SCHOOL OF ACCOUNTING, FINANCE & ECONOMICS

Financial capability of practicing professionals:
A comparative analysis of finance and non-finance professional's financial capability.

BY

MISS THEMBISA VANESA MNGADI
(Student number: 208513991)

This thesis is submitted in fulfilment of the requirements for the degree
of
Master of Commerce in Accounting

Supervised by:
MISS HLENGIWE P NDLELA

DECLARATION

I, **Thembisa V Mngadi** hereby solemnly confirm that:

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Signed………………………….

08 July 2020

Date…………………………

DEDICATION

This research thesis is dedicated to my family and many of my friends for their encouragement.

I would like to thank God for the strength He has given me, I couldn’t have done it all by myself.

My mother and my whole family who have always had great trust in me.

My industry mentor; amazing Mrs Olisha Pillay, for her immeasurable faith in my abilities.

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ABSTRACT

Being financially capable relates to having the ability to make optimal financial decisions that can have severe impact on an individual's financial wellbeing. This severe impact may be felt immediately in the short term or may accumulate over the years and have regretful impact in the long term. As an extension of financial literacy, the concept of financial capability has been described as a broad concept, encompassing the people's knowledge and skills to understand their financial circumstances, along with the motivation to take action. Financially capable consumers plan, find and use information, know when to seek advice and can understand and act on this advice, leading to greater participation in the financial services market. A more recent conceptualisation of financial capability describes a financially capable person as someone who posssess the right financial knowledge, financial behaviour, financial attitude and financial self efficacy. While several financial literacy studies in South Africa have suggested that Souh Africans have poor financial literacy levels, there is currently no study that has considered the financial capability of South Africans with the consideration of their financial self efficacy. This study delved into the financial capability of South African practising professionals in the Kwazulu-Natal province by considering the specific research objectives: (1) To determine the levels of financial capability (knowledge, behaviour, attitude & self efficacy) among practising professionals in KwaZulu-Natal; (2) To assess the determinants of financial capability of practising professionals in KwaZulu-Natal; (3) To comparatively analyse the financial capability of finance related professionals vis-à-vis the financial capability of non-finance related professionals in KwaZulu-Natal; and (4) To evaluate the influence of socio demographic variables (Gender, Age, Profession, Professional experience in practise, Highest educational qualification, Race, & Monthly Income) on the financial capability levels of practising professionals in KwaZulu-Natal. To achieve this, the study surveyed 242 practising professionals in the fields of Accounting, Engineering, Law, and Medicine using a structured questionnaire that was administered via both onlne and physical contact methods. The collected data was further analysed descriptively and inferentially using several statistical techniques such Factor analysis, ANOVA T-test, and Regression analysis research techniques which are contained in the SPSS 25. Based on the results of analysis, the research study established an overall low level of financial capability among the finance professionals. From a componential perspective, it was further established that most of the finance professionals have low financial knowledge, good financial behaviour, poor financial attitude and good financial self-efficacy. Also, based on both the descriptive and t-test analysis, a statistically significant difference was found between the financial capability of finance related professionals and non-finance related professionals. Moreso, the Principal Component Analysis (PCA) revealed that financial knowledge and financial behaviour are the leading factors or influencers of financial capability among the finance professionals. Finally, the research study evidenced that education and race are the only socio demographic factors that impact the financial capability of practising professionals in the KwaZulu-Natal province of South Africa.

Keywords: Financial knowledge, Financial behaviour, Financial attitude, Financial self efficacy, Financial capability, and Practising professionals.

TABLE OF CONTENT

List of Tables

List of Figures

CHAPTER ONE

INTRODUCTION AND OVERVIEW

1.1 Introduction

Financial capability as a multidisciplinary construct emerged from several social science disciplinary fields like Economics, Sociology, Anthropology, Psychology and Behavioural finance (Robeyns, 2016). As a social science construct, the crux of this construct resides in understanding human behaviours, human psychology, and social structures from the perspective of human financial choices and decisions.

As an emerging construct it is increasingly drawing the attention of global leaders and policy makers of developing economies as well as developed economies (Lusardi and Mitchell, 2014). A plausible reason for this is because at both global and national levels, financial capability is fast becoming critical to the improvement of financial stability (Lusardi and Mitchell, 2014), financial inclusion (Zottel, 2013), and financial equality (Sherraden, 2013).

Also, at household and personal levels, several studies and surveys have reported that being financially capable is a precursor to improving the financial wellbeing of individuals over a life time (Xiao and Porto, 2017) In the short term, financially capable individuals and households possess the necessary financial abilities and knowledge to make optimal financial decisions (Lusardi, 2011; Lusardi et al., 2017). In the long term, financial capable individuals and households ensure their financial security by via retirement planning and by accumulation of financial assets (Sherraden et al., 2015; Boisclair et al., 2017). Hence, financial capability has been conceptualised by several authors, scholars and researchers.

For instance, the British Household Panel Survey (BHPS) which considered financial wellbeing and capability of British nationals, conceptualised the term as:

"…a broad concept, encompassing the people's knowledge and skills to understand their financial circumstances, along with the motivation to take action. Financially capable consumers plan, find and use information, know when to seek advice and can understand and act on this advice, leading to greater participation in the financial services market" (Taylor, 2011).

This definition explicates the impact of financial capability from the perspective of knowledge of an individual in personal finance decisions. This is further reflected in the way which an individual handle and manages money matters (Taylor, 2011). Likewise, West and Friedline (2016) in their survey on financial capabilty of millennials, conceptualised the construct as a person's capability that exhibits sound behaviours in financial decisions that are enabled by financial infrastructures that supports such financial behaviours.

A broadly acknowledged definition was posited by the Center for financial inclusion who conceptualised financial capability as:

"…the combination of attitude, knowledge, skills/behaviour, and self-efficacy needed to make and exercise money management decisions that best fit the circumstances of one's life, within an enabling environment that includes, but is not limited to, access to appropriate financial services…" (CFI, 2013). This study will adopt this definition as a guide for the research study.

According to headline findings of the 2012 South African Financial Service Board baseline study, it was recorded that South Africans generally have poor levels of financial literacy and capability in decision making (Struwig et al., 2012). The findings, which were based on a survey of 2992 South Africans across diverse socio demographic groups, revealed drastically low financial literacy levels in all assessed areas of financial literacy, across all age groups. Similarly, an investigation done by Rousseau and Venter (2016) on the financial insight, financial behaviour and financial literacy of 560 consumers in Port Elizabeth found that majority of the respondents were most informed in the areas of financial control and financial discipline, and least informed in financial planning. The survey which utilised a convenience sampling discovered that employment level, age, gender, marital status and education have a significant influence on financial behaviour and insights. It was further concluded that poor financial behaviour and lack of insight is widespread among young unemployed single South Africans with a low level of education.

However, Nanziri and Leibbrandt (2018) measured and profiled the financial literacy of South Africans via the dimensions of financial knowledge and financial capability using the Principal Component Analysis (PCA) to create a composite index. The researchers utilised the FinScope surveys datasets from 2005-2009 which related to domains of access to and use of financial services. The study found the combined financial literacy index of South African to be low at 48.4%. under the financial capability category, while only 19% claimed to spend wisely, 47% agreed to have regular savings behaviour and 21% spoke about not being worried about saving enough for retirement. It was further suggested that Behavioural finance methods can be used to improve the financial capability and overall financial literacy of South Africans.

In a doctoral study, Nomlala (2019) considered the financial capability, financial socialization and professional skills of accounting students in the KwaZulu-Natal province. This was done via a survey across three universities within the province that assessed the students' capabilities using self-administered questionnaires. While findings from the regression analysis evidenced low levels of financial knowledge among the students, high levels of financial attitudes, behaviours and numeracy skills were noted among the students. Further overall findings suggested that accounting students in KwaZulu-Natal province are financially capable of making optimal financial decisions.

1.1.1 Practising Professionals in South Africa

Press (2019) defines a professional as a member of a profession or any person who earns his living from a specified professional activity. This person needs to be engaged or qualified in a specific profession. Examples include, doctors, lawyers, accountants, engineers etc. For this study, a professional will be divided into two categories; non-finance professionals (doctors, engineers etc) who have no finance exposure into their professional duties and finance professionals (Accountants, Auditors, Financial planners etc) who have some exposure to finance related matters in their professional duties.

The Health Professions Council of South Africa report that more than 248 000 medical professionals in South Africa were registered with the professional body in 2018, including medical interns and students (HPCSA, 2019)

The SAICA 2019 reports that there are more than 44 000 constituencies in their database of professionals and of this, an estimate of 6500 of them are Black professionals (SAICA, 2019). The Law profession has been steadily growing, and according to The Law Society of South Africa, in January 2019 there were a total of

27 000 total attorneys in South Africa and only 8 933 were Black (includes African, Colored and Indians) (LSSA, 2019). Currently, South Africa has one engineer for every 3100 people. A total number of 45 806 professional engineers were reported by the Engineers Council of South Africa in 2015 for South Africa and 6919 were Black (ECSA, 2019).

1.2 **Research problem**

Several existing literatures on financial capability have found individuals to exhibit low levels of capability in financial decisions globally (Sherraden, 2010; Lusardi, 2011) . From a local perspective, only a few studies have evident that South Africans have low financial literacy (Roberts et al., 2012; Rousseau and Venter, 2016). However, it remains unclear if practising professionals in KwaZulu-Natal have the financial capability (financial knowledge, financial behaviour, financial attitude and financial self-efficacy) to make optimal choices that have positive impacts on their financial security over a lifetime. Also, there is no existing clarity on what capability factors and socio demographic factors which impact capability of practising professionals in KwaZulu-Natal.

1.3 Aim of the research study

Subsequent upon the definition of the problem statement, the core purpose of this research study is to provide meaningful insights on the financial capability of practising professionals based in KZN. The study seeks to determine how financially capable are South African practising professionals especially those who are currently residing in KZN. Furthermore, the study aims to analyse comparatively the financial capability of professionals across disciplines and evaluate financial capability drivers among professionals.

Hence, the construct of financial capability, defined as financial knowledge, financial behaviour, financial attitude and financial self-efficacy.

1.4 Research objectives

Upon defining the research study aim, the research study highlights the following objectives:

1. To determine the levels of financial capability (knowledge, behaviour, attitude & self efficacy) among practising professionals in KwaZulu-Natal.
2. To determine the factors that impact the financial capability of practising professionals in KwaZulu-Natal.

3. To comparatively analyse the financial capability of finance related professionals vis-à-vis the financial capability of non-finance related professionals in KwaZulu-Natal.
4. To evaluate the influence of socio demographic variables (Gender, Age, Profession, Professional experience in practise, Highest educational qualification, Race, & Monthly Income) on the financial capability levels of practising professionals in KwaZulu-Natal.

1.5 Research questions

Based on the research objectives, the research methodology will seek to proffer answers to questions such as:

1. How financially capable are the practising professionals in KwaZulu-Natal?
2. What are the factors that impact the financial capability among practising professionals in KwaZulu-Natal?
3. Are finance related professionals more financially capable than non-finance professionals?
4. How do socio-demographic factors impact the capability of practising professionals in KwaZulu-Natal?

1.6 Research Contributions

A major novel finding of this thesis will be to provide empirical evidence about the levels of financial capability of practising professionals. This empirical evidence will be useful to several stakeholders in better understanding financial capability and financial decisions of professionals and working adults. Among these stakeholders are: professionals, professional bodies, financial services institutions, financial planners, and other financial professionals, practitioners, and policy makers in the South African government agencies.

Furthermore, the empirical evidence from this research will provide insights on the components of financial capability as well as factors that drives capability among individuals. This is necessary for developing and implementing curricula and financial literacy programmes

Lastly, the evidence produced by this research will provide fresh and novel facts to current literatures on financial capability, professionals, and personal finance decision making among working-class group of all ages. This knowledge will be relevant for both future South African studies, African studies and global studies.

1.7 The scope and methodology

1.7.1 Research Scope

The scope of the research considers practising professionals in the fields of Accountancy, Engineering, Medicine and Law that are resident in KwaZulu-Natal. While there are currently no accurate figures on the total number of practising professionals in KwaZulu-Natal, the available current statistics provides only for current membership figures at a national level. Noteworthy, is that this statistic does not specify if the provided figures are memberships for professionals that who dead, alive or have emigrated from South Africa.

1.8 Limitations

This research thesis has several limitations and constraints which are primarily caused by time, scope and financial impediments. Firstly, the generalisation of this research is limited by the population size, as the population (KwaZulu-Natal) is not a true sample representation of practising professionals in South Africa. Secondly, with regards to the target population of the study, majority of the practising professionals who are the focus group of this research study are more likely to be resident in eThekwini Municipality of KwaZulu-Natal due to the commercialisation of this municipality in comparison to other municipalities in KwaZulu-Natal. Lastly, this research considers practising professionals within four main professions, and many other professions in the fields of Humanities, Social Sciences, and Arts will not be considered within the scope of the study.

1.9 Delimitations

The pivot of this research thesis revolves around assessing capability of practising professionals in KwaZulu-Natal in making financial decisions. This research study considers practising professionals in selected fields of Accounting, Law, Engineering, and Medicine in KwaZulu-Natal. This profession was considered by the researcher as they often represent the epitome of professionals in the fields of Commerce, Science and Health. Also, the region was specifically chosen because of accessibility.

1.10 Thesis structure

This research study comprises of five chapters namely:

Chapter One- Introduction and overview

This chapter gives an introduction and overview of the research study and its subject matter being financial capability. This was done via the background of the study, problem statement, aim of the study, research objectives, research questions and the research significance.

Chapter Two- Review of Theoretical and Empirical Literatures

This chapter critically considers the theories of behavioural finance and financial capability. Herein, the foundations and development of these theories were discussed systematically. Furthermore, this chapter explores succinctly relevant empirical studies and literatures on financial capability. It adopts a systematic approach which considers financial capability within both global and local environmental domains.

Chapter Three- Research methodology

This chapter clarifies the research design, approach and methodology utilised in the research study. In this chapter, the methods of data collection, analysis, and interpretation techniques adopted for the thesis were highlighted as well as discussed. Furthermore, the adoption of each method and techniques utilised were justified.

Chapter Four- Data analysis, Interpretation and Discussion

The chapter of the thesis analyses the data collected from the field surveys via the use of the necessary statistical tools as well as analytical techniques. This section of the further discusses research outcomes of the data analysis and conclusions.

Chapter Five- Conclusion and recommendations

This chapter summarises the outcome of the entire research thesis vis-à-vis other findings from studies. While this was based on the predetermined research questions, a conclusion was further reached, and inevitable limitations of the study were highlighted.

1.11 Summary

This section of the research study introduced the study. Herein, the study commenced by critically discussing the concept of financial capability globally as well as in South Africa. This assisted in the identification of the research gap and the justification for the research inquiry. In subsequent, the research broad aim, objectives, significance, questions as well as hypotheses were clarified. Lastly, the research scope was discussed and highlighted respectively.

The next chapter of this research study considers the theoretical and empirical literature.

CHAPTER TWO

REVIEW OF THEORETICAL AND EMPIRICAL LITERATURE

2.1 Introduction

This chapter considers the definitions of financial capability, its relative theories and empirical literatures. In this chapter, various conceptualizations of financial capability are considered, relative theories such as the behavioral finance theory, bounded rationality as well as the capability approach are considered. Furthermore, necessary local and international empirical literatures are reviewed and further considered vis-à-vis socio demographic perspectives.

2.2 Definitions of Financial Capability

A broadly acknowledged definition was posited by the Center for financial inclusion who conceptualised financial capability as:

"…the combination of attitude, knowledge, skills/behaviour, and self-efficacy needed to make and exercise money management decisions that best fit the circumstances of one's life, within an enabling environment that includes, but is not limited to, access to appropriate financial services…" (CFI, 2013).

According to the World Bank, financial capability can be conceptualised as the ability of individuals to have the necessary capacities to behave and act in their best financial interests' subject to prevalent socio-economic circumstances. This definition of financial capability encompasses individuals' capacities in terms of knowledge, attitudes, skills and behaviours that are necessary for managing resources, understanding, selecting and making optimal use of financial products and services to meet their needs and obligations (Perotti and Zottel, 2013; Zottel et al., 2016).

Whilst considering the financial capability of low-income millennials in America, West and Friedline (2016) conceptualised the term financial capability from the perspective of having both financial knowledge and financial inclusion. Thus, they defined financial capability as a person's ability to adopt healthy financial behaviours within an institutional context that enables the sustainability of such behaviours via subsisting opportunities that are open to all individuals. Banerjee et al. (2017) simply ideated the term financial capability as an individual's ability to save, access credit facilities and utilize investment opportunities that are available in an economy.

2.3 Theoretical Framework on Behavioural Finance and Financial Capability Theories

2.3.1 The Behavioural Finance Theory

Behavioural finance is an area of finance that offers the use of psychology-based theories to explain anomalies and deviations from expected rationalities of human behaviours in financial decisions (Filbeck et al., 2017). The behavioural finance theory, inculcates the behavioural science theories of psychology into the field of finance, with a view to reexamine Individual investment behaviours in financial markets (Yang, 2016). These investment behaviours are individual financial decisions that are often replicated in stock market trends such as severe peaks and troughs in stock prices (Filbeck et al., 2017).

While originating contributions to the behavioural finance theory have been evidenced in the works of scholars such as Charles (1841), Le Bon (1895), Keynes (1936), and even Simon (1955), however, the revolutionary work on the behavioural finance theory is widely accredited to Tversky and Kahneman (1979) through their work on the Prospect theory. In ab initio, Von Neumann and Morgenstern (1947) in their works on the prospect theory provided an alternative theoretical perspective in relation to decision making in high-risk environments by presenting several deviations and abnormalities in the human behaviour, which violates the axiomatic assumptions of the expected utility hypothesis. These works explicate the origins of the behavioural finance theory.

The expected utility hypothesis also referred to as the neoclassical theory, was initially highlighted as a regulatory model which represents the behaviour of an ideal rational person and not as a descriptive model which explains the behaviour of real people (Tversky and Kahneman, 1986; Costa et al., 2019). In contrast to the expected utility hypothesis, the prospect theory evidences that subjective factors influence the individual decision making process, hereby causing individuals to deviate from behaving rationally through human Behavioural abnormalities often termed as cognitive biases (Tversky and Kahneman, 1979; Costa et al., 2019).

Unlike the neoclassical and traditional finance theory, the modern Behavioural finance has evolved from the combination of cognitive psychology and modern finance theories. (Yang, 2016). Statman (2019) asserts that the field of Behavioural finance, like every other fields of knowledge, remains an evolving field and a work in progress. He further noted that the first generation of Behavioural finance commenced in the 1980s, with postulations that sought to address gaps and cracks in the classical and traditional finance theory that described individuals as rational beings seeking maximum expected utility in their financial decisions (Statman, 2019). However, real world evidences have proven traditional finance theorists to be wrong in their assumption of human rationality especially in the area of investment decisions, as market evidences depicts human errors that are often driven by poor cognitive and emotional tendencies (Costa et al., 2019).

Statman (2019) highlights that the traditional finance otherwise known as the standard finance is based on the following axiomatic assumptions:

- The traditional finance theory assumes that Individuals are rational (Statman, 2019).
- The traditional finance theory assumes Individual investors develop their portfolios based on the mean-variance portfolio theory assumptions, which holds that individual wants comprises of only high expected returns and low risk (Statman, 2019).
- The traditional finance theory assumes that individual spending and saving behaviours are based on the standard life cycle theory, which assumes that individuals find it easy to follow the right path to save and spend (Statman, 2019).
- Under the traditional finance theory, the asset pricing theory accounts for the expected returns of investment, whereby deviations from the expected returns on investments are ascribed to risk differentials (Statman, 2019).
- The traditional finance theory believes in market efficiency, which assumes that asset prices are equal to asset values; hence it is difficult to “beat the market” by making abnormal profits (Statman, 2019).

As an alternative to the axiomatic assumptions, the behavioural finance theory offers five fundamental axiomatic assumptions for each of the foundational assumptions of the traditional finance theory. Unlike the traditional finance theory, the behavioural finance theory further incorporates knowledge about people's wants, and their cognitive and emotional shortcuts and errors. Thus, the foundational axiomatic assumptions of the behavioural finance theory include:

- The behavioural finance theory assumes that individuals are normal people (Statman, 2019).
- The behavioural finance theory assumes that individuals build their portfolio as described by the behavioural portfolio theory, where individual portfolio wants exceeds beyond their high expected returns and low risk, such as for social status and social responsibility (Statman, 2019).
- The behavioural finance theory assumes that individuals save and spend as described by the behavioural life-cycle theory, whereby limitations such as poor self-control, make it difficult to save and spend in the right manner (Statman, 2019).
- Under the behavioural finance theory, the behavioural asset pricing theory is used to account for the expected returns of investments, whereby deviations in expected returns are ascribed beyond just mere risk differentials such as levels of social status and social responsibility (Statman, 2019).
- The behavioural finance theory assumes that markets are inefficient, in the perspective that asset prices are always equal to asset values. However, assumes market efficiency relates to the perspective that markets are difficult to beat (Statman, 2019).

Yang (2016) asserts that the significance of the behavioural finance theory does not only lie in the correction of the gaps in the traditional finance theory, but further improves clarity on the underlying theories that informs finance and financial decisions. From a micro level perspective, the analysis of investor's psychology by the lens of the behavioural finance theory does not only immune individuals from making decision errors, but avails individuals the opportunity to formulate bespoke investment strategy. Similarly, from a macro-level perspective, the behavioural finance theory analyses the effectiveness and efficiency of stock market by considering whether asset prices reflects asset values (Yang, 2016).

The behavioural finance theory in the context of individual’s financial capability in making rational financial choices can be related to the seminal works of three Nobel laurates; Herbert Simon (Bounded rationality), Daniel Kahneman (cognitive biases) and Richard Thaler (Nudging).

2.3.2 Bounded rationality

The pioneer works of Herbert Simon on the bounded rationality theory highlighted detailed and critical assessment of several influences that hinders rational choices among individuals (Simon, 1955). Simon asserts that individuals have bounded rationality, and when they encounter information that is either incomplete or intractable, they tend to find solutions that are adequate, rather than optimal. This perspective was the central notion of the conceptualisation of “satisficing” approach to understanding human decisions. The satisficing approach offered a more realistic understanding of human decision process as compared to a rationalistic model such as the Bernoulli’s expected utility theory (Bernoulli, 2011; Levy, 2016).

Traditional economic theories on human decision such as the expected utility theory are built primarily on the core idea that individuals as such are rational economic agents (Levy, 2016). The theorists of this traditional economic philosophy who are often referred to as neo-classicalists, believe that human decision making is often based on standardised neoclassical assumptions and are driven by market forces of an ideal society (Navarro-Martinez et al., 2018). However, the flaws and apparent deviations of human decision-making processes from rationality has been one of the foundational blocks of the behavioural economics (Thaler, 2016).

The bounded rationality theory studies the Behavioural irrationalities in human decision making due to limitations in the human cognition (Altman, 2015). This theory asserts that a plausible explanation for evident human Behavioural irrationalities in terms of decision making can be ascribed to bounded and limited cognitive ability that may otherwise improve Behavioural choices (Altman, 2015; Battaglio Jr et al., 2019). An individual cognitive ability has been described as the capability to make rational decision as a result of a conscious and critical thought process, that is largely influenced by the amount of relevant information that such individuals possess at the time of the decision making (Statman, 2019).

Hernandez and Ortega (2019) assert that rationality is an ambiguous phenomenon in the real world as several research studies have opined that human rationality is bounded by lack of knowledge. They further reiterated that the struggle for rationality among individuals is limited within the confines of knowledge possessed by individuals. While a decision can either be objectively rational or subjectively rational, an objectively rational decision is such which is based on the correct behaviour which maximises the values given in a particular context. On the other hand, a subjectively rational decision is such that it maximises achievement, relative to the individual's knowledge (Hernandez and Ortega, 2019).

The theory of bounded rationality views a decision process from a different perspective. For instance, in a decision making process for a relatively simple problem, it is difficult to obtain the maximum value, as it is impossible to verify all possible alternatives (Navarro-Martinez et al., 2018). This is because environmental factors influences and differentiates people based on available opportunities and desires (Hernandez and Ortega, 2019). Hence, when individual decisions are influenced by both their desires and the opportunities that the think they possess. While this perspective may not be entirely accurate, there is a possibility that an individual posed with a decision may not be aware of some opportunities that are actually viable to him, or he may believe that certain opportunities are favourable to him which in reality are not, thus, his choice may not be guaranteed as the best alternative (Hernandez and Ortega, 2019).

Kahneman (2011) asserts that individuals as economical agents that barely comply with theories of economical transactions as stated in the classical economic theories, are hardly rational. The scholar further links systematic patterns of deviations from rational decision making to both system 1 and system 2 thinking. While the system 1 thinking resonates along with the perceptual system which presides over intuition, system 2 thinking utilises cues, that produce judgements based on either intuition or deliberate reasoning (Battaglio Jr et al., 2019). In general, individuals make decision via the following mechanisms, in order of likelihood:

- An intuitive judgement is elicited and endorsed by system 2 (Battaglio Jr et al., 2019).

- An intuitive judgement is evoked and serves as an anchor to be adjusted by system 2 in the context of other situational features (Battaglio Jr et al., 2019).
- A deliberate judgement is created by system 2 because no intuitive judgement is available (Battaglio Jr et al., 2019).
- A deliberate judgement is generated by system 2 because the intuitive judgement that came to mind is identified as incorrect (Battaglio Jr et al., 2019).

Thaler and Sunstein (2009) further referred to both system 1 and system 2 as automatic and reflective systems, respectively, how individuals' decisions can be evident in the variations in the degree of accessibility of the characteristics of a specific context. This perspective is the foundational block of a crucial concept in the field of behavioural finance known as heuristics.

Heuristics are described as shortcuts developed by individuals to ease complexities and ambiguities that are inherent in decision making processes (Gigerenzer, 2018). While heuristics are quite prone to decision errors due to human tendency to substitute an ambiguous situation for a more accessible one, the likelihood of this inherent error in the use of heuristics is largely dependent on the ecological perspective otherwise known as ecological rationality (Mousavi and Gigerenzer, 2017). The notion of ecological rationality stresses that the accuracy of heuristics is largely influenced by the environment or context in which they are used. Hence, the more functional the alignment is between a heuristic and the environment, the higher the level of ecological rationality (Mousavi and Gigerenzer, 2017; Luan et al., 2019).

In recent years, several intercessory works on cognitive biases and improvements on individual decisions were further explicated in the Nobel prize winning research works of Thaler and Sunstein (2003) on libertarian paternalism (Battaglio Jr et al., 2019). This ideal is built on the assumption that the welfare and wellbeing of individuals can be influenced by government via policies and actions that do not impose material costs on peoples' choices (Hansen, 2016). As a sub discipline of the Behavioural economics and finance, the concepts of libertarian paternalism and nudging are often used synonymously (Hansen, 2016; Quigley, 2018).

Nudging can be described as any aspect of a choice architecture that alters people's behaviour in a predictable way without forbidding any options or changing their economic incentives significantly (Battaglio Jr et al., 2019). The central purpose of nudging is to influence behaviours among individuals, who upon intentional reflection of the outcome, would have made different decisions for themselves (Hansen, 2016). The use of nudges is not mandatory and does not infringe on the choice making ability of an individual decision maker (Quigley, 2018). Hence, for an intervention to count as a nudge, it is necessary that such intervention is neither costly, nor difficult to avoid in the decision making process (Battaglio Jr et al., 2019).

Within the context of financial decision making, the bounded rationality theory posits that cognitive limitations often result in poor financial decisions through incomplete and wrong information, lack of incentives and financial incapability of individuals to make rational financial decisions (Yang, 2016; Costa et al., 2019). Hence, as an antidote, proponents of this school of thought believe that empowering individuals' financial capability through exposure to financial knowledge and experiences can improve their cognitive abilities and chances of making better financial decisions (Hernandez and Ortega, 2019; Statman, 2019).

2.3.3 The capability approach

Robeyns (2017) asserts that the core idea of the capability approach is built on normative questions of what individuals are capable of and what lives they are able to lead on their own. These questions resonate among individuals, scholars and policy makers within the contexts of social justice, developmental progress and stability (Robeyns, 2017; Culp, 2019).

As a theoretical idea, the capability approach was first ideated by Amartya Sen in 1979 at the Tanner Lecture upon the completion of his studies on the equality of what financial capability is (Sen, 1980). As conceptualised by Sen (1980), the capability approach can be described as an intellectual discipline that gives a central role to the evaluation of a person's achievements and freedoms in terms of his or her actual ability to do different things a person has reason to value doing or being. The conceptualization of capability approach from Sen's perspective highlights that capability approach is concerned with critical aspects of individuals' lives such as their health, education and support they enjoy from social interactions (Sen, 2018). This perspective further covers what people can do such as being able to work, raise a family, travel and be engaged politically. While this perspective was referred to as individuals' "notions of freedom", Sen further asserts that the foundational blocks of the capability approach can be clarified under the broad themes (Robeyns, 2016):

- Evaluation of the wellbeing of individuals in a society (Robeyns, 2016).
- Constructs and assessment of social arrangements within the society (Robeyns, 2016).
- Formulation of policies and proposals necessary for societal social transformation (Robeyns, 2016).

Over the past decades, the capability approach has evolved tremendously with wide applications in diverse fields such as health, education, welfare policies etc, via the questioning of what people are able to do, and what kind of persons they are able to be? While the question of what people can do and be relates to their capabilities, the latter question of what they are achieving in terms of beings and doings relates to their functioning (Robeyns, 2017; Sen, 2018).

In further extensive works on the capability approach, Nussbaum (2000) from a social interaction context, considered the capability approach as it affect human welfare and the development of individuals' quality of life. This approach to capability adopted a combined perspective which considered both internal capacity and external conditions that are necessary to improve the quality of individuals' lives. She further highlighted internal capabilities to consist of individuals' skill set, ability, and knowledge in societal decision-making contexts. More so, the external capabilities comprise of opportunities that are available to such individuals in the form of access to institutions, products, and services in societal decision-making contexts (Sherraden et al., 2015).

Nussbaum (2011) shared the idea of creating capabilities in his book via the creation of a theoretical framework of basic social justice. While acknowledging the works of Amartya Sen, Nussbaum (2011) posited that the capability approach is such that it should have a defined perspective to comparative quality of life assessment as well as theorising about basic social justice. She further asserts that improving the quality of life for individuals requires wise policy decisions as well as individuals' personal commitment for improvement. Thus, Nussbaum (2011) posited a general capability approach based on the following principles:

- A general capability approach that treats individuals as an end (Nussbaum, 2016).
- A general capability approach that focuses on freedom and choice rather than achievements (Nussbaum, 2016).

- A general capability approach that adopts a pluralistic perspective on values (Nussbaum, 2016).
- A general capability approach that is deeply concerned about social justice (Nussbaum, 2016).
- A general capability approach that ascribes an urgent task to the government (Nussbaum, 2016).

Within the context of financial capability (knowledge, behaviour, attitude & self efficacy), Sherraden et al. (2015) asserts that the financial capability i.e financial knowledge, financial behaviour, financial attitude & financial self efficacy of an individual is largely influenced by both individual responsibility and structural paradigms. This is because the capability approach considers the role of environmental factors that influence the financial capability of an individual (Sherraden et al., 2018). This perspective clarifies that an individual's financial capability is a combination of both his ability to make sound financial decisions, as well as being opportuned to make financial decisions that align with their best interests (Sherraden et al., 2018; Luan et al., 2019).

Thus, financially capable individuals are not such that possess the requisite financial literacy but are also availed with the necessary financial opportunities and access to financial products and services. These opportunities and access further contribute to individual's functioning, chances as well as overall financial wellbeing (Sherraden et al., 2015; Sen, 2018; Sherraden et al., 2018).

2.4 Empirical Literature Review

2.4.1 Relevant Literatures on Financial capability

In recent times, the construct of financial capability has been receiving recognition globally. This recognition has sparked academic curiosities among several scholars and researchers. Although prior studies such as Johnson and Sherraden (2007) have emphasised borderline distinctions between financial literacy and financial capability, these studies have stressed that financial capability extends beyond mere attainment of financial knowledge and skills. This extension further stretches to the gaining of access to financial products and services and financial self-efficacy (Johnson and Sherraden, 2007; Farrell et al., 2016).

According to headline findings of the 2012 South African Financial Service Board baseline study, it was recorded that South Africans generally have poor levels of financial literacy and capability in decision making (Struwig et al., 2012). The findings, which were based on a survey of 2992 South Africans across diverse socio demographic groups, revealed drastically low financial literacy levels in all assessed areas of financial literacy, across all age groups.

While emphasising the necessity of financial capability among adults, Batty et al. (2015), posit that the introduction of financial topics at a formative age plays a vital role in the latter is financial capability in adulthood. This proposition was based on study evidence that showed a link between being taught financial topics at an early age and improvements in later financial attitude, behaviour and overall financial capability. Drever et al. (2015) assert that the basic foundations of financial wellbeing in adult life are grounded in the formative and youthful years, where individuals' financial knowledge, skills, attitudes, and personality are formed.

In a survey conducted by Loke et al. (2015), it was reported that financial educational programmes can improve youth financial capability. This was found in the survey done among 275 economically disadvantaged youths who had participated in the *MyPath Savings Initiative*. As a creative youth development and employment programme, the *MyPath Savings Initiative* encouraged first income earners to save through traditional financial products. The survey further noted that the improvements in financial capability are independent of several socio demographic factors such as age, household income, gender, race, etc. (Loke et al., 2015).

Also, Sherraden and Grinstein-Weiss (2015) believe that the drivers of financial capability in the future generations can be attributed to three crucially trending issues namely: early exposure of young adults to high-stake financial decisions such as student loans, increasing complexity in daily financial decision making and financial struggles among many families. Using the U.S 2012 financial capability Survey, Xiao and O'Neill (2016) inquired on on possible effects of financial education on financial capability. It was found that Americans consumers who are financially knowledgeable exhibited better financial capability. Their discovery further affirms findings from similar studies (Thapa, 2015; Bharucha, 2019; Noreen et al., 2019; Rothwell and Wu, 2019).

Other existing studies have evidence that financial knowledge is not significant in consumer financial decisions (Tang et al., 2015; Friedline and West, 2016).

Similarly, an investigation done by Rousseau and Venter (2016) on the financial insight, financial behaviour and financial literacy of 560 consumers in Port Elizabeth found that majority of the respondents were most informed in the areas of financial control and financial discipline, and least informed in financial planning. The survey which utilised a convenience sampling discovered that employment level, age, gender, marital status and education have a significant influence on financial behaviour and insights. It was further concluded that poor financial behaviour and lack of insight is widespread among young unemployed single South Africans with a low level of education.

More so, Rothwell et al. (2016) considered financial capability of low-income families in Canada, via their financial knowledge, financial self-efficacy and savings outcomes. While the study found no link between financial knowledge and savings outcome, it was evidenced that financial self-efficacy serves as a mediator between financial knowledge and savings outcomes as well as retirement planning behaviour among Canadians.

While considering financial capability from the perspective of wealth inequalities, Lusardi et al. (2017) assert that financial knowledge is a key factor in the issue of wealth inequality among Americans. This is due to the proficiencies it offers individuals to optimize limited financial resources efficiently amidst competing demands. Their study further revealed that financial knowledge as a singular factor, contributes over thirty percent in inequalities of retirement wealth among Americans.

Likewise, Gibson et al. (2017) stressed that financial education should be taught at different stages of life in order to improve financial capability. Their study emphasised the effects of contextual factors such as mental maturity, timing and applicability of financial education, changes in financial products and services. The researchers suggest that these factors can have relative impacts in both short term and long-term financial behaviours, as it was found that some individuals that did not attend college but were exposed to financial education at high school exhibited positive financial behaviour.

Furthermore, Idris et al. (2017) inquired on the relationship between financial literacy and financial distress among Malaysian young adults. The survey, which was done among 430 young adults, found that although there is a positive link between the level of financial literacy and corresponding financial distress, this relationship is weak. The study further highlights moderate levels of financial literacy and distress among the individuals and suggests that organisations should provide financial literacy trainings for their employees to ensure their productivity.

In a national survey on financial capability of Canadians, Rothwell and Wu (2017) sought to examine the impacts of financial education on financial knowledge and the self-efficacy of Canadians. The study reported that financial education is a determinant for both financial knowledge and self-efficacy, Xiao and Porto (2017) while considering interceding components of financial literacy, financial behaviour and financial capability, a positive relationship was found between financial education, financial satisfaction and overall financial capability. In a national financial capability study, Kim et al. (2019) investigates the role of financial knowledge in the lives of millennials. The study suggest that millennials had lower levels of both objective and perceived financial knowledge in comparison to other household categories.

The study of Strömbäck et al. (2017) evidenced a positive relationship between self-control and financial behaviour as individuals with better self-control behaviours tend to be better prepared for unexpected expenses as a result of regular savings. Also, from the perspective of financial behaviour, it was further observed that individuals' level of financial capability is largely dependent on several factors such as self-control, biographical features, financial wellbeing, as well as their financial behaviour (Strömbäck et al., 2017).

Similarly, Angus (2018) found a positive link between financial counselling, financial capability training and financial literacy of vulnerable students at a major university in Australia. The study found inadequate income as the leading cause of students' vulnerability amongst other factors such as budgeting, family issues, university fees, housing etc. Evidence from the financial counselling and financial capability trainings suggest that students' financial literacy can be improved when partnered casework practises.

Also, Caplan et al. (2018) considered financial capability as a form of social investment, further conceptualising the term to comprise of an individual's ability to act in terms of knowledge, skills, confidence and motivation, as well as the individual's opportunity to act in terms of access to quality financial products, services, and policies that foster financial wellbeing.

However, Nanziri and Leibbrandt (2018) measured and profiled the financial literacy of South Africans via the dimensions of financial knowledge and financial capability using the Principal Component Analysis (PCA) to create a composite index. The researchers utilised the FinScope surveys datasets from 2005-2009 which related to domains of access to and use of financial services. The study found the combined financial literacy index of South African to be low at 48.4%. under the financial capability category, while only 19% claimed to spend wisely, 47% agreed to have regular savings behaviour and 21% spoke about not being worried about saving enough for retirement. It was further suggested that Behavioural finance methods can be used to improve the financial capability and overall financial literacy of South Africans.

The research works of Czar (2019) researched on the impact of leaving home on the financial capability of young New Zealanders between the ages of 18 to 25 years. The study found that leaving home impacts the financial capability of young New Zealanders significantly, as their financial experiences improves their financial behaviours and financial confidence levels. However, the study further found that this transitional financial experience does not impact on the financial knowledge of the young New Zealanders.

Likewise, French et al. (2019) sought to understand how effective mobile phone apps can be used to improve the financial capability of working-class individuals in Northern Ireland. The study which considered individuals between the ages of 16 and 65 years via a Randomised Control Trial (RCT) noted statistically significant improvements among the treatment cohort that utilised the mobile phone apps. The improvements were evident in areas of financial knowledge, understanding, attitudes and motivations. The study suggests that mobile apps can be effective tools to keep track of income and expense as well as improve financial self-efficacy which are crucial to improving financial capability.

From the perspective of Millennials, Lee et al. (2019) examined financial capability among American millennials between the ages of 18 and 34 years from the perspective of having emergency savings. The study which surveyed 7399 adults across all American states found statistically significant differences in the average levels of financial capability and financial knowledge between female and male millennials. While male millennials were found to be more financially knowledgeable and capable, female millennials were less financially knowledgeable and capable. Hence, the study suggested that male millennials are more disposed to have emergency savings than female millennials.

Similarly, Luukkanen and Uusitalo (2019) considered financial capability among youths and young individuals in Finland. The study, which sought to avail a novel framework for improving financial capability, suggested dimensions of empowerment through both context change and cognition change. While the empowerment via context change relates to improving contextual conditions to facilitate financial capability, empowerment through cognition change relates to the content of financial capability being taught to individuals.

In a doctoral study, Nomlala (2019) considered the financial capability, financial socialization and professional skills of accounting students in the KwaZulu-Natal province. This was done via a survey across three universities within the province that assessed the students' capabilities using self-administered questionnaires. While findings from the regression analysis evidenced low levels of financial knowledge among the students, high levels of financial attitudes, behaviours and numeracy skills were noted among the students. Further overall findings suggested that accounting students in KwaZulu-Natal province are financially capable of making optimal financial decisions.

Also, Potocki (2019) considered financial capability among low income earners in rural parts of Poland. The study examined financial capability under the broad themes of financial literacy, financial behaviour and financial inclusion. Findings from the study revealed that majority of the individuals have high levels of financial behaviour, regardless of their financial literacy. Hence, the study suggested that financial capability of low-income earners is not necessarily influenced by financial literacy levels, rather by social and environmental factors.

The research works of Ramana and Muduli (2019) investigated the financial capability of street vendors in the Bhubaneswar region of India, via four broad perspectives of: financial management vis-à-vis current financial needs, financial knowledge, management of financial products and future financial planning. Whilst the study found that vendors who reside in areas where there is a bank are more financially capable than those that do not, several other socio demographic factors were further found to impact statistically on the financial capability of the street vendors. Amongst these were education, age, business experience and daily income, which were all found to be statistically significant on financial capability.

From the African context, Schützeichel (2019) inquired on the financial capability of Kenyans based on their financial access and financial literacy of financial products and services. The inquiry, which was done via a national survey, revealed a positive relationship between access to financial products and services and the financial wellbeing of Kenyans. The study further advocates the need of basic financial knowledge, as it informs Kenyans in making better financial decisions.

Although, Wagner and Walstad (2019) assert that financial education tends to have more positive and stronger effect on both students and working individuals' long-term financial behaviours and capability. This was based on the analysis of the 2015 National Financial Capability Study (NFCS) data. The study further revealed due to the less timely feedback of financial education, that the adverse effect of financial illiteracy is often only realised later in life. This is evident as lack of saving enough for retirement cannot be immediately corrected in the long term.

The afore discussed empirical literatures have considered the phenomenon of financial capability succinctly across regions, countries and intercontinental contexts.

2.4.2 Financial capability and socio demographic characteristics

2.4.2.1 Empirical studies on gender and financial capability

Although this study evidences that gender does not have a significant impact on financial capability, some studies have however found that females across all age groups in several countries are less financially capable than males (Bucher-Koenen et al., 2017; Chen and Garand, 2018).

Notably, Farrell et al. (2016) considered the significance of financial self-efficacy in explaining personal finance behaviours among Australian women. The study which defined financial self-efficacy as self-assuredness, or self-belief in one’s own financial capabilities, found that women with higher levels of financial self-efficacy to be more self-assured and self-confident in their financial management capacities as evident in their leaning towards savings and investment products, as well as a less likelihood to holding debt related products.

Similarly, Bucher-Koenen et al. (2017) explored the differences between the financial literacy of men and women across all age groups. The study considered financial literacy from the perspective of basic and advanced financial knowledge among respondents. Based on the results of the study, it was revealed that women across all age groups exhibited less financial knowledge and capabilities to understand financial concepts than men. The authors further advocated for the improvement of women’s financial capability due to the high incidence of single mothers and widows in society.

Furthermore, Chen and Garand (2018) sought to analyse the gender gap disparity in financial knowledge between male and females via disentangling the effects of “don’t knows” and “incorrect responses” in the National Financial Capability Studies data set. Based on the results from the multinomial logistic regression, it was found that while men are likely to offer correct responses randomly, women are more likely to offer incorrect responses and “don’t know” responses randomly. The findings of the study suggest that the psychological processes of females in risk acceptance and financial confidence could be critical underlying drivers of the gender gap in the financial capability between genders.

Likewise, Lee et al. (2019) examined financial capability among American millennials between the ages of 18 and 34 years from the perspective of having emergency savings. The study which surveyed 7399 adults across all American states found statistically significant differences in the average levels of financial capability and financial knowledge between female and male millennials. While male millennials were found to be more financially knowledgeable and capable, female millennials were less financially knowledgeable and capable. Hence, the study suggested that male millennials are more disposed to have emergency savings than female millennials.

2.4.2.2 Empirical studies on Age and financial capability

Batty et al. (2015), posit that the introduction of financial topics at a formative age plays a vital role in later financial capability in adulthood. This proposition was based on study evidence that showed a link between being taught financial topics at an early age and improvements in later financial attitude, behaviour, and overall financial capability. Drever et al. (2015) assert that the basic foundations of financial wellbeing in adult life are grounded in the formative and youthful years, where individuals' financial knowledge, skills, attitudes, and personality are formed.

Further studies by Xiao et al. (2015), found that individuals between the ages of 18 and 24 years have the least level of financial capability in the United States. This was based on the National financial capability survey that measured the financial capability of Americans across all age groups, using the five main variables of: subjective financial literacy, objective financial literacy, desirable financial behaviour, perceived financial capability, and financial capability index.

Other studies by West and Friedline (2016) considered the financial capability of lower income millennials in Canada via a national financial capability survey. The survey which was conducted among millennials between the ages of 18 and 34 years, noted that majority of the millennials exhibit good financial behaviours in areas of being able to afford unforeseen expenses, having emergency savings and less exposure to debt.

The research study of Henager and Cude (2016) examined the link between financial literacy and financial behaviours across several age groups of 18 and above 65 years. The study sought to understand how objective financial knowledge, financial confidence and subjective financial management ability impacts both short term and long-term financial behaviours. While long term financial behaviours were considered as retirement saving and investing behaviour, short term financial behaviours related to spending and emergency savings behaviours. Findings from the study revealed that financial confidence strongly influences both short- and long-term financial behaviour among young people, while objective financial knowledge impacts long term financial behaviour among the older age cohorts.

However, Finke et al. (2017) asserted that age does not affect confidence in financial decision making. This was found in a study that surveyed individuals aged 60 and above, with a motive to understand if financial literacy declines with age. While the study noted that financial knowledge begins to decline at age 60, it was suggested that the decline in financial literacy can be attributed to natural weakening in cognition and intelligence that comes with old age.

2.4.2.3 Empirical studies on Profession and financial capability

The study of Agarwal et al. (2017) sought to know how working in the finance profession affects mortgage delinquency among Americans. This inquiry was based on the analysis of a dataset provided by a leading subprime lender in America. The findings of the study suggest that finance professionals exhibited lesser chances of becoming mortgage delinquents.

Another study by Parrey and Rather (2018) sought to understand how financial knowledge of entrepreneur in Agri-allied professions influence their financial decision. The survey which considered 200 respondents and farmers in India via a structured questionnaire and random sampling technique, analysed the collected data via a structural equation model. Findings of the study suggested that the poor level of financial knowledge among the farmers was a precursor of their financial behaviour. Hence this study showed poor levels of financial capability among non-finance professionals as well as a link between financial knowledge and financial behaviours.

Although, Abdullah et al. (2019) evaluated the relationship between financial literacy and financial wellbeing among young Malaysian workers. The survey, which was conducted among 508 Malaysian workers in both public and private sectors, measured their financial literacy from the perspective of their attitude towards money as well as their debt management capabilities. The Pearson's correlation analysis revealed that there is a positive relationship between financial literacy and financial wellbeing of the workers. While the study found attitude towards money as a precursor to financial wellbeing among young workers, financial education in workplace was further suggested by the study as a positive intervention to improve financial wellbeing of the workers.

In another environmental context, Jana et al. (2019) inquired on the determinants of financial literacy and its impact on the use of financial services among workers in the unorganised sector of west Bengal in India. The primary study surveyed 400 unorganised workers via a questionnaire that considered their economic and socio-economic variables as well as their financial literacy and use of financial services.

Results from the logistic regression revealed that the profession of workers as well as their income and educational qualifications are the determinants of their financial literacy. Further findings evidenced that the level of financial literacy, income and place of domiciliation are impactful in their use of financial services.

Also, Mizell et al. (2019) conducted a survey among fourth year medical students to observe the effects of inculcating an elective 20 hour personal finance and business module in their medical curriculum. This survey was conducted both at the start and finish of the course in order to observe and evaluate changes among students who enrolled in the course. Findings from the study evidenced significant improvements among medical students who took the course, as this was shown in both their financial knowledge and positive financial behaviours.

2.4.2.4 Empirical studies on Professional Experience and financial capability

The research works of Nano and Mema (2017) sought to assess if work experience impacts in the financial behaviour of students in Albania. This was done via a structured questionnaire that was administered to 637 students across 7 universities in Albania. The gathered data was further analysed using One way welch ANOVA, which evidences that work experience of students has a positive impact in the improvement of financial behaviour of the students.

Likewise, the studies of Bačová et al. (2017) assessed the influence of professional experience in financial planning for retirement among young professionals in Slovakia. The study surveyed a total of 527 professionals in both finance and non-finance professions via a domain of specific personal belief assessment which evaluated all important aspects of financial planning for retirement. Findings from the study showed that finance professionals exhibited better understanding of financial retirement as compared to non-finance professionals. Hence, the study concludes that having professional experience in finance plays a significant role in financial capability and the making of long term optimal financial decisions such as pension.

Also, the study of Clark et al. (2017) examined the financial literacy and retirement plan behaviour among employees of the federal reserve system in America. The study assessed the employee retirement plan behaviour via three measures of: participation in defined contribution plan, percentage of income contributed towards retirement contribution and portfolio allocations by the employees. Findings from the analysis of the data evidenced that employees of the federal reserve system exhibited a high level of financial literacy in comparison to the general population. This was evidenced in their retirement plan behaviour. Further findings from the study revealed that financially savvy and financially experienced employees showed even higher levels of financial literacy and better retirement plan behaviours.

More so, Rai et al. (2019) considered the financial literacy of 394 working women in India using a structural equation modelling approach to evaluate the strongest predictors of financial literacy. using this approach, financial literacy was assessed under broad components of financial knowledge, financial behaviour and financial attitude. Findings from the study suggests that financial behaviour and financial attitude are the strongest predictors of financial literacy and capability among working women in India.

In a non-conventional study, Ramana and Muduli (2019) inquired on the financial capability of street vendors in the Bhubaneswar region of India. The study assessed the financial capability of the vendors via the four broad perspectives of: financial management vis-à-vis current financial needs, financial knowledge, management of financial products and future financial planning. Whilst the study found that vendors who reside in areas where there is a bank are more financially capable than those that do not, several other socio demographic factors were further found to impact the financial capability of the street vendors statistically. Amongst these were education, age, business experience and daily income, which were all found to impact statistically significant on financial capability.

2.4.2.5 Empirical studies on Education and financial capability

In a study done in South Asia, Thapa (2015) considered financial literacy and the capability of youths and university students in Nepal from the perspective of their basic financial knowledge. This was done via a survey approach that sampled 436 college students with the aim of understanding the impact of their demographics, educational and personality characteristics on their financial literacy and capability. The findings of the study suggest that education has a positive influence on the financial literacy and capability of the youth in Nepal.

In another Asian study, Bharucha (2019) examined the factors that influence financial literacy among Indian youths. This assessment was done via a survey of 650 youths in India using a structured questionnaire and was further analysed via both descriptive and multivariate analysis. Based on the analysis, it was found that factors such as being a parent, having an educational degree and being employed are correlated to being financially literate and capable of making optimal financial decisions.

Similarly, Noreen et al. (2019) studied the impact of financial education on the financial capability of young adults in the Punjab region of Pakistan. The study surveyed 400 students that were enrolled in business administration and other disciplines at both undergraduate and postgraduate levels. Based on the findings of the survey, it was revealed that students who studied business and commerce related disciplines were more financially capable than those in other disciplines. The study further affirmed that financial education index has a statistically significant relationship with financial capability measures such as financial knowledge and financial attitudes. However, it was noted that financial education does not impact on financial behaviour.

However, in North America, Rothwell and Wu (2019) explored the relationship between financial education and cognitive outcomes such as financial knowledge and financial self-efficacy in Canada. The was done via a two-wave national survey on the financial capability of Canadians. The findings of the survey showed that individuals across all age group and gender who had participated in taking a financial education course, exhibited higher financial capability than those who had not taken the financial education course. This financial capability was measured via objective financial knowledge, subjective financial knowledge, and financial self-efficacy.

2.4.2.6 Empirical studies on Race and financial capability

Due to the mixed research outcomes on the impact of financial education, Loke et al. (2015) sought to know if the financial capability will offer a more credible alternative. This was done via the assessment of the impact of the MyPath Savings programme on 275 economically disadvantaged youths who are earning income for the first time. Notable among several findings of the study was that the financial capability of youth is not determined by their age.

Likewise, Anong (2016) inquired into the fundamental causes of financial issues among African Americans. This was based on the consistent statistical trends and literatures that have reported that African Americans have lower levels of financial capability vis-à-vis other racial diversities in the United states of America. Financial capability within this context was defined as financial knowledge, financial outcomes, and financial attitudes of African Americans. The study asserts that a plausible explanation for the persistent poor levels of financial capability among African Americans could resonate with the theory of cumulative disadvantage.

The study of Peach and Yuan (2017) found race as a predictor of financial capability among undergraduate students in a small private university in America. The study which surveyed 449 undergraduate students comprised of racial groups of White, Hispanic and other cohorts. The study revealed that individuals within the 'White' racial cohort are more likely to be financially capable in terms of setting their monthly credit card debts than other racial categories.

Furthermore, Gill and Bhattacharya (2017) considered the interaction effect between financial knowledge and financial attitudes among low income Hispanic families in America. This interaction was measured based on having emergency savings, savings for college, savings for retirement, investment accounts, as well as no ownership among low income Hispanic American families. The study found a statistically significant link between financial knowledge, having diverse savings products as well as owning an investment account. It was further noted that financial attitude is less impactful, except when combined with financial knowledge.

Also, Nam et al. (2019) assessed the financial capability and economic security among low income older Asian immigrants via a qualitative research design that utilised in-depth interviews. The interviews which were conducted among 13 Asian immigrants, noted poor levels of financial capability and economic insecurity among the older Asian generation. The majority of participants indicated that their low-income levels, mistrust for banks and financial exclusions, as reasons for not improving their financial knowledge and management skills. However, the researchers found financial losses as a result of their financial incapability and further advocate for financial interventions to improve their financial capability and economic security.

2.4.2.7 Empirical studies on Income and financial capability

The research study of Arifin (2017) considered the influence of financial knowledge, control, and income on financial behaviours of working-class individuals in Jakarta communities of Indonesia. The study utilised a purposive sampling technique to survey 503 working Indonesians using questionnaires that were administered via several media. The collated data was further analysed using a Structural Equation Modelling (Epstein et al.). The findings of the study revealed a positive significant relationship between financial knowledge, locus of control and financial behaviour. However, no significant relationship was found between income and financial behaviour of working-class Indonesians.

From an American context, Lee et al. (2019) examined financial capability among American millennials between the ages of 18 and 34 years from the perspective of having emergency savings. The study which surveyed 7399 adults across all American states found income to be statistically significant as millennials who earned higher income are more financially capable and prepared for emergency occurrences than those who earned less.

More so, in a European study, Potocki (2019) considered financial capability among low income earners in rural parts of Poland. The study examined financial capability under broad themes of financial literacy, financial behaviour and financial inclusion. Findings from the study revealed that majority of the individuals have high levels of financial behaviour regardless of their financial literacy. Hence, the study suggested that financial capability of low-income earners is not necessarily influenced by financial literacy levels, rather by social and environmental factors.

Furthermore, Riitsalu and Murakas (2019) sought to know the predictors of financial wellbeing among individuals in Estonia. This was done by looking at the impact of subjective financial knowledge, prudent behaviour and income on the financial wellbeing of Estonians. The results from the regression analysis indicated that there is a stronger relationship between subjective financial knowledge and financial wellbeing in comparison with objective financial knowledge. The study further noted that there is a positive correlation between the income levels of Estonians and their financial wellbeing.

Thus, these reviewed studies have explicitly discussed linkages between socio demographic attributes and financial capability of individuals across spheres of regions, borders, and continents.

2.5 Summary

This chapter considered the definitions of financial capability, its relative theories and relevant empirical literatures. Several conceptualizations of financial capability were considered. Relative theories such as the Behavioural finance theory, Bounded rationality as well as the Capability approach were considered. In addition, necessary local and international empirical literatures were reviewed and further considered vis-à-vis socio demographic perspectives.

The next chapter of this theses considers the research methodology of the study.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter of the research study provides the necessary information on the research methodology used to achieve the objectives of the study. Herein, different types of research approach are discussed, and justification are be given for the selection. The research methods used for the study are also clarified and justified, discussing the research instrument, the questionnaire, the pilot study, and the reliability and validity of the research instruments. Furthermore, clarification and justification regarding the research sample, data collection, data analysis and ethical considerations are provided and simplified by means of tables where necessary.

3.2 The Research Approach

Creswell (2014) asserts that the primary goal of the research methodology is to assist the researcher to devise the broad framework necessary to accomplish the research aim and objectives that informs the research study. Furthermore, Sekaran and Bougie (2016), notes that the successful achievement of the research objectives is based on the adopted research approach. This approach, is the research blueprint that clearly explains how the research data will be collected, measured and eventually analysed, based on predetermined research questions (Kumar, 2014).

Although a researcher may choose a quantitative research approach, qualitative research approach or mixed research approach for collection of data, measurement, and subsequent data analysis, the researcher's choice is largely influenced by the type of research questions which the research study purports to answer (Creswell, 2014). Precedent on the nature of the questions and objectives of this research study, the researcher deems it most appropriate to adopt a quantitative research approach. This choice is further motivated and justified by research approaches adopted in previous similar studies.

3.2.1 Qualitative Approach
Walliman (2017) asserts that Qualitative research depends on careful definition and use of words, development of concepts and variables, as well as the plotting of interrelationships between these. Bell et al. (2018) further expatiates that qualitative research can be described as a research strategy that utilises words rather than numbers in the collection and analysis of data. The authors further opined the distinctive attributes of qualitative approach to include:

- Predominant use of an inductive approach in evaluating the relationship between theory and research.
- A view of social reality as constantly changing with human creativity.
- Negate the practises and ideals of natural scientific model and positivism, particularly with respect to how individuals perceive the world.

3.2.2 Mixed method Approach
The mixed method research approach as conceptualised by Molina-Azorin (2016), mixed methods is the fusion and integration of both qualitative and quantitative research methods within a specific research study. While there have been debates around the characterization and application of mixed methods, Shannon-Baker (2016) asserts that the definitive criterion of mixed methods research approach relates to its approaches to data and methods rather than the signalling of a singular worldview. The core premise and central purpose of using a mixed method approach is based on the perspective that it provides a better understanding of research problems and complex phenomena via the use of both qualitative and quantitative approaches (Molina-Azorin, 2016).

This research study adopts a quantitative research approach which was deemed most appropriate to achieve the broad aim of the research study, as well as the highlighted research objectives and research questions sought to be achieved by the researcher.

3.2.3 Quantitative approach
The quantitative approach within a scientific research context has been conceptualised as an attempt to explain a phenomena by collecting numerical (quantitative) data that are further analysed using mathematical and statistical methods of analysis (Sekaran and Bougie, 2016). Quantitative study designs are

specific, well structured, and have been tested for their validity and reliability; hence can be explicitly defined and recognized (Kumar, 2019).

3.3 Definitive characteristics of Quantitative Approach

Kumar (2019) discusses the defining characteristics of quantitative approach in contrast to both qualitative and mixed method approaches as:

- The quantitative research approach utilises a well-structured and predetermined criterion for measuring and classifying the gathered information to ensure and maintain accuracy of the research study.
- The quantitative research approach provides more clarity and distinction on the data collection methods and sampling techniques used in the research study.
- When using a quantitative research approach, the respondent concordance is not a pivotal prerequisite to the success of the research study, as it is assumed to be achieved by circulating or sharing the findings with those who participated in the study.
- The quantitative research approach is characterised by enough detail for it to be replicated for verification and reassurance.

3.4 Pros and Cons of Quantitative Approach

Queirós et al. (2017) highlight several advantages and disadvantages of quantitative research methods in accordance to several types as discussed above. The advantages of the quantitative research approach offer several merits, for instance

The use of field experiments as a type of quantitative approach avails the conduct of research within natural settings. This technique further improves the conduct of large-scale research and eliminates the possibility of research subjects being influenced by the research process. Also, the use of simulations is advantageous in the study of complex systems within a short time frames and further helps to test, analyse and proffer answers to “what-if “questions and scenarios.

Furthermore, the use of surveys as a form of quantitative approach offers a cost effective and time efficient research process in terms of data collection and analysis. Furthermore, surveys are effective in reaching a large-scale audience or research subjects, notable in high level of sample representativeness and free from researcher’s bias and subjectivity. In addition to this, the use of correlational study as a form of quantitative research method offers the benefit of exploring a lot of information and different domains. This further enhances the calculation of the degree of association between variables in a scientific manner with no manipulation of behaviour required. The use of multivariate analysis as a form of quantitative research method offers the possibility of using several statistical tests and techniques. This further allows for the exploration of a lot of information and different domains as well as technical rigour in the research process.

Despite the succinct discussions on the advantages of using quantitative research methods, Queirós et al. (2017) further highlights several disadvantages of quantitative research methods. Firstly, with reference to field experiments, it is difficult to control variables and replicate the same conditions of the study under quantitative research methods. Moreso, the use of field experiments often creates ethical concerns to be addressed by the researcher. Also, drawing from the use of simulation methods, quantitative approach could require in-depth technical knowledge on model building. While this is often time consuming and expensive, it further demands the use of bespoke software and hardware that may require further training and “upskilling”.

The use of surveys as a type of quantitative research method often result in a high dependence of the reliability of the data on the quality of the answers and on the survey’s structure. In addition, this method is characterised by a rigid structure as emotions of respondents are not captured. Furthermore, the use of correlational research method as a quantitative research approach can result in a situation whereby no direct cause and effect can be established, or an instance of not providing a conclusive reason for the existence of a correlation between two variables. Lastly, with reference to multivariate analysis, quantitative approach involves complex techniques which may require the use of specialised statistical software.

Subsequently, under the adopted quantitative approach, this research study further adopts a survey research method which is deemed most suitable to achieve the broad aim of the research study, as well as the highlighted research objectives and research questions sought to be achieved and answered via this research study.

3.5 The Survey method

Surveys as a type of quantitative approach is a technique that gives the researcher the opportunity to collect data from the research subjects directly via a set of questions that are structured in an orderly manner (Queirós et al., 2017). The survey method is one of the most frequently used methods of data collection, as it facilitates information gathering about a specific subject matter via the development of questions that reflect the perspectives, opinions, and behavioural tendencies of a group of people (Queirós et al., 2017).

As discussed above, the survey method is one of the most frequently used method of data collection, as it facilitates information gathering about a specific subject matter via the development of questions that reflect the perspectives, opinions and Behavioural tendencies of a group of people (Queirós et al., 2017).

Surveys as a type of quantitative approach is a technique that gives the researcher the opportunity to collect data from the research subjects directly via a set of questions that are structured in an orderly manner (Queirós et al., 2017). This merit of the survey technique makes them particularly useful and beneficial when conducting a quantitative research study.

Several scholars such as Creswell (2014) and Queirós et al. (2017) have asserted that the survey method forms the core of a quantitative research framework, and can be dissected into three broad categories, namely:

- *The procedures for collecting of the research data.*
- *The data analysis methods for the research study.*
- *The data interpretation for the research study.*

3.5.1 The data collection procedure for the research study

Sekaran and Bougie (2016) asserts that the success of a research process that adopts a quantitative approach is vastly dependent on the data collection process. Thus, it is crucial to emphasise that the successful accomplishment of the research objectives of this study is dependent on the large amount of primary quantitative data as well as the data collection procedure for the study.

3.5.2 The Research population

The population for this study comprises of all practising professionals who are resident in KwaZulu-Natal. In the context of this study, the focus group consists of KwaZulu-Natal resident professionals who practise and/or work as a practitioner in the fields of Accounting, Medicine, Engineering and Law, as defined by their governing or regulatory professional body. Hence, the designated cohort for this study comprises of:

- ✓ *Chartered Accountants*

- ✓ *Medical Doctors/ Medical Interns*
- ✓ *Registered Engineers*
- ✓ *Attorneys and Practising Lawyers*

3.6 The Research sampling & sample size

3.6.1 Sampling

To get the necessary data from the defined cohort, this research study will adopt a simple random sampling technique as well as a convenience sampling technique. While the simple random sampling technique is a probabilistic technique that gives all population elements in the group an equal and fair chance of selection, convenience sampling technique is a form of non-probabilistic sampling method that tends to recruit elements of the target population that are easily accessible by the researcher. The utilisation of this combined sampling techniques is necessary to further eliminate any potential bias that might arise in any of the sampling methods.

In the context of this study, while a simple random sampling technique was used as the probability technique, the researcher adopted a convenience sampling approach as a form of non-probability technique to recruit respondents who are practising professionals, for the study. These techniques were practicalised by the use of both online survey that were sent to the professional societies considered for the study, as well as physical distribution of the questionnaires, at conferences, symposiums, workshops etc.

Furthermore, the choice of practising professionals in KwaZulu-Natal is motivated by the pressing concern to evaluate the levels of their financial capability and consciousness in financial decision making. This concern is further motivated by the intention to provide novel scientific and empirical knowledge on whether professional discipline is crucial to financial capability and financial decision making.

3.6.2 Sample size

While there are currently no accurate figures on the total number of practising professionals in KwaZulu-Natal, the available current statistics provides only for current membership figures at a national level. This statistic does not specify if the provided figures are memberships for professionals that are dead, alive or have emigrated from South Africa.

Based on these figures, the target population estimates for KwaZulu-Natal province were determined as an average of the nine provinces. Hence, the sample size for the research study were estimated at a confidence level of 95% with an error rate of 4%. The table below further illustrates the computations of current membership in South Africa, estimated membership for KwaZulu-Natal, Sample size estimate at 95%CL as well as sample size formula:

$$\frac{\dfrac{z^2 \times p(1-p)}{e^2}}{1 + \left(\dfrac{z^2 \times p(1-p)}{e^2 N}\right)}$$

Table 3. 1 Population distribution per Profession

Practising Professionals	**Current membership in South Africa**	**Estimated membership for KZN**
Chartered Accountants	44000	4889
Practising Lawyers	27000	3000
Professional Engineers	45806	5010
Medical Doctors	46091	5122
Total	**162897**	**18021**

Source: Constructed by researcher based on 2018 estimates provided by professional bodies.

Based on the estimated population size of 18021 practising professionals in KwaZulu-Natal, the calculated sample size at 95% confidence level and 4% confidence interval is 581.

3.7 Research instrument: The questionnaire

To collect the needed data effectively, the researcher utilised critically designed questionnaire as the research instrument for this research study. Several studies have noted that questionnaires are effective tools for survey research methods which rely on primary data to achieve pre-set objectives and the broad aim of the research study.

Primary data is a key factor when conducting descriptive and exploratory studies that often require deductive and inductive reasoning perspectives to analyse complex research phenomena. Hence, the cruciality of a questionnaire as an effective research tool cannot be overemphasised.

As a popular term in research and academia, several scholars and researchers have made attempts to conceptualise and define a questionnaire effectively. In recent years, Sekaran and Bougie (2016) define a questionnaire as a predetermined list of written questions which requires respondents to make choices among a certain range of delineated alternatives. From the perspective of an interview schedule, Brace (2018) describes a questionnaire as a written guide which may contain both open and close ended questions as in semi-structured interviews or a defined set of questions as in structured interviews. Kumar (2019) describes a questionnaire as a list of written questions that are presented to a group of respondents for answers.

The adoption of an effective questionnaire as a research tool for surveys offers amongst other benefits a no or low cost option of getting the best and most objective responses from respondents (Brace, 2018). This is because questionnaires offer a high degree of representativeness and protect anonymity of respondents who prefer to air their objective views via a discreet and confidential channel of communication (Kumar, 2019). Also, questionnaires are notable and most suitable for surveys that requires high degree of representativeness across varying time and distance frames. This is possible as questionnaires can be administered via diverse forms and channels such as: physical and collective administration, administration in public places, administration via mails, and online platforms (Brace, 2018; Kumar, 2019).

In this research study, the primary data required to achieve the broad research aim and highlighted research objectives were obtained using a holistic approach. The questionnaires for this research study were administered to the practising professionals via physical/collective contact, in public places, and on online platforms. The physical/collective administration, this administration was done at their places of work, seminars, and professional workshops. Also, the researcher had to make arrangements to meet with some practising professionals in public places and other points of engagements where necessary.

Furthermore, due to time and distance constraints, the researcher further utilised online (survey monkey) to research practising professionals who are often busy and in far areas of KwaZulu-Natal province. The data for this research study was collected over a three-month period from August 2019 to October 2019.

3.7.1 Questionnaire content and construction

Brace (2018) emphasises that the content and structure of a questionnaire are pivotal to its effectiveness and success as a research instrument. A questionnaire can be structured or semi structured. This is determined by the form to which the questions (content) are being constructed and the underlying purpose for their inclusion in the overall questionnaire (Bell et al., 2018).

While a semi structured questionnaire comprises of both open ended questions and close ended questions, a structured questionnaire comprises of only closed ended questions (Brace, 2018). Open ended questions simply are questions that do not provide the respondent with a set of answers and alternatives, rather are left "open" for the respondent to express their answers, thoughts, and opinions, to questions being asked (Sekaran and Bougie, 2016; Kumar, 2019).
On the other hand, a closed ended question offers the respondent a set of possible answers and alternatives that the respondent is expected to choose from, like which one best aligns with their agreement as a response to the question being asked by the researcher (Sekaran and Bougie, 2016; Kumar, 2019).

Within the context of this research study, the researcher utilised a structured questionnaire, otherwise known as a close-ended questionnaire. This kind of questionnaire consists of closed ended questions that avail participants with a choice of responses to choose from (Kumar, 2019). More so, the questionnaire for this research study was designed to cover comprehensively the core areas of financial capability, which are pertinent to achieving the overall aim of the research study as well as its pre-set research objectives.

Hence, in the construction of the questionnaire for this study, the researcher deemed it necessary to adapt some questions from previous financial capability research studies. A breakdown of the questionnaire structure as well as the references for questions adapted is shown in the table below:

Table 3. 2 Structure of the Questionnaire

Category	Number of Questions	Question Intent	Source
A	Seven (7)	Socio demographics	Developed by researcher
B	Sixteen (16)	Financial Knowledge	Mandell (2004) and Nomlala (2019)
C	Ten (10)	Financial Behaviour	Moore (2003), Mandell (2004) and Nomlala (2019)
D	Thirteen (13)	Financial Attitude	Moore (2003), Mandell (2004) and Nomlala (2019)
E	Six (6)	Financial Self Efficacy	Lown, J.M. (2011)

Source: Researcher's construction

<u>3.7.1.1 Socio-demographics Questions</u>

Section A of the research questionnaire consists of socio demographic data questions for each respondent. This section covers bio data information such as gender, age, profession, professional experience, highest level of education, race, and monthly (gross) allowance. Herein, the information solicited from the practising professionals are crucial to analyse descriptively the financial capability of the professionals across their socio demographic metrics. This descriptive analysis is necessary to visualise varying levels of commonalities and disparities in financial capability among the practising professionals in KwaZulu-Natal.

<u>3.7.1.2 Financial Knowledge Questions</u>

Section B of the research questionnaire consists of basic financial knowledge questions for each respondent, which a financially knowledgeable person is expected to know. The purpose of this section is to test how financially knowledgeable the practising professionals in KwaZulu-Natal are based on financial knowledge questions used in similar previous studies, which have been contextualised for this research study. Financial knowledge of the professionals was tested in key areas such as: inflation, interest rate, financial products, risk and returns, financial mathematics, budgeting, and credit card dynamics. Herein, the information solicited from the practising professionals are crucial to analyse descriptively the financial knowledge of the professionals across their socio demographic metrics. This descriptive analysis is necessary to visualise varying levels of commonalities and disparities in financial knowledge among the practising professionals in KwaZulu-Natal.

3.7.1.3 Financial Behaviour Questions

Section C of the research questionnaire consists of financial behaviour questions for each respondent. This section comprises financial behaviour statements that seeks to determine positive and negative behaviours exhibited among the practising professionals using a 4-point Likert scale measurement. The purpose of this section is to evaluate habits and Behavioural dispositions of the practising professionals in KwaZulu-Natal which are based on financial behaviour statements used in similar previous studies and have been contextualised for this research study. Financial Behavioural dispositions of the professionals were tested in key areas such as: spending, savings, investing, price consciousness, budgeting behaviour, and credit card dynamics. Herein, the information solicited from the practising professionals are crucial to analyse descriptively the financial behaviour of the professionals across their socio demographic metrics. This descriptive analysis is necessary to visualise varying levels of commonalities and disparities in financial behaviours among the practising professionals in KwaZulu-Natal.

3.7.1.4 Financial Attitude Questions

Section D of the research questionnaire consists of financial attitude questions for each respondent, that seek to determine positive and negative attitudes displayed among the practising professionals using a 4-point Likert scale measurement. The purpose of this section is to evaluate whether lifestyles and attitudinal dispositions of the practising professionals in KwaZulu-Natal are based on financial behaviour statements used in similar previous studies, which have been contextualised for this research study. Financial attitudinal dispositions of the professionals were tested in key areas such as: financial control, spending attitudes, savings attitudes, retirement planning, financial consciousness and budgeting attitudes. Herein, the information solicited from the practising professionals are crucial to analyse descriptively the financial attitudes of the professionals across their socio demographic metrics. This descriptive analysis is necessary to visualise varying levels of commonalities and disparities in financial attitudes among the practising professionals in KwaZulu-Natal.

3.7.1.5 Financial Self Efficacy Questions

Section E of the research questionnaire consists of financial self-efficacy questions for each respondent, that seek to determine positive and negative self-efficacy displayed among the practising professionals using a 4-point Likert scale measurement. The purpose of this section is to evaluate whether mentality and self-efficacy of the practising professionals in KwaZulu-Natal are based on financial self-efficacy statements used in similar previous studies, which have been contextualised for this research study. Financial self-efficacy of the professionals was tested in key areas such as: financial confidence, financial mentality, value, and beliefs in financial planning. Herein, the information solicited from the practising professionals are crucial to analyse descriptively the financial self-efficacy of the professionals across their socio demographic metrics. This descriptive analysis is necessary to visualise varying levels of commonalities and disparities in financial self-efficacy among the practising professionals in KwaZulu-Natal.

3.7.2 Measurement: The Likert Scale

The Likert scale is popular measurement scale that is often utilised in survey research studies in the fields of social sciences, humanities, health, management studies, and other disciplines (Awang et al., 2016). This measurement scale assesses attitudes and behaviours of respondents who are required to rate the extent to which they agree or disagree with a specific statement, item or question on the questionnaire scale presented to them (Awang et al., 2016; Kumar, 2019).

Also referred to as the summated rating scale, the Likert scale is a type of attitudinal scale that is distinct for its popularity and wide adoption among other psychometric measurement scales used in quantitative and survey studies. This is due primarily to its simplicity, ease of use, and efficiency in coding of large number of responses for data analysis (Kumar, 2019).

In this research study context, the researcher adopted a Likert scale measurement for most of the sections contained in the questionnaires. Except for sections A (socio demographics) and B (financial knowledge), a 4-point Likert scale measurement was used to measure questions in Section C (Financial behaviour), Section D (Financial attitude) and Section E (Financial self-efficacy).

3.7.3 Pretesting Questionnaire: The Pilot study

Upon the construction of the questionnaire, the researcher further conducted a pilot study to test the “fitness for use” of the questionnaire for the study. This pilot study was done exclusive of the practising professionals, among a random mixed group of working individuals and students, who are not practising professionals within the defined target population for the study. This random mixed group consisted of thirty-four working individuals and students, who were sampled over a period of two weeks.

Upon the collection of data from the pilot study group, the collected data was filtered, coded, and captured, using the MS Excel software. Subsequently, the captured data was exported to SPSS software to perform reliability and validity tests for the questionnaire, based on the pilot study.

3.7.4 Reliability and Validity

Heale and Twycross (2015) conceptualised reliability test as the consistency of a measure which is characterised by its homogeneity (internal consistency), stability, and equivalence. Homogeneity (internal consistency) refers to the extent to which all the questions or items on a questionnaire scale measure a specific construct. Stability refers to the consistency of the outcomes after repetitive testing of the research instrument. Equivalence refers to the consistency among responses of multiple users of a research instrument, or among alternate forms of a research instrument.

On the other hand, Heale and Twycross (2015) defines validity test as the extent to which a concept is measured accurately in a quantitative study. The three main forms of validity are content validity, construct validity, and criterion validity. Content validity, this refers to the extent to which a research instrument or questionnaire measures accurately all aspects of a construct, while construct validity refers to the extent to which the research instrument or questionnaire measures the intended construct. Lastly, criterion validity refers to the extent to which a research instrument or questionnaire relates to other instruments or questionnaires which measure the same variables.

In this study, the reliability and the internal consistency of the study's instrument was tested using the Cronbach Alpha Coefficient test. In other words, this study uses the Cronbach Alpha Coefficient test to determine the degree of consistency of the study's instrument. Therefore, with a total mean (M) score of 74.74 and a standard deviation (SD) of 10.562, the Cronbach reliability test of all the items (from section B to section E, excluding section A for biodata questions) was determined at 0.727. In addition, the ANOVA test results on all the 45 items used for the Cronbach reliability test was statistically significant, where ($F = 414.377$; $P = 0.000$). This is an indication that 72.7% of all the 44 items' variance score are reliable and consistent variance. This also suggests that the Cronbach reliability test results of this study also exceeded the classical and conventional Cronbach's Alpha coefficient value. Therefore, the higher value in this study reflects a higher internal consistency of the variance.

3.8 Data analysis methods for the research study

Upon collecting the necessary data for this study, appropriate research analytical methods were utilised for the analysis of the collated data using the Statistical Package for Social Science (SPSS) version 25 software. The collated data was firstly filtered and purified. Thereafter, a coding structure was devised to codify responses to each question. Then, each questionnaire was captured according to the coding structure, using the Microsoft Excel spreadsheet software and finally, the coded data was further analysed using the appropriate statistical tools. The analysis of the coded data using the necessary applicable statistical methods, is crucial to assessing the financial capability of the practising professionals under the broad themes of financial knowledge, financial behaviour, financial attitude, and financial self-efficacy.

Based on the inquiry of this study, research adopted appropriate analytical research methods for data description and inference. The descriptive research methods were utilised to describe the data characteristics, while inferential analytical methods were used to make inferences about the population based on the data collected from the sample.

Hence, to achieve the broad aim of the research study and the highlighted research objectives successfully, the appropriate statistical and analytical methods adopted as per the research objectives and questions are shown in the table below and subsequently discussed systematically:

Table 3. 3 Research Analytical Methods

Objective	**Question**	**Methods**
Objective 1	Question 1	Descriptive statistics using measures of central tendency such as mean averages, medians etc to compute the aggregate financial capability.
Objective 2	Question 2	Factor Analysis- Exploratory Factor Analysis (EFA) and Principal Component Analysis (PCA)
Objective 3	Question 3	ANOVA/ T-test will be used to determine significance and variations among the four different professional practises.
Objective 4	Question 4	Regression Analysis

Source: Researcher's construction

3.8.1 Descriptive Analytical Method

3.8.1.1 Tables, Graphs and charts: Socio demographic information and Research Objective One

This research objective seeks to ascertain levels of financial knowledge, financial behaviour, financial attitude, as well as financial self-efficacy of the practising professionals in KwaZulu-Natal.

To achieve this, the researcher utilised descriptive analytical tools to compute the mean and median averages (in aggregate and comparatives) of the financial capability of the practising professionals. The determined results were presented clearly using tables, graphs and charts, to illustrate graphically results of analysis. Prior to this, the socio demographic information of the respondents was also visualised using tables, graphs, and charts to present clearly commonalities and disparities among the socio demographic metrics of the practising professionals in KwaZulu-Natal.

3.8.1.2 Factor Analysis: Research Objective Two

This research objective seeks to determine the factors that impact on the financial capability of practising professionals in KwaZulu-Natal.

To determine the factors that influence the financial capability of practising professionals in KwaZulu-Natal, the researcher employed both Exploratory Factor Analysis (EFA) and Principal Component Analysis (PCA) methods to measure and present the relationships on the factors that influence the financial capability of KwaZulu-Natal practising professionals. In this study, EFA was used to measure the relationship among the variables by understanding the constructs of the underlying variables, while PCA was used to simply derive fewer variables that provide the same information that is found in the larger set of variables.

Therefore, to identify the factor structure of the determinants that influence the financial capability of practising professionals in KwaZulu-Natal province, a Principal Component Analysis (PCA) was conducted on all 45 items with an orthogonal rotation (Varimax). Using an Eigenvalue parallel analysis, four factors were extracted from this study, which were based on the Eigenvalue (Eigenvalue of >2). Here, the Eigenvalues related to each factor represents the variance explained by each linear component, which are also displayed in terms of the percentage of variance explained.

Hence, the factor analysis was appropriate in this study as a means of identifying the determinants of financial capability among practising professionals in KwaZulu-Natal province. In addition, the Kaiser-Meyer-Olkin (KMO) value and the Bartlett's assessment of sphericity value in this study, further allowed the application of factor analysis which indicates that relationships between the items were sufficiently large for PCA.

As an analytical method, the core purpose of Principal Component Analysis (PCA) in this research study is:

- *To visualise the correlations between the factors and the original variables.*
- *To reduce the original variables into a lower number of orthogonal (non-correlated) synthesised factors (variables).*
- *To visualise proximities among mathematical units.*

3.8.1.3 T-test and ANOVA: Research Objective Three

This research objective seeks to analyse comparatively the financial capability of finance related professionals vis-à-vis the financial capability of non-finance related professionals in KwaZulu-Natal province of South Africa.

To achieve this objective, the researcher adopted tests for variation and significance among means using T-test and ANOVA to understand the extent of variation in the financial capability levels of finance related professionals vis-à-vis the financial capability levels of non-finance related professionals. Hence, the practising professionals were categorised into subgroups via a median percentage of correct responses.

3.8.1.4 Regression Analysis: Research Objective Four

This research objective seeks to assess the influence of socio demographic variables (gender, age, profession, professional experience in practise, highest educational qualification, race, & monthly income) on the financial capability levels of practising professionals in KwaZulu-Natal.

To evaluate the impact of socio demographic variables (gender, age, profession, professional experience in practise, highest educational qualification, race, & monthly income) on the financial capability levels of practising professionals in KwaZulu-Natal, the researcher utilised a multiple linear regression analysis to estimate the relationship between the dependent variable and its gender, age, profession, professional experience in practise, highest educational qualification, race, & monthly income). Herein, the core purpose was to determine how well the respondents' socio demographic profile could predict their financial capability. Furthermore, a scatterplot analysis will be performed to demonstrate the relationship between the predictors (gender, age, profession, professional experience in practise, highest educational qualification, race, & monthly income) and the dependent variable (Financial capability). Subsequently, both correlation and regression analysis will be done using a regression model to identify causal relationships between the predictors and the outcome variable:

$$\hat{y} = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \ldots\ldots\ldots \beta_n X_n + ei$$

Thus, in the context of this study, the regression model for this study can be expressed as:

$\hat{y} = \beta_0 + \beta_1$(GENDER) + β_2(AGE) + β_3(PROFESSION) + β_4(PROFESSIONAL EXPERIENCE) + β_5(EDUCATIONAL QUALIFICATION) + β_6(RACE) + β_7(MONTHLY INCOME) + ei

Where:

$\hat{Y}$ = dependent variable (Financial capability of the professionals).

β_0 = y-intercept (constant term).

β_1 = the slope of coefficients for each explanatory variable.

GENDER = the explanatory variable for X_1

AGE = the explanatory variable for X_2

PROFESSION = the explanatory variable for X_3

PROFESSIONAL EXPERIENCE = the explanatory variable for X_4

EDUCATIONAL QUALIFICATION = the explanatory variable for X_5

RACE = the explanatory variable for X_6

MONTHLY INCOME = the explanatory variable for X_7

ei = the model's error term.

3.9 Data Interpretation

Upon analysis, the analysed data were presented and further interpreted using descriptive statistical tools such as tables, graphs, charts and commentaries. The interpretation of the findings of the study is necessary to evaluate the convergence and divergence in the relationships among observed variables. Thereafter, results of the findings were discussed within the perspective of the research objectives of the study.

3.10 Ethical consideration

Before the commencement of the research study, the researcher obtained ethical clearance from the University Research Ethics Office to conduct the proposed research study. This University Research Ethics Committee reviewed and approved the research procedures, research methods, and research instrument proposed by the researcher for the study. Where necessary, the researcher was requested to make clarifications and changes in alignment to strict adherence to the university Research Ethics guidelines and best practises.

Thereafter, the researcher obtained a gate keeper's letters from the several professional bodies, to enable the researcher to gain access to available seminars, conferences and professional workshops organized for the practising professionals during the period of data collection.

3.11 Summary

This chapter of the research study provided the necessary framework for the research methodology which was used to achieve the objectives of the study. Herein, different types of research approaches were discussed, and justification was made for the selection of a quantitative research approach. Furthermore, the research methods used for the study were also clarified and justified, with in-depth discussions on the research instrument, the questionnaire, the pilot study, and the reliability and validity of the research instruments. Finally, clarification and justification regarding the research sample, data collection, data analysis, and ethical considerations, were provided and simplified by means of tables where necessary.

The next chapter of this research study consists of the data analysis, interpretation, and discussion of the research findings.

CHAPTER FOUR

DATA ANALYSIS, INTERPRETATION AND DISCUSSION OF FINDINGS

4.1 Introduction

The prime purpose of this study is to assess the financial capability of practising professionals in the KwaZulu-Natal province. Consequently, this chapter present the analysis and interpretation of the data as well as the discussion of findings vis-à-vis other relevant studies. A questionnaire was employed as the source of data collection. Thereafter, the researcher used the SPSS software (Version 25.0) to capture, clean, organize, and ultimately analyse the collated data. For which, the researcher used both descriptive and inferential statistical matrices to demonstrate the findings from this study.

While the descriptive statistical techniques were used to measure the central tendencies and dispersion within the variables, the inferential statistical techniques were used to demonstrate the relationships between variables and to evaluate the degree of association, probability, and the nature of relationships amongst variables in the dataset. As a result, the researcher used the traditional p-value of <0.05 for all inferential tests computed in this study.

4.2 Sample Realisation

For the purpose of this study, the sample was realised using both probability and non-probability techniques. While a simple random sampling technique was used as the probability technique, the researcher adopted a convenience sampling approach as a form of non-probability technique to recruit respondents who are practising professionals, for the study. These techniques were practicalised by the use of both online survey that were sent to the professional societies considered for the study, as well as physical distribution of the questionnaires, at conferences, symposiums, workshops etc. The adoption of a holistic approach in the sample realisation was due to the low response rate received via the online survey (survey monkey).

Despite the several challenges faced by the researcher in the realisation of the sample, a total number of 242 practising professionals were surveyed for the purpose of this study. This was based on a sample size of 581, and a response rate of 41.6%.

These practising professionals were recruited based on current professional membership in the professions of Accounting, Engineering, Law and Medicine, and are currently practising in the KwaZulu-Natal province of South Africa. Although a larger number of this cohort had participated in the study, however, some of these practising professionals were not deemed fit for the study due to incomplete responses to the questions contained in the utilised questionnaire.

4.3 Reliability Statistics

In this study, the reliability and the internal consistency of the study's instrument was tested using the Cronbach Alpha Coefficient test. In other words, this study uses the Cronbach Alpha Coefficient test to determine the degree of consistency of the study's instrument. Therefore, with a total mean (M) score of 74.74 and a standard deviation (SD) of 10.562, the Cronbach reliability test of all the items (from section B to section E, excluding section A for biodata questions) was determined at 0.727. In addition, the ANOVA test results on all the 44 items used for the Cronbach reliability test was statistically significant, where ($F = 414.377$; $P = 0.000$). This is an indication that 72.7% of all the 44 items' variance score are reliable and consistent variance. This also suggests that the Cronbach reliability test result of this study also exceeded the classical and conventional Cronbach's Alpha coefficient value. Therefore, the higher value in this study reflects a higher internal consistency of the variance.

4.4 DESCRIPTIVE STATISTICS

4.4.1 Respondents' Biodata Assessment

The biodata of this study consists of respondents' gender, age, profession, years of professional experience, highest level of education, racial or ethnic identity, and monthly income from all sources.

4.4.1.1 Respondents' Gender

With a mean (M) value of 1.47 and a standard deviation (SD) of 0.500, the findings from this study revealed that most of the respondents (n=129; 53.3%) were female as compared to their (n= 113; 46.7%) male counterparts.

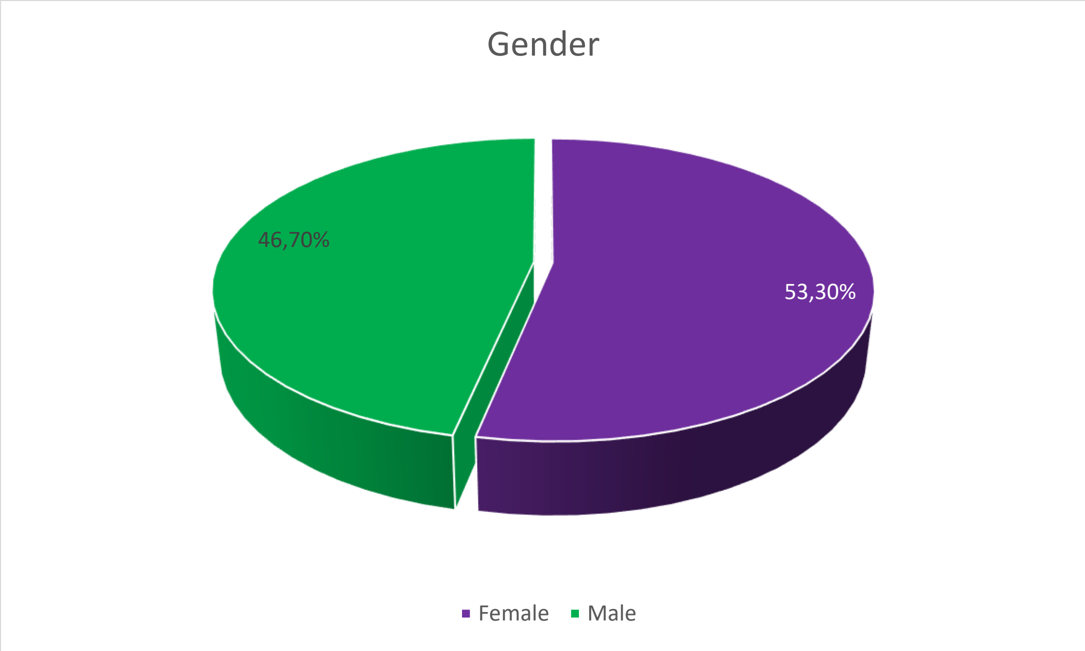

Figure 4. 1: Respondents' Gender

Source: SPSS Output

4.4.1.2 Respondents' age

The descriptive computation of this study suggested that almost half of the respondents (n= 113; 46.7%) were within the ages of 29 and 39 years old. The findings also revealed that about (n=70; 28.9%) of the respondents were within the ages of 18 and 28 years old, where (M= 2.01 and SD = 0.835). See **Figure 4.2** for a detailed presentation of the results.

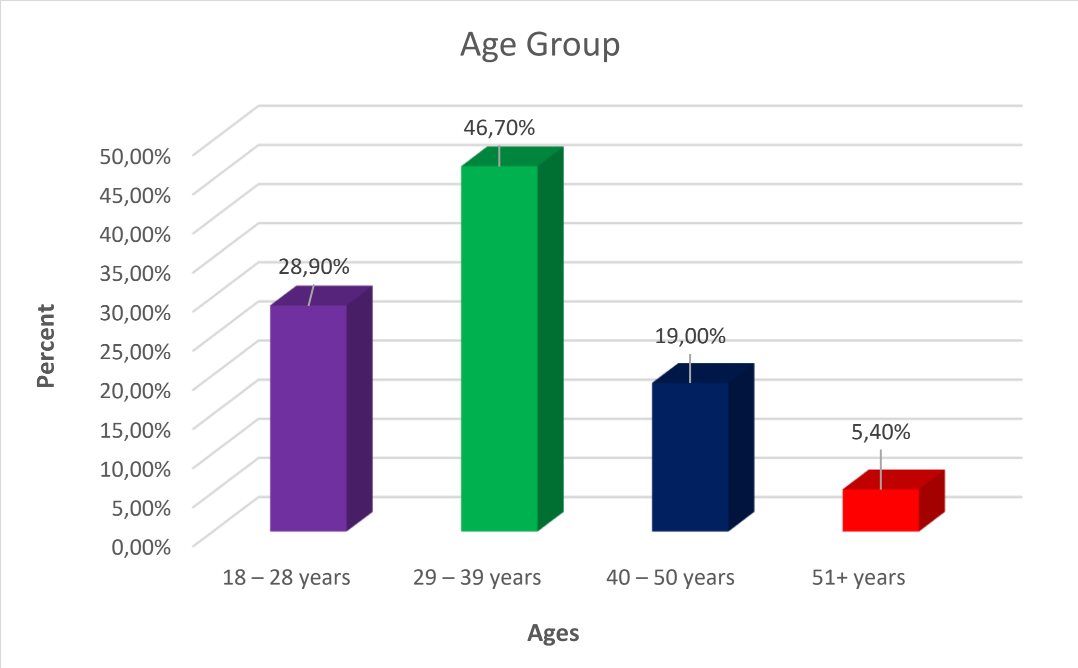

Figure 4. 2: Respondents' age

Source: SPSS Output

<u>*4.4.1.3 Respondents' profession*</u>

With M = 2.29 and SD = 1.129, it says here that about (n=82; 33.9%) of the respondents are medical doctors. While about (n=57; 23.6%) and (n=56; 23.1%) of the respondents are accountants and lawyers, respectively, the descriptive results from this study revealed that about (n=47; 19.4%) of the respondents are engineers.

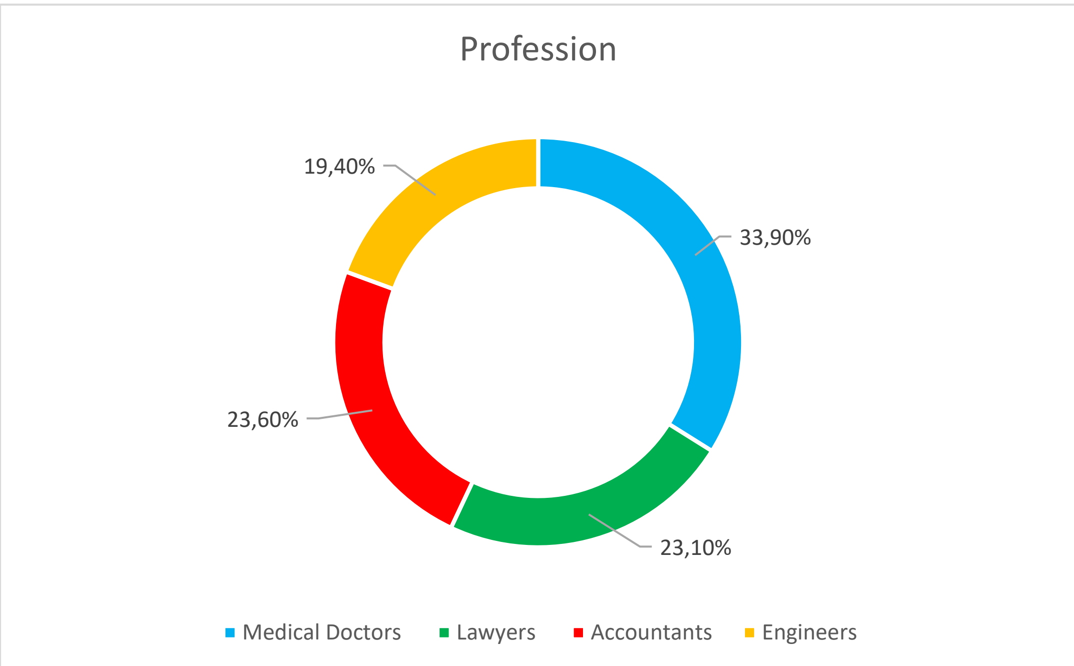

Figure 4. 3: Respondents' profession

Source: SPSS Output

Thereafter, on determining respondents' profession based on finance professionals and non-finance professionals, the descriptive computation of this study revealed that most of the respondents (n=185; 76.4%) are non-finance professionals as compared to the (n=57; 23.6%) of those who are finance professionals.

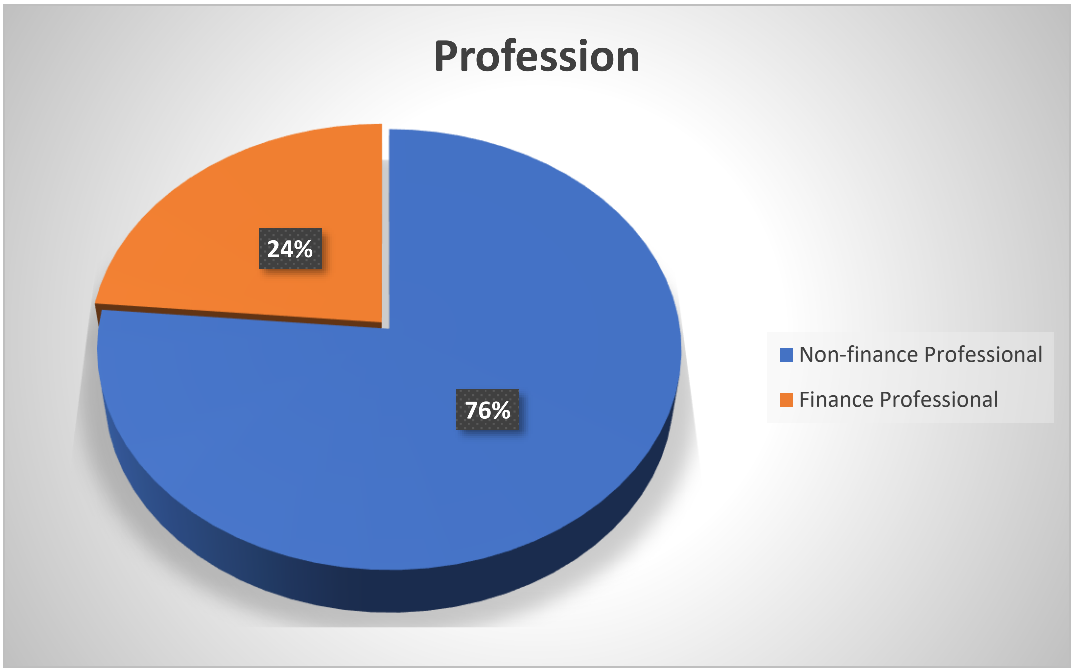

Figure 4. 4: Respondents' profession based on finance and non-finance profession

Source: SPSS Output

4.4.1.4 Respondents' years of professional experience

With a mean score of 2.38 and a standard deviation of 1.129; the findings from this study revealed that about (n=74; 30.6%) of the respondents reported having a working experience of between 4 to 8 years within their reported profession. The study also revealed that about (n=67; 27.7%) of the respondents reported that they have a working experience of ≤3 years, while about (n=58; 24.0%) of the respondents reported that they have a working experience of ≥13 years. See **Figure 4.5** below for a detail representation of the results.

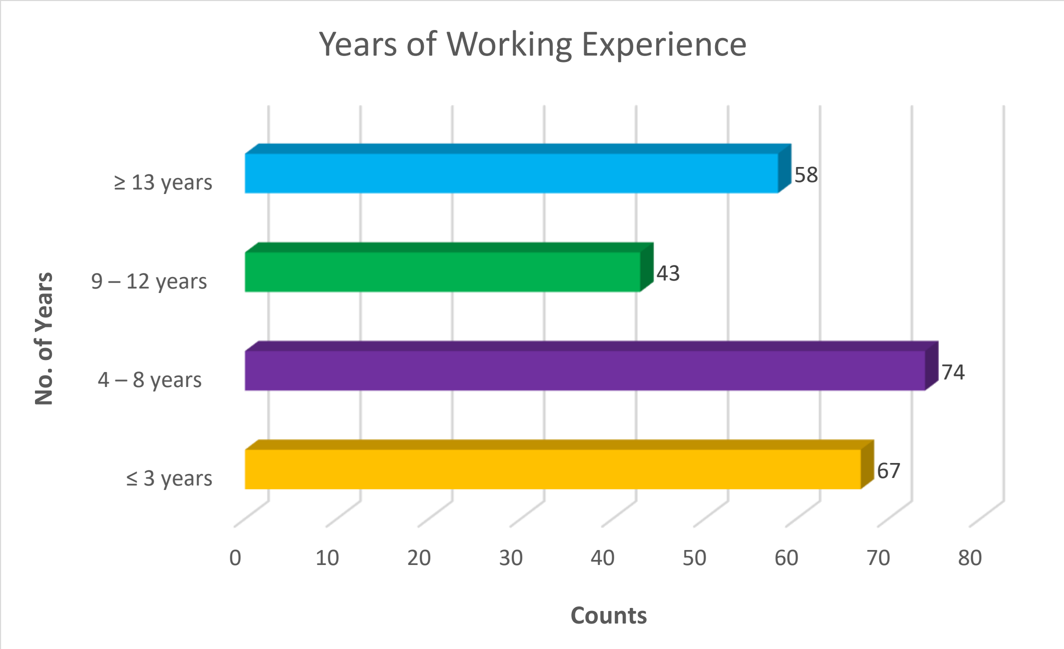

Figure 4. 5: **Respondents' years of working experience**

Source: SPSS Output

4.4.1.5 Respondents' highest level of education

The descriptive results of this study suggested that most of the respondents (n= 133; 55.0%) reported having a Degree as their highest qualification. More so, about (n=92; 38.0%) of the respondents reported that they have a Postgraduate qualification as their highest qualification. While about (n=15; 6.2%) of the respondents reported having a Master's degree as their highest qualification, only about (n=2; 0.8%) of the respondents reported that they have a PhD as their highest qualification. (M= 2.38; SD= 0.652).

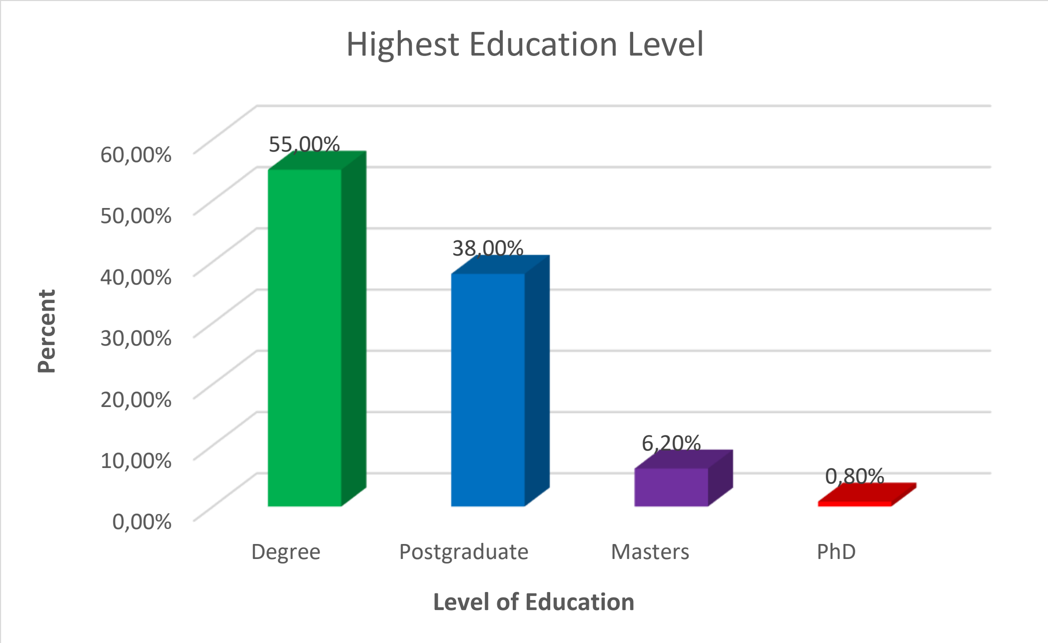

Figure 4. 6: **Respondents' level of highest education**

Source: SPSS Output

4.4.1.6 Respondents' racial or ethnic affiliation

With a mean score of 1.80 and a standard deviation of 0.988, it says here that most of the respondents in this study identified themselves as Africans/Blacks, with (n=125; 51.7%). More so, about (n=53; 21.9%) of the respondents in this study identified themselves as Whites, while about (n=48; 19.8%) of the respondents identified themselves as Indians. However, only about (n=16; 6.6%) of the respondents identified themselves as Coloureds/Others.

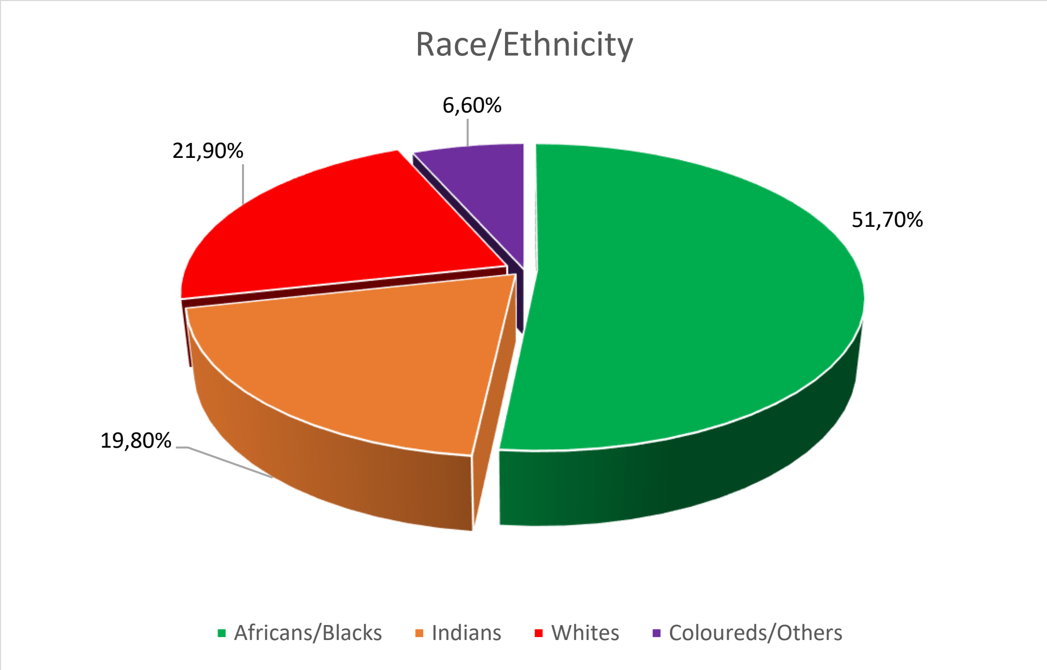

Figure 4. 7: **Respondents' racial/ethnic identity**

Source: SPSS Output

4.4.1.7 Respondents' total monthly income

With M = 3.69 and SD = 1.674, the descriptive computation of this study suggested that about (n=51; 21.1%) of the respondents reported that they have a total monthly income of ≥ R50 001, while about (n=50; 20.7%) of the respondents reported that they have a total monthly income of between R20 001 and R30 000. More so, while about (n=37; 15.3%) of the respondents reported having a total monthly income of between R10 001 and R20 000, about (n=35; 14.5%) of the study sample reported that they have a total monthly income of between R40 001 and R50 000. However, about (n=29; 12.0%) of the study sample reported having a total monthly income of ≤ R10 000.

See **Figure 4.8** below for a detail presentation of the results.

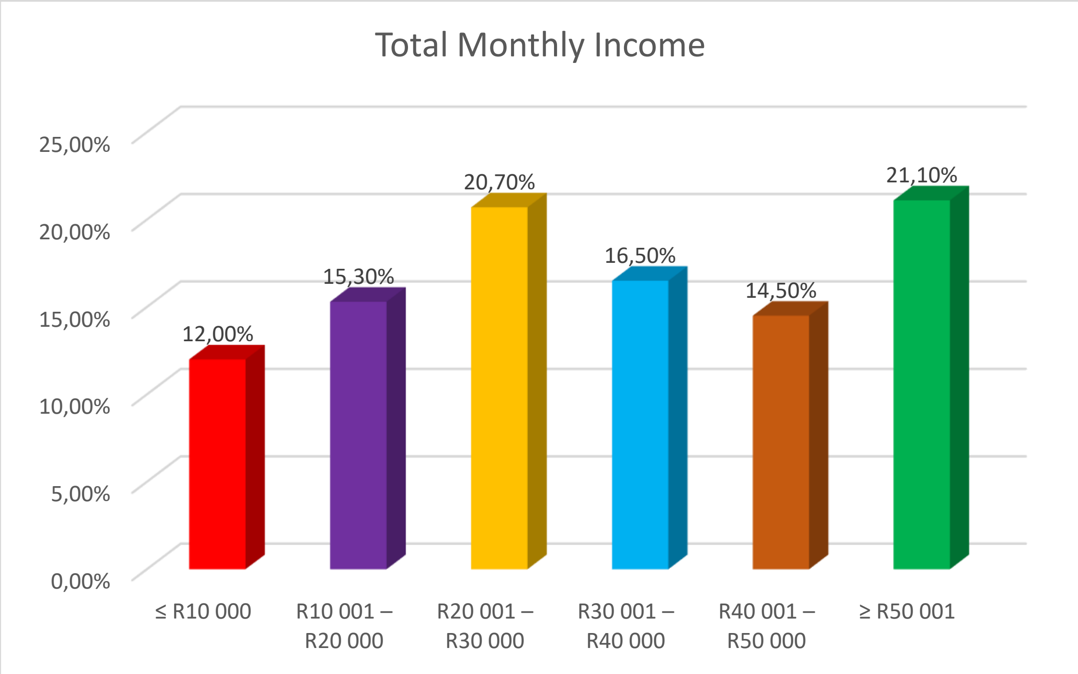

Figure 4. 8: **Respondents' total monthly income**

Source: SPSS Output

4.4.2 Assessment of Respondents'' Financial Capability (knowledge, behaviour, attitude & self efficacy)

In this study, respondents' financial capability comprises of financial knowledge, financial behaviour, financial attitude, and financial self-efficacy. Here, the researcher uses these four elements of financial capability to determine the level of financial capability among practising professionals in KwaZulu-Natal.

4.4.2.1 Respondents' Financial Knowledge Assessments

To determine respondents' Financial Knowledge, the researcher uses 16 questions to measure respondents' financial knowledge. Here, the 16 questions were structured in a multiple-choice format, which has only one correct answer to the question being asked. Thus, for each correct answer chosen by a respondent, the respondent scored 1 point and otherwise 0 point. This eventually aids the researcher to measure the total financial knowledge performance of each respondent and ultimately determine the levels of financial capability (knowledge, behaviour, attitude & self efficacy) among practising professionals in KwaZulu-Natal province. Thereafter, each respondent's total performance was estimated to determine whether the respondent is financially knowledgeable or has poor financial knowledge. Therefore, a total score of ≥ 50% shows that a respondent is financially knowledgeable or has good financial knowledge, while a score of ≤ 49% shows that a respondent has poor financial knowledge.

Therefore, the descriptive computation of this study revealed that out of the 16 questions that were asked to determine respondents' financial knowledge, most of the respondents were found to have poor financial knowledge, with scores that range between 53.3% and 81.0%. See **Table 4.1** below for a detailed representation of the results herein.

Table 4. 1: **Respondents' financial knowledge**

Financial knowledge questions	Knowledgeable	Poorly Knowledgeable	Mean	Standard deviation
Question 1	55 (22.7%)	187 (77.3%)	0.23	.420
Question 2	58 (24.0%)	184 (76.0%)	0.24	.428
Question 3	49 (20.2%)	193 (79.8%)	0.20	.403
Question 4	102 (42.1%)	140 (57.9%)	0.42	.495
Question 5	83 (34.3%)	159 (65.7%)	0.34	.476
Question 6	104 (43.0%)	138 (57.0%)	0.43	.496
Question 7	70 (28.9%)	172 (71.1%)	0.29	.454
Question 8	113 (46.7%)	129 (53.3%)	0.47	.500
Question 9	69 (28.5%)	173 (71.5%)	0.29	.452
Question 10	87 (36.0%)	155 (64.0%)	0.36	.481
Question 11	102 (42.1%)	140 (57.9%)	0.42	.495
Question 12	78 (32.2%)	164 (67.8%)	0.32	.468
Question 13	53 (21.9%)	189 (78.1%)	0.22	.414
Question 14	64 (26.4%)	178 (73.6%)	0.26	.442
Question 15	80 (33.1%)	162 (66.9%)	0.33	.471

Question 16	46 (19.0%)	196 (81.0%)	0.19	.393
Total scores	**47 (19.4%)**	**195 (80.6%)**	**5.01**	**2.865**

Thereafter, with a total mean (M) score of 5.01 and a standard deviation (SD) of 2.865, the descriptive statistic of this study suggested that most of the respondents (n=195; 80.6%) had poor financial knowledge as compared to the (n=47; 19.4%) of the sample who were found to be financially knowledgeable or having good financial knowledge. See **Table 4.1** and **Figure 4.9** for a detailed presentation of the results.

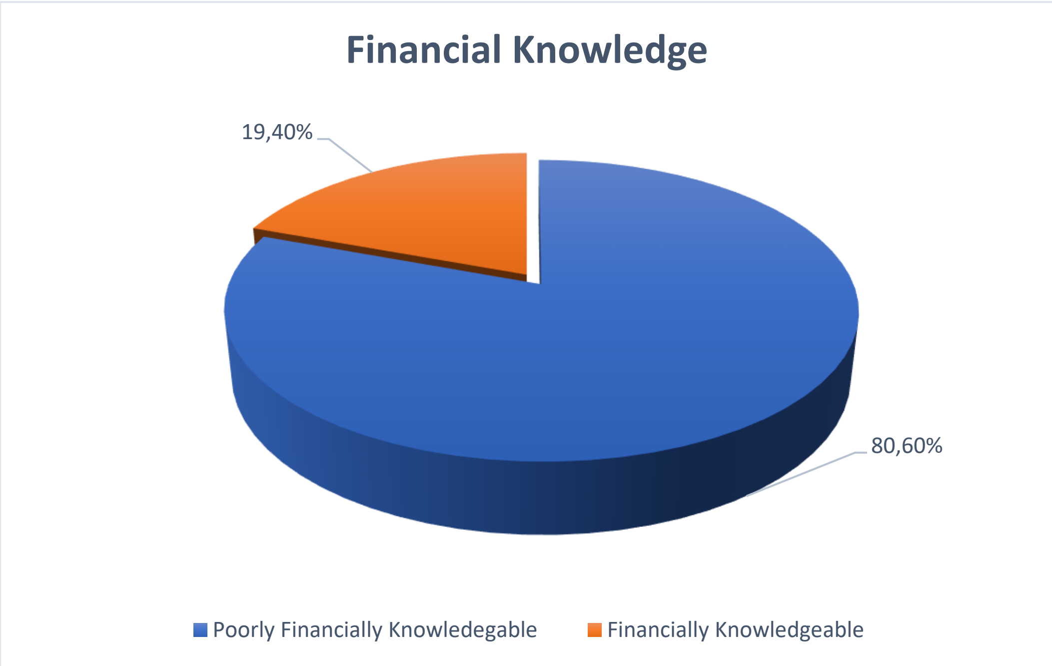

Figure 4. 9: Respondents' financial knowledge

Source: SPSS Output

Furthermore, a close comparison between respondents' total financial knowledge performance and respondents' profession revealed that most of the respondents have poor financial knowledge regardless of their profession, with percentages that range between 68.4% to 91.1%. The results in **Table 4.2** suggested that respondents in the profession of Law have the highest percentage of poor financial knowledge, with about 91.1%. On the other hand, the results revealed that Accountants has the least percentage with poor financial knowledge, with about 68.4%.

See **Table 4.2** below for a detail presentation of the results herein.

Table 4. 2: **Respondents' financial knowledge versus profession**

	Financial Knowledge		
Professions	Poorly Knowledgeable	Knowledgeable	Total
Medical Doctors	67 (81.7%)	15 (18.3%)	82 (100.0%)
Lawyers	51 (91.1%)	5 (8.9%)	56 (100.0%)
Accountants	39 (68.4%)	18 (31.6%)	57 (100.0%)
Engineers	38 (80.9%)	9 (19.1%)	47 (100.0%)
Total	**195 (80.6%)**	**47 (19.4%)**	**242 (100.0%)**

Source: SPSS Output

Using the percentile technique, the researcher further transformed the total financial knowledge of respondents into three percentile categories; where a total score of ≤ 7 points is translate into ≤ 49%, a total score of between 8 and 11 points translated into 50% to 74%, and a total score of ≥ 12 points is translated into ≥ 75%. Thus, a total score of ≤ 49% entails low financial knowledge, a total score of between 50% and 74% entails moderate financial knowledge, and a total score of ≥ 75% entails high financial knowledge.

Therefore, the results from this study revealed that most of the respondents (n=195; 80.6%) were determined to have low financial knowledge. More so, the results suggested that while about (n=42; 17.4%) of the respondents have moderate financial knowledge, only about (n=5; 2.1%) of the study sample have high financial knowledge.

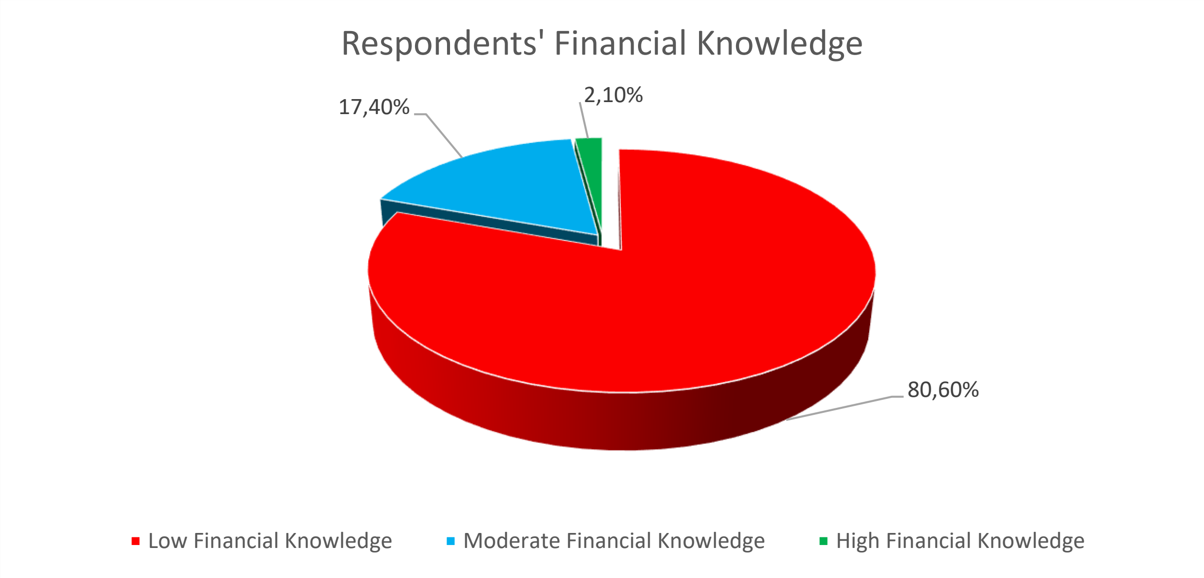

Figure 4. 10: Respondents' financial knowledge based on the percentile scale

Source: SPSS Output

Thereafter, the researcher compares these results with the respondents' professions, based on finance professionals and non-finance professionals. Therefore, the results from this study suggested that most of the respondents in both the finance professional and non-finance professional categories have low financial knowledge, with 68.4% and 84.3%, respectively. Although the results here suggested that most of the respondents have low financial knowledge regardless of their profession, the results from this study suggested that finance professionals are more likely to have moderate or high financial knowledge than their counterparts, with about 28.1% and 3.5%, respectively. See **Table 4.3** below for a detail presentation of the results.

Table 4. 3: Respondents' financial knowledge versus profession (finance and non-finance)

	Financial Knowledge			
Professions	Low	Moderate	High	Total
Non-Finance	156 (84.3%)	26 (14.1%)	3 (1.6%)	82 (100.0%)
Finance	39 (68.4%)	16 (28.1%)	2 (3.5%)	56 (100.0%)
Total	**195 (80.6%)**	**42 (17.4%)**	**5 (2.1%)**	**242 (100.0%)**

Source: SPSS Output

4.4.2.2 Respondents' Financial Behaviour Assessments

To determine respondents' Financial Behaviour, the researcher utilised a 4-point Likert scale questions to measure the respondents' financial Behaviour. Here, the 10 questions were structured in a Likert scale format to measure how often respondents engage with the 10 items in Section C of the questionnaire, where (1 = never; 2 = slightly sometimes; 3 = very often; and 4 = always). Thus, to accurately measure the respondents' financial behaviour, the researcher further transformed the Likert scale responses into a binary format, where a score of 1 or 2 was transformed into a score of 0 point (coded as *poor financial behaviour*) and a score of 3 or 4 was transformed into a score of 1 point (coded as *good financial behaviour*). This allowed the researcher to measure the total financial behaviour of each respondent, and ultimately determine the levels of financial capability (knowledge, behaviour, attitude & self efficacy) among the practising professionals in KwaZulu-Natal province. Thereafter, each respondent's total performance was estimated, to determine whether the respondent has good or poor financial behaviour. A total score of ≥ 50% indicates that a respondent has good financial behaviour, while a total score of ≤ 49% indicates that a respondent has poor financial behaviour.

Based on question 1, 2, 5, & 9 with scores that ranges between 57.4% – 69.0%, the descriptive results of this study revealed that most of the respondents had poor financial behaviour. On the other hand, the results from this study suggested that most of the respondents have good financial behaviour, based on question 3, 4, 6, 7, 8 & 10 with scores that ranges between 56.2% to 65.7%. See **Table 4.4** below for a detailed representation of the results.

Table 4. 4: **Respondents' financial behaviour**

Financial Behaviour Items	Poor Behaviour	Good Behaviour	M	SD
Question 1	167 (69.0%)	75 (31.0%)	0.30	.463
Question 2	139 (57.4%)	103 (42.6%)	0.42	.495
Question 3	102 (42.1%)	140 (57.9%)	0.57	.494
Question 4	83 (34.3%)	159 (65.7%)	0.65	.475
Question 5	140 (57.9%)	102 (42.1%)	0.42	.494
Question 6	104 (43.0%)	138 (57.0%)	0.57	.496
Question 7	106 (43.8%)	136 (56.2%)	0.56	.497
Question 8	104 (43.0%)	138 (57.0%)	0.57	.496
Question 9	153 (63.2%)	89 (36.8%)	0.36	.483
Question 10	87 (36.0%)	155 (64.0%)	0.64	.480
Total scores	**87 (36.0%)**	**155 (64.0%)**	**0.64**	**0.480**

Source: SPSS Output

With a total mean (M) score of 0.64 and a total standard deviation (SD) 0.480, the results from this study revealed that most respondents (n=155; 64.0%) have good financial behaviour as compare to the (n=87; 36.0%) of those who have poor financial behaviour. See **Figure 4.411** below for a detailed representation of the results.

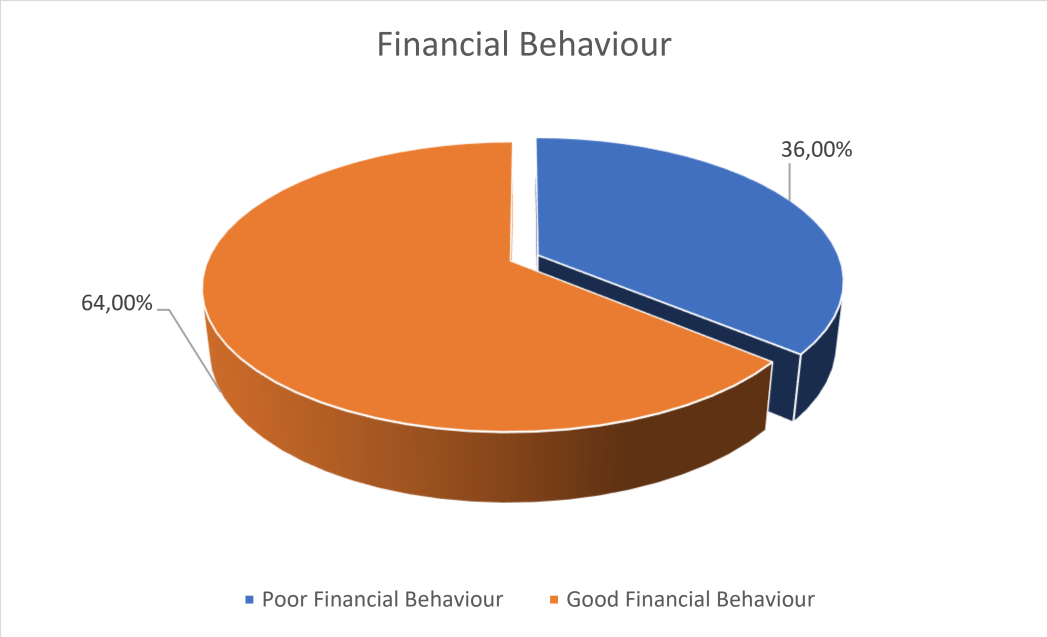

Figure 4. 11: Respondents' financial behaviour

Source: SPSS Output

When taking a close comparison between respondents' financial behaviour and respondents' profession, the results from this study revealed that most of the respondents have good financial behaviour, with scores that range between 56.1% to 74.5%. Out of the 47 engineers who participated in this study, about 74.5% of them displayed good financial behaviour. Out of the 56 lawyers who participate in the study, about 66.1% of them have good financial behaviour. Out of the 57 accountants who participate in this study, about 64.9% of them have good financial behaviour. Although, the results from this study suggested that most of the engineer and lawyer respondents have better financial behaviour than the accountant, the results from this study further revealed that the finance professionals are more likely to have better financial behaviour than the non-finance professionals, with about 64.9%. Note that the difference is not statistically significant. See **Table 4.5** below and **Figure 4.12** following for a detailed presentation of the results.

Table 4. 5: Respondents' financial behaviour versus profession

	Financial Behaviour		
Professions	Poor Behaviour	Good Behaviour	Total
Medical Doctors	36 (43.9%)	46 (56.1%)	82 (100.0%)
Lawyers	19 (33.9%)	37 (66.1%)	56 (100.0%)
Accountants	20 (35.1%)	37 (64.9%)	57 (100.0%)
Engineers	12 (25.5%)	35 (74.5%)	47 (100.0%)
Non-finance Professionals	67 (36.2%)	118 (63.8%)	185 (100.0%)
Finance professionals	20 (35.1%)	37 (64.9%)	57 (100.0%)

Source: SPSS Output

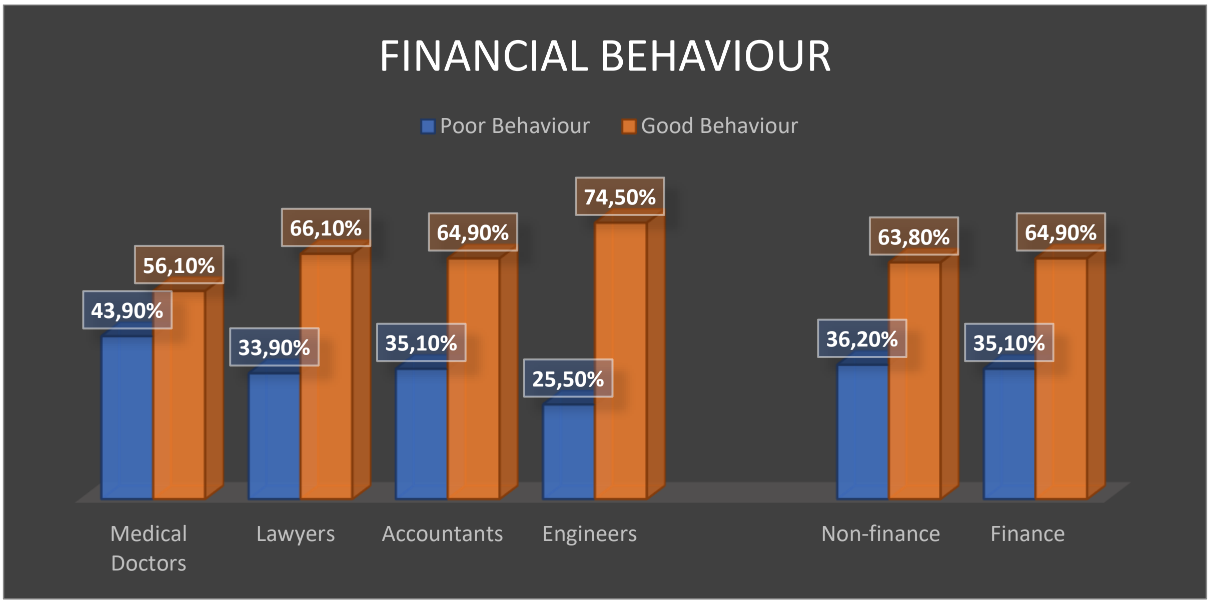

Figure 4. 12: Respondents' financial behaviour versus profession

Source: SPSS Output

<u>4.4.2.3 Respondents' Financial Attitude Assessments</u>

To measure respondents' Financial Attitude, the researcher utilised a 4-point Likert scale questions to measure respondents' financial attitude. The 13 questions were structured in a Likert scale format to measure how often respondents engage with the 13 items in Section D of the questionnaire, where (1 = never; 2 = sometimes; 3 = very often; and 4 = always). Thus, to accurately estimate the respondents' financial attitude, the researcher transformed the Likert scale responses into a binary format, where a score of 1 or 2 was transformed into a score of 0 point (coded as *poor financial attitude*) while a score of 3 or 4 was transformed into a score of 1 point (coded as *good financial attitudes*). This eventually avails the researcher to measure the total financial attitude of each respondent and ultimately determine the levels of financial capability (knowledge, behaviour, attitude & self efficacy) among practising professionals in KwaZulu-Natal province. Thereafter, each respondents' total performance was estimated to determine whether the respondents have good or poor financial attitude. A total score of ≥ 50% entails that a respondent has good financial attitude, while a total score of ≤ 49% entails that a respondent has poor financial attitudes.

The descriptive results of this study revealed that most of the respondents had good financial attitude, based on question 3, 4, 6, 7, 10, 11, 12 & 13 with scores that range between 50.4% to 67.8%. On the other hand, the results from this study suggested that most of the respondents has poor financial attitude, based on question 1, 2, 5, 8, & 9 with scores that ranges between 55.8% to 74.0%.

See **Table 4.6** below for a detail representation of the results.

Table 4. 6: **Respondents' financial attitude**

Financial Attitude items	**Poor Attitude**	**Good Attitude**	**M**	**SD**
Question 1	156 (65.3%)	84 (34.7%)	0.34	.477
Question 2	159 (65.7%)	83 (34.3%)	0.34	.475
Question 3	111 (45.9%)	131 (54.1%)	0.54	.499
Question 4	80 (33.1%)	162 (66.9%)	0.66	.471
Question 5	135 (55.8%)	107 (44.2%)	0.44	.497
Question 6	120 (49.6%)	122 (50.4%)	0.50	.501
Question 7	78 (32.2%)	164 (67.8%)	0.67	.468
Question 8	179 (74.0%)	63 (26.0%)	0.26	.439
Question 9	156 (64.5%)	86 (35.5%)	0.35	.479

Question 10	88 (36.4%)	154 (63.6%)	0.63	.482
Question 11	87 (36.0%)	155 (64.0%)	0.64	.480
Question 12	118 (48.8%)	124 (51.2%)	0.51	.500
Question 13	105 (43.4%)	137 (56.6%)	0.56	.496
Total scores	**146 (60.3%)**	**96 (39.7%)**	**0.39**	**.490**

Source: SPSS Output

Furthermore, with an overall mean (M) score of 0.39 and an overall standard deviation (SD) of 0.490, the descriptive results of this study suggested that most of the respondents (n=146; 60.3%) have poor financial attitude as compared to those with good financial attitude (n=96; 39.7%). In addition, the results from this study also suggested that when comparing respondents' profession, majority of respondents who are medical doctors, accountants, and lawyers have poor financial attitude, with about 69.5%, 63.2%, and 53.6%, respectively. On the contrary, the results from this study suggested that out of 47 respondents in the Engineering profession, majority (51.1%) of them have good financial attitude. This is an indication that respondents in the Engineering profession are more likely to have good financial acumen and planning compared to other professions. Again, when comparing finance and non-finance professionals, the descriptive findings of this study indicated that the finance professionals (n=36; 63.2%) are more likely to have poor financial attitude as compared to their counterparts (n=110; 59.5%). Note that this finding was not statistically significant. See **Table 4.7** and **Figure 4.13** below for a detail presentation of the results.

Table 4. 7: **Respondents' financial attitude versus profession**

	Financial Attitude		
Professions	Poor Attitude	Good Attitude	Total
Medical Doctors	57 (69.5%)	25 (30.5%)	82 (100.0%)
Lawyers	30 (53.6%)	26 (46.4%)	56 (100.0%)
Accountants	36 (63.2%)	21 (36.8%)	57 (100.0%)
Engineers	23 (48.9%)	24 (51.1%)	47 (100.0%)

Non-finance Professionals	110 (59.5%)	75 (40.5%)	185 (100.0%)
Finance professionals	36 (63.2%)	21 (36.8%)	57 (100.0%)

Source: SPSS Output

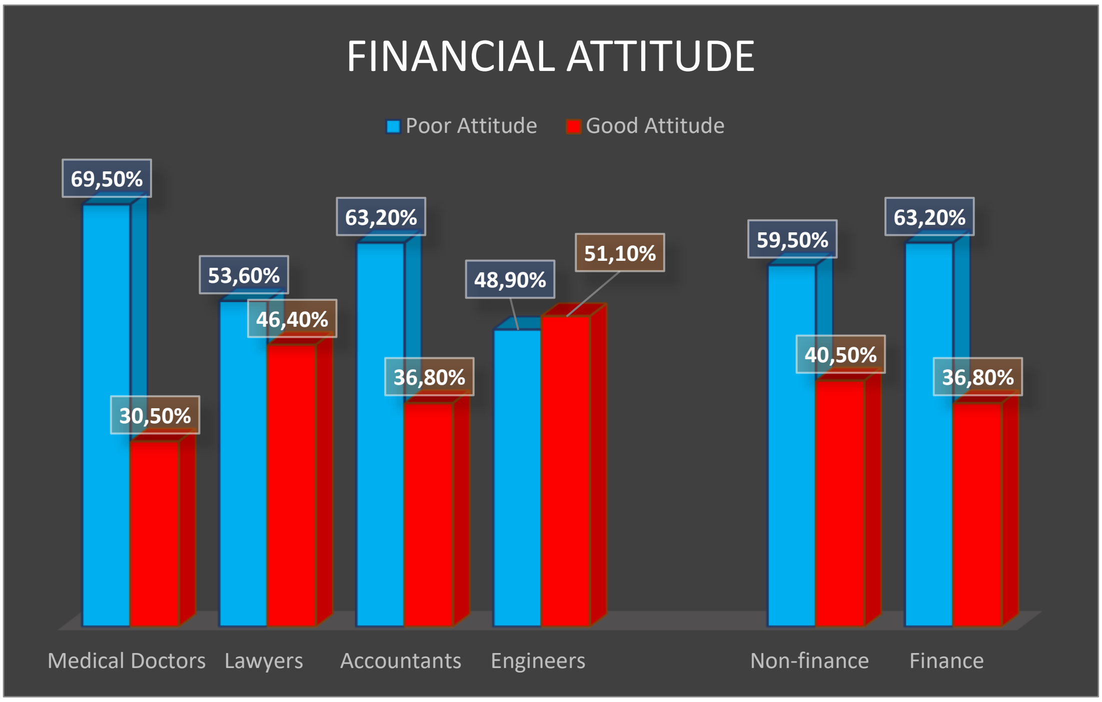

Figure 4. 13: Respondents' Financial attitude versus professions

Source: SPSS Output

4.4.2.4 Respondents' Financial Self-Efficacy Assessments

To estimate respondents' Financial Self-Efficacy, the researcher uses 6 questions of 4-point Likert scale to measure respondents' financial self-efficacy. The 6 questions were structured in a Likert scale format to measure respondents' agreement or disagreement with the 6 items in Section E of the questionnaire, where (1 = Strongly disagree; 2 = Disagree; 3 = Agree; and 4 = Strongly Agree). Thus, to estimate accurately the respondents' financial self-efficacy, the researcher transformed the Likert scale responses into a binary format, where a score of 1 or 2 was transformed into a score of 0 point (coded as *poor financial self-efficacy*) while a score of 3 or 4 was transformed into a score of 1 point (coded as *good financial self-efficacy*). This eventually allows the researcher to measure the total financial self-efficacy of each respondent and ultimately determine the levels of financial capability (knowledge, behaviour, attitude, & self efficacy) among practising professionals in KwaZulu-Natal province. Thereafter, each respondent's total performance was estimated to determine whether the respondent has good financial self-efficacy or has poor financial self-efficacy. A total score of ≥ 50% entails that a respondent has good financial self-efficacy, while a total score of ≤ 49% entails that a respondent has poor financial self-efficacy.

The findings from this study revealed that most of the respondents were found to have good financial self-efficacy, based on question 1, 2, 4, & 5, with scores that ranges between 51.2% and 70.2%. On the other hand, the results from this study indicated that majority of the respondents have poor financial self-efficacy, based on question 3 & 6 with 61.2% and 55.4%, respectively. See **Table 4.8** below for a detailed representation of the results.

Table 4. 8: **Respondents' financial efficacy**

Financial Self-Efficacy	**Poor Self-Efficacy**	**Good Self-Efficacy**	**M**	**SD**
Question 1	72 (29.8%)	170 (70.2%)	0.70	.458
Question 2	98 (40.5%)	144 (59.5%)	0.59	.491
Question 3	148 (61.2%)	94 (38.8%)	0.38	.488
Question 4	118 (48.8%)	124 (51.2%)	0.51	.500
Question 5	107 (44.2%)	135 (55.8%)	0.55	.497
Question 6	134 (55.4%)	108 (44.6%)	0.44	.498
Total	**62 (25.6%)**	**180 (74.4%)**	**0.74**	**.437**

Source: SPSS

With a total mean (M) score of 0.74 and a standard deviation (SD) of 0.437, the findings from this study revealed that majority of the respondents have good financial self-efficacy (n=180; 74.4%) whereas about (n=62; 25.6%) of the respondents have poor financial self-efficacy. In comparison to respondents' professions, the findings from this study suggested that most of the respondents in each profession have good financial self-efficacy, with a score range of between 66.0% to 85.4%. Here, the descriptive results are indicating that respondents who are medical doctors and lawyers are more likely to have good financial self-efficacy, with about 85.4% and 73.2%, respectively. In addition, when comparing the respondents' total financial self-efficacy performance with respondents' professions, the descriptive findings of this study suggested that non-finance professionals (n=142; 76.8%) are more likely to have good financial self-efficacy as compared to finance professionals (n= 38; 66.7%). See **Table 4.9** and **Figure 4.14** below for a detailed representation of the results.

Table 4. 9: **Respondents' financial self-efficacy versus profession (n=242)**

	Financial Self-Efficacy		
Professions	Poor Self-Efficacy	Good Self-Efficacy	Total
Medical Doctors	12 (14.6%)	70 (85.4%)	82 (100.0%)
Lawyers	15 (26.8%)	41 (73.2%)	56 (100.0%)
Accountants	19 (33.3%)	38 (66.7%)	57 (100.0%)
Engineers	16 (34.0%)	31 (66.0%)	47 (100.0%)
Non-finance Professionals	43 (23.2%)	142 (76.8%)	185 (100.0%)
Finance professionals	19 (33.3%)	38 (66.7%)	57 (100.0%)

Source: SPSS Output

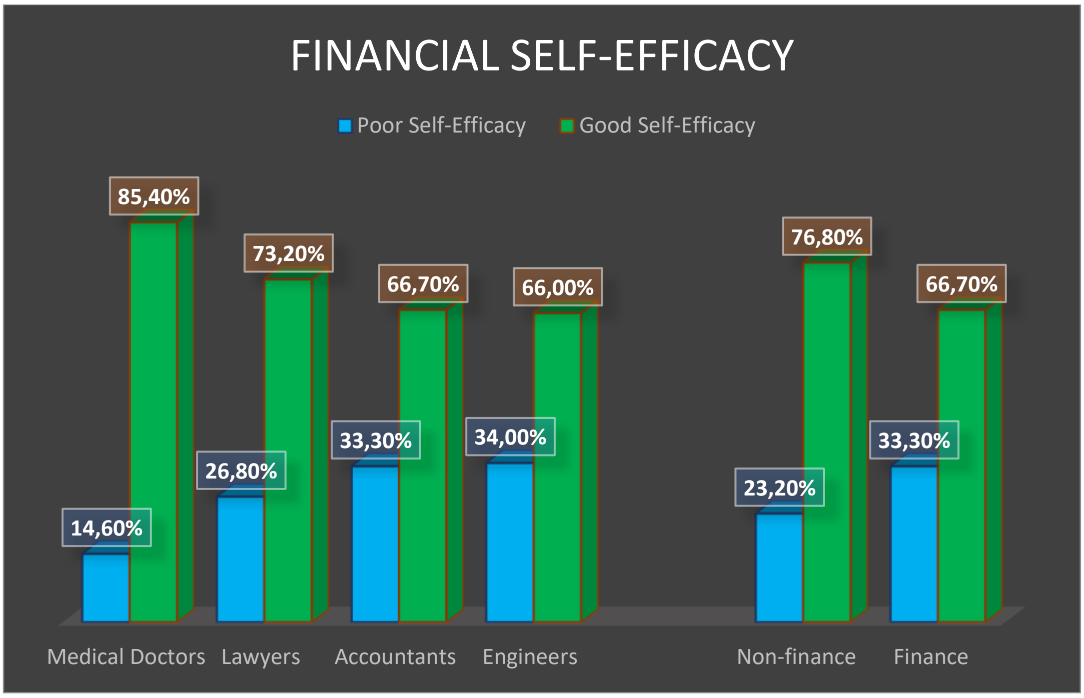

Figure 4. 14: Respondents' financial self-efficacy versus professions

Source: SPSS Output

4.4.3 Assessment of Respondents' Financial Capability Versus Professions

To estimate respondents' Financial Capability, the researcher utilised all 45 questions (16 financial knowledge questions; 10 financial behaviour questions; 13 financial attitude questions; and the 6 financial self-efficacy questions) contained in sections B-E of the questionnaire. This entire set of questions was used to establish the level of financial capability among KwaZulu-Natal Professions. This eventually allowed the researcher to measure the total financial capability of each respondent and ultimately determine the levels of financial capability among practising professionals in KwaZulu-Natal province.

Each respondent's total performance was estimated to determine whether the respondent has good or poor financial capability. Therefore, a total score of ≤ 49% entails that a respondent has low financial capability. Similarly, a total score of between 50% and 69% suggests that a respondent has moderate financial capability, whereas a total score of ≥ 70% suggests that a respondent has high financial capabilities.

With a total mean (M) score of 19.81 and a standard deviation (SD) of 5.488, the findings from this study revealed that majority of the respondents (n=141; 58.3%) have low financial capability, while about (n=75; 31.0%) of the respondents have moderate financial capability, about (n=26; 10.7%) of the study sample have high financial capability. See **Figure 4.15** below for a detailed representation of the results

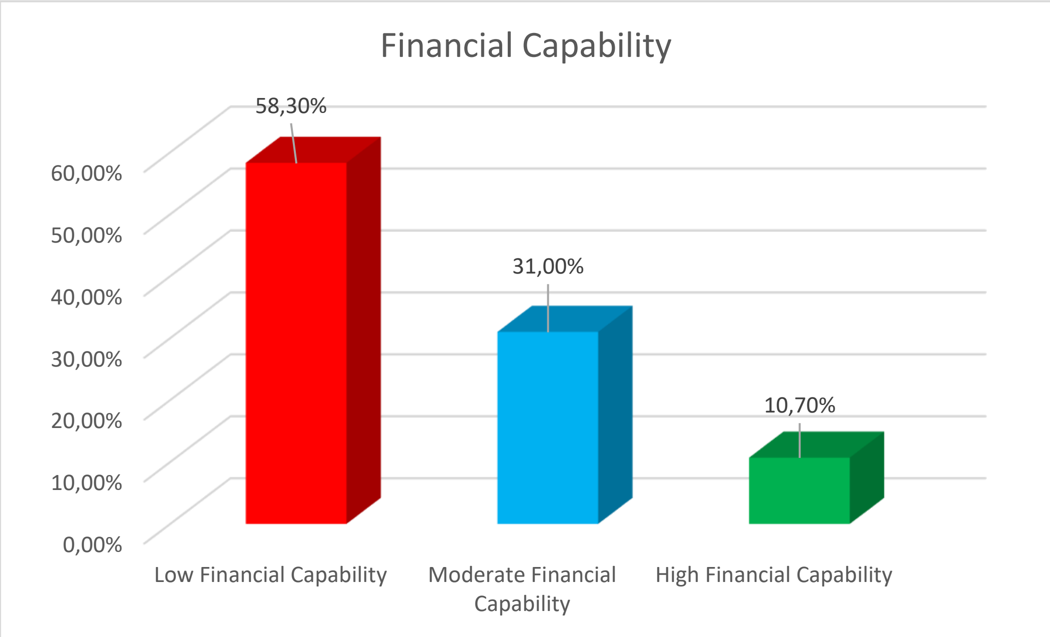

Figure 4.15: Respondents' financial capability

Source: SPSS Output

In comparison to respondents' professions, the descriptive findings of this study suggested that most of the respondents who are lawyers, medical doctors and engineers have low financial capability, with a score range of 51.1% to 67.9%. Furthermore, the results from this study suggested about 49.1% of accountants have low financial capability. The descriptive results indicate that respondents who are accountants are less likely to have low financial capability as opposed to their counterparts in other professions being considered. In addition, when comparing the respondents' total financial capability performance with respondents' professions, the descriptive findings of this study suggested that non-finance professionals (n=113; 61.1%) are more likely to have low financial capability as compare to finance professionals (n= 28; 49.1%). See **Table 4.10** and **Figure 4.16** below for a detailed representation of the results.

Table 4. 10: **Respondents' financial capability versus profession**

	Financial Capability (FC)			
Professions	Low FC	Moderate FC	High FC	Total
Medical Doctors	51 (62.2%)	22 (26.8%)	9 (11.0%)	82 (100.0%)
Lawyers	38 (67.9%)	14 (25.0%)	4 (7.1%)	56 (100.0%)
Accountants	28 (49.1%)	21 (36.8%)	8 (14.1%)	57 (100.0%)
Engineers	24 (51.1%)	18 (38.3%)	5 (10.6%)	47 (100.0%)
Non-finance Professionals	113 (61.1%)	54 (29.2%)	18 (9.7%)	185 (100.0%)
Finance professionals	28 (49.1%)	21 (36.8%)	8 (14.1%)	57 (100.0%)

Source: SPSS Output

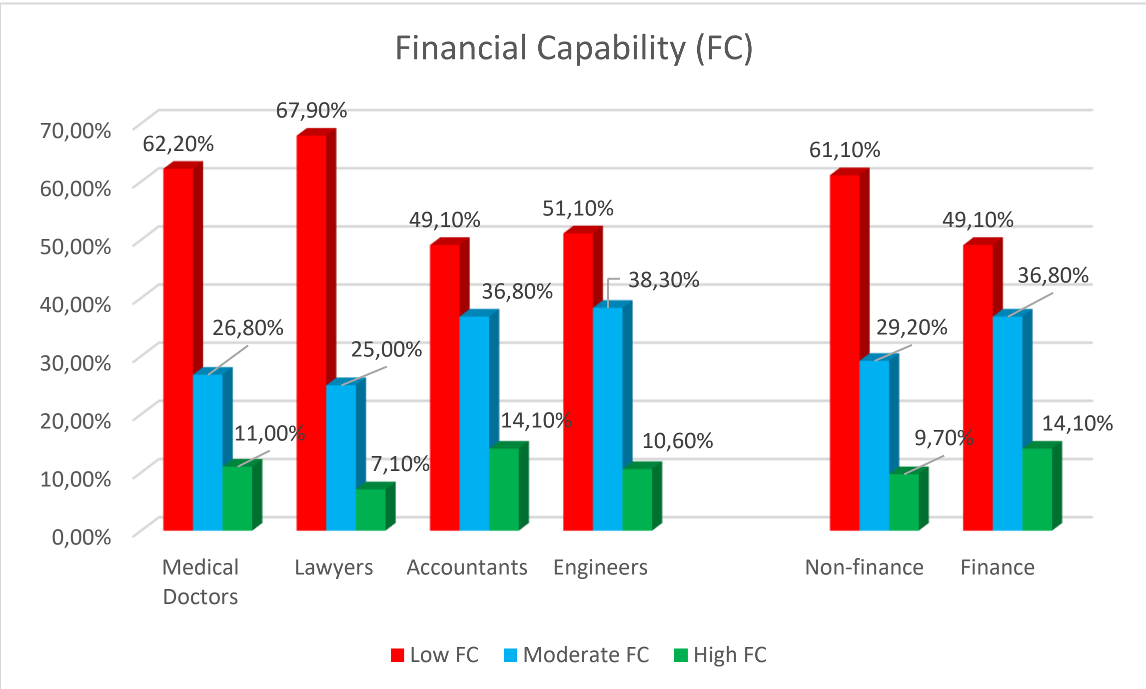

Figure 4.16: Respondents' financial capability versus professions.

Source: SPSS Output

4.5 INFERENTIAL STATISTICS

To estimate the financial capability of practising professionals in KwaZulu-Natal province inferentially, a Factor analysis was used to determine the factors that impact on KwaZulu-Natal practising professionals' financial capability as necessary to achieve objective two of this study.

The researcher used an ANOVA test to determine the difference between finance professionals and non-finance professionals as necessary to achieve objective three of this study.

In addition, the researcher used a linear regression to measure the impact of socio demographic variables on respondents' financial capability levels as necessary to achieve objective four of this study. Therefore, the researcher used the traditional p-value of <0.05 for all inferential tests computed in this study.

4.5.1 The components or constructs of Financial Capability among Practising Professionals in KwaZulu-Natal (Objective Two)

To determine the factors that impact on the financial capability of practising professionals in KwaZulu-Natal, the researcher employed both Exploratory Factor Analysis (EFA) and Principal Component Analysis (PCA) methods to measure and present these relationships. In this study, EFA was used to measure the relationship among the variables by understanding the constructs of the underlying variables, while PCA was used to simply derive fewer variables that provide the same information that is found in the larger set of variables.

Therefore, to identify the factor structure of the determinants that influence the financial capability of practising professionals in KwaZulu-Natal province, a Principal Component Analysis (PCA) was conducted on all 45 items with an orthogonal rotation (Varimax). Using an Eigenvalue parallel analysis, four factors were extracted from this study, which were based on the Eigenvalue (Eigenvalue of >2). Here, the Eigenvalues related to each factor represents the variance explained by each linear component, which are also displayed in terms of the percentage of variance explained. The four-factors solution accounted for 25.17% of the explained variance of the determinants influencing the financial capability of practising professionals in KwaZulu-Natal province. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was highly significant at 0.729 (>0.70) and the Bartlett's assessment of sphericity was also statistically significant, where (X^2 = 2856.496; p = 0.000). Hence, the factor analysis was appropriate in this study as a means of identifying the determinants of financial capability among practising professionals in KwaZulu-Natal province. In addition, the KMO value and the Bartlett's assessment of sphericity value in this study, further allowed the application of factor analysis which indicates that relationships between the items were sufficiently large for PCA. See **Table 4.11** and **Figure 4.17** below for a detailed representation of the results.

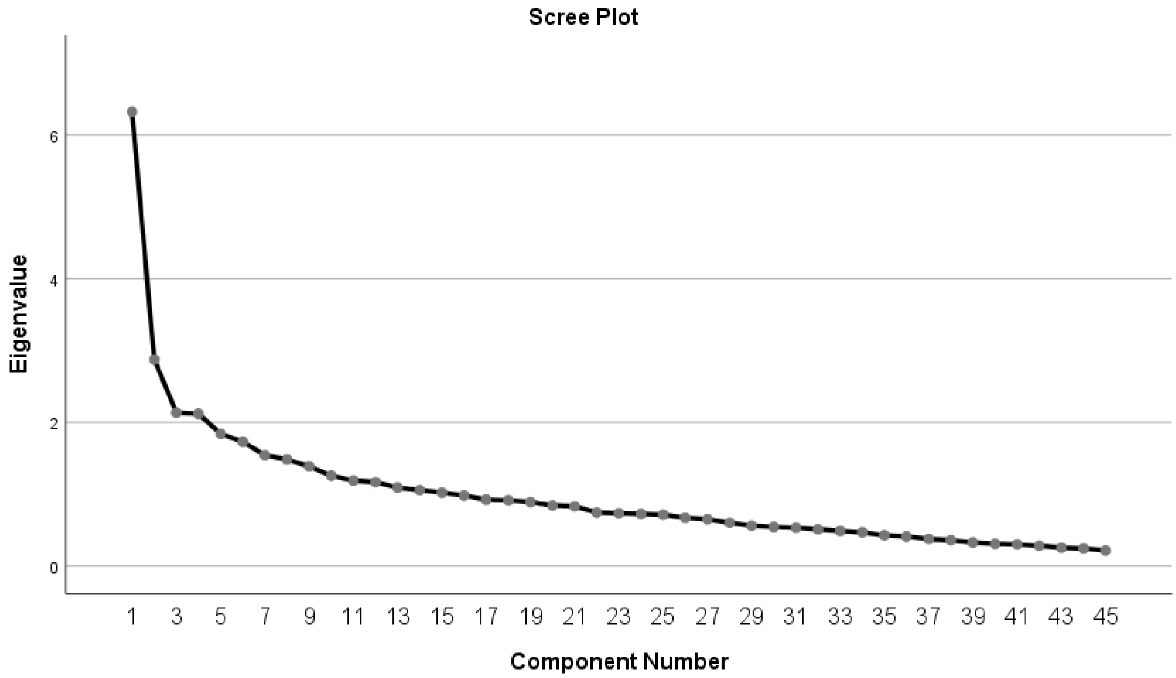

Figure 4. 17: Screen plot of components based on the eigenvalue of >2

Source: SPSS Output

Table 4. 11: **Rotated Component Matrix of the factors influencing the financial capability of practising professionals in KwaZulu-Natal by using EFA.**

	Components			
Items	Factor 1	Factor 2	Factor 3	Factor 4
FB1 (Financial Behaviour item 1)	.770			
FA1 (Financial Attitude item 1)	.722			
KK5 (Financial Knowledge item 5)	.683			
FK9 (Financial Knowledge item 9)	.649			
FK15 (Financial Knowledge item 15)	.630			
FK13 (Financial Knowledge item 13)	.584			
FK12 (Financial Knowledge item 12)	.575			
FSE1 (Financial Self-efficacy item 1)	.530			
FB2 (Financial Behaviour item 2)	.528			
FK6 (Financial Knowledge item 6)	.528			
FB3 (Financial Behaviour item 3)	-.486			
FK14 (Financial Knowledge item 14)	.474			
FA8 (Financial Attitude item 8)	.448			
FA6 (Financial Attitude item 6)	.443			
FK1 (Financial Knowledge item 1)	.410			
FK11 (Financial Knowledge item 11)		.607		
FK7 (Financial Knowledge item 7)		.606		
FA3 (Financial Attitude item 3)		.496		
FB4 (Financial Behaviour item 4)		.428		
FA11 (Financial Attitude item 11)		.414		
FA4 (Financial Attitude item 4)		.412		
FB9 (Financial Behaviour item 9)			.675	
FA5 (Financial Attitude item 5)			.544	
FB5 (Financial Behaviour item 5)			.529	
FB7 (Financial Behaviour item 7)			.511	
FA12 (Financial Attitude item 12)			.416	
FES5 (Financial Self-efficacy item 5)			.409	
FB10 (Financial Behaviour item 10)				.552
FB6 (Financial Behaviour item 6)				.527
FA9 (Financial Attitude item 9)				.500
FB8 (Financial Behaviour item 8)				.454
FSE6 (Financial Self-efficacy item 6s)				.422
Extraction Method: Principal Component Analysis. **Rotation Method:** Varimax with Kaiser Normalization.				

Source: SPSS Output

The rotation matrix results in **Table 4.11**, suggests that there are four factors influencing the financial capability of practising professionals in KwaZulu-Natal. However, looking at the factor structure of the determinants influencing the financial capability of practising professionals in KwaZulu-Natal province, Table 4.11 indicates financial behaviour and financial knowledge are the leading factors that influence the financial capability of practising professionals in KwaZulu-Natal – based on the variance scores.

Thus, even though the overall analysis in Table 4.11 suggested that there are four main factors that influence the financial capability of practising professionals in KwaZulu-Natal, these factors are geared towards financial behaviour and financial knowledge.

4.5.2 Assessment of Finance and Non-finance Professionals Financial Capability (Objective Three)

The ANOVA (analysis of variance) results for the entire sample indicated that there is no statistical difference between finance and non- finance professionals' financial capability, where ($F=1.659$; $p=0.193$). However, using a sample statistic test, the results from this study suggested that there is a statistical difference between finance and non- finance professionals' financial capability, with ($t= 11.957$; $p= 0.000$).

Thus, the t-test results support the descriptive results of this study, which argued that finance professionals (Accountants) are less likely to have low financial capability than their non-finance counterparts in the professions of Law, Engineering and Medicine. The results also suggested that the percentage of finance professionals who have moderate and high financial capability is greater than that of their counterparts (see Table 4.10). Thus, the findings from this study suggest that finance professionals are more financially capable compared to their non-financial counterparts – based on the t-test analysis.

4.5.3 The Impact of Socio demographic Variables on the Financial Capability of Practising Professionals in KwaZulu-Natal (Objective Four)

To ascertain the impact of socio demographic variables on the financial capability levels of practising professionals in KwaZulu-Natal, the researcher utilised a linear regression analysis to estimate the relationship between the dependent variable and its predictors (gender, age, profession, professional experience in practise, highest educational qualification, race, & monthly Income). The prime purpose was to determine how well respondents' socio demographic profile could predict their financial capability. Here, the scatterplot analysis of this study demonstrates that the relationship between the predictors (gender, age, profession, professional experience in practise, highest educational qualification, race, & monthly Income) and dependent variable was negative and linear, which did not reveal any bivariate outliers (See **Figure 4.18, Figure 4.19** and **Figure 4.20**). The correlation between the predictive variables and financial capability were statistically significant, with *r* (242) = .361; *p* = .000. More so, the ANOVA test results in the regression analysis were statistically significant, with F = 5.011; *p* = .000. This is an indication that with p=0.000 the regression model used for this study was significantly fitting. Therefore, there is a statistically significant relationship between the predicting variables (socio demographic variables) and the outcome variable (financial capability).

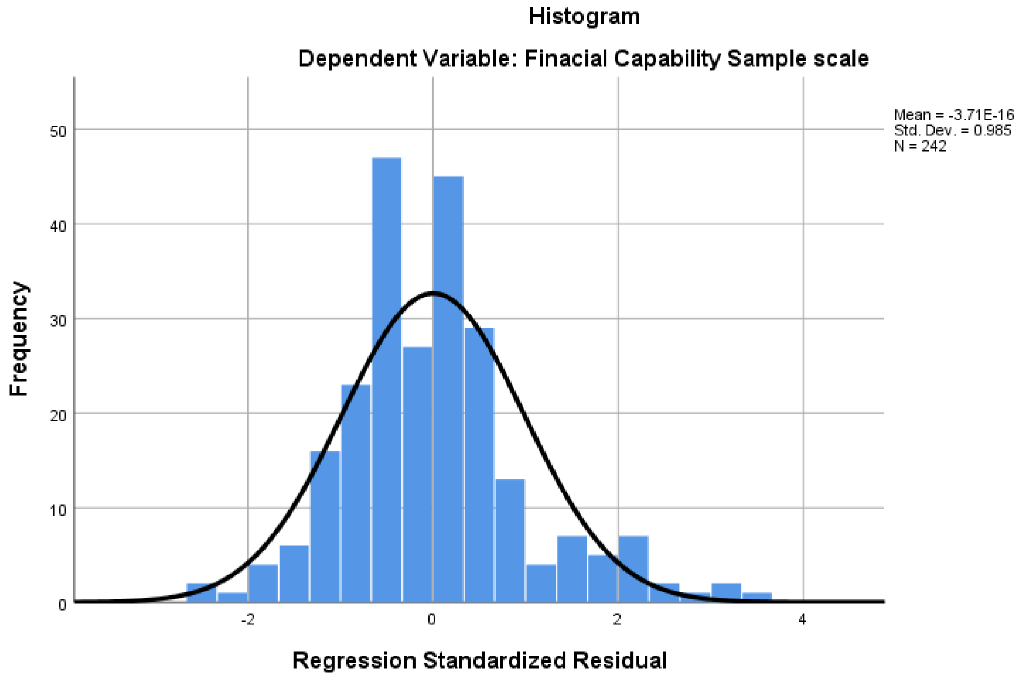

Figure 4. 18: Multiple regression histogram

Source: SPSS Output

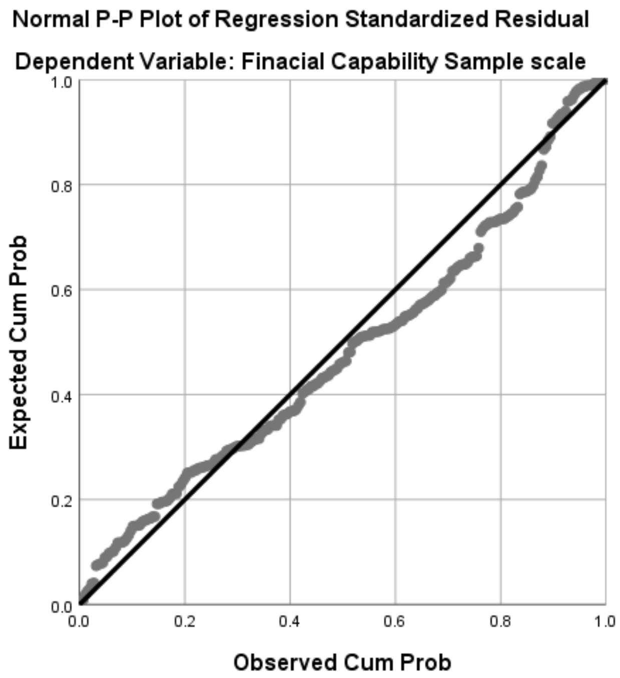

Figure 4. 19: Multiple linear regression

Source: SPSS Output

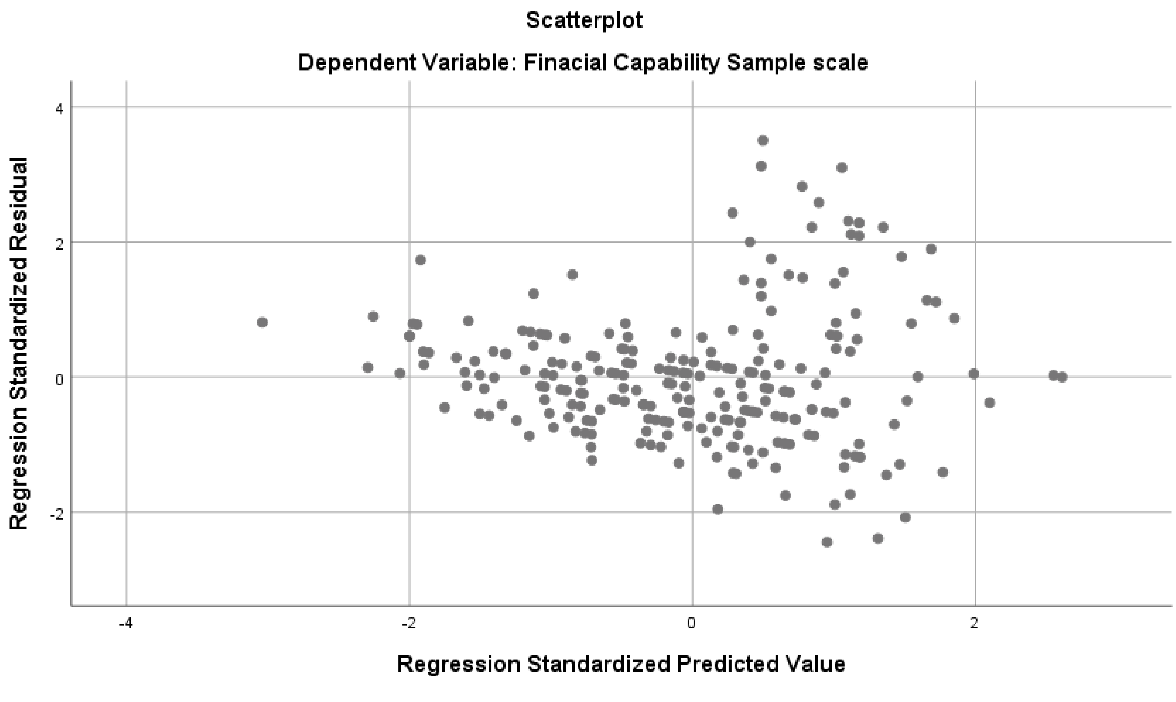

Figure 4. 20: Multiple regression scatterplot

Source: SPSS Output

The regression equation for predicting the financial capability among practising professionals in KwaZulu-Natal from their socio demographic profile is:

$\hat{y}$ = 21.157 – ((-0.708x_1) + (-0.661x_2) + 0.468x_3 + (-0.246x_4) + 1.283x_5 + (-1.426x_6) + 0.324x_7).

The R-square for this equation was 0.130; that is 13.0% of the variance in respondents' financial capability was predictable from their socio demographic profile. The result of the logistic regression revealed that respondents with Degree as their highest level of education are more likely to be financially capable than their counterparts. The result equally revealed that respondents who identified themselves as Africans/Blacks are more likely to have low financial capability as compared to those from other racial groups. See **Table 4.12** below for a detail representation of the results.

Table 4. 12: **Regression model of financial capability for socio demographic variables**

Coefficients							
Model	Unstandardized Coefficients		Standardized Coefficient Beta	t	Sig.	95,0% Confidence interval for B	
	B	Std. Error				Lower Bound	Upper Bound
(Constant)	21.157	1.657		12.767	0.000	17.892	24.422
Gender	-.708	.685	-.065	-1.034	.302	-2.058	.642
Age	-.661	.664	-.101	-.996	.320	-1.970	.647
Professions	.468	.306	.096	1.527	.128	-.136	1.071
Years of experience	-.246	.501	-.051	-.491	.624	-1.233	.741
Highest education level	1.283	.543	.152	2.363	.019	.213	2.352

Racial identity	-1.426	.347	-.257	-4.110	.000	-2.110	-.743
Monthly income	.324	.217	.099	1.493	.137s	-.103	.751
Dependent Variable: ***Financial Capability***							

Source: SPSS Output

4.6 DISCUSSION AND IMPLICATIONS OF THE FINDINGS

This aspect of the research study succinctly discusses the research findings of the study in line with the corresponding research questions. The research findings are further discussed comparatively with previous similar studies that were reviewed in the literature review.

4.6.1 Research Question One

How financially capable are the practising professionals in KwaZulu-Natal province?

In order to answer this research question, the needful data was collected, and analysed based on the respective research objective and research hypothesis. Subsequently, the results of the analysis were discussed vis-à-vis reviewed literatures presented in prior chapters.

Research Objective One: This research objective sought to determine the levels of financial capability (knowledge, behaviour, attitude & self efficacy) among practising professionals in KwaZulu-Natal province.

Hypothesis One: The first research hypothesis for this study and its respective null hypothesis examined the financial capability of the practising professionals in KwaZulu-Natal. Thus, the research hypothesis subjected to testing was:

H1: Practising professionals in KwaZulu-Natal province are financially capable.

$H1_0$: Practising professionals in KwaZulu-Natal province are not financially capable.

Assessment of financial capability (knowledge, behaviour, attitude & self efficacy) of the practising professionals

Assessment of financial Knowledge of the practising professionals

Overall financial Knowledge of the practising professionals

The descriptive computation of this study revealed that out of the 16 questions that were asked to determine respondents' financial knowledge, it was found that most of the respondents were found to have poor financial knowledge, with scores that range between 53.3% and 81.0%. See **Table 4.1** below for a detailed representation of the results.

With a total mean (M) score of 5.01 and a standard deviation (SD) of 2.865, the descriptive statistic of this study suggest that most of the respondents (n=195; 80.6%) were determined to have poor financial knowledge as compared to the (n=47; 19.4%) of the sample who were found to be financially knowledgeable or having good financial knowledge. See **Table 4.1** and **Figure 4.9** for a detailed presentation of the results.

Therefore, the results from this study revealed that most of the respondents (n=195; 80.6%) were determined to have low financial knowledge. More so, the results suggested that while about (n=42; 17.4%) of the respondents have moderate financial knowledge, only about (n=5; 2.1%) of the study sample have high financial knowledge.

The findings of this study are consistent with other similar studies such as (Kim et al., 2019; Nomlala, 2019). In a national financial capability study, Kim et al. (2019) investigate the role of financial knowledge in the lives of millennials. The study suggests that millennials had low levels of both objective and perceived financial knowledge in comparison to other household categories. Similarly, Nomlala (2019) found low levels of financial knowledge among accounting students in KwaZulu-Natal.

Comparative financial Knowledge of the practising professionals

A close comparison between respondents' total financial knowledge performance and respondents' profession revealed that most of the respondents have poor financial knowledge regardless of their profession, with percentages that range between 68.4% and 91.1%. The results in **Table 4.2** suggest that respondents in the profession of Law have the highest percentage of poor financial knowledge, with about 91.1%. On the other hand, the results revealed that Accountants have the least percentage, with poor financial knowledge, with about 68.4%. See **Table 4.2** below for a detailed presentation of the results herein.

Thereafter, the researcher compared these results with respondents' profession, based on finance professionals and non-finance professionals. The results from this study suggested that most of the respondents in both the finance professional and non-finance professional category have low financial knowledge, with 68.4% and 84.3%, respectively. Although the results here suggest that most of the respondents have low financial knowledge regardless of their profession, the results from this study suggested that finance professionals are more likely to have moderate or high financial knowledge than their counterparts, with about 28.1% and 3.5%, respectively. See **Table 4.3** below for a detailed presentation of the results.

This findings is similar to Agarwal et al. (2017) who found that finance professionals exhibited lesser chances of becoming mortgage delinquents due to their financial knowledge. Similarly, Clark et al. (2017) assert that financially savvy and financially experienced employees who work in financial institutions such as the federal reserve system showed higher levels of financial literacy and better retirement plan behaviours than the average professional.

Assessment of financial behaviour of the practising professionals

Overall financial behaviour of the practising professionals

With a total mean (M) score of 0.64 and a total standard deviation (SD) 0.480, the results from this study revealed that most respondents (n=155; 64.0%) have good financial behaviour as compared to the (n=87; 36.0%) of those who have poor financial behaviour.

This finding is consistent with (Strömbäck et al., 2017) which evidenced a positive relationship between self-control and financial behaviour as individuals with better self-control behaviours tend to be better prepared for unexpected expenses as a result of regular savings. Furthermore, Angus (2018) found a positive link between financial counselling, financial capability and financial literacy of vulnerable Australians.

Comparative financial behaviour of the practising professionals

Although the results from this study suggested that most of the engineers and lawyers' respondents have better financial behaviour than the accountants' respondents, the results from this study further revealed that the finance professionals (in aggregate) are more likely to have better financial behaviour than the non-finance professional, with about 64.9%. Note that the difference is not statistically significant. See **Table 4.5** and **Figure 4.12** below for a detailed presentation of the results.

The findings of this study are in consonance with studies such as (Agarwal et al., 2017; Bačová et al., 2017; Parrey and Rather, 2018). While Parrey and Rather (2018) found poor financial knowledge and behaviour among non-finance professionals, Agarwal et al. (2017) assert that individuals in finance professions have better financial Behavioural tendencies. In the study of Bačová et al. (2017) it was also evidenced that finance professionals have better financial behaviours than non-finance professionals.

Assessment of financial attitude of the practising professionals

Overall financial attitude of the practising professionals

With an overall mean (M) score of 0.39 and an overall standard deviation (SD) of 0.490, the descriptive results of this study suggest that most of the respondents (n=146; 60.3%) have poor financial attitude as compared to those with good financial attitude (n=96; 39.7%).

Although studies such as Nomlala (2019) have found South African students studying finance related degrees to have good financial attitudes, studies such as Abdullah et al. (2019) also noted that having positive attitudes towards money is essential for the financial wellbeing of workers. In fact, studies of Rai et al. (2019) assert that financial attitude and financial behaviour are the strongest predictors of financial capability among women. However, the findings of this study align with the findings of Anong (2016) and Gill and Bhattacharya (2017) who found poor levels of financial attitudes among racial groups such as African Americans and Hispanic Americans.

Comparative financial attitude of the practising professionals

The results from this study also suggested that in comparison to respondents' profession, majority of the respondents who are medical doctors, accountants, and lawyers have poor financial attitude, with about 69.5%, 63.2%, and 53.6%, respectively. On the contrary, the results from this study suggest that out of 47 respondents in the Engineering profession, majority (51.1%) of them have good financial attitude.

This is an indication that respondents in the Engineering profession are more likely to have good financial attitude as compared to other professions, as determined in this study. Again, when compared to finance and non-finance professionals, the descriptive findings of this study indicated that the finance professionals (n=36; 63.2%) are more likely to have poor financial attitude as compared to their counterparts (n=110; 59.5%). Note that this finding was not statistically significant.

This finding is in contrast with findings of studies such as Batty et al. (2015) and Abdullah et al. (2019) who have found that financial exposures to financial education and experience are positively related to improvements in financial attitudes.

Assessment of financial self-efficacy of the practising professionals

Overall financial self-efficacy of the practising professionals

With a total mean (M) score of 0.74 and a standard deviation (SD) of 0.437, the findings from this study revealed that majority of the respondents have good financial self-efficacy (n=180; 74.4%) whereas about (n=62; 25.6%) of the respondents have poor financial self-efficacy.

In a national survey on financial capability of Canadians, Rothwell and Wu (2017) sought to examine the impacts of financial education on financial knowledge and self-efficacy of Canadians. The study reported that financial education is a determinant for both financial knowledge and self-efficacy, Farrell et al. (2016) found Australian women to have higher levels of financial self-efficacy to be more self-assured and self-confident in their financial management capacities as evident in their leaning towards savings and investment products, as well as a less likelihood to having debt related products.

Comparative financial self-efficacy of the practising professionals

In comparison to respondents' professions, the findings from this study suggest that most of the respondents in each profession, have good financial self-efficacy, with a score range of between 66.0% and 85.4%. The descriptive results indicate that respondents who are medical doctors and lawyers are more likely to have better financial self-efficacy, with about 85.4% and 73.2%, respectively.

When comparing the respondents' total financial self-efficacy performance with respondents' professions, the descriptive findings of this study suggest that non-finance professionals (n=142; 76.8%) are more likely to have better financial self-efficacy as compared to finance professionals (n= 38; 66.7%)

While there is no existing study to support this finding, the study of Rothwell and Wu (2019) proves otherwise, as it noted that professionals that participate in financial education programme exhibit better financial self-efficacy than those who did not.

Assessment of Respondents' Financial Capability Versus Professions of the practising professionals

Overall financial capability

With a total mean (M) score of 19.81 and a standard deviation (SD) of 5.488, the findings from this study revealed that majority of the respondents (n=141; 58.3%) have low financial capability, while about (n=75; 31.0%) of the respondents have moderate financial capability, and about (n=26; 10.7%) of the study sample has high financial capability.

According to headline findings of the 2012 South African Financial Service Board baseline study, it was recorded that South Africans generally have poor levels of financial literacy and capability in decision making (Struwig et al., 2012). The findings, which were based on a survey of 2992 South Africans across diverse socio demographic groups, revealed drastically low financial literacy levels in all assessed areas of financial literacy, across all age groups.

Similarly, an investigation done by Rousseau and Venter (2016) on the financial insight, financial behaviour and financial literacy of 560 consumers in Port Elizabeth found that majority of the respondents were most informed in the areas of financial control and financial discipline, and least informed in financial planning. It was further concluded that poor financial behaviour and lack of insight is widespread among young unemployed single South Africans with a low level of education. Also, the FINRA financial capability, Lin et al. (2016) found low levels of financial capability among American youths between age range of 18 years and 34 years.

The results from this study suggested about 49.1% of accountants have low financial capability. The descriptive results indicate that respondents who are accountants are less likely to have low financial capability as opposed to their counterparts in other professions being considered. In addition, when comparing the respondents' total financial capability performance with respondents' professions, the descriptive findings of this study suggest that non-finance professionals (n=113; 61.1%) are more likely to have low financial capability as compared to finance professionals (n= 28; 49.1%).

Several similar studies have affirmed that finance professionals are more likely to be financially capable than non-finance professionals (Agarwal et al., 2017; Bačová et al., 2017; Clark et al., 2017; Nano and Mema, 2017). Also, some studies have revealed that non-finance professionals are less financially capable due to their lack of financial education, experience and exposures (Parrey and Rather, 2018; Mizell et al., 2019).

4.6.2 Research Question Two

What are the determinants of financial capability among practising professionals in KwaZulu-Natal province?

In order to answer this research question, the data was collected, and analysed based on the respective research objective and research hypothesis. Subsequently, the results of the analysis were discussed vis-à-vis reviewed literatures presented in prior chapters.

Research Objective Two: This research objective sought to assess the determinants of financial capability among practising professionals in KwaZulu-Natal province.

Hypothesis Two: The second research hypothesis for this study and its respective null hypothesis examined the financial capability of the practising professionals in KwaZulu-Natal. Thus, the research hypothesis subjected to testing was:

H2: Financial capability of Practising professionals in KwaZulu-Natal province is determined by several factors.

$H2_0$: Financial capability of Practising professionals in KwaZulu-Natal province is not determined by several factors.

The Determinants of Financial Capability among Practising Professionals in KwaZulu-Natal (Objective Two)

Although the rotation matrix results in **Table 4.11**, suggests that there are four factors that influence the financial capability of practising professionals in KwaZulu-Natal, however, the analysis of the factor structure of the determinants of financial capability among the practising professionals reveals that financial behaviour and financial knowledge are the leading factors that influence the financial capability of practising professionals in KwaZulu-Natal. This is based on the variance scores of the factor analysis as evident in Table 4.11. This finding supports the premise of the bounded rationality theory and the Capability approach.

From the perspective of the bounded rationality theory, Simon (1955) assert that individuals have bounded rationality, and when they encounter information that is either incomplete or intractable, they tend to find solutions that are adequate, rather than optimal. Furthermore, the bounded rationality theory studies the behavioural irrationalities in human decision making due to limitations in the human cognition (Altman, 2015). This theory assert that a plausible explanation for evident human Behavioural irrationalities in terms of decision making can be ascribed to bounded and limited cognitive ability, that may otherwise improve behavioural choices (Altman, 2015; Battaglio Jr et al., 2019). An individual's cognitive ability has been described as the capability to make rational decisions as a result of a conscious and critical thought process, that is influenced largely by the amount of relevant information that the individual possesses at the time of the decision making (Statman, 2019).

On the other hand, from the perspective of the capability approach, Robeyns (2017) assert that the core idea of the capability approach is built on normative questions of what individuals are capable of, and what lives they are able to lead on their own. These questions resonate among individuals, scholars and policy makers within the contexts of social justice, developmental progress and stability (Robeyns, 2017; Culp, 2019). As conceptualised by Sen (1980), the capability approach can be described as an intellectual discipline that gives a central role to the evaluation of a person's achievements and freedoms in terms of his or her actual ability to do different things a person has reason to value doing or being. The conceptualisation of the capability approach from Sen's perspective highlight that capability approach is concerned with critical aspects of individuals' lives such as their health, education and support they enjoy from social interactions (Sen, 2018).

In further extensive works on the capability approach, Nussbaum (2000) from a social interaction context, considered the capability approach as it affects human welfare and development of individuals' quality of life. This approach to capability adopted a combined perspective which considered both internal capacity and external conditions that are necessary to improve the quality of individuals' lives. She further highlighted internal capabilities to consist of individuals' skill set, ability, and knowledge in societal decision-making contexts. More so, the external capabilities comprise of opportunities that are available to such individuals in the form of access to institutions, products and services in societal decision-making contexts (Sherraden et al., 2015).

Empirically,some studies have evidenced that financial knowledge and financial behaviour are determinants of financial capability (Lusardi et al., 2017; Xiao and Porto, 2017; Strömbäck et al., 2017).

From the perspective of financial knowledge, using the U.S 2012 financial capability survey, Xiao and O'Neill (2016) researched on possible effects of financial education on financial capability. It was found that Americans consumers who are financially knowledgeable exhibit better financial capability. Also, Lusardi et al. (2017) assert that financial knowledge is a key factor in the issue of wealth inequality among Americans. This is due to the proficiencies it offers individuals to optimize efficiently limited financial resources amidst competing demands. Their study further revealed that financial knowledge as a singular factor, contributes over thirty percent in inequalities of retirement wealth among young adult.

From the perspective of financial behaviour, Xiao and Porto (2017) who considered interceding components of financial literacy, financial behaviour and financial capability, found a positive relationship between financial education, financial satisfaction, and overall financial capability. In a similar view, it was also observed that individuals' level of financial capability is largely dependent on several factors such as self-control, biographical features, financial well-being as well as their financial behaviour (Strömbäck et al., 2017).

Other existing studies have evidenced that both financial knowledge and financial behaviour are not significant in consumer financial decisions (Tang and Peter, 2015;

Friedline and West, 2016). Tang and Peter (2015) assert that financial knowledge is not a precursor for financial behaviour and long-term financial capability among young adults.

Czar (2019) researched the impact of leaving home on the financial capability of young New Zealanders between the ages of 18 and 25 years. The study found that leaving home impacts the financial capability of young New Zealanders significantly as their financial experiences improve their financial behaviours and financial confidence levels. However, the study further found that this transitional financial experience does not impact the financial knowledge of the young New Zealanders.

Wagner and Walstad (2019) assert that financial education tends to have more positive and stronger effect on both students and working individuals' long-term financial behaviours and capability. This was based on the analysis of the 2015 National Financial Capability Study (NFCS) data. The study further revealed that due to the less timely feedback of financial education, the adverse effect of not being financially knowledgeable is often only realised later in life. This is evident as lack of saving enough for retirement cannot corrected be immediately in the long term.

4.6.3 Research Question Three

Are finance related professionals more financially capable than non-finance professionals?

In order to answer this research question, the data was collected, and analysed, based on the respective research objective and research hypothesis. Subsequently, the results of the analysis were discussed vis-à-vis reviewed literatures presented in prior chapters.

Research Objective Three: This research objective sought to analyse comparatively the financial capability of finance related professionals vis-à-vis the financial capability of non-finance related professionals in KwaZulu-Natal province.

Hypothesis Three: The third research hypothesis for this study and its respective null hypothesis examined the financial capability of the practising professionals in KwaZulu-Natal. Thus, the research hypothesis subjected to testing was:

H3: There is a difference between financial capability of finance related professionals and non-finance professionals.

$H3_0$: There is no difference between financial capability of finance related professionals and non-finance professionals.

Assessment of Finance and Non-finance Professionals Financial Capability

The ANOVA (analysis of variance) results for the entire sample indicated that there is no statistical difference between finance and non-finance professionals' financial capability, where ($F=1.659$; $p=0.193$). However, using a sample statistic test, the results from this study suggested that there is a statistical difference between finance and non- finance professionals' financial capability, with ($t= 11.957$; $p= 0.000$).

The t-test results support the descriptive results of this study, which argued that finance professionals (Accountants) are less likely to have low financial capability than their non-finance counterparts in the professions of Law, Engineering and Medicine.

The results also suggested that the percentage of finance professionals who have moderate and high financial capability is greater than that of their counterparts (see Table 4.6). Thus, the findings from this study suggests that finance professionals are more financially capable compared to their non-financial counterparts – based on the t-test analysis.

The findings of the t-test analysis of this study is in consonance with studies such as (Agarwal et al., 2017; Bačová et al., 2017; Clark et al., 2017; Abdullah et al., 2019; Jana et al., 2019). While studies such as Clark et al. (2017) and Abdullah et al. (2019) noted that individuals' professional experience in finance related jobs largely affect their financial capability more than the average individual in society. Jana et al. (2019) asserted that 400 unorganised workers, having exposure to financial education, financial literacy and working in a finance related profession are all impactful on financial capability.

4.6.4 Research Question Four

How does socio demographic factors influence financial capability of practising professionals in KwaZulu-Natal province?

In order to answer this research question, the data was collected, and analysed, based on the respective research objective and research hypothesis. Subsequently, the results of the analysis were discussed vis-à-vis reviewed literatures presented in prior chapters.

Research Objective Four: This research objective sought to evaluate the influence of socio demographic variables (Gender, Age, Profession, Professional experience in practise, Highest educational qualification, Race, & Monthly Income) on the financial capability levels of practising professionals in KwaZulu-Natal province.

Hypothesis Four: The fourth research hypothesis for this study and its respective null hypothesis examined the financial capability of the practising professionals in KwaZulu-Natal. Thus, the research hypothesis subjected to testing was:

H4: Socio demographic factors will influence financial capability of practising professionals considerably in KwaZulu-Natal province.

$H4_0$: Socio demographic factors will not considerably influence financial capability of practising professionals considerably in KwaZulu-Natal province.

The Impact of Socio demographic Variables on the Financial Capability of Practising Professionals in KwaZulu-Natal (Objective Four)

The R-square for this equation was 0.130; that is 13.0% of the variance in respondents' financial capability was predictable from their socio demographic profile.

Socio demographic Variables vs Financial Capability of Practising Professionals

Gender

Although this study evidences that gender does not have a significant impact on financial capability, some studies have, however found that females across all age groups in several countries, are less financially capable than males (Bucher-Koenen et al., 2017; Chen and Garand, 2018; Lee et al., 2019). The findings of this study are in alignment with some studies that have considered the financial capability of youth and university students (Thapa, 2015; Nomlala, 2019).

Both Chen and Garand (2018) and Lee et al. (2019) found that men are more financially capable than women in national financial capability studies conducted in both Canada and America. However, in a South African study done among Accounting students in KwaZulu-Natal universities by Nomlala (2019) the researcher did not find gender to be significant.

Age

Although this study evidence that age does not have a significant impact on financial capability, some studies have found a positive link between age and financial capability (Batty et al., 2015; Xiao et al., 2015; Henager and Cude, 2016; West and Friedline, 2016). Some studies such as Loke et al. (2015) and Finke et al. (2017) have found that age does not influence financial capability of individuals.

While Xiao et al. (2015) noted poor levels of financial capability among American millennials between the ages of 18 to 34 years, Batty et al. (2015), posit that the introduction of financial topics at a formative age plays a vital role in later financial capability in adulthood. This proposition was based on study evidence that showed a link between being taught financial topics at an early age and improvements in later financial attitude, behaviour and overall financial capability. These improvements were evident as financial confidence in both short and long term financial decisions among young and old people between the age group of 18 and 65 years (Henager and Cude, 2016).

However, the findings of this study are in consonance with Loke et al. (2015) and Finke et al. (2017), who noted that financial capability of youth is not determined by their age.

Profession

Although this study evidences that profession does not have significant impact on financial capability, some studies have found a positive link between profession and financial capability (Agarwal et al., 2017; Parrey and Rather, 2018; Abdullah et al., 2019; Jana et al., 2019; Mizell et al., 2019). However, studies such as Bucher-Koenen et al. (2017) and Potocki (2019) did not evidence a relationship between profession and financial capability among millennials.

While Agarwal et al. (2017) found that finance professionals exhibited lesser chances of becoming mortgage delinquents, Parrey and Rather (2018) noted the poor level of financial knowledge among the farmers was a precursor of their financial behaviour. Financial education in the workplace can serve as an effective tool that improves financial attitude, debt management capabilities and the overall financial wellbeing of both private and public workers (Abdullah et al., 2019). The positive impact of financial literacy and financial education was further noted among unorganised workers (Jana et al., 2019) as well as students in the medical profession (Mizell et al., 2019).

However, the findings of this study aligns with studies such as Bucher-Koenen et al. (2017) and Potocki (2019) which did not evidence a relationship between profession and financial capability among millennials.

Professional experience

Although this study evidences that professional experience does not have significant impact on financial capability, some studies have found a positive relationship between professional experience and financial capability (Nano and Mema, 2017; Bačová et al., 2017; Rai et al., 2019; Ramana and Muduli, 2019). However, studies such as West and Friedline (2016) and Lee et al. (2019) did not evidence a link between professional experience and financial capability among millennials.

While Nano and Mema (2017) found that work experience of students has a positive impact in the improvement of financial behaviour of the students, Bačová et al. (2017) noted that having professional experience in finance plays a significant role in financial capability as finance professionals exhibited better understanding of financial retirement as compared to non-finance professionals. This was consistent with studies done by Clark et al. (2017) who found positive retirement plan behaviour among employees of the federal reserve system in America. Similar studies in India further noted professional experience as a predictor of financial capability among women (Rai et al., 2019) and street vendors (Ramana and Muduli, 2019).

However, the findings of this study aligns with studies such as West and Friedline (2016) and Lee et al. (2019) which did not evidence a link between professional experience and financial capability among millennials.

Education

The result of the logistic regression revealed that respondents with a Degree as their highest level of education are more likely to be financially capable than their counterparts.

The findings of this study are in alignment with several studies that have revealed that there is a subsisting connection between education and financial capability of individuals (Thapa, 2015; Bharucha, 2019; Noreen et al., 2019; Rothwell and Wu, 2019; Wagner and Walstad, 2019). However, studies such as (Idris et al., 2017; Czar, 2019; Potocki, 2019) have noted that education does not necessarily impact financial capability.

While de Bassa Scheresberg (2013) found low levels of financial capability among individuals with less education., Thapa (2015) noted that education impacts the financial capability of youths and university students in Nepal. Also, similar studies have found that educational levels and discipline have a statistical impact on financial capability among youths in India (Bharucha, 2019) as well as young adults in Pakistan (Noreen et al., 2019).

Gibson et al. (2017) stressed that financial education should be taught at different stages of life in order to improve financial capability, their study emphasised the effects of contextual factors such as mental maturity, timing and applicability of financial education, changes in financial products and services. Also, some other studies did not find education to be sufficient in predicting financial capability (Idris et al., 2017; Czar, 2019; Potocki, 2019). For instance, Czar (2019) asserts that transitional financial experiences are more likely to improve financial behaviours, financial confidence and the overall financial capability of young adults.

Race

The results equally revealed that respondents who identified themselves as Africans/Blacks are more likely to have low financial capability as compared to those from other racial groups.

The finding of this study is consistent with several studies that have revealed that there is a relationship between racial diversities and financial capability of individuals (Anong, 2016; Peach and Yuan, 2017; Gill and Bhattacharya, 2017; Nam et al., 2019; Nomlala, 2019).

While Anong (2016) assert that a plausible explanation for the generational poor levels of financial capability among African Americans could resonate with the theory of cumulative disadvantage, Peach and Yuan (2017) noted that White Americans are more likely to be financially capable than other racial categories. Another American study showed that financial knowledge plays a crucial role in financial capability among low income Hispanic families Gill and Bhattacharya (2017). This was noted in their financial attitude by having short term savings and long-term investments.

In a study done among Asian immigrants, Nam et al. (2019) noted that the poor levels of financial capability and economic insecurity can be attributed to their low-income levels, mistrust for banks and financial exclusions as reasons for not improving their financial knowledge and management skills. A South African study further affirms race as a strong predictor of financial capability among accounting students in KwaZulu-Natal (Nomlala, 2019).

However, some studies such as Bucher-Koenen et al. (2017) and Parrey and Rather (2018) have noted that racial diversities do not necessarily impact financial capability.

Income

Although this study does not show any statistical relationship between income of respondents and their financial capability, some studies have found a positive link between income and financial capability (de Bassa Scheresberg, 2013; Thapa, 2015; Arifin, 2017; Lee et al., 2019; Potocki, 2019; Riitsalu and Murakas, 2019). However, some studies such as Chen and Garand (2018) and Noreen et al. (2019) did not evidence a relationship between income and financial capability among millennials.

While Thapa (2015) noted that income is a significant determinant of financial capability among university students, de Bassa Scheresberg (2013) found low levels of financial capability among young adults with less education and income levels.

Similarly, Lee et al. (2019) noted that American millennials who earned higher income are more financially capable and prepared for emergency occurrences than those who earned less. Potocki (2019) suggested that financial capability of low-income earners is not necessarily influenced by financial literacy levels, but rather by social and environmental factors.

However, the findings of this study aligns with studies such as Chen and Garand (2018) and Noreen et al. (2019) which did not evidence a relationship between income and financial capability among millennials.

4.7 Summary of chapter

The prime purpose of this chapter of the study was to analyse and interpret the collated data on the financial capability of practising professionals in KwaZulu-Natal and discuss the findings of the analysis vis-à-vis other relevant studies. Hence this chapter commenced by providing the necessary clarifications on the sample realisation as well as the scale reliability. Subsequently, the realised sample was analysed descriptively using tables, charts and graphs to provide a vivid representation of the bio-data assessment of the finance professionals. Thereafter, the inferential analysis was performed using the necessary tests, correlations and regression techniques based on the hypothesis of the study. Finally, the interpreted results of the study were further discussed vis-à-vis relevant theories and literatures that were reviewed prior in the study.

CHAPTER FIVE

CONCLUSION, FINDINGS, AND RECOMMENDATIONS

5.1 Introduction

The overall aim of this research study was to assess and establish the financial capability of practising professionals in KwaZulu-Natal province. This was done by considering the overall financial capability as well as the componential financial capability. In furtherance to this, this study considered the financial capability of the professionals vis-à-vis their socio demographic characteristics.

This final chapter of the research study provides the conclusion, findings and suggested recommendations based on the findings of the research study. In this chapter, summaries of findings and chapters are discussed, as well as perceived limitation of the study and a general conclusion. Thereafter, the main findings, implications, contributions and recommendations are discussed, and suggestions for future research studies are ideated.

5.2 Summary of findings

The core aim of this research study was to provide meaningful insights on the financial capability of practising professionals in KwaZulu-Natal, in aggregate and componential perspectives. Hence, this study sought to determine levels of financial capability (knowledge, behaviour, attitude & self efficacy) among finance and non-finance practising professionals in KwaZulu-Natal province of South Africa vis-à-vis their socio demographic characteristics. The socio demographic features considered the professionals' gender, age, profession, professional experience in practise, highest educational qualification, race, & monthly income. The researcher devised a structured questionnaire that was used as a research instrument to survey 242 practising professionals in the KwaZulu-Natal province. The data collected from the survey was further analysed descriptively and inferentially with the aid of several statistical applications contained in the SPSS software (Version 25.0). The statistical applications used included: charts, graphs, Analysis of Variance (ANOVA), t-test, correlation, Principal Component Analysis (PCA) and regression analysis. These were used to establish the levels of financial capability, determine the leading factors/components that drive financial capability, as well as the relationship between socio demographic variables and financial capability of practising professionals in the KwaZulu-Natal province.

The research study established an overall low level of financial capability among the finance professionals. From a componential perspective, it was further established that most of the finance professionals have low financial knowledge, good financial behaviour, poor financial attitude and good financial self-efficacy. Also, based on both the descriptive and t-test analysis, a statistically significant difference was found between the financial capability of finance related professionals and non-finance related professionals. More so, the Principal Component Analysis (PCA) revealed that financial knowledge and financial behaviour are the leading factors and influencers of financial capability among the finance professionals. Finally, the research study evidenced that education and race are the only socio demographic factors that impact the financial capability of of practising professionals in the KwaZulu-Natal province.

5.3 Summary of Chapters

Chapter One: Introduction and Overview

This chapter of the study has presented an introduction and overview of the research study. The chapter commenced by discussing the concept of financial capability critically. This assisted in the identification of the research gap and the motivation for the study. Upon this, the research aim, objectives, significance, questions, and hypotheses were clarified. Lastly, the research scope and methodology were discussed and highlighted respectively.

Chapter Two: Review of Theoretical and Empirical Literatures

This chapter considered the definitions of financial capability, its relative theories and relevant empirical literatures. Herein, several conceptualisations of financial capability were considered and relative theories such as the Behavioural finance theory, Bounded rationality as well as the Capability approach were considered. In addition, necessary local and international empirical literatures were reviewed and further considered vis-à-vis socio demographic perspectives.

Chapter Three: Research Methodology

This chapter of the research study provided the necessary framework for the research methodology which was used to achieve the objectives of the study. Herein, different types of research approaches were discussed, and justification was made for the selection of a quantitative research approach. Furthermore, the research methods used for the study were also clarified and justified, with in-depth discussions on the research instrument, the questionnaire, the pilot study, and the reliability and validity of the research instruments. Finally, clarification and justification regarding the research sample, data collection, data analysis and ethical considerations were provided and simplified by means of tables where necessary.

Chapter Four: Data Analysis, Interpretation and Discussion of Findings

The prime purpose of this chapter of the study was to analyse and interpret the collated data on the financial capability of practising professionals in the KwaZulu-Natal and discuss the findings of the analysis vis-à-vis other relevant studies. Hence this chapter commenced by providing the necessary clarifications on the sample realisation as well as the scale reliability. Subsequently, the realised sample was analysed descriptively using tables, charts and graphs to provide a vivid representation of the bio-data assessment of the finance professionals. Thereafter, the inferential analysis was performed using the necessary tests, correlations and regression techniques based on the hypothesis of the study. Finally, the interpreted results of the study were further discussed vis-à-vis relevant theories and literatures that were reviewed prior in the study.

Chapter Five: Conclusion and Recommendations

This chapter of the study provides a general summary of the entire research study. In this chapter, the main findings of the study, summary of chapters, conclusions, implications, contributions and recommendations are discussed. Furthermore, the limitation of the study and suggestions for future research are considered herein.

5.4 Limitation of the study

This research study is hampered by several limitations and constraints which were primarily caused by time, scope and financial impediments. Firstly, this generalisation of this research study may be limited by the population size, as the target population (KwaZulu-Natal) is not a true sample representation of practising professionals in South Africa. Secondly, based on the selection of the target population, majority of the practising professionals that participated in the research study are resident in eThekwini Municipality of KwaZulu-Natal. Although, the researcher utilised an online survey method with other data collection methods, it was observed that many of the respondents that were interested in the study are residents of eThekwini Municipality. Lastly, this research study considered practising professionals within four main professions only, and many other professions were not included within the scope of the study especially in the field of Humanities, Social sciences and Arts, were not considered.

5.5 Conclusion

The primary aim of this research study was to evaluate the overall and componential levels of financial capability (knowledge, behaviour, attitude & self efficacy) among finance and non-finance practising professionals in KwaZulu-Natal province their socio demographic characteristics. Hence, it was necessary to first evaluate the financial capability of the practising professionals in both general and componential perspectives. This was prior to evaluating the impact of socio demographic characteristics, as well as the relationship among intra component factors of financial capability - financial knowledge, financial behaviour, financial attitude & financial self efficacy.

The research study revealed that practising professionals in KwaZulu-Natal province have an overall low financial capability with a mean score of 19.81. The descriptive analysis further revealed that majority of the professionals (58.3%) have low financial capability; while about (31.0%) of the professionals have moderate financial capability, and about only (10.7%) of the professionals have high financial capability. While the study found (58.3%) of the professionals to have low level of financial capability, of this percentage, (61.3%) were non-finance professionals and only (49.1%) were finance professionals. This implied that finance professionals are less likely to have low levels of financial capability in comparison to non-finance professionals. Findings from the intra-componential analysis revealed low financial knowledge, good financial behaviour, poor financial attitude and good financial self-efficacy among the practising professionals.

With consideration to the impact of socio demographic variables on financial capability of practising professionals in KwaZulu-Natal province, this study concludes that there is a statistically significant relationship between the highest level of education and financial capability of practising professionals in KwaZulu-Natal province. In addition, the study found a statistically significant relationship between the race and financial capability of practising professionals in KwaZulu-Natal province. These findings were based on the results of the regression analysis. This conclusion implies that professionals with a degree qualification are more likely to be financially capable, and professionals who fall under the African/Black category, are less likely to be financially capable.

5.6 Main findings, Implications, contributions and recommendations

The focus of this research study was to achieve the following research objectives:

1. To determine the levels of financial capability (knowledge, behaviour, attitude & self efficacy) among practising professionals in KwaZulu-Natal province.
2. To determine the factors that impact the financial capability of practising professionals in KwaZulu-Natal province.
3. To analyse comparatively the financial capability of finance related professionals vis-à-vis the financial capability of non-finance related professionals in KwaZulu-Natal province.
4. To evaluate the influence of socio demographic variables (gender, age, profession, professional experience in practise, highest educational qualification, race, & monthly income) on the financial capability levels of practising professionals in KwaZulu-Natal province.

Thus, summaries of the main findings, implications, contributions and recommendations is provided in the subsequent section vis-à-vis objectives.

5.6.1 First objective

The first objective of this research study was to determine the levels of financial capability among practising professionals in KwaZulu-Natal province. This was achieved by considering the professionals' financial knowledge, financial behaviour, financial attitude and financial self efficacy via a structured questionnaire.

In general, it was found via the mean score that majority of the professionals have poor financial capability. This was evident as 58.3% of the professionals exhibited low financial capabilty. To arrive at the financial capability of the professionals, the financial knowledge, financial behaviour, financial attitude and financial self efficacy of the professionals were tested. Using a relevant set of questions. Thereafter, the financial capability levels of the professionals were ranked in stratas of low financial capability (a total score of ≤ 49%), moderate financial capability (a total score of between 50% – 69%) and high financial capability (a total score of ≥ 70%). Based on this classification, the findings from this study revealed that majority of the respondents (n=141; 58.3%) have low financial capability, while about (n=75; 31.0%) of the respondents have moderate financial capability, and about (n=26; 10.7%) of the study sample has high financial capability. In comparison to respondents' professions, the descriptive findings of this study suggested that most of the respondents who are lawyers, medical doctors and engineers have low financial capability, with a score range of 51.1% to 67.9%. Furthermore, the results from this study suggested about 49.1% of accountants have low financial capability. Here, the descriptive results indicate that respondents who are accountants are likely to have low financial capability as opposed to their counterparts in other professions. In addition, when comparing the respondents' total financial capability performance with respondents' professions, the descriptive findings of this study suggested that non-finance professionals (n=113; 61.1%) are more likely to have low financial capability as compared to finance professionals (n= 28; 49.1%).

Furthermore, from a componential perspective, the study analysed the professionals' financial knowledge, financial behaviour, financial attitude and financial self efficacy. Hence, on financial knowledge; the study found most of the professionals (n=195; 80.6%) to have poor financial knowledge, while about (n=42; 17.4%) of the respondents have moderate financial knowledge, and only about (n=5; 2.1%) of the study sample have high financial knowledge. On financial behaviour, the study revealed that most respondents (n=155; 64.0%) have good financial behaviour as compared to the (n=87; 36.0%) of those who have poor financial behaviour. On financial attitude, the descriptive results of this study suggest that most of the respondents (n=146; 60.3%) has poor financial attitude as compared to those with good financial attitude (n=96; 39.7%). On financial self efficacy, the findings from this study revealed that majority of the respondents have good financial self-efficacy (n=180; 74.4%) whereas about (n=62; 25.6%) of the respondents have poor financial self-efficacy.

5.6.2 Second objective

The second objective of this research study was to assess the determinants of financial capability among practising professionals in KwaZulu-Natal province. This was achieved by considering how the professionals' financial knowledge, financial behaviour, financial attitude, and financial self efficacy affect their overall financial capability by a principal component analysis.

Based on the Factor analysis, the rotation matrix tested the four factors (financial knowledge, financial behaviour, financial attitude and financial self efficacy) that affect financial capability of individuals. However, an analysis of the factor structure of the determinants influencing the financial capability of practising professionals in KwaZulu-Natal province. **Table 4.11** reveals that financial behaviour and financial knowledge are the leading factors that influence the financial capability of practising professionals in KwaZulu-Natal. This analysis is based on the variance scores of test results.

Thus, even though the overall analysis in **Table 4.11** confirmed that there are four factors that influence the financial capability of practising professionals in KwaZulu-Natal, an in-depth analysis noted that financial behaviour and financial knowledge are the principal factors that determine financial capability of practising professionals in KwaZulu-Natal province.

This finding made by the study has been affirmed by several existing literatures that have opined that financial knowledge and financial behaviour, as evident in the understanding of basic financial concepts as well as exhibiting good behavioural tendencies in financial decisions play a crucial role in improving capabilities and cognitive Behavioural impediments. This is further affirmed by theories such as the bounded rationality theory and the capability approach. This novel finding implies that financial knowledge and financial behaviour are the fundamental determinants of financial capability among practising professionals in KwaZulu-Natal. Hence, this study recommends that while all four components of financial capability of practising professionals in KwaZulu-Natal should be improved, necessary attention and efforts via intercessory measures should be targeted at improving financial knowledge and financial behaviours of the professionals.

5.6.3 Third objective

The third objective of this research study was to analyse comparatively the financial capability of finance related professionals vis-à-vis the financial capability of non-finance related professionals in KwaZulu-Natal province of South Africa.

Although the ANOVA (analysis of variance) results indicated that there is no statistical difference between finance and non- finance professionals' financial capability, findings from the t-test results aligns with the descriptive results which evidence that finance professionals (Accountants) are less likely to have low financial capability than their non-finance counterparts in the professions of Law, Engineering, and Medicine. This means that professionals in finance related fields such as Accountants are more likely to be financially capable in making optimal decisions, than professionals in non-finance related fields such as Law, Engineering and Medicine.

This finding is supported by several existing literatures that have suggested that financial exposures such as trainings, education and experience play a significant role in improving cognitive behavioural limitations and capabilities. This is further corroborated by theories such as the bounded rationality theory and the capability approach. The implication of this could mean that being a professional and well learned is not necessarily a fool proof measure for being capable of making optimal financial decisions that can bear both short- and long-term consequences. Hence, this study recommends targeted interventions and efforts to be made to improve the financial capability of professionals, especially professionals outside the field of the finance related profession.

5.6.4 Fourth objective

The fourth objective of this research study was to evaluate the influence of socio demographic variables (gender, age, profession, professional experience in practise, highest educational qualification, race, & monthly income) on the financial capability levels of practising professionals in KwaZulu-Natal province.

This research study established that there is a statistically significant relationship between some socio demographic variables and the financial capability of practising professionals in KwaZulu-Natal province. While the study did not find any statistically significant relationship between financial capability of the professionals and socio demographic variables such as gender, age, profession, professional experience in practise & monthly income, evidences from the regression analysis showed that educational qualification and race are statistically significant. The result of the regression analysis showed that professionals with a degree as their highest level of education are more likely to be financially capable than their counterparts. Also, the study further noted that professionals who identified themselves as Africans/Blacks are more likely to have low financial capability as compared to those from other racial groups. The implication of these findings is that professionals with higher educational qualifications are more likely to be financially capable. Also, it is implied that professionals within the African/Black racial group are more prone to making poor financial decisions based on their low level of financial capability. Thus, this research study recommends that measures to improve financial capability among professionals should pay more attention to professionals within these identified groups.

5.7 Suggestions for future research

Although this research study explored the financial capability of practising professionals in KwaZulu-Natal province, as a novel study with original contribution to the body of knowledge to the South African literatures, this research study informs a new path for future creative and interesting studies within the South African context.

For future study considerations, this study can be expanded to explore financial capability of practising professionals in other provinces in South Africa. This will help to analyse comparatively the findings and evidences of this research study vis-à-vis findings and evidences of studies done in other provinces.

Also, for future study considerations, this research study can be expanded to consider financial capability of professionals outside the fields of Finance, Law, Engineering, and Medicine. To do this, practising professionals in the fields of Arts, Humanities and Social Sciences can be considered.

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APPENDIX A: QUESTIONNAIRE

FINANCIAL CAPABILITY SURVEY

This research survey is intended to evaluate the financial capability of practising professionals in KwaZulu-Natal province of South Africa. Kindly spend the next few minutes to answer the questions from Section A-E. the researcher will appreciate your correct and complete answer to help successfully fulfil the requirements for a Master of Commerce degree.

Please be informed that all provided information will be held confidential as it is not mandatory to provide your name. Also, we further assure you that all provided information will be utilised for the purpose of the research study only and all ethical responsibilities of the researcher will be duly observed.

Thank you for cooperation

Researcher

QUESTIONNAIRE

SECTION A: SOCIO DEMOGRAPHIC DATA

Please fill the appropriate answers in the corresponding boxes.

1. **Gender**

2. **Age**

3. **Profession**

4. **Professional experience (years)**

5. **Highest level of Education (Degree, Diploma or Post Graduate)**

6. **Race or ethnic background**

7. **Please tick your monthly allowance that you receive from all sources**

Less or Equal R10000	R10001 to R20000	R20001 to R30000	R30001 to R40000	R40001-R50000	R50000 and above

SECTION B: SCALE ON FINANCIAL KNOWLEDGE

1. Which of the following types of investment would best protect the purchasing power of a family's savings in the event of a sudden increase in inflation?

   (a) A 10-year bond issued by a corporation.
   (b) A certificate of deposit at a bank.
   (c) A twenty-five year corporate bond.
   (d) A house financed with a fixed-rate mortgage.

2. Inflation can cause difficulty in many ways. Which group would have the greatest problem during periods of high inflation that last several years?

   (a) Older, working couples saving for retirement.
   (b) Older people living on fixed retirement income.
   (c) Young couples with no children who both work.
   (d) Young working couples with children.

3. Under which of the following circumstances would it be financially beneficial to you to borrow money to buy something now and repay it with future income?

   (a) When you need to buy a car to get a much better paying job.
   (b) When you really need a week vacation/holiday.
   (c) When some clothes you like go on sale.
   (d) When the interest on the loan is lower than the interest, you get on your savings.

4. Hlengiwe has saved R12, 000 for her university expenses by working part-time. Her plan is to start university next year and she needs all of the money she saved. Which of the following is the safest place for her university money?

   (a) Locked in her closet/safe/money box at home.
   (b) Shares.
   (c) Corporate bonds.
   (d) A bank savings account.

5. Your take home pay from your job is less than the total amount you earn. Which of the following best describes what is taken out of your total pay?

   (a) Unemployment Insurance Fund (UIF) and Medical contributions.
   (b) Receiver of Revenue income tax, property tax, and Medical and UIF contributions.
   (c) Receiver of Revenue income tax, UIF and Medical contributions.
   (d) Receiver of Revenue income tax, VAT, and UIF contribution.

6. Many young people receive medical aid benefits through their parents. Which of the following statements is true about medical aid coverage?

   (a) You are covered by your parents' medical aid until you marry, regardless of your age.
   (b) If your parents become unemployed, your medical aid coverage may stop, regardless of your age.

(c) Young people do not need medical aid because they are so healthy.
(d) You continue to be covered by your parents' medical aid as long as you live at home, regardless of your age.

7. **Bomi must borrow R12, 000 to complete his university education. Which of the following would NOT be likely to reduce the finance charge rate?**

(a) If he went to a government university rather than a private university.
(b) If his parents co-signed the loan.
(c) If his parents took out an additional mortgage on their house for the loan.
(d) If the loan was insured by the South African Government NSFAS.

8. **Helen and Cyril just had a baby. They received money as baby gifts and want to put it away for the baby's education. Which of the following tends to have the highest growth over periods of time as long as 18 years?**

(a) Cheque account	(b) Shares	(c) RSA. Govt. savings bond	(d) Savings account

9. **Jacob and Mandy are the same age. At age of 25, Mandy began saving R2, 000 a year while Jacob saved nothing. At age 50, Jacob realized that he needed money for retirement and started saving R4, 000 per year while Mandy kept saving her R2, 000. Now they are both 75 years old. Who has the most money in his or her retirement account?**

(a) They would each have the same amount because they put away the same.
(b) Jacob, because he saved more each year.
(c) Mandy, because she has put away more money.
(d) Mandy, because her money has grown for a longer time at compound interest.

10. **Julius and Fikile work together in the finance department of the same company and earn the same pay. Fikile spends his free time taking work-related classes to improve his computer skills; while Julius spends his free time socializing with friends and working out at a fitness centre. After five years, what is likely to be true?**

(a) Julius will make more because he is more social.
(b) Julius will make more because Fikile is likely to be laid off.
(c) Julius will make more money because he is more valuable to his company.
(d) Julius and Fikile will continue to make the same money.

11. **Mbale has just applied for a credit card. She is an 18-year-old high school girl with few valuable possessions and no credit history. If Barbara is granted a credit card, which of the following is the most likely way that the credit card company will reduce its risk.**

(a) It will make Mable's parents pledge their home to repay Mbale's credit card debt.
(b) It will require Mbale to have both parents co-sign for the credit card.
(c) It will charge Mbale twice the finance charge rate it charges older cardholders.

(d) It will start Mbale out with a small line of credit to see how she handles the account.

12. Which of the following is the best description of a budget?

(a) An accounting spreadsheet
(b) Spending as little as you possibly can
(c) A plan for what you earn and what you spend
(d) Knowing where all your money goes

13. Which of the following credit card users is likely to pay the GREATEST rand amount in finance charges per year, if they all charge the same amount per year on their cards?

(a) Jessica, who pays at least the minimum amount each month and more, when she has the money.
(b) Vera, who generally pays off her credit card in full but occasionally, will pay the minimum when she is short of cash.
(c) Megan, who always pays off her credit card bill in full shortly after she receives it.
(d) Erin, who only pays the minimum amount each month.

14. If you went to university and earned a three/four-year degree, how much more money could you expect to earn than if you only had a matric certificate?

(a) About 10% more.
(b) No more, I would make about the same either way.
(c) Just about 20% more.
(d) A lot more; about 70% more.

15. Kiran needs to take out R50 cash for the weekend and also pay for his groceries. Generally, which of the following ways would John pay the least in baking fees and costs?

(a) get out enough cash from a bank teller to pay for the groceries and for the weekend
(b) pay using EFTPOS at the supermarket and take out cash at the same time
(c) write a cheque for the groceries and request cash at grocery store
(d) go to the ATM to take out the cash

16. Matt has a good job on the production line of a factory in his hometown. During the past year or two, the country in which Matt lives has been raising taxes on its businesses to the point where they are much higher than in neighboring countries. What effect is this likely to have on Matt's job?

(a) Higher business taxes will cause more businesses to move into Matt's country, raising wages.
(b) Higher business taxes cannot have any effect on Matt's job.

(c) Matt’s company may consider moving to a lower-tax country, threatening Matt’s job.
(d) He is likely to get a large raise to offset the effect of higher taxes.

SECTION C: SCALE ON FINANCIAL BEHAVIOUR

Indicate how often you do the following by indicating **never (1), slightly sometimes (2), very often (3), or always (4).**	Never (1)	Sometimes (2)	Very often (3)	Always (4)
(a) Paying expenses on time.				
(b) Being responsible for my financial future.				
(c) has the debit/credit card been declined for insufficient funds				
(d) reading bank account regularly				
(e) paying more than minimum amount on my credit/store card				
(f) checking your bank balance				
(g) following a budget every time I spend				
(h) checking of outstanding balance on all cards (credit & clothing store)				
(i) keeping emergency fund of at least one month’s living expenses				
(j)shop around for the best prices				

SECTION D: SCALE ON FINANCIAL ATTITUDE

Indicate how often you do the following by indicating **never (1), sometimes (2), very often (3), or always (4).**	Never (1)	Sometimes (2)	Very often (3)	Always (4)
(a) paying bills on time.				
(b) in control of my finances and sticking to the budget.				
(c) creating a budget and following the budget.				
(d) reviewing my bank balance often.				
(e) reading my bank statement regularly.				
(f) contributing to a retirement fund if you had steady income.				
(g) saving money where you can.				
(h) shop around for best the interest rate before taking a loan.				
(i) checking of credit/loan/student balance often.				
(j) taking insurance for a valuable asset.				
(k) keep money where it can grow.				
(l) shop around for the best prices.				
(m) filing your tax return annually.				

SECTION E: SCALE ON FINANCIAL SELF EFFICACY

For the following questions, please indicate how your behavioural attitude would agree or disagree with each statement by ticking the corresponding box, where: **(SD) = Strongly Disagree; (D) =Disagree; (A) = Agree; (SA) = Strongly Agree.**	**SD**	**A**	**SA**	**SA**
(a) It is hard to stick to my spending plan when unexpected expenses arise.				

(b) It is challenging to make progress toward my financial goals.				
(c) When unexpected expenses occur, I usually have to use credit.				
(d) When faced with a financial challenge, I have a hard time figuring out a solution.				
(e) I lack confidence in my ability to manage my finances.				
(f) I worry about running out of money in retirement.				

APPENDIX B: ETHICAL CLEARANCE LETTER

UNIVERSITY OF
KWAZULU-NATAL
INYUVESI
YAKWAZULU-NATALI

10 September 2019

Miss Thembisa Vanesa Mngadi (208513991)
School Of Acc Economics & Fin
Westville Campus

Dear Miss Mngadi,

Protocol reference number: HSSREC/00000338/2019
Project title: Financial Capability of Practicing Professionals: a Comparative analysis of finance and non finance professional's financial capability.

Full Approval – Expedited Application

This letter serves to notify you that your application received on 28 August 2019 in connection with the above, was reviewed by the Humanities and Social Sciences Research Ethics Committee (HSSREC) and the protocol has been granted **FULL APPROVAL**

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number. PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

This approval is valid for one year from 10 September 2019.
To ensure uninterrupted approval of this study beyond the approval expiry date, a progress report must be submitted to the Research Office on the appropriate form 2 - 3 months before the expiry date. A close-out report to be submitted when study is finished.

Yours sincerely,

Dr Rosemary Sibanda (Chair)

/spm

Humanities & Social Sciences Research Ethics Committee
Dr Rosemary Sibanda (Chair)
UKZN Research Ethics Office Westville Campus, Govan Mbeki Building
Postal Address: Private Bag X54001, Durban 4000
Website: http://research.ukzn.ac.za/Research-Ethics/

Founding Campuses: Edgewood Howard College Medical School Pietermaritzburg Westville

INSPIRING GREATNESS

APPENDIX C: TURNITIN REPORT

Financial Capability of Practicing Professionals in KZN - Thembisa Mngadi-Theses

ORIGINALITY REPORT

13%	6%	0%	12%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	Submitted to University of KwaZulu-Natal Student Paper	4%
2	Submitted to University of Wales Institute, Cardiff Student Paper	1%
3	Submitted to Stourbridge College Student Paper	1%
4	Submitted to International Islamic University Malaysia Student Paper	1%
5	eprints.uthm.edu.my Internet Source	1%
6	mro.massey.ac.nz Internet Source	1%
7	Submitted to Glasgow Caledonian University Student Paper	1%
8	eprints.utm.my Internet Source	1%

9	chss.uonbi.ac.ke Internet Source	1%
10	Submitted to Mancosa Student Paper	<1%
11	www.ijhssnet.com Internet Source	<1%
12	Submitted to Ateneo de Davao University Student Paper	<1%
13	www.forbes.com Internet Source	<1%

Exclude quotes	On	Exclude matches	< 5 words
Exclude bibliography	On		