NELSON MANDELA UNIVERSITY

DEPARTMENT OF BUSINESS MANAGEMENT

FACULTY OF BUSINESS AND ECONOMIC SCIENCES

ASSESSING THE FINANCIAL ATTITUDE, FINANCIAL BEHAVIOUR AND FINANCIAL WELL-BEING OF NELSON MANDELA UNIVERSITY STUDENTS

BY

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DECLARATION:

In accordance with Rule G5.6.3, I hereby declare that the above-mentioned treatise/dissertation/thesis is my own work and that I have not previously been submitted to another University or for another qualification

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DATE: 1 OCTOBER 2021

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ABSTRACT

The purpose of this study is to conduct literature and empirical research to assess the financial attitude, financial behaviour and the financial well-being of Nelson Mandela University students and to determine whether there are differences based on selected demographic variables. Data was collected from 500 respondents using questionnaires at Nelson Mandela University and 484 questionnaires were deemed usable for this study. The results suggest a positive association between financial attitude, financial behaviour and financial well-being, with the association between financial attitude and financial behaviour, and financial attitude and financial well-being being slightly weaker than the relationship between financial behaviour and financial well-being. The study also shows that there are differences in financial attitude, financial behaviour and financial well-being based on demographics, with ethnicity and geographic area making up the most differences between the three financial literacy components. Theoretical and applied implications are provided.

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BACKGROUND AND INTRODUCTION TO THE STUDY

1.1 INTRODUCTION

The large majority of South African consumers are inadequately insured, highly leveraged with debt and own few or no assets (Ssebagala 2017:235). This increases their chances of being exposed to severe indebtedness, unsystematic risk and defaulting on loans and equities (Ssebagala 2017:235). South Africans also lack a comprehensive savings culture which leads to a reliance on debt for day-to-day expenses and use more debt than what they are able to save (Rootman and Antoni 2015:475). This is a result of South African adults' lack of financial literacy which leads them to make ineffective and incompetent personal financial decisions (Kotze and Smit 2008:157). Several studies (Roberts *et al.* 2014:4; Beal and Delpachitra 2010:65; Vitt, Anderson, Kent, Lyter, Siegenthaler and Ward 2000:2) have reported that financial literacy is not restricted to the knowledge of financial concepts but also includes the awareness, attitude, behaviours and skills to make sound personal financial decisions in order to achieve personal financial well-being. Rai, Dua and Yadav (2019:52) define financial attitude as the positive or negative feelings that an individual has towards financial matters. These inclinations dictate how an individual feels about their personal finances and in turn influences how they make financial decisions such as how risk tolerance dictates the amount of financial risk an individual is willing to take on. The financial attitude of an individual influences thus their financial behaviour (Ameliawati and Setiyani 2018:811).

Stolper and Walter (2017:617) state that individuals who are less financially literate tend to make poor financial decisions. A poor financial attitude can lead to poor financial behaviour such as overspending, not budgeting or not paying financial commitments on time and can result in poor financial well-being (Sugiyanto, Radianto, Efrata and Dewi 2019:353). Hasibuan and Lubis (2018:504) define financial behaviour as the way in which an individual manages, treats and uses his or her personal financial resources. Rai *et al.* (2019:53) adds that financial behaviour is human behaviour that is relevant to money management and financial decision-making such as the timeous payment of financial liabilities, regular saving and developing an appropriate budget. Good financial behaviours results in an individual being wealthier, therefore, increasing the individual's perceptions of financial well-being (Iramani and Lutfi 2021:698).

Osman, Madzlan and Ing (2018:58) state that financial well-being refers to the outcome of an individuals' personal financial practices, including their attitude towards money, their financial literacy, and the way in which they manage their financial resources. Drever, Odders-White, Kalish, Else-Quest, Hoagland and Nelms (2015:13-14) define financial well-being as an individual's ability to have control over their personal finances by absorbing financial shocks, being on track with their financial goals, and having the financial freedom to make choices that will allow the individual to live an enjoyable life. In order to attain financial well-being, individuals need to either adopt or dispose of certain financial behaviours that will help them reach that goal. Impulsive spending and risky borrowing or the use of credit for daily expenses can also negatively impact an individual's financial well-being. However, saving and planning for the future can increase the levels of financial well-being for an individual (Kempson, Finney and Christian 2017:12-13).

According to Mngomezulu, Dhunpath and Munro (2017:133) majority of South African households find it challenging to support a dependent at university using their own income, without any additional financial assistance. As a result, the South African government introduced a student bursary and loan scheme, called the National Student Financial Aid Scheme (NSFAS) (Ramavhea, Fouche and van der Walt 2017:49). NSFAS operated as a loan until December 2017, and since 2018 it has been a bursary scheme offering financial support to students who do not have the means to pay for their tuition (Cloete 2020). The scheme offers financial aid to students who are unable to pay for their studies at tertiary institutions by paying for their tuition fees, accommodation costs, books and food allowance (Ramavhea *et al.* 2017:49).

Students can also apply for bursaries offered by many state-owned and private companies in various specialist fields (Ruzicka 2018). The terms of bursaries differ, certain bursaries require the student to pay back the bursary by working for the company offering the bursary and other bursaries do not require the student to work for the company to 'pay back' the bursary and exist purely to financially aid those in need (Old Mutual 2021). However, students who receive assistant funding and bursaries tend to lack the experience of handling money and the ability to handle it responsibly (Mngomezulu, Dhunpath and Munro 2017:139). Ameliawati and Setiyani (2018:813) report that students with financial assistance or bursaries still mismanage the funds they receive monthly. Poor financial behaviours by students causes them to worry about their personal finances which results to a decreased sense of financial well-being (Setiyani and Solichatun 2019:453).

It is, therefore, important to start teaching personal finance earlier on in an individual's life (Fox 2021). According to Gregg Murset, co-founder and CEO of BusyKid, the main reason it is important to teach personal finance from a younger age is that a foundation for understanding personal finance should start as early as primary school since financial skills will influence most financial decisions done in adulthood (Marchello 2019). Prior research on financial literacy report that there is a large heterogeneity in financial literacy across the population, documenting that different demographic groups are at a further disadvantage by lacking financial education (Stolper and Walter 2017:581; Rai *et al.* 2019:51). To achieve financial well-being an individual needs to be exposed to good financial attitudes and financial behaviours (Shim, Xiao, Barber and Lyons 2009:720). The way in which a guardian imparts personal financial values and positive financial expectations, can contribute to the child's understanding of good financial attitudes and good financial behaviours (Shim *et al.* 2009:720).

1.2 PROBLEM DEFINITION

South African consumers suffer from high levels of debt and depleted savings (Kotze and Smit 2008:157). Every household's financial well-being has a direct impact on the economic stability of a country it resides in (Momentum 2018). South Africa has a high unemployment rate and the households' debts far exceed their disposable income, which causes concern on whether the average South African individual is prepared for unforeseen financial setbacks (Momentum 2018). Bhattacharya and Gill (2020:253) report that financial attitudes are linked with a university student's willingness to take on more debt. Osman *et al.* (2018:63) reports that poor personal financial management can lead to serious consequences such as stress due to financial hardship, inability to pay off debts, poor credit rating and repossession of assets.

Positive financial attitudes and positive financial behaviours not only improve financial satisfaction but also improve an individual's overall well-being (Zulfiqar and Bilal 2016:98; Osman *et al.* 2018:63). Assessing students' financial attitude, financial behaviour and financial well-being will provide insight on the future financial well-being of the next set of professionals that will be entering the labour force and contributing to the economy. Assessing students' financial attitude, financial behaviour and financial well-being is of great concern taking into consideration that students are the future participants of an economy vulnerable to a local resurgence of the pandemic (Ramavhea *et al.* 2017:48).

1.3 RESEARCH OBJECTIVES

The research objectives of the study, namely the primary, secondary and methodological objectives, are presented below.

1.3.1 PRIMARY RESEARCH OBJECTIVE

The primary objective of the study is to assess the financial attitude, financial behaviour and the financial well-being of Nelson Mandela University students and to determine whether there are differences based on selected demographic variables.

1.3.2 SECONDARY RESEARCH OBJECTIVES

The following secondary research objectives are prepared to address the primary research objective:

SO^1: To conduct an extensive literature review that will assist in developing a measure to assess the financial attitude, financial behaviour and financial well-being of Nelson Mandela University Students.

SO^2: To determine whether there are differences in the financial attitude, financial behaviour and financial well-being of Nelson Mandela University students based on selected demographic variables.

1.3.3 METHODOLOGICAL RESEARCH OBJECTIVES

To achieve the secondary research objectives, the following methodological research objectives are presented:

MO¹: To conduct an in-depth literature review on the nature and importance of financial attitude, financial behaviour and financial well-being and the demographic variables that may have an influence on these factors among university students.

MO²: To develop an appropriate research design and methodology that will address the research problem and achieve the objectives of the study.

MO³: To collect and analyse primary data using questionnaires to gather information on the financial attitude, financial behaviour and financial well-being of Nelson Mandela University students.

MO⁴: To provide appropriate conclusions and recommendations on the findings of the study to students and other stakeholders on how to improve the financial attitude, financial behaviour and financial well-being of students.

1.4 SIGNIFICANCE OF THE RESEARCH

By investigating the financial attitude of NMU students, insights can be provided into the aspects that create a negative attitude towards personal financial matters, so that measures can be put in place to change the perception of financial matters and improve negative attitudes. In addition, by investigating the financial behaviours of NMU students, negative financial behaviour such as overspending or not paying financial commitments on time can be identified and remedies created to improve financial behaviour among students. Finally, by investigating the over-all financial well-being of NMU students, measures can be put in place to assist students with financial planning or financial coaching as part of university orientation where negative financial well-being is identified.

1.5 STRUCTURE OF THE STUDY

Figure 1.2 provides a framework of the research process utilized in this study. The primary objective of this study is to assess financial attitude, financial behaviour and financial well-being of Nelson Mandela University (NMU) students and to determine whether there are differences based on selected demographic variables. The research problem of this study was used to formulate the objectives of the study. The secondary objectives are formulated to describe how the primary objective will be achieved. The methodological objectives provide a practical outline of how the study will be executed. Each chapter of the study has an expected outcome.

Figure 1.2: Framework of the research process

PRIMARY OBJECTIVE	SECONDARY OBJECTIVES	METHODOLOGICAL OBJECTIVES	EXPECTED OUTCOME
The primary objective of this study is to assess financial attitude, financial behaviour and financial well-being of NMU students and to determine whether there are differences based on selected demographic variables.	**SO_1:** To conduct an extensive literature review that will assist in developing a measure to assess the financial attitude, financial behaviour and financial well-being of NMU students.	**MO_1**: To conduct an in-depth literature review on the nature and importance of financial attitude, financial behaviour and financial well-being and the demographic variables for university students and the demographic factors that have an influence on these factors.	**Chapter Two:** A literature review on financial attitude, financial behaviour and financial well-being
	SO_2: To determine whether there are differences in the financial attitude, financial behaviour and financial well-being of NMU students based on selected demographic factors.	**MO_2**: To develop an appropriate research design and methodology that will address the research problem and achieve the objectives of the study.	**Chapter Three:** Research design and methodology
		MO_3: To collect and analyse primary data using questionnaires to gather information on the financial attitude, financial behaviour and financial well-being of NMU students.	**Chapter Four:** Empirical results
		MO_4: To provide appropriate conclusions and recommendations on the findings of the study to students and other stakeholders on how to improve the financial attitude, financial behaviour and financial well-being of students	**Chapter Five** Summary, conclusions and recommendations

Source: Researchers' own construction

CHAPTER TWO

A LITERATURE REVIEW ON FINANCIAL ATTITUDE, FINANCIAL BEHAVIOUR AND FINANCIAL WELL-BEING

2.1 INTRODUCTION

Chapter Two provides the literature review of the nature and importance of the financial attitude, financial behaviour and financial well-being of South African students and also the influence demographics have on financial attitude, financial behaviour and financial well-being. Hypotheses are also developed to determine if there are any differences in the financial attitude, financial behaviour and financial well-being of Nelson Mandela University students based on selected demographic variables

2.2 THE NATURE AND IMPORTANCE OF FINANCIAL ATTITUDE, FINANCIAL BEHAVIOUR AND FINANCIAL WELL-BEING

It is important for individuals to understand the factors that influence their financial well-being such as financial attitudes and financial behaviours, by understanding these factors individuals will be able to manage their finances better which will help them achieve financial well-being (Chikezie and Sabri 2017:287). In this section, the nature and importance of financial attitude, the nature and importance of financial behaviour and the nature and importance of financial well-being will be discussed in detail.

2.2.1 THE NATURE AND IMPORTANCE OF FINANCIAL ATTITUDE

Financial attitude is defined as an individual's mind-set towards their personal finances and the issues that they might face concerning their finances (Caronge, Mediaty, Fattah and Khaeril 2019). Yuliani, Fuadah and Taufik (2020:357) defines financial attitude as psychological traits found in an individual when interpreting everything in his or her life in relation to personal finances. It is important for an individual to have a positive attitude towards their finances, especially in an era of dynamic financial markets and unpredictable economic environments (Mudholkar 2013). A positive attitude to personal finances can encourage an individual to plan for short-term and long-term financial goals in order to reach financial satisfaction and prosperity (Yuliani *et al.* 2020:357).

In an economy that is rising with unemployment levels and recovering from the impact of the COVID-19 lockdown, most individuals are financially strained, especially middle-class South Africans (Moyo 2020). This has resulted in individuals using savings to make monthly payments (Moyo 2020). During the COVID-19 pandemic, Kunst (2020) reports that 50 percent of South African (18 to 64 years) agreed that they were well informed about their financial situation while approximately 47 percent of the individuals stated that they were concerned about their finances during the same period. According to Sugiyanto *et al.* (2019:354) financial attitude influences the financial management behaviour of students. A positive financial attitude will have a positive impact on an individual's financial management behaviour. A good financial attitude enables students to make more responsible financial choices and to manage their finances better (Ameliawati and Setiyani 2018:819).

2.2.2 THE NATURE AND IMPORTANCE OF FINANCIAL BEHAVIOUR

Financial behaviour is defined as the way in which an individual or household manages financial resources such as investments, insurance, savings, and budget planning (Hasibuan *et al.* 2018:504). The financial attitude an individual forms and continuously nurtures about their finances makes the individual act in a particular way and therefore defines his or her financial behaviour (Vikram 2020). An individual needs to engage in sound financial behaviours through effective financial decision-making that will allow them to achieve their personal financial goals (Rousseau and Venter 2016:241). South Africans use debt to cope with extreme financial pressures, which is apparent in the continued rise in credit card advances and the fact that South Africans spent more than two thirds of their gross income to service debt in 2019 (Sidaki 2020). According to Mudzingiri, Mwamba and Keyser (2018:11), financial behaviour is dependent on the level of an individual's financial literacy, which implies that highly financially literate individuals are better equipped to achieve better financial goals that they have set for themselves.

Sugiyanto *et al.* (2019:354) state that financial literacy had a significant effect on the financial behaviour of students. South African students, in particular, tend to show low levels of financial literacy, which implies that they are unable to make sound financial decisions or manage their personal finances on their own (Ramavhea *et al.* 2017:51). Therefore, university students need to be conscious of the financial decisions and financial behaviours they partake in since this will dictate whether they achieve financial well-being or not (Susilowati, Latifah and Jariyah 2017:7468).

2.2.3 THE NATURE AND IMPORTANCE OF FINANCIAL WELL-BEING

Chavali, Raj and Ahmed (2021:274) defines financial well-being as a sense of security an individual has in their personal finances. Individuals with a good financial well-being have the ability to meet required current and future financial obligations with little to no pressure compared to individuals with a poor financial well-being (Dickason-Koekemoer and Ferreira 2019:1). A low propensity to save and excessive consumer debt still persists in South Africa despite increased social and financial costs of doing so (Hyland, Sebastian and Seetharam 2021:1). As a result, poor financial well-being continues to be a social issue for South Africa (Hyland et al. 2021:1). The average South African individual is struggling to manage their personal finances and it has been evident before the pandemic (Alexander Forbes Investments 2021). A student’s financial well-being is influenced by their financial attitude and financial behaviour, therefore having positive financial attitude and financial behaviour allows a student to attain financial well-being (Setiyani and Solichatun 2019:452). Financial well-being of students is important since it will affect how comfortable they are with their personal finances after graduation (Setiyani and Solichatun 2019:452).

2.3 DEMOGRAPHIC FACTORS THAT INFLUENCE FINANCIAL ATTITUDE, FINANCIAL BEHAVIOUR AND FINANCIAL WELL-BEING

The importance and nature of the three aspects of financial literacy have been discussed in the previous section. The following section will examine any possible differences that demographics, namely gender, financial education, income levels, ethnicity, marital status, geographic area, age and employment status have on financial attitude, financial behaviour and financial well-being. Thereafter, the research hypotheses will be discussed.

2.3.1 GENDER AND FINANCIAL ATTITUDE, FINANCIAL BEHAVIOUR AND FINANCIAL WELL-BEING

Bottazi and Lusardi (2016:2) state that there are gender differences in all developing and developed economies. Gender appears to be a significant aspect related to financial literacy (Khadoya and Khan 2020:6-7; Robb and Woodyard 2011:62). Women typically have a more positive attitude towards long term financial planning than men (Atkinson and Messy 2012:44; Rai *et al.* 2019:52). Women are also more risk-averse than men and are less confident when making financial decisions (Greimel-Fuhrmann and Silgoner 2018:1779). Robb and Woodyard (2011:62) reports that women are more likely to make use of sound financial practices, but they also tend to have lower levels of financial knowledge than men. According to Kirbis, Vehovec and Galic (2017:170), men ranked higher on financial knowledge and financial satisfaction, while women ranked higher on overall personal well-being. Women reported to experience financial well-being when they experienced a desirable financial status such as high household income and assets, whereas men viewed financial well-being as accumulated financial knowledge (Kirbis *et al.* 2017:170). Therefore, given the differences in the financial attitude, financial behaviour and financial well-being of different genders, the following hypothesis is presented:

H[1]: There is a difference between the *financial attitude, financial behaviour and financial well-being* of Nelson Mandela University students based on their *gender.*

2.3.2 FINANCIAL EDUCATION AND FINANCIAL ATTITUDE, FINANCIAL BEHAVIOUR AND FINANCIAL WELL-BEING

Before the existence of the first banks and savings accounts, individuals relied on their families and friends' experience and advice on how to manage their money (Moskovska 2021). Furthermore, financial education was transferred from one generation to another in the form of financial tips and advices from trusted sources such as family, friends and eventually financial institutions (Moskovska 2021). The goal of financial education is to increase financial literacy levels by providing financial knowledge, positive financial attitudes, and the ability to apply what is taught in the form of financial skills that can bring about positive changes in individuals' money management behaviours (Gray, Sebstad, Cohen and Stack 2010). Acquiring financial education can liberate individuals from being overwhelmed by their personal finances and empower them (Cohen 2010). Negative financial attitudes lead to poor financial behaviours and decreased financial well-being. Therefore, Bhattacharya and Gill (2020:253) suggests that financial education encourages a positive financial attitudes. Furthermore, financial education provides students with financial knowledge and financial skills that will help them make more informed financial decisions in the future (Bruhn, Leao, Legovini, Marchetti and Zia 2011). Students from under-privileged schools are less likely to perform at an academic standard that would offer them opportunities to be educated at tertiary institutions that might allow them to advance their careers and in turn their overall financial well-being (Susswein 2020). Therefore, based on the aforementioned literature, the following hypothesis is presented:

H^2: There is a difference between the *financial attitude, financial behaviour and financial well-being* of Nelson Mandela University students based on their *financial education*.

2.3.3 INCOME LEVELS AND FINANCIAL ATTITUDE, FINANCIAL BEHAVIOUR AND FINANCIAL WELL-BEING

Financial literacy can be gained by individuals at all income levels since it does not have an impact on their ability to form attitudes that are favourable to their own financial well-being (OECD 2013:60). Zahn, Anderson and Scott (2006:55) state that in a comparison of low-income level individuals with high-level income individuals, the low-income level individuals are less likely to own bank accounts and invest or save their incomes, this is due to the fact that most low-income level individuals are excluded from financial access (Hasan, Le and Hoque 2021:2). Therefore, financial literacy is mostly prevalent among high income earners than low income earners (Al-Bahrani, Weathers and Patel 2018:582). A low income is often viewed as an explanation for certain financial behaviours such as borrowing to pay debts and make ends meet, and also used as an excuse not to save or make long term financial plans (OECD 2013:60). Individuals with higher incomes are most likely to gain financial knowledge on their own while those with low incomes found it costly or did not have the same incentives to do so (Wagner 2019:2). Consequently, individuals with higher incomes tend to meet their short-term financial obligations such as paying their bills on time, paying their credit card in full each month, and also making their mortgage payments on time (Wagner and Walstad 2018:259). Therefore, given the differences in the financial attitude, financial behaviour and financial well-being of individuals in different income levels, the following hypothesis is presented:

H^3: There is a difference between the *financial attitude, financial behaviour and financial well-being* of Nelson Mandela University students based on their *different income levels.*

2.3.4 ETHNICITY AND FINANCIAL ATTITUDE, FINANCIAL BEHAVIOUR AND FINANCIAL WELL-BEING

There is a noticeable gap in financial literacy among different ethnic groups (Mokhtar, Sabri and Ho 2020:1083). South Africa suffers from high levels of racism, poverty and inequality which is attributed to centuries of conflict between indigenous Africans and white settlers (Mthanti 2017). As a result of such conflict, Black people have been treated unequally and unfairly for generations regarding the acquisition and exposure to financial literacy and have been denied equal opportunities to build a solid financial foundation (Susswein 2020:1). According to Wagner and Walstad (2018:243), White people tend to display more desirable financial behaviours than other ethnic groups in South Africa. One of the reasons why the racial financial literacy gap exists is due to the poor access to financial education that is faced by some ethnic groups (Al-Bahrani *et al.* 2018:573). Black students, as reported by a study on Perry, Steinbaum and Romer (2021), tend to finance their tuition through debt. This is evident by the amount of debt owed to former black universities that cater to the poorest aspirant graduates, with most of the debt associated to historically disadvantaged people such as black people (Donelly 2012). Ethnicity has also been reported to be indirectly related to financial satisfaction (Joo and Grable 2004:41; Ferreira 2019:42). Ferreira (2019:42) also reports that there is a strong possibility that ethnicity influences an individual's financial behaviour, therefore having an influence on an individual's overall financial well-being. Therefore, based on the aforementioned literature, the following hypothesis is presented:

H4: There is a difference between the *financial attitude, financial behaviour and financial well-being* of Nelson Mandela University students based on their *ethnicity.*

2.3.5 MARITAL STATUS AND FINANCIAL ATTITUDE, FINANCIAL BEHAVIOUR AND FINANCIAL WELL-BEING

Rousseau and Venter (2016:240) report that people who are married or cohabiting demonstrate better savings behaviour and tend to be more confident with their finances than people who are divorced or single. Married couples also tend to pool their income and savings, accumulate more assets, and utilize consumer debt more than single individuals do (Dew 2008:338). Married females prefer lower levels of financial risks than married men, whereas single males had a more positive attitude to financial risk than married males (Shusha 2017:71). Households with more financial dependents and the presence of young children negatively affect financial well-being (Wilmarth 2012:14). It was also found that financial independence within a marriage increased both the spouse's financial well-being (Lersch 2017:14). Therefore, based on the foregoing literature, the following hypothesis is presented:

H5: There is a difference between the *financial attitude, financial behaviour and financial well-being* of Nelson Mandela University students based on their *marital status.*

2.3.6 GEOGRAPHIC AREA AND FINANCIAL ATTITUDE, FINANCIAL BEHAVIOUR AND FINANCIAL WELL-BEING

Jorgensen, Foster, Jensen and Vieira (2017:70) found that there is a difference in financial attitudes and responsible financial behaviours across locations. Huat, Geetha and Mohidin (2010:214) reports that individuals who live in urban areas are more likely to purchase financial instruments than individuals living in rural areas. The difference in living expenses between individuals in urban areas and rural areas shows the difference in financial perception and behaviour across geographic locations (Huat *et al.* 2010:214). Nanziri and Leibbrandt (2018:7) report that provinces with higher levels of positive financial attitudes and financial behaviours are linked to lower levels of poverty while those with lower positive financial attitudes and financial behaviours are among the poorest. Furthermore, provinces such as KwaZulu-Natal and Eastern Cape show poor financial attitude and financial behaviour among traditional dwellers, followed by urban informal settlers and rural settlers, resulting to decreased financial well-being (NDA 2014:57). Therefore, given the differences in the financial attitude, financial behaviour and financial well-being of individuals in different geographic areas, the following hypothesis is presented:

H⁶: There is a difference between the *financial attitude, financial behaviour and financial well-being* of Nelson Mandela University students based on *different geographic areas.*

2.3.7 AGE AND FINANCIAL ATTITUDE, FINANCIAL BEHAVIOUR AND FINANCIAL WELL-BEING

An individual's financial attitude and financial behaviour varies based on different age groups. According to Xiao, Chen and Sun (2015:387) young adults (18-24 years old) exhibit lower levels of financial literacy and older adults demonstrate higher levels of financial literacy especially in terms of displaying better financial behaviours. Older individuals may have also learned from experience after years of continual financial decisions mistakes and observing those of other individuals (Fong, Koh, Mitchell and Rohwedder 2021:2). Millennials (1982-1999) are known to have better financial attitudes which in turn demonstrates good financial behaviour in managing their money (Dewi, Febrian, Effendi and Anwar 2020:32). In contrast, Bauer, Collins and Richardson (2017:31) state that comparing millennials with Gen-Xers (1961-1981), millennials show a lower level of financial literacy. Henager and Cude (2016:4-5) reports that millennials were more familiar with financial behaviours such as saving, budgeting and spending as opposed to borrowing, paying, and investing. Most baby boomers (1946-1960) and Gen-Xers associate the words "investment" and "risk" with "uncertainty" and "inconvenience" while millennials associate the words with "opportunity" (Anastasia, Setiadiwiria, Kunto 2019:16). Consequently, most investments are associated with millennials, followed by generation X and lastly, baby boomers (Anastasia *et al.* 2019:16). Therefore, based on the preceding literature, the following hypothesis is presented:

H[7]: There is a difference between the *financial attitude, financial behaviour and financial well-being* of Nelson Mandela University students based on their *age cohorts.*

2.3.8 EMPLOYMENT STATUS AND FINANCIAL ATTITUDE, FINANCIAL BEHAVIOUR AND FINANCIAL WELL-BEING

Muir, Hamilton, Noone, Marjolin, Salignac and Saunders (2017:31) reports that employment has a significant impact on individuals' financial well-being since the income they receive makes it easier for them to cover their expenses and acquire assets. Nearly half of full-time employees find it difficult to meet their expenses on time each month (PWC 2016:1). However, part-time employees are reported to experience decreased financial stress since they adjust their spending to their income (Maverick 2021). Fransman (2014:5) reports that women employed part-time were generally as financially secure as those employed full-time. Unemployment tends to have a negative impact on an individual's financial well-being (Muir *et al.* 2017:31). Although unemployed individuals suffer a loss of income, its impact on the individual's financial well-being varies depending on whether the individual has other income sources, such as income-generating assets, savings and unemployment insurance (Ahn, Garcia and Jimeno 2004:1). Therefore, given the differences in the financial attitude, financial behaviour and financial well-being of individuals with different employment status, the following hypothesis is presented:

H[8]: There is a difference between the *financial attitude, financial behaviour and financial well-being* of Nelson Mandela University students based on their *employment status.*

2.4 SUMMARY OF THE CHAPTER

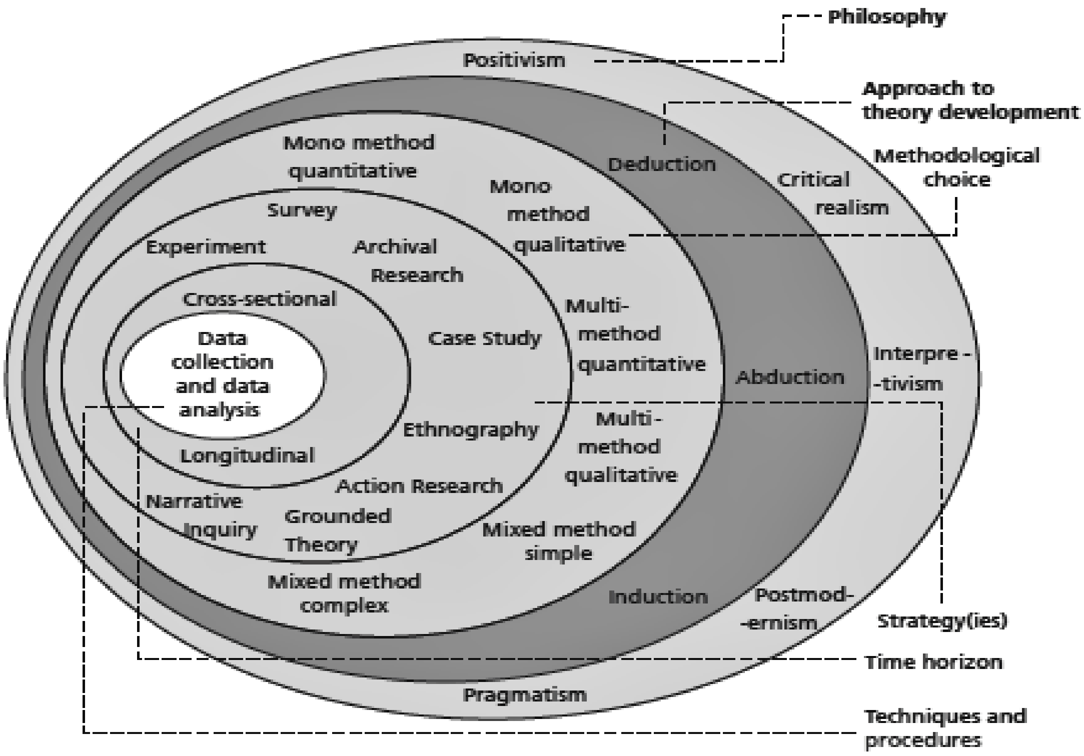
The purpose of chapter two was to provide a literature review on the nature and importance of financial attitude, financial behaviour and financial well-being of South Africans and South African students, the selected demographic factors that influence financial attitude, financial behaviour and financial well-being which consists of gender, financial education, income levels, ethnicity, marital status, geographic area, age and employment status. Furthermore, the hypotheses for each demographic variable was formulated.

CHAPTER THREE
RESEARCH DESIGN AND METHODOLOGY

3.1 INTRODUCTION

Chapter Three of the study provides the research design and methodology of the study. The research design and methodology of the study will be discussed in the context of Saunders, Lewis and Thornhill (2009:108) research onion which explains that the research process can be considered a layer of an onion (Figure 3.1).

Figure 3.1: The research onion



Source: Saunders *et al.* 2019:130.

The research design and philosophy will thus be discussed in the context of Saunders *et al.* (2019) research onion.

3.2 RESEARCH PHILOSOPHY

A research philosophy is defined by Saunders *et al.* (2019:130) as a set of beliefs and assumptions about the nature of a particular field of study and the development of knowledge in that particular field of study. There are five research paradigms that Saunders *et al.* (2019:131) outlines, namely pragmatism, postmodernism, interpretivism, critical realism, and positivism. **Positivism** focuses on the identification of causal relationships through quantitative approaches, where empirically based findings from large sample sizes are favoured (Park, Konge and Artino 2020:690). Positivism assists researchers with a clear understanding of the observed objects by means of empirical tests and methods such as sampling, questionnaires, measurements, focus group discussions (Pham 2018). Therefore, the positivism research philosophy is well-suited for this research as the study aims to determine and measure the relationship that is apparent between financial attitude, financial behaviour and financial well-being, and selected demographics of students.

3.3 RESEARCH APPROACH TO THEORY DEVELOPMENT

The extent to which the study is concerned with theory building and theory testing dictates the approach that is used for the research project (Saunders *et al.*, 2019:152). There are two contrasting approaches namely an inductive or deductive and an approach that combines both approaches which is known as the abductive approach. This study will adopt a **deductive approach** to theory development since existing theories relating to financial attitude, financial behaviour and financial well-being will be tested in a different context specifically among university students.

3.4 METHODOLOGICAL CHOICE

The manner in which the scientific approach to conducting research (data collection, data analysis, and data interpretation) is realised is referred to as the research methodology and can be either qualitative, quantitative or a combination of qualitative and quantitative (Zait and Zait, 2009:907). Since the positivism paradigm leads to a systematic and scientific approach to research, it is usually associated with a quantitative methodology (Mukherji and Albon 2009:9). As per Saunders *et al.*

(2019:151) there are six methodological choices. A mono-method methodological choice uses one method of data collection, and one subsequent method of data analysis. The study makes use of the **mono-method quantitative methodological choice** since a single quantitative data collection method (questionnaires) will be used to analyse quantitative data (descriptive and inferential statistics).

3.5 RESEARCH STRATEGY

A research strategy is the overall plan for how a research study will be conducted (Johannesson and Perjons 2014:39). A researcher is guided by the research strategy to plan, execute and monitor the study using research methods for data collection such as interviews, focus groups, observations, and questionnaires (Johannesson and Perjons, 2014:39-40). **Survey** research refers to the information collected from a sample of individuals from their responses to the questions asked (Check and Schutt, 2011:160). Quantitative surveys are used to collect data about an issue or phenomenon in numerical form and are usually used to approve or disprove a hypothesis and use quantitative data collection methods such as questionnaires to gather information (Apuke 2017:41; Harden 2019). This study employs a quantitative survey as its research strategy, making use of questionnaires to collect and analyse large amounts of numerical data (Saunders *et al.* 2019:189).

3.6 TIME HORIZON

The time horizon of a study refers to the time frame in which the research will be conducted and can either be cross-sectional or longitudinal time frames (Melnikovas 2018:38). A longitudinal time horizon refers to data being gathered at two different points of time as in the duration of the study and the cross-sectional time horizon refers to data being gathered at a specific point in time. This study uses a **cross-sectional time horizon** as data will be collected from Nelson Mandela University students about their financial attitude, financial behaviour and financial well-being at a specific point in time.

3.7 TECHNIQUES AND PROCEDURES FOR DATA COLLECTION

Bhandari (2020) defines data collection as a systematic process of gathering measurements or observations. Data collection allows the researcher to gain original insights regarding their research problem (Bhandari, 2020). Primary data and secondary data are the two types of research data that can be collected. These two techniques for data collection will be further discussed, together with the population and sample, the sampling method, and the sample size.

3.7.1 SECONDARY DATA COLLECTION

Secondary data is defined as information that is collected from existing sources such as journal articles, books, book sections, reports, and reputable sites, among others (Kabir, 2016:205). Secondary data was collected to conduct a literature review that assisted in the understanding of existing theoretical research about the financial attitude, financial behaviour, and financial well-being of South Africans citizens as well as that of South African university students. Secondary data will be collected from electronic databases such as SAGE and SEALS which is accessible from the Nelson Mandela University library.

3.7.2 PRIMARY DATA COLLECTION

Primary data refers to data that has been collected by the researcher by means of surveys, interviews, experiments, designed for understanding and solving the research problem (Wagh 2021). This study will make use of **questionnaires** as its method of primary data collection to collect data from Nelson Mandela University students on their financial attitude, financial behaviour and financial well-being.

3.7.3 POPULATION AND SAMPLE

The population of interest is defined as the population in which a researcher intends to study and draw conclusions from (Majid 2018:3). From that population a sample is derived in order for the researcher to generalize the findings of the study from the sample to the whole population of interest (Majid 2018:3). The population that will be observed in this study are the 28 342 undergraduate and postgraduate students of Nelson Mandela University that were registered during the 2020 academic year.

3.7.4 SAMPLING METHOD

In order to address the research questions, it is sometimes impossible to collect data from the entire population, thus, a need to select a sample arises (Taherdoost 2016:18). Sampling methods are broadly classified as non-probability or non-random sampling, which is a technique where the sample selection is based on factors other than just random chance, and probability or random sampling, which is a technique where the probability of choosing each sample is equal (Jha 2017). In this study, the sample will be selected using the **convenience sampling** which is one of the subsets of non-probability sampling. Convenience sampling is a method used to collect samples by taking samples that are conveniently located and readily available around a location or Internet service (Edgar and Manz 2017:393-404). Convenience sampling is a favoured sampling technique among research done with students since it is inexpensive and an easy option compared to other techniques (Taherdoost 2016:22). Therefore criterion sampling will also be used to select individuals or groups who meet the research criteria, will be used to select the sample for the research (Omona 2013:180).

3.7.5 SAMPLE SIZE

The sample size reflects the number of obtained responses from the questionnaires distributed (Taherdoost, 2016:26). The focus is on the number of complete responses rather than the number of questionnaires distributed. In order to make sure that minimum samples are met, a researcher needs to increase the sample size by approximately 50 percent in the initial distribution of the questionnaires (Barlett, Kotrlik and Higgins 2001:44). For the purpose of this study a sample size of a minimum of 200 respondents and a maximum of 500 respondents will be sought in order to ensure that a sufficient amount of data is collected (Memon, Hwa,Ting, Ramayah, Chuah, Cham 2020:8). Thus for this study, 500 questionnaires will be sent out to the chosen sample for data collection.

3.8 TECHNIQUES AND PROCEDURES FOR DATA ANALYSIS

The aim of data analysis is to solve the underlying trends, relationships, and patterns of a research's contextual situation (Albers, 2017:215). Data analysis allows researchers to use statistical tests as a tool to develop conclusions from the data (Albers, 2017:215). LoBiondo-Wood and Haber (2014:311) add that descriptive statistics refers to procedures that allow researchers to conceptualize and summarize data. These statistics include measures of central tendency, such as mode, median, and mean; measures of viability such as standard deviation and range (LoBiondo-Wood and Haber, 2014:311). LoBiondo-Wood and Haber (2014:311) defines inferential statistics as procedures that enable researchers to estimate how reliable their predictions are and generalize their findings based on the data collected. Sutanapong and Louangrath (2015:31) defines inferential statistics as using the sampled descriptive statistics to make predictions or estimations of the overall population. Descriptive statistics will be used to describe the data collected from the sample and the inferential statistics will be used in this study to generalize the data captured from the sample to the whole population of Nelson Mandela University students. Pearson Product Moment correlation coefficients will be used to determine whether there is a relationship between financial attitude, financial behaviour and financial well-being. Analysis of variance (ANOVA) will be used to determine whether there are differences between the financial attitude, financial behaviour and financial well-being based on the selected demographic variables (Kenton and Walters 2021).

3.9 RELIABILITY AND VALIDITY

Reliability and validity are used to demonstrate and communicate the thoroughness of the research processes and also the trustworthiness of the findings of the research (Roberts and Priest 2006:41). Reliability refers to the consistency of a measure and its ability to be repeatable over time, under different circumstances, and across different researches (Drost 2011:106). According to Tavakol and Dennick (2011:54), the most widely used objective measure of reliability is the **Cronbach's Alpha** which measures the internal consistency of a scale or test and is expressed as a number between 0 and 1. Values close to 1 show that the investigated factors can be measured (Mohamad, Sulaiman, Sern, Salleh 2015:165). The Cronbach's Alpha coefficient value of 0.60 will be used to measure the test of reliability (Ursachi, Horodnic and Zait 2015:681). Validity is described as the extent to which a concept is measured accurately in quantitative research (Heale and Twycross 2015:66). **Exploratory Factor Analysis** is used for the investigation of validity in cases where the relationships amongst variables are unknown (Atkinson, Rosenfeld, Sit, Mendoza, Fruscione, Lavene, Shaw, Li, Hay, Cleeland, Scher, Breitbart, Basch 2011:563). In this study an exploratory factor analysis with a factor of 0.50 is used to assess the suitability of the respondent data.

3.10 ETHICAL CONSIDERATIONS

The protection of human subjects is paramount through the application of appropriate principles in any research (Arifin, 2018:30). Subjects have the right to giver or retract consent, subjects should be able to grasp what is asked from them, and the subjects involved should be competent enough to consent (Arifin, 2018:30). In conducting this study, participants will have the right to participate or refuse to partake. No physical or psychological harm will be done to any individual while conducting this research. The questionnaires that will be used are written in a simple manner that will allow all participating individuals to comprehend what is being asked. Participants will not be forced to complete the questionnaires even after starting the process. The completion of the questionnaires will be determined by the individuals' free will while also retaining their anonymity. The questionnaire that will be used for this study were taken through the NMU Research Ethics Committee (REC-H) process, it was submitted to the Faculty Postgraduate Studies Committee (FPGSC) for approval, the Research Capacity Development (RCD) for screening and the REC-H granted ethical clearance with the reference number: H19-BES-BMA-054.

3.11 SUMMARY OF THE CHAPTER

This chapter provided the research design and methodology which consist of the research philosophy, approach to theory development, methodological choice, research strategy, time horizon, techniques and procedures for data collection, techniques and procedures for data analysis, reliability and validity and ethical considerations.

CHAPTER FOUR
FINDINGS OF THE STUDY

4.1 INTRODUCTION

The research design and methodology adopted for this study was outlined in chapter three. This included, among other sub-topics, a discussion on techniques and procedures for data collection in which a description of the sample used is outlined. The main objective of Chapter Four is to present and report on the findings of the analysed data.

4.2 DESCRIPTION OF THE SAMPLE

A total of 484 questionnaires were deemed usable for the study. In section A of the questionnaire the demographic data of the 484 respondents is described. The demographic information consists of the exposure respondents have to financial programmes, the demographic information of the respondents that relates their biographic details and lastly, the academic information of the respondents.

4.2.1 EXPOSURE TO FINANCIAL PROGRAMMES

The first set of questions in Section A established respondents' exposure to financial programmes. Table 4.1 depicts the depicts the exposure that Nelson Mandela University students have to financial programmes by inquiring whether the respondents have participated a financial education programme and if they were a member of or attended one of the Nelson Mandela University (NMU) Financial Planning Society events. A large percentage (80.37%) indicated that they had not participated in a financial education programme while only 4.96 percent indicated that they are a member of or attend any events of the NMU Financial Planning Society.

Table 4.1: Results on the exposure to financial programmes

Financial education programme participation	Frequency	Percentage
Yes	95	19.63
No	389	80.37
Total	**484**	**100.00**

NMU Financial Planning Society member or attendee	Frequency	Percentage
Yes	24	4.96
No	460	95.04
Total	**484**	**100.00**

Source: Calculated from questionnaire results

4.2.2 DEMOGRAPHIC INFORMATION OF THE RESPONDENTS

Section A of the questionnaire further requested demographic information from the respondents including their age cohorts, gender, ethnicity, nationality, province, marital status, type of area, average monthly income, employment status and employment tenure(Table 4.2). In terms of age, Generation Z (20 and 25 years old) accounted for the majority of the sample (58.88%) and the age cohorts in the minority consisted of Generation Y (20.66%), Generation Z (younger than 19) at 16.94%, Generation X (3.31%), and the Baby Boomers at 0.21 percent. Female respondents were in the majority constituting 52.27 percent of the sample. The majority of the sample were Black respondents (67.98%), followed by White (15.91%), Coloured (10.54%), Asian/Indian respondents (2.27%) and other ethnic groups (0.41%). Respondents who are of South African Nationality made up 96.28 percent of the sample and the majority of the respondents (67.77%) were from Eastern Cape.

Table 4.2: Demographic information

Age	Frequency	Percentage
Generation Z (younger than 19) – teenagers	82	16.94
Generation Z (20 to 25) - young adults	285	58.88
Generation Y (39 to 25)	100	20.66
Generation X (55 to 40 years old)	16	3.31
Baby Boomers (older than 56)	1	0.21
Total	**484**	**100.00**
Gender	**Frequency**	**Percentage**
Male	231	47.73
Female	253	52.27
Total	**484**	**100.00**
Ethnicity	**Frequency**	**Percentage**
White	77	15.91
Black	329	67.98
Coloured	51	10.54
Asian / Indian	11	2.27
Other	2	0.41
Prefer not to say	14	2.89
Total	**484**	**100.00**
Nationality	**Frequency**	**Percentage**
South African	466	96.28
Non-South African	18	3.72
Total	**484**	**100.00**

Province	Frequency	Percentage
Eastern Cape	328	67.77
Western Cape	37	7.64
Gauteng	34	7.02
Free State	28	5.79
Kwazulu-Natal	28	5.79
Limpopo	14	2.89
Mpumalanga	7	1.45
North West	3	0.62
Northern Cape	2	0.41
Prefer not to say | did not indicate	3	0.62
Total	**484**	**100.00**

Source: Calculated from questionnaire results

Table 4.2 further depicts that majority of the respondents revealed their marital status as single (94.42%), and that most of the respondents lived in urban formal settlements (47.93%), or in urban informal settlements (22.73). Majority of the respondents (23.55%) reported an average monthly income between R1 001 – R1 500, followed by those earning R1 501 – R2 000 (14.67%).Majority of the respondents reported that they were unemployed (80.17%), and the employment tenure of the respondents showed that 82.64 percent of the respondents were either employed or unemployed for less than 1 year, 13.84 percent between 1 to 10 years, 1.86 percent between 11 to 20 years, 1.03 percent between 21 to 30 years and 0.62 percent for more than 30 years.

Table 4.2: Demographic information (continued)

Marital status	Frequency	Percentage
Single	457	94.42
Married	26	5.37
Civil Union	1	0.21
Total	**484**	**100.00**
Type of area	**Frequency**	**Percentage**
Urban formal	232	47.93
Urban informal	110	22.73
Rural formal	97	20.04
Rural informal	45	9.30
Total	**484**	**100.00**
Average monthly income	**Frequency**	**Percentage**
R0 - R500	55	11.36
R501 - R1 000	53	10.95
R1 001 - R1 500	114	23.55
R1 501 - R2 000	71	14.67
R2 001 - R2 500	44	9.09
R2 501 - R3 000	24	4.96
R3 001 - R5 000	40	8.26
R5 001 - R10 000	19	3.93
R10 001 - R15 000	14	2.89

R15 001 - R20 000	15	3.10
More than R20 000	16	3.31
Prefer not to say	19	3.93
Total	**484**	**100.00**
Employment status	**Frequency**	**Percentage**
Unemployed	388	80.17
Part-time employment	57	11.78
Fulltime employment	39	8.06
Total	**484**	**100.00**
Employment tenure	**Frequency**	**Percentage**
Unemployed or employed for less than 1 year	400	82.64
1 to 10 years	67	13.84
11 to 20 years	9	1.86
20 to 30 years	5	1.03
More than 30 years	3	0.62
Total	**484**	**100.00**

Source: Calculated from questionnaire results

4.2.3 ACADEMIC INFORMATION OF THE RESPONDENTS

Table 4.3 shows that the majority of the respondents in the observed sample were in the second year of study (27.27%), followed by those in the first year (25.21%), and third year (23.14%). Respondents who attended lectures at South Campus constituted 48.55 percent of the sample, followed by those who attended at the North Campus (24.17%). Most of the respondents belonged to the Business and Economic Sciences faculty (38.22%), followed by those in Engineering, the Built environment and Technology faculty (19.21%), the Humanities faculty (13.64%).

Table 4.3: Academic information

Year-level	Frequency	Percentage
1st year	122	25.21
2nd year	132	27.27
3rd year	112	23.14
4th year (for 4-year qualifications)	37	7.64
Advanced Diploma	16	3.31
Postgraduate Diploma	15	3.10
Honours	21	4.34
Masters	20	4.13
Doctorate	8	1.65
Prefer not to say | did not indicate	1	0.21
Total	**484**	**100.00**
Campus where lectures are attended	**Frequency**	**Percentage**
South Campus	235	48.55
North Campus	117	24.17
2nd Avenue Campus	94	19.42
Ocean Sciences Campus	5	1.03
Missionvale Campus	4	0.83
George Campus	29	5.99
Total	**484**	**100.00**

Faculty	Frequency	Percentage
Humanities	66	13.64
Business and Economic Sciences	185	38.22
Education	24	4.96
Engineering, the Built environment and Technology	93	19.21
Health Sciences	59	12.19
Law	13	2.69
Sciences	44	9.09
Total	**484**	**100.00**

Source: Calculated from questionnaire results

4.3 RESULTS OF THE FINDINGS OF FINANCIAL ATTITUDE, FINANCIAL BEHAVIOUR AND FINANCIAL WELL-BEING

This section provides a discussion on the validity and reliability of financial attitude, financial behaviour and financial well-being. The relationship and differences between financial attitude, financial behaviour and financial well-being are also discussed in this section.

4.3.1 VALIDITY OF FINANCIAL ATTITUDE, FINANCIAL BEHAVIOUR AND FINANCIAL WELL-BEING

An exploratory factor analysis was used in order to ensure the validity of the scales. Only factor loadings that were greater than 0.5 were regarded to be valid and were considered for further analysis in the study. Table 4.4 depicts the factor structure among the three variables, namely, financial attitude (FINATT), financial behaviour (FINBEH) and financial well-being (FINWEL), after the exploratory factor analysis. The negative sign (-) at the end of some items indicate a negatively phrased item which has been reversed for the purpose of data analysis. There were factors that fell below 0.5 and deemed ineffective in measuring the particular factor. Six out of eleven factors were deemed ineffective in measuring financial attitude, three out of ten were deemed ineffective in measuring financial behaviour and two out of eight factors were deemed ineffective in measuring financial well-being. The factor loadings of financial attitude range from 0.545 to 0.622, which are greater than the 0.5 loading factor, which indicates acceptable evidence for the validity of financial attitude. The factor loadings of these items range from 0.510 to 0.739 and are greater than the designated loading factor of 0.5, therefore, they are considered as acceptable items to measure the validity of financial behaviour. The factor loadings of these items are greater than 0.5 as they range from 0.530 to 0.725, therefore are deemed acceptable to measure the validity of financial well-being. Financial behaviour accounted for 3.44 percent of the variance in the data, financial attitude accounted for 2.69 percent and financial well-being accounted for 3.31 percent of the variance in the data.

Table 4.4: Factor structure

Items	Financial well-being	Financial attitude	Financial behaviour
FINWEL2	**0.724946**	0.000825	0.154752
FINWEL4	**0.678809**	-0.016030	0.181035
FINWEL1	**0.613245**	-0.036049	0.105373
FINWEL5-	**0.598790**	0.094325	0.032602
FINWEL6	**0.560150**	0.144540	0.256871
FINWEL3-	**0.529760**	0.248887	0.030923
FINATT1-	0.147253	**0.621518**	0.083875
FINATT7-	0.021193	**0.596724**	0.106114
FINATT6-	-0.036177	**0.562078**	0.060817
FINATT2-	0.228243	**0.554629**	0.153442
FINATT4-	0.057309	**0.545111**	0.064734
FINBEH4	0.148961	0.028310	**0.738829**
FINBEH2-	0.062871	0.010233	**0.732074**
FINBEH3	0.163034	0.039045	**0.720119**
FINBEH5-	0.119599	0.142255	**0.531465**
FINBEH8	0.316828	0.208945	**0.513021**
FINBEH10-	0.179342	0.117680	**0.511316**
FINBEH7-	0.040349	0.080183	**0.510419**
Expl.Var	**3.447421**	**2.694941**	**3.314174**
Prp.Totl	**0.118877**	**0.092929**	**0.114282**

Source: Calculated from questionnaire results

4.3.2 RELIABILITY OF FINANCIAL ATTITUDE, FINANCIAL BEHAVIOUR AND FINANCIAL WELL-BEING

The Cronbach Alpha coefficients were used to construct the reliability of the scales, with those greater than 0.6 considered as acceptable evidence of reliability. Table 4.5 further interprets the Cronbach Alpha coefficients.

Table 4.5: Cronbach Alpha coefficient interpretations

excellent	0.93 - 0.94	High	0.73 - 0.95	adequate	0.64 - 0.85
strong	0.91 - 0.93	Good	0.71 - 0.91	moderate	0.61 - 0.65
reliable	0.84 - 0.90	relatively high	0.70 - 0.77	satisfactory	0.58 - 0.97
robust	0.81	slightly low	0.68	acceptable	0.45 - 0.98
fairly high	0.76 - 0.95	Reasonable	0.67 - 0.87	sufficient	0.45 - 0.96

Source: Taber (2017:1278)

Table 4.6 depicts the results of the validity and reliability analysis after looking at the factor structure. Financial attitude, financial behaviour and financial well-being were measured using a five-point Likert scale and respondents were required to indicate their extent of agreement with the statements measuring the three variables, ranging from strongly agree (5) to strongly disagree (1). The financial attitude scale was measured using eleven items with respondents being asked the extent of agreement with the statement used to measure financial attitude. Furthermore, a Cronbach Alpha coefficient of 0.660 was returned by the financial attitude variable. Since the Cronbach Alpha coefficient returned is greater than 0.6, it is considered as sufficient evidence of reliability (Taber 2017:1278).

Financial behaviour was measured using ten items, respondents were also required to state their extent of agreement with the statement. After the application of the exploratory factor analysis, only seven items had factor loadings that were greater than 0.5. These are depicted in Table 4.6. The financial behaviour variable also returned a Cronbach Alpha coefficient of 0.734. Moreover, the Cronbach Alpha coefficient returned by the financial behaviour variable is greater than 0.6, therefore it is considered reliable.

Table 4.6 also illustrates the financial well-being variable and its accepted loading factors. Eight items were used to measure the validity of the financial well-being variable, after the exploratory factor analysis was applied, only six items were considered acceptable to measure the variable's validity. The Cronbach Alpha coefficient returned by the financial well-being variable was 0.754 which is regarded as acceptable evidence for the reliability of financial well-being.

Table 4.6: Results of the validity and reliability analysis

% of variance 2.695				Cronbach alpha: 0.660
Codes	**Items measuring financial attitude**	**Factor loading**	**Item-total correl.**	**Cronbach alpha after deletion**
FINATT1-	I tend to live for today and let tomorrow take care of itself.	0.622	0.485	0.572
FINATT7-	As long as I meet monthly payments, there is no need to worry about the length of time it will take me to pay off outstanding debts.	0.555	0.511	0.558
FINATT6-	Saving is not important.	0.545	0.397	0.617

FINATT2-	I find it more satisfying to spend money than to save it for the long term.	0.562	0.330	0.645
FINATT4-	Money is there to be spent.	0.597	0.356	0.633
% of variance 3.314				**Cronbach alpha: 0. 734**
Codes	**Items measuring financial behaviour**	**Factor loading**	**Item-total correl.**	**Cronbach alpha after deletion**
FINBEH2-	Missed an account payment.	0.732	0.510	0.676
FINBEH4	Pay my bills on time.	0.720	0.617	0.654
FINBEH3	Paid my accounts on time.	0.739	0.583	0.661
FINBEH5-	Borrow to pay monthly expenses.	0.531	0.379	0.707
FINBEH7-	Overdrawn my cheque account.	0.510	0.363	0.711
FINBEH8	Follow a monthly budget to control spending.	0.513	0.264	0.742
FINBEH10-	Spent money before receiving it.	0.511	0.408	0.702
% of variance 3.447				**Cronbach alpha: 0. 754**
Codes	**Items measuring financial well-being**	**Factor loading**	**Item-total correl.**	**Cronbach alpha after deletion**
FINWEL1	I could handle a major unexpected expense.	0.613	0.433	0.735
FINWEL2	I am confident in my financial future.	0.725	0.596	0.689
FINWEL3-	Because of my financial situation I feel that I will never get what I want.	0.530	0.423	0.737
FINWEL4	I can enjoy life because of the way I am managing my money.	0.679	0.533	0.709
FINWEL5-	I am concerned that the money that I have will not last.	0.599	0.481	0.722
FINWEL6	I have money left over at the end of the month.	0.560	0.503	0.716

Source: Calculated from questionnaire results

4.4 THE RELATIONSHIP BETWEEN FINANCIAL ATTITUDE, FINANCIAL BEHAVIOUR AND FINANCIAL WELL-BEING

The Pearson product moment correlation coefficient is used in this study to measure the relationship between financial attitude, financial behaviour and financial well-being. The Pearson product moment correlation coefficient is a statistic used to determine if there is a relationship between two different variables and also to measure the strength or weakness of the relationship between the variables (Taylor 1990:36). The product-moment correlation coefficient (*r*) has been concocted in a way as to ensure that the value of *r* lies between -1 and +1, where -1 means a perfect inverse correlation between two variables (when *x* rises, *y* falls) and +1 means a perfect positive correlation between two variables (when *x* rises, *y* rises) (Tredoux and Durrheim 2002:184). A zero (0) correlation means that there is no relationship between the two variables (Tredoux and Durrheim 2002:184). Table 4.7 illustrates the interpretation related to different ranges that the Pearson product moment correlation coefficient (*r*) might fall into.

Table 4.7: Pearson product moment correlation coefficient analysis

Coefficient	Interpretation
- 1.0 to - 0.7	Strong negative association
- 0.7 to - 0.4	Moderate negative association
- 0.3 to - 0.1	Weak negative association
- 0.0 to + 0.0	Little or no association
+ 0.3 to 0.1	Weak positive association
+ 0.4 to + 0.7	Moderate positive association
+ 0.7 to +1.0	Strong positive association

Source: Simon (2005); Tredoux and Durrheim (2002:185).

The results of the Pearson product moment correlations analysis are illustrated in Table 4.8. The analysis was performed in order to understand the nature of the relationships between the three different financial literacy components (financial attitude, financial behaviour and financial well-being) that were used to measure the level of financial literacy of the respondents in the study. Based on the results provided in Table 4.8, a statistically significant relationship ($p<0.05$) was reported, between all the three variables (financial attitude, financial behaviour and financial well-being) in the study. Using the five-point Likert scale mean score interpretation, financial well-being reported a mean score of 3.152, indicating that respondents reported that their financial well-being was average. Financial attitude had a mean score of 3.881 and financial behaviour had a mean score of 3.970 which indicates that respondents reported their financial attitude and financial behaviour to be above average or positive towards their personal finances.

There was a perfect positive relationship between two identical variables such as financial well-being and financial well-being (r = 1.000), a weak positive correlation between financial well-being and financial attitude (r = 0.253), a moderate positive association between financial well-being and financial behaviour (r = 0.423) and a weak positive relationship between financial attitude and financial behaviour (r = 0.297).

Table 4.8: Results of the Pearson Product Moment Correlations

	Mean	Std.Dev.	FINWEL	FINATT	FINBEH
FINWEL	3.152	0.747	**1.000**	0.253	0.423
FINATT	3.881	0.672	0.253	**1.000**	0.297
FINBEH	3.970	0.639	0.423	0.297	**1.000**
(p<0.05) FINWEL: financial well-being | FINATT: financial attitude | FINBEH: financial behaviour					

4.5 DIFFERENCES BETWEEN THE FINANCIAL ATTITUDE, FINANCIAL BEHAVIOUR AND FINANCIAL WELL-BEING OF NELSON MANDELA UNIVERSITY STUDENTS BASED ON DEMOGRAPHICS

An ANOVA analysis was conducted to determine if there were any differences between financial attitude, financial behaviour and financial well-being based on the selected demographic variables. Table 4.9 depicts the ANOVA results based on financial attitude, financial behaviour and financial well-being and selected demographic variables.

To determine the difference between the three observed financial literacy variables (financial attitude, financial behaviour and financial well-being) and the gender of the respondents, an ANOVA analysis was conducted. The analysis revealed that there is a significant difference ($p<0.005$) between the three financial literacy variables based on the gender of the respondents. Even with female respondents scoring higher in financial attitude (3.886) and financial behaviour (3.972), their male counterparts were not far off. Furthermore, the male respondents scored higher in financial well-being (3.244) than the female respondents (3.069).

A significant difference ($p<0.005$) between the three financial literacy variables and the faculty in which respondents were in was evident, with respondents in the Business and Economic Sciences faculty scoring the highest in financial behaviour (4.045), respondents in the Sciences faculty scoring the highest in financial attitude (4.009) and respondents in the Engineering, Built Environment and Technology faculty scoring the highest in financial well-being (3.289). With respondents from the Education faculty scoring the lowest in all three financial literacy variables with financial attitude at a mean score of 3.542, financial behaviour at 3.635, and financial well-being at 2.938.

Table 4.9 also depicts a significant difference ($p<0.005$) between financial attitude, financial behaviour and financial well-being based on the income levels of respondents. Respondents with an income between R3 001 – R5 000 scored the lowest in financial attitude (3.765), while those in the income level R10 001 – R15 000 scoring the highest in financial attitude (4.186). Respondents who earned between R501 – R1 000 had the lowest mean score of 3.821 in financial behaviour and those who preferred not to disclose their income scored the highest in financial behaviour (4.217). A mean score of 3.688 was recorded in financial well-being for respondents earning more than R20 000, which is the highest mean score among all mentioned income levels. In contrast, respondents earning between R501 – R1 500 scored the lowest in financial well-being (2.934).

The ANOVA analysis also reported a significant difference ($p<0.005$) between the three financial literacy components based on ethnicity. Black respondents score the lowest in financial behaviour (3.872), coloured respondents scored the lowest in financial well-being (2.961), and other ethnicities categorised as others scoring the lowest in financial attitude (3.700). Asian/Indian respondents scored the highest in financial well-being (3.439), while other ethnicities categorised as others scored the highest in financial behaviour (4.563), and those who preferred not to mention their ethnicities scored the highest in financial attitude (4.086).

The results of the ANOVA analysis reported a significant difference ($p<0.005$) between financial attitude, financial behaviour and financial well-being based on the marital status of the respondents with married respondents having the highest mean score in financial attitude at 4.285. With respondents in a civil union scoring the highest in financial behaviour at 4.250 and financial well-being at 3.833. Respondents who were from Mpumalanga scored the highest mean score in financial attitude (4.400). Respondents from Northern Cape had the lowest mean score in financial attitude (3.300) and financial well-being (2.833) but scored the highest in financial behaviour (4.125). Respondents from Northwest had the lowest mean score in financial behaviour (3.000) and the highest mean score in financial well-being (3.389).

A significant difference ($p<0.005$) is evident between financial attitude, financial behaviour and financial well-being based on the type of area in which respondents reside in. Respondents from urban formal settlements scored the highest in financial attitude (3.923), financial behaviour (4.081) and financial well-being (3.237). Respondents who were from rural informal settlements scored the lowest in financial attitude (3.809) and financial behaviour (3.800), with respondents from urban informal settlements scoring the lowest in financial well-being (3.000). Respondents who were unemployed had the lowest mean score in financial attitude (3.847), financial behaviour (3.935) and financial well-being (3.102). However, respondents who were employed part-time scored the highest in financial attitude (4.067), financial behaviour (4.171) and financial well-being (3.480).

Table 4.9: ANOVA results based on financial attitude, financial behaviour and financial well-being and selected demographic variables

Gender (H1)	**Financial attitude**	**Financial behaviour**	**Financial well-being**	**N**
Male	3.876	3.969	**3.244**	231
Female	**3.886**	**3.972**	3.069	253
F-value: 3.178 | p-value: 0.008 (p-value <0.05)				
Faculty (H2)	**Financial attitude**	**Financial behaviour**	**Financial well-being**	**N**
Humanities	3.830	3.915	2.949	66
Business and Economic Sciences	3.874	**4.045**	3.220	185
Education	**3.542**	**3.635**	**2.938**	24
EBET#	3.929	3.958	**3.289**	93
Health Sciences	3.966	3.975	3.181	59
Law	3.723	3.923	3.026	13
Sciences	**4.009**	3.955	3.000	44
F-value: 1.696 | p-value: 0.011 (p-value <0.05)				
Income levels (H3)	**Financial attitude**	**Financial behaviour**	**Financial well-being**	**N**
R0 - R500	3.862	3.905	2.997	55
R501 - R1 000	3.906	**3.821**	**2.934**	53
R1 001 - R1 500	3.833	3.961	3.127	114
R1 501 - R2 000	3.859	4.014	3.148	71
R2 001 - R2 500	3.823	3.994	3.011	44
R2 501 - R3 000	3.833	3.927	3.333	24
R3 001 - R5 000	**3.765**	4.053	3.213	40
R5 001 - R10 000	4.042	4.092	3.395	19
R10 001 - R15 000	**4.186**	4.080	3.607	14
R15 001 - R20 000	4.027	3.842	3.322	15
More than R20 000	4.163	3.945	**3.688**	16
Prefer not to say	3.947	**4.217**	3.184	19
F-value: 1.524 | p-value: 0.008 (p-value <0.05)				
Ethnicity (H4)	**Financial attitude**	**Financial behaviour**	**Financial well-being**	**N**
White	4.021	4.273	3.421	76
Black	3.861	**3.872**	3.118	329
Coloured	3.765	4.047	**2.961**	51
Asian / Indian	3.855	4.170	**3.439**	11
Other	**3.700**	**4.563**	3.167	2
Prefer not to say	**4.086**	4.170	2.988	14
F-value: 2.513 | p-value: 0.000 (p-value <0.05)				
Marital status (H5)	**Financial attitude**	**Financial behaviour**	**Financial well-being**	**N**
Single	3.860	3.958	3.128	457
Married	**4.285**	**4.173**	**3.545**	26
Civil Union*	3.200	4.250	3.833	1
F-value: 2.020 | p-value: 0.029 (p-value <0.05)				
Province (H6)	**Financial attitude**	**Financial behaviour**	**Financial well-being**	**N**

Eastern Cape	3.902	3.998	3.160	328
Western Cape	3.924	4.007	3.063	37
Gauteng	3.771	4.103	3.176	34
Free State	3.643	3.821	3.190	28
Kwazulu-Natal	4.007	3.946	3.095	28
Limpopo	3.714	3.714	3.012	14
Mpumalanga	**4.400**	3.393	3.310	7
Northwest	4.000	**3.000**	**3.389**	3
Northern Cape	**3.300**	**4.125**	**2.833**	2
Did not indicate	3.200	4.000	3.556	3
F-value: 1.561 | p-value: 0.010 (p-value <0.05)				
Type of area (H6)	**Financial attitude**	**Financial behaviour**	**Financial well-being**	**N**
Urban formal	**3.923**	**4.081**	**3.237**	232
Urban informal	3.813	3.877	**3.000**	110
Rural formal	3.893	3.890	3.156	97
Rural informal	**3.809**	**3.800**	3.078	45
F-value: 2.945 | p-value: 0.000 (p-value <0.05)				
Employment (H8)	**Financial attitude**	**Financial behaviour**	**Financial well-being**	**N**
Unemployed	**3.847**	**3.935**	**3.102**	388
Part-time employment	**4.067**	**4.171**	**3.480**	57
Fulltime employment	3.949	4.029	3.175	39
F-value: 2.664 | p-value: 0.003 (p-value <0.05)				

#EBET: Engineering, Built Environment and Technology | *findings from this segment of the sample will not be considered as there is only one respondent.

Source: Calculated from questionnaire results

Table 4.10 provides a summary of the relationship between financial literacy and selected demographic variables. Therefore, to determine if there is a relationship between the demographic variables and financial literacy, an ANOVA analysis was conducted. A p-value of less than 0.005 should be observed for the differences in mean scores to be significant, which will lead to a hypothesis being accepted. The analysis revealed that there is significant differences (F-value: 3.178| p-value: 0.008) between the financial literacy variables based on the gender of Nelson Mandela University (NMU) students. Therefore, the hypothesis (H1) developed for the study should be accepted as there is significant differences between the financial literacy variables and the gender of the respondents, consequently, there is a relationship between gender and financial literacy.

Furthermore, the analysis revealed that there was no significant differences (F-value: 1.961| p-value: 0.083) between financial programme, which is one of the components used to measure the financial education of respondents, and the financial literacy variables. However significant differences (F-value: 1.696| p-value: 0.011) were evident between the financial literacy components and the faculty respondents were in – the other component used to measure the financial education of respondents. Therefore, the hypothesis (H^2) should be accepted since one of the measures (faculty) for financial education reported significant differences between the three financial literacy variables and financial education. Furthermore, a relationship between financial education and financial literacy is evident.

Significant differences (F-value: 1.524| p-value: 0.008) between financial attitude, financial behaviour and financial well-being and income levels were evident. Therefore, the hypothesis (H^3) should be accepted since there is a significant relationship between the three financial literacy variables and income levels. There is also significant differences (F-value: 2.513| p-value: 0.000) between the three financial literacy variables and the ethnicity of the respondents were evident, therefore, the hypothesis (H^4) should be accepted because of the evident relationship between the three financial literacy variables and ethnicity. Furthermore, the analysis also revealed significant differences (F-value: 2.020| p-value: 0.029) between the three financial literacy variables based on marital status. Therefore, the hypothesis (H^5) should be accepted as there is a relationship between the three financial literacy variables and marital status.

The ANOVA analysis also revealed significant differences between the three financial literacy variables based on geographic area, which had province (F-value: 1.561| p-value: 0.010) and type of area (F-value: 2.945| p-value: 0.000) as its measuring components. Therefore, the hypothesis (H^6) should be accepted since there is a significant relationship between the three financial literacy variables and the geographic areas of respondents. The analysis also revealed that there is no significant differences (F-value: 1.519| p-value: 0.066) between the three financial literacy variables based on the age of the respondents. Therefore, the hypothesis (H^7) developed for the study should be rejected as there is no significant differences between the financial attitude, financial behaviour and financial well-being and the age of the respondents. Significant differences (F-value: 2.664| p-value: 0.003) were revealed between the three financial literacy variables based on employment status. Therefore, the hypothesis (H^8) should be accepted since there is a significant relationship between the three financial literacy variables and employment status.

Table 4.10: Summary of demographic relationships with financial literacy

Demographic variable			F-value	p-value*	Hypothesis
H^1	Gender		3.178	0.008	Accepted
H^2	Financial education	Financial programme	1.961	0.083#	Accepted
		Faculty	1.696	0.011	
H^3	Income levels		1.524	0.008	Accepted
H^4	Ethnicity		2.513	0.000	Accepted
H^5	Marital status		2.020	0.029	Accepted
H^6	Geographic area	Province	1.561	0.010	Accepted
		Type of area	2.945	0.000	Accepted
H^7	Age		1.519	0.066#	Rejected
H^8	Employment status		2.664	0.003	Accepted

*p-value<0.05 | # not significant

Source: Researcher's own construction

4.6 SUMMARY OF THE CHAPTER

The purpose of this chapter was to provide the empirical results of the data analysis and the findings of the study. The chapter included discussions the description of the sample chosen for the study, the results of the findings of financial attitude, financial behaviour and financial well-being, the relationship between the three financial literacy components and lastly, the differences between the three financial literacy components of NMU students based on demographics.

CHAPTER FIVE
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

The primary objective of this study was to assess the financial attitude, financial behaviour and the financial well-being of Nelson Mandela University students and to determine whether there are differences based on selected demographic variables. The final methodological objective which aims to achieve the primary objective provides a summary of key findings and appropriate conclusions and recommendations on the findings of the study to students and other stakeholders on how to improve the financial attitude, financial behaviour and financial well-being of students. Therefore, the purpose of Chapter Five is to provide the summary, conclusions and recommendations of this study.

5.2 RATIONALE, PURPOSE AND OBJECTIVES OF THE STUDY

Research indicates that majority of South African consumers are inadequately insured, highly leveraged with debt and own very little to no assets which increases their chances of being exposed to severe indebtedness, unsystematic risk and defaulting on equities and loans (Sebaggala 2017:235). South African households' debts far exceed their disposable income, which causes a great concern on whether the average South African individual is prepared for unforeseen financial setbacks (Momentum 2018). Therefore, it is necessary and important to start teaching personal finance earlier on in an individual's life (Fox 2021). There tends to be a large heterogeneity in financial literacy across the population, with different demographic groups being financially disadvantaged due to their lack of financial education (Stolper and Walter 2017:581; Rai *et al.* 2019:51). Poor personal financial management leads to grave consequences such as stress due to inability to pay off debts, financial hardship, poor credit rating and repossession of assets (Osman *et al.* 2018:63). Saving and planning for the future, as opposed to impulsive spending, risky borrowing and use of credit for daily expenses, can increase the levels of financial well-being for an individual (Kempson *et al.* 2017:12-13). Students with poor financial behaviours tend to be stress about their personal finances which results to a decreased sense of financial well-being (Setiyani and Solichatun 2019:453). Assessing students' financial attitude, financial behaviour and financial well-being is very important when taking into consideration that students are the future participants of an economy vulnerable to a local resurgence of the pandemic (Ramavhea et al. 2017:48).

To address the aforementioned rationale and research problem, the **primary objective** of the study was to assess the financial attitude, financial behaviour and the financial well-being of Nelson Mandela University students and to determine whether there are differences based on selected demographic variables. To address the primary objective, the following **secondary and methodological objectives** were developed which is graphically depicted as per Figure 5.1. This figure also indicates the expected outcome as well as the purpose of the outcome based on the objectives of the study.

Figure 5.1: Framework of the research process

PRIMARY OBJECTIVE	SECONDARY OBJECTIVES	METHODOLOGICAL OBJECTIVES	EXPECTED OUTCOME
The primary objective of this study is to assess financial attitude, financial behaviour and financial well-being of NMU students and to determine whether there are differences based on selected demographic variables.	**SO_1:** To conduct an extensive literature review that will assist in developing a measure to assess the financial attitude, financial behaviour and financial well-being of NMU students.	**MO_1**: To conduct an in-depth literature review on the nature and importance of financial attitude, financial behaviour and financial well-being and the demographic variables for university students and the demographic factors that have an influence on these factors.	**Chapter Two:** The nature and importance of financial attitude, financial behaviour
	SO_2: To determine whether there are differences in the financial attitude, financial behaviour and financial well-being of NMU students based on selected demographic factors.	**MO_2**: To develop an appropriate research design and methodology that will address the research problem and achieve the objectives of the study.	**Chapter Three:** Research design and methodology
		MO_3: To collect and analyse primary data using questionnaires to gather information on the financial attitude, financial behaviour and financial well-being of NMU students.	**Chapter Four:** Empirical results
		MO_4: To provide appropriate conclusions and recommendations on the findings of the study to students and other stakeholders on how to improve the financial attitude, financial behaviour and financial well-being of students	**Chapter Five** Summary, conclusions and recommendations

Source: Researchers' own construction

5.3 AN OVERVIEW OF LITERATURE FINDINGS AND HYPOTHESES

A literature review of the study was conducted in Chapter Two which highlighted the nature and importance of financial attitude, financial behaviour and financial well-being, and the demographic factors that influence financial attitude, financial behaviour and financial well-being. Chapter Two discussed the nature and importance of financial attitude outlining the need for a positive financial attitude as it encourages an individual to plan appropriately for short-term and long-term goals in order to achieve financial satisfaction and prosperity (Yuliani *et al.* 2020:357). Financial attitude is defined as an individual's mind-set towards their personal finances and the issues that they might face concerning their finances (Caronge *et al.* 2019). A positive financial attitude enables students to make responsible financial choices and to manage their finances better, which will have a positive impact on an individual's financial management behaviour (Ameliawati and Setiyani 2018:819). Financial behaviour is defined as the way in which an individual manages financial resources such as insurance, investments, savings and budget planning (Hasibuan *et al.* 2018:504). Chapter Two also stressed the need for individuals to engage in sound financial behaviours through effective financial decision-making that will allow them to achieve their personal financial goals (Rousseau and Venter 2016:241). Students need to be conscious of the financial behaviours they partake in since this will dictate whether they achieve financial well-being or not (Susilowati *et al.* 2017:7468). The nature and importance of financial well-being is also discussed in Chapter Two. Financial well-being is defined as a sense of security an individual has in their personal finances (Chavali *et al* 2021:274). An individual's financial well-being is influenced by their financial attitude and financial behaviour, therefore having positive financial attitude and financial behaviour allows an individual to attain financial well-being (Setiyani and Solichatun 2019:452).

Chapter Two further gave an overview of demographic factors that influence financial attitude, financial behaviour and financial well-being. These demographics consisted of gender, financial education, income levels, ethnicity, marital status, geographic area, age and employment status. Chapter Two discussed the differences that these demographics have on financial attitude, financial behaviour and financial well-being.

Based on the literature review conducted on the demographic variables that could possibly influence the levels of financial literacy of Nelson Mandela University students, the following hypotheses were developed:

H^1: There is a difference between the *financial attitude, financial behaviour and financial well-being* of Nelson Mandela University students based on their *gender*.

H^2: There is a difference between the *financial attitude, financial behaviour and financial well-being* of Nelson Mandela University students based on their *financial education*.

H^3: There is a difference between the *financial attitude, financial behaviour and financial well-being* of Nelson Mandela University students based on their *different income levels.*

H^4: There is a difference between the *financial attitude, financial behaviour and financial well-being* of Nelson Mandela University students based on their *ethnicity.*

H^5: There is a difference between the *financial attitude, financial behaviour and financial well-being* of Nelson Mandela University students based on their *marital status.*

H^6: There is a difference between the *financial attitude, financial behaviour and financial well-being* of Nelson Mandela University students based on *different geographic areas.*

H^7: There is a difference between the *financial attitude, financial behaviour and financial well-being* of Nelson Mandela University students based on their *age cohorts.*

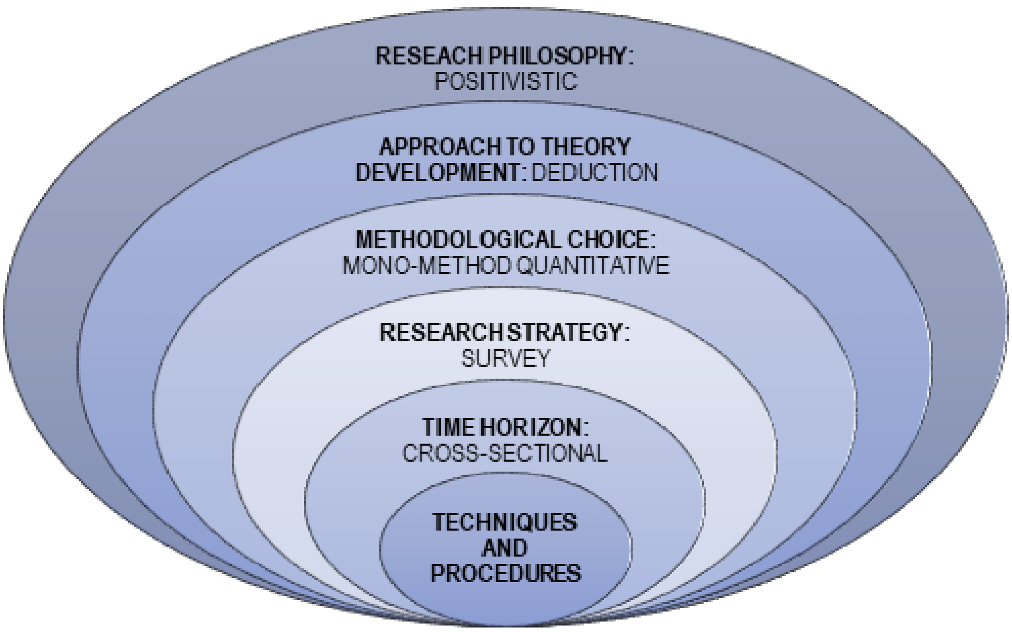
H[8]: There is a difference between the *financial attitude, financial behaviour and financial well-being* of Nelson Mandela University students based on their *employment status.*

Thus the first methodological research objective **(MO¹)** was achieved, which was to conduct an in-depth literature review on the nature and importance of financial attitude, financial behaviour and financial well-being and the demographic variables that may have an influence on these factors among university students.

5.4 OVERVIEW OF THE RESEARCH DESIGN AND METHODOLOGY

The research design and methodology was discussed in the context of a research onion as proposed by Saunders *et al.* (2019:130). The research onion explains that the research process can be considered a layer of an onion where each layer must be peeled off in order to unveil the following stage of the research process. The research onion provides the methods that are going to be used in the research process at every layer and is depicted in Figure 5.2.

Figure 5.2: The research onion applied to the study



Source: Saunders *et al.* 2019:130.

Table 5.1 provides a summary of the primary research conducted in the study as discussed in the techniques and procedures for data collection section. This consisted of population and sample, sampling method and sample size.

Table 5.1: Summary of the primary research conducted in the study

Population	28 342 undergraduate and postgraduate students at Nelson Mandela University
Sample	Students registered at Nelson Mandela University
Sample size	▪ 500 respondents
Sampling method	▪ Criterion and convenience sampling
Research instrument	Questionnaires were used to collect data from respondents

Source: Researcher's own construction

Given the discussion of the research design and methodology, the second methodological objective **(MO²)** was achieved, being to develop an appropriate research design and methodology that will address the research problem and achieve the objectives of the study. Therefore, the first secondary objective has been achieved (**SO¹)**.

5.5 OVERVIEW OF EMPIRICAL FINDINGS

The main objective of Chapter Four was to provide the empirical results of the data analysis and the findings of the study. Thus, the third methodological research objective of the study is achieved, which was to collect and analyse primary data using questionnaires to gather information on the financial attitude, financial behaviour and financial well-being of NMU students. This section will provide an overview of the findings reported in Chapter Four and provide appropriate conclusions on the findings.

5.5.1 OVERVIEW OF THE SAMPLE OF THE STUDY

The population that was observed in this study were the 28 342 undergraduate and postgraduate students of Nelson Mandela University that were registered during the 2020 academic year. The sample used to generalize the findings of the study was derived from the population observed in the study. Of a sample of 484, Majority of the respondents were young adults (20 to 25) making up 58.88 percent of the Generation Z age cohort, followed by Generation Y (25 to 39) making up 20.66 percent of the sample. Most of the respondents in the sample are female (52.27%) with males making up the remainder of the sample at 47.73% percent. Majority of the respondents in the sample are of Black ethnicity (67.98%), reside in Eastern Cape (67.77%) and are South African nationals (96.28%). Furthermore, most of the respondents listed their marital status as single (94.42%), reside at an urban formal area (47.93%), earned between R1 001 – R1 500 per month (23.55%) and were unemployed (80.17%). For employment tenure, respondents who were unemployed or employed for less than 1 year were in the majority at 82.64 percent. Majority of the respondents were in their second year of study (27.27%). Most of them attend lectures at South Campus (48.55%) and are in the Business and Economic Sciences faculty (38.22%).

5.5.2 OVERVIEW OF FINANCIAL ATTITUDE, FINANCIAL BEHAVIOUR AND FINANCIAL WELL-BEING

The following section provides an overview of financial attitude, financial behaviour and financial well-being and an overview of the relationship between selected demographic variables and financial attitude, financial behaviour and financial well-being.

5.5.2.1 An overview of financial attitude

Eleven questions were used to measure the financial attitude of respondents which required them to indicate their level of agreement with the statements, ranging from strongly agree (5) to strongly disagree (1). The exploratory factor analysis was used to determine the validity of financial attitude, with only five of the eleven questions having loading factors that were greater than the recommended 0.5 loading factor. Therefore they were deemed valid, which indicates acceptable evidence for the validity of financial attitude. Financial attitude returned a Cronbach Alpha coefficient of 0.660 which is greater than 0.6, therefore, it is considered as sufficient evidence of reliability. Financial attitude also returned a mean score of 3.881 which indicates that respondents viewed their financial attitude as above average. This implies that respondents believe that saving is important and that saving money for the long-term is more satisfying than spending it impulsively. This might be so because of the access to savings accounts that is prevalent in this age and the hype surrounding saving and planning your finances showed in banks' and other financial institutions' advertisements. The Pearson product moment correlation coefficient analysis recorded a coefficient of 0.253 between financial attitude and financial well-being and also a coefficient of 0.297 between financial attitude and financial behaviour. This shows a weak positive association between financial attitude and financial well-being, and financial attitude and financial behaviour. Thus, a positive financial attitude influences positive financial behaviours by a small margin, this also applies to the relationship between financial attitude and financial well-being, even though there is an association between the two financial literacy components, the association is weak.

5.5.2.2 An overview of financial behaviour

Financial behaviour was also measured using a five-point Likert scale. Ten items were used to measure financial behaviour, after the application of the exploratory factor analysis, only seven items had factor loadings greater than 0.5. The factor loadings of these items range from 0.510 to 0.739, therefore, they are considered as acceptable items to measure the validity of financial behaviour. A Cronbach Alpha coefficient of 0.734, which is greater than 0.6, was returned by financial behaviour therefore it is considered as reliable. A mean score of 3.970 was returned by financial behaviour which indicates that respondents had positive financial behaviours. Respondents reported to be able to pay their bills on time, pay their accounts on time, barely spent money before receiving it and followed a monthly budget to control their spending. There are many factors that influence positive financial behaviour such as receiving financial knowledge, nurturing good financial attitudes, developing financial stability, and being in a setting that nurtures positive financial behaviour and with people who show positive financial behaviour. The Pearson product moment correlation coefficient showed a moderate positive association between financial behaviour and financial well-being ($r = 0.423$). Thus, a moderate positive association between the two financial literacy components implies that positive financial behaviour tends to lead to greater financial satisfaction. A weak positive relationship between financial behaviour and financial attitude is evident ($r = 0.297$) meaning financial behaviour influences financial attitude, and vice versa, by a small margin.

5.5.2.3 An overview of financial well-being

Eight items were used to measure the validity of financial well-being, only six were considered acceptable to measure the validity of financial well-being after the exploratory factor analysis was applied. The factor loadings of these items were greater than 0.5, ranging from 0.530 to 0.725. Financial well-being returned a Cronbach Alpha coefficient of 0.754 which is regarded as acceptable evidence for the reliability of financial well-being. Financial well-being also reported a mean score of 3.152, indicating that respondents reported that their financial well-being was average. Therefore, respondents were moderately confident in their future finances, barely had money left over at the end of the month and could hardly handle a major unexpected expense. There are many factors that influence financial well-being such as gaining financial knowledge and financial skills, practicing positive financial behaviour and also the mind-set of an individual – how they view their personal finances. The Pearson product moment correlation coefficient showed a weak positive correlation between financial well-being and financial attitude (r = 0.253). Therefore, a positive, but weak, association exists between the two financial literacy components. The analysis also reported a moderate positive association between financial well-being and financial behaviour (r = 0.423). Therefore, the association between the two financial literacy components is one that is moderate in nature.

5.5.3 AN OVERVIEW OF THE DEMOGRAPHIC RELATIONSHIPS WITH FINANCIAL ATTITUDE, FINANCIAL BEHAVIOUR AND FINANCIAL WELL-BEING

The second secondary research objective **(SO^2)** was to determine whether there are any differences in the financial attitude, financial behaviour and financial well-being of NMU students based on selected demographic factors. Therefore, this section provides a discussion the relationships between selected demographic factors and financial attitude, financial behaviour and financial well-being.

The ANOVA analysis revealed that there were significant differences between financial attitude, financial behaviour and financial well-being based on **gender**, the data shows that females have a slightly higher positive financial attitude than males and also females tend to exhibit good financial behaviour than males. However, males reported to be more satisfied with their personal finances than females. Females' higher score in financial attitude and financial behaviour might be due to the fact that they are usually the ones responsible for household finances such as paying all the monthly household expenses in time and saving for unforeseen circumstances. Males tend to link financial well-being with the accumulation of financial knowledge (Kirbis *et al.* 2017:170), this might be one of the main reasons why they scored higher in financial well-being than females.

When considering **financial education** (faculty), respondents within the Business and Economic Sciences faculty scored the highest in financial behaviour (4.045). This maybe because respondents belonging to the faculty are exposed to modules that are money-oriented such as personal financial planning, financial management, economics of financial markets and accounting. This exposure might be the instigator of positive financial behaviour when it comes to their personal finances. Respondents in the Education faculty scored the lowest in financial attitude (3.542), financial behaviour (3.635) and financial well-being (2.938), however, they still showed average positive financial attitudes and financial behaviours. Which implies that most individuals have an average understanding of financial attitude, financial behaviour and financial well-being even in faculties that do not offer modules dealing with finances. Respondents in the Sciences faculty scored the highest in financial attitude (4.009). This shows that most respondents from the Sciences faculty believe that saving is important, among other scored factors. While respondents in the Engineering, Built Environment and Technology scored the highest in financial well-being (3.289) with most being able to enjoy life because of the way they manage their finances as compared to respondents from other faculties.

When considering **income levels**, a low income is often viewed as an explanation for negative financial behaviours such as borrowing to pay debts and also as an excuse to not save or invest (OECD 2013:60). Which explains their low financial well-being. Respondents earning between R3 001 – R5 000 per month scored the lowest in financial attitude (3.765) which shows that a less than desirable financial attitude can still be apparent in individuals earning a substantial amount of money compared to the individuals earning lower, but with inflation it is easy for individuals in this income level to be stressed about their finances. Respondents who earn R10 001 – R15 000 had the highest score in financial attitude (4.186) this might be so because these individuals believe that money should be saved and invested. Those respondents who preferred not to state their income levels scored the highest in financial behaviour (4.217), such a high mean in financial behaviour might be due to the fact that individuals who preferred not to mention their income levels belong to majority of the listed income levels therefore accounting for positive financial behaviour practiced in several income levels. Respondents earning more than R20 000 reported the highest mean score (3.688) in financial well-being. This may be because individuals with higher incomes tend to have money left over at the end of the month.

When considering **ethnicity**, respondents of Black ethnicity scored the lowest mean score (3.872) in financial behaviour. This may be due to the fact that Black people have been, for years, treated unequally and unfairly in regards to receiving financial literacy. This results to Black people being unable to make sound financial decisions since they lack the knowledge to do so. Respondents of Coloured ethnicity scored the lowest in financial well-being with a mean score of 2.961 which reports that individuals of Coloured ethnicity find it challenging to handle a financial situation that might arise. And as Ferreira (2019:42) states, there is a strong possibility that ethnicity influences an individual’s behaviour, therefore having an influence on an individual’s overall financial well-being. Furthermore, respondents of Asian/Indian ethnicity scored the highest mean score in financial well-being (3.439) which may result from the financial literacy individuals of Asian/Indian ethnicity have from the experience of establishing and managing their family businesses.

In regards to **marital status**, respondents who are married reported the highest level of financial attitude at 4.285. This means married individuals think that saving is important. Married respondents also scored the highest in financial behaviour (4.250) and financial well-being (3.833). This could be due to the fact that married individuals tend to overthink their finances which results to better financial behaviours such as budgeting, saving for unforeseen circumstances, and investing for future plans. Individuals who are married, tend to plan their finances beforehand especially those with children. Findings on civil unions were not considered since there was only one respondent in that category.

When considering **geographic area**, two measures were used to report findings on respondents' financial attitude, financial behaviour and financial well-being – province and type of area. In terms of province, respondents from Mpumalanga scored the highest in financial attitude (4.400) which implies that respondents from Mpumalanga have an above average positive financial attitude. This might be due to the financial literacy programmes like Banking on Our Future South Africa that are introduced to the youth in Mpumalanga. Respondents from Northwest scored the lowest in financial behaviour (3.000) this may be so if it is taken into consideration that majority of the population residing or from Northwest are of Black ethnicity and most of the province is made up of rural areas and small towns. However, respondents from Northwest also scored the highest in financial well-being (3.389) which could translate to individuals from North West being confident in their financial future regardless of their financial behaviour. Respondents from Northern Cape had the lowest mean score in financial attitude (3.300) and financial well-being (2.833). However, respondents from Northern Cape also recorded the highest mean score in financial behaviour (4.125) which could mean that individuals from Northern Cape are more confident in their financial future than individuals from other provinces. Respondents who resided in urban formal settlements recorded the highest mean score in financial attitude (3.923), financial behaviour (4.081) and financial well-being (3.237) which could be due to the high standard of living in urban formal settlements and also the easy access to resources that increase financial literacy, such as availability of financial institutions. Respondents from rural informal settlements had the lowest mean score in financial attitude (3.809) and financial behaviour (3.800) which may be due to the fact that individuals from rural informal settlements find it hard to access institutions that allow them to gain financial literacy. Huat *et al.* (2010:214) also reports that individuals who live in urban areas are more likely to purchase financial instruments than individuals living in rural areas.

There was no significant relationship between financial attitude, financial behaviour and financial well-being based on the **age** of the respondents. Age has a recorded p-value of 0.066. According to the ANOVA analysis a p-value of less than 0.005 should be observed for the differences in the mean scores to be significant. This may be due to the fact that positive financial attitude and positive financial behaviour can be learnt at any stage in an individual's life. With a p-value of 0.066, it cannot be concluded that there is any differences between financial attitude, financial behaviour and financial well-being based on age.

Taking into account employment status, respondents that worked part-time scored the highest in financial attitude (4.067), financial behaviour (4.171) and financial well-being (3.480). This may be because individuals employed part-time tend to adjust their expenses to their current income, being careful to not misuse finances. This calls for budgeting, saving and investing for future goals and circumstances which enables an individual to experience financial satisfaction. Unemployed respondents had the lowest mean score in financial attitude (3.847), financial behaviour (3.935) and financial well-being (3.102). Unemployed individuals may have showed lower level of financial attitude, financial behaviour and financial well-being because of their lack of money. However, it should be taken into consideration that the mean score might be higher due to the fact that there are some unemployed individuals who have other streams of income from owning assets or by being an entrepreneur.

Table 5.4 provides a summary of demographic relationships with financial literacy. It also shows the status of the hypotheses of each demographic variable.

Table 5.4: Summary of demographic relationships with financial literacy

Demographic variable			F-value	p-value*	Hypothesis
H^1	Gender		3.178	0.008	Accepted
H^2	Financial education	Financial programme	1.961	0.083#	Accepted
		Faculty	1.696	0.011	
H^3	Income levels		1.524	0.008	Accepted
H^4	Ethnicity		2.513	0.000	Accepted
H^5	Marital status		2.020	0.029	Accepted
H^6	Geographic area	Province	1.561	0.010	Accepted
		Type of area	2.945	0.000	Accepted
H^7	Age		1.519	0.066#	Rejected
H^8	Employment status		2.664	0.003	Accepted

*p-value<0.05 | # not significant

Source: Researcher's own construction

After reporting and analysing the findings received from the questionnaires in Chapter Four and interpreting those findings in Chapter Five, the third methodological research objective **(MO^3)** was achieved namely, to collect and analyse primary data using questionnaires to gather information on the financial attitude, financial behaviour and financial well-being of NMU students.

5.6 LIMITATIONS AND RECOMMENDATIONS OF THE STUDY

Despite the findings of the study, several limitations exist which should be considered when interpreting the findings of the study. There are limited studies in the research area of financial attitude, financial behaviour and financial well-being based on various demographics in South Africa. As the foundation of any research paper, the lack of previous studies limits the findings for the literature review which in turn limit research objectives.

The population that was observed was that of individuals who were registered at NMU in 2020, which amounted to 28 342 individuals, and only 484 questionnaires were deemed useful. A larger sample would have been better since it would have reported more precise results. Therefore, a larger sample would have been more representative of the observed population. The sample size of the study mostly comprised of individuals of Black ethnicity. An equal number of respondents from different ethnicities must be sought as financial attitude, financial behaviour and financial well-being may differ from one ethnicity to another. This is one of the consequences of voluntary sampling since it is highly susceptible to bias because of the little effort that researchers make to control the sample composition. Those who actually volunteer to participate in the study may be different from those who did not volunteer.

Based on these limitations and the findings of the study, several recommendations are presented below to improve financial attitude, financial behaviour and financial well-being among South African University Students:

- Financial attitudes and financial behaviours of South African students can be improved by exposing students to workshops that deal with financial literacy. The department of Higher Education can give Universities a mandate to provide reading material and real-life case scenarios that will help students who tend to have negative financial attitude and financial behaviours.

- Universities can offer modules such as personal financial planning to students from all faculties by either making it a mandatory module across all faculties or a recommended selective across all faculties. This could assist in increasing students' financial attitude and financial behaviour.

- The department of Higher Education can create a curriculum for all learning institutions in South Africa that includes subjects or modules that deal with finance, specifically personal finance such as how to file for tax, how to budget and how to save and invest.

- Universities can work with financial institutions to designate a day or two annually that is dedicated to spreading the message on how positive financial attitude and financial behaviour can lead to financial well-being and overall well-being for an individual, especially in the long term.

- Universities can, if affordable, install a software or an application in all the computers that students make use of at computer labs and libraries that require students to take a short quiz on concepts related to financial attitude, financial behaviour and financial well-being before they make use of the computer, this might assist students to have better financial attitude and make responsible financial decisions.

Chapter Five went into great detail to report on whether there were differences in financial attitude, financial behaviour and financial well-being of NMU students based on selected demographic factors. Therefore, the second secondary research objective **(SO²)** of the study was achieved. Chapter Five also provided limitations and recommendations of the study, therefore, the fourth methodological research objective **(MO⁴)** is achieved, since its aim was to provide appropriate conclusions and recommendations on the findings of the study to students and other stakeholders on how to improve the financial attitude, financial behaviour and financial well-being of students.

5.7 CONCLUDING REMARKS

The completion of Chapter Five marks the achievement of the two secondary objectives of the study which meet the primary research objective of assessing the financial attitude, financial behaviour and the financial well-being of Nelson Mandela University students and also to determine whether there are differences based on selected demographic variables. This study investigated the financial attitude, financial behaviour and financial well-being of NMU students based on their demographics. The financial attitude, financial behaviour and financial well-being of students based on their demographics has been an important topic in personal financial planning and the studies on this topic are limited in South Africa. The study showed that there were differences in financial attitude, financial behaviour and financial well-being based on demographics, with ethnicity and geographic area making up the most differences between the three financial literacy components. The study also showed a positive association between all three financial literacy, even though the associations were by small margins. The study reported that a positive financial attitude and positive financial behaviours can lead to financial well-being for South African students.

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NELSON MANDELA UNIVERSITY

Department of Business Management
Main Building 11-20 | South Campus
Jasmine.Kinsman@mandela.ac.za
+2741 504 2156

February | March 2020

Dear respondent,

The second-year BCom students are required to complete a research assignment for the module personal financial planning (EBFV201). Your assistance is requested to complete a questionnaire that will be used to complete the research assignment. **To qualify for participation in the study, you must be 18 years or older and be a registered student at NMU.** The research topic focuses on conceptualising financial literacy in South African universities, specifically NMU. The aim of the study is to determine the financial literacy levels of NMU students.

Financial literacy is important because it gives an individual the ability to make financial decisions and ensure that they exhibit appropriate financial behaviour and attitudes to manage their finances effectively. However, despite this importance, the financial literacy levels of university students in South Africa are low. Therefore, given the low financial literacy levels of university students and the lack of previous research being done on financial literacy within universities, it is important to perform a thorough investigation into South African university students, specifically in Nelson Mandela University (NMU).

You are not obliged in any way to take part in this study. If you wish to withdraw you may do so at any time without penalty. Your participation is of your own violation; however, it would be appreciated if you participated in the study by answering the following questions to assit in completing the research. The questionnaire will take approximately 20-30 minutes, there are no right or wrong answers. The only thing that matters is your honesty in answering the questions presented. **Your participation is anonymous, and all information will be treated with the strictest confidence.** The results of the study will be used for publication purposes only and your identity will remain anonymous at all time.

The questionnaire has been subjected to the NMU Research Ethics Committee (REC-H) protocols and has been granted ethical clearance: **H19-BES-BMA-054**. For any queries, please feel free to contact the lecturer and module coordinator below.

Yours faithfully,

JKinsman

Mrs Jasmine Kinsman
Programme coordinator: Bcom Financial Planning
Lecturer: Financial planning programmes

SECTION A: GENERAL INFORMATION
Please mark your selection with an (x)

1 Please indicate whether you have participated in a financial education programme.

Yes		1
No		2

2 Please indicate whether you are a member of or attended one of the NMU Financial Planning Society events.

Yes		1
No		2

3 Please indicate your gender.

Male		1
Female		2

4 Please indicate your ethnicity.

White		1
Black		2
Coloured		3
Asian / Indian		4
Other		5
Prefer not to say		6

5 Please indicate your Nationality.

South African		1
Non-South African		2

6 Please indicate the province which you are from.

Eastern Cape		1
Western Cape		2
Gauteng		3
Free State		4
Kwazulu-Natal		5
Limpopo		6
Mpumulanga		7
North West		8
Northern Cape		9

7 Please indicate the current academic level at which you are studying

1st year		1
2nd year		2
3rd year		3
4th year (for 4-year qualifications)		4
Advanced Diploma		5
Post graduate Diploma		6
Honours		7
Masters		8
Doctorate		9

8 Please indicate the campus at which you attend lectures.

South Campus		1
North Campus		2
2nd Avenue Campus		3
Ocean Sciences Campus		4
Missionvale Campus		5
Bird Street Campus		6
George Campus		7

9 Please indicate the faculty that you belong to.

Humanities		1
Business and Economic Sciences		2
Education		3
Engineering, the Built environment and Technology		4
Health Sciences		5
Law		6
Sciences		7

10 Please indicate your marital status.

Single		1
Married		2
Divorced		3
Widowed		4
Civil Union		5

11 Please indicate the type of area where you are from.

Urban formal		1
Urban informal		2
Rural formal		3
Rural informal		4

12 Please indicate where you currently reside.

Living at home		1
On-campus or off-campus student residence		2
Private rental property		3

13 Please the average monthly income that you receive from all sources for day-to-day expenses.

R0 – R500		1
R501 – R1000		2
R1 001 – R1 500		3
R1 501 – R2 000		4
R2 001 – R2 500		5
R2 501 – R3 000		6
R3 001 – R5 000		7
R5 001 – R10 000		8
R10 001 – R15 000		9
R15 001 – R20 000		10
More than R20 000		11
Prefer not to say		12

14 Please indicate your current employment status

Unemployed		1
Part-time employment		2
Fulltime employment		3

15 If you are currently employed, please indicate your length of employment in years: _______

16 Please specify your age: _______

SECTION B: FINANCIAL KNOWLEDGE

1 Please indicate whether the followings statements are true or false.

1	A high inflation rate means that the cost of living is increasing rapidly.	True	False
2	Earnings from interest on fixed deposits always beat inflation.	True	False
3	Inflation has an impact on savings.	True	False
4	If interest rates rise, bond prices will fall.	True	False
5	Investments that present a high risk are more likely to yield a high return.	True	False
6	To minimise the risk of investing, investments should be diversified.	True	False
7	The equity (shares/stocks) market is the riskiest of all markets.	True	False
8	Equity (shares/stocks) is riskier than bonds.	True	False
9	It is important to invest in various types of assets to reduce the risk of losing money.	True	False
10	You are less likely to lose your money if you save it in more than one place.	True	False

2 Please indicate how you would rate your level of financial knowledge:

Non-existent		1
Below average		2
Average		3
Above Average		4
Excellent		5

SECTION C: FINANCIAL SKILLS

Consider the following questions and indicate your response with an (x). There is only one correct answer.

1 Assume you have R1000 in a savings account at an interest rate of 10% per year. After five years, what is the value you have in savings? Consider no money has been deposited or withdrawn.

A	More than R150	B	Less than R150
C	Exactly R150	D	I do not know

2 Assume Joseph inherits R10 000 today and Pedro inherits R10 000 in approximately 3 years. Who is considered richer?

A	Joseph	B	Pedro
C	They are equally rich	D	I do not know

3 Imagine that the interest rate on your savings account is 6% per year and the inflation rate is 10% per year. After one year, how much you will be able to buy with the money from that account? Consider no money has been deposited or withdrawn.

A	More than today	B	Less than today
C	Exactly the same	D	I do not know

4 Assume that in 2021 your income will double, and the prices of all goods will also double. In 2021, how much will you be able to buy with your income?

A	More than today	B	Less than today
C	Exactly the same	D	I do not know

5 A loan with maturity of 15 years usually requires higher monthly payments than a 30-year loan, but the total amount of interest paid at the end of the loan will be lower. This statement is:

A	True	B	False
C	I do not know		

6 Assume you took a loan of R10 000 to be paid after one year and the total cost with interest is R600. The interest rate you will pay on this loan is:

A	0.6%	B	6%
C	60%	D	I do not know

7 Assume you saw the same television at two different stores for the initial price of R1000. Shop A offers a discount of R150 while shop B offers a discount of 10%. What is the best alternative?

A	Shop A (R150 discount)	B	Shop B (10%)
C	I do not know		

8 Imagine five friends receive a donation of R1000 and must equally divide the money between them. How much will each of them get?

A	R100	B	R150
C	R200	D	I do not know

9 Suppose you put R100 into a savings account with a guaranteed interest rate of 2% per year. You don't make any further payments into this account and you don't withdraw any money. How much would be in the account at the end of the first year, once the interest payment is made?

A	R100	B	R102
C	R120	D	I do not know

10 You lend R50 to a friend and he gives you R50 back the next day. How much interest has he paid on this loan?

A	R0%	B	R50
C	I do not know		

SECTION D: FINANCIAL ATTITUDE

Please indicate your extent of agreement with the following statements. Five (5) indicates strong agreement with the statement and one (1) indicates strong disagreement with the statement.		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	I tend to live for today and let tomorrow take care of itself.	1	2	3	4	5
2	I find it more satisfying to spend money than to save it for the long term.	1	2	3	4	5
3	I am prepared to risk my money when saving or making an investment.	1	2	3	4	5
4	Money is there to be spent.	1	2	3	4	5
5	Each individual should be responsible for his or her own financial wellbeing.	1	2	3	4	5
6	Saving is not important.	1	2	3	4	5
7	As long as I meet monthly payments, there is no need to worry about the length of time it will take me to pay off outstanding debts.	1	2	3	4	5
8	It does not matter how much I save as long as I do save.	1	2	3	4	5
9	It is more important to concentrate on the present when managing my finances.	1	2	3	4	5
10	Planning for retirement is not necessary for assuring one's security during old age.	1	2	3	4	5
11	Keeping records of financial matters is too time-consuming.	1	2	3	4	5

SECTION E: FINANCIAL BEHAVIOUR

Please indicate how often the following behaviours occur. Five (5) indicates very always and one (1) indicates never.		Never	Hardly	Sometimes	Frequently	Always
1	Pawned a valuable possession.	1	2	3	4	5
2	Missed an account payment.	1	2	3	4	5
3	Paid my accounts on time.	1	2	3	4	5
4	Pay my bills on time.	1	2	3	4	5
5	Borrow to pay monthly expenses.	1	2	3	4	5
6	My monthly expenses are more than my monthly income.	1	2	3	4	5
7	Overdrawn my chequque account.	1	2	3	4	5
8	Follow a monthly budget to control spending.	1	2	3	4	5
9	Save for important purchases.	1	2	3	4	5
10	Spent money before receiving it.	1	2	3	4	5

SECTION F: FINANCIAL WELLBEING

Please indicate your extent of agreement with the following statements. Five (5) indicates strong agreement with the statement and one (1) indicates strong disagreement with the statement.		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	I could handle a major unexpected expense.	1	2	3	4	5
2	I am confident in my financial future.	1	2	3	4	5
3	Because of my financial situation I feel that I will never get what I want.	1	2	3	4	5
4	I can enjoy life because of the way I am managing my money.	1	2	3	4	5
5	I am concerned that the money that I have will not last.	1	2	3	4	5
6	I have money left over at the end of the month.	1	2	3	4	5
7	My finances control my life.	1	2	3	4	5
8	I am behind in my finances.	1	2	3	4	5

END OF FINANCIAL LITERACY QUESTIONNAIRE

****

THANK YOU FOR YOUR PARTICIPATION

NELSON MANDELA UNIVERSITY

PO Box 77000, Nelson Mandela University, Port Elizabeth, 6031, South Africa mandela.ac.za

Chairperson: Research Ethics Committee (Human)
Tel: +27 (0)41 504 2347
sharlene.govender@mandela.ac.za

NHREC registration nr: REC-042508-025

Ref: [H19-BES-BMA-054] / Approval]

17 February 2020

Ms J Kinsman
Faculty: BES

Dear Ms Kinsman

FINANCIAL LITERACY: A CASE OF A SOUTH AFRICAN UNIVERSITY

PRP: Ms J Kinsman
PI:

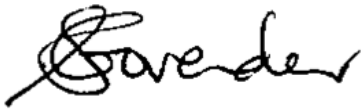
The above-entitled application served at the Research Ethics Committee (Human) (*meeting of 18 September 2019*) for approval. The study is classified as a medium risk study. The ethics clearance reference number remains **H19-BES-BMA-054** and approval is subject to the following conditions:

1. The immediate completion and return of the attached acknowledgement to Imtiaz.Khan@mandela.ac.za, the date of receipt of such returned acknowledgement determining the final date of approval for the study where after data collection may commence.
2. Approval for data collection is for 1 calendar year from date of receipt of above mentioned acknowledgement.
3. The submission of an annual progress report by the PRP on the data collection activities of the study (form RECH-004 to be made available shortly on Research Ethics Committee (Human) portal) by 15 November this year for studies approved/extended in the period October of the previous year up to and including September of this year, or 15 November next year for studies approved/extended after September this year.
4. In the event of a requirement to extend the period of data collection (i.e. for a period in excess of 1 calendar year from date of approval), completion of an extension request is required (form RECH-005 to be made available shortly on Research Ethics Committee (Human) portal)
5. In the event of any changes made to the study (excluding extension of the study), completion of an amendments form is required (form RECH-006 to be made available shortly on Research Ethics Committee (Human) portal).
6. Immediate submission (and possible discontinuation of the study in the case of serious events) of the relevant report to RECH (form RECH-007 to be made available shortly on Research Ethics Committee (Human) portal) in the event of any unanticipated problems, serious incidents or adverse events observed during the course of the study.
7. Immediate submission of a Study Termination Report to RECH (form RECH-008 to be made available shortly on Research Ethics Committee (Human) portal) upon unexpected closure/termination of study.
8. Immediate submission of a Study Exception Report of RECH (form RECH-009 to be made available shortly on Research Ethics Committee (Human) portal) in the event of any study deviations, violations and/or exceptions.
9. Acknowledgement that the study could be subjected to passive and/or active monitoring without prior notice at the discretion of the Research Ethics Committee (Human).

Please quote the ethics clearance reference number in all correspondence and enquiries related to the study. For speedy processing of email queries (to be directed to Imtiaz.Khan@mandela.ac.za), it is recommended that the ethics clearance reference number together with an indication of the query appear in the subject line of the email.

We wish you well with the study.

Yours sincerely



Dr S Govender
Chairperson: Research Ethics Committee (Human)

Cc: Department of Research Capacity Development
Faculty Officer: BES

Appendix 1: Acknowledgement of conditions for ethical approval

APPENDIX 1

ACKNOWLEDGEMENT OF CONDITIONS FOR ETHICS APPROVAL

I, **MS J KINSMAN** (PRP) OF THE STUDY ENTITLED **FINANCIAL LITERACY: A CASE OF A SOUTH AFRICAN UNIVERSITY (H19-BES-BMA-054)**, DO HEREBY AGREE TO THE FOLLOWING APPROVAL CONDITIONS:

1. The submission of an annual progress report by myself on the data collection activities of the study by 15 November this year for studies approved in the period October of the previous year up to and including September of this year, or 15 November next year for studies approved after September this year. It is noted that there will be no call for the submission thereof. The onus for submission of the annual report by the stipulated date rests on myself.

2. Submission of the relevant request to RECH in the event of any amendments to the study for approval by RECH prior to any partial or full implementation thereof.

3. Submission of the relevant request to RECH in the event of any extension to the study for approval by RECH prior to the implementation thereof.

4. Immediate submission of the relevant report to RECH in the event of any unanticipated problems, serious incidents or adverse events.

5. Immediate discontinuation of the study in the event of any serious unanticipated problems, serious incidents or serious adverse events.

6. Immediate submission of the relevant report to RECH in the event of the unexpected closure/discontinuation of the study (for example, de-registration of the PI).

7. Immediate submission of the relevant report to RECH in the event of study deviations, violations and/or exceptions.

8. Acknowledgement that the study could be subjected to passive and/or active monitoring without prior notice at the discretion of RECH.

Signed: JKinsman

Date: 17 February 2020

FINAL DRAFT 2

ORIGINALITY REPORT

6%	7%	5%	1%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

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