from respondents with an average financial behavior scoring. It was also noted that 93% of the respondents who used financial advice services from banks, had responded yes to the question on monitoring of one's personal financial issues.

Figure 4.10 Overall Effect of Financial Literacy on the Uptake of Bank Products



Source: primary data

As depicted in figure 4.11 the overall impact of financial literacy on the uptake of financial products and services was estimated by measuring the connection between the variables, overall financial literacy and product uptake using Pearson's correlation coefficient. The researcher used the coefficient of determination (R^2) to ascertain the extent to which product uptake is determined by financial literacy. A coefficient of determination of 70% indicated that 70% of variations in the uptake of financial products can be explained by the variations in the level of financial literacy amongst bank clients. The residual 30% represents other variables that explain variation in the uptake of financial products and these include income, costs of products and resistance to change. A Pearson correlation coefficient of 0.84 was realized between financial literacy and product uptake. This correlation coefficient (r) was used to evaluate the strength of the linear relationship between financial literacy and financial products uptake.

The Pearson correlation coefficient obtained indicate that there is a positive but moderate relationship between financial literacy and financial product uptake. Buglear (2005) postulated that a Pearson correlation coefficient of between 0.6-0.89 shows a positive and moderate association between variables. This view was also shared by all bank personnel who responded to questionnaires and interviews who noted that financial literacy affects the uptake of financial products. From the results of the sturdy, a financial literacy mean of 11.74 was realized which implies that for an individual to have an above average uptake of financial products, they have a financial literacy scoring of at least 12.

Table 4.6 Distribution of Financial Literacy and Product Uptake

Variable	Mean	Std. Dev.	Min
financial literacy	11.74603	4.931689	2
product uptake	2.349206	1.46087	0

Source primary data

4.8 Summary

This chapter highlighted the findings of the research which were presented and analyzed in tables, charts and graphs. Descriptive statistics were also used to interpret the results of this research. The study showed that the level of financial literacy amongst commercial bank clients is considerable given that more than half of the respondents to clients and bank personnel questionnaires indicated above average financial literacy scores. In line with what Atkinson and Messy (2012) found in their research, this research revealed that increased levels of education are associated with high levels of financial literacy. It was also noted that individuals from high income households had higher levels of financial literacy as compared to those respondents who came from low income households. However some individuals from low income households demonstrated high levels of financial literacy and this implies that high levels of financial literacy can be achieved regardless of the income level as noted by Atkinson and Messy (2012). The study also revealed that the uptake of commercial bank products and services is fairly low and that financial literacy affects the uptake of commercial bank products and services. However other factors that affect the uptake of bank products such as income, age and costs of banking products were cited by respondents. The following chapter will summarize and conclude on the findings of this research. Necessary recommendations on the improvement of bank clients' financial literacy and their uptake of bank products and services will be made based on these findings and conclusions of the research.

CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The preceding chapter presented on the findings of the research on the impact of financial literacy on the uptake of bank products and services in Zimbabwe. In this chapter, the researcher intends to wind up the research by giving a summary of the entire research. Conclusions will be made based on the findings presented in the previous chapter. From these conclusions, recommendations will be made that address the problems that have been highlighted in the study with suggestions for further study being crafted from those areas linked to the topic but not addressed in the study

5.2 Summary of the Study

This research was carried out to assess the impact of financial literacy on the uptake of financial products and services. In this regard the objectives of the study were to; determine the impact of financial literacy bank products uptake,examine the effect of education on the level of financial literacy, to determine if income affects the level of financial literacy and to assess the level bank product uptake in Zimbabwe. The Zimbabwean banking sector has perennially failed to perform its role effectively as a result of bank failures, operational failures and the provision of expensive products and this has had negative impact on its clients' perception of it. Past research has proven that financial literacy improves the uptake of bank products and services.

The researcher reviewed both theoretical and empirical literature on financial literacy and bank product uptake in order to make inferences and provide the basis for a strong analysis. Studies carried out in both developing and developed countries were incorporated in the empirical literature review and theories such as diffusion of innovations were used to provide a theoretical premise for this study.The researcher employed a descriptive research design in order to generate conclusive data on the impact of financial literacy on the uptake of financial products and services. A sample of 87 bank clients and 5 bank personnel was drawn using both convenience and simple random sampling.

The researcher found out that the general level of financial literacy amongst commercial bank clients in Zimbabwe is fairly high. The research also showed to a larger extent that income has a positive effect on individuals' level of financial literacy. However this is not always the case as some respondents with low income demonstrated high levels of financial literacy. It was also noted that increased levels of education are associated with high levels of financial literacy also has a positive effect on individuals'. A fairly uptake of banking products and services in Zimbabwe was discovered in this study although some of the bank personnel indicated high levels of uptake of their banks' products and services. The major finding of this research was that financial literacy has a positive impact on the uptake of commercial bank products and services in Zimbabwe. However it was noted that other factors such as income, age and product costs also affect the uptake of bank products. These findings were used to come up with conclusions and recommendations discussed below.

5.3 Conclusions

Based on the findings of the study presented in chapter four, the researcher has made the following conclusions

- Positive impact of financial literacy on product uptake

  Financial literacy scores and commercial bank product uptake were found to have a positive correlation of 0.84, therefore the uptake of commercial bank products in Zimbabwe increases with increased levels of financial literacy. However other factors such as age, income, and product costs also affect the uptake of bank products.

- Fairly high level of financial literacy

From this study, commercial bank clients have a fairly high level of financial literacy since 63% of the bank clients who responded to this study had above average financial literacy scoring. This may be attributed to the high educational literacy rate at 90.1 in the country (UNDP, 2014).

- Fairly low uptake of commercial bank products and services

The uptake of commercial bank products is fairly low in Zimbabwe given the low disposable income and the lack of confidence in the banking sectoramongst the general public. Only 46% of the respondents indicated an above average uptake of commercial bank products and services in Zimbabwe.

- Positive association between education and financial literacy levels

High levels of educational attainment are associated with high levels of financial literacy. Since knowledge and cognitive skills increase with increases in education, individuals with high levels of education are more likely to have high level of financial literacy.

- Positive effect of income on financial literacy

Income has a positive effect on the level of financial literacy since individuals from high income households demonstrated considerably high levels of financial literacy. However it was noted some individuals from low income households demonstrated high levels of financial literacy. Therefore it is not always the case that incomehas a positive impact on financial literacy

5.4 Recommendations

Having noted the conclusions discussed above, the following recommendations have been made to bankers and regulatory authorities with the view of improving financial literacy and bank product uptake in Zimbabwe.

- Financial literacy framework

There is need to develop a framework for measuring, evaluating and improving financial education and financial literacy that is led by a mandated authority in the financial services sector such as the central bank, ministry of finance, consumer council of Zimbabwe or the bankers association of Zimbabwe.

- Incorporation of financial literacy in advertising

Bankers should incorporate financial literacy in the marketing of their banks since informing clients of their soundness will result in customers making informed choices thereby increasing uptake of banking products as was revealed in the study.

- Complementing financial literacy

Since the uptake of bank products remains fairly low given the considerably high level of financial literacy, there is also need to complement financial literacy with other incentive programs such as cost reduction, promotions and the tailor making of products in order to increase uptake by taking into cognizance other factors that affect uptake of financial literacy such as income, age and product costs.

- Financial education programs

Financial education programs should be implemented. This may be done by incorporating financial education in ordinary education curricular so as to reach a wide spectrum of the population given the high literacy rate in Zimbabwe. Especially on areas such compound interest where lack of knowledge was prevalent

- Identification and targeting of vulnerable groups

Since disparities in terms of the level of financial literacy have been noted between male to female and urban to rural population there is need to implement financial education programs stated above with the aim of redressing these imbalances.

5.5 Suggestions for Future Records

Given the limitations of the researcher, some areas linked to research topic could not be covered hence other researchers could research on:

- A national survey on the level of financial literacy and socio-demographic variables that affect financial literacy.
- Determinants of bank product uptake in Zimbabwe.

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Appendix A: Questionnaire for Bank Clients

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Faculty of Commerce

Department of Banking and Finance

I am Manganda James A (R104264E) a final year student at the above institution studying towards completion of an honours degree in Banking and Finance. As per university requirements, I am carrying out a research entitled, "The impact of financial literacy on the uptake of financial products and services in Zimbabwean commercial banks." I am kindly requesting for your assistance towards the cause by responding to a questionnaire and interview. Your responses will be accorded the highest level of **CONFIDENTIALITY** and used **ONLY** for the purpose of this study.

You are advised to remain anonymous.

Thank you for your cooperation and time

No	Questions	Responses		Coding category
		PERSONAL INFORMATION QUESTIONS		
1	Age	18-30yrs		1
		30-45yrs		2
		above 45yrs		3
2	Gender	Male		1
		Female		2
3	Marital status	Single		1
		Married		2
		Divorced/Separated		3
		Living with partner		4
4	Level of education	None		1
		Primary		2
		Secondary		3
		College (Diploma etc)		4
		University (First degree)		5
		Postgraduate		6
5	Monthly household income (wages,salaries,benefits payments, foreign remmittances)	Below $500		1
		$500-$1000		2
		above $1000		3
6	Place of residence	Rural		1
		High density (urban)		2
		Low density (urban)		3
7	How many people live in your household?	less than 5		1
		5-10 people		2
		more than 5		3
		FINANCIAL KNOWLEDGE QUESTIONS		
8	If five people were given $500 to share equally. How much does each one get? (indicate response)	…………………………		1
		Don't know		0
9	If you save $1000 for a year and the inflation rate is zero. How much would you buy?	More		1
		Less		2
		Don't know		3
10	After lending $100 to a friend, she pays you back $110. How much interest has she paid you? (indicate response)	…………………………		1
		Don't know		0
11	Suppose that you deposit $100 in a savings account with a fixed 2% per year interest rate. How much would be in the account after a year? (indicate response)	……………...………….		1
		Don't know		0

12	And how much would be in the account after 5 years?	More than $110		1
		Exactly $110		2
		Less than $110		3
		Don’t know		0
13	An investment with high risk return offers high risk	TRUE		1
		FALSE		2
		Don’t know		0
14	High inflation means that costs of living are increasing	true		1
		FALSE		2
		Don’t know		0
15	You are less likely to lose your money If you save it in more than one place.	true		1
		FALSE		2
		Don’t know		0
16	Which banking product amongst those in the list have you heard of? (tick every product you have heard of)	Current accounts		1
		Savings accounts		2
		Banc assurance		3
		Advisory services		4
		Asset management		5
		loans		6
		Mortgages		7
		Overdrafts		8
		Credit and Debit cards		9
		Remittances		10
		Mobile banking		11
		Internet Banking		12
		ATMs		13
		Unit trusts		14
		Money transfers		15
		Don’t know		0
UPTAKE QUESTIONS				
17	Do you have a (commercial) bank account?	Yes		1
		No		2
		Don’t know		0
18	Have you acquired a loan in the past year? (includes overdrafts, mortgages business and personal loans)	Yes		1
		No		2
		Don’t know		0
19	Would you prefer receiving money from abroad through a bank or by other means?	Yes		1
		Other means		2
		Don’t know		0

20	Have you ever used financial advice from a bank in the past year?	Yes		1
		No		2
		Don't know		0
21	Have you ever used any of these products? Internet Banking Mobile banking Credit/Debit cards ATMS	Yes		1
		No		2
		Don't know		0
	ATTITUDE QUESTIONS			
22	Money is there to be spent	true		1
		FALSE		2
		Don't know		0
23	You live for today and let tomorrow take care of itself	Yes		1
		No		2
		Don't know		0
24	You find it more satisfying to spend money than to save it for the future	Yes		1
		No		2
		Don't know		0
25	If you had excess income would you prefer to save it in a bank or elsewhere	In a bank		1
		Elsewhere		2
		Don't know		0
	BEHAVIOURAL QUESTIONS			
26	Does your household have a budget?	Yes		1
		No		2
		Don't know		0
27	If you have used a financial product in the past year months. Did you compare the same product or service with those of other banks?	Yes		1
		No		2
		Don't know		0
28	If you have used a financial product in the past year. Did you consider the costs and the benefits associated with the product or service?	Yes		1
		No		2
		Don't know		0
29	Are you currently actively saving?	Yes		1
		No		2
		Don't know		0
30	You set long term financial objectives and strive to attain them.	Yes		1
		No		2
		Don't know		0
31	You pay your bills on time	Yes		1
		No		2
		Don't know		0
32	Do you keep a close watch on your personal financial issues?	Yes		1
		No		2

Appendix B: Questionnaire for Bank Personnel

	QUESTIONNAIRE TO BANK PERSONEL			
No	Question	Responses		coding
	PERSONAL INFORMATION			
I	Age	18-30yrs		1
		30-45yrs		2
		above 45yrs		3
2	Gender	Male		1
		Female		2
3	Position	branch manager		1
		Customer relations personnel		2
		Bank teller		3
		Other bank personnel		4
	FINANCIAL LITERACY AND UPTAKE QUESTIONS			
2	What do you think is the general level of financial literacy amongst the consumers of your financial products?	High		1
		Considerable		2
		Low		3
		don't know		0
3	Do you think income and educational level affect the level of financial literacy	Yes		1
		No		2
		don't know		0
4	What other factors do you think affect the level of financial literacy?	……………………………		1
		……………………………		2
		……………………………		3
		don't know		0
5	What have you done as a bank to improve the financial literacy of your clients?	…………………………		1
		…………………………		2
		…………………………		3
		don't know		0
6	What else can be done to improve financial literacy amongst your clients?	…………………………		1
		…………………………		2
		…………………………		3
		don't know		0
7	Describe the level of uptake of your bank's products and services	High		1
		Considerable		2
		Low		3
		don't know		0
8	Do you think financial literacy affects the uptake of your products and services?	Yes		1
		No		2
		don't know		0
9	Highlight other factors that you think might affects the uptake of your products and services	…………………………		1
		…………………………		2

Appendix C: Bank Personnel Interview Guide

To be administered to bank branch personnel:

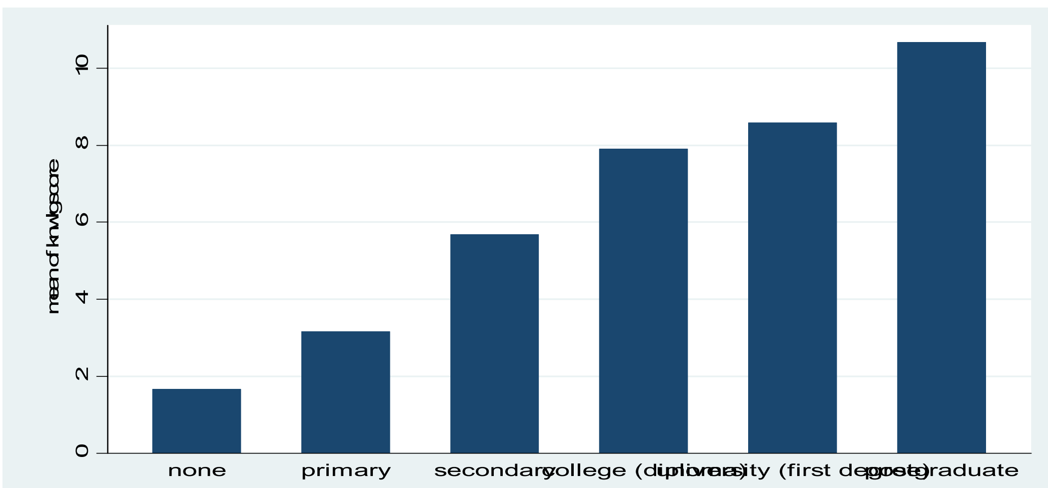
1. What do you think is the general level of financial literacy amongst the consumers of your financial products?
2. Do you think income and educational level affect the level of financial literacy
3. What other factors do you think affect the level of financial literacy?
4. What else can be done to improve financial literacy amongst your clients?
5. Describe the level of uptake of your bank's products and services
6. Do you think financial literacy affects the uptake of your products and services?
7. Highlight other factors that you think might affects the uptake of your products and services

```
. tab edctnlvl
```

edctn lvl	Freq.	Percent	Cum.
none	3	4.76	4.76
primary	6	9.52	14.29
secondary	29	46.03	60.32
college (diploma)	10	15.87	76.19
university (first degree)	12	19.05	95.24
postgraduate	3	4.76	100.00
Total	63	100.00	

.

Appendix D: Stata Results



```
. mean financialliteracy, over(edctnlvl)

Mean estimation                    Number of obs    =      63

         none: edctnlvl = none
      primary: edctnlvl = primary
    secondary: edctnlvl = secondary
    _subpop_4: edctnlvl = college (diploma)
    _subpop_5: edctnlvl = university (first degree)
 postgraduate: edctnlvl = postgraduate

--------------------------------------------------------------
             Over |       Mean   Std. Err.     [95% Conf. Interval]
------------------+-------------------------------------------
financialliteracy |
             none |   3.333333   .6666667      2.000686    4.665981
          primary |   5.833333   .8724168      4.089397     7.57727
        secondary |   10.65517   .7247827      9.206352    12.10399
        _subpop_4 |       14.8   .8406347       13.1196     16.4804
        _subpop_5 |       14.5   .7537784      12.99322    16.00678
     postgraduate |   21.33333   .3333333      20.66701    21.99966
--------------------------------------------------------------
```

```
. tab hsehldincme

     hsehld |
      incme |      Freq.     Percent        Cum.
------------+-----------------------------------
 below $500 |         37       58.73       58.73
 $500-$1000 |         18       28.57       87.30
above $1000 |          8       12.70      100.00
------------+-----------------------------------
      Total |         63      100.00
```

```
. tab gender bnkaccnt

           |      bnk accnt
    gender |       yes         no |     Total
-----------+----------------------+----------
      male |        17         13 |        30
    female |        15         18 |        33
-----------+----------------------+----------
     Total |        32         31 |        63
```

. tab pplenhsehld loan

pple n hsehld	loan yes	no	Total
less than 5	6	26	32
5-10 people	10	15	25
more than 10	0	6	6
Total	16	47	63

. tab residence remittance

residence	remittance yes	no	Total
rural	0	6	6
high density (ubarn)	31	13	44
low density (ubarn)	9	4	13
Total	40	23	63

. pwcorr financialliteracy productuptake

	financ~y	produc~e
financiall~y	1.0000	
productupt~e	0.8364	1.0000