

**An investigation of the levels of financial literacy
among school teachers
in the Johannesburg Central District**



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Mini-thesis submitted in partial fulfillment of the requirements for the degree *Magister Scientiae* in Business Administration at the Mafikeng Campus of the North-West University

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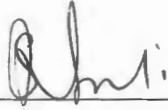
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DECLARATION

I, Sibongile Bernice Ntuli, declare that the investigation of the levels of financial literacy among school teachers in the Johannesburg Central District is my own work and has not been previously submitted to any other university.

Signature: _____



Sibongile B. Ntuli

Date: 13 APRIL 2016



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DEDICATION

This study is dedicated to my late parents, Mr and Mrs Ntuli.

ABSTRACT

The main aim of this study was to investigate the levels of financial literacy among school teachers in the Johannesburg Central District. Financial markets have become complex and sophisticated for individuals. The developments of new products and accessibility of financial products such as credit card, mortgages, student loans and unsecured loans have grown rapidly worldwide. These new developments in the market require households to be well-equipped to make complex financial decisions, but there is evidence that this is lacking in many individuals/investors. The lack of financial literacy has been associated with low saving rates, over-indebtedness and lack of planning for the future. The importance of financial literacy seems to be overwhelming. It is evident that financially literate individuals are more likely to undertake retirement planning, save for the future and accumulate wealth.

A quantitative research methodology was applied in this study. A non-probability convenience sampling of 130 teachers employed in the Johannesburg Central District was used. A survey method was adopted in the design of self-administrated questionnaire to capture the relevant information from school teachers. Data obtained from the respondents was analysed using the Statistical Package for Social Sciences (SPSS version 23).

The results suggest that the majority of school teachers hold financial products such as banking, credit and loans, insurance, investment and saving products. It was also observed that the majority of school teachers in the Johannesburg Central district demonstrated a positive attitude and behaviour towards money management and spending patterns. The results also suggest that gender, age, marital status variables are linked to teachers' attitude and behaviour towards money management and spending patterns.

Key terms

Financial literacy, financial knowledge, financial education, economic climate, school teachers, literacy, illiteracy, Johannesburg Central District, indebtedness, overspending, productivity, stress.

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LIST OF ABBREVIATIONS

FSB	Financial Services Board
GD	Gauteng Department of Education
MBA	Masters in Business Administration
NGO	Non-Government Organisation
NWU	University of the North West
OECD	The Organisation of Economic Cooperation and Development
PSC	Public Service Commission
SARB	South African Reserve Bank
SASI	South African Savings Institute
SMMEs	Small Micro Medium Enterprises
UNISA	University of South Africa
UK	United Kingdom
US	United States

CHAPTER 1

BACKGROUND AND OVERVIEW OF THE STUDY

1.1 INTRODUCTION

Financial literacy is of great interest worldwide because individuals these days are required to have financial skills to manage their finances. The Organisation of Economic Cooperation and Development OECD (2005) defined financial literacy as, “the combination of consumers’/investors’ understanding of financial products and concepts and their ability and confidence to appreciate financial risks and opportunities, to make informed choices, to know where to go for help and to take other effective actions to improve their financial well-being.” The Programme for International Student Assessment (PISA, 2012) defined financial literacy as the knowledge and understanding of financial concepts and risks, and the skills, motivation and confidence to apply such knowledge and understanding in order to make effective decisions across a range of financial contexts, to improve the financial well-being of individuals and society and to enable participation in economic life.’’

Although financial literacy is very important for financial decision making, numerous studies have shown that individuals/investors around the world lack adequate financial knowledge. Many countries, are concerned about the low levels of financial literacy among their citizens and the low levels of financial literacy is the subject of attention in countries such as United Kingdom, United States, Australia, New Zealand. As a result, many developed and developing countries have introduced programmes to teach citizens financial literacy. A growing body of the literature has documented the low level of financial literacy in the general population and its impact on individual decision making. Initiatives by many organisations, government departments, financial institutions, private companies and community-based institutions have attempted to address this problem. Despite the initiatives by these organisations literature continue to reveal low levels of financial literacy among investors.

The lower levels of financial literacy have been associated with factors such as indebtedness, low saving rates and poor financial planning. Campbell (2006) highlighted several other factors resulting from low levels of financial literacy: inadequate diversification to households’ apparent preference to invest in local firms and employer stock, individuals’ tendencies to sell assets that have appreciated, while holding onto assets whose value has declined even if future return

prospects are the same and failing to refinance fixed rate mortgages in a period of declining interest rate. In addition, Agarwal, John, Driscall, Gabaix and Laibos (2009) also documented the large number of several different financial mistakes ranging from optimal credit card use after making a balance transfer to an account with a low teaser rate, to paying unnecessarily high interest rates on a home loan or a credit card. Easier access to credit cards, deregulations of financial markets, new marketing techniques, improvements in technology and the introduction of many new financial instruments have left many consumers with a confusing variety of investing opportunities (Consumer and Financial Literacy Task Force, 2004). This was supported by Lusardi and Mitchell (2011) who stated that financial markets around the world have become more complex and individuals and families are consequently faced with highly sophisticated and sometimes irreversible financial decisions.

1.2 CURRENT STATUS OF FINANCIAL LITERACY IN SOUTH AFRICA

A consumer survey conducted by FinScope (2014) revealed alarming low levels of financial literacy among South Africans. The survey revealed the following results:

State of saving levels

The statistics show that borrowings increased from 31% to 44% since 2004 to 2014 while savings only increased by from 30% to 32% over the same period. Statistics from National Credit Regulator revealed that almost R160 billion in unsecured credit was outstanding in 2014. From this outstanding amount, 24% of the loans were in arrears for 30 days or more and 16% of borrowers had missed payments for 90 day or more.

Risk management

Only 32% of adults with a car have car insurance in their own name. Further, only 23% of adults working full-time have medical aid, are part of a medical scheme or a hospital plan in their own name. Only 38% of adults working full-time have life cover or life insurance in their own name.

Debt levels among South Africans

According to South African Reserve Bank (SARB, 2013), the household debt to disposable income ratio for the second quarter in 2013 was 75.8% and the outstanding in March 2013 was R1.45 trillion. From this it can be concluded that many South Africans are indebted. According to Scholtz-Mare (2014), Head of Financial Wellness at Momentum, South Africans are over

reliant on credit and on expensive personal loans to fund their lifestyles. The results from the consumer survey conducted by FinScope (2014) revealed that about 1.4 millions of South Africans are indebted and have garnish or emolument orders; there is little evidence of long-term financial planning for the future; the savings rates are very low and very few take insurance products.

1.3 SAVINGS AND OVER-INDEBTEDNESS IN SOUTH AFRICA

1.3.1 Personal Saving

Personal saving is defined as that part of current income, after the payment of direct taxes, which is not consumed or transferred as part of household current consumption. According to South Africa Reserve Bank (SARB, 2015), South African savings as a percentage of disposable income shows a slight improvement from -2.3% to -2.2%. The slight improvement is due to an improvement in debt to household disposable income from 78.8% to 77.8%. However, the debt levels are still high and consumers remain highly indebted. According to the acting CEO of the South African Saving Institute (SASI), Gerald Mwandambira, “these numbers strengthen the need for increased financial education and activity to change behaviour and attitudes towards saving and investment.” Lorgat (2003) contended that South Africans generally lack a savings culture, one of the causes being manifest financial illiteracy on the part of the consumer. Lusardi (2008) found that a lack of financial literacy is the reason for people’s inability to save and secure comfortable retirement.

The statistics released by the South African Reserve Bank (SARB, 2015) shows that South Africa has the worst savings rates in the world. Figure 1.1 shows that personal savings increased from R52 708 million in the first quarter of 2015 to R52 557 million in the second quarter.

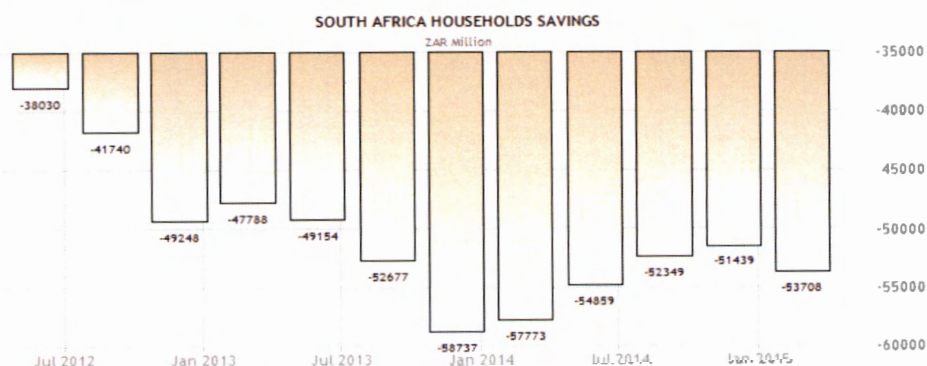


Figure 1.1 South Africa households' savings (Source: [www: Tradingeconomics.com](http://www.Tradingeconomics.com))

1.3.2 OVER-INDEBTEDNESS

Studies revealed that the majority of South Africans are over-indebted. The National Credit Regulator (2009) stated that “over-indebtedness occurs when individuals are unable to pay all their bills in a timely manner, which results in feelings of panic, stress, and being over-whelmed by the number and extent of these unpaid debts.

1.4 RESEARCH PROBLEM AND RESEARCH QUESTIONS

1.4.1 Research Problem

Low savings rates, over-indebtedness and lack of planning for retirement have been associated with low levels of financial literacy. Financial products are numerous and complex, requiring individuals to make choices from a wide range of options. Consumers are increasingly responsible for saving and managing the funds for their retirement. Without financial literacy, individuals are likely to make irrational financial decisions, choose inappropriate financial products and not save for the future.

The results from the consumer survey conducted by Finscope (2014) revealed low levels of saving rates and high debt levels. They also revealed that individuals are not taking insurance products. Additionally, the Public Service Commission Report (2007) pointed out many public servants, including teachers, are heavily indebted. The report also indicated that the high debt levels among the public servants have led to low productivity, ill-health and compromised ethical standards and employee seeking remuneration outside the public service. Thami Bolani (2007), the Consumer Fair Chairman, stated that more than 60% of the public servants are drowning in debts and teachers are the worst affected. Therefore there is a need to establish the extent of financial literacy among school teachers, which is the aim of this study.

1.4.2 Research questions

The following research questions will be examined:

- a) What does the term financial literacy mean?
- b) What is the importance of financial literacy?
- c) Which financial products do school teachers in the Johannesburg Central District hold?



- d) What is the attitude and behaviour of school teachers towards spending and money management?
- e) Which demographic characteristics influence attitude and behaviour towards money management and spending among school teachers in the Johannesburg Central District?

1.5 RESEARCH OBJECTIVES

In order to attempt to answer the research questions, the study will strive to attain the following objectives:

1.5.1 Primary objective

The primary objective of the study was to investigate the level of financial literacy among school teachers in the Johannesburg Central District.

1.5.2 Secondary objectives

In order to reach the general objective the following specific objectives were set:

- To determine what does the term financial literacy mean.
- To determine the importance of financial literacy.
- To determine the financial products that school teachers in Johannesburg Central District hold.
- To examine the attitude and behaviour towards money management and spending among school teachers in the Johannesburg Central District.
- To determine demographic characteristics that influences the behaviour and attitude towards money management and spending among school teachers in the Johannesburg Central District.

1.6 SIGNIFICANCE OF THE STUDY

The purpose of the study is to investigate the levels of financial literacy among school teachers in the Johannesburg Central District. The study is motivated by the need for financial awareness among school teachers. Way and Holden (2009) find that there is a great need to expand personal financial awareness among teachers in order to meet both their personal and professional needs. They concluded that that majority of teachers recognize the need for personal finance education. Most studies found low levels of financial literacy among students. If children and youth are to become financially literate, teachers should possess personal financial knowledge to properly

educate their students. The study may be of significance to the government and employers because individuals who are financially illiterate are not likely to make sufficient provision for their retirement. Previous studies have found that a lack of financial literacy among employees leads to a decrease in work productivity (Volpe, Chen & Liu 2006). Vitt, Anderson, Kent, Lyter, Siggenthaler & Ward (2000) stated that one of advantages of financial literacy is to reduce employees' financial problems and encourage them to be responsible for their own finance and both will help increase efficiency of the organisation. This was supported by Kim (2007) who argued that high financial literacy decreases emotional stress and anxiety in the workplace. The study will also provide an insight on whether demographic characteristics have any influence on financial literacy.

1.7 DELIMITATIONS

The proposed study will be conducted in, Johannesburg Central District, situated in Gauteng Province, and the findings are therefore applicable to this area. The participants are school teachers employed in the Johannesburg Central District; Arising from this restricted population, the findings of the study might not be representative of the whole South Africa populace.

1.8 ETHICAL CONSIDERATIONS

Cooper and Schindler (2001:116) defined ethics as “norms or standards of behaviour that guide moral choices about our behaviour and relationships with others.” The ethical clearance is required so that the researcher's work does not harm any individual, group of individuals, organisations, animals or environment (Hofstee, 2011). Ethical clearance to conduct the study was obtained from the Research Ethics Committee at the Faculty of Commerce and Administration as per University of North-West requirements. Permission to conduct research at the Johannesburg Central District was obtained from the Gauteng Department of Education (GDE). Informed written consent was also obtained from school teachers in the Johannesburg Central District. The identities of the teachers are protected. Participation in the survey is voluntary and no individual person was forced to participate.

1.9 THE STRUCTURE OF THE THESIS

The study is divided into five chapters:

Chapter 1 Introduction

This chapter outlines the study's introduction and background of financial literacy, the research problem, research questions and objectives, the significance of the study.

Chapter 2 Literature review

In this chapter, an in-depth literature review includes definitions of financial literacy, and measures of financial literacy, indicators of financial literacy and the importance of financial literacy are discussed. Financial literacy in South Africa and around the world is also discussed. Demographic variables that influence financial literacy are highlighted.

Chapter 3 Data and methodology

The chapter describes the research design and the research methodology used for this study. This includes stating data collection methods, sample and sampling techniques, target population, data analysis and research ethics. The reliability and validity of the instruments used are also conferred.

Chapter 4 Analysis and interpretation of results

This chapter provides the analysis and interpretation of the results obtained.

Chapter 5 Findings, conclusions and recommendations

This chapter reflects on the implications of the findings from the research questions that have driven the findings of this research. The researcher makes clear implications of the findings and discusses the limitations of the research. Recommendations for further research are made and finally conclusion is drawn.

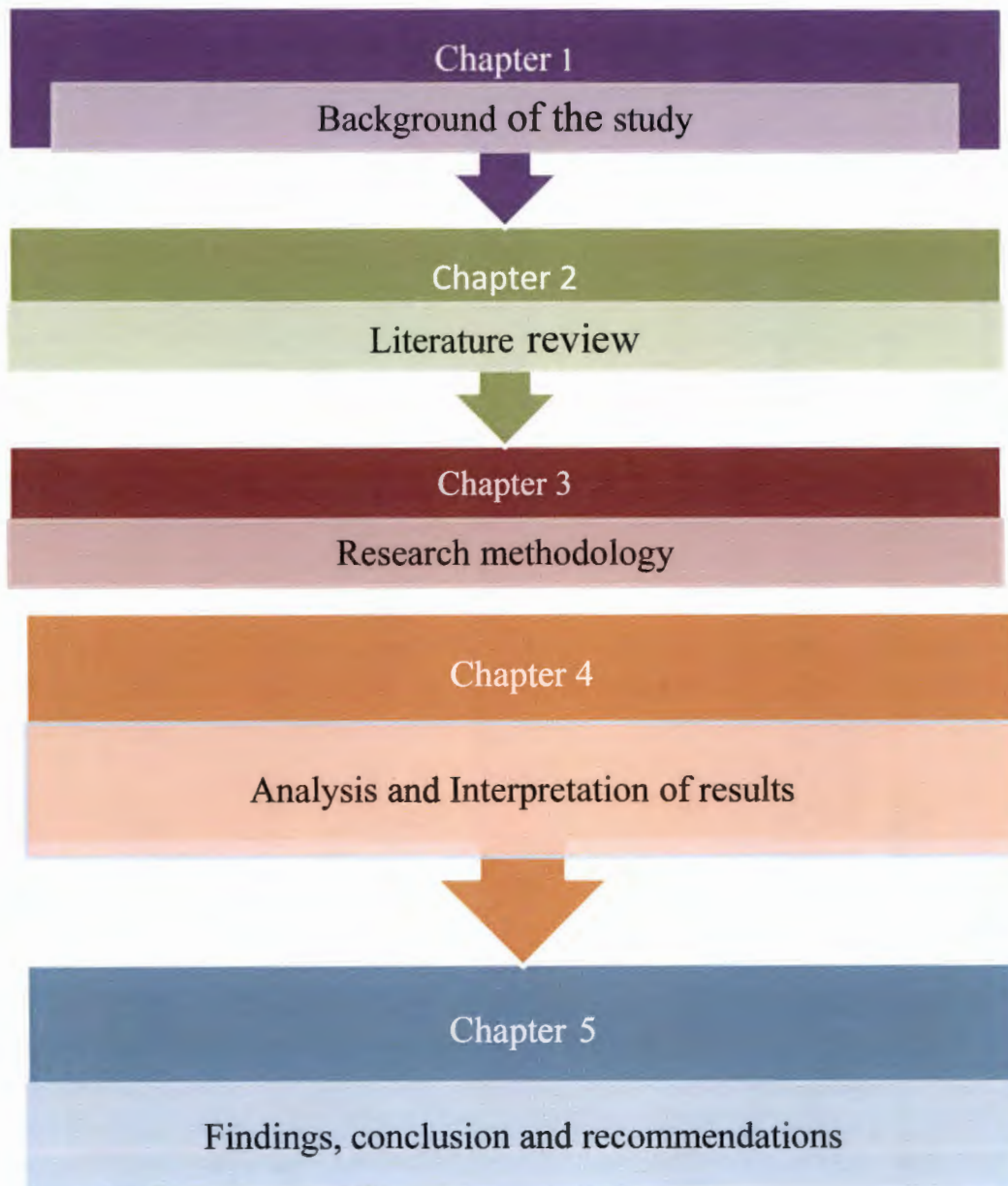


Figure 1.2 The structure of the thesis

1.10 SUMMARY

This chapter introduces the background of the study, the problem statement, objectives, questions, the scope of the study and delimitations.

CHAPTER 2 LITERATURE REVIEW

2.1 INTRODUCTION

The aim of the study is to investigate the levels of financial literacy among school teachers in the Johannesburg Central District. The background, problem statement and significance of the study are discussed in Chapter 1. In this chapter, an in-depth review of literature is outlined. The chapter is organised in the following sections:

- 2.1 Introduction.
- 2.2 Defining financial literacy.
- 2.3 Measuring financial literacy.
- 2.4 Indicators of financial literacy.
- 2.5 Demographic characteristics affecting financial literacy.
- 2.6 The importance of financial literacy.
- 2.7 Financial literacy around the world.
- 2.8 Financial literacy among school teachers.
- 2.9 Financial literacy in South Africa.
- 2.10 Conclusion.

Individuals are usually faced with a need to make rational financial decisions such as buying a home or renting a property, buying a new car or used car, leasing or financing a vehicle, saving for their children's post-secondary education, saving for the future and choosing the right financial products. These important decisions can be affected negatively by the lack of financial knowledge. The development of new products and accessibility of financial products such as credit card, mortgages, student loans and unsecured loans has grown rapidly worldwide. As a result of these new developments in the market, there is a need for households to be well-equipped to make complex financial decisions. These new developments have their advantages, according to Lusardi and Mitchell (2014), but have proven to be financially difficult for unsophisticated investors to master. Therefore, there is a need for individuals to be financially literate. Klapper, Lusardi & Panos (2013) posit access to credit combined with low levels of financial literacy might end up being a dangerous mix.

It is widely believed that financial literacy education can turn consumers into 'responsible' and 'empowered' market players. It is also believed that individuals who are financially literate are

motivated and competent to handle their own credit, insurance, saving and investment matters by confidently navigating the abundant unrestricted marketplace.

2.2 DEFINING FINANCIAL LITERACY

Financial literacy has been defined in various ways in the literature. These definitions vary in terms of their focus, but all reflect an emphasis that financial literacy is necessary for individuals to function in society (Bowen, 2002). An analysis of literature indicates that the concept of financial literacy or financial knowledge has been used interchangeably with other terms such as *financial education* and *financial capability* to mean the same thing. Huston (2010) found that the term financial literacy, financial knowledge and financial education are often used interchangeably. However, researchers attempted to differentiate these terms (Huston, 2010). Robb and Woodyard (2011) highlighted the distinction between financial literacy and financial knowledge. According to Robb and Woodyard (2011), the term financial literacy involves an ability to understand financial information and make rational decisions using that information, whereas financial knowledge means remembering a set of facts. Xiao, Chen & Sun (2011) argued that financial knowledge is not sufficient for efficient financial management and the influence of financial knowledge on behaviour is a measure of the students' attitude. Botha (2013) also argued that financial knowledge cannot be used to refer to financial literacy because it lacks the application dimension necessary to make financial decisions. Taylor (2011) defined financial capability as people's ability to manage and take control of their finances.

OECD (2005) defined financial education as the process by which individuals improve their understanding of financial products and concepts; and through information, instruction and /or objective advice develop the skills and confidence to become more aware of financial risks and opportunities, to make informed financial choices, to know where to go for help and take other effective actions to improve their financial well-being and protection. Financial education is defined by Hung, Parker & Young (2009) as a process by which people improve their comprehension about financial products and services. On the hand Curley and Sherreaden (2013) described the key difference between financial literacy and financial capability. They described financial capability as the need to be financially capable, people must be more than financially literate; they must also have access to financial products and services that allow them to act in their best financial interests.

Louw (2009) stated that financial literacy depends upon a person's circumstances, background and previous financial experiences and therefore it can be difficult to define financial literacy in

a broad sense. According to Gouws and Shuttleworth (2009), the term financial literacy can be misinterpreted because it consists of the terms financial and literacy; both of which are used to represent many issues that can easily lose their relevance when used together. 'Financial' means commercial, economic, business, monetary and fiscal, all of which have different meanings. The word 'literacy' is used to describe the ability to read, speak, write and listen using different language for a different purpose in a range of context. According to Huston (2010), the term literacy consists of understanding (i.e. knowledge of words, symbols and arithmetic operations) and use (ability to read, write and calculate) of methods related to writing style, document and quantitative information.

According to Van Nieuwenhuyzen (2009), the following are the core elements that constitute financial literacy:

- The ability to read, analyse, manage and write about personal conditions that affect material well-being;
- The ability to discern financial choices;
- To discuss money and financial issues without discomfort;
- To plan for the future;
- To respond completely to life events that affect everyday financial decisions, including events in the general economy.

Fonseca, Mullen, Zamarro & Zissimopoulos (2011) stated that the definitions and measures of financial literacy varies across researchers and studies have included specific knowledge, the ability or skills to apply knowledge, perceived knowledge, good financial behaviour, and/or even certain financial knowledge.

Vitt et al. (2000) outlined the specific activities that demonstrate financial literacy in their definition:

Personal financial literacy is the ability to read, analyse, manage and communicate about the personal financial conditions that affect material well-being. It includes the ability to recognize financial choices, discuss money and financial issues without discomfort, plan for the future and respond completely to life events that affect everyday financial decisions, including events in the general economy.

Symanowitz (2006) defined financial literacy as the individual's ability to take control of personal financial circumstances that inevitably impact material well-being, future financial

planning and to react knowledgeably to financial events that influence everyday financial decisions. Remund (2010) argued that the definitions of financial literacy are so different that he is forced to subdivide them into five grouping:

- Knowledge of financial concepts;
- Ability to communicate about financial concepts;
- Aptitude in managing personal finances;
- Skills in making appropriate financial decisions, and
- Confidence in planning effectively for future financial needs.

Financial literacy has also been linked to the individual's ability to make informed decisions. Researchers such as Mandell and Schmid (2009), Lusardi (2008) found that high levels of financial literacy lead to improved financial decision-making, which in turn lead to a wealthy life, health and content life. The ability to make informed decisions is critical to the financial well-being to individuals and can also lead to the proper functioning of financial markets and the economy (Gaberlavage, 2009). This was further supported by Kefela (2010) who argued that a person with a good level of financial literacy is likely to be better placed than someone without this knowledge to manage their financial affairs prudently, all else being equal; they are more likely to budget effectively invest wisely and sustainably manage their debts. Kefela (2010) further added that financial literacy can help to prepare consumers for tough financial times, by promoting strategies that mitigate risk, such as accumulating savings, diversifying assets, and purchasing insurance. Gale, Harris and Levine (2012) also added that financial literacy affects the individuals' welfare and saving behaviour as well as the ability to make informed decisions on products offered in financial markets.

The ability of individuals to make informed financial decisions is critical to developing sound personal finance, which can contribute to more efficient allocation of financial resources and to greater financial stability at both micro and macro level (Lusardi and Mitchell, 2008; Lusardi and Tufano, 2009 a,b).

Research has shown that many adults lack financial knowledge to make competent and effective financial choices (Kim, 2000; Joo, 1998). Excessively high levels of debt, low saving rates, becoming targets of investment fraud, delinquency on credit cards and bankruptcy have all been found to be related to financial illiteracy in individuals (Kim, 2000). Vosloo, Fouche & Barnard (2014) found that factors such as high debt levels, low savings and economic recessions are the main contributors of financial stress.

Financial illiteracy has also been linked to sub-optimal retirement saving (Lusardi and Mitchell, 2007a,b) low wealth increase (Behrman, Mitchell, Soo & Bravo 2012), using payday loans instead of cheaper alternatives (Agarwal et al., 2009), reduced effectiveness of programs to enhance financial decision-making (Carlin and Robinson, 2012) and over-borrowing (Lusardi and Tufano, 2009a). Kotze and Smit (2008) found that lack of financial literacy adds to the mismanagement of personal finances and leads to poor financial decisions, which ultimately have unpleasant consequences of the financial health of an individual. This was confirmed by Messy and Monticone (2012) who posit that the lack of financial knowledge among consumers or investors could put them in a disadvantaged position with respect to banks, microfinance institutions, and informal lenders and this could in turn increase the probability of falling victim of fraud or abuse.

On the contrary, other researchers such as Rubin (2007), Collins and O'Rourke (2010), Vandome (2009), and Lyons and Neelakantan (2008) tend to disagree with the fact that financial literacy lead to informed decision making. Rubin (2007) argued that increased knowledge does not necessarily change behaviour. This was further confirmed by Collins and O'Rourke (2010) who concluded that people may lack self-control or exhibit other behavioural biases that education may not enable them to overcome. Huston (2010) added that characteristics such as impulsiveness, behavioural biases, unused preferences or external circumstances also contribute to poor financial decisions making. Vandome (2009) contended that schemes adopted to promote financial literacy should be periodically monitored for their effectiveness. This was further confirmed by Lyons and Neelakantan (2008) who claimed that financial education itself rarely changes an individual's financial circumstances.

2.3 MEASURING FINANCIAL LITERACY

Although there are numerous studies on financial literacy, many researchers find it difficult to measure financial literacy. According to Moore (2003), Cole and Fernanolo (2008) there is no standardized measure of financial literacy. This was further confirmed by researchers such as Huston (2010), Remund (2010) and Robb, Babiarz & Woodyard (2012) who concluded that financial literacy has a definition, but it does not have a standardized instrument of measure. Huston (2010) identified the following three obstacles to creating a standard measure of financial literacy:

1. The lack of a common constructs,

2. The lack of a comprehensive set of questions to measure all components of financial literacy, and
3. The lack of guidance in interpreting the measure created.

Atkison and Messy (2011) added that the lack of consistency also poses the biggest challenge to an international comparison. Huston (2010) states that even though financial literacy measures may be used to predict financial behaviours or outcomes, it does not necessarily imply that individuals will behave in a way that many scholars, policy makers or educators would deem optimal. Researchers such as Brown and Graf (2013) and Arrodel, Debbich & Savignac (2013) adopted the approach, used by Lusardi and Mitchell (2013), which examines the levels of financial literacy based on questions which test (i) an understanding of interest rates and interest compounding, (ii) an understanding of inflation and (iii) an understanding of risk diversification. Lusardi and Mitchell (2011) stated that although it is important to evaluate the way in which people are financially literate, in a practical way, it is difficult to explore the way in which people proceed with financial information and make decisions based on this knowledge. Measuring financial literacy requires a multi-dimensional score that incorporates financial awareness, knowledge, skills, attitude and behaviour (Struwig and Gordon, 2014). According to Mbarire and Ali (2014), there are two major approaches of measuring financial literacy, i.e. self-assessment and objective measures like test scores.

To measure the levels of financial literacy among school teachers, the researcher designed a set of 51 questions. Section A of the questionnaire consisted of demographic information of the participants. Sections B and C consisted of questions that aimed at measuring money management and expenditure practices respectively. Sections D and E measure saving and investment management and retirement planning. Sections F and G are aimed at measuring participants' ability to choose the right financial products and financial risk management.

2.4 INDICATORS OF FINANCIAL LITERACY

Literature studies suggest that an individual is said to be financially literate if he/she is able to perform the following:

- **Day to day money management:** Financial literacy helps an individual to have control over his financial matters. It enables an individual to frame appropriate budget, which in turn helps them to track his finances and meet the ends.

- **Financial Planning:** The intensity to save and plan for their retirement life should be clear. Investing in proper avenues or saving through various investment plans shows their attitude and behaviour towards financial issues.
- **Financial knowledge and understanding:** An individual should be aware of the products available in the market. Should possess adequate knowledge about the basics of the products, the related concepts, consumer rights of such products and its use.
- **Choosing appropriate products:** An individual should be able compare similar products and choose the product that suits their requirements. Financial knowledge about the various products would enable this.

2.4.1 Financial control (also known as day-to-day money management)

Financial control includes elements such as budgeting; keeping of records and knowing what are your expenses are (OECD, 2005).

People are often faced with making consumer choices in their daily lives. The ability to manage personal finances is one of the most important and challenging features of everyday life. The ability to manage personal finance is one of the core skills in today's world. The skill affects the quality of life. Arrowsmith and Pignal (2010) posit that the presence of a budget suggests a positive awareness relating to financial management. According to Lusardi and Mitchell (2011b) a certain percentage of the adult populace reported the presence of a budget in their households. Botha et al. (2012:1035) state that a budget is twofold in nature, consisting of income to be earned and the expenditure likely to be incurred and the cash received and paid resulting from the identified income and expenditure in the first-fold mentioned. Swart (2012) distinguished between a budget and budgeting by stating that a budget is a plan in financial or many terms, whereas budgeting consists of a process or steps to be employed in drawing up a budget. Swart (2012) outlined the following advantages of a personal budget:

- It compels a family to think about their financial future and household objectives.
- It improves understanding between members of the family if they know why certain expenses should not be incurred.
- A budget compels a family to do financial planning.
- It is a tool for exercising financial control.
- It provides unity in objectives with the financial resources of the family.

1. Making ends meet

'Making ends meet' determines how long a person is able to work effectively with his or her money. It also determines how easy it is to keep up with payments and other bills (OECD, 2009:5). The financial literacy Baseline study conducted by the FSB (2013) revealed that worrying findings, which indicate that many South Africans experience financial shortfalls and struggle to make ends meet. 45% of the participants in the study indicated that they had experienced a shortfall in their life time.

2. Keeping track of finances

The ability to keep track of expenses is an element of money management and this behaviour indicates certain knowledge of personal finance.

2.4.2 Financial planning (Savings and investments)

Different people have different motives to save. These include saving money for their children's education, buying a property or a car and savings for retirement. Saving is the portion of income not spent on current expenditures. Nyamute and Maina (2010) defined the term saving as the difference between income and consumption.

Saving rates are alarmingly low worldwide. In 2013 the national gross saving rate as a percentage of GDP was 13.5%. Saving is very important for households as well as for government and companies. The Global Financial Crisis of 2008 and its aftermath showed how vulnerable governments can be when they excessively spend, especially for consumption, and use excessive borrowing for such spending (SARB, 2014). Results from FinScope 2014 Consumer Survey revealed that saving rates in South Africa increased by only 2% from 2004 to 2014. According to Xu and Zia (2012) China's gross savings rate was 51% in India; 30% in Russia; 15% in Brazil and South Africa 14.2%.

Countless individuals all over the world are not saving enough money for retirement and unprepared to deal with the complexities of managing and acquiring assets throughout their working lives (Lloyd, 2005). This was further confirmed by the study conducted by Lusardi & Mitchell (2006), which revealed that many households in the United States of America are not familiar with the most basic concepts needed for making saving and investment decisions. Research shows that saving benefit households as well as the entire nation because it provides the base for long-term investments and infrastructure development for every country that

contribute towards economic growth. Saving also acts as a hedge for individuals and nations against the economic downturn and financial crises. According to Prina (2015), saving promotes asset accumulation, helps to create a buffer against shocks and relax credit constraints. Lusardi and Mitchell (2007) investigated the impact of planning of financial outcomes and find that individuals with a tendency to plan are more likely to engage in saving behaviours and a hold high level of knowledge about financial concepts.

Gale, Harris and Levine (2012) stated that improved financial literacy could help individuals understand their saving situations better, save more and attain higher economic status and more economic security.

Botha, Du Preez, Geach, Goodall, Rossini & Rabenowitz (2012) described an investment as the present commitment of money for a specific time of period to derive future benefits that will reward the individual for the time the funds are committed, the expected inflation rate and the uncertainty of the future payments.

Lusardi and Mitchell (2011b) conducted a survey on the implications for retirement well-being among Americans. They found that people who are financially savvy are likely to plan for retirement. The researchers found that financial knowledge and planning are clearly interrelated, and keeping track of spending and budgeting appears conducive to retirement savings.

2.4.3 Choosing the right financial products

The financial literacy baseline study that was undertaken by South Africa's Financial Services Board (FSB) in 2013 revealed that the majority of the South African population are not aware of some of the financial products offered in the market. The study identified four key financial product types; namely banking, credit and loans, investment and savings, and insurance.

Banking products

The study revealed that a large population is aware of some of the banking products, but chooses not to own such products.

Credit and loan products

The study revealed that the majority of the population is aware of the available formal and informal credit and loan products. The study also showed that a proportion of South Africans are

aware of informal credit and loan products such as a loan from friends and family and a loan from mashonisa or informal money lender.

Investment and savings products

According to the study conducted by the FSB (2013), most South Africans are aware of pension funds, but half of South African adults had not had income as a benefit of other investment and savings products such as unit trusts and bonds.

Insurance products

The study showed that most South Africans are aware of life-insurance or life cover followed by vehicle insurance and medical schemes. However, the majority of people are not aware of home-owners insurance and the insurance that covers the deceased's debts.

Gale, Harris and Levine (2012) found that financial literacy affects individual welfare and saving behaviour as well as the nature of the products offered in the financial markets. Nga, Yong and Sellappan (2010) investigated the general level of financial product awareness among youths and adults in Malaysia. They found that the level of education and majors influence general product awareness among youths and their study also reveals that the male youths are more aware when compared with their female counterparts. According to Messy and Monticone (2012), improved financial literacy can increase awareness about products and services offered in the market as well as confidence and ability in using them. This in turn can help in promoting the demand for formal financial products and services.

2.5 THE RELATIONSHIP BETWEEN DEMOGRAPHIC CHARACTERISTICS AND FINANCIAL LITERACY

Studies investigating the impact of demographic variables and financial literacy have revealed different results. Botha (2013) pointed out that even though there are various studies on the influence of demographic characteristics on financial literacy, there have been some inconsistent findings. Researchers such as Cole and Fernanole (2008), Lusardi and Mitchell (2006 and 2008), Gallery, Newton & Palm (2011), Van Rooij et al. (2007) and Al-Tamimi and Kalli (2009) studied the influence of demographic characteristics such as gender, age, marital status, level of education and work experience on the levels of financial literacy among individuals. De Clercq and Venter (2009) investigated the impact of age, gender, ethnic (viz. home language and race) background and the financial literacy among undergraduate Chartered Accountants students at

the University of South Africa (UNISA). They found that factors such as gender, age, language, race and income have an impact on the levels of financial literacy among chartered accountants students at UNISA.

2.5.1 Gender

Researchers such as Bernhein and Garrett (2003); Lusardi and Mitchell (2008) documented that women demonstrated lower levels of financial literacy than men. Lusardi, Mitchell & Curto (2010), stated that a low degree of financial knowledge remains a problem among young women. Sekita (2011) added that women face greater challenges than men in making financial calculations, and she also states that that women lack the basic knowledge of financial concepts and all these make it more difficult to make efficient financial decisions. In contrast, Mbarire and Ali (2014) found that female respondents in their study demonstrated a higher level of financial literacy than men. On the other hand, Wagland and Taylor (2009) investigated the impact of gender on financial literacy among 165 undergraduate students at the University of Western Sydney. They found that gender was not a significant factor influencing financial literacy among Australian students.

2.5.2 Age

Other studies stated that financial literacy is influenced by age of the investors or consumers.

Taft, Hosein, Mehrizi & Roshan (2013) found that age and education are positively correlated with financial literacy and well-being. Mbarire and Ali (2014) investigated determinants of financial literacy among employees of Kenya Ports Authority in Kenya, they found the lower levels of financial literacy among the young (below 30 years) and old respondents (over 50 years), highest the young adults (31–40 years) and moderate among the middle-aged respondents (41–50 years). On the other hand, Xiao, Chen & Sun (2015) examined age differences in consumer financial capability in Kingston. Their findings suggested that age plays a significant factor for financial capability. They also found that older consumers exhibit higher levels of financial literacy when compared with their younger counterparts.

2.5.3 Race

Kindle (2010) studied perceptions of financial literacy among undergraduates and graduates social work students in the United States. The results did not reveal any significant difference in

students' perceptions based on race and ethnic identity and gender. Synamowitz (2006) stated that whites grade 12 learners scored higher than other population groups on financial literacy.

2.5.4 Marital status

Fonseca et al. (2011) pointed out that married women are more financially literate than unmarried, divorced women. This was further confirmed by Taft, Hosein, Mehrizi and Roshan (2013) who found that married people are more financially literate than their unmarried counterparts.

2.5.5 Work experience

Mbarire and Ali (2014) found no significant relationship between occupation status and financial literacy between Kenya employees. However, the findings by Mian (2014) tended to contradict their results. Mian (2014) examined the level of financial literacy among Saudi investors and its impact on financial decisions and revealed that respondents who are self-employed or in the business demonstrate a higher level of financial literacy than their employed and unemployed counterparts.

2.5.6 Education level

Campbell (2006) showed that individuals with lower incomes and lower education levels—characteristics that are strongly related to financial literacy—are less likely to refinance their mortgages during a period of falling interest rates. This was further confirmed by Calvet et al. (2007; 2009) who discovered that poorer, less educated, and immigrant households in Sweden—demographic characteristics that are strongly associated with low financial literacy are more likely to make financial mistakes. Malone & Susan (2010), Cute (2010), Lusardi et al. (2010), Dvorak and Hanley (2010) confirmed the positive relationship between education and financial literacy. The study conducted by Lusardi and Mitchell (2011b) found that those with lower educational achievement (e.g without a high school degree) in the U.S. are unlikely to answer questions correctly, and also more likely to say they don't know the answer and this pattern is found in all countries.

Mahdavi and Horton (2014) studied financial knowledge among educated women with at least bachelor's degree. They discovered that women who obtained an MBA degree display higher levels of financial literacy than graduates with a bachelor's degree only.

Mbarire and Ali (2014) asserted that financial knowledge among employees in Kenya with a bachelor's degree and above is higher; moderate among college and secondary graduates and lower financial knowledge among employees with below high school education. De Bassa Scheresberg (2013) tended to disagree with them and contends that a high level of education does not guarantee a high level of financial literacy. He examined financial literacy and financial behaviour among young adults aged between 25 and 34. The results show that only 49 per cent of respondents with college education and only 60 per cent of respondents with postgraduate education were able to answer three simple questions designed to assess financial literacy. Nayebzadeh, Taft and Sandrabadi (2013) investigated financial literacy among university professors. They find that university professors demonstrated a low level of financial literacy. They also found that university professors lack the necessary skill to handle their daily financial issues. These findings suggested that the high level of education doesn't guarantee a high level of financial literacy.

2.6 THE IMPORTANCE OF FINANCIAL LITERACY

According to Al-Tamimi and Kalli (2009), the importance of improved financial literacy appears to have increased because of factors such as the developments of new financial products and the complexity of financial markets, among others. Cole, Sampson and Zia (2011) added that efforts to increase financial literacy can also be an important component of efforts to increase saving rates and lending to the poorest and most vulnerable consumers.

Kefela (2010) argued that a person with a good level of financial literacy is likely to be better placed than someone without those skills and knowledge to manage their financial affairs wisely; all else being equal; they are more likely to budget effectively, invest wisely and sustainably manage their debts. Kefela (2010) further added that financial literacy can help to prepare consumers for tough financial times, by promoting strategies that mitigate risk, such as accumulating savings, diversifying assets, and purchasing insurance.

Symanowitz (2006) is of the opinion that individuals with high levels of financial literacy are able to make financial decisions which could result in the achievement of long-term goals. Lusardi and Mitchell (2007) added that financial literacy influences planning behaviour, and this, in turn, increases wealth holding. Similarly, Bernhein and Garrett (2003) found that workers tend to accumulate significantly more assets when their employer offers financial education. Van Nieuwenhuizen (2009) identified that there is a need for individuals to improve their financial knowledge and behaviour. The result of financial literacy is that individuals will be better

informed, markets will function more effectively and social cohesion and personal wealth will improve. Moreover, financial literacy improves behaviour such as increased savings, improved debt management, retirement provision and can also result in less financial stress. This was further confirmed by Mahdzan and Victorian (2013) who concluded that improved financial literacy leads to an increased engagement in personal financial planning activities such as investing in share and property, and purchasing life insurance. According to Swart (2012), financially literate individuals understand fundamental concepts underlying money and asset management, and it enables them to employ the financial knowledge and understanding to plan and implement financial decisions. Lusardi and Mitchell (2011a) and (2011d) found that individuals who are more financially knowledgeable are more likely to undertake retirement planning and those who plan also accumulate more wealth. Cole, Sampson and Zia (2011) outlined the following benefits of financial literacy:

- It improves individuals saving behaviour and
- It helps individuals to better manage risk by purchasing insurance contracts.

According to Fakoti (2014), financial literacy has a positive influence on the ability to make sound financial decisions on household well-being and business survival. Glaser and Walther (2014) ascertained that financial literacy is important for the following reasons:

- Financial literacy can help prepare customers for tough times, by promoting strategies that moderate risks such as accumulating savings, diversifying assets and purchasing insurance products.
- Financial literacy also helps to improve behaviour such as the avoidance of over-indebtedness.
- Financial literacy enables people to make better informed decisions and to understand and manage risks.
- Financially literate consumers and investors help to reinforce competitive pressures on financial institutions to offer more appropriate prices and transparent services.
- Financial literacy is also needed for effective money management.

2.7 FINANCIAL LITERACY AROUND THE WORLD

A lot has been written about financial literacy in other countries such as United States, Australia and United Kingdom. The National Foundation for Education Research in the United Kingdom initiated studies on the financial literacy in 1992. The studies revealed rising levels of household

debt associated with low levels of understanding about financial matters, particularly among low-income groups. It was also found that the existing money advice centres were unable to cope with the volume of work due to lack of resources. The studies found that, not only did financial illiterate consumers have difficulty choosing appropriate products and services, but were also more likely to become victims of practices such as fraud and predatory lending. A survey launching a baseline of financial literacy in United Kingdom (Atkinson, McKay, Kempson & Collard, 2006) found alarming results. Among other things, the study found that people aged between 18-40 years are less financially skilled on average than their elders. The study found that many people are taking on inappropriate risks through poor choices or lack of awareness, and the greatest demands are placed on those least equipped to deal with them.

In the USA, Lusardi (2009) found widespread lack of financial literacy among sections of the population, especially people with low levels of education, women and ethnic minorities. This was further confirmed by the study conducted by De Bassa Scheresberg (2013) who examined the levels of financial literacy among young adults in the United States and finds that financial illiteracy is widespread in this population.

Van Rooij, Lusardi & Alessie (2011) studied financial literacy and retirement planning among Netherlands citizens using two sets of questions; the first set of questions were aimed at measuring the basic financial skills and the second set of questions was aimed at assessing sophisticated financial literacy knowledge. They found a positive relationship between financial skills and retirement planning. Their results indicate that many Dutch households lack the financial knowledge to cope with financial decisions such as how to save and invest enough for retirement planning. They also found that Netherlands citizens do not have sufficient buffers to deal with unexpected expenditures.

Mahdzan and Tabiani (2013) studied 200 individuals in Malaysia to examine the impact of financial literacy on individual saving. Their findings reveal that financial literacy has a significant positive impact on individual saving. Gathergood and Disney (2011) examined the impact of financial literacy on consumer credit use and over-indebtedness in the United Kingdom. They found that financially illiterate households use high cost credit and are likely to default their payments, moreover they experience difficulty paying their debts.

Disney and Gathergood (2011) examined the impact of financial literacy on consumer credit use and over-indebtedness in the United Kingdom. They found that financially illiterate households use high cost credit and are likely to default their payments, moreover they experience difficulty

paying their debts. The findings concur with a study conducted by Schicks (2013) who examined over-indebtedness of micro brewers in Ghana from a customer protection perspective. The study revealed that borrowers who are less financially knowledgeable are likely to be over-indebtedness.

Gathergood (2012) examined the relationship between self-control, financial literacy and over-indebtedness in the United Kingdom (UK). The results revealed that low financial literacy and self-control problems are positively associated with over-indebtedness. According to Lusardi and Tufano (2009b), financially literate households are likely to avoid indebtedness.

Mbarire and Ali (2014) conducted a study of a sample 500 employees in Kenya. The aim of the study was to investigate determinants of financial literacy levels among employees in Kenya Ports Authority using self-administered questionnaires. The findings of the study suggested that the overall levels of the employees in Kenya Ports Authority are low. The results further revealed that financial literacy is influenced by demographic characteristics such as gender, age and education levels. Their results also concur with Wachira and Kihui (2012) who found low levels of financial literacy in Kenya. Wachira and Kihui (2012) conducted a study in Kenya to establish the impact of financial literacy on access to financial services in Kenya. Their results also suggested that even though access to financial services is not based on the levels of financial literacy, there is a high probability that people who are financially illiterate can be excluded from other financial services.

Brown and Graf (2013) conducted a survey of 1 500 households aged between 24 and 70 to document the level of financial literacy in Switzerland and to determine whether financial literacy is related to retirement planning. They used standardised questions that capture knowledge of compound interest, inflation and risk diversification. Their findings reveal a low financial literacy among low-income and uneducated as well as women. Their results also reveal a strong relationship between voluntary retirement saving and financial market participation. Their results seem to support the findings of Van Rooij et.al (2011), Sekita (2011) and Bucher-Koenen and Lusardi (2011).

Arrodel, Debbich & Savignac (2013) studied financial literacy using the Pater Survey and following the Lusardi and Mitchell (2011c) approach. They found a low financial literacy among women, young and old people as well as less-educated people. They found that this group of people is likely to experience difficulties when dealing with fundamental financial concepts such

as risk diversification and inflation and interest compounding. Furthermore, they found that people who score higher on the financial literacy questions tend to plan for retirement.

Beckmann (2013) examined the relationship between financial literacy and household savings in Romania. She found that financial literacy has a positive impact on saving behaviour in Romania and that people are likely to have more than one saving investments and further more they are likely to invest for retirement.

Lusardi, Mitchell & Curto (2010) observed financial literacy among the young adults in the U.S. using three questions on interest rate, inflation and risk diversification. Their results indicated the majority of young adults lack basic knowledge of, interest rates, inflation and risk diversification. Their findings also show a strong relationship between financial literacy and sociodemographic characteristics and family sophistication. They found low levels of financial literacy among females without a high school education whose parents were not wealthy.

Agarwall, Barua, Jacob & Varna (2013) conducted a study of financial literacy among working young in urban India. The aim of the study was to investigate the influence of socio-demographic factors such as family income, gender, education, marital status, family budgeting and financial composition. They found a significant relationship between socio-demographic factors and financial literacy.

Akben-Selcuk (2015) conducted a study to explore the factors influencing behaviours among college students in Turkey. The study focused on three financial behaviours, paying bills on time, having a budget in place and saving for the future. The results reveal a significant difference between male and female students who were observed in budgeting behaviour, male students were found to be less likely to have a budget to control their finances when compared with their female counterparts. The results also suggest that finance courses taken in college or high school and work experience were positively related to saving behaviour, but there was no positive relation on timely payment timely payment or budgeting.

Financial literacy surveys in many African countries find that the majority of consumers lack adequate financial knowledge and that there is a need for financial education.

Finscope 2008 survey results indicate that large proportions of populations in countries such as Mozambique, Malawi and Nigeria lack awareness of basic financial products and concepts such as savings accounts, interest on savings, insurance and loans.

2.8 FINANCIAL LITERACY AMONG SCHOOL TEACHERS

Currently there are limited studies on financial literacy among school teachers. This study will fill the gap in the literature. Some studies conducted in other countries have shown low to moderate financial literacy among teachers. The researcher could not find any similar studies on financial literacy among school teachers in South Africa.

Brandon and Smith (2009) explored the financial knowledge and self-efficacy of prospective teachers towards teaching basic concepts in personal finance in Southern Alabama. The main aim of the study was to examine prospective teachers' financial knowledge, use of financial products, and their perceived self-efficacy toward teaching the basic principles of personal finance. The results show that the overall level of financial literacy is low. However, their findings reveal that prospective teachers at the graduate level were more financial knowledgeable than those at the senior level. The authors also find no difference in the overall financial knowledge of prospective teachers based on age, gender, ethnicity, and marital status. Way and Holden (2009) find that teachers need financial literacy for their own personal well-being especially future retirement adequacy.

Regecova and Slavickova (2010) examined a sample of 25 prospective mathematics teachers in the Slovak Republic. They find an insufficient financial literacy among Mathematics teachers. Petraskova and Hasek (2012) investigated the levels of financial literacy of secondary teachers in the Czech Republic; they used the questions adopted from the national survey of financial literacy in the United States of America (USA) FINRA, 2012 their study discovered deficiencies in financial literacy among teachers. The authors recommended appropriate financial education programs for teachers. Baron-Donavan, Wiener, Gross and Block-Lieb (2005) conducted a study of financial literacy among teachers in the US; they found an improved financial knowledge among teachers who attended financial literacy program.

Bahonar and Sandrabadi (2014) conducted a study among teachers in Yazd County schools in Iran. The aim of the study was to examine the relationship between teachers' financial literacy and prosperity. Their results indicate that more than 60% of teachers are well off financially. However, their level of financial literacy is inadequate. Their results also indicate that the main problem is evident in the areas of borrowing, saving and spending, but they are more knowledgeable in the area of retirement planning and insurance. On the other hand, Lucey, Hatch and Giannangelo (2014) used a convenience sample of 79 elementary and middle teachers

in Midwestern Institution in America to assess the financial knowledge among teachers, their results reveal a moderate level of financial knowledge among teachers in Midwestern Institution.

2. 9 FINANCIAL LITERACY IN SOUTH AFRICA

Financial regulators in many countries recently have obtained statutory mandates to enhance consumer financial literacy. The government of South Africa recognises the lack of, and need for, financial education (RSA MOF, 2006). Many developed countries have excessive debt levels and diminishing saving, even though they have abundant wealth and literacy at their disposal compared to developing countries (Anthens, 2004). Since the late 1990s, the importance of financial literacy in South Africa has been recognized, with various programmes being introduced by government, non-profit organisations, private companies and financial industry (Finmark Trust, 2004). However, low levels of financial literacy are still visible in most developing countries, including South Africa (FinScope, 2008; OECD, 2009). The baseline study conducted by the Financial Services Board (2012) also found very low levels of financial literacy among South Africans.

The financial literacy debate has stimulated many studies in South Africa. Most of these studies focused on students and small and medium businesses. Researchers such as Louw (2009), Lorgat (2003), Kotze and Smit (2008), Botha (2013), Gouws and Shuttleworth (2009), Van Niewenhuyzen (2009), Shambare and Rugimbara (2012), Van der Merwe (2012), Oseifuah (2010), Eresia-Eke and Raath (2013) and De Clercq and Venter (2009) conducted research on financial literacy in South Africa. These studies found low levels of financial literacy among students and small and medium businesses. Currently there are no studies on financial literacy among teachers. These studies tend to concentrate on students. While it is important to improve the financial knowledge and skills of students, it is also important to improve the financial knowledge and skills of teachers because this could help to increase students' financial knowledge and skills. Brandon and Smith (2009) stated that equipping teachers with financial knowledge, skills can play an important role in equipping the knowledge, skills and abilities needed to increase their economic security and well-being. This study is aimed to fill this gap. The studies conducted in South Africa ignore the role that could be played by parents. Studies have shown students/children can learn from their parents who are financially savvy. These studies were also conducted in some of the parts of South Africa; as a result, they don't represent the levels of financial literacy for the whole country.

Studies conducted in South Africa amongst the following groups found that the individuals studied were neither financially literate nor in possession of financial literacy skills necessary to make informed decisions: high school students (Symanowitz, 2006); college and university students (Botha, 2013; Louw, 2009; Shambare & Rugimbana, 2012; Kotze & Smit, 2008); small and medium businesses (Oseifuah, 2010) Eresia-Eke & Raath, 2013); adults (De Clercq & Venter, 2009; Van Nieuwenhuizen, 2009).

College students

Studies among college/university students in South Africa found worrisome low levels of financial students among this group of students.

Kotze and Smit (2008) studied the levels of financial literacy among 286 business management students with a minimum of three years working and management experience. They found that respondents lack confidence in money management skills.

Louw (2009) conducted a study to evaluate the financial competencies of third year students at the University of North-West in Potchefstroom Campus. He found a lack of knowledge in the fields of banking, taxation, financial planning, interest rates and inflation among third year students. The results also suggested that students from the Faculty of Economic and Management Sciences performed better in these areas when compared with their counterparts from the Faculty of Health Sciences.

Similarly Botha (2013) conducted a study among third year students who are studying towards a diploma at the University of Johannesburg. The aim of the study was to determine whether students who study towards a diploma in a finance-related field have higher financial literacy levels than those studying towards a diploma that is not finance related. The findings revealed low levels of financial literacy among final year diploma students in different fields of study at the University of Johannesburg. However, finance students performed better than non-finance group.

Fakoti (2014) conducted a study to assess the level of financial literacy of non-business university students using self-administered questionnaires at two universities in South Africa located in Gauteng and Limpopo provinces. The sample consisted of final year agriculture and chemistry students. The results revealed that non-business university students have low level of financial literacy.

Small and medium businesses

Eresia-Eke and Raath (2013) investigate the relationship between financial literacy and business growth among SMME owners; their sample consisted of small business owners in the Gauteng Province. They found no significant link between business owners' financial literacy and business growth.

Oseifuah (2010) conducted a survey to investigate the level of financial literacy and impact on youth entrepreneurship in Vhembe District. The results indicated that the level of financial literacy among youth entrepreneurs in Vhembe District is above average. However, the study conducted by Fakoti (2014) contradicts with this finding. Fakoti (2014) investigated the level of financial literacy among the owners of new-micro enterprises in South Africa using a self-administered questionnaire. This study was motivated by high failure rate of new SMME's in South Africa. The findings suggest a low level of financial literacy among the owners of new micro-enterprises in South Africa.

2.10 Conclusion

In this chapter, financial literacy was theorised. It was found there are various definitions of financial literacy because different researchers have different points relating to financial literacy. It was also noted from the literature that many researchers find it difficult to measure the levels of financial literacy because of the lack of a standardised measure of financial literacy. Demographic characteristics (such as gender, age, marital status, race, work experience and education level) influencing the levels of financial literacy were discussed. It was found that different studies reveal different results. In this chapter, studies from different countries were used to compare the levels of different groups of individuals. Most of these studies found low levels of financial literacy among individuals. It was noted that many studies conducted in South Africa have concentrated on students and small and medium businesses. These studies also found low levels of financial literacy among these groups.

In this chapter, literature review on financial literacy among school teachers was conducted. Most of these studies found low to moderate levels of financial literacy among school teachers. While research on financial literacy among school teachers have been conducted in other countries, no known studies have tested the levels of financial literacy among school teachers in the Johannesburg Central District.

In this chapter, the importance of financial literacy was also highlighted. It was discovered from the literature that financial literacy influences planning behaviour and individuals who are financially literate are likely to accumulate assets and it was also found that financial literacy improves behaviour such as saving, improved debt management, retirement provision and can also result in less financial stress. It was also found that financial literacy can lead to improved engagement in personal financial planning activities such as investing in shares and property.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 INTRODUCTION

In this chapter the research design applied is described by identifying the population and sample of the study. The sampling methods used in this descriptive study are discussed. This chapter describes the data collection method and data analysis used to establish the aims and objectives of the study. The techniques used in ensuring the validity and reliability are also discussed in this chapter.

Leedy and Ormrod (2013) defined research methodology as the general approach the researcher takes in carrying out the research project to some extent.

3.2 RESEARCH DESIGN

Cooper and Schindler (2001) described research design as the blueprint for fulfilling research objectives and answering research questions. According to Cooper and Schindler (2001), research design can be classified into three categories, namely descriptive, causal and exploratory. Descriptive research design is designed to obtain data that describe the characteristics of the topic of interest in research. The main aim of causal research design is to test whether one event causes another. According to the description of the exploratory research design by Hair Jr, Celse, Money and Samouel (2011), this choice is appropriate when the researcher knows little about the problem or opportunity. The researcher used a descriptive research design. The study is descriptive in nature. Leedy and Ormrod (2013) assert that the researcher who conducts a descriptive study wants to determine the nature of the data.

The researcher used primary and secondary data. Trafford and Leshem (2008) distinguished between three sources of data, namely primary, secondary and supporting sources. Primary data were collected by means of questionnaires and secondary data consists of data obtained from published and unpublished articles, academic journals, the internet and other local newspapers.

3.3 RESEARCH METHOD

Quantitative and qualitative research approaches are commonly used research approaches in a research study. Maree and Pietersen (2012) argued that quantitative research makes use of numeric data to examine the correlations between the variables. The principal purpose of quantitative research is to test hypotheses on a large representative sample by making use of structured data gathering procedures (Struwig and Stead, 2010). Dawson (2006) posits that quantitative research generates statistics through the use of large-scale survey research, using methods such as questionnaire or structured interviews. In contrast, qualitative research makes use of techniques that are not dependent on numerical measurements (Zikmund and Babin, 2013). Qualitative methods attempt to develop an understanding of how participants experience a specific outcome or incident (Berndt and Petzer, 2012). Leedy and Ormrod (2013:96) stated that the purpose of quantitative approach is to seek explanation and predictions that will generalize to other persons and places, while qualitative research seek a better understanding of complex of situations. Leedy and Ormrod (2013:95) stated that although quantitative and qualitative approaches differ they also have the following similarities:

- They both identify a research problem;
- They review related literature; and
- Collected data is analysed.

The researcher used a descriptive quantitative research design in this study. This type of research design involves identifying the characteristics of an observed phenomena or exploring possible correlations. The reason for choosing this methodology was because of the nature of the study, which involved mostly with numbers and measurements. The aim was to learn about a population by surveying a sample of population and getting to know about their characteristics and attitudes.

3.4 TARGET POPULATION

Zikmund and Babin (2013) described the target population as any complete cluster entities that share a general set of characteristics and are in possession of information required by the researcher in order to make the necessary conclusions. The target population in this study consisted of primary and high school teachers employed in the Johannesburg Central District in Gauteng Province.

3.5 SAMPLING

Kumar (2011) defined sampling as the process by which a few are selected from the entire group to become the basis for estimating the occurrence of an unknown piece of information or situation regarding the entire group. Pagono (2006) stated that sampling is used because collecting data from the whole population can be very expensive. According to Cooper and Schindler (2001:163), the reasons for sampling include: lower costs, greater accuracy of results, and greater speed of data collection and availability of data elements.

There are two sampling approaches that can be used, namely; probability sampling and non-probability sampling. Probability sampling entails selecting each member of the population randomly (Leedy and Ormrod 2013), and non-probability sampling is based on personal judgment or convenience (Zikmund, 2003). Leedy and Ormrod (2013) stated that the non-probability approach is used where some members of the population have little or no chance of being sampled. The researcher adopted a non-probability sampling. The techniques used to conduct non-probability sampling include judgemental sampling, convenience or accidental sampling, snowball sampling and quota sampling (Leedy and Ormrod 2013). Judgemental sampling occurs when a researcher selects sample members to conform to some criterion. Snowball sampling: this sampling technique is used when the researcher contacts a small number of members of the target population and gets them to introduce the researcher to others Walliman (2012). Quota sampling in this method of non-probability sampling, respondents are selected in the same proportions that they are found in the general population, but not in a same fashion (Leedy and Ormrod, 2013). Convenience sampling is described as a low-cost, but less reliable non-probability sampling method where element selection is unrestricted or left to those elements easily accessible by the researcher (Cooper & Schindler, 2001).

The researcher applied convenience sampling also known as accidental sampling. The researcher selected this technique due to time and cost constraints involved in this study. Welman and Kruger (2005:63) described convenience sampling as a form of non-probability (non-random) sampling as most convenient selection of population members which are near and readily accessible, so as to obtain an approximation of the results without incurring the cost or time needed to choose a random sample. They further found that non-probability sampling offer an advantage of being less complicated and more economical in terms of time and cost. Wilson (2006) pointed out that non-probability sampling methods are easier to conduct and economical.

The researcher selected school teachers which are located within the area and available to provide information.

In contrast, Hair Jr. et al. (2011) stated that disadvantages of non-probability sampling include the fact that the findings used can be generalised to the population, but it cannot be done with a specified accuracy.

3.6 SAMPLE SIZE

It is usually impractical and uneconomical to involve all members of the population in a research project and as a result, a sample of population is taken. It is therefore important that a sample of the population is selected.

The sample size of a research study constitutes the number of units that will be selected from the target population (Burns & Bush, 2010). Smith and Albaum (2012) stated that the sample size of a study depends on three factors; namely the judgement of the researcher, the required minimum size of the study, and costs. According to Fox and Bayat (2007), the choice of sample size is regulated by four parameters: the level of certainty of the collected data to be representative of the total population, the accuracy required as the basis for the estimates made for the sample, the type of analysis that will be used as many statistical techniques have a minimum threshold of data and cases for every variable and the size of the total population from which the sample will be drawn. Sekeran and Bougie (2010), contend that a sample size ranging between 30 and 500 is suggested depending on the nature of the questions. Hair Jr et al. (2011) suggested that the following steps must be followed in order to select the representative sample:

1. Defining the target population;
2. Choosing the sampling frame;
3. Selecting the sampling method;
4. Determining the sample size;
5. Implementing the sampling plan.

3.7 DATA COLLECTION

According to Struwig and Stead (2010:41), the data collection method indicates how data will be obtained. The researcher used both the primary and secondary data in this research. The primary data was collected from the respondents through self-administered questionnaires. Secondary data consists of data collected by means of an extensive literature study. This includes journal

articles, textbooks and internet searches on financial literacy. According to Hair Jr. et al, (2011), secondary data has advantages and disadvantages as described in Table 3.1:

Table 3.1 The advantages and disadvantages of using the secondary data

Advantages	Disadvantages
Using secondary data can save cost, time and human capital	Quality concerns
Potential for new insights	Age of data needs to be considered

Hofstee (2011:132) described questionnaires as a form of structured interviews, where all respondents are asked the same questions and often offered the same options in answering them (yes/no, ranked on a scale etc). The advantage of questionnaires is that participants respond to them with confidence and the assurance that their responses remain anonymous (Leedy and Ormrod 2013). Bless and Higson-Smith (1995) stated that questionnaires have the advantage of being standardized, cheap and time effective. According to Kruger and Mitchell (2005), a questionnaire is the perfect technique for collecting survey data, because it generally provides information on:

- What a person knows: knowledge, factual information.
- What a person likes or dislikes: values, preferences, interests and tastes.
- What a person thinks: attitudes and beliefs.
- What a person has experienced or what happens at present.
- The typical behaviour of a person.



Hofstee (2011:132) stated the following advantages of using questionnaires for data collection:

- They can offer confidentiality to respondents.
- They are easy to analyse and turn into quantitative results.
- They can be sent to more people to raise confidence in researcher's sample.

However, questionnaires can also have disadvantages Hofstee (2011:132) such as:

- Not allowing the researcher the opportunity to interact or observe with participants.
- They don't allow for deviation for the set format.
- Take longer to complete than telephone or personal interview.
- Response rate is often very low.

3.8 FORMAT OF THE QUESTIONNAIRE

The questionnaire comprised of seven sections. Sections A, B, C, D, E, F and G. Section A consisted of eight background and demographic questions. The questions measured participants' age, gender, work experience and employment status. Sections B, C, D, E, F and G comprised of questions with responses measured in five-point scale, ranging from strongly agree to strongly disagree. Stangor (2010:170) contends that a Likert scale consists of a series of items that indicate agreement or disagreement with the issue that is to be measured, each with a set of responses or which the respondents indicate their opinion. According to Leedy and Ormrod (2013:207), the rating scale —also known as Likert scale — is more useful when behaviour, attitude, or other phenomenon of interest needs to be evaluated on a continuum. Each questionnaire has a cover letter explaining the purpose of the study, indicating the estimated completion time of the study as well as assuring the school teacher that information supplied by them would be treated as confidential, their responses will remain anonymous and their participation is entirely voluntary.

According to Walliman (2012:157), there questionnaires can be delivered personally, by post or electronically. For the purpose of this study the researcher chose to distribute the questionnaires personally to selected school teachers in Johannesburg Central District. The following are the advantages of personal delivery (Walliman 2012:157).

- The researcher can help the respondents to overcome difficulties.
- The researcher can use personal persuasion and reminders to ensure a high response rate.
- The researcher can also find out the reasons why some people refuse to answer the questionnaire.

130 questionnaires were hand-delivered to the school teachers employed in the Johannesburg Central District during the third school term. The respondents filled in the questionnaire enclosed in Appendix G after school hours. Each respondent received a letter explaining the purpose of the study, the participants' rights. The participants were also asked to sign a consent form. The respondents were guaranteed anonymity and confidentiality of their responses and they were told that it would take approximately 30 minutes of their time to complete the questionnaire. All respondents were asked to sign a consent form before completing their questionnaire.

Cooper and Schindler (2001:765) distinguish between two types of target questions that can be used in questionnaire; namely close-ended and open-ended questions. Cooper and Schindler

(2001:765) defined open-ended questions as type of measurement questions in which the respondent provides the answer without the help of an interviewer, the respondent is able to express his/her views or opinions, whereas close-ended questions as type of measurement questions that present the respondent with a fixed set of choices. According to Cooper and Schindler (2001:426), close-ended questions are favoured by researchers over open-ended questions because of their efficiency and specificity.

According to Kumar (2011) close- ended questions have advantages and disadvantages.

Advantages of close-ended questions:

- Responses are easy to compare and analyse;
- Quick to answer;
- Respondents understand and answer questions in the same framework with fewer irrelevant answers provided.

Disadvantages of close-ended questions:

- The desired answers of respondents might not be available;
- Misinterpretation of a question may go unnoticed and
- Respondents with no opinion or knowledge or without thinking can answer close-ended questions.

In this research the close-ended questions were examined. The questionnaire comprised of seven sections as depicted in Figure 3.1



Figure 3.1 Questionnaire Sections

3.9 PILOT TESTING

Zikmund and Babin (2013) described pre-testing as a trial run using the survey instrument with a group of experienced researchers or actual participants to resolve fundamental problems in the instructions, items or design of a questionnaire, as well as to identify possible misinterpretations by participants. Jankowicz (2007:250) concluded that the pilot study is the final opportunity to adequately resolve the following issues:

- That the research design is appropriate to address the research questions.
- That the data collection methods are suitable.
- That the wording of the data collection methods' questions and instructions are clear and that the arrangements for recording responses will work.
- That the data analyses are likely to give the kind of information needed.
- That the findings will be informed of the research.

The questionnaire was first pilot-tested on a small sample of 10 respondents to ensure that the instrument was valid and reliable for achieving the study objectives. The respondents were invited to comment on the questionnaire items. It followed from the pilot study that the respondents understood the questions as measurement units of the data collection instrument for the study. However, certain questions such as questions 12, 32 and 40 were modified. The following changes were made to the questionnaire:

- Question 12 was edited to read " I take out a loan from an authorised provider or money lender.
- Question 32 was modified since the sentence did not read correctly as the word "plan" was left out in the questionnaire.
- Question 40 was also modified since the sentence did not read correctly. The word "have" was omitted in the questionnaire.

No questions were deleted from the initial questionnaire done to the piloting exercise.

3.10 DATA ANALYSIS

Walliman (2012:173) contends that data collected through surveys, experiment, or whatever methods used in the study are of little use to anyone if they are presented as raw. Therefore, it is the responsibility of the researcher to ensure that data is analysed and presented in a clear and concise fashion. According to the Walliman (2012:175), the reasons for analysing data include the following:

- Examine relationships;
- Test hypothesis;
- Make comparisons;
- For measurement.

In this study the SPSS statistical package (version 23) was used in the statistical analysis of the data. Leedy and Ormrod (2013:302) contend that statistical package such as SPSS offer several advantages which include the following:

- Increased user friendliness;
- Speed of completion;
- Range of available statistics;
- Assumption testing; and
- The ability to allow the researcher to summarise and display data in tables, pie charts, bar graphs and other diagrams.

3.11 RELIABILITY

Cooper and Schindler (2001:321) defined reliability as the degree to which consistent results are applied. Leedy and Ormrod (2013) defined reliability as the consistency with which a measuring instrument yields a certain consistent result when the entity being measured hasn't changed.

3.12 VALIDITY

Welman and Kruger (2001:96) defined validity as the extent to which the research findings accurately reflect what is really happening in the situation. To ensure the validity of the questionnaire a pilot test was done on 10 conveniently selected respondents.

3.13 ETHICAL ISSUES

Leedy and Ormrod (2013:140) stated that ethical issues in research fall into one of the following categories:

1 Protection from harm

In this study there was no risk involved in participating. The participants were not subjected to unusual stress, embarrassment or loss of esteem.

2 Voluntary and informed participation

Participation in this study was strictly voluntary. The researcher assured the participants that their participation was voluntary and that they also have the right to withdraw from participation if he/she feels uncomfortable. The participants were asked to sign an informed consent form that described the nature of the research project as well as the nature of one's participation.

3. Right to privacy

The participants were assured that their responses would be handled with confidentiality. Furthermore, the participants were further assured that the research results will be used only for academic purpose.

4 Honesty with professional colleagues

The researcher reported the research findings in a complete and honest fashion, without misinterpretation of the findings. There was no fabrication of data to support conclusions.

The researcher considered a range of ethical matters which included the following:

Application for ethical clearance from the North-West University, Mafikeng Campus.

Permission to conduct research at Johannesburg Central District from the Gauteng Department of Education.

Permission to conduct research in the Johannesburg Central District.

Informed consent from all participating respondents in the Johannesburg Central District.

3.14 SUMMARY

In this chapter, detailed procedures and the method followed in this research study are discussed. This chapter described the research methodology that included the discussion of the population, sampling, data collection method and data analysis. The ethical issues relevant to this study were also outlined. Finally the reliability and validity of the research instrument were determined.

CHAPTER 4

ANALYSIS AND INTERPRETATION OF RESULTS

4.1 INTRODUCTION

In this chapter, the data collected from respondents are analysed to determine the respondents' level of financial literacy. The purpose of the study was to investigate the levels of financial literacy among school teachers in the Johannesburg Central District. The chapter starts with analysis of the respondents' demographic information. The respondents' demographics allowed the researcher to establish whether the factors such as gender, age, race, marital status, work experience, and personal finance course have any influence on the level of financial literacy. The rest of the chapter is organised according to the responses to the research questions.

4.2 DESCRIPTION OF THE SAMPLE

The sample consisted of primary and secondary school teachers employed in the Johannesburg Central District. The researcher selected respondents who were located within the specified range and who indicated that they were available to participate. The total sample consisted of 130 teachers. Out of 130 questionnaires sent only 111 were completed and returned. This resulted in a usable response rate of 85%.

4.3 DATA COLLECTION

The paper-based questionnaires were distributed and collected from respondents during break and after school hours.

4.4 DATA ANALYSIS

All valid questionnaires were captured and analysed with SPSS version 23.

Demographic profile of respondents

In this section, the demographic variables of the respondents are analysed. The results are analysed and interpreted and are presented in a frequency table, a bar chart, or a pie chart.

Table 4.1 Gender composition of this study

Gender	Frequency	Percentage (%)
Male	46	41.4
Female	65	58.6
Total	111	100

The profile of the study is made up of 46 male and 65 female respondents as presented in Table 4.1 as a percentage. The gender difference of the sample indicates that 41.4% per cent of respondents are men and 58.6% are women. Gender was coded 1 for male and 2 for female.

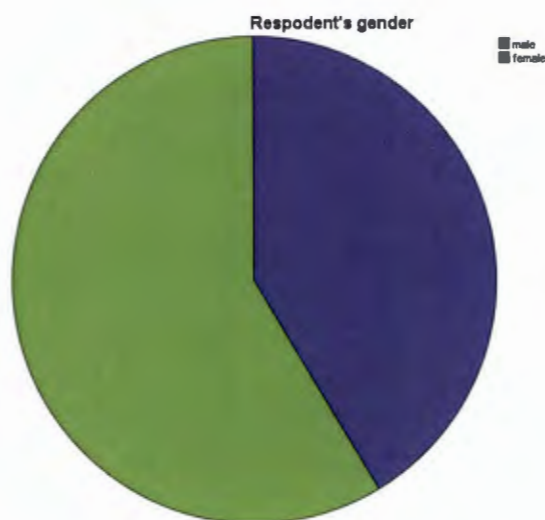


Figure 4.1 Gender composition

Marital status was coded 1 for single, 2 for married, 3 for divorced or separated, 4 for engaged or living together and 5 for widowed. Table 4.2 indicates that 36% of the respondents were married, 31% were single, 13.8% were divorced or separated, 9% were either engaged or living together and 10.8% were widowed.

Table 4.2 Marital status

Marital status	Frequency	Percentage
Single	34	31.0
Married	40	36.0
Divorced/separated	15	13.5
Engaged/living together	10	9.0
Widowed	12	10.8
Total	111	100.0

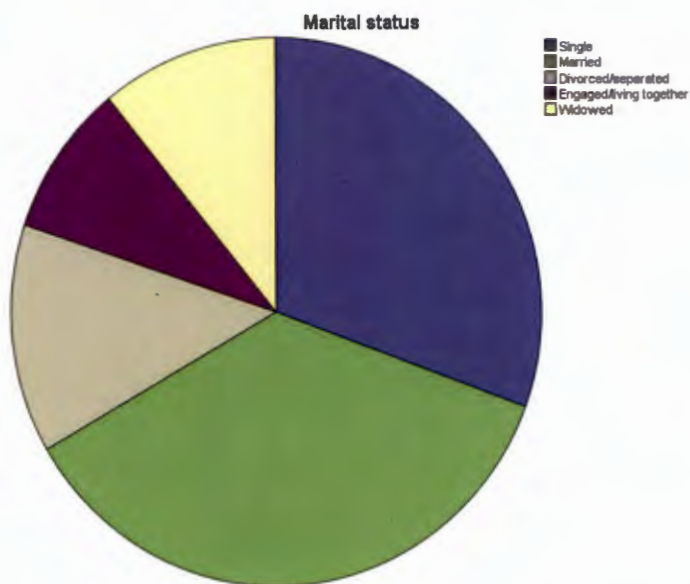


Figure 4.2 Marital status

Age groups represented in this study

The demographic variable of age was broken into five groups, namely; 21 to 30, 31 to 40, 41 to 50, 51 to 60 and over 61 years. According to data represented in Table 4.3, 27.9% of the respondents were between the ages of 31 and 40, 25.2% were between the ages of 51 and 60. The data also reveal that 22.5% and 23.4% of the respondents were between the ages of 21 and 30 years and 41 and 50 years respectively.

Table 4.3 Age category of the respondents

Age groups	Frequency	Percentage (%)
Valid 21–30 years	25	22.5
31–40	31	27.9
41–50	26	23.4
51–60	28	25.2
Above 61	1	0.9
Total	111	100.0

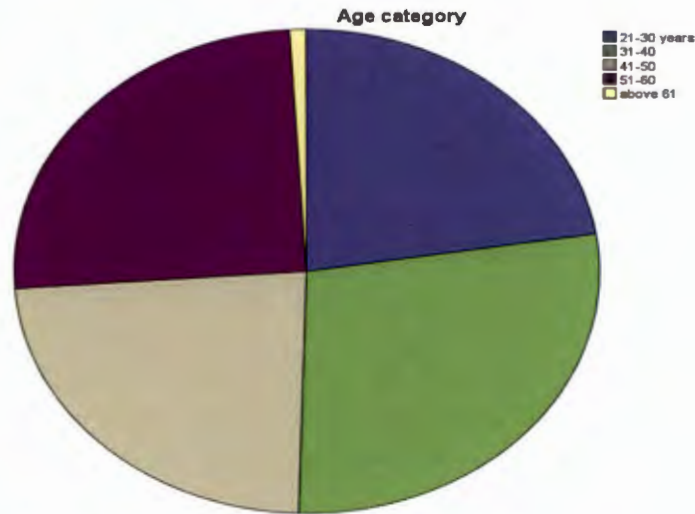


Figure 4.3 Age category of the respondents

Table 4.4 Highest academic qualification

Academic qualification	Frequency	Percentage (%)
Diploma	11	9.9
3 year degree	5	4.5
4 year degree	32	28.8
Honours degree	39	35.1
Masters	24	21.6
Total	111	100

Table 4.4 shows that 35.1% of the respondents have an honours degree, while 21.6% have a Master’s degree. 28.8% of the respondents possess a four year degree. 14.4% of the respondents have either a three year degree or diploma.

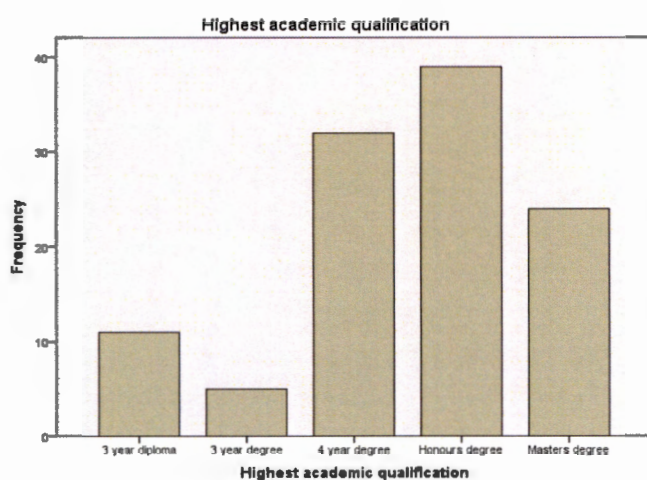


Figure 4.4 Highest academic qualifications

Table 4.5 Years of service as a teacher

Category for service	Frequency	Percentage (%)
Less than 5 years	21	20.7
5–10 years	27	24.3
11–15 years	23	20.7
16–20 years	21	18.9
21–30 years	17	15.3
Total	111	100.0

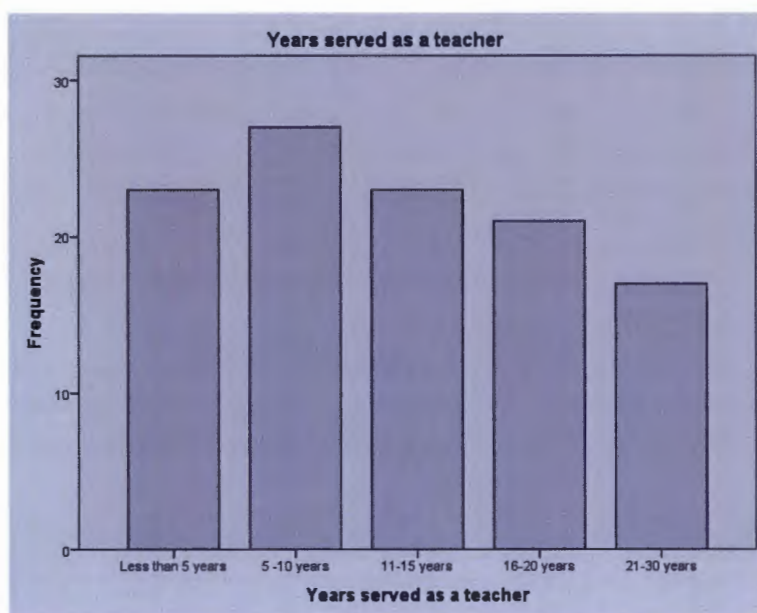


Figure 4.5 Years served as a teacher

Table 4.6 Basis of appointment as a teacher

	Frequency	Percentage (%)
Valid Full -time appointment	100	90.1
Fixed-time contract appointment	11	9.9
Total	111	100.0

Table 4.6 shows that the majority of respondents are employed on a permanent basis. 90.1% of the respondents indicated that they employed on a permanent basis while less than 10% are on fixed time contract appointment.

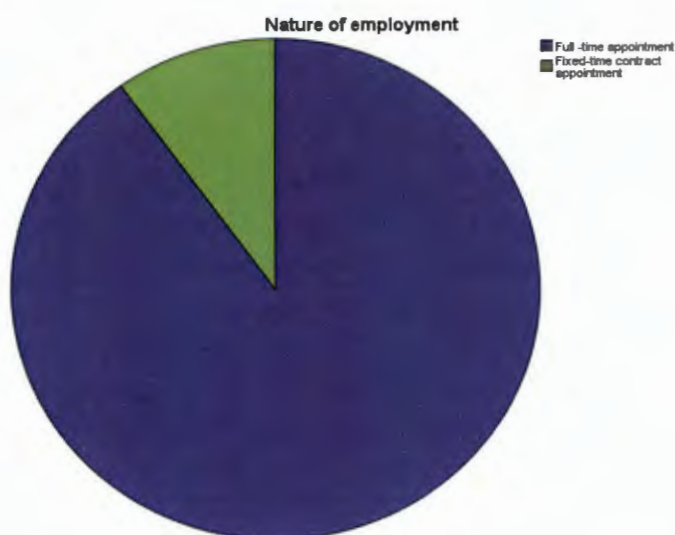


Figure 4.6 Basis of appointment as a teacher

Table 4.7 Attendance of any financial literacy courses

Attendance at literacy courses	Frequency	Percentage (%)
Yes	51	45.9
No	60	54.1
Total	111	100

In this section the respondents were asked to indicate whether they have attended any financial literacy courses. According to Table 4.7, 45.9% of the respondents indicated that they have attended a financial literacy course, while 54.1% of the respondents indicated that they have never attended any financial literacy courses. Even though 54.1% of the respondents have indicated that they have not attended any financial literacy courses, Table 4.8 indicates that 77.10% of the respondents have indicated that they considered themselves to have little and average financial knowledge.

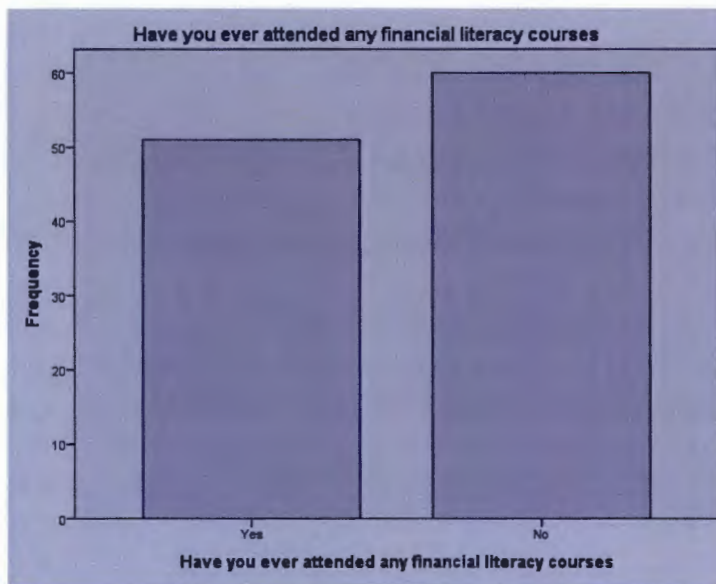


Figure 4.7 Attendance of any financial literacy courses

Table 4.8 The respondents' financial knowledge

Level of financial knowledge	Frequency	Percentage (%)
Very little/no financial literacy	10	9.0
A little financial knowledge	45	40.5
Average financial knowledge	44	36.6
High financial knowledge	10	9.0
Very high financial knowledge	2	1.8
Total	111	100.0

The respondents were asked to rate the extent to which they considered themselves financially knowledgeable. The rating ranged between very little/no financial knowledge, little financial knowledge, average financial knowledge, high financial knowledge and very financial knowledge. 40.5% of teachers indicated that they considered themselves to have low financial knowledge, 39.6% indicated that they consider themselves to possess an average financial knowledge.



Figure 4.8 The respondents' financial knowledge

- a) Research objective 1 and 2: To determine the meaning of financial literacy and the importance of financial literacy.**

By reviewing literature the following two research questions and their objectives were recognised:

What does financial literacy entail?

Why is financial literacy important?

In today's world the importance of improving financial literacy among individuals has increased due to factors such as the development of new financial products, complexity of the financial markets and easy access to credit. Various definitions of financial literacy were given to provide a clear understanding of financial literacy and the influence that financial literacy may have on individuals. The importance of financial literacy was also considered in section 2.5.

- b) Research objective 3: to determine the financial products that school teachers employed in Johannesburg Central District hold**

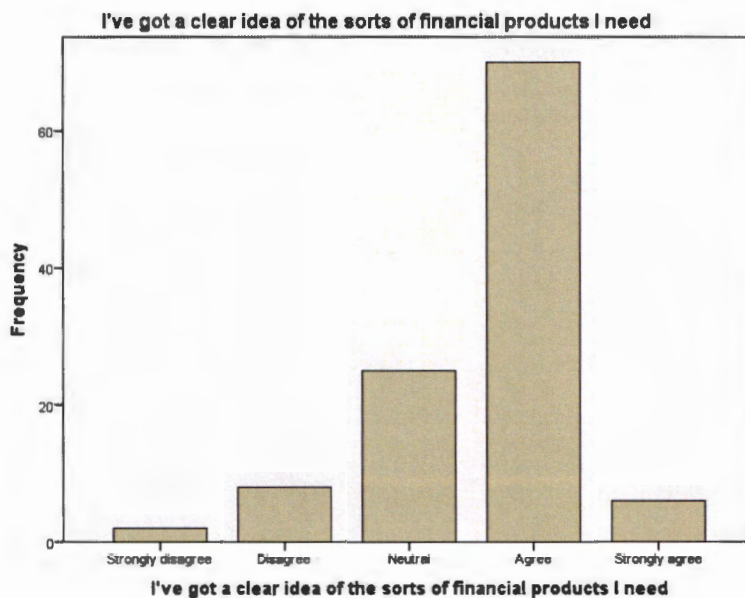
The respondents were asked to indicate the financial products they hold. One of the important financial decisions is the choice of the right product. This study examines the four primary financial areas, namely banking, credit and loan, insurance, and saving and investment. The results indicate that the majority of the respondents have access to these products.

Table 4.9 A clear idea of the sorts of financial products the respondents' need

		Frequency	Percentage (%)
Valid	Strongly disagree	2	1.8
	Disagree	8	7.2
	Neutral	25	22.5
	Agree	70	63.1
	Strongly agree	6	5.4
Total		111	100.0

Table 4.9 shows that 76% of the participants agree and strongly agree that they have a clear idea of the sorts of financial products they need.

Figure 4.9 A clear idea of the sorts of financial products the respondents need



Banking products

Currently the market offers numerous banking products around the world. In this study only two basic banking products, namely: bank account and credit card were examined. The majority of the respondents agreed and strongly agreed that they have these two products. Figures 4.10 and

4.11 show that 97.7% and 79.2% of the respondents have a bank account and a credit card respectively.

Table 4.10 I have a bank account

	Frequency	Percentage (%)
Valid Strongly disagree	2	1.8
Neutral	1	0.9
Agree	39	35.1
Strongly agree	69	62.2
Total	111	100.0

97.7% of the participants agree and strongly agree that they have a bank account.

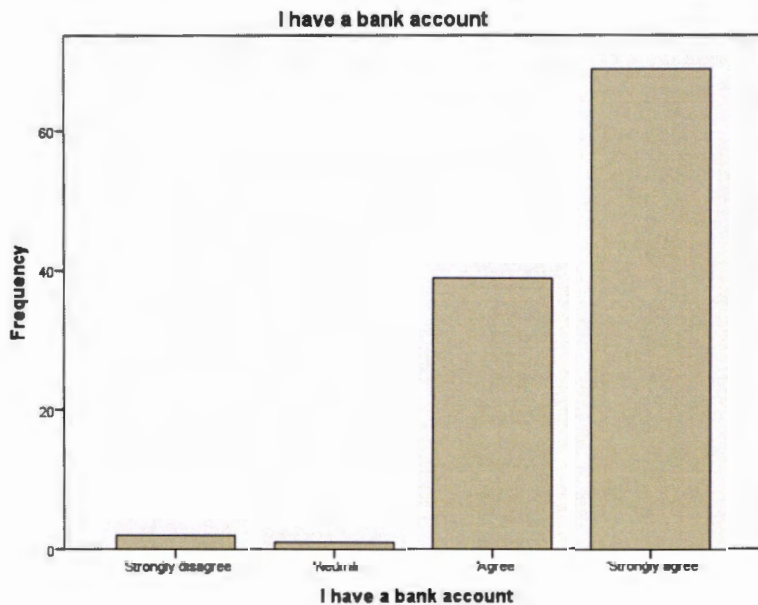
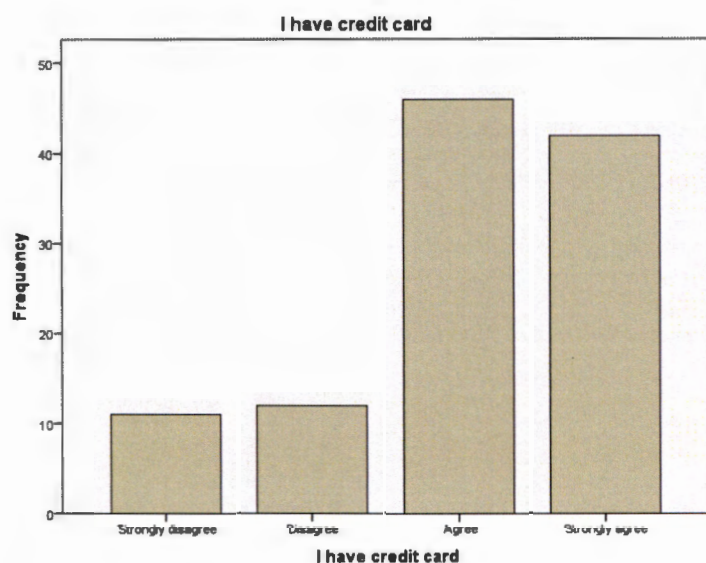


Figure 4.10 I have a bank account

79.2% of the participants have indicated that they have a credit card.

Table 4.11 I have a credit card

		Frequency	Percentage (%)
Valid	Strongly disagree	11	9.9
	Disagree	12	10.8
	Agree	46	41.4
	Strongly agree	42	37.8
	Total	111	100.0

**Figure 4.11 I have a credit card**

This question asked the participants, whether they use a credit card as cash advance or pay bills/buy food. Although 79.2% of respondents indicated that they have a credit card, 81% of the respondents agree and strongly agree that they use a credit card to pay bills/ buy food.

Credit and loan products

Table 4.12 Using a credit card as cash advance to pay bills/buy food

Credit Card used for Cash Advance		Frequency	Percentage (%)
Valid	Strongly disagree	12	10.8
	Disagree	11	9.9
	Neutral	7	6.3
	Agree	80	72.1
	Strongly agree	1	0.9
	Total	111	100.0

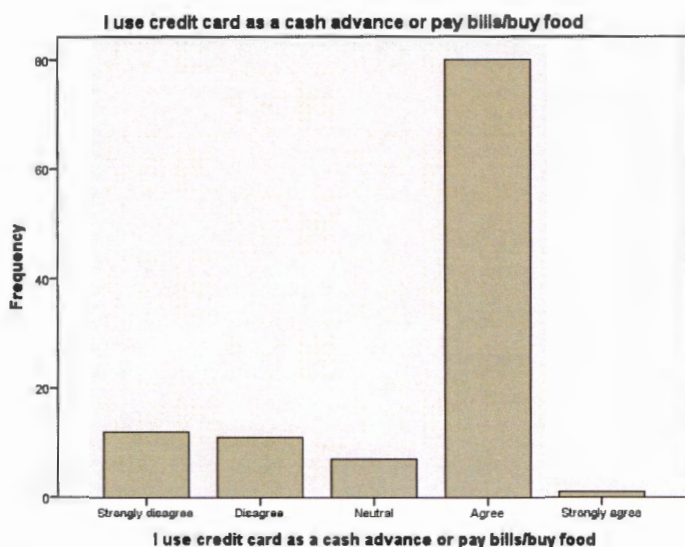


Figure 4.12 Using a credit card as cash advance to pay bills or buy food

Table 4.13 Taking out a loan from an authorised provider or money lender

Use of Loans	Frequency	Percentage (%)
Valid Strongly disagree	5	4.5
Disagree	8	7.2
Neutral	8	7.2
Agree	88	79.3
Strongly agree	2	1.8
Total	111	100.0

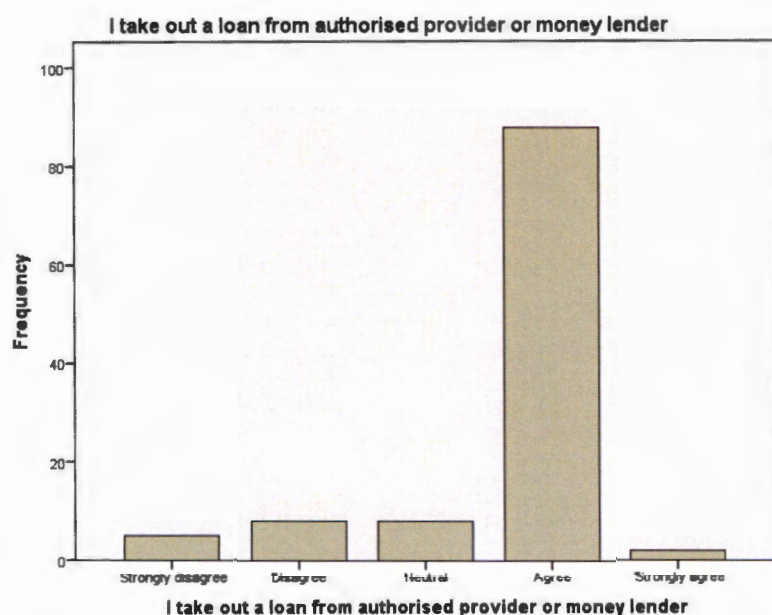


Figure 4.13 Taking out a loan from authorised provider or money lender

According to the Table 4.13, 81.1% of the respondents indicated that they take out a loan from an authorised provider or money lender.

Table 4.14 I borrow money from friends and family

		Frequency	Percent
Valid	Strongly disagree	8	7.2
	Disagree	53	47.7
	Neutral	10	9.0
	Agree	37	33.3
	Strongly agree	3	2.7
	Total	111	100.0

Table 4.14 above shows that only 42.3% borrow money from friends and family and almost 55% don't borrow money from friends and family.

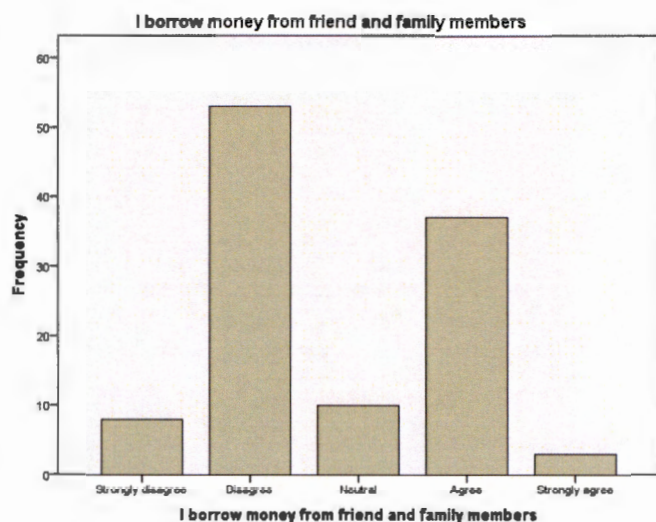


Figure 4.14 Borrowing money from friend and family members

Table 4.15 Taking a loan with informal lender (mashonisa/loan shark)

Use of an informal lender		Frequency	Percentage (%)
Valid	Strongly disagree	27	24.3
	Disagree	63	56.8
	Neutral	6	5.4
	Agree	10	9.0
	Strongly agree	5	4.5
Total		111	100.0

Even though 90% of the respondents agree that they take a loan from an authorised provider or money lender, 81.1% of the respondents disagree and strongly disagree that they have a loan with informal lender (mashonisa/loan shark). It is interesting to note that the majority of the respondents are aware of the informal credit and loan products available in the market such as taking loans from friends and family and a loan from a mashonisa or informal money lender, but it is evident that they prefer to take a loan from authorised credit provider or money lender.

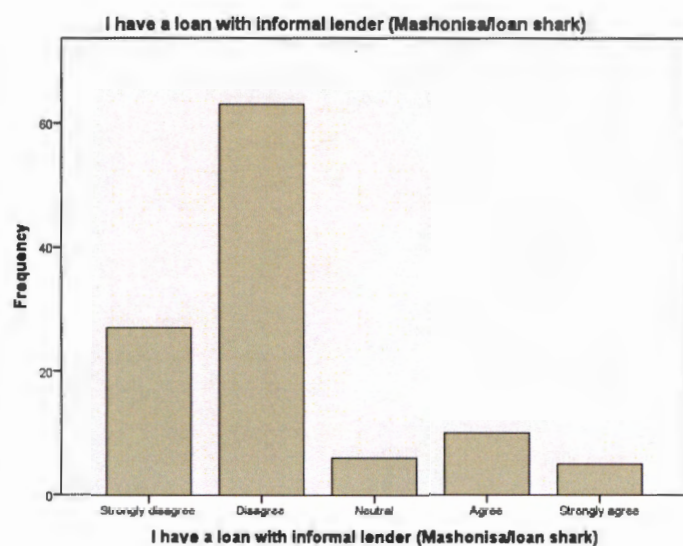


Figure 4.15 Having a loan with informal lender (Mashonisa/loan shark)

Insurance products

Long-term and short-term insurance products are very important products that individuals take to protect him or her against loss, economic and health shocks. The results in Figure 4.16 indicate that 93% of the respondents have taken a life cover.

Table 4.16 I have a life cover with an insurance company

Life cover with insurance company	Frequency	Percentage (%)
Valid Disagree	6	5.4
Neutral	2	1.8
Agree	55	49.5
Strongly agree	48	43.2
Total	111	100.0

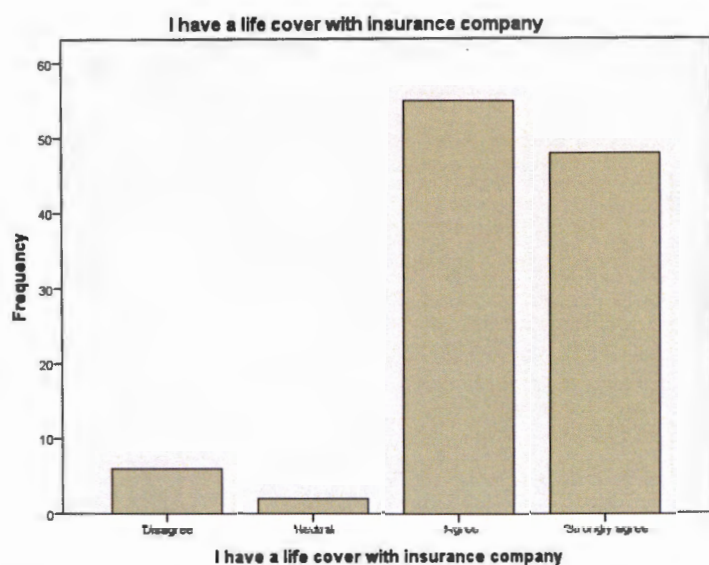


Figure 4.16 Having a life cover with insurance company

Table 4.17 I have taken an insurance policy for all major assets.

		Frequency	Percent
Valid	Strongly disagree	3	2.7
	Disagree	25	22.5
	Neutral	20	18.0
	Agree	48	43.2
	Strongly agree	15	13.5
	Total	111	100.0

Table 4.17 above indicates that 57,7% of the respondents have taken insurance for major assets.

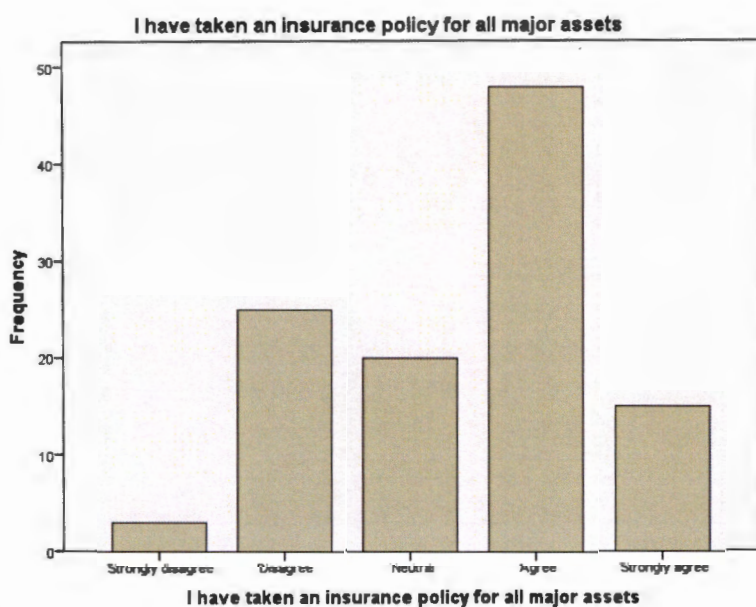


Figure 4.17 Taken an insurance policy for all major assets

Saving and investment products

According to the Table 4.18 65% of respondents indicated that maintain an emergency savings account.

Table 4.18 Maintaining an emergency savings account.

Emergency savings account	Frequency	Percentage (%)
Valid Strongly disagree	1	0.9
Disagree	21	18.9
Neutral	23	20.7
Agree	57	51.4
Strongly agree	9	8.1
Total	111	100.0

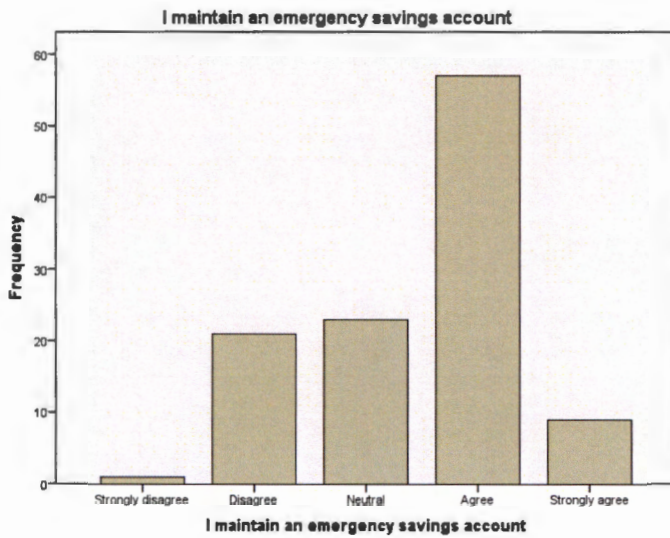


Figure 4.18 Maintaining an emergency savings account

Table 4.19 I contribute to registered retirement scheme

	Frequency	Percentage (%)
Valid Disagree	5	4.5
Neutral	2	1.8
Agree	77	69.4
Strongly agree	27	24.3
Total	111	100.0

According to Table 4.18, 93.7 % of the respondents contribute to a registered retirement scheme.

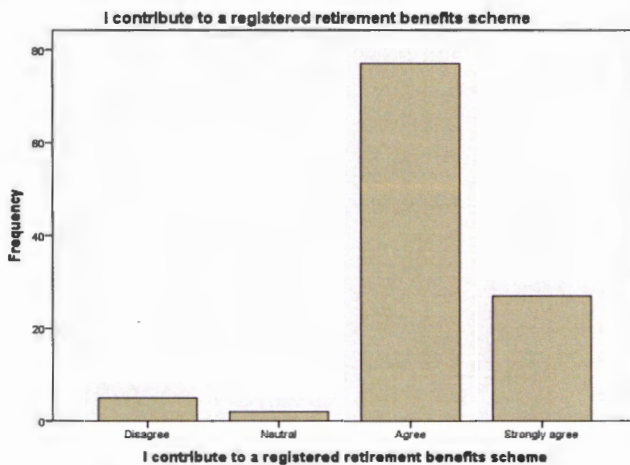


Figure 4.19 Contributing to a registered benefits scheme

c) Behaviour and attitude towards money management and spending

To capture evidence of behaviour and attitude towards money management and spending, the respondents were asked a variety of questions to find out about behaviours such as budgeting, paying bills on time, knowing how much they spend monthly.

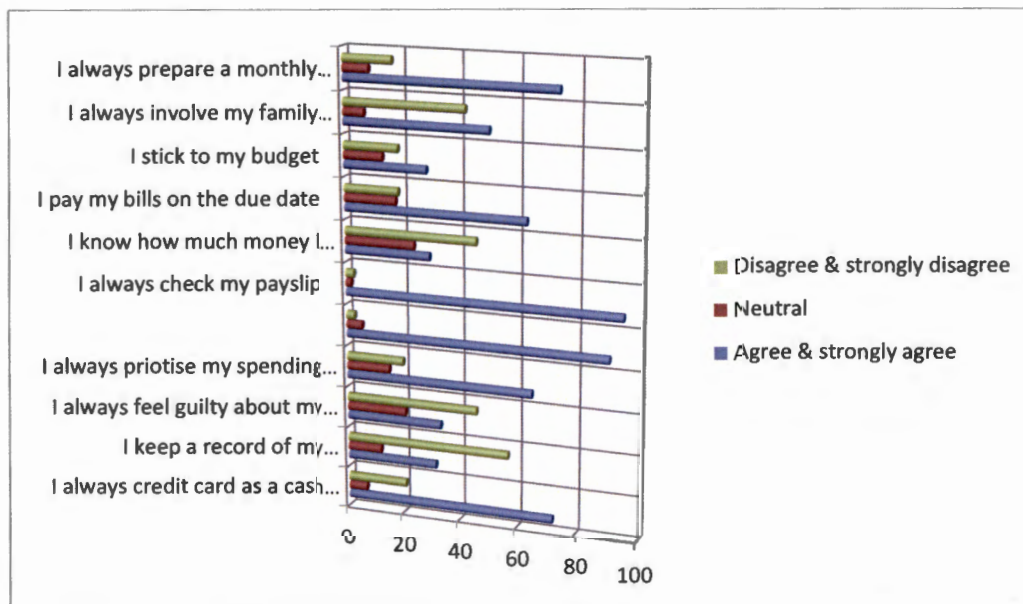


Figure 4.19 Money management

According to Figure 4.19, 73.9% of the respondents have indicated that they always prepare a monthly budget and 50% of the respondents agree and strongly agree that they involve their family when prepare the budget. However, the majority of the respondents have indicated that they do not stick to their budgets. The majority of the respondents indicated that they always check their pay slips and account balances. The results also show that more than 60% of the respondents pay their bills on the due date.

Expenditure behaviour

To examine spending behaviour, respondents were asked how they manage their money. The results indicate that the majority of the respondents strongly agree and agree that they compare prices for major expenses and they also track some or all their expenses. It is also interesting to note that the majority of the respondents indicated that they prefer to save their money for the long term than spending it.

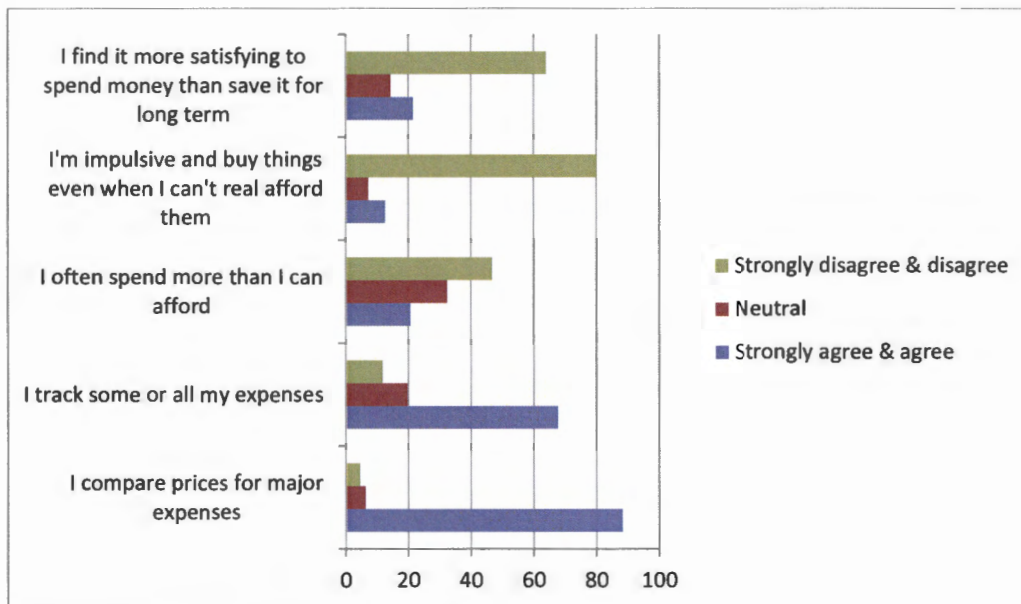


Figure 4.20 Expenditure behaviour

c) To determine the demographic characteristics that influence attitude and money management among school teacher in the Johannesburg Central District

The study examined whether demographic variables (such as gender, age, marital status and education) have a direct influence effect on the respondents' attitudes and behaviour towards money management and expenditure, savings and investments. The results indicate that demographic variables such as gender, marital status, age and education levels have direct influence on the attitude and behaviour towards money management and spending

SUMMARY

In this chapter, the quantitative data obtained through the self-administered questionnaires were presented, analysed and interpreted. One hundred and thirty questionnaires were initially distributed to the participants and one hundred and eleven were returned resulting in a response rate of 85 percent. The data were presented in different forms, including tables, graphs and charts.

CHAPTER 5

FINDINGS, RECOMMENDATIONS AND CONCLUSION

5.1 INTRODUCTION

In this chapter, a summary of the findings is reported from the detailed analysis of the responses to each research question. The limitations and recommendations of the findings for future research are deliberated. Finally, conclusions are drawn. In this descriptive study the levels of financial literacy among school teachers in the Johannesburg Central District were investigated.

The following specific objectives required to achieve the general objectives of the study were examined:

- To define the term financial literacy;
- To determine the importance of financial literacy;
- To determine the financial products that school teachers in Johannesburg Central District hold;
- To examine the attitude and behaviour of school teachers in Johannesburg Central District towards spending and money management; and
- To determine demographic characteristics that influence the attitude and behaviour towards money management among school teachers in the Johannesburg Central District.

Chapter 1 provided a detailed discussion of the background and introduction of the study. This included the research problem, questions and objectives of the study. This chapter also provided the significance of the study and ethical considerations.

Chapter 2 was based on a literature study. A brief background overview and various definitions of financial literacy were given to provide a clear understating of financial literacy (section 2.2). This was followed by an outline of how financial literacy is measured (section 2.3). In section 2.4 the indicators of financial literacy were highlighted and the demographic characteristics affecting financial literacy were researched in section 2.5. In section 2.6, the importance of financial literacy was considered. Section 2.7 reviewed financial literacy around the world.

This was followed by financial literacy among school teachers. In section 2.9, financial literacy in South Africa was outlined.

Chapter 3 highlighted the research design, target population, sample size and how data were collected.

Chapter 4 focused on the analysis and interpretation of the collected data. The data analysis and interpretation started with the analyses of demographic information of the respondents. This section was followed by the analysis was followed of data according to the specific objectives.

The literature review found that there is an alarming low level of financial literacy around the world. Government departments, Non-government organisations (NGOs) financial institutions, academics, private companies and community-based institutions have introduced programmes which attempt to address low levels of financial literacy.

5.3 FINDINGS

This section presents the findings from the literature review and the findings given by the respondents through their responses to the questionnaires.

5.3.1 Findings originating from the literature review

It is evident that financial literacy is a worldwide challenge. Numerous studies reviewed have found low levels of financial literacy among the majority of citizens.

Literature found that even though there is various definitions of financial literacy, researchers find it difficult to measure the levels of financial literacy due to the lack of a standardised measure of financial literacy. It was also discovered from the literature that individuals who are financially literate are likely to accumulate assets and it was also found that financial literacy improves behaviour such as saving, improved debt management and retirement planning. It was also found that financial literacy can lead to improved engagement in personal financial planning activities such as investing in shares and property

Research objective 1: To determine the meaning of financial literacy

The literature review in Chapter 2 (section 2.2) discovered that there are various definitions of financial literacy. It is evident from the literature that financial literacy encompasses concepts ranging from financial skills, financial capability, financial awareness and knowledge. It is concluded that financial literacy refers to consumers'/investors' understanding of financial products and concepts and their ability and confidence to appreciate financial risks and opportunities, to make informed choices, to know where to go for help and to take other effective actions to improve their financial well-being.

Research objective 2: To determine the importance of financial literacy

This research objective has been addressed in chapter 2, section 2.6.

The importance of financial literacy cannot be underestimated. The developments of new products and accessibility of financial products require households to be well-equipped to make complex financial decisions. These new developments increased the need to improve economic active individuals' levels of financial literacy through financial education. It is evident from the literature that individuals who are financially literate are able to make informed financial decisions. Literature studies suggested that financial literacy is important because of the following reasons:

Financial literacy can help individual to improve their behaviour such as the avoidance of over-indebtedness,

Financial literacy can help individuals for tough times, by promoting strategies that moderate risks such as accumulating savings, and purchasing insurance

The literature review also found that financial literacy influences a wide range of financial behaviours, including stock market participation, wealth accumulation, planning and saving for the future, asset accumulation, ability to control spending and budgeting.

On the other hand literature studies found that lower levels of financial literacy are associated with negative financial outcomes such as over-indebtedness, low saving rates, lack of retirement planning and excessive spending.

5.2.2 Findings originating from the empirical study

Research objective 3: To determine the financial products school teachers in the Johannesburg Central District hold.

In order to determine which financial products the respondents were asked which financial products they hold and currently use. The researcher identified four primary financial products; namely banking, credit and loans, insurance, investment and savings.

The results presented in Figure 4.9 to 4.20 reveal that the majority of the respondents have a clear idea of the financial products they need and they also always do research before making any decisions on their product choice. The results also suggest that the majority of the respondents hold different types of banking products, credit/loan, savings and investment and insurance products.

Research objective 4: To examine the attitude and behaviour of school teachers in Johannesburg Central District towards money management and spending.

The fourth research objective examined the respondents' attitude and behaviour towards spending and money management. Various questions were asked to understand the respondents' attitude and behaviour money management. These questions include questions on budgeting, sticking to the budget, paying bills on time, and keeping records of expenses, checking payslip and bank balances.

The findings presented in Figure 4.19 reveal that the majority of the respondents prepare monthly household budgets, however the majority of the respondents do not stick to their budget. The results also suggest that the majority of the respondents check their pay slips and account balances. The results also indicate the majority of the respondents pay their bills on time. This suggests that the majority of the respondents are confident in managing their own finances, but need advice to keep expenditure within the budgeted limits of income.

The respondents were various questions such as comparing prices for major purchases, tracking some or all expenses, spending more than they can afford and impulsive buying. The results are presented in Figure 4.20.

These indicate that the majority of the respondents have a positive attitude towards spending and money management.

Research objective 5: To determine the demographic factors that influence attitude and behaviour towards money management and spending among school teachers employed in the Johannesburg Central District.

ANOVA statistical tests were used in order to examine the demographic factors that influence the attitude and behaviour towards money management and spending among school teachers employed in the Johannesburg Central District. The results in Appendix I suggest that there is strong evidence that demographic characteristics such as gender, age, marital status and education have a significant influence on the attitude and behaviour towards money management and spending among teachers in the Johannesburg Central District.

The results reveal a strong evidence of the relationship between demographic variables such as gender; age, marital status and education on the attitude and behaviour towards money management and spending among school teachers employed in the Johannesburg Central District.

5.4 RECOMMENDATIONS

5.4.1 Recommendations following from the literature review

The literature studied indicated that is difficult to measure the levels of financial literacy due to the lack of standardised measure, the lack of constructs and the lack of comprehensive set of questions to measure all components of financial literacy. As a result, the following recommendations are proposed:

- That future research develop a standardised measurement of the levels of financial literacy; and
- That a comprehensive set of questions that cover all components of financial literacy be developed.

The literature studies suggested that financial literacy enables individuals to make informed financial decisions. However, it is important to note that financial decisions are made are made under uncertainty, hence necessitating risk taking. Therefore it is important individual's attitudes towards uncertainty, their trade-offs between today and the future may have an important role the financial decision making process.

It was discovered from the literature that the majority of the studies on financial literacy in South Africa concentrated on students. It is therefore recommended that future research should consider financial literacy among the workers in the public and private sector.

5.4.2 Recommendations from the empirical study

The results discovered that the respondent have a good levels of basic financial literacy. It is recommended that teachers attend financial literacy workshops regularly to keep them up-to – date with the new development in the market.

It is also important that the Department of Education develops training programs that would assist teachers to impart this financial knowledge to their students.

5.5 LIMITATIONS OF THE STUDY

The study investigated the levels of financial literacy among school teachers in the Johannesburg Central District using a small convenience sample from primary and secondary schools in Gauteng province only. As a result, any conclusions or recommendations based on the research findings of this study take into account the inherent limitations of this study. Even though using a probability sampling to select a sample is expensive and time consuming, it would offer a better representation of the population. It is also possible that the respondents' level of financial literacy might be affected by other variables not included in this study. Time and cost constraints made it impossible to conduct surveys at the entire Gauteng Province. In this study numeric skills questions based on (interest rate, inflation and risk diversification) used by Lusardi, Mitchell & Curto (2010), Lusardi and Mitchell (2011c), Brown and Graf (2013) and Arrodel, Debbich & Savignac (2013) were not used to examine the levels of financial literacy of the respondents. Due to the lack a comprehensive set of questions to measure all components of financial literacy, it is possible that some important questions that could help the research to come to conclusion were omitted.

5.6 CONCLUSION

The main aim of this study was to investigate the levels of financial literacy among school teachers employed in the Johannesburg Central District.

Low levels of financial literacy seem to be a challenge around the world. It is evident that a lack of financial skills and knowledge affect individuals' ability to make informed financial decisions. Studies revealed that low levels of financial literacy have been linked to financial mistakes such as over-borrowings, sub-optimal retirement saving, indebtedness, becoming targets of investment fraud and poor financial decisions. Demographic variables such as age, gender, race, marital status, work experience and educational attainment were studied to determine the relationship between these demographic characteristics and financial literacy. The results revealed different findings.

It can be concluded that the results demonstrate general good levels of basic financial literacy among the selected sample. The findings tend to contradict with the findings by Brandon and Smith (2009), Regecova and Slavickova (2010) and Petraskova and Hasek (2012). These researchers found low levels of financial literacy among school teachers.

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APPENDICES

APPENDIX A



NORTH-WEST UNIVERSITY
YUNIBESITHI YA BOKONE-BOPHONA
NOORDWES-UNIVERSITEIT
MAFIKENG CAMPUS

Graduate School of Business and
Government Leadership (GS&GL)
Private Bag x 2948, Mmabatho
South Africa, 2735
Tel: 018-389 2437 Fax: 018-389 2335
Email: Gradschool@nwu.ac.za

12 May 2015

To whom it may concern

Permission to conduct research- Ms SB Ntuli -MBA student

This letter serves to introduce Ms SB Ntuli who is presently a registered student for Master in Business Administration (MBA) programme at the Graduate School of Business and Government Leadership of the North West University. She is conducting a research project on, "An investigation of the level of financial literacy among school teachers in Johannesburg Central District" towards a partial fulfillment of her MBA programme.

In this regard, your office is requested to afford her full co-operation to conduct this research. In particular, Ms SB Ntuli requires permission to access information, data or even to distribute questionnaires.

Your cooperation will be highly appreciated.


Ismail Hanjaye
Research Unit



APPENDIX B



GAUTENG PROVINCE

Department: Education
REPUBLIC OF SOUTH AFRICA

For administrative use:
Reference no: D2016 / 103
enquiries: Diane Bunting 011 843 8503

GDE RESEARCH APPROVAL LETTER

Date:	10 June 2016
Validity of Research Approval:	10 June 2015 to 2 October 2015
Name of Researcher:	Ntuli S.B.
Address of Researcher:	P.O. Box 7528; Johannesburg; 2000
Telephone / Fax Number/s:	012 429 3895; 083 977 6227
Email address:	SNtuli@unisa.ac.za
Research Topic:	An investigation of the level of financial literacy among school teachers in Johannesburg central District
Number and type of schools:	TWENTY Primary and TWENTY Secondary Schools
District/s/HO	Johannesburg Central

Re: Approval in Respect of Request to Conduct Research

This letter serves to indicate that approval is hereby granted to the above-mentioned researcher to proceed with research in respect of the study indicated above. The onus rests with the researcher to negotiate appropriate and relevant time schedules with the school/s and/or offices involved. A separate copy of this letter must be presented to the Principal, SGB and the relevant District/Head Office Senior Manager confirming that permission has been granted for the research to be conducted. However participation is VOLUNTARY.

The following conditions apply to GDE research. The researcher has agreed to and may proceed with the above study subject to the conditions listed below being met. Approval may be withdrawn should any of the conditions listed below be flouted:

CONDITIONS FOR CONDUCTING RESEARCH IN GDE

1. The District/Head Office Senior Manager/s concerned must be presented with a copy of this letter;

Handwritten signature and date:
2015/06/11

1

Making education a societal priority

Office of the Director: Knowledge Management and Research

9th Floor, 111 Commissioner Street, Johannesburg, 2001
P.O. Box 7710, Johannesburg, 2000 Tel: (011) 355 0508
Email: David.Makhado@gauteng.gov.za
Website: www.education.gpg.gov.za

APPENDIX C: A LETTER REQUESTING PERMISSION IN THE JOHANNESBURG CENTRAL DISTRICT

The District Director
Private Bag X01
Braamfontein
2017

Dear Sir

A REQUEST TO CONDUCT RESEARCH IN THE JOHANNESBURG CENTRAL DISTRICT

I am currently in the process of completing my Masters degree in Business Administration at the University of North West. The topic under consideration is an investigation of the levels of financial literacy among school teachers in the Johannesburg Central District. The term 'financial literacy' refers to the combination of consumers'/investors' understanding of financial products and concepts and their ability and confidence to appreciate financial risks and opportunities, to make informed choices, to know where to go for help and to take other effective actions to improve their financial well-being.

I humbly request permission to conduct a research project on the investigation of financial literacy among school teachers in the Johannesburg Central District. The research will be conducted by questionnaires that will be distributed to school teachers. Enclosed is a copy of the questionnaire and a covering letter to the participants.

I hope my request will be considered.

Yours sincerely
Sibongile Ntuli

APPENDIX D A REQUEST FOR REQUESTING TEACHER PARTICIPATION

PO Box 7528

Johannesburg

2000

Dear Principal/Management of the School

REQUEST FOR TEACHER PARTICIPATION

I am currently registered for the degree of Master in Business Administration. I am conducting academic research on the levels of financial literacy among school teachers in the Johannesburg Central District. The topic under consideration is an investigation of the levels of financial literacy among school teachers in the Johannesburg Central District. The term 'financial literacy' refers to the combination of consumers'/investors' understanding of financial products and concepts and their ability and confidence to appreciate financial risks and opportunities, to make informed choices, to know where to go for help and to take other effective actions to improve their financial well-being.

My study entails collection of data via questionnaires from teachers at schools in Johannesburg Central District.

I humbly request permission to conduct research at your school. The data collection will be done after school contact time. The data collected will be used for research purposes only. The name of the school and all the participants in the research will be kept anonymous. Participation is voluntary and the participant has a right to withdraw if she or he feels uncomfortable.

The questionnaire consists of seven sections and will take approximately 30 minutes of your time.

Yours sincerely,

Sibongile Ntuli

**APPENDIX E: A LETTER TO RESPONDENT EXPLAINING THE PURPOSE OF
THE STUDY**

Dear Respondent,

As part of my studies in Master of Degree in Business Administration, I am conducting an academic research to investigate the levels of financial literacy among school teachers in the Johannesburg Central District. The term 'financial literacy' refers to the combination of consumers'/investors' understanding of financial products and concepts and their ability and confidence to appreciate financial risks and opportunities, to make informed choices, to know where to go for help and to take other effective actions to improve their financial well-being.

This is in partial fulfilment of the requirement for the award of a Master of Degree in Business Administration at the University of North West. I, therefore, seek your kind participation in this study. Participation in this research is not compulsory and you may withdraw at any time should you feel uncomfortable. Your opinion will be kept anonymous and the study findings will be used strictly for academic purposes only. Please be assured that all information supplied by you will be treated as confidential at all times. The questionnaire consists of seven sections and will take approximately 30 minutes of your time. Please tick/fill in your responses on the box or blanks provided as accurately and as completely four short sections that will take a few minutes of your time.

Thank you in advance for your corporation.

Yours sincerely,

Sibongile Ntuli

APPENDIX F CONSENT FORM

CONSENT TO PARTICIPATE IN THE STUDY ENTITLED:

An investigation of the levels of financial literacy among school teachers in the Johannesburg Central District.

Study investigator: Sibongile Ntuli

Invitation to participate

I am currently registered for a masters degree at the University of North West. I would like to invite you to participate in a research project that aims to explore the levels of financial literacy among school teachers in the Johannesburg Central District. The term 'financial literacy' refers to the combination of consumers'/investors' understanding of financial products and concepts and their ability and confidence to appreciate financial risks and opportunities, to make informed choices, to know where to go for help and to take other effective actions to improve their financial well-being.

It is estimated that the questionnaire will take approximately 30 minutes of your time.

The study does not involve any kind of risk and the information you provide will be kept confidential.

Your participation in this study is voluntary and you have a right to withdraw if you feel uncomfortable.

Please sign below if you are willing to participate in the research project outlined above.

I.....(full name) have read and understood the nature of my participation in the investigation of the level of financial literacy among school teachers in the Johannesburg Central District.

Signature..... Date.....

APPENDIX H**QUESTIONNAIRE****Section A: Demographic information**

In this section, please tick (✓) inside the box which is relevant to you.

1. What is your gender?

Male	1	
Female	2	

2. What is your marital status?

Single	1	
Married	2	
Divorced/ separated	3	
Engaged or living together	4	
Widowed	5	

3. What is your age category?

21-30 years	1	
31-40 years	2	
41-50 years	3	
51-60 years	4	
Above 61 years	5	

4. What is your highest academic qualification?

Diploma	1	
3 year degree	2	
4 year degree	3	
Honours degree	4	
Masters degree	5	
PHD	6	

5. How long have you served as a teacher?

Less than 5 years	1	
5-10 years	2	
11- 15 years	3	
16-20 years	4	
20-30 years	5	

6. Indicate the nature of your appointment

Full time appointment	1	
Fixed-term contract appointment	2	
Part-time/ Hourly appointment	3	

7. Have you ever attended any financial literacy courses?

Yes	1	
No	2	

8. On a scale of 1 to 5, please rate the extent to which you consider yourself financially knowledgeable:

Very little/ no financial knowledge	1	
A little financial knowledge	2	
Average financial knowledge	3	
High financial knowledge	4	
Very high financial knowledge	5	

Section B: Money management

In this section, please tick (✓) inside the box which closely represents your opinion on each statement

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1. I always prepare a monthly budget					
2. I always involve my family when preparing a budget					
3. I stick to my budget					
4. I pay all my bills on the due date					
5. I always feel guilty about my debts					
6. I know how much money I spend each month					
7. I always check my payslip					
8. I always check my account balances					
9. I feel overwhelmed by my debts					
10. I keep a record of my expenses each month					
11. I borrow money from friend and family members					
12. I take out a loan from an authorised provider or money lender					
13. I always prioritise my spending based on needs, not wants					
14. I have clothing accounts with at least one clothing store					
15. I always ensure that I understand the terms and conditions of any loan I take and ensure I understand the consequences of default.					

16. I use a credit card as a cash advance or pay bills/buy food					
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Section C: Expenditure Practices

In this section, please tick (✓) inside the box which closely represents your opinion on each statement

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
17. I compare prices for major expenses					
18. I track some or all my expenses					
19. I often spend more than I can afford					
20. I am impulsive and buy things even when I can't really afford them					
21. I find it more satisfying to spend money than save it for the long term.					

Section D: Saving and Investment Decisions

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
22. I feel confident in making investment decisions.					
23. I feel I have control over my personal finances					
24. Dealing with money is stressful and overwhelming					
25. Financial planning is only important for the wealthy					
26. My income is adequate for me to meet my monthly living expenses					
27. I feel I have adequate knowledge to manage my personal finances					
28. I am saving in a stokvel or any other informal saving club					
29. I take money out of a flexible home loan account					
30. I tend to live for today and let tomorrow take care of itself					

Section E: Retirement management

In this section, please tick (✓) inside the box which closely represents your opinion on each statement

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
31. I do not have a plan for retirement					
32. I have a plan in place and I'm quite confident that I will have enough for my future					
33. I contribute to a registered retirement benefits scheme.					

Section F: Financial risk Management

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
34. I have a life cover with insurance company					
35. I have taken an insurance policy for all major assets					
36. I maintain an emergency savings account					
37. I can afford to pay my own health care costs.					

Section G: Choosing the right financial products

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
38. I have a bank account					
39. I have a credit card					
40. I have a loan with informal lender (Mashonisa/loan shark)					
41. I've got a clear idea of the sorts of financial products I need					
42. I always research my choices thoroughly before making any financial decisions					
43. I always consult my family/spouse before making any important decisions					

**APPENDIX I Demographic variables with decision variables of money management
and spending**

ANOVA STATISTICAL TEST RESULTS

		Gender	Age	Marital status	Education
I always prepare a monthly budget	df	1	4	4	4
	Sig.	.061	.116	.405	.571
I stick to my budget	df	1	4	4	4
	Sig.	.616	.633	.382	.883
I pay all my bills on the due date	df	1	4	4	4
	Sig.	.194	.085	.111	.044
I always feel guilty about my debts	df	1	4	4	4
	Sig.	.728	.661	.333	.407
I always check my payslip	df	1	4	4	4
		.528	.001	.767	.937
I know how much I spend each month	df	1	4	4	4
	Sig.	.033	.237	.670	.401
I keep a record of my expenses each month	df	1	4	4	4
	Sig.	.114	.313	.830	.042
I borrow money from friend and family members	df	1	4	4	4
		.013	.015	.783	.860
I always prioritise my spending based on needs, not wants	df	1	4	4	4
	Sig.	.752	.088	.044	.139

I have clothing account with at least one clothing store	df	1	4	4	4
	Sig.	.760	.548	.711	.787
I use a credit card as cash advance to pay bills/buy food	df	1	4	4	4
	Sig.	.172	.442	.251	.030
I compare prices for major expenses	df	1	4	4	4
	Sig.	.490	.043	.916	.229
I track some or all my expense	df	1	4	4	4
	Sig.	.392	.252	.581	.690
I always spend more than I can afford	df	1	4	4	4
	Sig.	.477	.447	.041	.094
I am an impulsive buy and buy things when I can't really afford them	df	1	4	4	4
	Sig.	.954	.355	.005	.183
I find it more satisfying to spend money than save it for long term	df	1	4	4	4
	Sig.	.040	.073	.003	.248