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The effect of financial literacy on teachers' personal financial management in Westrand schools

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Thesis research report presented to the Faculty of Commerce, Law, and Management of the University of Witwatersrand, in partial fulfilment of the requirements for the degree of Master of Business Administration

Johannesburg, February 2022

Protocol number: WBS/BA2189073/983

DECLARATION

I, Pranaksha Budhoo, declare that this research report entitled 'The effect of financial literacy on teachers' personal financial management in Westrand schools' is my own unaided work. I have acknowledged, attributed, and referenced all ideas sourced elsewhere. I am hereby submitting it in partial fulfilment of the requirements for the degree of Master of Business Administration in the graduate School of Business Administration, at the University of Witwatersrand, Johannesburg. I have not submitted this report before for any other degree or examination or to any other institution.



Pranaksha Budhoo

Signed at Johannesburg

On the 28th day of February 2023

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DEDICATION

In memory of my father, Mr T. Dayaram, I am authoring this research paper for my Master of Business Administration Degree. For the lessons you have taught me about prioritising my ethics, morals, and values and never giving up on my aspirations,' and never permitting anyone to persuade me otherwise, I am eternally grateful, thank you!

ᘓ Mr Thulsiram Dayaram: 10 October 1940 – 17 December 2016 ᘒ

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ABSTRACT

This research study examines the impact of financial literacy, financial behaviour, and financial wellbeing on educators' financial management, with a specific focus on exploring whether higher levels of education equate to higher levels of financial literacy. Educators play a critical role in society but often face challenges in effectively managing their finances. The objective of this study is to investigate whether educators with higher levels of education possess higher levels of financial literacy, and how financial behaviour and financial wellbeing are influenced. Using a mixed-methods approach, the study collects quantitative data through surveys to measure financial literacy, financial behaviour, and financial wellbeing among a sample of educators. Additionally, qualitative interviews are conducted to gain deeper insights into the experiences, attitudes, and challenges related to personal finances among educators. Preliminary findings suggest that higher levels of education do not necessarily equate to higher levels of financial literacy among educators. Despite having advanced degrees, educators may still exhibit gaps in financial knowledge and understanding. Furthermore, the study reveals that financial behaviour and financial wellbeing are influenced by factors beyond formal education, such as personal experiences, socioeconomic background, and access to financial resources. These findings have significant implications for educational institutions and policymakers. Efforts to improve educators' financial management should focus on targeted financial literacy programs that address specific knowledge gaps and provide practical tools and resources. Additionally, support systems should be established to promote positive financial behaviour and enhance financial wellbeing among educators, considering the diverse factors that influence their financial decision-making processes. By addressing the unique challenges faced by educators in their personal financial management, educational institutions and policymakers can empower them to make informed financial decisions, improve their financial outcomes, and ultimately contribute to their overall job satisfaction, well-being, and effectiveness in the education system.

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DEFINITION OF KEY TERMS AND CONCEPTS

Financial attitude - A person's financial attitude is the way of thinking he or she has about money, and it is usually the product of upbringing and social conditioning (Stella & Ramachandran, 2022).

Behavioural Finance – Behavioural finance is the study of how human psychology affects financial decisions and market volatility. It clarifies why investors so often lack self-control, operate counter to their own best interests, and make decisions based on their prejudices rather than objective data (McMahon, 2005).

Financial behaviour - Human actions concerning money management are what finance behaviour examines (Stella & Ramachandran, 2022).

Financial Inclusion - The term refers to a situation in which all people, regardless of income or location, have access to stable, dependable, and affordable financial services. They include such activities as putting money away, investing, borrowing, and insuring oneself (Demirgüç-Kunt & Klapper, 2012).

Financial Literacy – Having financial literacy is having the knowledge and ability to handle one's own money effectively via means such as saving, investing and responsible spending (Fernando, 2021).

Financial Wellness - The authors, in their book, describe financial well-being as "a state of being in which you are at ease with your relationship to money" (Robin et al., 2008.p17).

Personal Finance - Planning and managing one's financial activities including earning a living, spending money, saving money, investing money, and safeguarding one's assets is what (Ebert and Griffin, 2016, p.3) mean when they write about "personal finance".

Financial planning – The goal of financial planning is to estimate the amount of money that will be needed and research the available alternatives. The term "financial planning" refers to the procedure through which an individual determines his/her strategies for raising, investing

and spending money (Parker, 2022).

Behavioural finance - It is the study of the influence of consciousness on stakeholders and economic markets (Kaplan Financial Education, 2021). The author discusses why investors lack self-discipline, operate counter to their own best interests, and make judgments based on emotions rather than statistics.

Personal finance - It encompasses all aspects of money management, including saving and investing (Kenton, 2022). “Budgeting, banking, insurance, mortgages, investments, retirement planning, and tax and estate planning” are all included under one umbrella.

CHAPTER 1: OVERVIEW OF THE STUDY

Purpose of the study

This study aimed to determine whether financial literacy affects behavioural health impacting educators' decisions in Westrand, Johannesburg.

Background and context of the study

Studies by Louw, Fouché and Oberholzer, (2013) have shown that educators in South Africa don't know much about money. Poor decision-making, debt, and stress due to money problems have all been linked to a lack of financial literacy (Lusardi, Michaud, & Mitchell, 2017). Negative mental and physical health effects, including depression, anxiety, and decreased productivity, have been linked to financial stress (Garman, Leech, & Grable, 1996). Educators' knowledge and ability to make sound financial decisions are crucial, so the study must measure their current financial literacy.

Financial decisions which affect our lives and livelihoods are a crucial component of being a productive member of society. Due to limited financial literacy, these financial decisions sometimes became challenging for educators, particularly in South Africa (Louw, Fouché, & Oberholzer, 2013). The educator's financial wellness affects the delivery of lessons to learners and could impact the governance of school finances as teachers also played a role in its administration (Mestry, 2006).

No matter the extent of the infrastructure, resources and tools, a school is likely to be dysfunctional if the teachers are not in a sound frame of mind. This could result in poor outcomes for learners (Ecija, 2020). A teacher under financial stress will likely not perform optimally and this would adversely affect the learners. Ecija (2020) maintained that if teachers are committed to their work and accountable in terms of maintaining a high degree of financial stability, they might also overcome any obstacles that could prevent the accomplishment of high standards.

According to financial literacy assessments, one can be considered financially illiterate if one lacks adequate financial skills or information in making informed decisions (Kenton, 2022). When educators are capable of managing their financials circumstances one can say financial wellness can be achieved. Although money is not assured to make educators happy, effective management of their finances could help them feel less stressed and contribute to living a healthier and more meaningful life. This could be having a positive and direct impact on teaching learners and the management of the school finances (Turner, 2022).

Regrettably, a large number of individuals lack a solid comprehension of essential principles linked to personal financial management. General viewpoints on financial expenditure and savings are an additional source of worry. What is lacking is not data, but rather the knowledge to interpret it (Robert, Lerman, & Bell, 2023). The future financial burden of borrowing at exorbitantly high-interest rates does not appear to register with many individuals. It is difficult to determine the number of individuals who

make poor decisions without knowing their backgrounds.

This study articulates financial education and the behaviour of educators that facilitate excellent financial capabilities outcomes. Financial literacy is defined as the combination of financial information attitudes, abilities and behaviours that are required to make financial decisions based on one's unique circumstances (Kimiyaghalam & Safari, 2015). It contributes to one's well-being. Being financially literate will indisputably aid in determining educators' behaviour and the decisions they make.

This study's primary objective is to examine the influence of financial literacy on personal financial management and its impact on financial decision-making among teachers in Westrand, Johannesburg.

Basic financial literacy concepts

1.3.1. Earning

The concept of earning denotes money earned through employment or active income, as well as returns on investment or passive income. Income and earnings are occasionally used interchangeably and could reveal the same outcome (Hewett, 1925). It is imperative to comprehend the taxes, one is required to pay as well as, how to administer the tax return if one has a source of income. Personal income tax is levied on earnings for example salaries, profits, pensions, and royalties.

1.3.2. Investing and Saving

The adage one should always save for a rainy day is considered veritable because regular income is not guaranteed due to unforeseen circumstances. This created a savings market and exploitation of consumers who lacked financial knowledge. When one is young started one should save money by opening a savings and or transaction account where you could put money away regularly (Markowitz, 2020). Money saved over time could grow and be utilized to fund a retirement plan or long-term investments. This in essence is compounding value. Investments assist one to increase the value of one's money and averting inflation.

1.3.3. Spending

One spends almost daily, from simple purchases such as grocery items to larger ones like purchasing an air ticket. Online shopping has made it easier to purchase items one desires. It is critical to understand the distinction between needs and wants to make informed spending decisions. One needs to be aware of one's expenditures, especially when using a credit card facility. Although it may be convenient, one should resist making impulsive purchases to avoid regret later (Bona, 2018). When making significant purchases it is important to do one's homework and compare prices to purchase the best value for money. Budgeting is the most effective way to keep track of and control one's expenditures. Adhere to a minimal personal budget and keep note of unnecessary expenses.

1.3.4. Borrowing

How do consumers utilize their money? Or did they take out a loan, which is occasionally essential? It could be a lifesaver when utilized wisely and for the appropriate reasons. However, many people went into debt because they utilised credit cards and or acquired loans because of a lack of financial education. Fortunately, many realized the consequences of their decisions (Davies, Finney, Collard, & Trend, 2019). It is crucial to adopt a financial strategy so that one can make timely payments and ensure that borrowed money could help various investments.

1.3.5. Protecting

There is a tendency to take one's financial competence for granted. To inhibit it, is critical to preserve one's assets and future when one can. For example, if one has life insurance, one's family will receive financial support in the advent of one's demise. This also safeguards one's family's financial future (Schinasi, 2004). Insurance encourages sound saving habits which allows one to invest in a secure financial future. It is important to plan one's retirement if one wants to live without financial concerns in retirement by planning as soon as one can do so and by being cautious of the dangers associated with one's investment. When necessary, amend one's retirement plans.

The Research problem statement

There is a need to address the disruptive nature of financial education, which can lead to informed financial decisions, ultimately affecting behaviour and healthy financial wellness and opportunity. This could be achieved by targeting the employed consumers who are the future leaders and equipping them with information resources to nurture financial success and drive the South African economy forward by empowering them access to financial knowledge about how the world of money works so they can make sound financial choices and be less stressed regarding their finances.

Scholars, politicians, and proficient organisations have all been interested in how customers, families, academics, and businesses manage their money (Kamakia, Mwangi, & Mwangi, 2017). In both rich and emerging nations financial literacy and related behaviour affects many people and their well-being. Sibanda and Sibanda (2016) asserts that an individual can make the most of their frequently limited business or salaried income by managing and monitoring their finances and making intelligent choices when borrowing money. The authors caution that it is necessary to note that financial education is part of the solution and should not be utilised as a stand-alone strategy.

Evidence suggests that financial behaviour (including saving and spending habits and short and long-term planning) is significantly influenced by financial literacy (Zulaihati, Susanti & Widyastuti, 2020). Furthermore, educator wellness refers to the overall health of people who work in education (Valentine, 2021). It is linked to the eight presumed categories of well-being with include *inter alia* healthy food, excellent sleep strategies, self-care, professional development, financial empowerment and other

factors.

A firm grasp of money matters and the ability to manage one's finances are crucial. Yet, only approximately 33% of the world's adult population is financially savvy, according to a poll of more than 150,000 people from 140 countries commissioned by Standard & Poor's and conducted by Gallup, GFLEC, and the World Bank (National Government of South Africa, 2012). Very few South Africans are financially literate. This is an enormous economic problem and the current situation that South Africans find themselves in, in an evolving economic market and developing country, which was exacerbated by the pandemic, where teachers in this study form part of that economic market. According to the National Credit Regulator(NCR), 42% of the country's 23 million active borrowers are considered compromised. Educators are considered to be well-represented in this category of borrowers It is proclaimed that the group is three or four months behind on their payments or has judgments against them (National Government of South Africa, 2012).

Many schools in Westrand Johannesburg are under administration due to the mismanagement of school finances which directly impacts the teaching of learners. There is an urgent need to examine if there is a correlation between financial literacy and making good financial decisions, and teachers' financial literacy and financial behaviour. Furthermore, there is a need to uncover how these outcomes impact financial well-being and what immediate action could be implemented, if required, to empower teachers. Ultimately, such remedial actions could improve teachers' financial and mental well-being an improve their behaviour in school.

The objective of the study examines the impacts of financial literacy on personal financial management and rational decision-making with teachers' financial well-being in Westrand Johannesburg. It contributes to literature relating to financial literacy, financial well-being, and financial behaviour.

Research objectives

The overarching objective of the study is to examine whether financial attitude, financial knowledge and financial well-being impact financial decisions and financial behaviour in society.

1.5.1.To achieve this objective, the following specific objectives are addressed:

1.5.1.1 To examine the extent of financial literacy among teachers in Westrand of Johannesburg.
1.5.1.2 To examine the financial behaviour / financial well-being of teachers determined by how they manage their finances.
1.5.1.3 To analyse the association between financial literacy, financial behaviour / financial well-being of teachers

1.5.2.The Research questions

Consistent with the research objectives, this study answers the following questions: Does societal financial attitude, financial knowledge and financial well-being influence financial-related choices and financial behaviour?

1.5.3.Research hypotheses:

Hypothesis 1:

H^0 There is **no relationship** between financial knowledge and teachers' financial decisions.
H^A There **is a relationship** between financial knowledge and teachers' financial decisions.

Hypothesis 2:

H^0 There is **no relationship** between financial knowledge and teachers' financial behaviour / financial wellbeing.
H^A There **is a relationship** between financial knowledge and teachers' financial behaviour/wellbeing.

Scope of the study

This study investigates the relationship between financial literacy, teachers' financial behaviour and financial decisions. The analysis is derived from the outcome of a survey based on how educators manage their finances which could impact their financial wellness. Due to the study's limited time limit, the focus is on a sample of educators in Westrand Johannesburg.

The Assumptions and Rationale of the study

1.1.1 The respondents reflected on their experiences and perspectives during the interview as it was conducted in English.
1.1.2 The respondents understood why the survey was conducted.
1.1.3 The respondents agreed to participate in the interview and their responses were both accurate, honest and without bias.
1.1.4 The number of respondents was adequate to accumulate data and draw conclusions from their responses.

Organization of the study

The study is organised into six chapters as follows: After this introduction chapter, Chapter two presents the literature review, including the theoretical and conceptual foundations. Chapter three covers the study's research methodology, framework, methods, reliability and validity indicators, and restrictions. The findings and discussions from delving into our research topics are presented in Chapter four, with a discussion of the study's findings in Chapter five, and the conclusion with recommendations provided in chapter six.

CHAPTER 2: LITERATURE REVIEW AND THEORETICAL FRAMEWORK

Introduction

This section examines the study and writings on financial literacy, behavioural finance, personal finance, and financial wellness from a variety of sources. The theoretical foundations of the research investigation are discussed. Concerned that students may pick up negative behaviours from their educators, the study investigates how the development of financial illiteracy impacts academic institutions.

The current study critically examines the relationship between financial literacy and financial behaviour with rational financial decision-making among teachers in Westrand, Johannesburg.

Background Discussion

Why is financial education required?

Teachers are essential in developing the next generation in financial literacy. Contrarily, most teachers lack the financial expertise and assurance necessary to teach financial literacy effectively (Otter,2010). Teachers face another colossal challenge in the new normal, which is the usage and integration of technology, which requires them to invest more money. As identified by Vatanaritiran and Karadeniz (2020) these additional financial obstacles including financial decision-making abilities, understanding, and resource management. Since most teachers have significant debt, their financial situation is unstable, and probable incompetence to manage their finances and behaviour.

Adult consumers require financial education because it provides them with the ability and knowledge to manage their money effectively (Ferrer, 2017). Financial literacy is achieved by becoming financial educated and utilising the skills of what one has learnt of investments.

Despite its relevance in everyday life, educational institutions do not include financial education in their curricula (Elvira & Pecajas, 2022). Consequently, many adults lack the basic financial knowledge to manage their daily financial interactions and decision-making, which leads to debt, losses, and other setbacks. Early access to financial education is critical to develop one's financial skills, to enjoy success and prosperity through sound investor decision-making. Financial wellness begins with financial literacy and decision-making capabilities (Delaune, Rakow, & Rakow, 2010).

Lusardi (2008) held the belief that just as it was difficult to sustain and function appropriately in the earlier years without being financially literate, it is now extremely challenging to do so.

Atkinson and Messy (2012) defined a financially literate person is a financially

knowledgeable person who can plan, save, borrow, invest, and spend intelligently, implement the risk mitigating steps, and acquire financial information when informed financial decisions needed to be made.

On the other hand, financial well-being is defined as a state of mind that assesses a person's pleasure in their finances (Muleke & Muriithi, 2013).

According to Lusardi and Mitchell (2014), employees are gradually taking on more responsibility for their financial well-being and assert there is still much to learn about saving, investing and responsibilities. They hold that financial literacy impacts the workplace and retirement.

Financial well-being appears to have been a topic of interest amongst scholars, government officials, companies, and various professions. Hong, Zulkiffli, Farha, & Noorshella, (2021) describe financially literate persons as those who are financially prepared and can manage impediments, however more likely to end one's bankruptcy filings, manage illnesses, retire early, and cope with the consequences of being unemployed than those who are not prepared financially.

This study seeks to find the correlation and the gap between financial literacy, financial wellness, and financial decisions impacting the financial behaviour of educators in Westrand, Johannesburg.

Theoretical Overview

The prospect theory opposes the expected utility theory of decision-making, which states that individuals evaluate the usefulness or worth of each probable cause of action (Clark & Lisowski, 2017). It considers the authors' observations of loss aversion and the tendency to give more weight to outcomes with a lesser chance than ones with a high probability. The prospect hypothesis contends that rather than selecting alternatives based on their actual usefulness, individuals pick these based on the expectations of their results.

The Prospect theory is a mathematical model of human behaviour which reveals how people make choices with varying degrees of risk and uncertainty, as well as the role they play, and attitudes towards risk, uncertainty, loss, and gain in their decision-making (Kahneman & Tversky, 1979). According to scholars, this demonstrates that rather than focus on absolute outcomes, individuals tend to think about expected usefulness in proportion to a reference, for example, current wealth. Because people dislike losses more than they prefer equivalent rewards, the prospect theory, which was developed by framing hazardous possibilities, reveals that people are loss averse.

The prospect theory is intriguing because it was developed by someone who is neither a professor of economics nor finance. Rather, a psychologist advocated for this idea. Hence, the theory does not assume that people always act rationally (Nickerson, 2022). This theory, on the other hand, seeks to characterise reality because it exists. The primary of the prospect theory is that people are prone to making erroneous

judgments. Because of this prejudice, their perceptions of gains and losses are skewed. This process is heavily influenced by how much a loss or gain is perceived.

The heuristic and prospect theories are two psychological ideas which underpin behavioural finance. Muizzuddin et al. (2017a) posit that the heuristic theory of investing explains how investors make financial decisions in the face of uncertainty. According to this theory, there are numerous bias beliefs which influence how investors think and make judgments, whereas the prospect theory explains how investors make decisions when confronted with a specific danger. Loss aversion, mental accounting, myopic loss aversion, self-control and regret aversion are all investor behavioural features which face the risks mentioned in this theory and deliberated by the scholars.

Monroe and Maher (1995) posit that the rational choice theory assumes that 'all things are equal,' which is rarely the case. On this basic principle, people make choices and draw conclusions which they think are rational, although the contexts and instances in which these decisions are made affect how rational they are. They also hold that a person's values, beliefs and philosophy affects the rationality of their choices and decisions.

According to the Ajzen (1991) theory of planned behaviour (TPB), an individual's intention to participate in behaviour is governed by three factors: one's attitude towards the conduct, one's subject norms for the behaviour, and one's perception of their ability to regulate the behaviour. This theory proposes that an individual's economic actions are impacted by their money-related beliefs, societal conventions about money management, and the degree to which they feel in charge of their financial circumstances.

Bandura's (1977) social learning theory (SLT) proposes that people pick up new skills and knowledge by watching the actions of others around them and the results those actions have. According to SLT, one way people may improve their financial literacy is by studying the actions of others around them while they handle their own money.

The financial mindset is a factor that might impact financial management behaviour. The term financial attitude refers to a person's state of mind, viewpoint, and evaluation of finances. According to the social learning theory, Rai, Dua, and Yadav, (2019) assert that there is a three-way interaction between perception and action being influenced by an individual's behaviour, environment, and internal events. The inner events influencing perceptions and actions in this study which are financial attitudes and financial management behaviour. A suitable financial mindset can serve as a foundation for excellent and true financial management activity was also asserted to.

Individuals' monetary choices are studied from a behavioural economics perspective, which integrates insights from the fields of psychology and economics. Behavioural economics proposals that people's cognitive limits, psychological biases, and social pressures lead them to make erroneous or prejudice judgments about their own money (Thaler, 2016).

Behavioural finance according to (Muizzuddin et al., 2017b) is a branch of finance that studies the interaction between human behaviour and the financial system, as well as the organisation's behavioural dimension in which human and financial systems coexist.

Behavioural finance is a relatively new subject in economics and has become a popular issue among investment experts (Fuller, 2000). Behavioural finance is a derivative of the study of psychology, which underscores that people's mental states have an impact on their decision-making and that their ability to act rationally is limited. The author states that the idea of traditional finance and the assumptions which had constituted its foundation are later called into question by a plethora of subsequent empirical researchers who are related to financial-based psychology.

A person’s financial conduct can be observed by how well they save money and spend their money Beverly et al., (2003), this idea is linked to the behavioural finance field. Whether they save money regularly, they have an emergency fund, is among multiple factors which are connected to their habit of saving. The authors explain that behavioural finance is a crucial subject for persons to understand how to manage their finances appropriately. This is observed, *inter alia.* their capacity to buy a house, set and achieve objectives, and investors' evaluations of possible losses and gains. Being financial savvy is the application of foresight and wisdom to resolve a problem or seize an
opportunity that may or may not have been anticipated.

Josef and Vera, (2017) suggest grouping all the financial theories in finance and economics syllabi and refer to this as textbook finance. The issue with financial textbooks is that they portray an idealised world. It presupposes that all people have accurate knowledge, *i.e.,* did they receive the same information at the same time? In addition, it assumes that they possess the cognitive abilities necessary to process this information rationally and objectively. The remaining theories are mathematical equations once these two presumptions are accepted. Nevertheless, contrary to how the world functions, all market participants do not have access to complete information, nor are they competent to manage all the information rationally and make informed decisions. The scholars hold that in reality, investors' decisions are influenced by emotions. Numerous psychological processes and biases play a role in determining the ultimate decision. Behavioural finance explains these psychological processes and cognitive biases. Essentially behavioural finance is a synthesis of finance and behavioural psychology.

Traditional financial theories presume finance to be a scientific discipline. This implies that similar to scientific problems, financial problems also have a perfect answer (Jurevičienė & Ivanova, 2013). Financiers possess the required resources and can address any issue in the financial sector, according to the scholars of these theories. In actuality, this is not true. To begin with, the possibility of a perfect answer is controversial. Second, even if such an alternative exists, individual investors lack the psychological and financial means to determine the ideal solution. In simple terms, the expense of obtaining the ideal solution exceeds its benefits. This is why investors

frequently employ heuristics or mental shortcuts when making financial decisions.

The theory of financial literacy by Lusardi and Mitchell (2014) posits that several studies have revealed that customer demands, a phase of the economy, and social welfare programmes' privileges influence the lifetime growth process. Furthermore, this financial literacy theory is applied through micro-level simulations, which suggest that individuals can create and save, and identify spending patterns. This requires the ability to conduct intricate monetary calculations and adequate knowledge of financial markets. However, a concern is that limited individuals are financially literate, although there is a considerable theoretical and empirical body of evidence in economics. The challenge is how individuals learn and apply financial literacy has received relatively limited attention. (This could be a probable research gap). They underscored that the consumers' financial well-being is thought to be enhanced through financial education, which in turn is thought to improve financial literacy, drive desired financial behaviours, and increase financial well-being (Lusardi & Mitchell, 2014).

The questionable use of the phrase financial literacy has been accentuated in several recent studies. Huston (2010) compiled a list of the financial literacy measures and definitions which were employed in the recent decade. Furthermore, Huston (2010) defines financial literacy as a measure of an individual's ability to comprehend and utilise personal financial information. Hence, financial literacy refers to an individual's competence and confidence in utilising financial knowledge to make sound financial judgments.

The study by Norwich Education (2017) begins with the most basic premise imaginable, that humans are logical. Rationality is a tricky concept with many probable interpretations, they try to define it accurately. Moreover, they claim that rationality and a moral code have no negative implications. Hence, the following logic does not necessarily entail behaving morally or ethically. Reasonable behaviour is deliberate. If a person makes choices meant to achieve outcomes which are consistent with their stated goals, then that person is being rational.

Joo and Grable’s (2004) study identifies the variables which impact financial well-being among workers, performed. They observed that contrary, poor levels of financial wellbeing are because of factors including financial stress, tension, and lack of financial awareness among workers. Furthermore, it has been revealed that increased financial well-being is closely related to less absenteeism due to death, improved employee performance evaluations, and limited time lost from work. There are two relationships between financial behaviour and its well-being: a direct and an indirect link (Joo & Grable, 2004).

The promotion of access to finance for the working poor is essential to enable them to make better financial decisions at home or in their businesses (Sibanda & Sibanda, 2016). The authors claim that it encourages several target populations, including men, women, young people, and compensated professionals to become better at budgeting and planning, save more money, spend responsibly, borrow with more knowledge, and ultimately enhance their financial wellness as well as change their lives.

Hicks, Tinkler, & Allin, (2013) emphasize that having enough money to get by is important for communities and countries alike. The economic, environmental, social, and health aspects, as well as the quality of one's surroundings and that one's relationships with one's peers, all contribute towards one's sense of well-being. The writers accentuate monetary well-being as an essential element of complete happiness.

Individual conduct is a critical factor in whether or not a person is effective to manage one's finances Shim and Siegel (1991). Furthermore, they state that a person's financial conduct is revealed by how they administer their own money now and in the future.

Although experiences in many countries suggest a relatively low rate of financial literacy, Barber and Odean (2007) argue that financial literacy has become an integral part of daily life because it is a helpful tool to make sound financial decisions. The scholar also revealed that a lack of financial knowledge results in the development of a flawed financial strategy and ultimately a skewed perspective of what constitutes success regarding financial management in retirement.

The study of how financial literacy impacts the economic position of educators in the Westrand, Johannesburg is pertinent to Lusardi & Mitchell's (2014) notion of financial literacy. They suggest that when an individual's earnings are high, a completely rational and informed person will consume less than his income, conserving funds for when one's earnings decline. Lusardi & Mitchell (2014), assert that financial education is believed to promote financial literacy, encourage desirable financial behaviours, and boost financial well-being for consumers.

According to the reviewed literature, financial education significantly impacts financial literacy and financial behaviour. This underscores the importance of financial learning and financial literacy as crucial element of consumers' capacity to make educated choices and exemplify sound financial behaviour (Cupák *et al.,* 2021).

The major goal of the research is to improve educators' awareness of the importance of financial literacy among South African consumers, with a focus on educators in the Westrand, Johannesburg area so that the educators' financial situations do not have a disturbing effect on students' education or administration of the school funds. The teachers' capacity to teach and manage school funds is directly impacted by their financial stability or lack thereof. Therefore, financial literacy is a serious issue that may undermine their ability to execute their jobs. Hence, the research determines whether teachers have the financial literacy to manage their financial issues. Educators may avoid being badly influenced by the stress of managing their money if they are financially savvy to make sound judgments.

Where did one acquire one's financial attitude?

The way one thinks about money reflects one's character, one's strengths and one's

weaknesses.

Table 2-1: Factors developing financial attitudes

Factors in developing a financial attitude		
1.	**Your early years**	Our financial outlook, like so many other aspects of ourselves, develops early. People often refer to their parents as the 'first ATM of their life' when asked about the source of their early financial stability. As a result, our views of the necessity for money to fulfilling life is its accessibility is heavily influenced by our parents' attitudes towards and practises of financial-related matters.
2.	**Knowledge and awareness**	It is impossible to manage if one has no idea what is going on. Therefore, becoming conscious is the first crucial step in moulding one's perspectives. Once curiosity for personal finance is piqued by the increasing amount of available information through friends, elders, co-workers, and the relentlessness blitz of mass media. When a person has financial literacy, also known as financial knowledge, one is better able to assess the pros and cons of various options and determine which are most suited to one's needs.
3.	**Emotional quotient**	It is crucial to determine what is good or bad, right, or wrong. Whether one is prepared to take charge of one's financial situation, think freely, or act on all the information one has accumulated and make a rational choice which is a function of one's emotional state.

Source: Adapted from: (I Gede Adiputra, 2020)

Where does financial behaviour emanate from?

One's financial actions are a result of the financial outlook, or the mentality of money which hone cultivates and rejects actively**.**

Table 2-2: Factors developing financial behaviours

Factors to develop financial behaviour		
1.	**Fear**	For example, a person whose upbringing included witnessing one's parents' never-ending struggle to pay the bills and keep up appearances would view wealth as something to strive for because of the looming threat on the left side of the menu card. One will constantly be afraid of making enough money to support a comfortable lifestyle. As a result, one will always be on the lookout for ways to increase their financial standing, whether through ingenuity or sheer hard effort.
2.	**Mindset**	This mindset underscores the importance of constantly having an adequate sum of money, while the corresponding behaviour accentuates opportunities to earn and hide savings.
3.	**Role modelling**	The same is true of one's financial behaviour, which can be a result of a combination of factors, for example, being entrusted with a sizable amount of pocket money at a young age, having loved ones who work in the financial sector, use of a bank account at a young age, open about seeking guidance or additional information etc.

Source: Adapted from: (I Gede Adiputra, 2020)

Theoretical Framework

The theoretical framework guides the research investigation.

2.1.1 The theoretical framework gives the research shape and viewpoint. It grounds the investigation and helps researchers arrange their thoughts and results in a worldview (Creswell, 2014). It helps researchers organise their study and identify their hypotheses (Sandelowski, 2010).

2.1.2 The theoretical framework helps researchers place and contextualise their ideas by placing their study in perspective and relying on ideas and concepts that underlie their research topics (Green & Thorogood, 2014).

2.1.3 A theoretical framework defines the study scope and identifies significant ideas and variables (Sandelowski, 2010).

2.1.4 This framework links to the research topic and justifies the investigation, it helps explain the research topic by placing it within current literature and identifying knowledge gaps that they want to fill (Creswell, 2014).

2.1.5 This framework outlines the study's ideas, variables, and linkages from the research topic through analysis and interpretation it guides the project (Green & Thorogood, 2014).

Analytical Framework

Financial literacy is the ability to make wise judgments about money. It is a set of information and abilities and a crucial component of personal money management which assists people to achieve financial stability and security. Individuals and organisations may have to evaluate and enhance their financial literacy by utilising an analytical framework.

The following are several key elements of an analytical framework for financial literacy:

2.1.6 **Financial knowledge**: The ability to manage money well includes having a basic awareness of topics, such as saving, investing, borrowing, and insurance. Financial mismanagement and bad decision-making may result from a lack of financial awareness. As a result, initiatives for financial training and awareness should be funded by both people and organisations to increase financial literacy (Lusardi & Mitchell, 2014).

2.1.7 **Financial behaviour:** Individuals' activities and financial choices are referred to as their financial behaviour, which can be affected by several aspects, namely: individual values, attitudes, and beliefs (Mandell, 2006). Making choices which conform to one's beliefs and financial objectives is a sign of sound financial conduct. Debt and other financial issues might arise due to poor financial decisions.

2.1.8 **Financial attitudes:** A person's thoughts and feelings towards money and financial affairs are referred to as their financial attitudes. It encompasses opinions of risk, reward, and security in money matters (Huston, 2010). An individual's financial and decision-making may be influenced by their financial mindset. Those who have a favourable attitude about savings are more likely to

save money consistently.

2.1.9 **Financial skills:** The capacity to execute certain financial duties, such as calculating interest, maintaining a budget, and evaluating investment possibilities is referred to as having financial skills (OECD, 2017). Individuals may improve their financial results and make informed choices about their finances by developing their financial literacy.

2.1.10 **Financial context:** The social, economic, and regulatory aspects which affect financial decision-making are referred to as the financial context. It encompasses the availability of financial goods and services, financial rules, and monetary attitudes in various cultural contexts (Sherraden, Johnson, & Guo, 2010). They also make mention of making wise financial choices and enhancing financial results requires an understanding of the financial environment.

The deductive theory is utilised in quantitative studies. The goal is to prove or disprove a theory. The theory serves as a framework for the entire investigation, as well as an organisational model for the research questions and hypothesis which will be utilised in the data collection process (Creswell and Creswell, 2018).

Conclusion

A healthy financial habit is exemplified through effective financial planning, management, and oversight. The capacity and understanding of financial literacy are closely correlated with one's financial management acumen. Thus, financial literacy influences virtually all elements of planning and spending including individual financial behaviour (Muizzuddin *et al.* 2017).

Consumers' level of financial knowledge has a huge impact on their quality of life. It has an impact on the capacity to provide for themselves, their families, and their attitude towards monetary and investment decisions (Botha, 2021). Financial literacy enables people to comprehend what it takes to live a financially balanced, sustainable, ethical, and responsible lifestyle

This study was not conducted previously in Westrand, Johannesburg in the education sector. This research sought to articulate individuals' synergies of those who are financially educated and have behavioural control over their resources. Hence, they are in better financial health to teach our learners and manage our school's finances.

In this situation, the teacher may have an impact on the choices the pupils or other individuals make. Teachers play an important role in society and as a result, they have a strong capacity to acquire knowledge of a subject by using their expertise and influence others who are nearest to them (Ersoy & Özen, 2021). This study sought to identify the teachers' attitudes and their financial literacy when they make financial decisions and highlight variations in their financial attitudes based on investment preferences.

In summary, the aforementioned literature provides a foundation for the study. While selected scholars have conducted experiments along these lines, they have done so

on the same physical site. The primary goal of this research was to contribute to the gap in the body of knowledge by analysing the relationship between financial literacy and the probability to examine the behaviour of educators. There was an in-depth expansion of the heuristics and the prospect model. The subsequent chapter will present the research strategy, design, procedure, and methods to draw conclusions and provide recommendations.

CHAPTER 3: CHAPTER 3. RESEARCH STRATEGY, DESIGN, PROCEDURES AND METHODOLOGY

Introduction

This chapter explains the research methodology to address the research questions and analyze the gathered data. A quantitative technique was chosen for this study. Quantitative research is associated with measurement and separation, as it is based on a rigorous distinction between researchers and those being studied presently.

Research strategy

The strategy behind conducting research lays out not only the overarching course of action but also the specific steps to be taken. The results of quantitative studies are unbiased and may be communicated via the use of numerical and statistical methods (Creswell & Creswell, 2018). Researchers use quantitative methods to observe conditions or events that have an impact on people.

Quantitative research was conducted through a collection of primary data from sample elements to extrapolate the results to a wider population. An online survey questionnaire was utilized to gather data. The study analyzed the data retrieved from the survey. The objective of quantitative research was to develop an understanding of the subject and to determine if there is a correlation between being financially literate and informed decisions impacting the positive behaviour of individuals.

The study employed a descriptive research strategy including the mean (average), the median (middle), the mode (most common), standard deviation (standard error of the mean), and skewness (angle of rotation around the vertical axis) used. In contrast, inferential statistics were used to conclude the entire population based on a subset of the data (the sample). It used surveys to gather initial information. Westrand, Johannesburg, was chosen as the site of the study since its instructors served as the study's unit of analysis. Since it was conducted between November 1st, 2022, and January 31st, 2023, we call this a cross-sectional study. The time needed to collect the data was three months. Sub dimensions including financial knowledge, financial attitude, financial behaviour and financial competence are taken into account to analyze the sample's level of financial literacy and its impact ultimately resulting in financial behaviour outcomes.

Research design

Questionnaires are prominent research methodologies because they provide a quick, efficient, and low-cost way to collect enormous amounts of data from sample sizes. These tools are particularly useful for determining subject preferences, intents, attitudes, and opinions (Creswell & Creswell, 2018).

While determining a person's level of financial literacy is crucial, it can be challenging to investigate how they process economic data and come to responsible financial

decisions. Three economic ideas were identified when the questionnaire was developed that people should be familiar with if they are to apply them when taking financial decisions. It may be concluded by drawing on economic models of preservation and portfolio selection. Understanding inflation, risk diversification and interest compounding were among the concepts. Respondents were not asked to conduct complex calculations to keep these theories simple in the framework of survey interviews, rather the study simply assessed whether respondents could perform simple calculations associated with these notions (Lusardi & Mitchell, 2014).

The purpose of correlation research was to establish the relationship between two closely related variables, how one affects the other, and what eventual changes are detected. A minimum of two distinct groups were necessary to successfully execute this quantitative research method to assign a value to two naturally occurring associations.

The scientific approach provided the framework for a quantitative design. It employed deductive reasoning, in which the study formulated a hypothesis, from collected data during the investigation of the problem, and then utilized the data from the study after the results were analyzed to prove the hypothesis to be true or untrue.

This study employed a quantitative research strategy to correlate multiple variables using mathematical analysis techniques. Patterns, correlations, and trends between variables were determined based on their initial configuration. The effect of one of these factors on the other was noticed. Only the variables data, relationships, and distributions were investigated. Variables were not altered, rather they were identified and examined in their natural state.

Research techniques and methodologies

3.4.1. Audience and sample

Population refers to the complete group from which inferences are to be drawn. Information is collected from a sample of the population (Kumar, 2020). It's impossible to get an accurate representation of a population from a tiny sample.

Kothari (2004) says that when researching a group of people, it is uncommon that you will be able to collect data from every single one of them. You choose a sample. The sample is the number of people who will take part in the study.

The population for this study is educators in Westrand, Johannesburg with internet access over the age of eighteen who represents various groups representing youth, women, men and salaried professionals of different genders and races (Kumar, 2020).

3.4.2. Sampling method

When doing a probability sample, each individual within the population has the same chance of being selected (Kothari, 2004). Probability sampling and structured data collection tools are used in quantitative data collection procedures to fit different

experiences into predetermined response categories. They generate outcomes that are simple to summarize, compare, and generalize. Quantitative research entails putting theory-based ideas to the test and or estimating the scale of a phenomenon of interest (Nayak & Singh, 2015). For this study probability sampling would be used.

The most common sort of survey question is the multiple-choice question. They let your responders choose one or more choices from a set of predetermined responses. They support the production of easily analyzable data, are straightforward, simple to use in many ways, and offer independently exclusive options (Groves et al., 2011).

3.4.3. Procedure for data collection

When it comes to quantitative outcome research methodology and studies, survey research is the most essential tool. Online surveys were employed to query a cross-section of respondents. A questionnaire was used in the study, which was accessible online through Qualtrics. This survey was best conducted online, as it reached a wider audience than in-person interviews. This type of survey also provided unique access to a population that would otherwise be inaccessible. The convenience of access to complete the surveys saved a substantial amount of time, and there was also a reduction in the resources necessary, such as paper and transportation, which lowers the expenditures in conducting this study (Wright, 2017).

This type of study was undertaken with an identified target audience group: educators in Westrand, Johannesburg, as well as with several groups as comparative analysis.

Having done the survey research, the study was able to ask several survey questions, gather data from a pool of clients, and evaluate the obtained data to get numerical results. It was the initial phase in the data collection process for this study's investigation.

Table 3-1:Data Processing Steps

DATA PROCESSING STEPS		
STAGES	**DESCRIPTION**	**REFERENCE TO THE STUDY**
1. Data Collection	As a first step, they will start to compile information from multiple sources, like primary data, data lakes and data warehouses. It is crucial to have access to reliable and well-built data sources to guarantee the best quote quality data is collected and later used as information.	
2. Data Preprocessing / Preparation	The information is cleaned up and organised in this phase so that further analysis may take place. Pre-processing is a step in machine learning that involves preparing a data set for use by a model. To improve the efficiency of some machine learning models, this is required for dimension reduction, relevant content identification, and content prioritisation. Data is encoded or transformed so that it may be easily processed by	

	a computer. Additionally, a model's prediction must be reliable and inexact as the algorithm should have no trouble understanding the data. In this study, excel was used for pre-cleaning the data.
3. Data Input	The data is transformed from its original format into one that can be read by computers. Once the data has been cleaned, it is loaded into the data warehouse and transformed into the language of the target system. Keyboards, scanners, and other input devices are the starting point for any process that transforms raw data into actionable intelligence. Excel was used for preliminary data cleaning an SPSS was used for the final analysis in this study.
4. Data Analysis	When dealing with data, processing is usually the initial step and analysis comes second. Analysts and scientists use the process of analysing data to conclude the data at hand. Decision-making is the process of employing processed facts to address questions or to make choices. Its common method for accomplishing this is by using machine learning or statistical analysis. Enterprises can employ software suites like SPSS, would you specialise in algorithms and statistical calculations to accomplish this?
5. Reporting	Making a report outlining the results of the analysis is the final stage of processing. A report is a written document that provides a concise overview of your data analysis and displays the findings in an understandable style. It is a useful tool for sharing research results and getting feedback, both of which can help you reflect on what you have learned.
6. Data Storage	Putting away data in a format that can be read and used is the next step. At this point, authorised personnel can access the consolidated data set as needed

Source: Adapted from Sutton and Austin (2015)

Methods of data collection

3.1.1 Survey interviewing
3.1.2 Can evaluate hypothesis across a wide variety of variables. (Deduction)
3.1.3 Uses standardized procedures for questions and answers. (Objectivity)
3.1.4 The findings may be used by more individuals or in other contexts. (Generality) (Creswell & Creswell, 2018).

A requirement for this type of study was that the respondent sample be comprised of individuals chosen at random. As a result, this study could efficiently manage the accuracy of its findings, as a large diversity of respondents was approached through random selection. Traditionally, survey questionnaires were administered face-to-face or via telephone calls. However, with the advancement of online mediums such as e-mail and social media, survey research has expanded to online mediums.

The research instruments

The investigator usually selects the research tool, which is then linked to the study, which is a quantitative survey questionnaire.

3.6.1. Characteristics of research instruments

3.1.4.1 Trustworthy and valid.

3.1.4.2 Depending on a theoretical context, or the researcher's comprehension of a range of factors the findings interact and relate to one another.

3.1.4.3 Must collect data that is appropriate intended for and applicable to the study subject which is unbiased and appropriate for the study's setting, culture, and diversity (Nayak & Singh, 2015).

3.6.2. Type of research instrument: Survey questionnaire

Any measurement process that involves asking respondents questions is referred to as survey research. The sorts of surveys differ depending on the length of time spent conducting the research. Cross-sectional and longitudinal surveys are the two types of surveys available (Nayak & Singh, 2015). The following are examples of survey questions:

2.6.2.1 unrestricted, essay or unguided questions are examples of free-answer questions, sometimes known as open-ended inquiries.

2.6.2.2 Recall type questions in which the subject is asked remembrance of a series of types. Diverse options and multi-reply queries are both common (Nayak & Singh, 2015).

Data analysis strategies and interpretation

Quantitative data analysis required the application based on logical thinking to transform raw numbers into relevant facts. The calculation of variable frequencies and correlation between variables are examples of quantitative data analysis (Kumar, 2020). A quantitative technique was typically related to locating data to support or refute ideas that were formulated earlier in the research process (Kumar, 2020). In this study, SPSS was used as formulas and statistical processes were covered extensively, which was used to import data files.

Quantitative data analysis is used to measure differences between groups, to assess the relationships between variables and to assess hypothesis scientifically.

Descriptive statistics were employed to describe the fundamental characteristics of the study's data. It offered straightforward summaries of the sample and measures. In conjunction with simple graphical analysis, they served as the foundation for this study. The study used descriptive statistics to describe what is or what the data revealed.

To extrapolate and conclude the entire population the study employed inferential statistics using the data at hand from a small representative sample. Hypothesis

testing, confidence intervals and regression analysis were the three primary methods of inferential statics used for this study.

A correlation study is a nonexperimental research design strategy that assisted in establishing a relationship between two closely related variables. When analyzing a relationship between two variables, no assumptions were made, and statistical analytical techniques were utilized to calculate the relationship. A correlation coefficient, whose values range from minus one to one, was used to determine the relationship between two variables. A positive correlation coefficient implies a positive association between the variables, while negative correlation values suggest a negative relationship (Creswell & Creswell, 2018).

Delimitations of the study

3.1.5 Respondents will conduct an online survey interview.
3.1.6 Respondents will be limited to living, working, or studying in Westrand, Johannesburg, with free accessibility to participate in this research.
3.1.7 Respondents will be sampled from a diverse range of backgrounds, cultures, and experiences, in the education sector to obtain a true reflection of this study.

Possible limitations and challenges of the study

3.1.8 Lack of resources for data collection.
3.1.9 Inability to control the environment.
3.1.10 Limited outcomes in quantitative research.
3.1.11 Difficulty in data analysis (Kothari, 2004).

When making financial decisions people exhibit a variety of attitudes and actions. Non-professionals will make decisions in these cases based on prevailing financial attitudes. It is expected that like other people teachers who are expected to make financial investing decisions will do so with particular biases, attitudes, and tendencies. Teachers may pass down their perceptions, attitudes, and habits to others in their surroundings or to their pupils (Kothari, 2004).

Validity and reliability

Validity refers to how well an apparatus measures what it is expected to represent and does what it’s supposed to do. Because it is unlikely if not impossible, for an instrument to be completely valid, validity is unusually expressed in degrees. Validation is a procedure that involves gathering and analyzing data to determine an instrument's accuracy. To evaluate the accuracy of quantitative instruments a variety of statistical tests and measures are used with pilot testing being the most common (Creswell & Creswell, 2018).

The internal consistency of a set of items is quantified by calculating Cronbach's alpha. This parameter is used as a gauge of the trustworthiness of the scale. A high alpha value does not always suggest that the metric is one-dimensional. Extra analysis can

be done beyond only testing internal consistency if you need to prove that the scale in question is unidimensional (Goforth, 2015). You may verify dimensionality in a few ways. One is by using exploratory factor analysis. Instead of being a statistical test Cronbach's alpha is a measure of dependability (or consistency).

Ethical considerations

Once code of ethics is a set of guiding ideas or assumptions about how a person or group should act in any given situation, with consideration for oneself, others, and the large community (Resnik, 2020). Ethical considerations in research are applied to all aspects of the research process, from planning to execution to the sharing of findings and the allegations of scientific misconduct, and the oversight of research itself.

Respondents were not required to disclose their personal information or other data points that could be used as identifiers in this study. Respondents were informed of the purpose, objectives and their role in the study. That their rights of participants shall be safeguarded, participation by all respondents will be voluntary, they will have the option to withdraw from the survey at any moment should the need arise.

My interest in this investigation is strictly intellectual as a graduate student. The study was not funded by anyone, and I do not stand to benefit monetarily from the work and findings of this study

3.1.12 These ethical norms cover topics like honesty, informed permission, data anonymisation and storage, participant access to data and the duty of secrecy for all those involved in the research.
3.1.13 The data collection includes human participants.
3.1.14 There are no ethical risks associated with the study.
3.1.15 There are no potential unintended consequences of the study.
3.1.16 There are no actual or potential conflicts of interest.
3.1.17 There is minimal risk associated with the study.
3.1.18 All risks, unintended consequences and conflicts of interest have been mitigated.

Conclusion of Research Strategy, Design, Procedures and Methodology

In this chapter, we discussed the research approach that was employed in the study to ascertain the elements that influence decisions and behaviours related to financial literacy. This chapter described in detail the statistical approaches that would be utilized to analyze the data obtained and then concluded with the ethical principles to preserve the integrity and privacy of the respondents. To aid in drawing conclusions and making recommendations, the findings of the study based on the techniques employed will be presented in the next chapter.

CHAPTER 4: PRESENTATION AND DISCUSSION OF RESEARCH RESULTS

Introduction

This study set out to identify variables which form part of an individual's monetary choices. The purpose of this study was to examine the determinants of financial literacy on teachers' personal financial management in Westrand schools. This quantitative analysis of the surveyed responses considered the following variables: demographics, financial literacy, smart financial decisions, attitudes and behaviours. This chapter provides a summary and discussion of the study's findings as they relate to the study's aims.

The responses to the objectives outlined in Section 1.5.1 are presented in this chapter. This chapter is followed by a tabular summary which includes the study's questions, null and alternative hypothesis, statistical test and significance level, the p-value (if relevant), and the outcome (hypothesis either accepted or rejected).

The quantitative research topics and hypotheses are addressed here. Regarding the trustworthiness and legitimacy of the data, an evaluation of its internal consistency and construct validity is conducted. The study utilized a variety of inferential statistical methods to respond to the research questions. This enabled the study to analyze whether the findings were consistent with or contradicted the reviewed literature in Chapter Two. Lastly, the results are based on the gathered which is summarized at the end of this chapter.

Data analysis and results

It was important to assess the quality and potential usefulness of the data before conducting an analysis. Initially, this was conducted by undertaking specific field evaluations and cross-checks of critical components to verify the reliability of the data. The sample size made it challenging to comprehend all the data at once. However, the data was examined by visually skimming and navigating through the information window. For example, how many distinct values can a given variable hold? Did all possible values for a given variable appear with approximately the same frequency, or were selected values more noticeable as more common than others?

The term 'data cleaning' refers to the act of prepping data for analysis by deleting or correcting flawed information due to incomplete responses, errors, omissions, redundancies, or poor formatting (Ridzuan & Wan Zainon, 2019). Tables which summarized all the values of selected variables were generated by conducting data frequencies for ease of an initial glance. This section provides descriptive information about the sample population in the form of descriptive and frequency analyses.

Descriptive analysis

These descriptive statistics shown in Table 5.1, provides both a macro and micro view of the data, providing both an overview and specifics. These helped to identify potential

errors in the data, for example, if an average is much higher than expected or if a response to a question is extremely variable. This scenario revealed that the data should be double-verified. Further details on the distribution of values on continuous variables are also supplied by descriptive statistics (skewness). Parametric statistical methods may require this data if the variables in question are utilized (e.g. T-tests, analysis of variance). skewness as the value of can be utilized to assess the degree to which its distribution is skewed. A value of zero reveals known skewness and represents a normal distribution. Furthermore, descriptive statistics helped determine which inferential statistical techniques can be utilized, because these methodologies rely on the shape of the data.

Table 4-1: Descriptive Statistics

	N	Range	Minimum	Maximum	Sum	Mean	Std. Deviation	Variance	Skewness	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
1. What is your age?	55	4	1	5	181	3.29	1.048	1.099	-.119	.322
2. What is your gender?	55	1	1	2	84	1.53	.504	.254	-.112	.322
3. What is your highest education level?	55	5	1	6	180	3.27	1.326	1.758	.216	.322
Valid N (listwise)	55									

Source: **Survey instrument**

Frequency analysis

4.1.1 Demographic analysis

Table 5.2. presents the demographic analysis output which comprises two parts namely: provide a summary of each of the requested variables. The sample was valid in that N=55 was the number of respondents, and no data was omitted. For the continuous variables of age and education, it was pertinent to note the mean, median, and mode as measures of central tendencies. The measures of dispersion were

examined from the range, variance, skewness and standard deviation. The minimum and maximum values were examined to ensure that these made sense and were within the range of possible scores for that variable. The subsequent tables detailed the distributions of answers by variable. The other tables presented in the output corresponded with each of the investigated variables, while the cases were placed into legitimate categories. One could from the frequency output establish whether the data set was clean and error-free to proceed to other descriptive analyses.

Measures of central tendency offered a summation metric which sought to characterize an entire data set with a single number that reflected either the middle or centre of its distribution. These measures included: mode, median, and mean. The mode of a variable is a characteristic that occurs most frequently, while the median describes the midway value in an ordinal, interval or ratio variable. The term mean refers to the mathematical average.

Table 4-2: Frequencies Statistics

		1. What is your age?	2. What is your gender?	3. What is your highest level of education?
N	Valid	55	55	55
	Missing	0	0	0
Mean		3.29	1.53	3.27
Median		3.00	2.00	3.00
Mode		3	2	3
Std. Deviation		1.048	.504	1.326
Variance		1.099	.254	1.758
Skewness		-.119	-.112	.216
Std. Error of Skewness		.322	.322	.322
Range		4	1	5
Minimum		1	1	1
Maximum		5	2	6
Percentiles	25	3.00	1.00	2.00
	50	3.00	2.00	3.00
	75	4.00	2.00	4.00

Source: **Survey instrument**

4.1.2 Frequency Tables

Each occurrence of a data code in the variable is listed in the frequency table. Table 5.3. illustrates the following data for each code:

Frequency: The average number of times a code is utilized.
Percentage: An expression of the frequency with which a certain value is observed, expressed as a percentage.

Valid Percentage: The fraction of non-missing values where a given value exists and utilizes the percentage symbol.
Cumulative Percentage: The fraction of non-missing data situations when the value is less than or equal to some other value.

Table 4-3:Frequencies-What Is Your Age?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20-25	2	3.6	3.6	3.6
	26-35	11	20.0	20.0	23.6
	36-45	18	32.7	32.7	56.4
	46-55	17	30.9	30.9	87.3
	> 56	7	12.7	12.7	100.0
	Total	55	100.0	100.0	

***Source*: Survey instrument**

Table 5.3.'s age statistics demonstrate that 3.6 per cent of the sample comprised individuals aged 20-25. This was followed by the age range 26-30, which accounted for 23.6 per cent of the sample population. The age range of 36-45 dominated the sample with 32.7 per cent of the respondents. This was followed by 30.9 per cent of the age range 46-55, while only 7 per cent accounted for responders over the age of fifty-six and above. Hence, the sample size comprised fifty-five respondents.

Table 4-4: Frequencies-What Is Your Gender?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	26	47.3	47.3	47.3
	Female	29	52.7	52.7	100.0
	Total	55	100.0	100.0	

***Source*: Survey instrument**

Table 5.4. illustrates the gender breakdown of the sample. The results revealed that 52.7% of the sample comprised females, whereas only 47.3% of males. Hence, a total of fifty-five responses. It is significant to observe the response rate in the various subgroups of the sample. To undertake certain analyses (e.g. Anova), it is easier to have equal group sizes.

Table 4-5: Frequencies-What Is Your Highest Level of Education?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Diploma	4	7.3	7.3	7.3
	Bachelor's Degree	13	23.6	23.6	30.9
	Bachelor's Honours Degree	17	30.9	30.9	61.8
	Post Graduate Diploma	8	14.5	14.5	76.4
	Master's Degree	11	20.0	20.0	96.4
	Doctorate	2	3.6	3.6	100.0
	Total	55	100.0	100.0	

***Source*: Survey instrument**

Table 5.5 reveals a notable prevalence of the Bachelor's Honours Degree with a frequency of 30.9%. This is followed by 23.6% of respondents who have a Bachelor's Degree. A total of 20.0% of the respondents had acquired a Master's Degree, while 14.5% had a Post Graduate Diploma. Furthermore, 7.3% while only 3.6% had Doctoral qualifications.

4.1.3 Graphical/pictorial method

The histograms of age, gender and level of education with a fitted line of distribution assessed the quality of the fit by exploring how well the heights of the bars matched the curves. There was a good fit between the data and the distribution because the bars tracked the constructed line from the data. This revealed that the dataset was distributed normally.

The mean indicates the location of the centre value of a data set. A small standard deviation revealed that the data is clustered towards the mean, while a big standard deviation indicates that the data was more scattered. The closest standard deviation is to zero, the more closely the data points cluster around the mean, The further away from zero the data points cluster, the more the data set is either above or below the mean. The standard deviation reveals how dispersed the values in a data set are relative to the mean. The greater the value of the standard deviation, the more dispersed the sample values.

Inferential statistics

Inferential statistics are utilized when generalizations are made of the population at large must be from gathered data and a smaller subset. At this stage, information is extrapolated from the entire population based on what has been observed in the sample. This takes place with the help of the population of interest.

Table 4-6: Summary-Case Processing (Demographics)

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
3. What is your highest level of education? * 4. 'Suppose you had R100 in a savings account and the interest rate was 2% per year'. ("Solved Suppose that you had $100 in a savings account and - Chegg") After 5 years, how much do you think you would have in the account if you left the money to grow?	54	98.2%	1	1.8%	55	100.0%
2. What is your gender? * 4. Suppose you had R100 in a savings account and the interest rate was 2% per year. ("Financial Literacy Answers | Global Financial Literacy Excellence ...") After 5 years, how much do you think you would have in the account if you left the money to grow?	54	98.2%	1	1.8%	55	100.0%

Source: **Survey instrument**

The Case Processing Summary is a summary of the cases which were processed when the crosstab analysis was conducted. Table 5.6 illustrates the sample description with Valid N representing the number of valid samples = 54 and Missing N = 1 with a Total N of 55.

The chi-square of independence table output for the cross tabs revealed that the findings of the test appear to be a difference between those who answered the question correctly and those that did not. The crosstabs table includes information about observed and expected counts.

4.1.4 Observed count

For each cell in a crosstabs table, the observed count represents the actual frequency of occurrence for that value. Table 5.6 illustrates that there are twenty-one males (out of a total of 26) who responded correctly to the question, while twenty-two females (of a total of 28) provided the same response.

4.1.5 Expected count

If the null hypothesis is correct, the expected count of a given cell is the number of times that cell would be encountered. In our test, the null hypothesis reflects no

association between the level of education variable and the calculated education measure variable. This means that the projected frequency of a cell is equal to the expected count on the assumption that the level of education and education measures are not dependent on each other.

Chi-square scores are more likely to be significant and the null hypothesis will be rejected when there is a larger discrepancy between the observed and predicted values, suggesting an association between the variables. The question is whether these differences are big enough to conclude that the level of education variable and education measure variable are associated with each other.

Reliability and Validity of Dataset

It is crucial to acquire dependable scales when selecting scales for inclusion in the research. Internal consistency is one of the primary challenges with the scale. This indicates the degree to which the components of the scale “hang together.” Do all measure the same fundamental concept? Cronbach’s Alpha coefficient is one of the most widely utilized measures of internal consistency. The Cronbach’s Alpha coefficient scale should ideally be greater than .7 (DeVellis, 2003).

4.1.6 Scale: Measure financial knowledge

Table 4-7: Summary Case Processing (Financial Knowledge)

		N	%
Cases	Valid	54	98.2
	Excluded[a]	1	1.8
	Total	55	100.0

"a. Listwise deletion based on all variables in the procedure." (“Listwise deletion based on all variables in the procedure.”)

Source: **Survey instrument**

Cases in the case processing summary table for the scale measuring financial literacy revealed that fifty-four cases were valid (98.2%) while one case was excluded.

Table 4-8: Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.613	.657	2

Source: **Survey instrument**

In the table displaying dependability data, just two things were put to the test. A total of 61.3% of Cronbach’s Alpha was acceptable due to the number of items tested to measure financial literacy. The value of the Cronbach Alpha was within the range of 0.60 to 0.80, which implied that it was moderate and acceptable (Rai et al., 2019).

Table 4-9: Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Inter-Item Correlations	.490	.490	.490	.000	1.000	.000	2

Source: **Survey instrument**

Values of Cronbach Alpha are very sensitive to the total number of items on a scale. Low Cronbach scores are common for short scales (those with 10 items or less). the 'mean inter-item correlation.' of the items may be useful information to provide in this case. Inter-item correlation matrices between .2 to .4 are recommended by Briggs and Cheek (1986). all the values in the inter-item correlation matrix are positive. This indicates that the items measure the same underlying characteristics.

4.1.7 Scale: Financial Decisions

Table 4-10: Summary Case Processing (Financial Decisions)

		N	%
Cases	Valid	52	94.5
	Excluded[a]	3	5.5
	Total	55	100.0

Source: **Survey instrument**

Cases in the case processing summary table for the scale measuring smart financial decisions revealed that fifty-two cases were valid (94.5%) while 3 cases were excluded (5.5%).

Table 4-11:Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.089	.091	2

Source: **Survey instrument**

The Cronbach's Alpha coefficient for the two tested items was .089. This suggested that the items had a relatively high internal consistency that measured smart financial decisions.

Table 4-12: Item Statistics

	Mean	Std. Deviation	N
7. In a typical month, how difficult is it for you to cover your expenses and pay all the bills?	2.00	.714	52
8. Have you thought of how to manage your debt?	2.54	.576	52

Source: **Survey instrument**

Table 5.12 displays the Mean, Standard Deviation and N sample of the items.

Table 4-13: Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	2.269	2.000	2.538	.538	1.269	.145	2

Source: **Survey instrument**

All the negative values in the inter-item correlation matrix are positive, there are no negatives. This suggests that the items all assess the same fundamental traits.

Measures of association

The Chi-square test of association is utilized if one has two nominal scale categorical variables and intends to establish whether these are related. The test can also be read as whether or not there is a difference between the two compared variables. Pearson's Chi-squared test is another name for this analysis, and it is also known as the Chi-squared test for independence.

4.1.8 Research hypothesis 1

H^0 There is **no relationship** between financial knowledge and teachers' financial decisions.
H^A There **is a relationship** between financial knowledge and teachers' financial decisions.

Table 4-14: Post Hoc Tests

Multiple Comparisons

Dependent Variable: HW_TO_BUDGET

Tukey HSD

(I) 3. What is your highest level of education?	(J) 3. What is your highest education level?	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound"
Diploma	Bachelor's Degree	.167	.137	.828	-.24	.57
	Bachelor's Honors degree	.183	.134	.744	-.21	.58
	Post Graduate Diploma	.250	.146	.528	-.18	.68
	Master's degree	.250	.139	.475	-.16	.66
	Doctorate	.250	.206	.828	-.36	.86
Bachelor's Degree	Diploma	-.167	.137	.828	-.57	.24
	Bachelor's Honors degree	.017	.092	1.000	-.26	.29
	Post Graduate Diploma	.083	.109	.972	-.24	.41
	Master's degree	.083	.099	.958	-.21	.38
	Doctorate	.083	.182	.997	-.46	.62
Bachelor's Honours Degree	Diploma	-.183	.134	.744	-.58	.21
	Bachelor's Degree	-.017	.092	1.000	-.29	.26
	Post Graduate Diploma	.067	.104	.987	-.24	.38
	Master's Degree	.067	.094	.980	-.21	.35
	Doctorate	.067	.179	.999	-.47	.60
Post Graduate Diploma	Diploma	-.250	.146	.528	-.68	.18
	Bachelor's Degree	-.083	.109	.972	-.41	.24
	Bachelor's Honours degree	-.067	.104	.987	-.38	.24
	Master's Degree	.000	.110	1.000	-.33	.33
	Doctorate	.000	.188	1.000	-.56	.56
Master's Degree	Diploma	-.250	.139	.475	-.66	.16
	Bachelor's Degree	-.083	.099	.958	-.38	.21
	Bachelor's Honours Degree	-.067	.094	.980	-.35	.21
	Post Graduate Diploma	.000	.110	1.000	-.33	.33
	Doctorate	.000	.183	1.000	-.54	.54
Doctorate	Diploma	-.250	.206	.828	-.86	.36
	Bachelor's Degree	-.083	.182	.997	-.62	.46
	Bachelor's Honours Degree	-.067	.179	.999	-.60	.47
	Post Graduate Diploma	.000	.188	1.000	-.56	.56
	Master's Degree	.000	.183	1.000	-.54	.54

Source: Survey instrument

Tukey's HSD Test for multiple comparisons revealed that the mean value of the how-to budget was significantly different between levels of education Diploma (p = .828, 95% C.I. = [-2.4, .57]). There was no significant statistical difference in the mean of how to budget and level of education Diploma and Bachelors Honours Degree (p = .744) or between how to budget and level of education Diploma and Post Graduate Diploma (p = .528).

The results thus far, revealed that there are insignificant statistical differences between the groups. The multiple comparison table output test revealed significant values were generated for the mean differences between the various levels of education variable (Diploma - Bachelor's Degree - Bachelors Honours Degree - Postgrad Diploma - Master's Degree - Doctorate). The Turkey HSD (Honest significant difference) test revealed that the mean difference between the level of education groups does not reach significance while the P-values are greater than the standard 0.5 alpha level.

4.1.9 Chi-Square Tests

Table 4-15: Chi-Square Tests

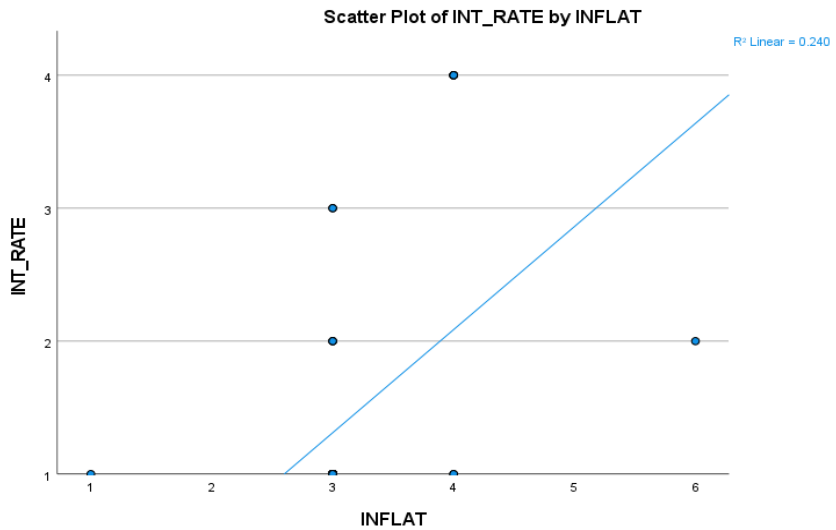
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	7.760[a]	3	.051
Likelihood Ratio	10.194	3	.017
Linear-by-Linear Association	1.382	1	.240
N of Valid Cases	54		

a. 6 cells (75,0%) have an expected count of less than 5. The minimum expected count is 96.

Source: **Survey instrument**

In the value column to the right of Pearson Chi-Square, one can see the Chi-square statistic. In the test output, the value of the Chi-square statistic was 7.760 and 3 degrees of freedom (df). On the same row under Asymptotic Significance (2-sided), we get the p-value (.051). If this number is less than or equal to the predetermined alpha threshold, usually set at P 0.05, then the outcome has statistical significance. In the test, the P-value is equal to the standard alpha value. Hence, the null hypothesis is rejected, which asserts that the two variables are independent of each other. The result is statistically significant. In addition, the data seems to indicate that there is no link between the variables. This is compelling evidence that the null hypothesis is false. The lack of correlation between the two variables under study is stated as the null hypothesis (one variable does not affect the other).

Figure 4-1: Scatter Plot



Source: **Survey instrument**

A claim that the results could have just been the result of chance is called insignificance. As a result, the null hypothesis assumes that the opposite of what one

is trying to establish is false. If the null hypothesis is false, then the alternative hypothesis is the preferred explanation. If the independent variable does affect the dependent variable, then the null hypothesis is rejected. Furthermore, these results significantly support the theory under investigation (i.e., not due to chance).

The Chi-square statistic only informs one whether the variables are associated. The crosstabs table informs one of how these are associated. The results of a sample study may be extrapolated to the whole population should the P-value be a smaller amount than or equal to 0.05.

Table 4-16: Symmetric Measures

		Value	Approximate Significance
Nominal by Nominal	Phi	.379	.051
	Cramer's V	.379	.051
N of Valid Cases		54	

Source: **Survey instrument**

Table 5.9 presents both Phi and Cramer's V contingency coefficient of .379 and a significance of .051.

4.1.10 Correlation Tests

Table 4-17: Correlations

		INT_RATE	INFLAT
INT_RATE	Pearson Correlation	1	.490**
	Sig. (2-tailed)		<,001
	N	54	54
INFLAT	Pearson Correlation	.490**	1
	Sig. (2-tailed)	<,001	
	N	54	54

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

Source: **Survey instrument**

The result is a simple table including the correlation matrix, and it is easy to interpret. Pearson's correlation coefficient amongst two variables is calculated using bivariate correlation analysis. Analyzing well over two variables results in a more complex matrix. Thus, the matrix is homogeneous because the link between elements "A" and "B" is the same as the relationship between elements "B" and "A". Furthermore the correlation between 'A and A' is always one.

Pearson's correlation coefficient was .490 in the test, which signified a medium positive linear correlation. The significance test has the null hypothesis and there is neither a positive nor negative correlation between the two variables in the universe (r = 0). The

results revealed a high statistical significance of P < 0.001. Consequently, one can reject the null hypothesis and assume that the interest and inflation rate test scores are positive, and linearly associated in the general universe.

A linear correlation between scores on tests and their expected values was the first hypothesis for the interest and inflation rate which were administered to a sample of fifty-four respondents. Pearson's bivariate correlation coefficient revealed a medium positive relationship between both test scores (r = .490) which is significantly different from zero (p < 0.001).

MEASURING FINANCIAL LITERACY

4.1.11 Regression Test

Table 4-18: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.082[a]	.007	-.013	.888

a. Predictors: (Constant), ENJ_DEAL_FIN_MATTERS

The model summary section shows that the R-squared value is 0.0007 meaning that only 0.7% of the variance in the dependent variable (INT_RATE) can be explained by the predictor variable (ENJ_DEAL_FIN_MATTERS). The adjusted R-Squared value is -0.013, which indicated that the model is not a good fit for the data. The standard error of the estimate is 0.888, which means that the average distance between the predicted values and the actual values is 0.888 units.

Table 4-19: Anova

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.271	1	.271	.344	.560[b]
	Residual	40.182	51	.788		
	Total	40.453	52			

a. Dependent Variable: INT_RATE

b. Predictors: (Constant), ENJ_DEAL_FIN_MATTERS

This section indicated that the regression sum of squares is 0.271, the residual sum of the squares is 40.182, and the total sum of squares is 40.453. The F-test statistic is 0.344, and the associated p-value is 0.560, which indicates that the predictor variable is not a significant predictor of the dependent variable.

Table 4-20: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.206	.317		3.803	<,001
	ENJ_DEAL_FIN_MATTERS	.065	.111	.082	.586	.560

a. Dependent Variable: INT_RATE

This section shows the intercept term is 1.206, and the coefficient for the predictor variable, ENJ_DEAL_FIN_MATTERS, is 0.065. The t-value for this coefficient is 0.586, and the associated p-value is 0.560, which confirms that this variable is not a significant predictor of the dependent variable.

Overall the regression analysis suggests that there is no significant relationship between the predictor variable and the dependent variable. The low R-squared value and nonsignificant p-value indicate that the model is not a good fit for the data.

4.1.12 Anova Test

Table 4-21:Model Summary(Attitudes & Behaviours)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.142[a]	.020	.001	.379

a. Predictors: (Constant), ENJ_DEAL_FIN_MATTERS

Table 4-22: Anova

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.151	1	.151	1.052	.310[b]
	Residual	7.321	51	.144		
	Total	7.472	52			

a. Dependent Variable: UNDER_COMP_INTEREST

b. Predictors: (Constant), ENJ_DEAL_FIN_MATTERS

Table 4-23: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.038	.138		7.509	<,001
	ENJ_DEAL_FIN_MATTERS	.049	.048	.142	1.026	.310

a. Dependent Variable: UNDER_COMP_INTEREST

Table 4-24: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.487[a]	.237	.222	.887

a. Predictors: (Constant), DISTRACT_WK_FIN_STRESS

This table provides the R and R2 values. The R-value represents the simple correlation between the dependent and independent variables. A value greater than 0.4 is analyzed further. In this instance, the value was 0.487 (the “R” column), which was good and revealed a low degree of correlation. R-square revealed the total variation for the dependent variable which could be explained by the independent variables. A value greater than 0.5 shows that the model is effective enough to determine the relationship. In this case, the value is .237, which is lower than expected. Adjusted R-square revealed the generalization of the results, as well as the variation of the sample results from the population in multiple regression. It must reflect a difference between the R square and the adjusted R square minimum. In this instance the value is .222 which is not far off from .237, hence it is good.

Hence, these values in the model summary table are adequate, and the next step can be taken, if they are not, the data must be modified until the intended outcomes are achieved.

Table 4-25:Anova

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12.704	1	12.704	16.134	<,001[b]
	Residual	40.944	52	.787		
	Total	53.648	53			

a. Dependent Variable: FEEL_ABT_FINANCES

b. Predictors: (Constant), DISTRACT_WK_FIN_STRESS

This table revealed a regression model and predicted the dependent variable

significantly well. Here, p < 0.0005, is less than 0.05 and revealed that overall, the regression model predicts the outcome variable is statistically a good fit for the data.

The significant threshold (P-Value / Sig Value) for this investigation was set at 5%, with a 95% confidence interval for the participants. P-Values below 0.05 are considered acceptable. Yet as you can see, in the table above, it is less than 0.001. This is an important finding.

Because of the model's refinement in light of the error signal provided by the F-Ratio, the variable's prediction is improved. For an F-Ratio yield efficient model, the AB value is bigger than one. A value of 16.1 seems to be appropriate in the table above.

Table 4-26: Coefficients

		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	4.222	.256		16.483	<,001
	DISTRACT_WK_FIN_STRESS	-.389	.097	-.487	-4.017	<,001

a. Dependent Variable: FEEL_ABT_FINANCES

For the research to be considered significant, the value must be lower or smaller than the threshold of statistical significance, often setting a significance level of 0.05 or 95% confidence interval. To reject or not reject the null hypothesis depends on the significance level. If the hypothesis is rejected the Sig. is less than 0.05, and there is an impact when the null hypothesis is rejected it implies. However, should the null hypothesis not accept it implies there is no impact.

Therefore, the analysis suggests that how people feel about their finances has a significant negative relationship with them and experience distraction at work due to financial stress.

4.1.13 Research hypothesis 2

H^0 There is **no relationship** between financial knowledge and teachers' financial behaviour / financial well-being.
H^A There **is a relationship** between financial knowledge and teachers' financial behaviour/wellbeing.

4.1.14 Scale: ATTITUDES AND BEHAVIOURS / WELL-BEING

Table 4-27: Case Processing Summary (Wellbeing)

		N	%
Cases	Valid	11	20.0
	Excluded[a]	44	80.0
	Total	55	100.0

Source: **Survey instrument**

The number of instances in the case processing summary table 5.27 to measure attitudes and behaviour revealed eleven valid cases (20.0%), while 44 cases were excluded from a total of 55 respondents.

Table 4-28: Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.785	.848	5

Source: **Survey instrument**

With Cronbach's Alpha for this test of the reliability of .785, we may infer that the sample is a reliable representation of the population that the scale is meant to measure.

Table 4-29:Item Statistics

	Mean	Std. Deviation	N
OFT_SAV_INVEST	1.36	.674	11
FAIL_OPP_SAV_INVEST	2.09	1.136	11

Source: **Survey instrument**

The items statistics display the Mean, Standard Deviation and N samples of the items.

Table 4-30:Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Inter-Item Correlations	.736	.736	.736	.000	1.000	.000	2

Source: **Survey instrument**

There are no negative values in the inter-item correlation matrix. The fact that all the numbers are positive indicates that they are all measuring the same quality.

4.1.15 One-way Tests

Table 4-31: Descriptive Statistics-How To Budget

					95% Confidence Interval for Mean			
	"N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximum"
Diploma	4	1.25	.500	.250	.45	2.05	1	2
Bachelor's Degree	12	1.08	.289	.083	.90	1.27	1	2
Bachelor's Honors degree	15	1.07	.258	.067	.92	1.21	1	2
Post Graduate Diploma	8	1.00	.000	.000	1.00	1.00	1	1
Master's degree	11	1.00	.000	.000	1.00	1.00	1	1
Doctorate	2	1.00	.000	.000	1.00	1.00	1	1
Total	52	1.06	.235	.033	.99	1.12	1	2

Source: **Survey instrument**

Descriptive statistics show that there is a difference in the sample mean scores across all six levels of the education variable. Data analysis showed that the Diploma group samples are more likely to have a higher mean than the other groups.

Table 4-32: Tests Of Homogeneity Of Variances

		Levene Statistic	df1	df2	Sig.
HW_TO_BUDGET	Based on Mean	3.347	5	46	.012
	Based on Median	.803	5	46	.553
	Based on the Median and with adjusted df	.803	5	20.729	.560
	Based on trimmed mean	2.269	5	46	.063

Source: **Survey instrument**

The equality of variances between groups was verified with the use of the Levene statistic, which is a prerequisite for the ANOVA test. 0.5 or more was sought as the significant value. Obtaining a statistically significant result is not intended to happen since doing so will imply there is a genuine disparity between the variances. According

to the homogeneity of variance test, the median is .553 which is not statistically significant, but the Levine statistic's significance value is depending on the comparison. Hence, the homogeneity of variance conditions has been satisfied, and the ANOVA tests may be relied upon.

Table 4-33: Anova-How To Budget

	"Sum of Squares	df	Mean Square	F	Sig."
Between Groups	.227	5	.045	.803	.553
Within Groups	2.600	46	.057		
Total	2.827	51			

Source: **Survey instrument**

A one-way ANOVA was conducted to compare the effect of the five levels of education and whether the respondents know how to budget. The significance level and F value in the between groups row off the ANOVA output were of interest. The one-way ANOVA revealed that there was a statistically significant difference in the mean education level between at least five groups (F(0.161) = [.803], p = .503). With a P-value of .553, The F- Value of .803 is (in) significant, above the 0.5 alpha threshold. according to the output, there is no statistically significant difference in mean levels of education. it is unclear, nevertheless, whether these categories it implies the difference is negligible. Thus, the post hoc Turkey HSD test result should be looked at.

Table 4-34: Post Hoc Tests

Multiple Comparisons

Dependent Variable: HW_TO_BUDGET

Tukey HSD

(I) 3. What is your highest level of education?	(J) 3. What is your highest education level?	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound"
Diploma	Bachelor's Degree	.167	.137	.828	-.24	.57
	Bachelor's Honors degree	.183	.134	.744	-.21	.58
	Post Graduate Diploma	.250	.146	.528	-.18	.68
	Master's degree	.250	.139	.475	-.16	.66
	Doctorate	.250	.206	.828	-.36	.86
Bachelor's Degree	Diploma	-.167	.137	.828	-.57	.24
	Bachelor's Honors degree	.017	.092	1.000	-.26	.29
	Post Graduate Diploma	.083	.109	.972	-.24	.41
	Master's degree	.083	.099	.958	-.21	.38
	Doctorate	.083	.182	.997	-.46	.62
Bachelor's Honours Degree	Diploma	-.183	.134	.744	-.58	.21
	Bachelor's Degree	-.017	.092	1.000	-.29	.26
	Post Graduate Diploma	.067	.104	.987	-.24	.38
	Master's Degree	.067	.094	.980	-.21	.35
	Doctorate	.067	.179	.999	-.47	.60
Post Graduate Diploma	Diploma	-.250	.146	.528	-.68	.18
	Bachelor's Degree	-.083	.109	.972	-.41	.24
	Bachelor's Honours degree	-.067	.104	.987	-.38	.24
	Master's Degree	.000	.110	1.000	-.33	.33
	Doctorate	.000	.188	1.000	-.56	.56
Master's Degree	Diploma	-.250	.139	.475	-.66	.16
	Bachelor's Degree	-.083	.099	.958	-.38	.21
	Bachelor's Honours Degree	-.067	.094	.980	-.35	.21
	Post Graduate Diploma	.000	.110	1.000	-.33	.33
	Doctorate	.000	.183	1.000	-.54	.54
Doctorate	Diploma	-.250	.206	.828	-.86	.36
	Bachelor's Degree	-.083	.182	.997	-.62	.46
	Bachelor's Honours Degree	-.067	.179	.999	-.60	.47
	Post Graduate Diploma	.000	.188	1.000	-.56	.56
	Master's Degree	.000	.183	1.000	-.54	.54

Source: Survey instrument

Tukey's HSD Test for multiple comparisons revealed that the mean value of the how-to budget was significantly different between levels of education Diploma (p = .828, 95% C.I. = [-2.4, .57]). There was no significant statistical difference in the mean of how to budget and level of education Diploma and Bachelors Honours Degree (p = .744) or between how to budget and level of education Diploma and Post Graduate Diploma (p = .528).

The results thus far, revealed that there are insignificant statistical differences between the groups. The multiple comparison table output test revealed significant values were generated for the mean differences between the various levels of education variable (Diploma - Bachelor's Degree - Bachelors Honours Degree - Postgrad Diploma - Master's Degree - Doctorate). The Turkey HSD (Honest significant difference) test revealed that the mean difference between the level of education groups does not reach significance while the P-values are greater than the standard 0.5 alpha level.

4.1.16 “Homogeneous Subsets

Table 4-35:Tukey Test HSD-How To Budget

3. What is your highest education level?	N	Subset for alpha = 0.05
		1
Post Graduate Diploma	8	1.00
Master’s degree	11	1.00
Doctorate	2	1.00
Bachelor’s Honors degree	15	1.07
Bachelor’s Degree	12	1.08
Diploma	4	1.25
Sig.		.523

Means for groups in homogeneous subsets are displayed.
a. Uses Harmonic Mean Sample Size = 5.377.
b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.”

Source: **Survey instrument**

Reliability and validity of survey results

To investigate what factors encourage educators’ financial literacy and how the level of education and behaviour plays a role therein, an online survey was conducted. A questionnaire and measurement scales were utilized to gather data related to the demographics e.g., age, gender, and level of education. The survey revealed that a final sample of 55 was adequate. In terms of gender distribution, 52.7% of the respondents comprised females, and 47.3% of males. The sample was skewed because the majority of participants were aged between 36 and 45.

The validity of the instruments and trustworthiness was also evaluated. The reliability analysis findings revealed that the total dependability was greater than 0.7. This outcome verified that the scales were dependable. Furthermore, frequencies and descriptive were utilized to evaluate construct validity. The findings corroborated the reliability and validity of the selected instruments. Therefore, the findings were accepted as credible.

Table 4-36: Summary Of Analysis

Test / Independent variable	Test method	Sig Value		Hypothesis testing result at 95% confidence interval	Comment
DISTRACT_ WK_FIN_ STRESS	Linear regression (Anova)	<,001		Null Hypothesis rejected (0.001 < 0.05)	The significant financial stress due to how people feel about their finances because the value of Sig. is below the threshold of acceptability with a one percent hike in how people feel about their finances the distraction level due to financial stress at work increases by -.389% (B value)

Conclusion of Presentation and Discussion of Research Results

This chapter explored selected, basic information relevant to the respondents who participated in the survey. A total of 55 online responses from Gauteng Westrand were included in the final sample of this study. SPSS version 28 was utilized to clean and analyze the gathered data. Frequency and descriptive analysis were utilized to assess omitted values as the first step in the data analysis process. The latter was illustrated graphically through histograms. It was necessary to conduct validity and reliability tests of the constructs utilized before testing the efficacy of the hypotheses.

The outcomes of this study can be linked to the existing literature on financial literacy, financial behaviour, and financial well-being among educators. The study's findings contribute to the growing body of research that highlights the importance of financial literacy in improving personal financial management outcomes. The results align with previous studies that have shown a positive association between financial literacy and financial behaviours, such as budgeting, saving, and investing.

The Cronbach's alpha coefficient was calculated to assess the reliability of the measuring scale with dependent and independent variables. The statistical Chi-square test was conducted to assess whether the actual results corresponded with the predictions. To figure out how strong and in which direction the links between the factors are, a correlation study was conducted using Pearson's correlations test. One-way tests for homogeneity of variances, ANOVA and Post Hoc tests were conducted by using one-way analysis of variances to establish whether there is a statistically significant difference.

Financial knowledge has been shown to improve fiscal habits. For instance, Lusardi & Mitchell (2014) those who are financially literate are more inclined to put their knowledge into sound financial habits including putting money away for retirement and avoiding expensive forms of borrowing.

Similar results were observed in research by Huston (2010) when savers and investors were shown to be more content with their financial situation.

CONCLUSION

This study aimed to investigate the impact of financial literacy, financial behaviour, and financial well-being on educators' financial management. It examined the relationship between these variables to understand how educators' financial knowledge, behaviours, and overall financial well-being influence their ability to manage their finances effectively. The study sought to identify any gaps, challenges, or areas for improvement in educators' financial management practices and provide recommendations to enhance their financial outcomes and overall job satisfaction.

From the preceding outcomes and results of the quantitative statistical analysis of the targeted sample of educators, it is supportably validated to conclude, that educators' limited financial literacy, poor financial behaviour, and inadequate financial well-being can lead to financial challenges and stress among educators, potentially impacting their job performance and overall well-being, influencing their financial management.

To address these issues, it is recommended to focus on enhancing financial literacy through targeted programs, promoting positive financial behaviour, and providing support systems that improve educators' financial well-being. By empowering educators with the necessary knowledge, skills, and resources, educational institutions and policymakers can contribute to their financial stability, job satisfaction, and ability to provide quality education to students.

By implementing these targeted programs, promoting positive financial behaviour, and providing support systems, educational institutions and policymakers can contribute to improving educators' financial well-being. These initiatives demonstrate a commitment to the financial success and overall welfare of educators, ultimately enhancing their job satisfaction, performance, and ability to provide quality education to students.

Taking action to improve educators' financial management not only benefits them individually but also has wider implications for the education system and society as a whole. By equipping educators with the tools and support they need for sound financial decision-making, we can enhance their financial outcomes and contribute to their overall well-being and effectiveness as educators.

Based on the analysis of the relationship between financial literacy, financial behaviour, financial well-being, and educators' financial management, the following recommendations can be made:

Strengthen Financial Literacy Programs: Educational institutions and policymakers should prioritize the development and implementation of comprehensive financial literacy programs specifically tailored for educators. These programs should cover essential financial concepts, such as budgeting, saving, investing, and retirement

planning, and provide practical tools and resources to enhance educators' financial knowledge and decision-making skills.

Promote Positive Financial Behavior: Interventions should focus on promoting positive financial behaviour among educators. This can be achieved through workshops, seminars, or coaching sessions that address topics like responsible spending, debt management, and goal setting. By encouraging educators to adopt prudent financial behaviours, such as saving regularly and making informed investment choices, their overall financial outcomes can be improved.

Support Financial Well-being: Educational institutions should consider implementing policies and practices that enhance educators' financial well-being. This includes providing competitive salaries, comprehensive benefits packages, and opportunities for professional development that lead to increased income potential. By addressing financial stressors and providing a supportive environment, educators' overall job satisfaction and financial well-being can be positively influenced.

Financial Literacy Workshops and Training: Offer regular workshops and training sessions specifically designed for educators to enhance their financial literacy. These programs can cover topics such as budgeting, saving, investing, debt management, and retirement planning. Collaborate with financial experts or organizations specializing in financial education to provide comprehensive and practical guidance.

Personal Finance Coaching and Counseling: Provide personalized financial coaching or counselling services to educators, where they can receive one-on-one guidance and support for their financial concerns. Trained financial professionals can help educators set financial goals, create customized financial plans, and provide ongoing support and accountability.

Financial Wellness Programs: Implement comprehensive financial wellness programs that encompass various aspects of financial well-being. These programs can include financial planning resources, financial health assessments, workshops on stress management related to finances, and access to resources for tackling financial challenges. Foster a supportive environment where educators feel comfortable seeking assistance and discussing financial concerns.

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APPENDICES

APPENDIX 1: ETHICS CLEARNACE CERTIFICATE

Graduate School of Business Administration
University of the Witwatersrand, Johannesburg

Wits Business School Ethics Committee
Constituted under the University Human Research Ethics Committee (Non-Medical)

Ethics Clearance Certificate

Ethics protocol number: WBS/BA2189073/983
This certificate is only valid with a legitimate ethics protocol number and signed by the Researcher (below)

Project title	The effect of financial literacy on teachers' personal financial management in West Rand schools
Investigator / Researcher	Mrs Pranaksha Budhoo
Nature of Project	MBA (Research Article)
Decision of the Committee	Approved, provided stakeholders and participants are guaranteed anonymity and confidentiality.
Issue Date of Certificate	10 02 2023
Expiry date	Date of submission of the project / research report
Chairperson	Prof Anthony Stacey ☎ +27 11 717 3587 +27 82 880 4531 anthony.stacey@wits.ac.za

Declaration by Researcher

One copy must be signed by the Researcher and returned to the Chairperson of the Wits Business School Ethics Committee.

I fully understand the conditions under which I am authorized to carry out the abovementioned research and I guarantee to ensure compliance with these conditions. Should any departure to be contemplated from the research procedure as approved I undertake to resubmit the protocol to the Committee.

Signature

10 February 2023
Date:

APPENDIX 2: TITLE APPROVAL

UNIVERSITY OF THE WITWATERSRAND JOHANNESBURG

Private Bag 3 Wits, 2050
Fax:
Tel:

Reference: Ms Jennifer Mgolodela
E-mail: jennifer.mgolodela@wits.ac.za

09 February 2023
Person No: 2189073
PAG

Mrs P Budhoo
P O Box 1801
Noordheuwel Ext 4
1756
South Africa

Dear Mrs Pranaiksha Budhoo

Master of Business Administration: Approval of Title

We have pleasure in advising that your proposal entitled *The effect of financial literacy on teachers¿ personal financial management in West Rand schools* has been approved. Please note that any amendments to this title have to be endorsed by the Faculty's higher degrees committee and formally approved.

Yours sincerely

Mrs Marike Bosman
Faculty Registrar
Faculty of Commerce, Law and Management

APPENDIX 3: EMPLOYEMENT APPROVAL TO CONDUCT RESEARCH

GAUTENG PROVINCE
Department: Education
REPUBLIC OF SOUTH AFRICA

R/4/4/1/2

GDE RESEARCH APPROVAL LETTER

Date:	16 August 2022
Validity of Research Approval:	08 February 2022– 30 September 2022 2022/365
Name of Researcher:	Budhoo P
Address of Researcher:	52 Simon Bekker Avenue
	Rangeview Ext 4
Telephone Number:	083 274 1409
Email address:	pranaksha.budhoo@gauteng.gov.za
Research Topic:	The social consequence of teachers impacted by financial literacy in Westrand Johannesburg
Type of qualification	Masters in Business Administration
Number and type of schools:	50 Primaey Schools and 50 Secondary Schools
District/s/HO	Gauteng West and Johannesburg West

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 to conduct the research. A separate copy of this letter must be presented to both the School (both Principal and SGB) and the District/Head Office Senior Manager confirming that permission has been granted for the research to be conducted.

16/08/2022

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

Office of the Director: Education Research and Knowledge Management
7th Floor, 17 Simmonds Street, Johannesburg, 2001
Tel: (011) 355 0488
Email: Faith.Tshabalala@gauteng.gov.za
Website: www.education.gpg.gov.za

APPENDIX 4: PROFESSIONAL EDITORS CERTIFICATE



VERIFICATION CERTIFICATE

TO WHOM IT MAY CONCERN

This certifies that the manuscript listed below was edited to enhance the document in areas related to language, and minimally address issues concerning the overall structure, content, referencing grammar, punctuation, spelling, logic, coherence, word choice, clarity and general readability.

by

PRANAKSHA BUDHOO [WBS]

MANUSCRIPT TITLE

THE EFFECT OF FINANCIAL LITERACY ON TEACHERS' PERSONAL FINANCIAL MANAGEMENT IN WESTRAND SCHOOLS

DATED

FEBRUARY 26 2023

Neither the research nor the author's intentions were altered during the editing process. All deviations from convention in English language usage was indicated and alternate recommendations to better convey the researcher's intended message was made. Documents receiving this certification should be English-ready for publication, however, the author has the right to either accept or reject the suggestions and changes. Furthermore, neither the suggested changes and recommendations be guaranteed nor assumed to have been addressed.

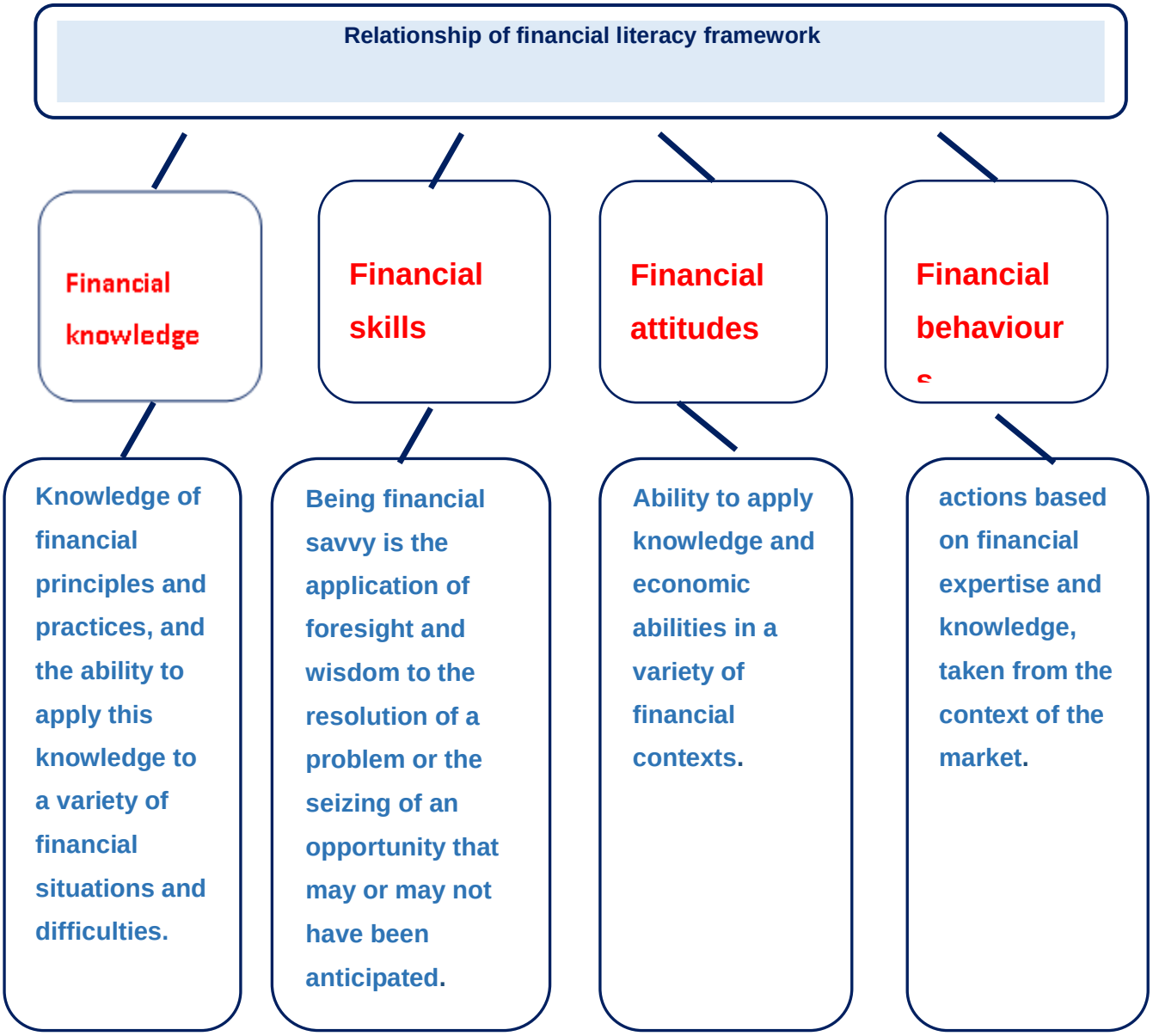
Thanking you

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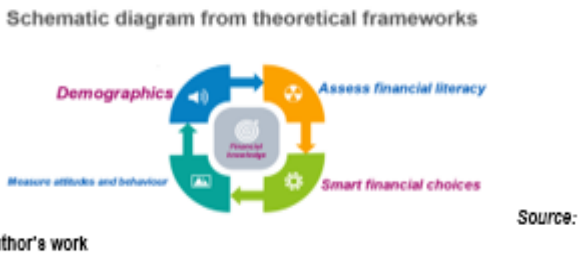
APPENDIX 5: FIGURES

Figure 1: Financial Literacy Relationship Framework



***Source*: Author's iteration**

Figure 2Schematic diagram from theoretical frameworks



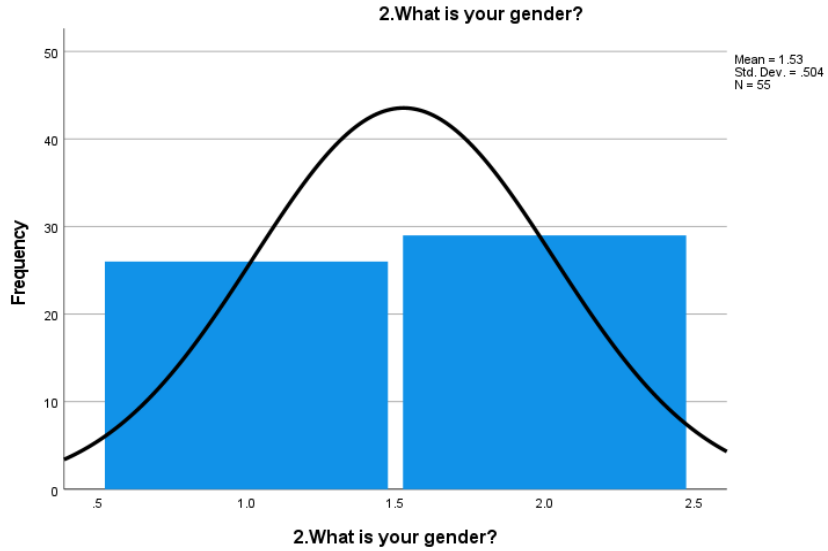
***Source:* Author's work**

Histograms
Figure: 3
Age



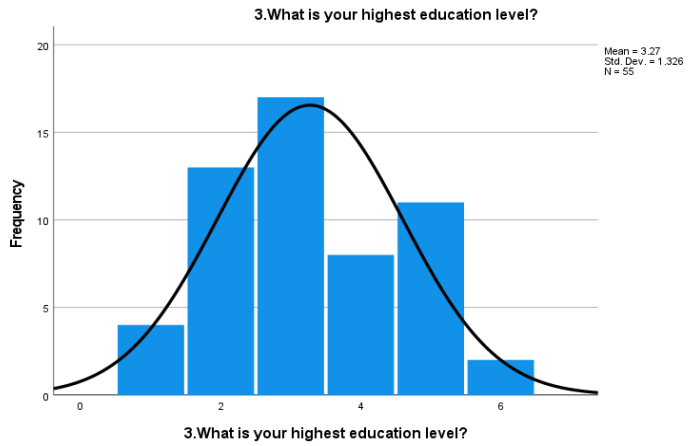
***Source*: Survey instrument**

Figure: 4
Gender



***Source*: Survey instrument**

Figure 5
Education level



***Source*: Survey instrument**

Figures 3, 4 and 5 which produced histograms examined the distribution of the variables to determine whether the variable followed a normal distribution. If the variable followed a normal distribution the histogram displayed a “bell” shape. Most of the values were concentrated in the middle and fewer at the end. These outputs are generally distributed generally prevalent with most scores in the centre and tapering towards the tail ends. Furthermore, there are no outliers.

APPENDIX 6: TABLES

Table 1: Ethical Considerations

Ethical issue	Definition
Voluntary participation	Your participants are free to opt in or out of the study at any point in time.
Informed consent	Participants know the purpose, benefits, risks, and funding behind the study before they agree or decline to join.
Anonymity	You don't know the identities of the participants. Personally identifiable data is not collected.
Confidentiality	You know who the participants are but you keep that information hidden from everyone else. You anonymize personally identifiable data so that it can't be linked to other data by anyone else.
Potential for harm	Physical, social, psychological and all other types of harm are kept to an absolute minimum.
Results communication	You ensure your work is free of plagiarism or research misconduct, and you accurately represent your results.

Source: Adapted from (Resnik, 2020)