



The influence of financial literacy and financial technology on the financial behaviour of high school teachers in KwaZulu-Natal

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Nkosinathi Prince Jali

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Supervisor: Dr Celani J. Nyide
(DBA)

Date: 30/05/2022

Co-Supervisor: Prof Lesley J. Stainbank
(D.COM)

Date: 30/05/2022

DECLARATION

I, Nkosinathi Prince Jali, declare that this dissertation is a representation of my own work in conception and execution. This work has not been submitted in any form for another degree at any university or institution of higher learning. All information cited from published or unpublished works has been acknowledged.

30/05/2022

Nkosinathi Prince Jali

Date

APPROVED FOR FINAL SUBMISSION

30/05/2022

Dr Celani J. Nyide (DBA)

Date

30/05/2022

Prof. L.J. Stainbank D.COM CA (SA)

Date

ABSTRACT

The argument that many people make financial decisions that are not in their best interest cannot be disputed. In using financial technology, there are both advantages and disadvantages. One disadvantage is that making irresponsible financial decisions has become easier since information is readily available to people, leading to a lot more debt. On the other hand, it can also make it easier for people to save more money, depending on their financial literacy level. Due to financial literacy, people are better able to make wise financial decisions and are more likely to save more money for the future. The Basic Education Department in South Africa is faced with a crisis of teachers leaving their profession prematurely. Some of the reasons cited for teachers' resignations include the search for pension pay-outs that would redeem them from indebtedness. Teachers' mass resignations create a serious problem in the education system that not only compromises the quality of education, but also increases recruitment, training and development costs. Moreover, South Africa is facing this crisis at a time when there is a lack of qualified, experienced and competent teachers in critical subjects such as Mathematics, Science, and Technology.

To determine the influence of financial literacy and financial technology on the financial behaviour of high school teachers in KwaZulu-Natal (KZN), this study employed a quantitative research approach. Data was collected from 246 high school teachers in Msunduzi Municipality KZN using a self-administered questionnaire. Several hypotheses were formulated and tested using regression analysis.

The study revealed that most of the high school teachers in Msunduzi Municipality had sound financial management knowledge which enabled them to mitigate and navigate financial literacy challenges. However, maintaining or sticking to a planned budget and finding solutions when facing financial challenges were problems mentioned by the teachers. Nevertheless, most of the teachers demonstrated that they had good debt management skills and financial management and planning skills which helped them to draft monthly budgets and keeping track of expenses. Additionally, the teachers indicated that they had a good grasp of financial technology services, but also indicated that their knowledge of financial technology made it easier for them to access and spend the money; this led to poor savings and negative financial behaviour.

Furthermore, despite the convenience that financial technology services offer, they also highlighted the security risks of using this technology such as the possibility of being hacked or defrauded online by scammers.

As this study used a quantitative research approach, it is suggested that another study should be conducted using a mixed methodology, which would help to expand the corpus of knowledge in this area.

Key words: Financial literacy, financial technology and financial behaviour

DEDICATION

I dedicate this dissertation to the Almighty God for His grace to successfully complete this work and to my supportive late grandmother, Mrs Ida Sitshelekiwe Ndlela.

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LIST OF ACRONYMS

ANOVA	Analysis of Variance
ATM	Automated teller machine
CEO	Chief Executive Officer
COVID-19	Coronavirus Disease 2019
DOE	Department of Education
DUT	Durban University of Technology
FCSM	Federal Committee on Statistical Methodology
FINRA	Financial Industry Regulatory Authority
FREC	Faculty Research Ethics Committee
HOD	Head of Department
HSRC	Human Sciences Research Council
KZN	KwaZulu-Natal
NCR	National Credit Regulator
OLS	Ordinary Least Squares
OECD	Organization for Economic Cooperation and Development
PRC	Pew Research Center
SABRIC	South African Banking Risk Information Centre
SARB	South African Reserve Bank
SARS	South African Revenue Service
SBP	Small Business Project
SPSS	Statistical Package for the Social Sciences
Stat SA	Statistics South Africa
USA	United States of America

CHAPTER ONE

INTRODUCTION

1.1 INTRODUCTION

This chapter introduces the study and discusses its objectives, research problem, and significance of the study. A brief discussion is also given of the research methodology used and the structure of the dissertation. This study investigates the influence of financial literacy and financial technology on the financial behaviour of high school teachers in KwaZulu-Natal (KZN). This study seeks to gain more insights on the financial literacy challenges affecting teachers. Compen, De Witte and Schelfhout (2019: 26) argue that while teachers play a crucial role in implementing financial literacy programmes, their personal professional development in financial literacy is lagging.

1.2 BACKGROUND OF THE STUDY

In recent years, low financial literacy levels worldwide have become an issue partly due to the global financial crises, thus emphasising the significance of the importance of financial literacy (Yew, Yong, Cheong and Tey 2017). The lack of financial literacy, or the inability to understand financial concepts, can lead to poor financial decision-making and financial difficulties (Skagerlund, Stromback and Tinghog 2018). Indebtedness challenges of individuals in developing economies have attracted research globally (Botha 2021). With the introduction of financial technology, these challenges appear to be worsening (Yew *et al.* 2017).

Sibanda and Sibanda (2016: 12) argue that a large portion of the South African population have underdeveloped financial literacy skills. Compen *et al.* (2019: 17) stated that “a lack of financial literacy negatively influences an individual’s financial behaviour, day-to-day financial management and capability to accumulate money for long-term investments and goals, such as purchasing assets, funding higher education or saving for retirement”. The South African Basic Education Department is facing a crisis as teachers are leaving the profession prematurely (Mafukata and Mudau 2016: 2243). The aforementioned authors add that about 4000 teachers leave the profession annually. Some of the reasons cited for teachers’ resignations include “the search for

pension pay-outs that would redeem them from indebtedness” (Mafukata and Mudau 2016: 2243). This contention is supported by Compen *et al.* (2019), who argue that “mass teacher resignations and early retirements occur in South Africa due to the fact that the majority of teachers resigned or chose to retire early were motivated by pressure of work due to an increased workload, low teacher salaries, a lack of safety and security, indebtedness of teachers, and a lack of incentives”.

1.3 PROBLEM STATEMENT

Sibanda and Sibanda (2016: 5) portray South Africans as excessively indebted owing to poor levels of financial literacy. Wentzel (2016: 329) points out that South Africa scores poorly in international surveys on financial literacy even though there are several initiatives in the country that are aimed at growing and improving financial literacy education. Wentzel (2016: 329) adds that “households are experiencing rising financial stress, with the household debt-to-income ratio near historical highs and the household savings-to-income ratio in negative territory.” This trend is worsening owing to the advent of surging financial technology (Khan, Naheed and Yoshihiko 2020: 739). Using financial technology has disadvantages and advantages. One of the disadvantages is that it is easy to make irresponsible financial decisions because there is more access to information which they may interpret incorrectly (Skagerlund *et al.* 2018: 18). People who are financially illiterate are not well equipped to cope with unexpected financial information that come from financial technology (Jorgensen, Foster, Jensen and Vieira 2017: 70).

In recent years, South Africa has witnessed mass resignations and early retirements of teachers from public schools. Mafukata and Mudau (2016: 2243) argue that this is largely due to financial distress and indebtedness. They add that this has become a crisis in South Africa. This crisis needs to be addressed if the country wants to make significant inroads in the financial literacy education agenda. According to Compen *et al.* (2019: 16), teachers play a meaningful role in financial literacy education. Mafukata and Mudau (2016: 2253) contend that teachers need to undergo financial literacy education themselves in order to improve their financial management expertise. Teachers are largely indebted to loan sharks and other informal lending financial institutions (Mafukata and Mudau 2016: 2253). Even though there are several studies conducted on financial literacy, there is limited research on financial literacy and

financial behaviour on teachers in the era of financial technology (Farida, Soesatyo and Aji 2021: 86). Hence, this study bridges that gap by investigating the financial literacy and financial behaviour of KZN teachers in the era of financial technology.

1.4 AIMS AND OBJECTIVES

The aim of this study is to determine the influence of financial literacy and financial technology on the financial behaviour of high school teachers in Msunduzi Municipality, KZN.

1.4.1 Research objectives

The following research objectives were formulated to achieve the aim of the study:

- To identify financial literacy challenges facing high school teachers in Msunduzi Municipality, KZN.
- To examine the financial literacy skills of high school teachers in Msunduzi Municipality, KZN.
- To determine the knowledge of financial technology of high school teachers in Msunduzi Municipality, KZN.
- To evaluate the relationship between financial literacy, financial technology and financial behaviour of high school teachers in Msunduzi Municipality, KZN.

1.4.2 Research questions

In order to achieve the research objectives, the following research questions were developed:

- What are financial literacy challenges facing high school teachers in Msunduzi Municipality, KZN?
- What are financial literacy skills of high school teachers in Msunduzi Municipality, KZN?
- What is the knowledge of financial technology of high school teachers in Msunduzi Municipality, KZN?
- What is the relationship between financial literacy, financial technology and financial behaviour of high school teachers in Msunduzi Municipality, KZN?

1.5 SIGNIFICANCE OF THE STUDY

The purpose of the study is to investigate the influence of financial literacy and financial technology on the financial behaviour of high school teachers in the Msunduzi Municipality. Githuri (2019) stated that “teachers need to increase their own financial awareness in order to meet both their personal and professional needs”. Sawatzki and Sullivan (2017) found that according to most studies, students are not financially literate. In order to teach financial literacy, teachers should possess personal financial knowledge (De Moor and Verschetze 2017). This study may make high school teachers more aware of their need for improving their own financial literacy and that of their students.

Government and employers would also benefit from this study because individuals who are financially illiterate will most likely not make adequate financial provisions for their retirement. Research on establishing the relationship between financial literacy, financial technology on the financial behaviour of high school teachers raises an awareness of these issues to government and employers.

De Moor and Verschetze (2017) mentioned that “research has shown that a lack of financial literacy among employees can lead to a decrease in work productivity”. Botha (2021) argues that financial literacy provides benefits such as reducing employees' financial worries and making them more responsible for their personal finances, which both assist an organisation's efficiency. Githuri (2019) supports this contention, claiming that financial literacy reduces work-related stress and anxiety. Making the high school teachers in this study aware of these issues may improve their productivity and make them more aware of their need for financial skills.

The study also adds to the paucity of research on financial literacy and financial behaviour on teachers in the era of financial technology (Farida *et al.* 2021: 86). Moreover, the study provides insight into the possible influence of the demographic characteristics of high school teachers on financial literacy.

1.6 RESEARCH DESIGN

The purpose of research design is to ensure that the various components of the study are integrated coherently and logically and that, in doing so, the researcher is effectively solving the research problem (Allan and Skinner 2020). This study

quantitatively analysed the influence of financial literacy and financial technology on the financial behaviour of high school teachers in KZN as rooted in the positivist paradigm. Through self-administered questionnaires, data was collected from 32 high schools in Msunduzi Municipality, KZN. To answer the research questions, Allan and Skinner (2020) suggest using a quantitative approach in order to test and measure the factors relevant to a study. Therefore, an empirical study was conducted in order to investigate the factors influencing financial literacy and financial technology on the financial behaviour of high school teachers using a quantitative research approach.

1.7 POPULATION

Gog (2015: 37) states that a research population is the group of participants that is selected for sampling purposes and for which generalisations are made. In this study, the target population are the teachers in high schools in Msunduzi Municipality in KZN. According to the Department of Education's (DOE) database, there are 32 high schools within the Msunduzi Municipality, and 793 high school teachers (DOE Umgungundlovu district database 2021). The reason for targeting high school teachers in this municipality is that there have been several studies on financial literacy, but few have examined financial literacy and financial behaviour of teachers in the era of financial technology (Farida *et al.* 2021). Hence, this study aims to bridge that gap. While teachers play an important role in implementing financial literacy programmes in societies, Compen *et al.* (2019: 26) argue that financial literacy professional development for educators is lagging.

1.8 SAMPLING METHOD AND SIZE

The probability sampling technique, particularly systematic random sampling, was used in this study, in which the initial sample point is chosen at random and then the sampling points are chosen evenly or systematically (Rahi 2017).

A formula was used to calculate the sample size of the study, which is explained in more detail in the research methodology (Chapter three). The study resulted in 246 participants from a target population of 793 high school teachers in the Msunduzi Municipality.

1.9 DATA COLLECTION INSTRUMENT

Patten (2017:13) defines a questionnaire as a tool used to gather data using a survey or statistical question with a view to analysing the results. In this study, participants were given a questionnaire and asked to provide their views. A questionnaire was a suitable measure to measure the factors in the study because of the large sample size of 246. A self-administered questionnaire with closed ended questions and Likert scales was provided to all participants.

1.10 DATA ANALYSIS

Statistical representations were employed to transform raw data into meaningful information (Crossman 2014). This study used descriptive statistical analysis, which included cross-tabulations, graphs, tables, and figures, to analyse the data collected from the respondents. The Statistical Package for the Social Sciences (SPSS version 27.0.) was used to analyse the data collected from the participants.

1.11 PRE-TESTING

The purpose of this step is to ensure that the research instrument has been constructed appropriately, does not contain errors, is readable and does not contain ambiguities (Doody and Doody 2015:1074). To test the validity, adequacy, and reliability of the questionnaire, 25 randomly selected participants were selected outside the research site to pre-test the questionnaire.

1.12 VALIDITY AND RELIABILITY

Sekaran and Bougie (2013: 262) argue that validity can be defined as the accuracy with which a measure of an empirical concept reflects its real meaning. A pre-test was used to validate the contents of the questionnaire. Based on Bryman and Bell (2015), a test is reliable if it measures what it is intended to measure with consistently reproducible results. Cronbach's alpha coefficient was used to measure the reliability of the questionnaire.

1.13 ANONYMITY AND CONFIDENTIALITY

Researchers ensure anonymity by ensuring that their research data cannot be linked to individual respondents (Babbie 2017). Throughout the research process, all participants remained anonymous, which means no confidential information was disclosed. An accompanying letter and a letter of information provided to each respondent assured them of the anonymity of their responses.

1.14 ETHICAL CONSIDERATIONS

The ethical considerations in research are a set of principles that guide your research designs and practices (Allan and Skinner 2020). They include “voluntary participation, informed consent, anonymity, confidentiality, potential for harm, and results communication” (Babbie 2017). This study was approved by the Faculty Research Ethics Committee (FREC) of the Durban University of Technology (DUT). Participants received all information needed in order to understand the study. Participants in the study also had to sign a consent form (Appendix B) indicating they understood and had volunteered to take part in the study.

1.15 STUDY LIMITATIONS

The study involved only high school teachers within Msunduzi Municipality in KZN. As a result, findings from this study are limited to the views of those who participated and may only be generalised with caution. Given that the study focuses on the financial literacy and financial behaviour on teachers in the era of financial technology in Msunduzi Municipality in KZN, the results are not generalisable across the whole country.

1.16 STRUCTURE OF THE DISSERTATION

This study is divided into the following five chapters:

Chapter 1: Introduction

This chapter provided the background of the study. The research problem was discussed together with the importance and the purpose of the study. The objectives and research questions were identified to guide the flow of the research. A brief

discussion was also given of the research methodology and the structure of the dissertation.

Chapter 2: Literature review

In this chapter, an overview of the literature is provided to unpack the definitions of key concepts and to provide a discourse on the financial literacy challenges in South Africa. Guided by the theoretical framework adopted, coherent with the study's aim, objectives and questions, this chapter discusses the role of teachers in financial literacy education and the benefits of having financial literacy skills. It also provides discussion on the relationship between financial literacy challenges, financial literacy skills, financial technology and financial behaviour. Finally, in this chapter, the conceptual framework adopted is discussed and the justification for its adoption is provided.

Chapter 3: Research methodology

The purpose of this chapter is to give an overview of the research design and data collection procedures, as well as to detail the specific methods employed to collect empirical data. It also goes through how to create a questionnaire for data collection. Statistical approaches are used to describe data analysis and processing.

Chapter 4: Presentation and discussion of the results

This chapter provides the research findings in respect of each of the research questions. The results are compared to those previously reported in the literature.

Chapter 5: Conclusion and recommendations

This chapter discusses the conclusion, recommendations, areas of future studies, contribution and implications of the study. The research objectives are revisited and limitations of the study are presented.

1.17 CHAPTER SUMMARY

This chapter provided the background of the study, problem statement, formulated aims and objectives of the study. Furthermore, the significance of the study was also

discussed. Lastly, the overview of chapters indicates the research path that guides this research.

The next chapter discusses the literature underpinning this study.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

Chapter 1 discussed the background, problem statement, research objectives, research questions and the importance of this study. A literature review, as defined by Efron and Ravid (2019), is a systematic analysis and comparison of a number of academic scholarly publications on a particular topic. Efron and Ravid (2019) add that these structured summaries of research theories and findings, are analysed critically to demonstrate knowledge about the particular topic under investigation. Therefore, the purpose of this chapter is to review the existing body of literature on financial literacy and financial behaviour of teachers in the era of financial technology. In this chapter, the definitions of key concepts that this study uses are provided together with a discourse on the financial literacy challenges in South Africa. Guided by the theoretical framework adopted in this study, coherent with the study's aim, objectives and questions, this chapter discusses the role of teachers in financial literacy education and the benefits of having financial literacy skills. It also discusses the relationship between financial literacy challenges, financial literacy skills, financial technology and financial behaviour. Finally, the conceptual framework adopted is discussed and the justification for its adoption is provided. The following section discusses the definitions of key concepts pertinent to this study.

2.2 DEFINITIONS OF KEY CONCEPTS

2.2.1 Financial literacy

Ripain, Amirul and Mail (2017) defined financial literacy as “a combination of awareness, knowledge, skills, attitude, and behaviour necessary to make sound financial decisions and ultimately achieve individual wellbeing”. Financial literacy is useful in daily activities; an understanding of financial information can be useful for financial decision making which may include financial planning, investment and wealth

accumulation, debt management and pension planning (Dumitru-Cristian and Dornean 2012; Dwiastanti 2015; Husna and Desiyanti 2016). Financial literacy thus relates to a fundamental understanding of the way money works, how to make, manage and invest money to benefit oneself and others, including the ability to make informed financial decisions (Arthur 2012; Aprea and Wuttke 2016; Bonga and Mlambo 2016). However, the definition of financial literacy used in this study is adopted from the Organization of Economic Cooperation and Development (OECD) (2005) which defines financial literacy as:

“the combination of consumers’/investors’ understanding of financial products and concepts and their ability and confidence to appreciate financial risks and opportunities, to make informed choices, to know where to go for help and to take other effective actions to improve their financial well-being”.

2.2.2 Financial technology

“Financial technology is the combination of finance and information technology” (Zavolokina, Dolata and Schwabe 2017). This could be any technology that delivers financial services such as online banking, mobile wallets, payments apps, money transfers and managing investments by utilising the internet and software (Leong and Sung 2018). It is “any innovative ideas that improve financial service processes by proposing technology solutions according to different business situations, while the ideas could also lead to new business models or even new businesses” (Leong and Sung 2018:75). In light of this, financial technology is using digital technologies and innovation to transform the provision of financial services in a way that promotes the development of new or modification of existing business models, applications, processes and products (Feyen, Frost, Gambacorta, Natarajan and Saal 2021).

2.2.3 Financial behaviour

Financial behaviour is the attitude and behaviour of an individual towards management of finances and is related to how an individual saves, spends, budgets, and invests his/her finances (Jorgensen *et al.* 2017; Xiao and Porto 2017). An individual can have either a positive or negative financial behaviour which can be categorised as responsible financial behaviour or risky financial behaviour respectively (Gutter and

Copur 2011; Xiao, Chen and Chen 2014; Asaad 2015; Tang, Baker and Peter 2015). In view of this, responsible financial behaviour is associated with checking one's credit ratings on a regular basis, saving money, and using a financial plan to manage expenses; whilst, risky financial behaviour is characterised by excessive spending and wastage of financial resources which may lead one to incur huge debts and/or to become broke (Asaad 2015).

Having discussed the definitions of terms which are relevant to this study, the theoretical framework underpinning this study is discussed next.

2.3 THEORETICAL FRAMEWORK

The theoretical framework underpinning this study is the theory of planned behaviour. This theory tries to simplify the complexities of human social behaviour in an effort to understand their behavioural patterns in an effort to understand how individuals make their decisions (Xiao and Wu 2008). Individuals with positive financial behaviour are likely to be more responsible and are able to use their finances effectively. In view of this, financial literacy can be considered as an ability which helps those individuals who possess it to make good, practical and informed decisions that are aligned to their long term financial interests (Barbić, Lučić and Chen 2019). In view of this, being financially literate helps one to be able to manage and control his/her finances by making proper decisions on whether to spend, save, invest or cover financial obligations such as debt (Dwiastanti 2015). The theory of planned behaviour can therefore be used to describe and explain the financial behaviour of individuals.

The theory of planned behaviour suggests that the behaviour of individuals emanates from planned intention towards that behaviour (Ajzen 1991). Furthermore, the theory postulates that human behaviour is influenced by behavioural beliefs, normative beliefs and control beliefs (Ajzen 1991). The behavioural beliefs that one has shapes the attitudes that one may have towards financial behaviour. In addition, the normative beliefs are related to an individual's perception about how a behaviour (in the context of this study, this is financial behaviour) would be judged by others in society. Besides, the control beliefs that an individual has, shape their perceptions on their ability to control their behaviour (financial behaviour) by virtue of their perceptions on whether controlling their behaviour is going to be easy or difficult.

In view of this, behavioural beliefs, normative beliefs and control beliefs strongly influence the financial behaviour of individuals. Therefore, the theory of planned behaviour can be useful in understanding how financial literacy and financial technology impact the financial behaviour of teachers. Consequently, the attitudes and perceptions that teachers have on financial literacy and financial technology can have an influence on their financial behaviour. Teachers that have a positive attitude toward financial literacy and see its value and importance in positively influencing their financial behaviour, are more likely to seek and acquire it so as to improve their financial behaviour. Similarly, teachers who have a positive perception on financial technology are more likely to desire to learn about it and utilise it to enhance their financial behaviour because they have a positive perception of it.

In light of this, behavioural beliefs, normative beliefs and control beliefs influence intention which then has an impact on their behaviour as illustrated in Figure 2.1 below.

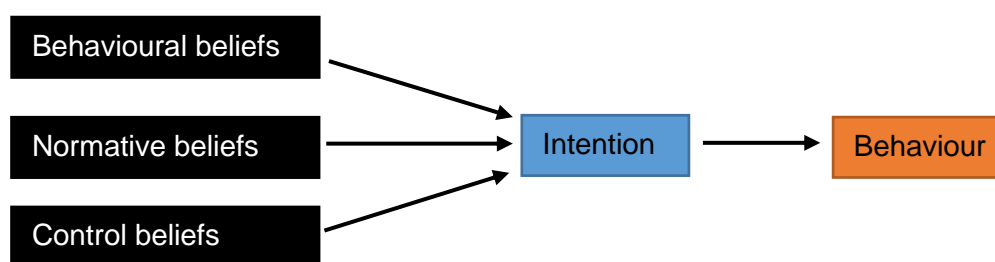


Figure 2.1: Theory of planned behaviour (Ajzen 1991)

2.4 FINANCIAL LITERACY CHALLENGES IN SOUTH AFRICA

South Africa is popularly known as the rainbow nation signifying a diversity and richness of culture and tradition. However, this diverse population also exhibits enormous gaps in financial literacy between its different citizens (Botha 2021). This reduces the efficacy of a one-size fits all approach on financial literacy and suggests that tailor-made solutions may be more effective. A study conducted by the Roberts, Struwig, Gordon and Radebe (2018) for the Human Sciences Research Council (HSRC 2017) indicates that 48% of South Africans are not saving at all whilst 42% have no long term savings. This is of great concern particularly in this current Covid-19 pandemic where the importance of saving and financial literacy was highlighted. It was also reported that low levels of financial literacy is associated with financial stress

and anxiety (Lin *et al.* 2019). Furthermore, Business Tech (2016: online) revealed that “South Africa has come last in a poll of 30 countries and economies – drawn from Africa, Asia, Europe, Australasia, North America and South America – when measuring financial knowledge”. This further highlights the low financial literacy levels in South Africa.

Low financial literacy is strongly associated with over-spending and becoming indebted as people with low financial literacy are unable to make informed financial decisions as a result of their limited financial skills and knowledge (Roberts, Struwig and Gordon 2014; Mitchell and Abusheva 2016). Capuano and Ramsay (2011) highlight that households which are over-indebted are especially at risk, as they have no ability to save or enhance their living standards.

The following subsections discuss the factors and challenges that contribute to financial literacy in South Africa.

2.4.1 Standard of education

Matemane (2018) argues that financial literacy amongst black South Africans is low due to the previous “bantu” education system which was propagated by the previous apartheid regime which subjected black people to poor education. Moreover, “black people were excluded from financial activities and mainstream economy leading to fewer opportunities to gain financial literacy” (Matemane 2018). This contributed to the lower levels of financial literacy amongst black people which still exists 25 years after independence (Matemane 2018). Matemane (2018) also revealed that black people have lower financial literacy levels than whites, coloureds and Indians. Even black people who possess tertiary education and work experience were found wanting (Matemane 2018). This contradicts the theory that suggests that higher education correlates with higher levels of financial literacy and that lower education is associated with low financial literacy. If this theory holds, then the only logical explanation may be that the standard of education black people are receiving currently is not of good quality.

According to Amnesty International (2020), South Africa has done well to uplift the standard of living of black people after independence including building a considerable

number of schools across the country. But the expansion of access to education for black people does not necessary mean or translate to increased accessibility to good quality education for all black people (Amnesty International 2020). Consequently, the educational system continues to reflect the socioeconomic inequalities within the country. Additionally, it is reported that at least 71% of learners in South Africa learn in schools where at least 30% of the learners are socioeconomically disadvantaged (OECD 2019). It has also been reported that 77.3% of the students who attend public schools benefit from school feeding schemes (STATSSA 2019). This data highlights the poor school and learning conditions that teachers and students face which ultimately contributes to poor education amongst black people. Accordingly, South Africa is named amongst the countries with one of the most unequal school systems in the world (The Economist 2017). This further solidifies the notion of poor-quality education in blacks' schools which may be a reason why learners from such schools have poor financial literacy skills.

2.4.2 Over-indebtedness

The National Credit Regulator (2019) states that "over-indebtedness includes failure to pay all bills in a timely manner, resulting in feelings of panic, stress, and feeling overwhelmed by the amount of unpaid financial obligations". The range of products in the financial technology space is broad and sophisticated, requiring consumers to select among a variety of options. It is increasingly important for all individuals, including teachers, to save and manage their retirement funds. Additionally, "financial literacy prevents individuals from making irrational financial decisions, choosing inappropriate financial products, and failing to save for the future" (Wentzel 2016). Financial stress is increasing among South African households as their debt levels rise whilst their household savings are dwindling (Wentzel 2016; Ryan 2018). According to French and McKillop (2016), poor financial literacy and over-indebtedness are positively correlated. French and McKillop (2016) argue that over-indebtedness is a financial literacy challenge because those with a lack of financial literacy are more likely to accumulate debt, incur more fees, default on loans, and become delinquent.

Subsequently, households cannot adequately prepare for financial hardships they may face. As a result, an increasing number of households are unable to repay their

debts which may lead to financial distress (Wentzel 2016). Moreover, it seems the increased access to financial services and products has led many South Africans due to limited financial knowledge to make bad or irresponsible financial decisions that has increased their indebtedness (Murendo and Mutsonziwa 2017). According to Roets (2021), the Chief Executive Officer (CEO) of Debt Rescue, at least 9.5 million South Africans who are credit-active consumers are in debt. This number may have increased owing to the Covid-19 pandemic in which many people lost their jobs and had their salaries reduced whilst on the other hand, the debt still remained and needed to be serviced.

2.4.3 High unemployment rate

As of 24 August 2021, the official unemployment rate was reported to be 34.4%. The high unemployment rate may be partially attributed to the Covid-19 pandemic which led many businesses to close and retrench their employees. The pandemic has also resulted in the loss of demand and revenue for goods and services which has created severe cash flow and liquidity problems for businesses (Small Business Project (SBP) 2020). As a result, supply chains have been disrupted, consumers have suffered loss of income and many workers have been laid off. This has negatively affected consumer spending and consumption and consequently, the sales of many businesses have dwindled (SBP 2020).

Stoddard (2021) argues that, “because of the high unemployment rate and the increasing number of retrenchments in recent years, South Africans are forced to dip into their retirement savings, increase their debt, cancel medical aid membership and life coverage to cut costs when their income declines”. Stoddard (2021) add that “the use of long-term savings, raising of debt, and cancelling of risk policies are putting South Africans at both physical and financial risk”. Even though the economic situation may change in the future, most South Africans are laden with debt and as soon as they start earning they have debt to repay and without savings or any meaningful investments, life after retirement is likely to be tough. However, the best protection against losing an income is to avoid debt, and to have an emergency fund to replace that income which can only be achieved through savings. As reported by Bourainy, Ashraf and Marwa (2021), a high unemployment rate is generally associated with lower financial inclusion which translates into lower financial literacy. This is because

financial literacy is the first step towards financial inclusion as it is considered essential for promoting financial development and stability (Ramachandran 2012).

2.4.4 Low savings and low economic growth

In South Africa, “the low saving rate can be attributed to a high level of spending on goods and services instead of setting money aside for future purposes or unforeseen circumstances” (South African Reserve Bank (SARB) 2019). Individual savings and investments are extremely low, which is a huge concern, since the individual sector has been found to contribute a greater proportion to national savings than the corporate and government sectors. (Kapounek, Korab and Deltuvaite 2016).

National saving is important for sustaining the development of economies due the channelling of available resources as capital input to developmental projects (Aidoo-Mensah 2018). Additionally, poor savings leads to lower levels of investment which also eventually leads to lower economic growth. Consequently, low wages and salaries lead to lower household income, which, due to low economic growth, leads to further dissavings which worsens the situation that is already bad from the onset. In view of this, Lawlor (2018) asserts that “the causes of South Africa’s poor savings levels are deep and complex”. Nonetheless, Lawlor (2018) and Lusardi and Mitchell (2007) postulate that lack of financial literacy may be one of the major causes of poor saving culture in South Africa. Consequently, this may have played a role in the current low economic growth of the country.

2.5 FINANCIAL LITERACY BENEFITS

Having highlighted the financial literacy challenges, one can argue that it is beneficial to be more financially literate because it makes financial sustainability easier. Hira (2012) argues that the aim of financial sustainability and financial well-being is to ensure that in the long term and through changes in economic conditions, individual and household resources are managed in ways that provide the funds necessary to meet personal and household financial obligations. To achieve this goal, financial literacy skills are crucial, since more financially literate individuals are more likely to plan for their retirement, participate more actively in the stock market and have fewer debt problems (Fatoki and Oni 2014). Klapper, Lusardi and Panos (2013) found that individuals with higher levels of financial literacy manage their debt better, are able to borrow at a lower cost, come up with better debt management strategies and are more

likely to remain debt free. De Clercq (2013) found that consumers who are more knowledgeable of financial matters were less likely to fall prey to unscrupulous financial service providers.

Moreover, individuals with a higher level of financial literacy are also better able to manage their credit score and make better financial decisions (De Clercq 2013). Li *et al.* (2015) explain that a credit score represents an individual's creditworthiness depending on their credit history. Although financial literacy is clearly important for avoiding financial risks, it is also important for embracing financial opportunities, which may be enhanced by better credit scores (Miller *et al.* 2015). Collins and Olive (2016) state that financial literacy contributes to individuals' well-being since it provides them freedom from financial worries, helps them establish emergency funds to absorb financial shocks, and helps them accomplish their financial goals.

The following subsections discuss the three financial literacy benefits that were identified from the literature (Dumitru-Cristian and Dornean 2012; Dwiastanti 2015; Husna and Desiyanti 2016); these are financial control, financial planning and financial knowledge and understandings.

2.5.1 Financial control (day-to-day management of money)

Budgeting, spending habits, saving and investing are among the key components of personal finance (Umamaheswari, Kumar, Balu and Adugna 2021). Umamaheswari *et al.* (2021) add that personal finance management plays a significant role in the reduction of unnecessary expenditures that do not contribute to an individual's living standards. Proper money management will allow individuals to achieve their financial goals and reduce the risk of incurring debts. Almost every aspect of people's lives is impacted by money. De Bassa Scheresberg (2013) argues that financial literacy plays a significant role in individuals' day-to-day management of money (that is borrowing patterns, saving and planning for retirement). Debt and borrowing have become part of everyday life, which makes over-indebtedness a common problem for consumers (Umamaheswari *et al.* 2021). Xu and Zia (2012) found that a person's financial literacy can have an impact on the amount of debt they owe and the type of mortgage loan they take out. Therefore, having financial literacy reduces the risk of consumers becoming involved in high debt or facing credit arrears compared to their less

financially literate counterparts (Gathergood and Disney 2011; Hussain and Sajjad 2016). As a result, consumers who lack financial literacy may end up paying excessive interest in order to repay their debts (Van Rooij, Lusardi and Alessie 2012; Lusardi and Mitchell 2014).

2.5.2 Financial planning (Savings and investments)

“Savings and investments play a crucial role in boosting the economic growth of every country” (Zins and Weill 2016; Demirguc-Kunt *et al.* 2018). “Both savings and investments are essential to improve the personal wealth and financial security of everyone” (Hira 2012; Demirgüç-Kunt and Klapper 2013). Individuals who are financially literate set aside money for a variety of purposes, including emergencies, unforeseen circumstances, and retirement (Meier and Sprenger 2013). Therefore, the benefits of financial literacy tend to improve personal wealth and individuals' savings habits.

2.5.3 Financial knowledge and understanding

It is important for individuals to be aware of the financial market which offers a variety of products. An individual must have good knowledge of the basic principles and processes of such products, as well as the rights of consumers (Umamaheswari *et al.* 2021). Financial literacy provides individuals with the ability to make highly informed financial decisions, as well as to demand a higher standard of service, which will in turn encourage competitors in financial markets (Beckmann 2013). These individuals are less likely to behave in an unpredictable manner when challenging financial situations arise despite their ability to bargain (OECD 2012:141). Financial literacy lets the poor escape poverty, so they are more likely to be able to build a better future for themselves and their families through effective services choices (Beckmann 2013). Umamaheswari *et al.* (2021) strongly believe that consumers ought to have the opportunity to compare similar products and buy the one that fulfils their requirements. It is possible to achieve this with knowledge about financial products.

The above discussion indicates that there are benefits to being financially literate. Teachers, as educators, are important promoters of the need for financial literacy. The following section discusses the role of teachers in financial literacy education.

2.6 ROLE OF TEACHERS IN FINANCIAL LITERACY EDUCATION

Compen *et al.* (2019) argue that teachers play a valuable role in financial literacy education. The need to investigate the influence of financial literacy and financial technology on the financial behaviour of teachers is important since teachers are role models who can influence learners' financial knowledge and skills on how to manage their finances. Coupled with this is the crisis being experienced by the South African Basic Education Department as teachers are leaving the profession prematurely with about 4 000 teachers leaving the profession annually (Mafukata and Mudua 2016). One of the reasons cited for teachers' resignations is "the search for pension pay-outs that would redeem them from indebtedness" (Mafukata and Mudau 2016: 2243). This mass resignation of teachers creates a serious problem in the education system that not only affects the quality of education but also increases recruitment, training and development costs (Mafukata and Mudua 2016). Moreover, Mafukata and Mudua (2016) argue that the South African educational system is challenged by a shortage of highly skilled and experienced teachers in critical subjects such as Mathematics, Science, and Technology.

In 2015, the OECD recommended that financial literacy education be taught in schools from the earliest age possible so that people can make better decisions about their finances (Sawatzki and Sullivan 2017). Students who are taught financial literacy from an early age develop the necessary knowledge and skills to build responsible financial habits throughout their education (Sawatzki and Sullivan 2017). Chetty, Friedman and Rockoff (2014) mentioned that "studies have shown that teachers have a profound impact on a student's school outcomes, as well as on their outcomes later in life".

Financial literacy is a crucial aspect of responsible financial decision-making as well as informed decision-making. Furthermore, "financial literacy has been found to play a very important role in the school curriculum of students who study Economics, Mathematics, and Accounting, as these subjects contain numbers" (Ballantine, Hammack and Stuber 2017). Financial literacy better positions a person to make informed decisions regarding their money and reduces the risk of being misled when facing financial challenges (Idris, Krishnan and Azmi 2017). The Australian government recognised the importance of introducing or including financial literacy education to the school curriculum both in primary and secondary schools, as it helps

students become critical thinkers when it comes to managing their finances (Taylor and Wagland 2013). The Australian government has provided professional development courses to enhance teachers' skills in teaching financial literacy so that they can introduce this subject to students (Taylor and Wagland 2013). Financial literacy is not only crucial for national development, but also requires teachers who are appropriately trained to deliver it.

South Africa has a number of stakeholders who are involved in financial literacy programmes. These are shown in Table 2.1. However, South African financial literacy programmes lack unification and focus of efforts amongst different stakeholders (Ifeanyi, Rena and Prinsloo 2019). The programmes are not supported by research on how to properly deliver and implement them, with most programmes being narrow, lacking depth and failing to represent South Africa's national interests, and lastly are not governed by best practices and standards for financial literacy education (Ifeanyi *et al.* 2019). Consequently, there are not many financial literacy programmes at national level that are specifically designed for teachers/educators for long term results. Table 2.1 shows a list of stakeholders which are involved in financial literacy education in South Africa.

Table 2.1: Stakeholders involved in financial literacy education in South Africa

Industry Bodies and Associations	Regulators	Governments Departments	Consumer and Labour Representatives	Offices of Ombudsmen
South African Insurance Association	National Credit Regulator	Trade and Industry	South African National Consumer Union	Credit Ombudsman
Association for Savings and Investments, South Africa	South African Reserve Bank	National Treasury	National Consumer Forum	Ombudsman for long-term insurance
Banking Association of South Africa	Financial Services Board	Basic Education	South African Trade Unions Congress and affiliates like the Finance Sector Union, SASBO	Ombudsman for short-term insurance
Institute for Retirement Funds	National Consumer Commission	Higher Education and Training	Federation of Unions of South Africa	Ombudsman for banking services
JSE Limited		Provincial Consumer Affairs Offices Forum		
Financial Planning Institute				
Financial Intermediaries Association				
Principal Officers Association				
Financial Sector Charter Council				
<i>Source: Adopted from Ifeanyi et al. (2019: 1129)</i>				

In order to provide effective financial education, it is important to have high-quality teachers, and several factors have been shown to contribute to this effectiveness. Teacher confidence is crucial to an effective financial education, since it has been demonstrated that teacher efficacy negatively impacts aspects such as instruction behaviour and student achievement (De Moor and Verschetze 2017). Furthermore, teachers need to have a reasonable level of financial literacy themselves to ensure that their students receive an adequate level of financial education (De Moor and Verschetze 2017). De Moor and Verschetze (2017) suggest that factors such as teaching discipline and teaching experience could influence teachers' (perceived) competencies about providing financial education. Studies on the attitudes of teachers towards financial education found that most teachers recognise the importance of financial literacy in schools; however, only a few believe that they are capable of teaching financial topics (Neill, Berg and Stevens 2014; De Moor and Verschetze 2017; Sawatzki and Sullivan 2017).

2.7 FINANCIAL LITERACY AMONG SCHOOL TEACHERS

Research on financial literacy and financial technology on the financial behaviour among school teachers in South Africa is limited (Farida *et al.* 2021). However, an overview of studies on the financial literacy of school teachers conducted in other countries is shown in Table 2.2.

<i>Table 2.2: Overview of previous studies on financial literacy amongst school teachers (own compilation)</i>	
AUTHOR, YEAR OF PUBLICATION	Regecová and Slavíčková (2010)
TITLE AND COUNTRY	Financial literacy of graduated students. Acta Didactica Universitas Comenianae Mathematics. Slovak Republic
SUMMARY	
Regecova and Slavickova (2010) investigated 25 prospective Mathematics teachers in the Slovak Republic. These authors found that Mathematics teachers are insufficiently knowledgeable about financial matters.	
AUTHOR, YEAR OF PUBLICATION	Sawatzki and Sullivan (2017)
TITLE AND COUNTRY	Teachers' perceptions of financial literacy and the implications for professional learning. Australian Journal of Teacher Education. Australia
SUMMARY	
Sakatzki and Sullivan (2017) assessed the perceptions of Australian primary school teachers regarding their financial competence and found that despite more than 75% considering themselves financially literate, only 50% feel confident about providing financial education.	
AUTHOR, YEAR OF PUBLICATION	Otter (2010)
TITLE AND COUNTRY	Teaching financial literacy in K-12 Schools: A survey of teacher beliefs and

	knowledge. PhD Thesis, The University of New Mexico, Albuquerque, NM. Mexico
SUMMARY	
Otter (2010) revealed that teachers received an average score of 37.5% on a financial questionnaire, showing that they lack the knowledge necessary to educate students about personal finance.	
AUTHOR, YEAR OF PUBLICATION	Petraskova and Hasek (2012)
TITLE AND COUNTRY	Financial education concerning teacher training. Czech Republic
SUMMARY	
Based on the questions from the Financial Industry Regulatory Authority (FINRA-2012) questionnaire about financial literacy conducted in the United States of America (USA), Petraskova and Hasek (2012) examined the level of financial literacy among secondary school teachers in the Czech Republic. Their findings demonstrated that teachers lacked financial knowledge, and the authors recommended financial literacy programs for teachers.	
AUTHOR, YEAR OF PUBLICATION	Bahonar and Sadrabadi (2014)
TITLE AND COUNTRY	Investigating the relationship between financial literacy and prosperity, and the determining association with demographic variables (Case study: Yazd County school teachers). Indian Journal of Fundamental and Applied Life Sciences. Iran (Yazd).
SUMMARY	
In Yazd County, Iran, Bahonar and Sandrabadi (2014) performed a study among teachers. The goal of the study was to see if there was a link between teachers' financial literacy and their financial success. They discovered that more than 60% of teachers were in good financial position in their survey. Their financial knowledge, on	

the other hand, was weak. Borrowing, saving, and spending were all important issues; however, they were better educated in the areas of retirement planning and insurance.	
AUTHOR, YEAR OF PUBLICATION	Lucey, Hatch and Giannangelo (2014)
TITLE AND COUNTRY	Developing the money skills of teacher candidates, <i>The Georgia Social Studies Journal</i> . United States of America (USA)
SUMMARY	
Lucey, Hatch, and Giannangelo (2014) assessed financial literacy among teachers in Midwestern Institution in America using a convenience sample of 79 elementary and middle school teachers. Their study revealed that educators in Midwestern Institution had a moderate level of financial literacy.	

The aforementioned studies demonstrate that the lack of financial literacy amongst teachers is a problem that is not only found in South Africa, but it is a global issue that is experienced by other countries as well. This indicates that a lot needs to be done in order to uplift the financial knowledge of teachers so that they are able to impart that knowledge to their students. This may help to increase general financial literacy in South Africa.

As the aim of this study is to investigate the influence of financial literacy and financial technology on the financial behaviour of high school teachers, the following section hypothesises whether there is a relationship between financial literacy challenges, financial literacy skills, financial technology and financial behaviour.

2.8 RELATIONSHIP BETWEEN FINANCIAL LITERACY CHALLENGES, FINANCIAL LITERACY SKILLS, FINANCIAL TECHNOLOGY AND FINANCIAL BEHAVIOUR

In order to make rational and effective financial and economic decisions, one needs financial skills (Kurihara 2013). A person with good financial knowledge is in a position to manage their finances well. Henager-Greene and Cude (2016), Herawati (2015)

and Agustina (2016) found that financial literacy has a significant positive effect on financial behaviour because a financial literate individual has the competence and confidence to use their financial knowledge in order to make informed and beneficial financial decisions. Chu *et al.* (2017) and Ali, Rahman and Bakar (2015) argue that financial literacy plays an important role in financial behaviour because it influences consumer spending, saving practices, and financial decision-making.

Three hypotheses were developed from the literature in this study. The following subsections discuss the relationship between financial literacy challenges, financial literacy skills, financial technology and financial behaviour:

2.8.1 Financial literacy challenges and financial behaviour

Financial literacy challenges were discussed in detail in Section 2.4 of this chapter. These challenges related to poor education, over-indebtedness, high unemployment, low savings and low economic growth. The first hypothesis is as follows:

H1: Financial literacy challenges have a negative relationship with financial behaviour.

2.8.2 Financial literacy and financial behaviour

Researchers have established a link between financial literacy and financial behaviour (Yong, Yew and Wee 2018). Chu *et al.* (2017) show that households with higher levels of financial literacy are more likely to plan and manage their money more effectively. Furthermore, “the higher the level of financial literacy, the greater the likelihood of engagement in desirable financial practices such as paying on time, managing expenses, making sound budgeting decisions, diversifying investments, and making long-term financial goals” (Chu *et al.* 2017). Robb and Woodyard (2011) indicate that appropriate financial literacy influences a person's financial behaviour, such as the ability to set or allocate finances. Monticone (2010) agrees with this and argues that financial literacy and financial behaviour are positively related, meaning, financial literacy affects financial behaviour and vice versa. Lusardi and Mitchell (2014) also found that poor financial literacy adversely affects financial behaviour. Consequently, those who lack a broad understanding of financial matters will lose out on many financial opportunities. Lusardi and Mitchell (2014), also contend that it is difficult to trace the causal relationship between financial literacy and financial behaviour. For example, Farida *et al.* (2021) argue that financial literacy does not influence financial

behaviour, but that the use of financial technology can affect financial behaviour and financial literacy. As a result, financial literacy can be acquired, but is never put into practice, meaning it can be understood only theoretically without being applied practically (Farida *et al.* 2021).

The second hypothesis is thus as follows:

H2: Higher levels of financial literacy have a positive relationship with financial behaviour.

2.8.3 Financial technology and financial behaviour

Financial behaviour is influenced by several factors, one of which is the use of financial technology (Younas *et al.* 2019). Carrying out the financial transactions and procedures online helps to save time as they are much easier and faster. However, these procedures and transactions which are carried out through the internet may lead to a threat of cyber-crime and negative spending behaviour (Younas *et al.* 2019).

The increasing diversity of financial technology products available has complicated South Africans' financial behaviour (Atkinson and Messy 2012). Consumers in South Africa tend to spend more money because there's more access to financial technology, leading to irresponsible spending, including lack of saving, poor investment, emergency fund planning, and insufficient budgeting (Zaimah *et al.* 2013; Younas *et al.* 2019). Numerous people have problems regarding how to manage their personal financial assets (Ripain *et al.* 2017). Every individual must possess basic intelligence to manage his/her personal financial resources effectively and efficiently for his wellbeing (Ripain *et al.* 2017). Many individuals are not well-equipped to make sound financial decisions because there is more access to financial technology, and this also negatively affects an individual's financial behaviour (Zaimah *et al.* 2013). Younas *et al.* (2019) show that many people are not able to make sound financial decisions due to access to financial technology, which adversely affects their financial behaviour.

Innovations in technology contribute to the growth and development of the financial services sector (Merry 2018). In the past decade, households have used a variety of technologies to manage their finances in order to achieve better financial wellness, such as electronic banking and automated advisers (Merry 2018). With all of the new

financial products available today, the financial world is becoming more complicated. There are numerous products and services associated with electronic banking provided by banks and financial institutions, such as automated teller machines (ATM), credit cards, direct deposit, preauthorised debit, phone banking, online banking, and so on (Merry 2018).

According to a recent report on consumer mobile banking, nearly three-quarters of USA households have smartphones (Pew Research Center 2021), and in the past 12 months, 50 percent of users had used mobile banking (Merry 2018). As a result of electronic banking technologies, distribution channels have become more efficient because transaction costs and service time have decreased and the expansion of credit access for consumers has increased (Jagtiani and Lemieux 2018). In South Africa, it is reported that about one third of the population that is nearly 22 million people, are using smartphones (Statista 2020). Additionally, over 50% of the South Africa population, that is roughly 38.13 million people, are actively using internet services (Statista 2021).

The relationship between financial technology and financial behaviour can be categorised into two categories, namely technology that assists transactions and technology that assists planning (Farida *et al.* 2021). The improvement in financial technology has mainly focused on providing ease of use and convenience for the users of online banking services at a lower cost (Bi 2015). In addition, with the introduction of ATMs and credit cards, bank customers are now able to access their banking services almost anywhere in the world. This convenience may have a negative influence on the financial behaviour of households as they are able to access money more easily to spend, leading to less savings in the future (Bi 2015). Furthermore, the overuse of credit cards could result in households incurring high interest costs further depleting the household saving potential (Bi 2015). However, financial technology can also assist bank customers to exercise positive financial behaviour by using preauthorised debit orders for automatic payment of loans and bills. Furthermore, this function can also be used to save money by scheduling payments into savings and/or investment accounts. The third hypothesis is therefore:

H3: Higher levels of financial technology knowledge have a positive relationship with financial behaviour.

The above three hypotheses form the conceptual framework which is discussed next.

2.9 CONCEPTUAL FRAMEWORK

The conceptual framework of the study is as follows:

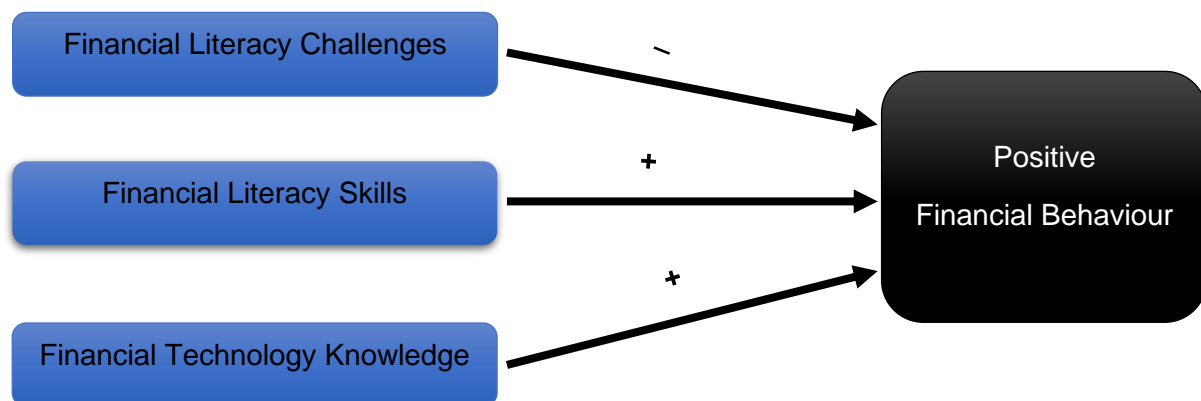


Figure 2.2: The conceptual framework of the study

The conceptual framework shown in Figure 2.2 above, illustrates the relationship between financial literacy challenges, financial literacy skills and financial technology knowledge.

It is postulated that financial literacy challenges have a negative relationship with positive financial behaviour. The reasoning behind this is that individuals who face a lot of financial literacy challenges are less likely to exhibit positive financial behaviour. Secondly, individuals that possess greater financial skills are more likely to exhibit positive financial behaviour. This is because financial skills are integral in helping individuals to make informed financial decisions which are expected to result in a positive financial behaviour. Lastly, greater financial technology knowledge is postulated to have a positive relationship with financial behaviour. This suggests that individuals who possess financial technology knowledge are more likely to use the financial technology to make good financial decision using various technology tools, such as scheduled payments, fixed deposits, savings accounts that are not immediately accessible, financial calculators and other tools available to assist

individuals, to exhibit positive financial behaviours. A summary of the hypotheses is shown in Table 2.3.

<i>Table 2.3: Summary of Hypotheses</i>	
Hypothesis	Description
H1	Financial literacy challenges have a negative relationship with financial behaviour.
H2	Higher levels of financial literacy have a positive relationship with financial behaviour.
H3	Higher levels of financial technology knowledge have a positive relationship with financial behaviour.

2.10 CHAPTER SUMMARY

This chapter focused on the importance of financial literacy and how it helps an individual to have a positive financial behaviour. Furthermore, financial technology was shown to have both a positive and a negative impact on one's financial behaviour. This is because financial technology may help one to easily access their savings as well as access debt which may lead to financial distress. On the other hand, scheduled saving deposits and debit order payments may help one to meet financial obligations leading to better financial well-being. Moreover, the literature also revealed that teachers have an integral part to play in financial literacy education; however, studies in other countries have shown that the financial literacy of most teachers are low. The next chapter describes the research methodology used to provide data to answer the research questions.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 INTRODUCTION

The previous chapter provided an overview of the literature which underpins this study. The objective of this chapter is to outline the methodology that was used to address the study's objectives. As already discussed in Chapter 1, the aim of the study was to determine the influence of financial literacy and financial technology on the financial behaviour of high school teachers within Msunduzi Municipality in Pietermaritzburg, KZN. To recap, the research objectives were formulated as follows:

- To identify financial literacy challenges facing high school teachers in Msunduzi Municipality, KZN.
- To examine the financial literacy skills of high school teachers in Msunduzi Municipality, KZN.
- To determine the knowledge of financial technology of high school teachers in Msunduzi Municipality, KZN.
- To evaluate the relationship between financial literacy, financial technology, and financial behaviour of high school teachers in Msunduzi Municipality, KZN.

This chapter outlines the scientific methods and techniques applied to arrive at empirical findings to address the research objectives. The chapter begins by exploring the research design and thereafter discusses the target population, sampling methods, sample size, data collection and data analysis techniques. This chapter also outlines how the validity and reliability of the instrument was assured, following which, the anonymity, confidentiality and ethical considerations of this study are presented. The next section discusses the research design adopted in this current study.

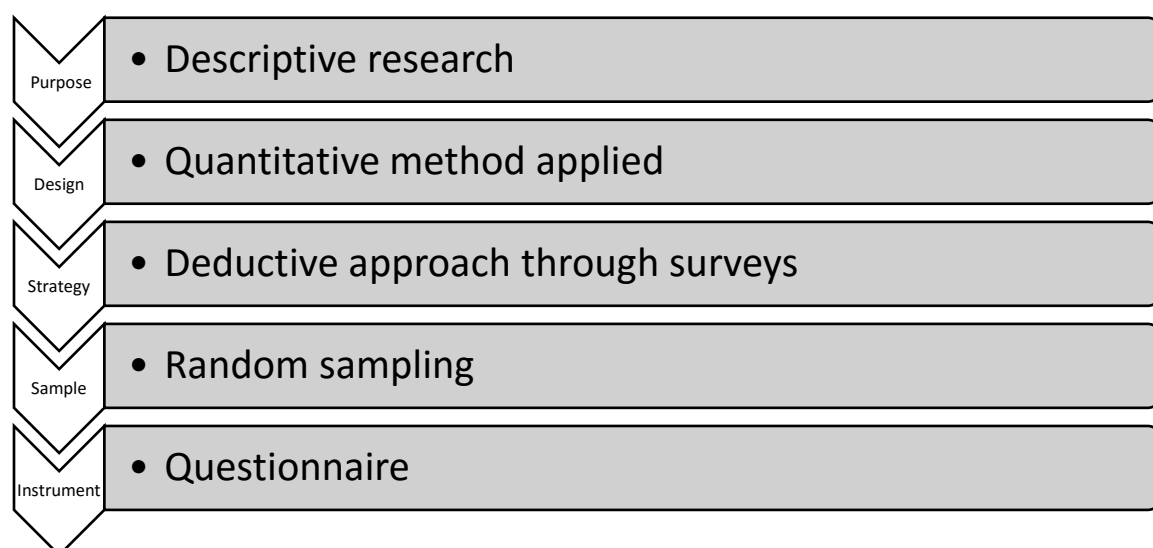
3.2 RESEARCH DESIGN

Picardi and Masic (2014: 8) define a research design as a tool for collecting data and analysing the data collected in accordance with the research methodology. According

to Polit and Beck (2012:714), research design refers to an overall plan describing how the research will be conducted, along with instructions about techniques for making the study more valuable. The purpose of the research design is to ensure that the various components of the study are integrated coherently and logically and that, in doing so, the researcher is effectively solving the research problem (Allan and Skinner 2020).

This study quantitatively analysed the influence of financial literacy and financial technology on the financial behaviour of high school teachers in KZN as rooted in the positivist paradigm. Positivism argues that to better understand the real world, one must establish numerical significance to what is occurring (Sekaran and Bougie 2016: 2). In positivism, establishing what is called 'objective reality' is a means of enhancing the validity and accuracy of research results in order to influence precise decision-making (Saunders *et al.* 2016). It is thus found that positivism is the essential philosophy of quantitative research since it explains data accuracy with numerical quantifications necessary for understanding the phenomenon under investigation. According to Saunders, Lewis, and Thornhill (2012), studies involving quantitative data are typically associated with positivism. Figure 3.1 illustrates the research process that was employed in this study.

Figure 3.1 Overview of the research methodology deployed in the study



Source: Adopted from Gupta and Gupta (2013)

3.3 NATURE OF THE STUDY

This is a descriptive study in nature. Kumar (2014: 19) stated that “descriptive research is a quantitative research method that attempts to collect quantifiable information for statistical analysis of the population sample”. This study is descriptive in nature because its main aim is to determine the influence of financial literacy challenges, financial literacy skills and financial technology knowledge on the financial behaviour of high school teachers in Msunduzi Municipality, KZN. Descriptive studies may involve surveys or interviews that aim to describe and illustrate relationships between variables (Johnston 2017).

Leedy and Ormrod (2012:137) state that descriptive studies can be longitudinal or cross-sectional in nature. Cross-sectional studies involve data collected from the participants at one point in time, whereas longitudinal studies collect data repeatedly over time (Leedy and Ormrod 2012: 137). This study employed a cross-sectional approach to get an overall picture of the situation at the time of the study. Kumar (2014: 19) add that “descriptive research is generally a cross-sectional study where different sections belonging to the same group are studied”.

Descriptive research was appropriate in this study because it involves an explanation of new information (Johnston 2017). According to the literature review even though there are several studies conducted on financial literacy, there is limited research on financial literacy skills, financial literacy challenges and the financial behaviour on teachers in the era of financial technology (Farida *et al.* 2021: 86). A descriptive research approach was therefore appropriate since the aim was to provide additional facts to support the argument on the influence of financial literacy challenges, financial literacy skills and financial technology knowledge on the financial behaviour on teachers.

3.4 RESEARCH METHOD

Silverman (2016) argues that the research methodology refers to a broad, strategic approach to conducting a study, which describes the research structure and how it should be conducted. Creswell and Creswell (2017) explains that “the research methodology represents a pathway for the study, which assists in achieving the researcher’s objectives and, in turn, attempts to answer the research questions”. It

explains how the information needed to solve the problem is obtained in order to provide a framework for conducting the research project (Kumar 2014:19). In order to collect, measure, and analyse data, this study employed a quantitative approach.

3.4.1 Quantitative method

Creswell (2014) argues that a quantitative method is one of the research methods that has its philosophical roots in natural science. Quantitative research involves adopting objective scales, presenting data numerically, and using statistical methods to draw conclusions (Creswell 2014). Due to the number of participants, the procedure for collecting data is less time-consuming than qualitative research (Creswell 2014). Creswell (2017) argues that quantitative research is embedded in a positivist paradigm. This study used this method with the intention of determining the influence of financial literacy and financial technology on the financial behaviour of high school teachers, in order to generalise the results. Johnston (2017) states that this research approach is often used to explain or describe and test the relationship between variables within a study.

3.4.2 Deductive approach

Based on Swain (2017: 38), research approaches are classified as deductive (fixed and based on quantitative data) or inductive (flexible and based on qualitative data). Research and philosophy are fundamentally different approaches to reasoning, resulting in two broad and contrasting methods. In deductive research, a generalisation is used as a starting point for testing a hypothesis and then evaluating whether it applies to specific cases by observation. Research methods in this method are typically based on scientific, positivist approaches that aim to establish a new theory. Deductive approaches are therefore used more often with positivistic research philosophy. The inductive approach to theory-building starts with observations of specific phenomena and seeks to generalise about them.

As reported by Swain (2017: 38), the method fits more into a phenomenological paradigm, in which a theory is tested and either confirmed or refuted. Creswell (2014: 24) argues that the most significant distinction between deductive and inductive approaches is the authors' method of utilising existing literature and theories as

guidelines for their research. To test a theory, a deductive approach is used (Creswell, 2014: 24). Hence, literature is used before data is collected to identify questions, themes, and interrelationships. In contrast, an inductive approach builds a theory as the research proceeds. Deductive reasoning focuses on a particular topic, whereas inductive reasoning is more exploratory and open-ended.

Swain (2017: 38) mentioned that deductive reasoning is more focused. Therefore, this study is based on deductive reasoning, using a quantitative research method to test theory. This study employed this approach after evaluating the research aim, limitations and reviewing the literature.

3.5 TARGET POPULATION

The term population refers to a significant grouping of people or things that are the subject of a scientific inquiry (Sekaran and Bougie 2016: 280). The total set of units from which inferences are to be formed from survey data is referred to as the target population for a survey (Swain 2017). As a result, the target population identifies the units for whom the survey's findings are intended to be generalised (Salkind 2014). As a result, the study's target population is 793 high school teachers from 32 high schools in Msunduzi Municipality (DOE Umgungundlovu District database 2021).

3.6 SAMPLING METHOD AND SIZE

A sample is a predetermined portion of a target population carefully chosen to represent the set population's individual characteristics (Kumar 2019). Pandey and Pandey (2015: 11) argues that sampling involves selecting a few from among the entire group to serve as the basis for estimating the occurrence of unknown details or conditions in the whole group.

There are two types of sampling strategies: probability and non-probability (Salkind 2014). In contrast to probability sampling methods, the chances of selecting an individual in the population using non-probability sampling methods are unclear (Salkind 2014). The probability sampling technique used in this study is systematic random sampling, in which the initial sample point is chosen at random and then the remaining sites are chosen evenly or consistently (Rahi 2017). The researcher is free

to pick a probability sample without knowing exactly what the sampling frame is in a systematic random sampling (Federal Committee on Statistical Methodology (FCSM) 2012). Systematic samples, according to Maree *et al.* (2016), are easier to collect and execute since the researcher does not have to bounce across the sampling frame to select the members to be sampled. As a result, it is less unbiased, as systematic sampling lessens the probability of specific participants being chosen (Salkind 2014). Another benefit of systematic sampling is that it allows the researcher to pick a probability sample without knowing the sampling frame ahead of time (FCSM 2012). The study had a sample size of 246 high school teachers, which was calculated as follows:

To determine the sample size based on 95% confidence level with 80% proportion of target population at 0.005 acceptable margin of error, the following formula was used:

$$N = \{ Z^2 * \Sigma^2 * [N / (N - 1)] \} / \{ ME^2 + [Z^2 * \Sigma^2 / (N - 1)] \}$$

where N= Sample Size; Z= Confidence Level; Σ = Alpha; P= Proportion and ME= Margin of error. Table 3.1 shows the sample size of this study.

TABLE 3.1: SAMPLE SIZE			
High schools within	Number of teachers	Proportion	Sample Size
Msunduzi Municipality	793	0.31	246

This study used systematic random sampling, in order to ensure that all members of the subpopulation have an equal chance of being selected. All high schools within Msunduzi Municipality were listed alphabetically and numbered from 1 to 32. All schools that had been assigned an uneven number were selected. As the number of teachers in the selected high schools exceeded the required sample size of 246, 300 questionnaires and letters of information and consent forms were distributed to the selected high schools. Two hundred and fifty-eight completed questionnaires were returned of which 12 were discarded, leaving 246 usable questionnaires.

3.7 DATA COLLECTION INSTRUMENT

Data collection is the process of acquiring information from respondents for the goal of research, using various data collection techniques and sources (Bryman and Bell 2014: 192). Swain (2017: 141) distinguishes between two categories of data: primary and secondary data. Primary data is the collection of data directly from the study's participants (Swain 2017: 141). Secondary data collection, on the other hand, is an examination of data that has already been obtained or compiled in some way (Coe *et al.* 2017: 122). Despite the fact that many data collection techniques are available under the quantitative research approach, it is crucial to choose those that are pertinent to the study objectives (Bryman and Bell 2014: 192).

This study collected primary data from the participants by distributing the questionnaires. According to Swain (2017), "primary data is more reliable since it is obtained directly from the original source, and it also provides up-to-date information about a research topic". In this study primary data was more reliable because the researcher prepared the questionnaire by the objectives and questions wanted to be answered. Data collected from the respondents was also kept confidential, only the researcher and the supervisors had the access to data.

3.7.1 The questionnaire

According to Saunders *et al.* (2012: 416), questionnaires are organized interviews in which all respondents are asked the same questions and given the same alternatives for responding (yes/no, ranked on a scale, etc.). A questionnaire was viewed as the most suitable method of collecting data from the participants in this study because of the large sample size of 246. Bryman and Bell (2014:192) indicate that there are advantages and disadvantages associated with self-administered questionnaires.

As this study used a questionnaire as a tool to collect data from participants the following subsection discusses the advantages and disadvantages of using self-administered questionnaire in this study.

The advantages of self-administered questionnaires are that:

- Questionnaires are one of the most affordable ways to gather quantitative data.
- Each aspect of a topic can be covered by a questionnaire.
- Questionnaires are an effective way to get results quickly.
- Data can be collected from large populations through questionnaires.
- A questionnaire can ensure anonymity for its respondents, so they feel confident that their views and opinions won't be identified by anybody.

The disadvantages of self-administered questionnaires are that:

- Respondents can provide false answers.
- Questions can remain unanswered.
- Interpretations and understandings differ.
- Analysing some questions can be challenging.
- A questionnaire cannot fully capture the emotional response or feelings of respondents.

Having decided to administer a questionnaire to meet this study's objectives, the layout and design of the questionnaire was considered next.

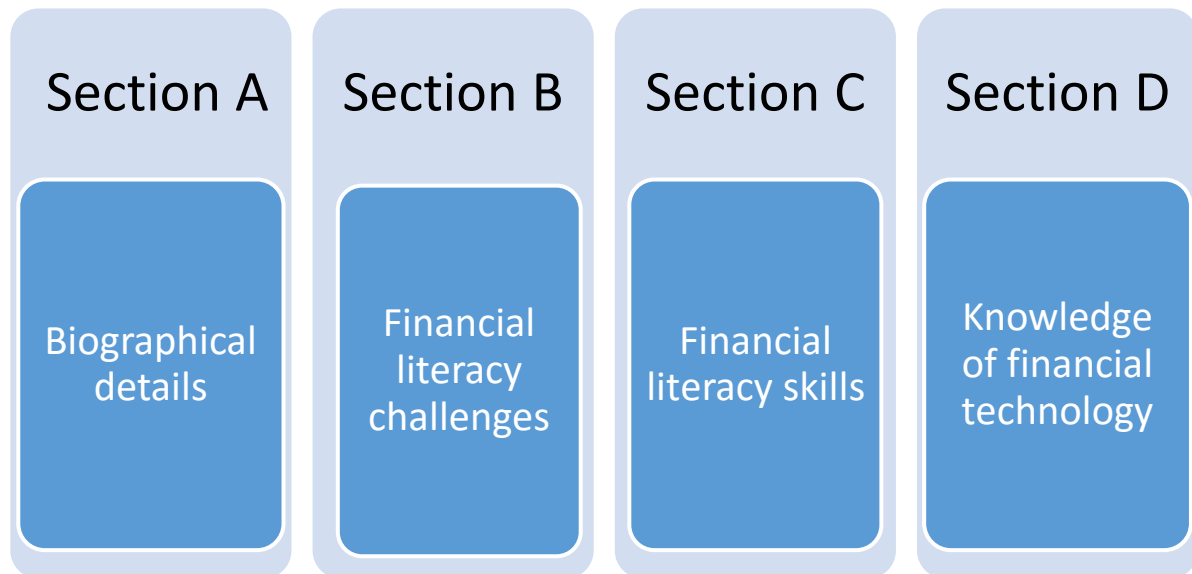
3.7.2 Layout and design of the questionnaire

Williamson (2011: 97) argues that a researcher must carefully consider the layout and design of the questionnaire. Granvetter and Forzano (2015: 386) recommend that questions should be presented in a simple language style with an organised format that is easy to follow by participants. Furthermore, questionnaires should be composed in a logical way, beginning with general information, then moving to specific information with a clear and logic order (Wimmer and Dominick 2011: 198).

Questionnaire design is the process of formulating research questions in order to resolve problems in a study and meet study objectives (Brink, van der Walt and van Rensburg 2012). This includes the wording, the sequence, the length, the arrangement, and the distribution (Brink, van der Walt and van Rensburg 2012). This

aspect was given special attention during the design of the questionnaire. In order to obtain accurate information about the influence of financial literacy and financial technology on the financial behaviour of high school teachers in KZN, the questionnaire comprised 56 closed-ended questions divided into four sections as depicted in Figure 3.2. The questionnaire is shown in Appendix C.

Figure 3.2 Sections of the questionnaire (own compilation)



- **Section A – Biographical details**

This section focused on the biographical details of high school teachers. It included gender, age category, educational level, work experience, financial literacy course attended, and field of employment. All these questions were included in this section in order to identify the type of teachers participated on this study and their level of experience in the field (Appendix C).

- **Section B – Financial literacy challenges**

This section focused on the financial literacy challenges faced by high school teachers; it included, amongst others, impulsive spending, satisfaction in spending than saving, overspending, price comparisons for major expenses, borrowing money from friends and family. This section was linked to research objective number one, “to identify financial literacy challenges facing high school teachers in Msunduzi Municipality, KZN”. The purpose of this section was to provide all the necessary information on financial literacy challenges faced by high school teachers as stated in the first chapter

that this study seeks to gain more insights on the financial literacy challenges affecting teachers (Appendix C).

- **Section C – Financial literacy skills**

This section focused on the financial literacy skills of high school teachers. It included, amongst others, preparation of monthly budgets, involvement of family members when preparing a budget, sticking to a budget, paying bills on due date, shopping around for the best prices. This section was linked to research objective number two, “to examine the financial literacy skills of high school teachers in Msunduzi Municipality, KZN”. “Financial literacy skills allow a person to be able to make rational and effective decisions related to finances and economic resources” (Ripain *et al.* 2017). (Appendix C).

- **Section D – Knowledge of financial technology**

This section focused on the teachers’ knowledge of financial technology. It included, amongst others, finding out financial technology knowledge when using smartphones/laptops to buy products online, pay bills, do cash transfers, and exposure on financial technology. This section was linked to research objective number three, “to determine the knowledge of financial technology of high school teachers in Msunduzi Municipality, KZN”.

The questions that were used in the questionnaire were developed from the literature. Questionnaires can either use open-ended questions or closed-ended questions (Saunders *et al.* 2016: 416). In this study, closed-ended questions were used in Sections B, C and D of the questionnaire. Saunders *et al.* (2016: 416) contend that closed-ended questions are easier to analyse statistically. Moreover, they have the following advantages:

- These types of questions can be answered more quickly and more easily.
- The results can be compared easily.
- Responses can easily be replicated.

Likert scale questions were used in the questionnaire, with answers ranging from (1) strongly disagree, (2) disagree, (3) neutral, (4) agree, and (5) strongly agree. In survey

research, a Likert scale is commonly used in order to measure respondents' attitudes by allowing them to indicate their level of agreement or disagreement with specific questions or statements (Awang, Afthanorhan and Mamat 2016:13).

3.7.3 Pre-testing of the questionnaire

It is necessary to conduct pre-testing prior to undertaking a study to determine whether there are any flaws or fundamental research issues with the instrument (Doody and Doody 2015: 1074). Twenty-five (25) questionnaires were administered to the selected participants outside the research site to ensure that the questions were clear and understandable. Some changes were subsequently made to the questionnaire under the guidance of the research supervisors before it was administered.

3.7.4 Administration of the questionnaire

Brink, Van Der Walt and Van Rensburg (2012: 145) argue that the choice of questionnaire administration is crucial to the overall success of the study. Permission from the DOE, Head of Departments and principals of each school was obtained to administer the questionnaire. The intended participants (the high school teachers) were notified of the study using e-mail with the assistance of the secretaries and principals of each school, prior to the distribution and collection of questionnaires. This email also attached the letter of permission to conduct the study from DOE and from DUT's FREC.

After notification, the questionnaires were delivered to the participants' work locations in schools. A consent form (Appendix B) and letter of information (Appendix A) was included in every questionnaire delivered to the participants. A week was allotted to the participants for completing the questionnaire. Participants who already received the questionnaires completed them immediately while the researcher was distributing them. Completed questionnaires were obtained from the participants during 20 September 2021 to 01 October 2021.

In the following section, the response rate is discussed.

3.7.5 The response rate

The targeted population consisted of 246 high school teachers within Msunduzi Municipality in KZN. As shown in Table 3.2, 246 questionnaires were distributed to the

respondents, and 246 questionnaires were returned, resulting in a 100% response rate.

TABLE 3.2: RESPONSE RATE			
High schools within	The targeted sample	The obtained sample	The obtained response rate
Msunduzi Municipality	246	246	100%

The next section explains how data was prepared and analysed.

3.8 DATA ANALYSIS AND INTERPRETATION

According to Ibrahim and Shiratuddin (2015), a data analysis involves extracting information from data after completing calculations and evaluations, and then assembling this information so that it can answer the research questions mentioned in the study.

3.8.1 Data preparation

Zheng (2012: 71) argues that coding, cleaning, and capturing unrefined data is required for preparing it for analysis. This study used closed-ended questions, and therefore each response was categorized logically on the questionnaire. Cooper and Schindler (2014: 437) assert that coding is crucial because it gives data structure and simplifies data entry. All the questionnaires from the participants were checked for completeness and none was required to be discarded.

The questions of the questionnaire were labelled from A1 to D56 with a unique number on an EXCELTM spreadsheet. To avoid any confusion or difficulty in analysing the data later, all the data was entered into SPSS using the same numbering as on EXCEL spreadsheet. In order to ensure the accuracy of responses gathered in SPSS, the responses from the questionnaire were verified against those gathered in SPSS after the capturing process was complete.

3.8.2 Data processing

Johnston (2017) defines data processing as the process of transforming raw data into meaningful information. SPSS version 27.0 was used in this study for analysing the data, after it had first been entered into an EXCEL™ spreadsheet.

3.8.3 The statistical presentation and analysis of the data

Data can be analysed using descriptive statistics or inferential statistics (LoBiondo-Wood and Haber 2010: 78). In descriptive statistics, a set of quantitative data is described, presented, or analysed to offer a simple, manageable or simplified explanation (Johnston 2017). The main purpose of descriptive statistics is to provide an explanation for observed data. In order to achieve this objective, descriptive analytical tools were used to compute the mean and standard deviation, and then visually presented through tables and graphs. Based on the number of teachers who participated in this study and their percentage of responses, the number of responses in Section A of the questionnaire was calculated using an absolute frequency and a relative frequency calculation. The frequency distributions, graphs and relative frequency distributions of tables were used in this study. The data was analysed using descriptive statistics, which included both the mean and standard deviation.

3.8.3.1 Mean

The mean is calculated by dividing the number of values in a set of data by the total number of values in the set (Sekaran and Bougie 2016:141). It is also referred to as the average. A mean can be used to give an overall picture or impression of the data set. It is best to use the mean of a set of numbers that are close together (Sekaran and Bougie 2016:141).

3.8.3.2 Standard deviation

The standard deviation is a measurement of your dataset's average variability. Using this method, you can calculate the average distance between each number and the mean (Johnston 2017). Values that are distant from the mean have a high standard deviation, while values that are close to the mean have a low standard deviation (Johnston 2017). To control how closely respondents agreed on a certain assertion, the standard deviation was determined.

3.8.3.3 Levene's test for equality of variances

The Levene's test for equality of variances was performed in this study to see if there were any significant variations between male and female respondents in terms of financial literacy skills, financial literacy challenges, and financial technology knowledge. Levene's test is used in statistics to investigate equality of variances between two or more groups of variables (Sekaran and Bougie 2016). Some statistics rely on the assumption that the variances of different samples from various populations are equal. This assumption is assessed using Levene's test.

3.8.3.4 Regression analysis

In this study, regression analysis was used to determine whether there is statistically correlation between financial literacy, financial technology, and the financial behaviour of the school teachers. Sekaran and Bougie (2016:141) define regression analysis as a process for assessing the connection between a dependent variable and one or more independent variables. It can be used to determine the strength of a relationship between variables and to predict how they will interact in the future.

The following section explains how this study ensured validity and reliability.

3.9 RELIABILITY AND VALIDITY

Bryman and Bell (2015) argues that a test is reliable if it measures what it intends to measure while yielding the same results each time. To ensure reliability, data collection bias was minimised as only the researcher administered the questionnaires. To determine if the questionnaire was reliable in measuring the concept, questions were grouped together to measure the same thing. After collecting the responses, a correlation was run between the questions that were grouped together.

3.9.1 Reliability

The results of the Cronbach alpha test to measure reliability is shown in Table 3.3.

Table 3.3: Reliability test using Cronbach's alpha		
Variable	Cronbach's alpha	Number of items
Financial literacy challenges (question 7 – 22 items)	0.921	16
Financial literacy skills (question 23 – 44 items)	0.899	22
Financial technology knowledge (question 45 – 56 items)	0.765	8

The results in Table 3.3 indicate that the Cronbach's alpha for financial literacy challenges, financial literacy skills and financial technology knowledge were 0.921, 0.899 and 0.765 respectively. According to Heale and Twycross (2015), Cronbach's alpha values of 0.7 and above are acceptable. This suggests that the research questions used to measure financial literacy challenges, financial literacy skills and financial technology knowledge were acceptable and therefore, the research instrument was internally consistent and the results are more likely to be reliable.

3.9.2 Validity

Sekaran and Bougie (2016: 262) argue that validity can be defined as the accuracy with which a measure of an empirical concept reflects its real meaning. Pre-testing was used to validate the content of the questionnaire. Using validity as a measure of accuracy is determining the degree to which the questions were able to answer the questions that were intended to be answered in the study. As described above, 25 teachers from outside the study site pretested the questionnaire.

3.10 ANONYMITY AND CONFIDENTIALITY

Babbie (2017) describes anonymity as when the researcher ensures that the respondents cannot be identified by the readers of the research. The covering letter as well as the letter of information provided assurance to all respondents that no names would be mentioned.

3.11 ETHICAL CONSIDERATIONS

Saunders *et al.* (2012: 52) argue that all research processes should have three major ethical considerations, namely, gathering, measuring and publishing. Welman *et al.* (2011: 61) recommended that formal procedures of obtaining permission for a research study be approved by an ethics committee. Accordingly, ethical clearance was granted by the university's FREC. Appendix D provides a copy of the ethical clearance letter. Thus, anonymity of respondents and confidentiality of their responses were guaranteed because results were only aggregated. Completed questionnaires were securely stored and only the supervisor and researcher had access to them.

3.12 CHAPTER SUMMARY

This chapter presented a description of the research methodology. Several factors were considered before choosing the pragmatic paradigm, such as the aim, objectives, research questions, and methods. The research strategy adopted for this study involved a data collection tool being, self-administered questionnaires. A quantitative analysis of the data was performed using SPSS version 27.0. Finally, the chapter focused on how validity, reliability, and ethical issues were addressed.

The next chapter presents and discusses the findings of this research study based on the research methodology adopted.

CHAPTER FOUR

PRESENTATION AND DISCUSSION OF THE RESULTS

4.1 INTRODUCTION

The previous chapter discussed the methodology and the research design of the study. As described in chapter three, the study used a quantitative research approach. The objective of this chapter is to present and discuss the results obtained from analysing the data collected from the respondents using questionnaires.

To recap, the four research questions which this study addresses are as follows:

- What are financial literacy challenges facing high school teachers in Msunduzi Municipality, KZN?
- What are financial literacy skills of high school teachers in Msunduzi Municipality, KZN?
- What is the knowledge of financial technology of high school teachers in Msunduzi Municipality, KZN?
- What is the relationship between financial literacy, financial technology and financial behaviour of high school teachers in Msunduzi Municipality, KZN?

Descriptive statistics have been used to answer all four research questions. However, to probe the final research question, inferential statistics were used. To provide a richer analysis of the data, a number of background questions were asked. These are discussed next.

4.2 DEMOGRAPHIC PROFILE OF RESPONDENTS

Section A of the questionnaire contained a number of questions that probed the background characteristics of the respondents who participated in this research. Table 4.1 presents the socio-demographic background of the respondents.

Table 4.1: Socio-demographic characteristics			
		N	%
Gender	Female	122	49.6
	Male	124	50.4
Age Category	Under 25 years	25	10.2
	25 - 34 years	89	36.2
	35 - 44	66	26.8
	45 - 54 years	56	22.8
	55 years and older	10	4.0
Qualification Type	Diploma	12	4.9
	Bachelor	142	57.7
	Honours	66	26.8
	Masters	17	6.9
	PhD	8	3.3
	Other	1	0.4
Teaching Experience	< 5 years	58	23.6
	5 - 10 years	76	30.9
	11 - 15 years	59	24
	16 - 20 years	31	12.6
	21 - 30 years	19	7.7
	31 years and more	3	1.2
Financial Literacy Course Attended	No	76	30.9
	Yes	170	69.1
Field Employed	Science	67	27.2
	Commerce	85	34.6
	Humanities	67	27.2
	Other	27	11

- **Gender**

The study respondents were asked to indicate their gender in order to gain a better understanding of the gender distribution. Table 4.1 shows that there were 124 (50.4%) male and 122 (49.6%) female respondents. As the gender of the respondents was almost equal, it is unlikely that gender has any impact on the results.

- **Age category**

Most of the participants (36.2%) were between the ages of 25 and 34 years, followed by 26.8% between 35 to 44 years, 22.8% between 45 and 54 years, 10.2% were under 25 years while the rest (4.0%) were 55 years and above. This is consistent with the statistical data of the working population in Msunduzi Municipality. STATSSA (2022) states that the working population aged between 20 – 64 years in the municipality consists of 47.8% males and 52.2% females of the total population of the municipality. Although the number of male teachers who participated in the study was slightly higher than that of the female teachers, the gender and age representation of the respondents was within expectations.

- **Qualification type**

Almost 60% of the participants had a bachelor's degree, followed by those who had an Honour's degree (26.8%). Only 0.4%, 3.3%, 4.9% and 6.9% had other levels of education, which were Advanced Diplomas (Other), PhD, Diploma and Master's degrees respectively. The results show that the majority of teachers had a bachelor's degree which was an expected outcome as high school teachers are typically required to have a bachelor's degree, but may also advance their education with an honours, masters or doctoral degree particularly if they wish to lecture in the tertiary institutions in the future (Githuri 2019).

- **Teaching experience**

In terms of teaching experience, Table 4.1 shows that most respondents, 30.9% have taught between 5 and 10 years, indicating that they were very well experienced within the field of teaching. This is followed by 24.0% who have taught between 11 and 15 years, 23.6% who have taught for less than 5 years, 12.6% who have taught between 16 and 20 years, 7.7% who have taught between 21 and 30 years and the remaining 1.2% who have taught for more than 30 years. Therefore, these results show that most respondents had the necessary expertise to answer the questionnaire because they were very well experienced within this field.

- **Financial literacy course attended**

Respondents were asked if they had taken any financial literacy course. According to Table 4.1, 69.1% of respondents have taken a financial literacy course, while 30.9% have never taken one. Despite the fact that 69.1% of respondents said they had taken a financial literacy course, Table 4.2 below indicates that 36% of the respondents have indicated that they considered themselves to have little and average financial knowledge when they responded to the statement, “I feel I do not have adequate knowledge to manage my personal finances”. Therefore, even though most of the respondents indicated that they have attended a financial literacy course, on average, they considered themselves to have little financial knowledge.

- **Field of employment**

Most (34.6%) of the respondents were educators from commercial studies, while 27.2% came from humanities as well as science fields, and only 11.0% came from other fields of study, that is languages (other) field. The results show that the majority of the respondents were teachers in commercial studies. This was expected as most teachers do not choose to teach the sciences or humanities (Githuri 2019).

To summarise the background information, although the gender of the respondents was almost equal, nearly 60% of respondents had a bachelor's degree, and most respondents had the necessary expertise because they had extensive experience in this field because of their age and experience. The majority of the respondents indicated that they had taken a financial literacy course, and the majority of the participants were from the commercial studies field.

4.3 DATA ANALYSES ACCORDING TO RESEARCH OBJECTIVES

Sections B to D of the questionnaire were designed such that it addressed the research objectives. Therefore, this part of the chapter provides an analyses and discussion of findings according to the study's objectives.

4.3.1 Objective 1: To identify financial literacy challenges facing high school teachers in Msunduzi Municipality, KZN

The questionnaire listed 16 items in Section B to identify the financial literacy challenges. The respondents were asked to provide their opinions on the listed

challenges using a scale of 1 (strongly disagree) to 5 (strongly agree). These results are shown in Table 4.2.

Table 4.2: Financial literacy challenges faced by high school teachers in KZN									
Statements	1	2	3	4	5	TA	TD	Mean	SD
I am impulsive and buy things even when I can't really afford them.	25%	30%	21%	16%	8%	24%	55%	2,5	1,2
I find it more satisfying to spend money than save it for the long term.	18%	33%	18%	24%	7%	31%	51%	2,7	1,2
I often spend more than I can afford.	20%	26%	23%	22%	9%	31%	46%	2,7	1,3
I never compare prices for major expenses.	17%	25%	27%	23%	8%	31%	42%	2,8	1,2
I often borrow money from friends and family members.	17%	20%	23%	29%	11%	40%	37%	2,9	1,3
It is hard to stick to my spending plan when unexpected expenses arise.	12%	17%	24%	32%	15%	47%	29%	3,2	1,2
I buy things on credit rather than waiting and saving up.	15%	29%	21%	25%	10%	35%	44%	2,9	1,2
When more unexpected expenses occur, I usually have to use more credit.	14%	13%	25%	33%	15%	48%	27%	3,2	1,3
When faced with a financial challenge, I have a hard time figuring out a solution.	15%	19%	22%	33%	11%	44%	34%	3,1	1,3
My exposure to advertising has negatively influenced my financial decisions.	14%	26%	29%	22%	9%	31%	40%	2,9	1,2
I lack confidence in my ability to manage my finances.	11%	31%	25%	23%	10%	33%	42%	2,9	1,2
I always exceed the maximum limit on my credit card.	22%	26%	24%	22%	6%	28%	48%	2,6	1,2
Paying my credit card in full to avoid financial charges is not so important.	20%	32%	20%	18%	10%	28%	52%	2,7	1,3
I feel I do not have adequate knowledge to manage my personal finances.	17%	20%	27%	26%	10%	36%	37%	2,9	1,3
I am not satisfied with the amount of money I am saving and investing for retirement.	14%	22%	20%	29%	15%	44%	36%	3,1	1,3
My work colleagues negatively influence me in my financial decisions.	22%	29%	19%	17%	13%	30%	51%	2,7	1,3
Note: 1 = strongly disagree; 2 = disagree; 3 = neutral; 4 = agree; 5 = strongly agree; TA = total agreement; TD = total disagreement; SD = standard deviation									

Each item in Table 4.2 is discussed separately below.

- **Impulsive spending**

In assessing the participants' impulsiveness and buying of items they cannot afford, the results indicate that most of the respondents, 55%, are not impulsive and do not buy things which they could not afford. On the other hand, 24% of the respondents

agreed that they are impulsive and buy things they cannot afford. While 21% of the respondents were neutral about the impulsive spending and the 21% that is neutral could be those that are not involve in impulsiveness and buying of items they cannot afford.

These results suggest that the teachers were, on average, not engaging in impulsive spending, thus demonstrating good financial management practices. Nevertheless, these findings seem to be contrary to what is reported in the literature. For instance, South Africans were found to have the lowest financial knowledge on spending in a poll of over 30 countries drawn from Africa, Asia, Europe, Australasia, North America and South America (Business Tech 2016: online).

- **Satisfaction in spending than saving**

Table 4.2 further indicates that most of the respondents did not find it more satisfying to spent money than to save for the long term ($m = 2.7$). This was reflected by 51% of the respondents who, on average, disagreed with the statement “I find it more satisfying to spend money than save it for the long term”. These findings seem contrary to what is reported in the literature as , in South Africa, there is a low saving rate which can be attributed to a high level of spending on goods and services instead of setting money aside for future purposes or unforeseen circumstances (SARB 2019).

- **Overspending**

Most of respondents indicated that they did not spend more than they can afford. This was reflected by 46% of the respondents who disagreed with the statement “I often spend more than I can afford” as compared with 31% of the respondents who agreed and 23% were neutral ($m = 2.7$). This suggests that teachers were in a good position to manage their financial literacy challenges. These results seem to be in opposition to those reported in the literature. According to the SARB (2019), the low savings rate in South Africa is the result of spending too much on goods and services instead of setting aside money for unexpected situations.

- **Price comparisons for major expenses**

The results also revealed that most of the respondents compared prices for major expenses as 42% of the respondents who disagreed with the statement “I never compare prices for major expenses” ($m = 2.8$).

- **Borrowing money from friends and family**

Most of the respondents also have a habit of borrowing money from friends and family members. This was reflected by 40% of the respondents who agreed with the statement “I often borrow money from friends and family members” as compared to 37% of the respondents who disagreed and 23% were neutral ($m = 2.9$). The mean of 2.9 reflects, on average, an almost neutral position towards this statement. De Bassa Scheresberg (2013) argues that financial literacy plays a significant role in individuals' day-to-day management of money (that is borrowing patterns, saving and planning for retirement) and that almost every aspect of people's lives is impacted by money.

- **Spending plan**

The results indicate that most of respondents have challenges with sticking to their spending plan particularly when unexpected expenses arise. This was reflected by 47% of the respondents who agreed with the statement “It is hard to stick to my spending plan when unexpected expenses arise”. The mean of 3.2 reflects that many of the respondents, on average, disagreed (29%) or were neutral (24%) in their opinions on this statement. Strongly leans towards agree.

- **Credit Purchases**

Most of the respondents indicated that they would rather save than buy on credit. This was reflected by 44% of the respondents who disagreed with the statement “I buy things on credit rather than waiting and saving up”. The mean of 2.9 reflects that, on average, 35% of the respondents agreed with the statement and 21% were neutral in their opinions. These results seem to be in opposition to what was reported in a study conducted by the Roberts *et al.* (2018) for the HSRC (2017) that indicated that 48% of South Africans are not saving at all whilst 42% have no long term savings. In this current survey, most respondents indicated that they would rather save than buy on credit.

- **Unexpected expenses**

Most of the respondents indicated that they use more credit when more unexpected expenses occur. This was reflected by 48% of the respondents who agreed with the statement “When more unexpected expenses occur, I usually have to use more credit”. The mean of 3.2 reflects that on average, 27% of the respondents disagreed with the statement and 25% were neutral in their opinions. These results support those

reported by Roets (2021), the CEO of Debt Rescue, who stated that at least 9.5 million South African who are credit-active consumers are over indebted because credit usage increases when consumers encounter more unexpected expenses.

- **Financial Challenges**

Many respondents felt that they find it hard to find a solution when faced with a financial challenge as 44% of the respondents who agreed with the statement “When faced with a financial challenge, I have a hard time figuring out a solution” ($m = 3.1$). However, the mean of 3.1 reveals that, on average, the respondents were almost neutral in their responses. The results support Wentzel (2016) who argued that households cannot adequately prepare for financial hardships they may face. As a result, an increasingly number of households are unable to repay their debts which may lead to financial distress because it hard to find a solution when faced with a financial challenge.

- **Exposure on advertising**

Table 4.2 shows that 40% of the respondents disagreed with the statement “My exposure to advertising has negatively influenced my financial decisions” ($m = 2.9$). Thus, the majority of respondents did not perceive advertising as having a negative effect on their financial decisions.

- **Confidence to manage finances**

Table 4.2 also shows that 42% of the respondents disagreed with the statement “I lack confidence in my ability to manage my finances” ($m = 2.9$). This indicates that the majority of the respondents believed they have the confidence to manage their finances.

- **Exceeding the maximum limit on credit cards**

Most of the respondents indicated they were not in the habit of always exceeding the maximum limit on their credit cards as 48% of the respondents disagreed with the statement “I always exceed the maximum limit on my credit card” ($m = 2.6$). These results seem contrary to those of Van Rooij, *et al.* (2012) and Lusardi and Mitchell (2014), who stated that most of the participants in their study indicated they were in the habit of always exceeding the maximum limit on their credit cards, especially when facing unexpected expenses.

- **Paying credit card in full to avoid financial charges**

The results in Table 4.2 also indicate that most of the respondents were of the opinion that paying their credit card in full to avoid financial charges is a priority as 52% of the respondents disagreed with the statement “Paying my credit card in full to avoid financial charges is not so important” ($m = 2.7$).

- **Adequate knowledge to manage personal finances**

The respondents were almost evenly split on the statement “I feel I do not have adequate knowledge to manage my personal finances” as 37% disagreed with the statement and 36% of the respondents agreed with the statement ($m = 2.9$). Therefore, although, on average, the majority of respondents indicated that they do have adequate knowledge to manage their personal finances, an almost similar number indicated that they lacked this knowledge.

- **Not satisfied with savings and investments for retirement**

Respondents indicated that they were not satisfied with the amount of money they are saving and investing for retirement as 44% of the respondents agreed with the statement “I am not satisfied with the amount of money I am saving and investing for retirement” ($m = 3.1$). The results support Mafukata and Mudau (2016: 2253) who argued that teachers are largely indebted to loan sharks and other informal lending financial institutions, and that they do not save enough money for retirement.

- **Influence on financial decisions by work colleagues**

Respondents also indicated that their work colleagues did not negatively influence their financial decisions as 51% of the respondents disagreed with the statement “My work colleagues negatively influence me in my financial decisions” ($m=2.7$).

4.3.1.1 Levene's Test for Equality of Variances – Financial Literacy Challenges

The results of the study were also assessed using Levene's test for equality of variances to test whether there were significant differences in financial literacy challenges faced male and female respondents in the study.

Table 4.3: Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Financial Literacy challenges	Equal variances assumed	0.083	0.773	0.716	244	0.474	0.07715	0.10768	-0.13496	0.28925
	Equal variances not assumed			0.717	244	0.474	0.07715	0.10766	-0.13492	0.28922

The results of the Levene's test shown in Table 4.3 revealed that $p > 0.05$ ($p = 0.773$) and this suggests that there was no significant differences between the financial literacy challenges of male and female educators in Msunduzi Municipality in KZN.

4.3.1.2 Summary of findings on objective 1

An overall comment for these findings on objective 1, is that for many of the statements, the mean tended towards neutral (3.00) which indicated that the respondents, on average, did not have strong opinions either way (disagree or agree) with the statements. However, on average, the teachers generally demonstrated good financial management practices and they seem to have a good level of financial literacy and were in a good position to manage most of their financial literacy challenges. Most of the teachers indicated that they were not impulsive in financial decision making, had a strong appetite for saving, compared prices when buying major assets, limited spending within the range of their affordability, met debt repayment to avoid excessive interest and penalties, and were not affected by peer pressure from work colleagues when making financial decisions, including advertisements. However, most of the teachers found it hard to stick to spending when some unexpected expenses arose and also found it hard to solve financial challenges. Additionally, there were no significant differences between the financial literacy challenges of male and

female teachers in Msunduzi Municipality. This suggests that gender does not have an influence on the financial literacy challenges that teachers face.

Nevertheless, these findings seem to be contrary to what is reported by other studies. For instance, South Africa was found to have the lowest financial knowledge in a poll of over 30 countries drawn from Africa, Asia, Europe, Australasia, North America and South America (Business Tech 2016). This suggests that South Africans generally have lower levels of financial knowledge which would also be expected in the teachers in Msunduzi Municipality, but these current results suggest the contrary. Furthermore, the results also indicated that most of teachers had a strong appetite for saving and were paying their debts in time. Yet national data suggests the contrary with evidence indicating that 48% of South Africans are not saving at all (Roberts *et al.* 2018) for the HSRC (2017) and increasingly a number of households are unable to repay their debts (Wentzel 2016). On the other hand, the study also revealed that the teachers were not satisfied with the amount of money they were saving and investing for retirement. This was consistent with Roberts *et al.* (2018) for the HSRC (2017) who asserted that 42% have no long-term savings and those who were saving are not saving enough.

4.3.2 Objective 2: To examine the financial literacy skills of high school teachers in Msunduzi Municipality, KZN

This section discusses the findings for objective 2 of this study which sought to examine the financial literacy skills of high school teachers in Msunduzi Municipality in KZN. The research instrument had 22 statement to which the respondents to the study were asked to answer using a scale of 1 = strongly disagree to 5 = strongly agree). These results are shown in Table 4.4.

Table 4.4: Financial literacy skills of high school teachers in KZN

Statements in Section C	1	2	3	4	5	TA	TD	Mean	SD
I always prepare a monthly budget.	7%	9%	24%	39%	21%	60%	16%	3,6	1,1
I always involve my family when preparing a budget.	7%	20%	20%	39%	14%	53%	27%	3,3	1,2
I stick to my budget.	6%	14%	38%	29%	13%	42%	20%	3,3	1,1
I pay all my bills on the due date.	4%	14%	25%	42%	15%	57%	18%	3,5	1,0
I shop around for the best prices.	3%	10%	27%	45%	15%	60%	13%	3,6	1,0
I am not overwhelmed by my debts.	7%	14%	25%	41%	13%	54%	21%	3,4	1,1
I keep a record of my expenses each month.	4%	18%	27%	39%	12%	51%	22%	3,4	1,1
I always prioritise my spending based on needs, not wants.	5%	8%	24%	41%	22%	63%	13%	3,7	1,1
I always pay the instalment required on my clothing accounts.	1%	12%	24%	46%	17%	63%	13%	3,7	0,9
I always ensure that I understand the terms and conditions of any loan I take.	4%	9%	21%	42%	24%	66%	13%	3,7	1,1
I always ensure I understand the consequences of default of loan.	2%	7%	18%	48%	25%	73%	9%	3,9	1,0
My debit/credit card has never been declined for insufficient funds.	6%	22%	23%	28%	21%	49%	28%	3,4	1,2
I have control over my personal finances.	2%	11%	25%	46%	16%	62%	13%	3,7	0,9
I have an emergency fund of at least one month's living expenses.	7%	14%	29%	39%	11%	50%	21%	3,4	1,1
I am quite confident that I will have enough money in my retirement plan in place for my future.	3%	15%	29%	33%	20%	53%	18%	3,5	1,1
I have life cover with insurance company.	6%	13%	19%	44%	18%	62%	19%	3,6	1,1
I have an insurance policy for all major assets.	2%	17%	20%	41%	20%	61%	19%	3,6	1,1
I maintain an emergency savings account.	4%	16%	25%	37%	18%	55%	20%	3,5	1,1
I always consult my family/spouse before making any important financial decisions.	5%	18%	29%	32%	16%	48%	23%	3,4	1,1
Before I buy something I carefully consider whether I can afford it.	1%	11%	22%	41%	25%	66%	12%	3,8	1,0
I set long-term financial goals and work hard to achieve them.	3%	11%	21%	46%	19%	65%	14%	3,7	1,0
I've got a clear idea of the sorts of financial products or services that I need without consulting a financial adviser.	5%	11%	25%	38%	21%	59%	16%	3,6	1,1
Note: 1 = strongly disagree; 2 = disagree; 3 = neutral; 4 = agree; 5 = strongly agree; TA = total agreement; TD = total disagreement; SD = standard deviation									

Each item in Table 4.4 is discussed separately below.

- **Preparation of monthly budgets**

The results indicate that the majority of the respondents always prepare monthly budgets ($m = 3.6$). This was reflected by 60% of the respondents who agreed to the statement “I always prepare a monthly budget” as compared to 16% of the respondents who disagreed while 24% remained neutral as shown in Table 4.4. Interestingly, these findings seem to contradict to what was reported by Mafukata and Mudau (2016:2253), who claim that teachers do not save and budget which causes them to be largely indebted to loan sharks and other informal lending financial institutions.

- **Involvement of family members in preparing a budget**

Table 4.4 further indicates that most of the respondents indicated that they always involve their families when preparing budgets ($m = 3.3$). This was reflected by 53% of the respondents who agreed to the statement “I always involve my family when preparing a budget” as compared to 27% of the respondents who disagreed while 20% remained neutral.

- **Sticking to a budget**

It was further revealed that most of the respondents had the ability to stick to their budgets ($m = 3.3$). As a result, 42% of the respondents answered “I stick to my budget” while 20% disagreed, and 38% remained neutral.

- **Paying bills on due time**

Also, most of the respondents indicated that they pay all their bills on the due date ($m = 3.5$). This was reflected by 57% of the respondents who agreed to the statement “I pay all my bills on the due date” as compared to 18% of the respondents who disagreed while 25% remained neutral.

- **Shop around for the best prices**

Most of the respondents also indicated that they shop around for the best prices ($m = 3.6$). This was reflected by 60% respondents who agreed to the statement “I shop around for the best prices” as compared to 13% of the respondents who disagreed while 27% remained neutral.

- **Not overwhelmed by debts**

Most of the respondents indicated that they were not overwhelmed by their debt ($m = 3.4$). This was reflected by 54% of the respondents who agreed to the statement “I am not overwhelmed by my debts” as compared to 21% of the respondents who disagreed while 25% remained neutral. This suggests that the majority of respondents is not overwhelmed by debts. These findings seem to contradict to what was reported by Mafukata and Mudau (2016: 2243) who argue that the mass resignation and early retirement of teachers is largely due to financial distress and indebtedness.

- **Keeping records of expenses**

Furthermore, the results revealed that most of the respondents keep a record of their monthly expenses ($m = 3.4$). This was reflected by 51% of the respondents who agreed to the statement “I keep a record of my expenses each month” as compared to 22% respondents who disagreed while 27% remained neutral. These results suggest that, the majority of respondents keep a record of their monthly expenses.

- **Prioritise spending based on needs, not wants**

The results suggest that most of the respondents always prioritised their spending based on needs, not wants ($m = 3.7$). This was reflected by 63% of the respondents who agreed to the statement “I always prioritise my spending based on needs, not wants” as compared to 13% of the respondents who disagreed while 24% remained neutral. These results suggest that, the majority of respondents always prioritise their spending based on needs, not wants. These findings seem to contradict to what was reported by Sibanda and Sibanda (2016: 12) who argue that a large portion of the South African population have underdeveloped financial literacy skills. These results suggest that teachers in this Municipality have financial literacy skills on spending.

- **Paying instalment required on clothing accounts**

Also, most respondents indicated that they always pay their clothing account instalment ($m = 0.9$). This was reflected by 63% of the respondents who agreed to the statement “I always pay the instalment required on my clothing accounts” as compared to 13% of the respondents who disagreed while 24% remained neutral. These results suggest that the majority of respondents always pay the instalment required on their clothing accounts.

- **Understanding loan terms and conditions**

It was further revealed that most of the respondents always ensure that they understood the terms and conditions of any loan they wished to take ($m = 3.7$). This was reflected by 66% of the respondents who agreed to the statement, “I always ensure that I understand the terms and conditions of any loan I take” as compared to 13% of the respondents who disagreed while 21% remained neutral. These results suggest that, the majority of respondents always ensured that they understood the terms and conditions of any loan they wished to take.

- **Understanding the consequences of default of loan**

Most of the respondents indicated that they always ensured that they understood the consequences of defaulting on loan repayments ($m = 3.9$). This was reflected by 73% of the respondents who agreed to the statement “I always ensure I understand the consequences of default of loan” as compared to 9% of the respondents who disagreed while 21% remained neutral. These results suggest that, the majority of respondents always ensured that they understood the consequences of defaulting on loan repayments.

- **Debit/credit card has never been declined for insufficient funds**

In addition, most of the respondents indicated that their credit or debit cards have never been declined due to insufficient funds ($m = 3.4$). This was reflected by 49% of the respondents who agreed to the statement “My debit/credit card has never been declined for insufficient funds” as compared to 28% of the respondents who disagreed while 23% remained neutral. Based on these results, it appears that most responders have never experienced an insufficient funds decline on their credit or debit cards. These results contrast with those given by Sibanda and Sibanda (2016: 12), who claim that South Africans have poor financial literacy skills.

- **Control over personal finances**

Most of the respondents indicated that they have control of their personal finances ($m = 3.7$). This was reflected by 62% of the respondents who agreed to the statement “I have control over my personal finances” as compared to 13% of the respondents who disagreed while 25% remained neutral. Based on these results, it appears that most respondents have control over their personal finances.

- **An emergency fund of at least one month's living expenses**

It was revealed that most of the respondents had some emergency fund of at least one's living expenses ($m = 3.4$). This was reflected by 50% of the respondents who agreed to the statement "I have an emergency fund of at least one month's living expenses" as compared to 21% of the respondents who disagreed while 29% remained neutral. Based on these results, it appears that most respondents have an emergency fund of at least one month's living expenses.

- **Enough money in the retirement plan**

Most of the respondents indicated they were confident that they had enough money saved up for their retirement plan ($m = 3.5$). This was reflected by 53% of the respondents that agreed to the statement "I am quite confident that I will have enough money in my retirement plan in place for my future" as compared to 18% of the respondents who disagreed while 29% remained neutral. Based on these results, it appears that most respondents were confident that they had enough money saved up for their retirement plan.

- **Life cover with insurance company**

The results of the study indicated that most of the respondents have a life cover with an insurance company ($m = 3.6$). This was reflected by 62% of the respondents who agreed to the statement "I have life cover with insurance company" as compared to 19% of the respondents who disagreed while 19% remained neutral. Based on these results, it appears that most respondents have a life cover with an insurance company.

- **Insurance policy for all major assets**

Most of the respondents also indicated that they have an insurance policy for all major assets ($m = 3.6$). This was reflected by 61% of the respondents who agreed to the statement "I have an insurance policy for all major assets" as compared to 19% of the respondents who disagreed while 20% remained neutral. These results suggest most respondents have an insurance policy for all their major assets.

- **Emergency savings account**

Most of the respondents indicate they maintain a savings account for emergency ($m = 3.5$). This was reflected by 55% of the respondents agreed to the statement "I maintain an emergency savings account" as compared to 20% of the respondents

disagreed while 25% remained neutral. Based on these results, it appears that most respondents maintain a savings account for emergency.

- **Consult with family/spouse before making any important financial decisions**

Furthermore, most of the respondents indicated that they always consult their family or spouse before making important financial decisions ($m = 3.4$). This was reflected by 48% of the respondents who agreed to the statement “I always consult my family/spouse before making any important financial decisions” as compared to 23% of the respondents disagreed while 29% remained neutral. Based on these results, it appears that most respondents have financial literacy skills because they always consult their family or spouse before making important financial decisions.

- **Checking affordability before buying anything**

Moreover, most of the respondents indicate that they carefully consider affordability before committing on purchasing any item they desire ($m = 3.8$). This was reflected by 66% of the respondents agreed to the statement “Before I buy something I carefully consider whether I can afford it” as compared to 12% of the respondents who disagreed while 22% remained neutral. These results suggest most respondents have financial literacy skills, they carefully consider affordability before purchasing any item.

- **Long-term financial goals**

Most of the respondents also indicated that they set long-term financial goals and work hard to achieve them ($m = 3.7$). This was reflected by 65% of the respondents who agreed on the statement “I set long-term financial goals and work hard to achieve them” as compared to 14% of the respondents who disagreed while 21% remained neutral. Considering these results, it is clear that most respondents set long-term financial goals and work hard toward reaching them.

- **Financial understanding without requesting a financial adviser**

It was also further revealed that the respondents had a clear idea of financial products or services they needed as a result did not need to consult a financial adviser ($m = 3.6$). This was reflected in 59% of the respondents who agreed to the statement “I’ve got a clear idea of the sorts of financial products or services that I need without consulting a financial adviser” as compared to 16% of the respondents who disagreed while 25% remained neutral. This suggests that the majority of respondents had a

clear understanding of the financial products or services they needed and did not require the services of a financial adviser.

4.3.2.1 Levene's Test for Equality of Variances – Financial Literacy skills

Levene's test for equality of variances was used to test whether there were significant differences in financial literacy skills of male and female respondents in the study. These results are shown in Table 4.5.

Table 4.5: Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Financial Literacy Skills	Equal variances assumed	1.455	.229	.684	244	.494	.05146	.07520	-.09667	.19958
	Equal variances not assumed			.683	237	.495	.05146	.07529	-.09687	.19978

Table 4.5 shows that $p > 0.05$ ($p = 0.229$) and this suggests that there was no significant difference between the financial literacy skills that male and female educators in KZN.

4.3.2.2 Summary of findings on financial literacy skills

Table 4.4 shows that the means are all > 3.00 which means, on average, the teachers were more in agreement with these statements. The findings of the study suggest that teachers in Msunduzi Municipality exercise appropriate debt management practices such as, paying bills in time, sound financial management and planning, such as, drafting monthly budgets and monitoring monthly expenses, as well as, practising proper due diligence when making financial decisions, such as, fully understanding the terms and conditions associated with loan applications. Furthermore, the study results also suggested that there was no significant difference between the financial literacy skills of male and female teachers in Msunduzi Municipality.

The findings of the study suggest teachers in Msunduzi Municipality have strong financial literacy skills and are able to manage their debt well. However, this is contrary to what has been reported in literature which states that many South African are financially distressed due to increasing households debt (Wentzel 2016; Ryan 2018). This indebtedness has been associated with over spending as result of low financial literacy and lack of informed decision making (Roberts *et al.* 2014; Mitchell and Abusheva 2016). However, the teachers in this study demonstrated high levels of financial literacy which is strongly associated with low debt and positive saving behaviour.

4.3.3 Objective 3: To determine the knowledge of financial technology of high school teachers in Msunduzi Municipality, KZN

This section discusses the financial technology knowledge of high school teachers in KZN. The research instrument had eight statements to which were the respondents to the study were asked to express their opinion using a scale of 1 = strongly disagree to 5 = strongly agree. These results are shown in Table 4.6.

Table 4.6: Knowledge of financial technology by teachers									
Statements in Section D	1	2	3	4	5	TA	TD	Mean	SD
Most of the time I use my smartphone/laptop to buy products online	11%	18%	21%	34%	16%	50%	29%	3,3	1,2
Most of the time I use my smartphone/laptop to pay my bills.	5%	15%	20%	41%	19%	60%	20%	3,5	1,1
Most of the time I use my smartphone/laptop to do cash transfers.	4%	5%	20%	47%	24%	71%	9%	3,8	1,0
I have sufficient knowledge about financial technology.	3%	14%	26%	42%	15%	57%	17%	3,5	1,0
The schools' syllabus needs to be improved to fit financial technology requirements.	4%	7%	15%	47%	27%	74%	11%	3,9	1,0
Without knowledge of financial technology, it is difficult to get a job.	7%	24%	19%	35%	15%	50%	31%	3,3	1,2
I am worried about using financial technology services because other people may be able to access my account.	9%	15%	26%	35%	15%	50%	24%	3,3	1,2
My exposure to financial technology has negatively influenced my financial decisions.	9%	28%	24%	29%	10%	39%	37%	3,0	1,2
Note: 1 = strongly disagree; 2 = disagree; 3 = neutral; 4 = agree; 5 = strongly agree; TA = total agreement; TD = total disagreement; SD = standard deviation									

Each item in Table 4.6 is discussed separately below.

- **Using smartphone/laptop to buy products online**

The results in Table 4.6 indicate that most of the respondents use a smartphone and/or a laptop to buy products online ($m = 3.3$). This was reflected by 50% of the respondents who agreed with the statement “Most of the time I use my smartphone/laptop to buy products online” as compared to 29% of the respondents who disagreed while 21% remained neutral as shown in Table 4.6. This suggests that the majority of respondents use a smartphone and/or a laptop to buy products online. These results seem to agree with Statista (2020), that in South Africa, about one third of the population that is nearly 22 million people, are using smartphones and 50% of the South Africa population that is roughly 38.13 million people are actively using internet services (Statista 2021).

- **Using smartphone/laptop to buy products to pay bills**

Moreover, most of the respondents indicated that they used smartphone and/or laptop to pay bills most of the time ($m = 3.5$). This was reflected by 60% of the respondents who agreed with the statement “Most of the time I use my smartphone/laptop to pay my bills” as compared to 20% respondents who disagreed while 20% remained neutral. As a result, most respondents pay bills most of the time with their smartphone and/or laptop.

- **Using smartphone/laptop to buy products to do cash transfers**

In addition, most of the respondents indicated that they used smartphone and/or laptop to conduct cash transfer most of the time ($m = 3.8$). This was reflected by 71% of the respondents who agreed with the statement “Most of the time I use my smartphone/laptop to do cash transfers” as compared to 9% of the respondents who disagreed while 20% remained neutral. Those that disagreed could represent the ones that prefer branch banking. This suggests that the majority of respondents use a smartphone and/or a laptop to do cash transfers.

- **Sufficient knowledge about financial technology**

It was also further revealed that most of the respondents had sufficient knowledge about financial technology ($m = 3.5$). This was reflected by 57% of respondents who agreed to the statement “I have sufficient knowledge about financial technology” as

compared to 17% of the respondents who disagreed while 26% remained neutral. This suggests that the majority of respondents have sufficient knowledge about financial technology.

- **The schools' syllabus to be improved to fit financial technology requirements**

Most of the respondents indicated that the syllabuses of schools should be adjusted to incorporate financial technology requirements ($m = 3.9$). This was reflected by 74% respondents who agreed with the statement "The schools' syllabus needs to be improved to fit financial technology requirements" as compared to 11% of the respondents who disagreed while 15% remained neutral. These results seem to agree with what was reported in the literature that in South Africa the schools' syllabus needs to be improved to fit financial technology requirements (Statista 2021).

- **Knowledge on financial technology**

Additionally, it was also revealed that most of the respondents were of the opinion that it is difficult to get a job when one lacks financial technology knowledge ($m = 3.3$). This was reflected by 50% of the respondents who agreed with the statement "Without knowledge of financial technology, it is difficult to get a job" as compared to 31% of the respondents who disagreed while 19% remained neutral. This suggests that the majority of respondents agree that without knowledge of financial technology, it is difficult to get a job.

- **Security risk of using financial technology services**

It was revealed that most teachers were worried about the security risk of using financial technology services to access their account due to possible of being hacked or defraud online by scammers ($m = 3.3$). This was reflected by 50% of the respondents who agreed to the statement "I am worried about using financial technology services because other people may be able to access my account" as compared to 24% of the respondents who disagreed while 26% remained neutral. This indicates that most respondents agreed they were concerned about the security risks of using financial technology services to access their accounts, because it is possible for them to be hacked or defrauded online by scammers.

- **Exposure on financial technology**

It was also further indicated that most of the respondents were of the opinion that their exposure to financial technology has negatively affected or influenced their financial decisions ($m = 3.0$). This was reflected by 39% of the respondents who agreed to the statement “My exposure to financial technology has negatively influenced my financial decisions” as compared to 37% of the respondents who disagreed while 24% remained neutral. This indicates that most of the respondents were of the opinion that their exposure to financial technology has negatively affected or influenced their financial decisions.

4.3.3.1 Levene’s Test for Equality of Variances – Financial technology knowledge

The results of the study were also assessed using Levene’s test for equality of variances to test whether there were significant differences in financial technology knowledge of male and female respondents in the study. These results are shown in Table 4.7.

Table 4.7: Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Financial Technology Knowledge	Equal variances assumed	3.003	0.084	1.201	244	0.231	0.10470	0.08719	-0.06705	0.27645
	Equal variances not assumed			1.202	243	0.231	0.10470	0.08714	-0.06694	0.27634

The results of the Levene’s test are shown in Table 4.7 revealed that $p > 0.05$ ($p = 0.084$) and this suggests that there was no significant difference between the financial technology knowledge of male and female educators in KZN.

In addition, four (4) follow-up and clarifying questions were asked to assess educators’ opinions on banking convenience, length of time using financial technology services, frequency of use of financial technology services and usage of mobile money. The

results of these questions are shown in Table 4.8, Table 4.9, Table 4.10 and Table 4.11 respectively.

Table 4.8: Teachers' opinions on banking convenience			
Banking method	Number	Percentage	Rank
Internet banking	123	50%	1
Branch banking	61	25%	2
ATM	56	23%	3
Other	6	2%	4

The results in Table 4.8 above indicate that the educators were of the opinion that internet banking was the most convenient way of doing banking transactions which accounted for 50% of the respondents. However, branch banking and ATM banking took the second and third rank which accounted for 25% and 23% of the respondents respectively. Nevertheless, 2% of the respondents had other banking services which they considered as more convenient. The results of this study appear in line with what has been reported in the literature, which suggests that approximately 22 million South Africans are using smartphones (Statista 2020). According to Statista (2021), over 50% of South Africans, 38.13 million use the internet regularly.

Table 4.9: Length of time financial technology services used		
Length of time	Number	Percentage
Not used	5	2%
Less than 2 years	65	26%
2 – 5 years	93	38%
More than 5 years	83	34%

The results in Table 4.9 above indicate that most of the respondents had been using financial technology services for 2 – 5 years and these accounted for 38% of the respondents. However, this was closely followed by respondents who had been using financial technology services for more than 5 years and these accounted for 34% of the respondents as shown in Table 4.9 above. The rest of the respondents who had been using financial technology services for less than 2 years were 26% of the

respondents and only 2% of the respondents had not used financial technology services at all. As Statistics (2021) reported that more than half of South Africans use the internet, and since internet access is becoming more accessible, many are also adopting internet banking, where they do daily transactions such as buying online and paying bills using it. These results support the literature.

Table 4.10: Frequency of use of financial technology services		
Frequency of usage	Number	Percentage
Never	4	2%
Rarely	49	20%
Sometimes	48	20%
Very often	82	33%
Always	63	25%

The results in Table 4.10 above indicate that the majority of the respondents had used financial technology services in one way or the other and these accounted for 98% of the respondents. Only 2% of the respondents had never used financial technology services at all. However, most of the respondents indicated that they used financial technology services very often and these accounted for 33% of the respondents in the study.

Table 4.11: Usage of mobile money		
Mobile Money	Number	Percentage
Sending cash	68	27%
Receiving cash	51	21%
Purchases at retailer	41	17%
Bill payments (utilities)	38	15%
Airtime purchases	23	9%
Bank related service	24	10%
None	1	1%

The results in Table 4.11 indicate that the most of the respondents used mobile money to send cash and this accounted for 27% of the respondents in the study. The second

most popular use of mobile technology was to receive cash and this accounted for 21% of the respondents of the study. The rest of the respondents were using mobile money technology to make purchases at retailers, to pay bills or utilities, to purchase airtime and for bank related services and these accounted for 17%, 15%, 9% and 10% of the respondents respectively. Only 1% of respondents indicated that they did not use mobile money.

4.3.3.2 Summary of findings for financial technology knowledge

The study revealed that most teachers in Msunduzi Municipality had good financial technology knowledge and used it to conduct online purchases, paying bills online and doing online cash transactions. Moreover, because the teachers had good financial technology knowledge, they were able to utilise online financial services which could have contributed to them citing internet banking as the most convenient banking method ahead of branch banking and ATM services. Nevertheless, the teachers were worried about the security risk associated with internet banking as it is possible to be hacked or scammed online resulting in loss of money. In addition, it was found that most of the teachers were of the opinion that their financial technology knowledge has negatively influenced their financial decisions. On the other hand, most of the teachers also suggested that the school curriculum should be restructured to accommodate more courses that meet financial knowledge requirements.

Financial technology advancement in the banking and financial industry has allowed electronic banking and distribution channels to become more efficient and less costly to consumers (Jagtiani and Lemieux 2018). As a result, many consumers have adopted these financial technology services because of convenience and lower costs. At least 50% of South Africans are reported to use internet services (Statista 2021) and because of the improving accessibility of internet, many people are also adopting internet banking and using it for daily transactions such as, buying online and paying bills. In view of this, it is not surprising that most of the teachers cited internet banking as the most convenient way of banking.

However, internet banking as its own fair share of problems particularly the concerns related to security risks which the teachers share. In 2020 alone, many South Africans lost over half billion through debit card fraud (Smith 2021). Furthermore, fraudsters and scammers are becoming very sophisticated in finding ways to exploit the internet

banking platforms to defraud victims by using social engineering to gain access to personal information of victims which enables them to gain access to their banking accounts (South African Banking Risk Information Centre (SABRIC) 2022). It seems as if they are able to manipulate and trick those clients who lack financial technology knowledge through phishing, vishing, smishing or malware installation via an internet link (SABRIC 2022). In light of this, many internet bankers are becoming worried about falling into the snare of these fraudsters and scammers and in the process, losing their hard-earned money.

The teachers also indicated the need to incorporate financial knowledge into the school curriculum to enhance the financial literacy of the students. It is important to note that for students to receive proper financial literacy education, the teachers themselves should be in a position to deploy that training. This means that they should have strong financial literacy themselves before they can attempt to teach it. However, this is not an issue of great concern as most of the teachers in Msunduzi Municipality have demonstrated having sound financial literacy and knowledge as per the results of the study. Nonetheless, these results should be further investigated to ascertain if indeed these teachers have sound financial literacy and knowledge as they purported and whether they are able to teach financial literacy education. This is because a study by Sakatzki and Sullivan (2017) revealed that although the 75% of teachers revealed that they were financially competent, only 50% were confident about their ability to provide financial education.

4.3.4 Objective 4: To evaluate the relationship between financial literacy, financial technology and financial behaviour of high school teachers in Msunduzi Municipality, KZN

This section is divided into two subsections. Firstly, the regression analysis is presented followed secondly by the correlation analysis. Regression analysis determines how one variable affects the other, while correlation analysis determines the inter-connection between the variables. The independent variables are financial literacy challenges, financial literacy skills, financial technology knowledge and the dependent variable is financial behaviour.

4.3.4.1 Regression analysis

To determine a value for financial behaviour, the following unstandardised prediction model using Ordinary Least Squares (OLS) was used. OLS minimises the squared distances between the observed and the predicted dependent variable y :

$$S(\beta) = \sum_{i=1}^N (y_i - x_i^i \beta)^2 = (y - X\beta)^i (y - X\beta) \rightarrow \beta^{min}$$

The resulting OLS estimator of β is:

$$\hat{B} = (X^i X)^{-1} X^i y$$

Given the OLS estimator, we can predict the dependent variable by $\hat{y}_i = x_i^i \hat{B}$ and the error term by $\hat{u}_i = y_i - x_i^i \hat{B}$. \hat{u}_i is called the residual.

For this study, the unstandardised prediction equation was calculated as follows:

$$\hat{Y} = -0.808 + 0.060_{FLC} + 1.260_{FLS} - 0.040_{FTK}$$

This is shown pictorially in Figure 4.1.

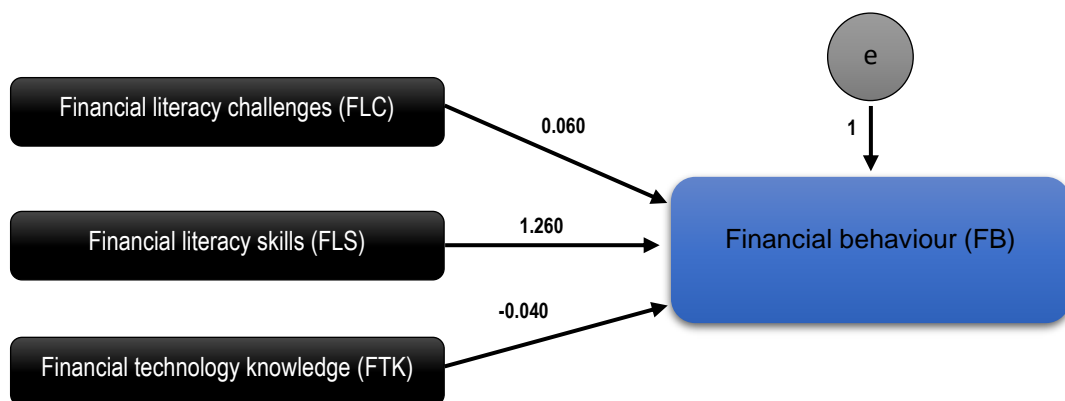


Figure 4.1: Unstandardised prediction relationship

The unstandardised prediction relationship shown in Figure 4.1 and the equation above show that a positive change in the financial literacy challenges variable holding other variables constant will lead to a 0.06 change on average in financial behaviour,

but is not significant at the 0.05 level. Furthermore, holding the other variables constant, a positive change in the financial literacy skills variable will result in a 1.26 change in average financial behaviour, which is statistically significant at the 0.01 level. Furthermore, a positive change in financial technology knowledge variable while keeping other variables constant will lead to -0.4 change in financial behaviour on average, but that change is not significant at the 0.05 level. In this context, financial literacy skills tend to be the strongest predictor of financial behaviour.

Table 4.12 shows the results for the model summary.

Table 4.12: Model Summary^b										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.794 ^a	.630	.625	.555	.630	137.371	3	242	.000	2.225
a. Predictors: (Constant), Financial technology knowledge, Financial literacy challenges, Financial literacy skills										
b. Dependent Variable: Financial behaviour										

The results in Table 4.12 shows that the independent variables in the multiple regression model explains 62.5% of the variance in the dependent variable which is significant at the level 0.01.

To further test the regression model, an ANOVA test was performed to determine whether a relationship exists between the variables. These results are shown in Table 4.13.

Table 4.13: ANOVA^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	127.103	3	42.368	137.371	.000 ^b
	Residual	74.637	242	.308		
	Total	201.740	245			
a. Dependent Variable: Financial behaviour						
b. Predictors: (Constant), Financial technology, Financial literacy challenges, Financial literacy skills						

Table 4.13 shows that the F statistic is >1. The high F-value indicates a high variation between the means of the sample relative to the variation within the samples as the higher the F-value, the lower is the p-value. As $p < .001$, the differences are statistically significant.

Table 4.14 shows the results of the regression analysis.

Table 4.14: Coefficients^a													
Model		Unstandardized Coefficients		Standardised Coefficients	T	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	-.808	.287		-2.816	.005	-1.374	-.243					
	Financial literacy challenges	.060	.044	.056	1.379	.169	-.026	.146	-.133	.088	.054	.930	1.076
	Financial literacy skills	1.260	.070	.818	18.094	.000	1.123	1.397	.792	.758	.707	.748	1.336
	Financial technology knowledge	-.040	.058	-.030	-.683	.495	-.155	.075	.332	-.044	-.027	.790	1.266
a. Dependent Variable: Financial behavior													

Table 4.14 shows that while the other factors remain constant, a positive change in financial literacy challenges results in a 0.06 change in average financial behaviour, which is not significant at the 0.05 level. Also, if you hold all other variables constant, a positive change in financial literacy skills will result in a 1.26 change in average financial behaviour, which is significant at the 0.01 level. Furthermore, a positive change in financial technology knowledge will result in a -0.4 change in average financial behaviour when all other factors are held constant, but this is not significant at the 0.05 level. In light of this, the results indicate that financial literacy skills have the strongest predictive relationship with financial behaviour.

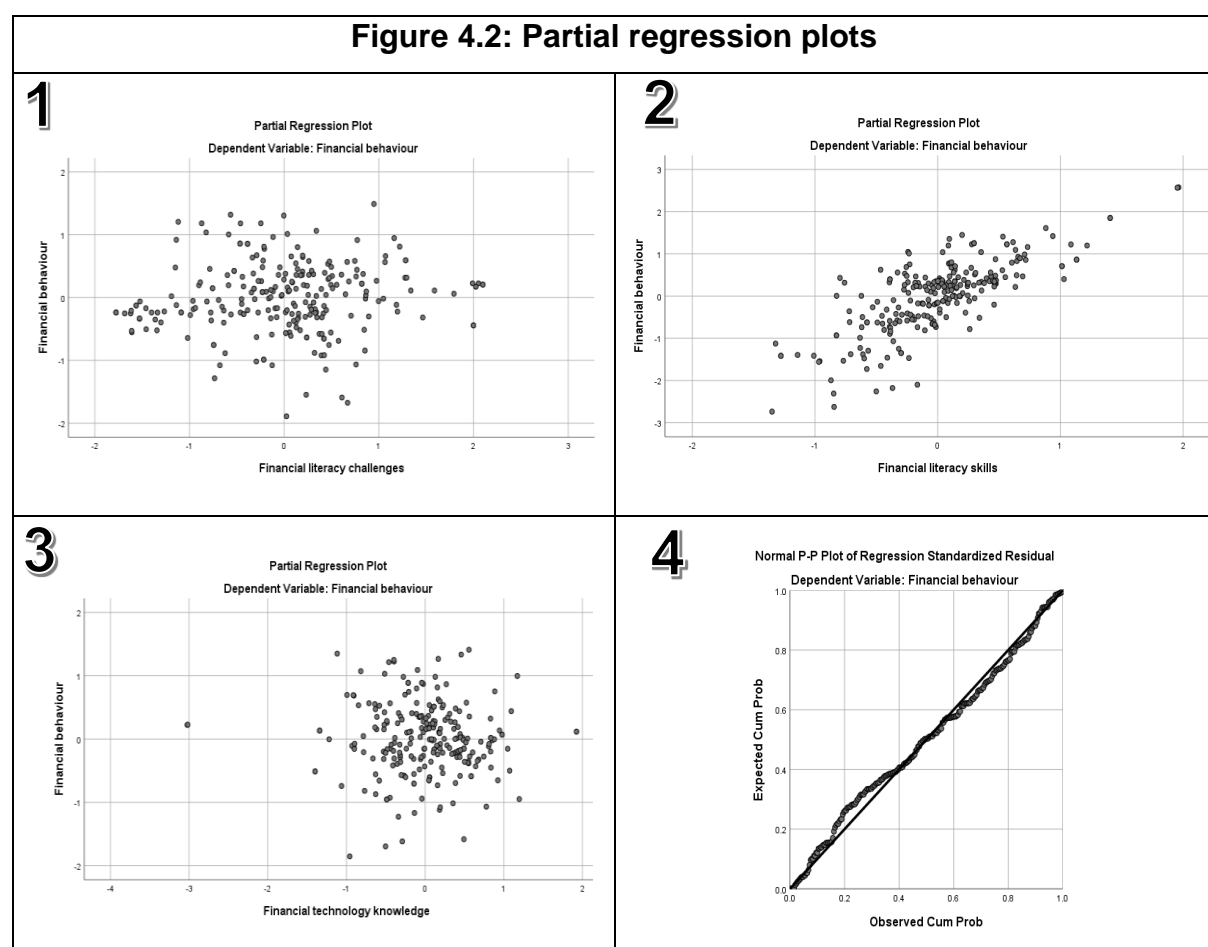
To determine whether the results of the regression model are valid, the assumptions for multiple regression analysis were considered. According to Laerd Statistics (2018), the regression model's results must satisfy eight assumptions before they are valid. The assumptions are as follows:

Assumption 1: It is essential to measure the dependent variable on a continuous scale. In this study, the dependent variable is financial behaviour, which is measured on a continuous scale.

Assumption 2: There should be at least two independent variables that are either continuous or categorical. All three of the independent variables in this study were continuous.

Assumption 3: There must be an independent observation/residual. The Durbin-Watson statistic is used to determine whether this is normal, meaning that values between 1.5 and 2.5 are considered normal, and those below 1 or higher than 3 should be viewed with concern (Field 2018). It is within normal range for Durbin-Watson statistics to have a value of 2.225 in this study. Therefore, the assumption of independence of observation was met.

Assumption 4: A linear relationship between the independent variables and the dependent variable is necessary as well as between the independent variables collectively. The partial regression plots are shown in Figure 4.2.



According to Stevens (2016), “partial regression plots display the linear relationship if the studentised residuals are distributed randomly and evenly around zero, between -3 and +3, and fall between those two values”.

The partial regression plot [1] in Figure 4.2 of financial literacy challenges against financial behaviour show that the plot is randomly and evenly distributed around zero and falls between -3 and +3. In this regard, the assumption is met for financial literacy challenges and financial behaviour.

The partial regression plot [2] in Figure 4.2 of financial literacy skills and financial behaviour is randomly but not evenly distributed around zero; however, it falls between -3 and +3. Nonetheless, the assumption is met partially for financial literacy and financial behaviour.

The partial regression [3] in Figure 4.2 of financial technology knowledge and financial behaviour is randomly and evenly distributed around zero and falls between -3 and +3. However, it seems there is one outlier to the left as shown in Figure 4.2 above. In view of this, the assumption was met for financial technology knowledge and financial behaviour.

Assumption 5: Data should show homoscedasticity. The standardised residuals seem to fit a normal distribution and the plot [4] seems to suggest that the homoscedasticity assumption is met.

Assumption 6: Values below 0.10 indicate the presence of multicollinearity (Hahs-Vaughn and Lomax 2013). The results show that tolerance for financial literacy challenges, financial literacy skills and financial technology knowledge were 0.930, 0.748 and 0.790 respectively. As a result, the data does not show multicollinearity and therefore meet the assumption.

Assumption 7: No significant outliers. There don't appear to be any significant outliers in the data.

Assumption 8: According to Stevens (2016) “residuals (errors) are approximately normally distributed and figure 4.3 below demonstrates that residuals (errors) conform to normal distributions and, therefore, meet the assumptions of the study”.

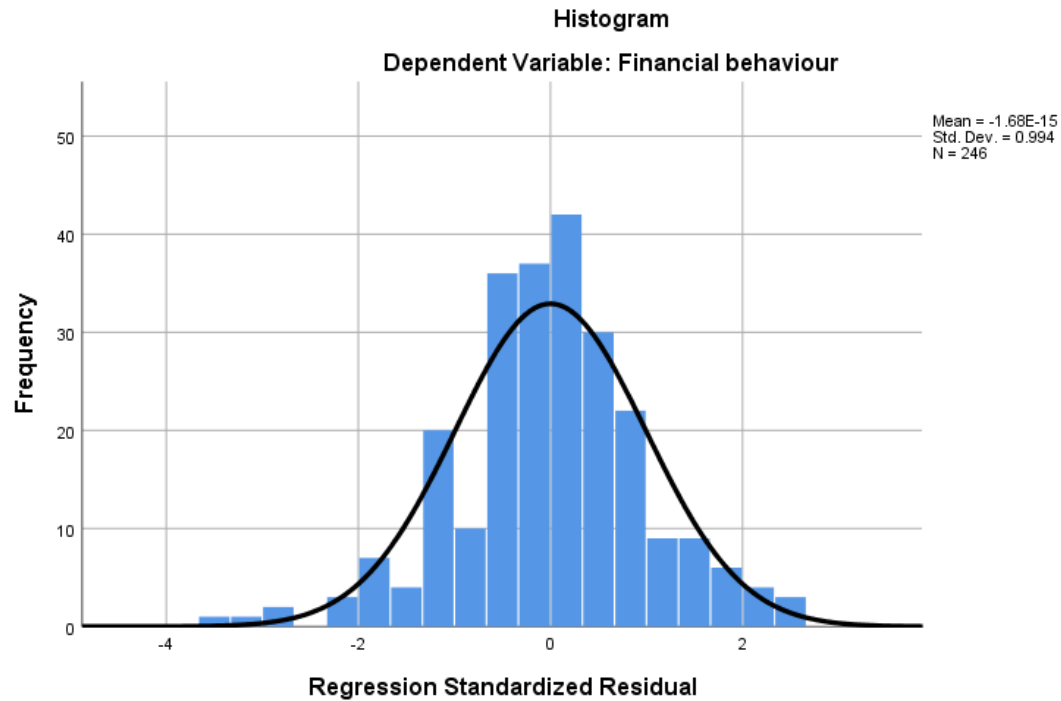


Figure 4.3: Regression standardised residual

The following section discusses the correlations between financial literacy challenges, financial literacy skills, financial technology knowledge and financial behaviour.

4.3.4.2 Correlations

To further explore the relationship between the variables, the correlations between the variables were calculated. These results are shown in Table 4.15.

Table 4.15: Correlations					
		Financial literacy challenges	Financial literacy skills	Financial technology knowledge	Financial behaviour
Financial literacy challenges	Pearson Correlation	1			
	Sig. (2-tailed)				
	N	246			
Financial literacy skills	Pearson Correlation	-.230**	1		
	Sig. (2-tailed)	.000			
	N	246	246		
Financial technology knowledge	Pearson Correlation	.018	.442**	1	
	Sig. (2-tailed)	.783	.000		
	N	246	246	246	
Financial behaviour	Pearson Correlation	-.133*	.792**	.332**	1
	Sig. (2-tailed)	.038	.000	.000	
	N	246	246	246	246
** Correlations is significant at the 0.01 level (2-tailed). * Correlations is significant at the 0.05 level (2-tailed).					

Table 4.15 shows financial literacy challenges to be weakly negatively correlated ($r = -0.230$) with financial literacy skills and this correlation was significant at the 0.01 level (2-tailed). This finding suggests that as teachers gain more financial literacy skills the financial literacy challenges that they face are more likely to lower due to his/her enhanced financial capabilities or competencies. Moreover, individuals who have low financial literacy skills are associated with over spending and over indebtedness as they are unable to make sound financial decisions (Roberts *et al.* 2014; Mitchell and Abusheva 2016). This suggests that an individual with low financial literacy skills leads is expected to face higher financial literacy challenges. In this regard, a person with higher levels of financial literacy skills will ultimately have limited or no financial literacy challenges. Consequently, as the financial literacy skills of an individual increase, their

financial literacy challenges are correspondingly reduced and this is consistent with the findings in this study.

Financial literacy challenges were weakly negatively correlated ($r = -0.133$) with financial behaviour and this correlation being significant at the 0.05 level (2-tailed). This finding suggests that as a person's financial literacy challenges are reduced, the more the person is likely to have good financial behaviour and vice versa. It is reported that people with higher levels of financial literacy are able to plan for retirement, are likely to actively participate in the stock market, are able to manage their debt better, are able to borrow at a lower cost, are able to come up with better debt management strategies and are less likely to suffer from financial distress (De Clercq 2013; Klapper *et al.* 2013; Fatoki and Oni 2014). This implies that individuals with lower financial literacy challenges are more likely to exhibit good financial behaviour which is consistent with the finding in this study.

Financial literacy skills were moderately positively correlated ($r = 0.442$) with financial technology knowledge and this correlation was significant at the 0.01 level (2-tailed). This finding suggests that a person with a higher level of financial literacy skills is more likely also, to have higher levels of financial technology knowledge and vice versa. According to Beckmann (2013), an individual with good financial literacy skills is able to make informed financial decisions and is more likely able to compare similar financial products and select the best choice (Umamaheswari *et al.* 2021). In this regard, the process of acquiring financial literacy skills may also leads to obtaining financial technology knowledge. Therefore, a positive correlation between financial literacy skills and financial technology knowledge is consistent with the literature.

Financial literacy skills were strongly positively correlated ($r = 0.792$) with financial behaviour, and this correlation was significant at the 0.01 level (2-tailed). This finding suggests that a person with a higher level of financial literacy skills is more likely to exhibit good financial behaviour and vice versa. Chu *et al.* (2017) found that households with higher levels of financial literacy are able to plan and manage their funds effectively and as such, they exhibit good financial behaviour. This is also consistent with Robb and Woodyard (2011), Monticone (2010) and Lusardi and Mitchell (2014) who asserted that higher levels of financial literacy lead to good financial behaviour. Nonetheless, Farida *et al.* (2021) argues that financial literacy may

be acquired by an individual, but if s/he does not put it into practice then it would not lead to good financial behaviour. This suggests some people may acquire financial literacy, but may decide not to use it to their advantage.

Financial technology knowledge was weakly positively correlated ($r = 0.332$) with financial behaviour, and this correlation was significant at the 0.01 level (2-tailed). This finding suggests that a person with a higher level of financial technology knowledge is more likely to exhibit good financial behaviour and vice versa. According to *Younas et al.* (2019), financial technology knowledge is one of the factors that influences financial behaviour. Typically, financial technology knowledge allows individuals to conduct online financial activities and also helps them to protect themselves against cybercrime which may help them to exhibit good financial behaviour by accessing and leveraging various financial technology products (*Younas et al.* 2019). It has also been reported that financial technology knowledge may also lead certain individuals to conduct bad financial behaviour by using financial technology products to conduct irresponsible spending such as poor investment, emergency fund planning and poor budgeting (*Atkinson and Messy* 2012; *Zaimah et al.* 2013; *Younas et al.* 2019).

To summarise this section, the correlation analysis indicated that financial literacy skills are the most important attribute influencing financial behaviour.

4.4 CHAPTER SUMMARY

The study revealed that most of the teachers in Msunduzi Municipality had sound financial management knowledge which enabled them to mitigate and navigate the financial literacy challenges with which they may have issues. However, it seems maintaining or sticking to a planned budget and finding solutions when facing financial challenges were the most prominent problems mentioned by the teachers. Nevertheless, most of the teachers demonstrated that they had good debt management skills and financial management and planning skills which helped them to draft monthly budgets and keep track of expenses. Additionally, the teachers also indicated that they had good grasps of financial technology services, but also indicated that their knowledge of financial technology made it easier for them to access and spend the money; this led to poor saving and negative financial behaviour. Furthermore, though the teachers expressed the convenience financial technology

services brought, they also highlighted the security risks of using this technology which many were worried.

It was also highlighted that school curriculum should be adjusted to accommodate financial literacy education so that the students may benefit from it. In light of this, it was also pointed out that in order for the teachers to teach financial literacy education, they themselves should be financially literate so the training or education on financial literacy would be impactful. Nonetheless, most of the teachers in Msunduzi Municipality were found to have good financial literacy and knowledge which suggested that they would be able to teach financial literacy education. It was also further indicated that there was no significant difference in financial literacy challenges, financial technology and financial behaviour of male and female teachers who participated in this study. However, the study results suggest a positive relationship between financial technology and financial behaviour and a negative relationship between financial literacy and financial behaviour.

The next chapter discusses the conclusions, limitations and recommendations of the study.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATIONS

5.1 INTRODUCTION

The findings of this study were presented in the previous chapter. The current chapter discusses the conclusion, recommendations and areas of future studies. The research objectives are revisited, and the contribution, limitations and implications of the study are presented.

5.2 FINDINGS OF THE STUDY

The research objectives of the study were as follows:

- To identify financial literacy challenges facing high school teachers in Msunduzi Municipality, KZN.
- To examine the financial literacy skills of high school teachers in Msunduzi Municipality, KZN.
- To determine the knowledge of financial technology of high school teachers in Msunduzi Municipality, KZN.
- To evaluate the relationship between financial literacy challenges, financial literacy skills and financial technology knowledge with financial behaviour of high school teachers in Msunduzi Municipality, KZN.

5.2.1 To identify financial literacy challenges facing high school teachers in Msunduzi Municipality, KZN

Most of the teachers demonstrated good and sound financial literacy and knowledge that enabled them to overcome many financial literacy challenges such as impulsive financial decision making, spending beyond their budget, affordability and peer pressure. However, there were two main financial literacy challenges that teachers in Msunduzi Municipality faced. These were i) difficulty in sticking to the budget when unexpected expenses arise, and ii) the ability to resolve financial challenges. Furthermore, the study also revealed that there were no significant differences

between the financial literacy challenges that male and female high school teachers in Msunduzi Municipality faced.

5.2.2 To examine the financial literacy skills of high school teachers in Msunduzi Municipality, KZN

The study indicated that most teachers in Msunduzi Municipality had strong financial literacy skills. These skills were demonstrated in the ability of teachers to appropriately handle debts by ensuring that bills were paid on time and proper monitoring, planning and accounting of income and expenses as well as practising proper due diligence when making financial decisions such as fully understanding the terms and conditions associated with loan applications. It was further revealed that there were no significant differences in the financial literacy skills of male and female high school teachers in Msunduzi Municipality.

5.2.3 To determine the knowledge of financial technology of high school teachers in Msunduzi Municipality, KZN

Most of the teachers demonstrated sound financial technology knowledge as they indicated that they were able to use financial technology services to conduct online purchases and other online transactions using a smartphone or laptop. They also further identified internet banking as the most convenient method of banking. However, it was also highlighted that financial technology services also expose the internet banking consumers to fraudsters and scammers which was a source of worry for many of the teachers.

5.2.4 To evaluate the relationship between financial literacy challenges, financial literacy skills and financial technology knowledge with financial behaviour of high school teachers in Msunduzi Municipality, KZN

The correlation analysis indicated that financial literacy challenges were weakly negatively correlated ($r = -0.133$) with financial behaviour and this correlation was significant at the 0.05 level (2-tailed). This finding suggests that as a person's financial literacy challenges are reduced, the more the person is likely to have good financial behaviour and vice versa.

The results also indicated that financial literacy skills were strongly positively correlated ($r = 0.792$) with financial behaviour and this correlation was significant at

the 0.01 level (2-tailed). This finding suggests that a person with a higher level of financial literacy skills is more likely to exhibit good financial behaviour, and a person with good financial behaviour is more likely to exhibit higher levels of financial literacy skills.

Lastly, the results indicated that financial technology knowledge is weakly positively correlated ($r = 0.332$) with financial behaviour and this correlation was significant at the 0.01 level (2-tailed). This finding suggests that those with higher levels of financial technology knowledge, are also more likely to display good financial behaviour, and those with good financial behaviour, are more likely to have higher levels of financial technology knowledge.

The unstandardised prediction equation which mathematically explains the relationship between financial literacy challenges, financial literacy skills and financial technology knowledge with financial behaviour showed that a positive change in financial literacy challenges holding other variables constant will result in an average 0.06 change in financial behaviour, but it was not significant at the 0.05 level. Furthermore, holding the other variables constant, a positive change in the financial literacy skills variable will result in a change of 1.26 in average financial behaviour, which was statistically significant at 0.01 levels. Furthermore, a positive change in financial technology knowledge while keeping other variables constant will lead to a - 0.4 change in financial behaviour, but the change was not significant at the 0.05 level. As a result, financial literacy tends to be a strong predictor of financial behaviour.

The findings of the study confirm the theories underpinning this study because teachers that have a positive attitude toward financial literacy and see its value and importance in positively influencing their financial behaviour, are more likely to seek and acquire it so as to improve their financial behaviour. Similarly, teachers who have a positive perception on financial technology are more likely to desire to learn about it and utilise it to enhance their financial behaviour because they have a positive perception of it.

5.3 IMPLICATIONS OF THE STUDY

This study revealed that most of the teachers in Msunduzi Municipality have sound financial management skills that allow them to mitigate and navigate financial literacy challenges that they encounter. The results of this study may make high school teachers more aware of the importance of improving their own and their students' financial literacy. Furthermore, some of the teachers indicated that they had a good grasp of financial technology services, but also indicated that their knowledge of financial technology made it easier for them to access and spend the money; this led to poor saving and negative financial behaviour. These findings will help the teachers to increase their own financial awareness in order to meet both their personal and professional needs and be more aware when using financial technology. In this study, the high school teachers were made aware of how financial literacy and financial technology affected their financial behaviour, which may help improve their productivity and increase their knowledge about the importance of financial literacy skills. Given that the study focused on high school teachers, In terms of their financial decision-making capacity and influence, this study's findings are extremely valuable for understanding this group of people. All stakeholders with responsibility for the country's financial stability need to know about this and make appropriate policy decisions.

5.4 CONTRIBUTION OF THE STUDY

This research has contributed to the literature that encourages financial literacy among teachers. The development of financial literacy is one of the steppingstones that future generations can use to escape the cycle of poverty created by historical practices of discrimination, oppression and exclusion. This study contributes new empirical knowledge to existing knowledge on financial literacy and financial technology on the financial behaviour of teachers. Considering that the study focused on high school teachers, its findings are important for understanding their financial decision-making abilities and influences, as well as their capacities to make financial decisions. Having this information is necessary for the policy making process by all stakeholders responsible for maintaining South Africa's financial stability. The results of this study have relevance for future curriculum development because they provide

scientific evidence on how school teachers can further improve their financial literacy skills.

5.5 LIMITATIONS OF THE STUDY

Creswell and Creswell (2017) note that all research has limitations as a result of the constraints placed on the researcher. In this study too, there were constraints placed upon the researcher. To achieve the research aim and objectives, the researcher made every effort to ensure that highly reliable and valid data were collected. The findings of the study were limited within high school teachers in Msunduzi Municipality and could not be generalised to other municipalities within the country. The views and understandings reflected in this study are based on their own experiences. It is possible that other high school teachers might have different views on the same topic. Furthermore, due to the fact that perspectives are largely based on personal observations, the reliability factor will be much lower, and so replication of the same study is not likely to yield the same results. As the study targets teachers in Msunduzi Municipality in KZN, the target population of this study is not representative of the country as a whole. The study also relied on honest feedback from participants. There is also the possibility that participants may have misinterpreted or misunderstood the questions.

Although there are some limitations to this study, this study does not negatively affect its contribution to existing knowledge.

5.6 RECOMMENDATIONS OF THE STUDY

The recommendations of the study are as follows:

- Training and/or courses that teachers are exposed to such as in their bachelor's degree, should incorporate financial literacy for teachers so as to equip them with the necessary skills that they could use to teach their students. Governments must create programmes to assist teachers to gain more financial literacy so that they may be able to transfer that knowledge to their students.
- Teachers should endeavour to improve their financial risk management skills in order to be able to predict more accurately the possibility of facing unexpected expenses. In view of this, teachers should allocate funds for unexpected

expenses during their monthly financial budgeting and planning so as to avoid deviating too far from their budget plans.

- Most teachers found it hard to find solutions when facing financial challenges. It is therefore recommended that the teachers should seek training on problem solving techniques. This may help the teachers to identify the root cause of their financial challenges thereby increasing the odds of finding appropriate solutions.
- The study also indicated that the teachers were worried about the security risk associated with internet banking. It is recommended that the teachers should keep themselves updated with the current tricks and scams that fraudsters and scammers are using. This will help them to identify suspicious activities that may compromise their internet banking security. Moreover, banks often update their clients with the current methods that fraudsters and scammers are employing to trick unsuspecting victims. In view of this, teachers should always read the banking crime reports released by banks so that they keep their hard-earned money safe.

5.7 AREAS OF FUTURE STUDY

The study population was taken from Msunduzi Municipality in KZN and the results may not be representative of the entire population of high schools in South Africa. Therefore, future studies that examine the same concepts in other high schools in different municipalities in the country would help to verify some of the findings in this study. This may also help to make the findings generalisable for all high school teachers in South Africa.

A quantitative approach was used in this study. As a result, it is suggested that another study should be conducted using a mixed methodology, which would help to expand the corpus of knowledge in this area. Data collection was carried out by completing questionnaires by the participants therefore, the use of other approaches such as interviews could also provide valuable information concerning respondents' perceptions. Nonetheless, the results should be further investigated to ascertain if

indeed these teachers have sound financial literacy and knowledge as they purported and whether they are able to teach financial literacy education.

5.8 OVERVIEW OF DISSERTATION

This study provided conclusions related to the literature review and empirical findings. It also provided recommendations emanating from the influence of financial literacy and financial technology on the financial behaviour of high school teachers. The majority of high school teachers in Msunduzi Municipality had sound financial management knowledge, which enabled them to mitigate and navigate financial literacy challenges. Teachers, however, complained about difficulties maintaining a budget or finding solutions when faced with financial difficulties. In spite of this, most teachers demonstrated good debt management skills, financial management skills, and planning skills, which enabled them to create monthly budgets and keep track of expenses.

Moreover, the teachers noted that they had good knowledge of financial technology services, but they also indicated that this knowledge made it easier for them to access and spend money, which in turn led to poor savings and poor financial behaviour. Despite the convenience that these services offer, they also highlighted the risks associated with making use of them, including the possibility of being hacked or defrauded online by scammers. Overall, this study met all its objectives and the recommendations presented in this chapter will help teachers improve their financial literacy skills, knowledge of financial technology and their financial behaviour.

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APPENDICES

APPENDIX A: LETTER OF INFORMATION



LETTER OF INFORMATION

Title of the Research Study: The influence of financial literacy and financial technology on the financial behaviour of high school teachers in KwaZulu-Natal

Principal Investigator/s/researcher: Nkosinathi Prince Jali (B Tech: CMA)

Co-Investigator/s/supervisor/s: Dr C.J. Nyide (DBA: Managerial Accounting)

Professor L.J. Stainbank, D Com: CA (SA)

Dear Participant,

You are kindly invited to participate in a research study titled “The influence of financial literacy and financial technology on the financial behaviour of high school teachers in KwaZulu-Natal.” This study is being conducted by Nkosinathi Prince Jali (Principal investigator), a master’s student at Durban University of Technology (DUT). One of the reasons the researcher registered for Master of Accounting is to be developed academically, gain new skills and knowledge, and improve research, writing and analysing skills and to take his career to the next level.

Brief Introduction and Purpose of the Study: The study will determine the influence of financial literacy and financial technology on the financial behaviour of high school teachers. This study seeks to gain more insights on the financial literacy challenges affecting teachers. This research will be focused on high school teachers based in Msunduzi Municipality, Pietermaritzburg, KZN. This study will assist respondents to understand the importance of financial literacy and financial behaviour of teachers in the era of financial technology because teachers need financial knowledge to manage day-to-day financial matters.

Invitation to the potential participant: I would like to invite you to participate in this research because the need for financial literacy education can never be underestimated, as it equips individuals with the right knowledge to make informed financial decisions.

What is Research: Research is a systematic search or enquiry for generalized new knowledge. Research is the process of discovering new knowledge. This knowledge can be either the development of new concepts or the advancement of existing knowledge and theories, leading to a new understanding that was not previously known.

Outline of the Procedures: You are kindly requested to answer all the questions in the questionnaire. It should take approximately 20-30 minutes to complete.

Risks or Discomforts to the Participant: There is no expected risk or discomfort when participating in this study.

Explain to the participant the reasons he/she may be withdraw from the Study: You can withdraw from the study at any time if you wish to do so. There will be no penalty for withdrawal from the study.

Benefits: Financial literacy and financial technology education will cause a positive impact on the financial behaviour of teachers, such as increases in savings and retirement fund contributions. Furthermore, a financially literate society help ensure that the financial services sector make a real contribution to poverty alleviation and economic growth.

Remuneration: Participants will not receive any financial or other benefits as a result for participation in this study.

Costs of the Study: There are no cost implications for the respondents for participating in the study.

Confidentiality: Names of respondents will not be used on questionnaires. The consent form with your name will be kept separately from the questionnaires by the researcher.

Results: The researcher will disseminate the results of the research to any interested respondents by providing a link of DUT Open scholar to search the topic that was researched.

Research-related Injury: The nature of the study does not pose any risk of injury to the respondents.

Storage of all electronic and hard copies including tape recordings: The primary data will be stored in the department in which the project is based. The intention of this is to ensure safety and integrity of the data set. Electronic data sets will be adequately arranged for back up.

Persons to contact in the Event of Any Problems or Queries: Please contact the researcher: Mr Nkosinathi Prince Jali, contact number 071 834 2981/073 152 1429, my supervisors, Dr CJ Nyide on 033 845 8804, Prof LJ Stainbank, 031 373 5836 or the Institutional Research Ethics administrator on 031 373 2375. Complaints can be reported to the Director: Research and Postgraduate Support Dr L. Linganiso on 031 373 2577 or researchdirector@dut.ac.za.

General:

A copy of the information letter should be issued to participants. The information letter and consent form must be translated and provided in the primary spoken language of the research population e.g. isiZulu.

APPENDIX B: CONSENT FORM



CONSENT

Statement of Agreement to Participate in the Research Study:

- I hereby confirm that I have been informed by the researcher, **NKOSINATHI PRINCE JALI** of about the nature, conduct, benefits and risks of this study.
- I have also received, read and understood the above written information (Participant Letter of Information) regarding the study.
- I am aware that the results of the study, including personal details regarding my sex, age, date of birth, initials and diagnosis will be anonymously processed into a study report.
- In view of the requirements of research, I agree that the data collected during this study can be processed in a computerised system by the researcher.
- I may, at any stage, without prejudice, withdraw my consent and participation in the study.
- I have had sufficient opportunity to ask questions and (of my own free will) declare myself prepared to participate in the study.
- I understand that significant new findings developed during the course of this research which may relate to my participation will be made available to me.

I, herewith confirm that I have been informed fully about the nature, conduct and risks of the above study.

Participant signature

Date

APPENDIX C: COVERING LETTER AND QUESTIONNAIRE



Dear participant,

I am currently registered for a Master of Accounting degree at the Durban University of Technology in the department of Financial Accounting. My research topic is **“The Influence of Financial Literacy and Financial Technology on the Financial Behaviour of high school teachers in Kwazulu-Natal”**. The aim of this study is to determine the influence of financial literacy and financial technology on the financial behaviour of high school teachers in Msunduzi Municipality, KwaZulu-Natal.

Your participation to this study will be highly appreciated, as it will enable the researcher to make recommendations that will help improves individuals’ understanding of financial products, services and concepts, so they are empowered to make informed financial decisions, avoid pitfalls, know where to go for help and take other actions to improve their present and long-term financial wellbeing. Please make sure that you fully complete the questionnaire as incomplete questionnaires will be disregarded for analysis purposes. Please note that your identity and individual answers will be kept totally confidential. Should you wish to discuss this further, please feel free to contact me or my supervisor Dr Celani J. Nyide at nyidec@dut.ac.za and co-supervisor Prof Lesley J. Stainbank at LesleyS@dut.ac.za

Your participation will be appreciated. Thank you.

Mr Nkosinathi Prince Jali

Cell No.: 071 834 2981

E-mail: NkosinathiJ1@dut.ac.za

QUESTIONNAIRE

Section A: Biographical details

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

1. Please specify your gender

	Gender	Tick
1.1	Male	
1.2	Female	

2. What is your age category?

	Age category	Tick
2.1	Under 25 years	
2.2	25 – 34 years	
2.3	35 – 44 years	
2.4	45 – 54 years	
2.5	55 years and older	

3. What is your highest academic qualification?

	Qualification type	Tick
3.1	Diploma	
3.2	Bachelor's degree	
3.3	Honour's degree	
3.4	Master's degree	
3.5	PhD	
3.6	Other – Specify _____	

4. For how long have you served as a teacher?

	Work experience	Tick
4.1	Less than 5 years	
4.2	5-10 years	
4.3	11- 15 years	
4.4	16-20 years	
4.5	21-30 years	
4.6	31 years or more	

5. Have you ever attended any financial literacy course?

*A **financial literacy course** is a course that is aimed at improving the management of personal finances. The knowledge and skills obtained from such courses enables individuals to make more informed financial decisions and helps in achieving financial stability.*

	Financial literacy course	Tick
5.1	Yes	
5.2	No	

6. Please indicate the field you are employed in.

	Work stream	Tick
6.1	Science	
6.2	Commerce	
6.3	Humanities	
6.4	Other – Specify _____	

Section B: Financial literacy challenges

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

Please read the following statements and rate accordingly based on the given options which range from strongly disagree to strongly agree.

	Strongly disagree	Disagree	Neutral	agree	Strongly agree
	1	2	3	4	5
7. I am impulsive and buy things even when I can't really afford them.	1	2	3	4	5
8. I find it more satisfying to spend money than save it for the long term.	1	2	3	4	5
9. I often spend more than I can afford.	1	2	3	4	5
10. I never compare prices for major expenses.	1	2	3	4	5
11. I often borrow money from friends and family members.	1	2	3	4	5
12. It is hard to stick to my spending plan when unexpected expenses arise.	1	2	3	4	5
13. I buy things on credit rather than waiting and saving up.	1	2	3	4	5
14. When more unexpected expenses occur, I usually have to use more credit.	1	2	3	4	5
15. When faced with a financial challenge, I have a hard time figuring out a solution.	1	2	3	4	5
16. My exposure to advertising has negatively influenced my financial decisions.	1	2	3	4	5
17. I lack confidence in my ability to manage my finances.	1	2	3	4	5
18. I always exceed the maximum limit on my credit card.	1	2	3	4	5
19. Paying my credit card in full to avoid financial charges is not so important.	1	2	3	4	5

20. I feel I do not have adequate knowledge to manage my personal finances.	1	2	3	4	5
21. I am not satisfied with the amount of money I am saving and investing for retirement.	1	2	3	4	5
22. My work colleagues negatively influence me in my financial decisions.	1	2	3	4	5

Section C: Financial literacy skills

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

Please read the following statements and rate accordingly based on the given options which range from strongly disagree to strongly agree.

	Strongly disagree	Disagree	Neutral	agree	Strongly agree
	1	2	3	4	5
23. I always prepare a monthly budget.	1	2	3	4	5
24. I always involve my family when preparing a budget.	1	2	3	4	5
25. I stick to my budget.	1	2	3	4	5
26. I pay all my bills on the due date.	1	2	3	4	5
27. I shop around for the best prices.	1	2	3	4	5
28. I am not overwhelmed by my debts.	1	2	3	4	5
29. I keep a record of my expenses each month.	1	2	3	4	5
30. I always prioritise my spending based on needs, not wants.	1	2	3	4	5
31. I always pay the instalment required on my clothing accounts.	1	2	3	4	5
32. I always ensure that I understand the terms and conditions of any loan I take.	1	2	3	4	5
33. I always ensure I understand the consequences of default of loan.	1	2	3	4	5
34. My debit/credit card has never been declined for insufficient funds.	1	2	3	4	5
35. I have control over my personal finances.	1	2	3	4	5
36. I have an emergency fund of at least one month's living expenses.	1	2	3	4	5

37. I am quite confident that I will have enough money in my retirement plan in place for my future.	1	2	3	4	5
38. I have life cover with insurance company.	1	2	3	4	5
39. I have an insurance policy for all major assets.	1	2	3	4	5
40. I maintain an emergency savings account.	1	2	3	4	5
41. I always consult my family/spouse before making any important financial decisions.	1	2	3	4	5
42. Before I buy something I carefully consider whether I can afford it.	1	2	3	4	5
43. I set long-term financial goals and work hard to achieve them.	1	2	3	4	5
44. I've got a clear idea of the sorts of financial products or services that I need without consulting a financial adviser.	1	2	3	4	5

Section D: Knowledge of financial technology

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

Financial technology is described as any technology that delivers financial services through software, such as online banking, mobile wallets, payments apps, money transfers and managing your investments.

Please read the following statements and rate accordingly based on the given options which range from strongly disagree to strongly agree.

	Strongly disagree	Disagree	Neutral	agree	Strongly agree
	1	2	3	4	5
45. Most of the time I use my smartphone/laptop to buy products online.	1	2	3	4	5
46. Most of the time I use my smartphone/laptop to pay my bills.	1	2	3	4	5
47. Most of the time I use my smartphone/laptop to do cash transfers.	1	2	3	4	5
48. I have sufficient knowledge about financial technology.	1	2	3	4	5
49. The schools' syllabus need to be improved to fit financial technology requirements.	1	2	3	4	5
50. Without knowledge of financial technology, it is difficult to get a job.	1	2	3	4	5
51. I am worried about using financial technology services because other people may be able to access my account.	1	2	3	4	5
52. My exposure to financial technology has negatively influenced my financial decisions.	1	2	3	4	5

Please tick (✓) inside the box which is relevant to you.

53. According to you, which method is the more convenient way of banking?

	Banking method	Tick
53.1	Branch banking	
53.2	Internet banking	
53.3	ATM	
53.4	Other	

54. For how long have you been using financial technology services?

	Financial technology services	Tick
54.1	Not used	
54.2	Less than 2 years	
54.3	2-5 years	
54.4	More than 5 years	

55. How frequently do you use financial technology services?

	Financial technology services	Tick
55.1	Never	
55.2	Rarely	
55.3	Sometimes	
55.4	Very often	
55.5	Always	

56. Which of the following services on financial technology do you use often?

	Mobile Money	Tick
56.1	Sending cash	
56.2	Receiving cash	
56.3	Purchases at retailer	
56.4	Bill payments (utilities)	
56.5	Airtime purchases	
56.6	Bank related service	
56.7	None	

*******THE END*******

Thank you for your support and time in completing the questionnaire

APPENDIX D: ETHICAL CLEARANCE LETTER



Faculty Research Office
Durban University of Technology
14 September 2021

Student: Nkosinathi Prince Jali
Student Number: 21351510
Degree: Master of Accounting
Email: 21351510@dut4life.ac.za
Supervisor: Dr C.J. Nyide
Supervisor email: nyidec@dut.ac.za

Dear Mr Jali

ETHICAL APPROVAL: LEVEL 2

I am pleased to inform you that the Faculty Research Ethics Committee (FREC) following feedback from two reviewers has granted preliminary permission for you to conduct your research 'The influence of financial literacy and financial technology on the financial behaviour of high school teachers in KwaZulu-Natal.'

When ethics approval is granted:

You are required to present the letter at your research site(s) for permission to gather data. Please also note that your research instruments must be accompanied by the letter of information and the letter of consent for each participant, as per your research proposal.

This ethics clearance is valid from the date of provisional approval on this letter for one year. A student must apply for recertification 3 months before the date of this expiry.

Recertification is required every year until after corrections are made, after examination, and the thesis is submitted to the Faculty Registrar.

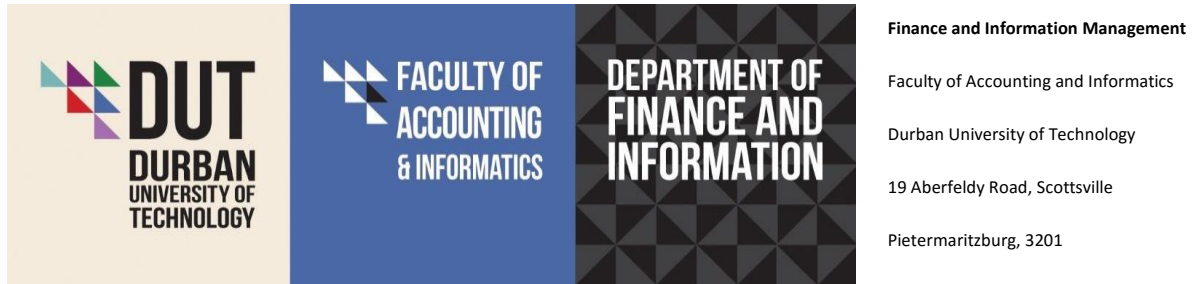
A summary of your key research findings must be submitted to the FRC on completion of your studies.

Kindest regards.

Yours sincerely

Dr Mogiveny Rajkoomar
FREC Chair
Faculty of Accounting and Informatics
Durban University of Technology
Ritson Campus
Durban, South Africa
4001

APPENDIX E: REQUEST FOR PERMISSION TO CONDUCT A STUDY



22/07/2021

To Whom It May Concern:

I hereby confirm that Mr NP Jali, student No. 21351510, is registered for a Master of Accounting degree, under the supervision of Dr CJ Nyide and Prof. LJ Stainbank. The title of his study is “The influence of financial literacy and financial technology on the financial behaviour of high school teachers in KwaZulu-Natal”.

The aforementioned student is currently seeking permission from the KwaZulu-Natal Department of Education to disseminate questionnaires amongst high school teachers within Umsunduzi Municipality.

I would be very grateful if his request would meet your favourable consideration.

Yours faithfully

Dr Celani J. Nyide

Senior Lecturer & Research Coordinator

Tel. 033 845 8804

Email: nyidec@dut.ac.za

APPENDIX F: LETTER FROM STATISTICIAN

60 Alan Paton Avenue
501 Nedbank Plaza
Scottsville
Pietermaritzburg
3201

01 February 2022

TO WHOM IT MAY CONCERN

Analysis of Data

This is to confirm that I assisted Mr Nkosinathi Prince Jali with the Quantitative analysis of his data.

Yours Sincerely,

THABO LEPHOTO (Mr)

PhD. Candidate (Statistics)

C. 074 704 8528

E-mail address: lephotot@ukzn.ac.za

Signature: _____

–

APPENDIX G: GATEKEEPERS LETTER



KWAZULU-NATAL PROVINCE
EDUCATION
REPUBLIC OF SOUTH AFRICA

OFFICE OF THE HEAD OF DEPARTMENT

Private Bag X9137, PIETERMARITZBURG, 3200
Anton Lembede Building, 247 Burger Street, Pietermaritzburg, 3201
Tel: 033 392 1051

Email: buyi.ntuli@kzndoe.gov.za

Enquiries: Buyi Ntuli

Ref.:2/4/8/7136

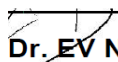
Mr Nkosinathi Prince Jali
P.O. Box 100033
SCOTTVILLE
3209

Dear Mr Jali

PERMISSION TO CONDUCT RESEARCH IN THE KZN DoE INSTITUTIONS

Your application to conduct research entitled: **“THE INFLUENCE OF FINANCIAL LITERACY AND FINANCIAL TECHNOLOGY ON THE FINANCIAL BEHAVIOUR OF HIGH SCHOOL TEACHERS IN KWAZULU-NATAL”**, in the Department of Education Institutions has been approved. The conditions of the approval are as follows:

1. The researcher will make all the arrangements concerning the research and interviews.
2. The researcher must ensure that Educator and learning programmes are not interrupted.
3. Interviews are not conducted during the time of writing examinations in schools.
4. Learners, Educators, Schools and Institutions are not identifiable in any way from the results of the research.
5. A copy of this letter is submitted to District Managers, Principals and Heads of Institutions where the Intended research and interviews are to be conducted.
6. The period of investigation is limited to the period from 29 July 2021 to 31 August 2023.
7. Your research and interviews will be limited to the schools you have proposed and approved by the Head of Department. Please note that Principals, Educators, Departmental Officials and Learners are under no obligation to participate or assist you in your investigation.
8. Should you wish to extend the period of your survey at the school(s), please contact Miss Phindile Duma at the contact numbers above.
9. Upon completion of the research, a brief summary of the findings, recommendations or a full report/dissertation/thesis must be submitted to the research office of the Department. Please address it to The Office of the HOD, Private Bag X9137, Pietermaritzburg, 3200.
10. Please note that your research and interviews will be limited to schools and institutions in KwaZulu-Natal Department of Education.


Dr. EV Nzama
Head of Department: Education
Date: 29 July 2021

GROWING KWAZULU-NATAL TOGETHER

APPENDIX H: LETTER FROM PROFESSIONAL EDITOR

TO WHOM IT MAY CONCERN:

This is to certify that I, Bernadette Mary Cecilia Tayler, have edited and proofread the draft dissertation of Nkosinathi Prince Jali, a Masters student at the Durban University of Technology (DUT) for Grammar, Spelling, Punctuation, Paraphrasing and Referencing errors. I can honestly say that with the changes made (that I have recommended) he is ready to submit his dissertation with confidence.

BMC Tayler

Bachelor of Education (Honours Degree in Applied Linguistics)

23 May 2022

Address: 10 Lincoln Mews

290 Murray Road

Lincoln Meade, Pietermaritzburg, 3201

Contact Number: 083 475 8063

E-mail Address: [taylorretta@gmail.com](mailto:tayleretta@gmail.com)

APPENDIX I: TURNITIN REPORT

DISSERTATION_FINAL_DRAFT_N P_JALI

by Nkosinathi Jali

Submission date: 05-Jun-2022 03:38PM (UTC+0200)

Submission ID: 1629878042

File name: NEW_DISSERTATION_FINAL_DRAFT_NP_JALI.docx (387.76K)

Word count: 26306

Character count: 146325

DISSERTATION_FINAL_DRAFT_NP_JALI

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