THE MODERATING EFFECT OF SOCIOECONOMIC FACTORS ON THE RELATIONSHIP BETWEEN FINANCIAL INCLUSION AND POVERTY AMONG SOUTH AFRICAN VULNERABLE HOUSEHOLDS

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ABSTRACT

Vulnerable households are often excluded from the formal financial sector, subsequently experiencing more poverty. Vulnerable households are those that face higher chances of experiencing higher levels of poverty due to their socioeconomic factors. This study aimed to determine the moderating effect of socioeconomic factors on the relationship between financial inclusion and poverty among South African vulnerable households. Poverty is the involuntary lack of monetary and other resources that can afford households with basic human needs and a decent standard of living above a chosen poverty measure. This study measured poverty using a multidimensional measure that incorporated a household's deprivation of health, education and a decent standard of living.

Financial inclusion refers to a process of incorporating vulnerable households into the formal financial sector by ensuring that they receive timely and adequate access to regulated financial products at an affordable price, regardless of their socioeconomic status. This study measured financial inclusion multidimensionally using access to four basic regulated financial products. Socioeconomic factors included gender, race, first or home language, age, the highest level and many more factors. This study was supported by theoretical framework of the vulnerable group theory of financial inclusion, financial development theory, the credit rationing theory and the public goods theory of financial inclusion.

The study adopted a quantitative research design. The study used existing data from the FinMark FinScope 2016 South Africa database, which collected data on households' demographics and their ownership of financial products. Using a closed-ended questionnaire, FinMark FinScope collected the data across South Africa through a multi-probability sampling technique. The final database used in this study after data cleaning contained a sample of 2759 households. The study used descriptive statistics, Pearson's product-moment correlation, ANOVA and Multiple regression to investigate the factors of the study.

The results of the study found a statistically significant relationship between financial inclusion and vulnerable households. The results also found a statistically significant relationship between poverty and vulnerable households. The results further showed a statistically significant negative relationship between financial inclusion and poverty. Lastly, the study found that only socioeconomic factors such as marital status, age as it relates to children and old people moderating effect on the relationship between financial inclusion and poverty among South African vulnerable households. Subsequently, it was concluded that vulnerable households experienced higher levels of poverty in South Africa, and these vulnerable households were less financially included in South Africa. Additionally, it was found that increasing vulnerable households' access to all regulated financial products could help decrease their poverty levels.

The study made several recommendations, which included inter-alia that formal financial institutions design products that specifically meet the needs of vulnerable households. This study also recommended that banks play a central role in facilitating vulnerable households' affordability of health in South Africa (e.g., offering affordable healthcare products to vulnerable households). Theoretically, this study contributed to the body of literature using multidimensional financial inclusion and poverty, as well as determining the moderating effect of socioeconomic factors. Practically, this study provided insights to the banks on how to develop their products to meet the needs of vulnerable households, help alleviate poverty, and increase the banks' market into previously unbanked or underbanked segments of the population of South Africa.

KEYWORDS: Financial inclusion, poverty, vulnerable households, socioeconomic factors, financial products, financial sector, South Africa.

DECLARATION

I declare that the thesis entitled "The moderating effect of socioeconomic factors on the relationship between financial inclusion and poverty among South African vulnerable households", which I hereby submit for the degree of Master of Commerce in financial management at Rhodes University is my own work. I also declare that I have not previously submitted this dissertation for a degree at this or any other tertiary institution and that all the sources I have used or quoted have been indicated and acknowledged using complete references.

Signed: 

PONTS'O VIOLET KHALANE

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CHAPTER 1
INTRODUCTION AND BACKGROUND OF THE STUDY

1.1 INTRODUCTION AND BACKGROUND OF THE STUDY

Approximately 55% of South Africa's population lives in poverty, with an estimated 9% increase in poverty levels in 2020 in South Africa (World Bank Group, 2020: 77). Poverty levels continue to become a persistent economic challenge in South Africa (Francis and Webster, 2019: 788, Mishi et al., 2020: 1). Poverty refers to the involuntary lack of monetary and other resources that can afford households with basic human needs and a decent living standard that is above a chosen poverty measure. Past literature measured poverty using income or expenditure levels (Ahmad, Mansor and Paim, 2016: 196; Baiyegunhu and Fraser, 2011: 87) which does not sufficiently cover all aspects of poverty (Fransman and Yu, 2019: 52; Tran et al., 2022: 2). Poverty should therefore be measured multi-dimensionally using the basic human needs that each household should have, namely health, education and a decent standard of living (Churchill and Marisetty, 2020: 1781; Tran et al., 2022: 2).

Poverty is driven by socioeconomic factors and it has become common contention that poverty cannot be studied in isolation from these socioeconomic factors (Sanchez-Martinez and Davis, 2014: 13). These socioeconomic factors include inter-alia age, gender, employment status, education, and marital status (Biyase and Zwane, 2018: 115; Churchill and Marisetty, 2020: 1779). Due to these socioeconomic factors and other regulatory barriers, vulnerable households often rely on the risky and costly informal financial sector to perform their financial activities (National Treasury, 2011; Mishi et al., 2020: 2). As a result, it is important to facilitate the inclusion of the vulnerable households into the formal financial sector by offering affordable, appropriate, and regulated financial products and services (Abrahams, 2017: 655).

Several authors have identified financial inclusion as one of the most necessary tools to reduce poverty (Schoombee, 2015: 166; Dawood et al., 2019: 243). Financial inclusion is particularly important for vulnerable households because unforeseen adverse events can push them further into poverty if they do not have access to regulated financial products and services to cushion them against such events (Iqbal and Sami, 2017:1, Abel, Mutandwa and Le Roux, 2018:1).

Financial inclusion refers to a process of incorporating vulnerable households into the formal financial sector by ensuring that they receive timely and adequate access to regulated financial products at an affordable price (Abel, Mutandwa and Le Roux, 2018: 1). Allen et al. (2016: 6) and Mhlanga and Denhere (2020:45) measured financial inclusion using access to a formal bank account. Churchill and Marisetty (2020: 1780) and Mhlanga, Dunga and Moloi (2021:1) challenged this view. They argued that financial inclusion could not be guaranteed by merely having a bank account. Instead, financial inclusion measures should include access to other regulated financial products and services. These other financial products and services include access to credit, insurance, and savings/investment products (Churchill and Marisetty, 2020: 1780; Janzen, Carter and Ikegami, 2021: 294). In this study, these financial products and services are important: if vulnerable households cannot access them, not only are the households poor and vulnerable now, but they will most likely not be able to escape poverty even in the future (National Treasury, 2020; Churchill and Marisetty, 2020). Therefore, the formal financial sector should provide access to regulated financial products and services to all segments of society (FinMark, 2016; Abel, Mutandwa and Le Roux, 2018: 1).

Previous literature indicated that socioeconomic factors drive financial inclusion (Louis and Chartier, 2017:181; Francis and Webster, 2019). However, Wentzel, Diatha and Yadavalli (2016: 203) found that gender, marital status and home ownership were not associated with financial inclusion. Similarly, in South Africa, Mhlanga and Denhere (2020: 39) found that some socioeconomic factors, including age, education, income, race, gender, and marital status, influence financial inclusion. Therefore, socioeconomic factors should not be excluded when studying the concepts of financial inclusion and poverty, especially among vulnerable households. Vulnerable households are more prone to adverse idiosyncratic and covariate risks, making them more likely to fall into poverty (Cheteni, Khamfula and Mah, 2019: 4801). These households can be identified using the household socioeconomic factors of the people heading them (Makhalima, 2020: 408; Koomson, Villano and Hadley, 2020). Vulnerable households might experience higher levels of poverty in South Africa (Biyase and Zwane, 2018: 122; Makhalima, 2020: 406-409), and they might be less financially excluded in South Africa (Louis and Chartier, 2017:170). Vulnerable households' access to all regulated financial products can

help decrease their poverty levels in South Africa (Schoombee, 2015: 166; Dawood et al., 2019: 243).

1.2 PROBLEM STATEMENT

Despite the different initiatives enacted to alleviate poverty in South Africa, poverty remains prevalent and continues to increase, especially among vulnerable households in South Africa (Francis and Webster, 2019). Financial inclusion has been echoed by the government, formal financial institutions and by academic literature as an important tool that can be used to alleviate poverty among vulnerable households in South Africa (Schoombee, 2015: 166; Abel, Mutandwa and Le Roux, 2018:1). According to the National Treasury (2020: 1) and Abrahams (2017: 632), the government of South Africa has reported that about 90% of South Africans are now financially included. It would then be expected that these reported high rates of financial inclusion would translate to reduced levels of poverty. However, this does not seem to be the case as poverty levels continue to be prevalent. Therefore, this mismatch warranted further investigation of the reported relationship between financial inclusion and poverty, particularly how this relationship fairs among vulnerable households in South Africa. Vulnerable households were the particular focus because they are the ones who face the risk of falling into poverty when unforeseen adverse events and economic turmoil happen (Iqbal and Sami, 2017:1, Abel, Mutandwa and Le Roux, 2018:1).

Past research has measured financial inclusion and poverty using singular measures, which has proven to be insufficient (Baiyegunhu and Fraser, 2011: 87; Ahmad, Mansor and Paim, 2016: 196; Allen et al., 2016: 6; Mhlanga and Denhere, 2020: 45). Additionally, past research has either studied the drivers of financial inclusion and poverty in isolation from each other; or the relationship between financial inclusion and poverty, but none have looked at the moderating effet of these drivers on the relationship between financial inclusion and poverty. In particular, literature exists on the drivers of financial inclusion and the drivers of poverty in South Africa, which are socioeconomic factors (Wentzel, Diatha and Yadavalli, 2016; Biyase and Zwane, 2018; Francis and Webster, 2019; Mhlanga and Denhere, 2020). Additionally, there are studies that have looked at the relationsip between financial inclusion and poverty (Churchill and Marisetty, 2020; Tran et al., 2022). However, there has not been much focus on empirically determining the

moderating role of socioeconomic factors on the relationship between financial inclusion and poverty among South African vulnerable households.

1.3 RESEARCH OBJECTIVES

This section states the primary objective of the study and outlines the secondary objectives. The secondary objectives validate and give effect to the primary objective.

1.3.1 PRIMARY OBJECTIVE

The study's primary objective was to determine the moderating effect of socioeconomic factors on the relationship between financial inclusion and poverty among South African vulnerable households. In order to achieve this primary objective of the study, the following secondary objectives were addressed:

1.3.2 SECONDARY OBJECTIVES

- To investigate the concepts of financial inclusion, poverty, and vulnerable households in South Africa.
- To propose a theoretical framework on relationships between financial inclusion, poverty and vulnerable households in South Africa.
- To determine the relationships between financial inclusion and poverty, vulnerable households and financial inclusion, as well as vulnerable households and poverty in South Africa.
- To determine the moderating effect of socioeconomic factors on the relationship between financial inclusion and poverty among vulnerable households in South Africa.
- To provide recommendations to formal financial institutions on how to promote access to regulated financial products and services for South African vulnerable households.

1.4 OPERATIONAL DEFINITIONS AND HYPOTHESES OF THE STUDY

This section provides the operational definitions and hypotheses of the study. Table 1.1 shows the operational definitions of the independent (financial inclusion), moderating (socioeconomic

factors) and dependent (poverty) variables, as well as the operational definition of vulnerable households.

Table 1. 1 Operational definitions

Factors	**Operational definition**	**Source**
Financial inclusion	Financial inclusion is measured as a multidimensional variable comprised of access to regulated transactional bank account products, credit products, insurance products and savings or investment products.	Churchill and Marisetty (2020: 1780); Janzen, Carter and Ikegami (2021: 294); National Treasury (2020: 12).
Poverty	Poverty is measured as a multidimensional variable comprised of deprivation of health, education and a decent standard of living.	Fransman and Yu (2019); Churchill and Marissety (2020: 1779)
Vulnerable households	Vulnerable households are households that are either households whose head of the household is either a female, Black, speaks Nguni as their first or home language, a child (below 18 years of age), youth (between 18 and 35), or the elderly (above 60 years), have attained low levels of education, unemployed, not married, households with a large household size (6+household members) and households that do not own the land/property on which they live.	Cheteni, Khamfula and Mah (2019: 4801); Statistics South Africa(2020)

Socioeconomic factors	Socioeconomic factors include gender, race, home language, age, the highest level of education attained, employment status, marital status, household size, and household land or property ownership.	Baiyeguni and Fraser (2011); Ahmad, Mansor and Pain (2016); Koomson, Villano and Hadley (2020).

Source: Researcher's own creation.

Table 1.1 shows the measurement of the independent, moderating and dependent variables. More information will be provided on the variables in Chapter 4. The hypotheses of the study are presented below.

H_{0_a}: There is no significant relationship between financial inclusion and poverty among South African vulnerable households.

H_{1_a}: There is a significant relationship between financial inclusion and poverty among South African vulnerable households.

H_{0_b}: There is no significant relationship between vulnerable households and financial inclusion in South Africa.

H_{1_b}: There is a significant relationship between vulnerable households and financial inclusion in South Africa.

H_{0_c}: There is no significant relationship between vulnerable households and poverty in South Africa.

H_{1_c}: There is a significant relationship between vulnerable households and poverty in South Africa.

H_{0_d}: Socioeconomic factors do not have a significant moderating effect on the relationship between financial inclusion and poverty among South African vulnerable households.

H_{1_d}: Socioeconomic factors have a significant moderating effect on the relationship between financial inclusion and poverty among South African vulnerable households.

1.5 RESEARCH DESIGN AND METHODOLOGY

This section provides brief information on the research design and methodology of the study. More information will be provided in Chapter 4.

This study was objective, independent of the researcher's personal views or interpretations, and only based on factual data; thus, it adopted a positivistic paradigm (Aliyu et al., 2014:81). A positivistic research paradigm is normally linked to quantitative research studies that use numerical data to test hypotheses using statistical models (McGregor and Murnane, 2010: 421; Antwi and Hamza, 2015: 218-219). Since this study will be using numerical data and statistical techniques to determine reltionships, this study adopted a qunatitatiive research design. Saunders, Lewis and Thornhill (2016:166) support the use of a quantitative research design in studies that use numerical data and statistical techniques to determine relationships between variables. A Qunatitative research design is usually associated with quantitative methodologies such as the correlational research methodology ((Asamoah, 2014: 45). This study used a correlational research methodology as hypotheses testing was used to determine the effect of an independent variable on a dependent variable (Saunders, Lewis and Thornhill, 2016: 166).

A sample of 4992 households from the latest publicly available household survey database by FinScope South Africa, obtained by FinMark using a multiple probability sampling method within a South African population, was used (Insight2Impact, 2016). The survey was conducted among the same sample, at one point in time which was conducted from June until August 2016, thus making this a cross-sectional study. A closed-ended questionnaire was used by FinMark to collect the data from respondents aged 16 years and older. The questionnaire collected household data related to the households' structure, access and usage of financial products and services, and general attitudes, statements, and demographics.

The database was examined for missing data using a complete case approach, which computed values based on only complete cases, also known as the listwise deletion approach (Hair et al., 2014: 543). Respondents who did not answer and those who chose the 'don't know' options were

eliminated from the study. In order to allow for inferential analysis, nonmetric data was dummy coded by using zeros and ones to represent the data (Hair et al., 2014: 33). Content validity was done by thoroughly defining the variables of the study through the literature reviewed (Saunders, Lewis and Thornhill, 2016: 450). Saunders, Lewis and Thornhill (2016, 338) stated that reliability and validity of secondary can be assessed by the looking at the reputation of thesource of thedata. FinMark Trust andFinScope South Africa are well known, reputable institutions in thefinancial inclusion sphere.

Poverty (the dependent variable) was measured by determining households' deprivation scores of three poverty indicators: health, education and standard of living. The scores were summed up and averaged to determine the poverty status of a household. A household with a total deprivation score of 29% or less was deemed not poor, and one with a total deprivation score of 30% or higher was deemed poor. Financial inclusion was measured by determining a household's access to a regulated bank account, credit, insurance, and savings/investment products (Churchill and Marisetty, 2020: 1780; Janzen, Carter and Ikegami, 2021: 294). These scores were summed up and averaged to determine the total access score of a household. Households with a total access score between 0% and 49% were deemed financially excluded. Those with a total access score of 50% were deemed partially financially included. Those with a total access score between 51 % and 74% were deemed moderately highly financially included, and those with total access scores of 75% and above were deemed highly financially included. The choice of socioeconomic factors used in this study was informed by existing literature (Churchill and Marisetty, 2020: 1779; Mhlanga, Dunga and Moloi, 2021: 5). Any factor that was measured using a nonmetric scale was dummy coded to allow for inferential analysis (Hair et al., 2014: 33).

Descriptive statistics were used to summarise data into meaningful and simpler interpretative indicators such as frequencies and percentages (Adams, Khan and Raeside, 2014: 171), while inferential statistics were used to test the hypotheses by examining relationships, trends, and differences between variables (Saunders, Lewis and Thornhill, 2016). The Analysis of Variance (ANOVA) test was used to determine relationships between financial inclusion and vulnerable households and poverty and vulnerable households by analysing the variance within and between variables by comparing their means (Saunders, Lewis and Thornhill, 2016: 544). Pearson's

product-moment correlation coefficient (r) was used to check for correlation between socioeconomic factors as strong correlations would reduce any single socioeconomic factor's predictive power by the extent to which it is associated with the other socioeconomic, known as multicollinearity (Hair et al., 2014: 161).

Multiple regression analysis was used to test the hypotheses of this study, namely the relationship between financial inclusion (independent variable) and poverty (dependent variable) and the moderating effect of socioeconomic factors on this relationship (Hair et al., 2014: 151). The predictive accuracy of the model was tested using a coefficient of determination (R^2), which is the squared correlation between the actual and the observed values of the dependent variable (Hair et al., 2014: 152). According to Hair et al. (2014: 176-177), the moderator effect occurs when adding the moderator variable (another independent variable) into the multiple regression changes the form of the relationship between other independent variables and the dependent variable. If the change in R^2 is statistically significant after socioeconomic factors are added to the multiple regression model as moderators, and if the beta coefficients of the interaction variables (independent variable x socioeconomic factor) are statistically significant, then a significant moderator effect will be assumed to be present for that factor (Hair et al., 2014: 177).

This research used publicly available secondary data; therefore, no ethics application form was submitted using the Ethical Review Application System (ERAS) for publicly available data (low-risk desktop research). Instead, the researcher completed and submitted an ethics application form for DATA ONLY to the supervisor and Departmental/Business School Ethics Representative for noting and filing, as per guidelines and requirements of the University.

1.6 SCOPE AND DEMARCATION

This study focused on financial inclusion, poverty and vulnerable households in South Africa. In particular, it focused on determining whether a relationship existed between financial inclusion and poverty, between financial inclusion and vulnerable households and between poverty and vulnerable households in South Africa. More specifically, it focused on determining whether socioeconomic factors (gender, race, language, age, highest level of education attained, employment status, marital status, household size and household's land or property ownership

status) had a moderating effect on the relationship between financial inclusion and poverty among vulnerable households in South Africa.

The study focused on the heads of households from across South Africa who were sixteen years and older and used their demographics and those of their households to identify the households as vulnerable or not vulnerable. The study also focused on banks as providers of regulated financial products. Financial inclusion was measured by four indicators: access to regulated transactional account products, credit products, insurance products and savings or investment products. Poverty was measured by three indicators: deprivation of education, deprivation of health and deprivation of a decent standard of living. The next section will provide information on the structure of the chapters and the summary of Chapter 1.

1.7 STRUCTURE OF THE CHAPTERS

Table 1.2 depicts how the study will be structured by describing the content of the chapters.

Table 1.2: Structure of the chapters

Chapter	Content of the chapters
Chapter 1	This chapter provided the introduction and background of the study, including the problem statement and the purpose of the study. It also outlined the primary and secondary objectives of the study and gave an overview of the research methodology. Lastly, it outlined the demarcation of the study and stated how the rest of the study would be structured.
Chapter 2	This chapter will provide a literature review of financial inclusion, poverty and vulnerable households in South Africa. It will describe the formal financial sector of South Africa and identify the regulations and regulations that apply to it. It will also describe financial inclusion, identify its measurements and measures, discuss why it is important to financially include vulnerable households, and discuss the financial state in South Africa. It will also describe

	poverty, how it is measured, and the state of poverty in South Africa. The chapter will conclude with a discussion about vulnerable households in South Africa.
Chapter 3	This chapter will provide the theoretical framework of the study by discussing financial inclusion theories used to build the theoretical framework of the study. It will also use existing literature to identify the relationships between financial inclusion and poverty, financial inclusion and vulnerable households, as well as poverty and vulnerable households in South Africa.
Chapter 4	This chapter will present the research design and methodology that the study adopted. It will also identify the sources of data, the data collection methods and the analysis techniques used to test the hypotheses of the study.
Chapter 5	This chapter will provide the results of the study. It will explore the response rate and use descriptive statistics (frequencies and percentages) for summarising the characteristics of households, the demographics of the heads of households, and the levels of financial inclusion and poverty among households in South Africa. It will also discuss the results of ANOVA that will show the relationships between financial inclusion and vulnerable households and that between poverty and vulnerable households. It will further present the multiple regression results showing the relationship between financial inclusion and poverty and the moderating effect of financial inclusion and poverty among vulnerable households in South Africa.
Chapter 6	This chapter will present the summary, conclusions and recommendations of the study. An overview and summary of all previous chapters will be provided, including a discussion of how the research objectives were achieved. It will also discuss the results of the chapter, provide recommendations, present the contribution of the study, the limitations of the study and provide the concluding remarks.

Source: Researcher's own creation.

Table 1.2 outlines that the study will have two literature chapters, a methodology chapter and a results chapter. The last chapter will be the recommendations chapter.

1.8 SUMMARY OF THE CHAPTER

This chapter provided the introduction and background of the study. It identified that poverty is still a prevalent issue in South Africa, especially among vulnerable households. It also identified the need to financially include vulnerable households in the formal financial sector. This would protect them against adverse risks that would otherwise push them into poverty. It also identified socioeconomic factors as drivers of both financial inclusion and poverty separately. The problem statement of the study was then presented.

The primary objective of the study and its subsequent secondary objectives were also presented. A brief overview of the research design and methodology used in the study was provided. Lastly, the scope and demarcation of the study were provided, including the structure of the chapters of the study. Chapter 2 will provide the literature review of the study, which will include an overview of financial inclusion, poverty and vulnerable households in South Africa.

CHAPTER 2
FINANCIAL INCLUSION, POVERTY AND VULNERABLE HOUSEHOLDS

2.1 INTRODUCTION

Chapter 1 introduced the study by including the background, problem statement and objectives. This study aimed to determine the moderating effect of socioeconomic factors on the relationship between financial inclusion and poverty among South African vulnerable households. In order to achieve this, the secondary objective was defined, namely, to investigate the concepts of financial inclusion, poverty, and vulnerable households in South Africa. This chapter will achieve the secondary objective of this study by providing a critical literature overview of financial inclusion, poverty and vulnerable households.

This chapter will firstly provide a discussion of the formal financial sector of South Africa, which includes the description of the formal sector of South Africa, the identification of regulators of the regulated financial products offered by the formal financial sector of South Africa, the role played by the formal financial sector of South Africa and the discussion of the regulated financial products and services offered by the formal financial sector of South Africa. It will then describe financial inclusion, followed by its measures, barriers to financial inclusion of vulnerable households and the importance of financially including vulnerable households. This will be followed by exploring the state of financial inclusion in South Africa, including the identification of the initiatives and current state of financial inclusion in South Africa, as well as the successes and failures or challenges of these initiatives.

Furthermore, this chapter will present a description of poverty, measures of poverty, and a discussion of the state of poverty in South Africa. This will be followed by a description of households, types of households prevalent in South Africa, as well as a description of the concept of vulnerable households. The chapter will conclude with a discussion of the measures of vulnerable households and a summary of the chapter.

2.2 THE FORMAL FINANCIAL SECTOR OF SOUTH AFRICA

This section describes the formal financial sector of South Africa and identifies its regulators. It then discusses its role in financial inclusion. Lastly, it describes the regulated financial products and services offered by the formal financial sector.

2.2.1 DESCRIPTION OF THE FORMAL FINANCIAL SECTOR OF SOUTH AFRICA

The formal financial sector refers to the formal banking and non-banking financial institutions that act as pillars of economic activity and growth in a country by providing regulated financial products and services to everyone (National Treasury, 2011: 1; Iqbal and Sami, 2017: 1). The South African formal financial sector provides a framework on carrying out economic transactions and monetary policy (National Treasury, 2011; Matsebula and Yu, 2020: 171). The South African formal financial sector consists of banks, whether locally controlled, mutual, or foreign-controlled, and non-banking financial institutions such as insurance providers, pension and provident fund providers (National Treasury, 2020: 15). This study specifically focused on banks as they are the most cardinal financial institutions that facilitate economic growth and provide the four regulated financial products used in this study.

Different acts and codes regulate the formal financial sector of South Africa. In particular, the Banks Act 94 of 1990 regulates deposit-taking companies in South Africa (South African Reserve Bank, 2020). Additionally, the Basel Committee on Banking Supervision has set out the Basel Accords that regulate and provide for strict risk measures related to capital adequacy requirements of banks (South African Institute of Chartered Accountants, 2011). The capital adequacy requirements under Regulations 38 of the Banks Act 94 of 1990, as well as under the Basel Accords II and III, impact the extent to which banks can ease access to financial products to vulnerable households (Anarfo, Abor and Osei, 2019: 10). For instance, the banks are mandated to take strict risk measures when it comes to safeguarding depositors' money and maintaining the required capital adequacy levels, thus restricting the financial products it can offer the vulnerable (Anarfo, Abor and Osei, 2019: 1).

The implementation of these capital adequacy regulations can lead to credit rationing, which would be at the peril of vulnerable households, wherein banks limit the supply of formal credit to those

demanding access to it as a measure to avoid default risks imposed by those deemed likely to default on payments (Matsebula and Yu, 2020: 176). Since vulnerable households are often unbanked, banks consider them uncreditable and risky because of their higher likelihood to default repayments (Matsebula and Yu, 2020:173). The Banks Act 94 of 1990 and Basel Accords II and III play a role in how deposit-taking institutions facilitate financial inclusion in South Africa. The following paragraphs will discuss the acts that regulate other sectors and institutions within the formal financial sector in South Africa. These link to the regulators of the formal financial sector of South Africa, as well as the regulated products offered by the formal financial sector of South Africa that this study used to represent financial inclusion.

The National Credit Act 34 of 2005 regulates credit-providing institutions in South Africa. It plays a vital role in financial inclusion, as access to regulated credit facilitates households to break free from the poverty cycle (Gordon, 2020). This act requires credit providers to provide regulated credit products in a fair manner to all members of society, as well as promotes the financial literacy of the vulnerable to assist them in making sound financial choices, thus promoting financial inclusion (Chitimira and Ncube, 2020: 344). Similarly, the Protection of Investment Act of 2015 provides legislative protection for investors and promotes investment. According to this Act, among other things, formal financial institutions must protect and provide their regulated investment products to vulnerable households that were previously marginalised and disadvantaged due to discrimination, thus promoting financial inclusion (Protection of Investment Act of 2015).

The Insurance Act 18 of 2017 regulates insurance providers by maintaining a fair, safe, and stable insurance market in South Africa (Insurance Act 2017). It is important in facilitating financial inclusion because, according to Janzen, Carter and Ikegami (2021), insurance offers incentives to invest, thus further pushing households into being financially included by accessing various regulated financial products. The Financial Sector Code (FSC) of South Africa indicates targets of access to regulated financial products and services such as affordable banking, insurance and savings (National Treasury, 2011). Thus, it guides and informs formal financial institutions as they develop products aimed at enhancing financial inclusion.

Lastly, the Financial Sector Regulation Act (FSRA) 9 of 2017 regulates and supervises formal financial institutions in South Africa (Financial Sector Conduct Authority, 2021). According to Chitimira and Ncube (2020: 345), the FSRA resulted in the formation of regulatory institutions, such as the Financial Sector Conduct Authority and the Prudential Authority, that mandate and promote financial inclusion in South Africa. To ensure that these acts and codes are followed and executed by the formal financial institutions of South Africa, regulatory bodies and institutions govern and regulate them.

2.2.2 REGULATORS OF FINANCIAL PRODUCTS AND SERVICES OFFERED BY THE FORMAL FINANCIAL SECTOR IN SOUTH AFRICA

The Financial Sector Regulation Act (FSRA) 9 of 2017 introduced the twin peaks model in 2018 (Financial Sector Conduct Authority, 2021). This is a financial sector regulatory framework that consolidates different financial sector regulators into two independent structures that regulate market conduct and consumer protection (The Financial Sector Conduct Authority) and maintain the stability of the financial system (The Prudential Authority) in South Africa (Heerden and Niekerk, 2017: 155). Prior to the enactment of the twin model in South Africa, the South African Reserve Bank (SARB) was the central prudential regulator of banks, with the Financial Services Board (FSB) regulating and supervising insurance and fund managers sharing the responsibility of supervising market intermediaries with the Johannesburg Stock Exchange (JSE) (Heerden and Niekerk, 2017: 154).

Additionally, the JSE supervised listed companies, the Department of Trade and Industry supervised unlisted companies, and the National Credit Regulator (NCR) oversaw lending and reported to the Department of Trade and Industry (Heerden and Niekerk, 2017: 154). This individualistic approach to regulation presented challenges of interlapping (institutions falling into two different sectors, such as banking and insurance, commonly known as bancassurance) and lack of coordination between the different regulators (Schmulow, 2017: 401). Subsequently, the twin peaks model was implemented in South Africa to ensure transparency, market integrity and consumer protection of both banks and nonbanking financial institutions (Schmulow, 2017: 405). The twin peaks regulatory framework comprises two independent regulatory peaks: the Financial Sector Conduct Authority and the Prudential Authority.

The Financial Sector Conduct Authority (FSCA) is the market conduct regulator of formal financial institutions in South Africa, located separately from the SARB, and has the responsibility of supervising all formal financial institutions, including banks, investment companies, credit providing companies and insurance providers and ensuring integrity and an efficient financial sector as a whole (Heerden and Niekerk, 2017: 155). The FSCA provides customers with effective financial information and ensures they are protected and treated fairly (Financial Sector Conduct Authority, 2021). Similarly, the Prudential Authority (PA) is a separate juristic person within the SARB and is tasked with overseeing the stability of all formal financial institutions, including banks, in South Africa (Heerden and Niekerk, 2017: 155). The PA ensures the soundness and safety of financial institutions, thus supervises financial products and service providers, such as banks, investment companies, credit providers and insurance companies, to ensure they can always meet their obligations to their customers (Chitimira and Ncube, 2020: 353).

The South African Reserve Bank is the central bank of South Africa that regulates, supervises and supports formal financial institutions and the financial market by ensuring their safety, soundness, and stability and by protecting the users of these formal financial institutions by monitoring their risk exposure and conducts (Louis and Chartier, 2017: 170). The SARB is responsible for the administration of the PA and is explicitly mandated with spearheading financial stability within the financial system of South Africa (Heerden and Niekerk, 2017: 155).

Unlike other regulators assimilated into FSCA after the implementation of the twin peaks, the National Credit Regulator (NCR) remained independent and is a credit market regulator within the twin peaks (Heerden and Niekerk, 2017: 155). The NCR oversees lending, regulates the credit market and promotes access to regulated credit, particularly by historically disadvantaged segments of the population in South Africa (NationalCredit Regulator, 2014). According to Chitimira and Ncube (2020: 344), the NCR mandates formal credit-providing institutions to provide financial education to vulnerable segments of the population and to ensure the provision of fair, adequate and effective regulated financial products to everyone.

Lastly, the Johannesburg Stock Exchange (JSE) is a marketplace for trading (buying and selling) investment products, such as equities, bonds and derivatives, that regulates the listing requirements

and trading rules in South Africa (Louis and Chartier, 2017: 170; Johannesburg Stock Exchange, 2021). The JSE supervises listed companies and market intermediaries within the financial sector of South Africa (Heerden and Niekerk, 2017: 154). These regulators ensure that the formal financial sector is efficient and effective in executing its roles, including its role in facilitating financial inclusion.

2.2.3 ROLE OF THE FORMAL FINANCIAL SECTOR OF SOUTH AFRICA IN FINANCIAL INCLUSION

The formal financial sector of South Africa is cardinal to facilitating economic activity. It is the pillar expected to facilitate the inclusion of the vulnerable into the formal financial system through the regulated financial products they offer (Abrahams, 2017). The South African government and the formal financial sector have struggled to integrate vulnerable households into the formal financial sector (Louis and Chartier, 2017: 181). The financial inclusion role of formal financial institutions in South Africa is crucial because implementing strategies that improve access to regulated financial products would not only mean expanding into an untapped market but also pulling vulnerable households away from poverty (Wentzel, Diatha and Yadavalli, 2016: 2).

According to Mhlanga and Denhere (2020: 40), the role of the formal financial sector in South Africa is to act as an intermediary between those with surplus funds and those who need the funds to cushion their consumption, invest in the future and insure against financial risks, thus promoting economic development and fighting poverty. Thus, formal financial institutions should facilitate easy and affordable access to the regulated financial products they offer vulnerable households. These households need these financial product offerings to finance their current and future consumption and protect them from any adverse effects caused by unexpected financial and economic shocks. Despite this, Louis and Chartier (2017: 170) asserted that financial inclusion of the vulnerable is still a major problem in South Africa, partly because the banking industry, being the largest segment of the formal financial sector, is a highly concentrated source of wealth that still limits capital to primarily the wealthy.

For Demirguc-Kunt and Klapper (2012), the role of a well-functioning formal financial sector is to provide savings, credit, payments and risk management products and services to all groups of

society. When the formal financial sector appropriately includes vulnerable households by giving them access to these regulated financial products and services in an easy, affordable and adequate manner, these households can gain better knowledge and understanding of the various product offers. Louis and Chartier (2017: 182) noted that knowledgeable households tend to make better-informed financial decisions that are more likely to boost their well-being and the economy. According to National Treasury (2011: 1), the South African formal financial sector impacts the lives of everyone by enabling economic activity and sustainability and promotes financial inclusion by providing access to regulated financial products and services (Demirguc-Kunt and Klapper, 2012).

2.2.4 REGULATED FINANCIAL PRODUCTS AND SERVICES OFFERED BY THE FORMAL FINANCIAL SECTOR OF SOUTH AFRICA

Financial products refer to the actual financial goods acquired through different financial processes. These include products offered by formal financial institutions (e.g., a transactional bank account, a unit trust, a mortgage loan or an insurance policy). Financial services, on the other hand, refer to financial activities or processes used to acquire a financial product, which formal financial institutions offer their customers, and include financial processes such as saving, wealth management, risk management, trading and transaction services (National Treasury, 2011: 1; Kaluwa and Kunyenje, 2019: 42; International Monetary Fund, 2020). This study measured financial inclusion using access to regulated financial products because they are the actual mechanisms through which South Africans conduct their financial activities and harness the benefit of financial inclusion that was intended for them (Demirguc-Kunt et al., 2017, as cited in Matsebula and Yu, 2020: 181).

There are formal and informal financial products. Formal financial products refer to regulated financial products offered by formal financial institutions, while informal financial products refer to unregulated financial products offered by unregulated and unregistered financial product providers (Matsebula and Yu, 2020: 174-175). Formal products will be referred to in this study as regulated financial products. This study will use these because informal financial products that are not regulated are often offered at unreasonably high costs and conditions at the peril of vulnerable households, thus not promoting financial inclusion (National Treasury, 2020: 1).

According to the Southern African Development Community (SADC) financial inclusion strategy, households should have access to four basic categories of regulated financial products: transactional bank accounts, credit, savings and investments and insurance products (FinMark, 2016: 7). The most popular of these are regulated transactional bank accounts, which are regulated financial instruments that allow users to safely store their money with a deposit-taking institution like a bank (Banking Relationship of South Africa, 2021). Regulated transactional accounts enable households to engage in the formal financial sector through transactions such as payments as they buy and sell, as well as send money to their counterparts (National Treasury, 2020: 15). Banks offer transactional accounts such as current or cheque accounts (Banking Relationship of South Africa, 2021). In this study, regulated transactional bank accounts will refer to cheque/current accounts, Mzansi accounts, student accounts and transactional accounts.

Regulated credit products refer to the regulated financial products that enable the provision of different forms of loans by formal financial institutions to supplement household income and financial asset acquisitions. It is used in this study because it helps vulnerable households to finance consumption, pay for basic household needs (e.g., education), raise the living standards of households and prevent those standards from falling sharply during a financial emergency (National Treasury, 2020). Some of the popular regulated credit products offered by banks and other formal credit institutions are personal and mortgage loans, car loans, credit cards and overdraft facilities, and these help vulnerable households to supplement their income, pay for basic needs, acquire assets and smoothen consumption (Churchill and Marisetty, 202: 1785; National Treasury, 2020: 1). In this study, regulated credit refers to car loans, home loan/mortgage, overdraft facilities and credit cards, as well as personal loans from any formal financial institution.

Savings products refer to regulated financial products offered by the formal financial sector that enable households to defer their current consumption of money to the future by storing their money in these products, such as savings accounts (National Treasury, 2020: 52). Investment products refer to regulated product offerings by formal financial institutions that not only store money for the future but accrue interest over time in an attempt to create wealth (Chitimira and Ncube, 2020: 329). Savings and investment products create wealth for the future and help cushion households against financial and economic shocks (Janzen, Carter and Ikegami, 2021). It is, therefore,

important that formal financial institutions design savings and investment products that support regular small-value savings for vulnerable households, as these households are more susceptible to financial and economic shocks (Louis and Chartier, 2017: 172; National Treasury, 2020: 51). In this study, savings will include call/money market accounts, fixed/notice deposit accounts, savings account, savings books, tax-free savings account, unit trusts and corporative bank savings.

Lastly, regulated insurance products refer to regulated financial products offered by formal financial institutions that protect customers against the risk of loss due to an adverse economic or financial event (Janzen, Carter and Ikegami, 2021). Unfortunately, informal insurance (risk pooling) is still very dominant among South African vulnerable households, mainly due to regulatory barriers that inhibit vulnerable households from participating in the formal financial sector (National Treasury, 2020.) For the most part, access to insurance products is still limited to funeral insurance among vulnerable households in South Africa (National Treasury, 2020). In this study, insurance products will refer to vehicle and household contents insurance, funeral cover, life insurance, building/property insurance, insurance for agricultural equipment, disability insurance, medical aid and loss of earnings insurance.

When vulnerable households have access to these regulated financial products at an affordable and accessible rate, they can engage with the services offered by the formal financial sector to perform their financial needs and activities; thus, be financially included (Abel, Mutandwa and Le Roux, 2018: 1). This is what South Africa continues to strive for: financial inclusion of vulnerable households.

2.3 DESCRIPTION OF FINANCIAL INCLUSION

United Nations (2015) describe financial inclusion as the process of enabling access to regulated financial products provided with quality to everyone who can use them, subsequently leading to increased levels of financial capability. According to Mohammed, Mensah and Gyeke-Dako (2017:2) and the Southern African Development Community (SADC), financial inclusion is availing regulated financial products in an affordable and accessible manner to all segments of the population (FinMark, 2016). These definitions suggest that regulated financial products should not only be developed and made available but be accessible in an affordable manner for all households,

regardless of their economic status. Similarly, Abel, Mutandwa, and Le Roux (2018: 1) emphasised that financial inclusion is a process of incorporating vulnerable households into the formal financial sector by ensuring that they receive timely and adequate access to regulated financial products at an affordable price.

In a South African context, financial inclusion refers to enabling all South African households to have access to regulated financial products that encourage them to engage in financial services such as managing their money, saving, obtaining credit, and insuring against unforeseen events (National Treasury, 2011; Iqbal and Sami, 2017: 1). This implies that the presence of financial inclusion in South Africa means that all South African households, regardless of whether they are in the rural or urban areas, and regardless of all other socioeconomic factors, should be able to efficiently participate in the formal financial sector by accessing the regulated formal products offered in order to make better-informed financial and economic decisions. Abel, Mutandwa, and Le Roux (2018: 1) added a granular description of financial inclusion, stating that financial inclusion should also ensure that transactions (payments and receiving money), savings, investments, credit, and insurance are being distributed responsibly and sustainably, not excluding the vulnerable households of the South African population. In this study, financial inclusion refers to a process of incorporating South African vulnerable households into the formal financial sector by ensuring that they receive timely and adequate access to regulated financial products at an affordable price, regardless of their socioeconomic status.

Financial inclusion is particularly important for vulnerable households, especially since unforeseen adverse events may push them further into poverty if they do not have access to regulated financial products to protect them against such events (Louis and Chartier, 2017:183; Iqbal and Sami, 2017:1, Abel, Mutandwa and Le Roux, 2018:1). Atake (2018) found that more vulnerable households did not have access to formal insurance products to insure their consumption against health shocks and risks. This indicates the importance of ensuring that vulnerable households have access to regulated financial products such as insurance products because by virtue of enduring various idiosyncratic risks, in this case, health-related risks, these households are more susceptible to shocks that can affect their income and livelihoods.

2.4 MEASURES OF FINANCIAL INCLUSION

Financial inclusion can be measured in terms of having access to financial products and indicators such as bank account ownership, access to other financial products and services, the proximity of financial services or frequency of using the financial products and services (Koomson, Villano and Hadley, 2020: 1). In contrast, it can also be measured using multidimensional measures that are a combination of the variables mentioned above. For Mahalika, Matsebula, and Yu (2021), using one variable to measure access to financial products and services is inadequate and can lead to functional misspecification because financial inclusion is multi-dimensional. Thus, financial inclusion should include access to other financial products than bank accounts. Churchill and Marisetty (2020: 1780) and Mhlanga, Dunga and Moloi (2021:1) argued that financial inclusion could not be guaranteed by merely having a bank account; instead, financial inclusion measures should include access to other regulated financial products. These financial products must include access to credit, insurance, and savings/investment products (Churchill and Marisetty, 2020: 1780; Janzen, Carter and Ikegami, 2021: 294). These financial products were significant in this study because if vulnerable households cannot access them, they are not only vulnerable now but will most likely be unable to escape poverty in the future (National Treasury, 2020, Churchill and Marisetty, 2020).

Other authors have argued that financial inclusion may also be measured as the usage of financial products. According to the SADC financial inclusion strategy, financial inclusion refers to access and the use of formal financial products (FinMark, 2016: 6). For Mindra and Moya (2016: 131), usage refers to households' ability to derive permanent utility from the offered financial products or services, stating that usage is necessary for measuring financial inclusion, adding that financial inclusion cannot be simply achieved by offering enough access points for financial products. Koomson, Vilano and Hadley (2020) also measured financial inclusion using both access and usage. Mindra and Moya (2016: 135) used the frequency of usage of regulated financial products to measure the usage aspect of financial inclusion.

These arguments support usage as a measure of financial inclusion. However, this study described and measured financial inclusion as access to the four basic regulated financial products that every household must be able to access; access to regulated financial products is the initial, most critical step in financial inclusion (FinMark, 2016: 6). Therefore, full access should be achieved first. The decision to focus on access only is due to the various studies that have maintained that many vulnerable households in South Africa still do not have access to regulated financial products. Thus, they defined and measured financial inclusion as providing less privileged households access to regulated financial products and services. For example, Wentzel, Diatha and Yadavalli (2016: 4) represented financial inclusion as access to formal financial services infrastructure. Louis and Chartier (2017: 177) regarded financial inclusion as providing vulnerable households in South Africa with access to regulated financial products. Mhlanga and Denhere (2020: 45) also measured financial inclusion using access to a bank account.

Additionally, the National Treasury (2020: 1) maintains that although financial products exist, they are still not easily accessible to the most vulnerable households in South Africa. The National Treasury (2020) added that even for the vulnerable households that own a transactional bank account in South Africa, transactional bank accounts are under-utilised. Thus, they do not act as enablers of financial inclusion by becoming gateways to accessing other financial products, as is expected and explained by this study. This perhaps explains the low levels of savings and investments among vulnerable households in South Africa, as reported by Rootman and Kruger (2016) and Stedall and Venter (2016), as well as the high usage of informal insurance among vulnerable households in South Africa, as indicated by the National Treasury (2020). Some previous studies have used bank account ownership as the only measure of access to financial products (Wentzel, Diatha and Yadavali, 2016; Mhlanga and Denhere, 2020). However, this study focused on access but expanded the measure of access by determining access to the four basic financial products that each household in South Africa should be able to access.

Resultantly, this study measured financial inclusion multi-dimensionally using access to four categories of regulated financial products that meet the basic financial needs of South Africans, namely a regulated transactional bank account, regulated savings and investments products,

regulated credit products, and regulated insurance products (National Treasury, 2020: 12). Having access to a regulated transactional bank account is the fundamental initial step in financial inclusion and was used to measure financial inclusion in this study because it is a gateway to using other financial products and services offered by financial institutions (National Treasury, 2020: 10). Regulated credit was also used as a measure of financial inclusion in this study because as mentioned earlier in this chapter, credit products assist vulnerable households to not only increase their standard of living but prevent those vulnerable households from falling sharply into poverty during a financial or economic emergency (National Treasury, 2020).

Furthermore, regulated savings and investment products were used to measure financial inclusion because investing in assets for the future would help smooth household income for vulnerable households in cases where an undesirable income/economic shock occurs (Janzen, Carter and Ikegami, 2021). Savings and investment products were significant in this study because, as stated earlier, past literature found meagre levels of savings and investments among South African households, especially vulnerable households (Rootman and Kruger, 2016; Stedall and Venter, 2016). Lastly, regulated insurance products were used to measure financial inclusion because they help households mitigate the risk of shocks that keep people captive in poverty (Churchill and Marisetty, 2020; Janzen, Carter and Ikegami, 2021). The National Treasury (2020: 12) states that all South African households should have access to these four basic regulated financial products if they are deemed financially included. However, various factors often inhibit vulnerable households from accessing regulated financial products, and these barriers are discussed below.

2.5 BARRIERS TOWARDS FINANCIAL INCLUSION FOR VULNERABLE HOUSEHOLDS IN SOUTH AFRICA

Vulnerable households face numerous barriers regarding access to the regulated financial products offered by the formal financial sector in South Africa. Among these barriers are the regulatory requirements, such as the documents required, wherein formal financial institutions have requirements that households must meet before qualifying to access these products (Abrahams, 2017). Allen et al. (2016: 11) found that a lack of required documents inhibited vulnerable households from accessing bank accounts, as some have jobs that do not provide pay slips, which banks require to open an account. These requirements are mandated by regulations to mitigate risk

and fraudulent activities such as money laundering. However, the impact of these regulations is often seen in vulnerable households not being able to meet the requirements of formal financial institutions; thus, they rather use informal financial products (National Treasury, 2011; Allen et al., 2016: 11).

Cost and affordability are barriers to entry into the formal financial sector for vulnerable households (Matsebula and Yu, 2020: 197). For Abrahams (2017: 640), vulnerable households often cannot afford the service fees required to access regulated financial products. Allen et al. (2016: 11) found that one of the main reasons people do not own a bank account is that they do not have enough money to use it. Affordability of regulated financial products is a barrier to entry into the formal financial sector, as vulnerable household income is insufficient to sustain the costs associated with owning a bank account and other regulated financial products. Mohammed, Mensah and Gyeke-Dako (2017) concluded that for vulnerable households to be effectively included financially, the formal financial sector needs to offer their products at a low cost so that vulnerable households can easily access them.

Vulnerable households, especially those living in rural areas, are not near banks; thus, the distance from banks remains another barrier towards accessing regulated financial products by vulnerable households (Koomson, Villano and Hadley, 2020: 3). In this regard, Allen et al. (216: 11) found that 47% of households that were not banked sighted distance as a reason behind not owning a bank account. Additionally, The National Treasury (2020: 8) argue that the lack of sufficient distribution channels for regulated financial products in rural areas is another barrier that inhibits vulnerable households from accessing regulated financial products.

Another barrier to financial inclusion is the suitability of regulated financial products offered (The National Treasury, 2020; 8). Suppose formal financial institutions do not offer suitable and appropriate regulated financial products that meet the need of vulnerable households. In that case, these households will be less inclined and able to access them, thus being financially excluded and at a higher risk of falling into poverty or being trapped into further poverty for those that are already poor (Demirguc-Kunt and Klapper, 2012: 3). According to Nsiah et al. (2021: 3), one of the reasons financial inclusion has not yielded expected results is because various regulated financial products

are not suitably designed to meet the needs of the vulnerable households. This, therefore, points out the importance of including vulnerable households in the formal financial sector. The following section discusses the importance of financially including vulnerable households in the formal financial sector of South Africa.

2.6 IMPORTANCE OF FINANCIALLY INCLUDING VULNERABLE HOUSEHOLDS

It is important to include vulnerable households in the formal financial sector. According to Abel, Mutandwa, and Le Roux (2018: 1), financial inclusion can help vulnerable households enter the formal financial sector by offering them access to affordable and adequately regulated financial products. If vulnerable households do not have access to regulated financial products to protect them against the adverse idiosyncratic and covariate risks they face, they could be pushed into poverty or further down into poverty levels (Iqbal and Sami, 2017:1, Abel, Mutandwa and Le Roux, 2018:1).

Furthermore, Mba, Nwosu and Orji (2021) argued that an adverse risk could push a vulnerable household further into poverty or below the poverty line; thus, these households must be protected against these risks by ensuring they have access to regulated financial products offered by the formal financial sector. As noted by Koomson, Villano and Hadley (2020: 2), for vulnerable households, improvement in financial inclusion means that these households would be better positioned to access and use risk-mitigating regulated financial products that would cushion them against unforeseen adverse events, thus significantly reducing their probability of being poor.

Additionally, Dermirguc-Kunt and Klapper (2012: 1) and Nsiah et al. (2021: 2) have posited that an increase in financial inclusion helps enhance vulnerable households' entrepreneurial capabilities, as well as providing them with broader resources to support their entrepreneurship activities, leading to improved income levels. Allen et al. (2016: 3) opined that having access to a regulated transactional bank account gives vulnerable households an incentive to save and use other regulated financial products. The study further stated that this creates a ripple effect on how vulnerable households, such as those led by women, young people and elderly people, are protected against adverse risks that would otherwise lead them into poverty or trap them further

into poverty. Additionally, having access to regulated credit products helps vulnerable households by supplementing their already thinly stretched income, thus allowing them access to basic needs (e.g., education, food, and health) that can assist them in not falling into poverty (Churchill and Marisetty, 2020: 1785; Nsiah et al., 2021: 3).

According to Louis and Chartier (2017: 183), access to regulated financial products (e.g., savings and investment products) also help to reduce the risk of falling into poverty by helping vulnerable households to better absorb the risks orconsequences of personal circumstances that affect their income, such as job loss or sickness. Churchill and Marisetty (2020: 1785) found that when vulnerable households have access to regulated insurance products, they also have a better chance to cope with income shocks, thus making them more resilient against the possibility of falling deeper into poverty.

By providing regulated financial products such as credit, savings and investments, financial inclusion allows vulnerable household members access to education, enhancing their chances of escaping poverty and improving their living conditions (Demirguc-Kunt and Klapper, 2012: 1; Koomson, Villano and Hadley, 2020: 615). This section identified and discussed the importance of financially including vulnerable households in the formal financial sector of South Africa. Benefits such as having access to regulated financial products to protect vulnerable households against risks that would affect their income and poverty levels and improvement in entrepreneurship are some of the reasons why this study found it imperative that vulnerable households should be financially included in South Africa. Consequently, the next section discusses the state of financial inclusion in South Africa.

2.7 FINANCIAL INCLUSION IN SOUTH AFRICA

This section will discuss the initiatives and current state of financial inclusion in South Africa. It will then identify and discuss the successes and failures of financial inclusion initiatives in South Africa.

2.7.1 INITIATIVES AND CURRENT STATE OF FINANCIAL INCLUSION IN SOUTH AFRICA

South Africa is a member of both continental and international organisations, such as the United Nations and SADC, which advocate for and encourage their member states to adopt strategies that foster financial inclusion to enable economic freedom and escape poverty (United Nations, 2015; FinMark, 2016). Consequently, the South African government has committed to enhancing financial inclusion and has since recognised and included it in its National Development Plan of 2030, identifying financial inclusion as one of the tools to help reduce poverty (Mhlanga and Denhere, 2020; National Treasury, 2020). The South African National Development Plan is a long-term perspective of where South Africa would like to see its economy by 2030 (National Planning Commission, 2012; Biyase and Zwane, 2017: 116). In this plan, the government aimed to have 90% of the South African adult population banked (thus considered financially included) by 2030.

South Africa's attempt to enhance financial inclusion improved with the signing of the World Bank's $4.6 billion multi-donor fund programme and the Swizz State Secretariat for economic affairs, which financed the South African Financial Sector Development and Reform Programme. This programme aimed to tackle current structural constraints to improve financial inclusion by expanding access to a range of cost-effective financial products and services to all segments of the population (World Bank, 2018). Additionally, the South African government formulated the South African Financial Inclusion Policy and Policy Implementation aimed at improving access to appropriate and affordable regulated financial products, thus ensuring that financial inclusion delivers measurable socioeconomic benefits for all South Africans, particularly vulnerable households (Mhlanga and Denhere, 2020; National Treasury, 2020).

The government of South Africa set-out to partner with financial institutions to enhance financial inclusion (Kostov, Arun and Annim, 2015: 38). However, Louis and Chartier (2017: 170) maintained that these partnerships and initiatives by the government and private financial institutions have proved insufficient in including the vulnerable households in the formal financial sector. This proves partially true for the ultimate failure of the 'Mzansi' account, which was a bank product created through a collaboration between the government and private formal financial sector to include the vulnerable in the formal financial sector (Kostov, Arun and Annim, 2015:

36). While this banking product initially increased the number of households that had access to a regulated transactional bank account, the account proved expensive for formal financial institutions, and resultantly, the effectiveness of this product in promoting financial inclusion of the vulnerable has decreased significantly, as most of the Mzansi accounts are currently inactive (Louis and Chartier, 2017: 170; Chitimira, 2020: 154).

Besides the Mzansi account, other financial initiatives and financial products have been rolled out by the government and the formal financial sector to improve financial inclusion in South Africa. For instance, banks have actively and strategically placed their Automated Teller Machines (ATMs) and branches in rural and remote areas to try and enhance access to regulated financial products by vulnerable households in South Africa (World Bank Group, 2014: 69; FinScope, 2014 as cited in Abrahams, 2017: 637). Additionally, formal financial institutions (e.g., banks) are currently using agents such as grocery stores to offer their products and services to vulnerable households in South Africa (Abrahams, 2017: 638; National Treasury, 2020: 43). They have also increasingly been using digital financial products and services that better meet the needs of vulnerable households in South Africa such as mobile banking and mobile money, thus improving financial inclusion of these households through better access to those products and services (Chitimira, 2020: 154).

2.7.2 SUCCESSES OF FINANCIAL INCLUSION INITIATIVES IN SOUTH AFRICA

In terms of the National Development Plan's objective of ensuring 90% of the population is banked by 2030, the government of South Africa has triumphantly achieved this, as Abrahams (2017: 632) reported that South Africa was only 1% away from achieving this goal. Subsequently, the National Treasury (2020: 1) reported that about 91% of South African adults had been financially included in the formal financial sector of South Africa, subsequently achieving its goal. However, the measure of this success warrants further scrutiny. For instance, this success is anchored on the success of having banked the previously unbanked segment of the adult population (National Planning Commission, 2012). While having access to a regulated transactional bank account is the initial step in financial inclusion, Churchill and Marisetty (2020: 1780) and Mhlanga, Dunga and Moloi (2021:1) argue that financial inclusion cannot be guaranteed by merely having a bank account; instead, financial inclusion measures should include access to other regulated financial

products. This implies that the current reported success of financial inclusion in South Africa is subject to how financial inclusion is measured.

The convergence of technology through telecommunications and financial services to offer products such as mobile money and mobile banking is another triumph of the financial inclusion strategy. It has benefitted formal financial institutions and customers, especially those in rural and disadvantaged locations (Abrahams, 2017: 637-638). For the former, it has helped them increase their penetration into the previously excluded segment of the population without incurring building and other costs related to establishing physical offices in those places (Lee, Lee and Kim, 2007 as cited in Abrahams, 3017: 637). For the latter, it has reduced the distance needed to travel to access formal financial products and services and has reduced the administration of requirements associated with attaining access to regulated financial products and services the traditional way (Chigada and Hirschfelder, 2017: 3).

2.7.3 FAILURES/CHALLENGES OF FINANCIAL INCLUSION INITIATIVES IN SOUTH AFRICA

Besides the echoed failure of the Mzansi account, other financial inclusion initiatives have also faced many challenges and failures. Abrahams (2017: 637) reported that the bank branches and ATMs that had previously been placed in rural and disadvantaged areas to enhance the financial inclusion of vulnerable communities proved unsustainable for the banks and the customers; subsequently, most have been closed down. This implies that the strategies banks use to offer regulated financial products to these vulnerable communities need continuous research that balances the needs of vulnerable households with the sustainability of the banks, which would lead to an improved financial product offering. In this regard, Louis and Chartier (2017) added that financial inclusion initiatives have faced challenges in South Africa because formal financial institutions and the government have viewed financial inclusion as a social responsibility instead of a business opportunity that could help the formal financial institutions create a larger market share and increase their customer base.

Additionally, the National Treasury (2020) reported that even though regulated financial products exist, they are still not accessible to the majority of the excluded and underserved segment of the

population, mainly due to different socioeconomic factors and other regulatory barriers. This has resulted in vulnerable households' continued use of the informal financial sector. According to Mishi et al. (2020: 2), vulnerable households still actively use the informal financial sector to conduct most of their financial activities due to their socioeconomic status and regulatory barriers that make it challenging to access regulated financial products from the formal financial sector.

Furthermore, the National Treasury (2020) noted that even for those vulnerable households that only have access to a regulated bank account, using this account is only reduced to a simple monthly money distribution service; as soon as money is received, it is almost immediately withdrawn. Consequently, this defeats the purpose of a transactional bank account of acting as a pathway to accessing other regulated financial products and services (National Treasury, 2020: 10). If vulnerable households immediately withdraw their money from regulated transactional accounts and resolve to go back to the informal financial sector to conduct their financial activities, their propensity to save, invest, qualify for regulated credit or even access regulated insurance is bound to be reduced (National Treasury, 2020). According to Rootman and Kruger (2016:1), the rate of savings among South Africans is still too low.

The National Treasury (2020) also identified other challenges, such as the lack of use of appropriate asset-insurance products by vulnerable households, with insurance reduced to funeral cover products. Similarly, Stedall and Venter (2016) found very low usage of regulated wealth management products by South African households. All these challenges could explain the National Treasury (2020) finding that financial inclusion levels in South Africa have not adequately translated to improving life for the vulnerable. This mismatch further explains the continued escalation of poverty levels in South Africa, despite the high levels of financial inclusion already noted. This warrants further investigation into the relationship between financial inclusion and poverty, as well as the role played by socioeconomic factors of vulnerable households in South Africa in this relationship.

2.8 DESCRIPTION OF POVERTY

Janzen, Carter and Ikegami (2021) described poverty as a general state of deprivation of monetary and non-monetary basic human needs. This description implies that poverty is multifaceted, as it not only means the lack of money but also includes the lack of other non-monetary needs. Magwedere, Chisasa and Marozwa (2021:1) added that poverty is the inability of households to afford basic human needs such as education, financial products and services, health, water, and sanitation. These definitions imply that poverty affects the well-being and living standards of households. Ahmad, Mansor and Paim (2016) support this view, stating that poverty affects household well-being due to a lack of resources and capabilities to meet basic human needs.

In South Africa, Akinwale and Ogundiran (2014: 158) initially described poverty as the lack of resources that inhibits households from managing and surviving the negative effects of shock. This broad definition highlights the effect of resource deprivation on the ability to deal with unexpected shocks in South African vulnerable households. Makhalima (2020) provided an interesting description of poverty in South Africa, stating that as a personified phenomenon, those who are poor in South Africa are young people, females and those living in rural areas. Identifying the segments of those who usually fall under the poverty definition is crucial to policy developers as target strategies can be formulated. Beyond the lack of resources, Akinwale and Ogundarin (2014: 158) also described poverty as a state of material and social deprivation that makes people live below the socially acceptable living standard, making them experience social deprivation in society. This definition brings in the concept of poverty as a measurable phenomenon affecting households' living standards and status within society.

It is important to study poverty because poverty poses adverse effects on the well-being of households and has a ripple effect on other household factors. According to Akinwale and Ogundiran (2020: 158), poverty affects people's health, inhibits their access to literacy and denies them access to basic infrastructure such as road transportation. In this study, poverty refers to the involuntary lack of monetary and other resources that can afford households basic human needs and a decent living standard above a chosen poverty measure.

2.9 MEASURES OF POVERTY

Different measures can be used to understand and measure poverty. According to Fransman and Yu (2019), poverty can either be measured objectively or subjectively. Objective poverty measures may include using poverty lines determined either nationally or internationally or poverty indices set by researchers, governments, and statistical institutions (Churchill and Marisetty, 2020). With poverty lines, households' consumption is linked to their well-being, and their income is compared to a pre-determined minimum monetary amount needed to afford basic human needs, set by the government or an international organisation to determine whether a household is poor or not (Statistics South Africa, 2020). Biyase and Zwane (2017) used a poverty line of R450 to measure poverty in South Africa. Churchill and Marisetty (2020: 1779) also used a poverty line as one of their measures of poverty in India.

With poverty indices, different poverty indicators that include the ability to afford health, education, a decent living standard, and employment are combined to form a multi-dimensional index/cut-off point which each household's index score will be compared to determine whether they are poor or not (Oxford Poverty and Human Development Initiative, 2016). Fransman and Yu (2019) used a multi-dimensional poverty index as one of the measures of poverty in South Africa. They stated that the advantage of using this measure is that it can be broken down into sub-groups to see which indicators contribute the most towards poverty. Churchill and Marisetty (2020: 1779) also used a multi-dimensional poverty index to measure poverty in India. However, the use of a multi-dimensional poverty index in South Africa is said to be low, partly because it requires a variety of data (Fransman and Yu, 2019).

Subjective poverty measures include a household's self-assessment of whether they feel poor or not compared to a reference group (Janzen et al., 2014). Posel and Rogan (2014: 57) argued that while this approach is often met with scepticism, it has advantages over objective measures because it does not use pre-determined expert-derived poverty thresholds that may not capture a broader range of long-term welfare components. Ravillion (2012) adopted and advocated for using a subjective measure of poverty.

While all the individual measures of poverty will yield an indication of which specific segment of the population is poor (as per the type of indicator used to measure poverty), the main purpose of studying poverty extensively is to form strategies that may help alleviate poverty for all segments of the population that may be deemed poor when using different measures of poverty. As such, this study measured poverty using a multi-dimensional index, including three poverty indicators: education, health and standard of living. It is important to find a measure of poverty that combines different poverty indicators. The formulation of this index will be further explained in Chapter 4.

2.10 POVERTY IN SOUTH AFRICA

Although the end of the Apartheid era left South Africa with evident imbalances such as societal inequalities, high unemployment rates and high levels of poverty (National Treasury, 2020: 1), efforts and strategies have been implemented to correct those to combat poverty among vulnerable households. Among these has been the wide-spread distribution of social assistance in the form of social grants provided to guardians of children under eighteen, the disabled and pensioners (Francis and Webster, 2019). Social grant distribution aims to help improve the living standards and well-being of vulnerable households in South Africa (Duriex, 2012).

In a positive light, Gutura and Tanga (2014) found that these social grants were used to improve the well-being of households that received them and were used to pay for household necessities (e.g., electricity and education). However, while social grants improve the purchasing power of households that receive them, enabling them to afford some of the needs they would not be able to afford without the grants, these grants have proven insufficient to pull vulnerable households out of poverty. Nishimwe-Niyimbanira and Ngwenya (2021: 241) support this view, stating that more than half (55%) of households' recipients of social grants fell below the lower-bound poverty line of South Africa, meaning even with the social grants being received, only 45% of households were above the lower-bound poverty line, thus considered not poor. Consequently, despite the assistance of social grants in supplementing the income of vulnerable households, the grants are still insufficient to alleviate poverty.

Regrettably, half of the South African population continues to live in poverty (Francis and Webster, 2019). The World Bank Group (2020: 1) reported that approximately 55.5% of South

Africa's population (about 30.3 million people) lives in poverty at the national upper-bound poverty line. It was estimated that poverty levels would increase by 9% in 2020 in South Africa. This means that more than 30 million South Africans cannot afford basic food and essentials such as water and electricity needed to survive on a daily basis. Poverty levels seemingly continue to become a persistent economic challenge in South Africa (Francis and Webster, 2019: 788, Mishi et al., 2020: 1). These, therefore, warrant a further study of poverty, specifically the understanding of how financial inclusion relates to poverty, and how socioeconomic factors moderate the relationship between financial inclusion and poverty among vulnerable South African households.

2.11 DESCRIPTION OF HOUSEHOLDS

This study focused on vulnerable households as a sample instead of individuals. Therefore, it is important to first describe a household and identify different types of households prevalent in South Africa.

According to the Statistics Act No. 6 of 1999, a household refers to a group of individuals living together at least four nights a week, eating together and sharing resources, or an individual who lives by themselves. FinScope (2016) adopted this definition in their study in South Africa. The questionnaire and data used in FinScope (2016) were used in this study. As a result, this study also adopted a similar definition: a household refers to a group of people who stay together for at least four nights and share a pot of food. However, a household and a family may not be the same thing. The 2018 General Household Survey by Statistics South Africa (2018) supports this view, stating that a household is a group of people who live together for at least four nights and share resources, while a family refers to people who are related by blood, marriage or adoption but may not necessarily be living together. It is important to note that a household and a family can refer to the same thing; this may happen when all the members staying in a housing unit together and sharing a meal for at least four nights are related by blood, marriage or adoption (Maila and Mabasa, 2021: 2). According to the revised White Paper on Families in South Africa by the Department of Social Development (2021: 11), majority of households in South Africa are made up of families.

Households have many functions, such as providing their members with physical, social and economic resources (Statistics South Africa, 2018: 4). Akinyemi, Chisumpa and Odimegwu (2016: 2) also concurred with these views, stating that a household provides the physical and social environment in which children are born, natured and brought up. Physical resources refer to tangible basic human needs such as food, clothes and shelter (Pillay, 2012: 4). This is supported by the Department of Social Development of South Africa (2021), stating that households perform the functions of providing physical resources such as a place of dwelling for its individual members.

Households also provide social resources, and these refer to intangible resources that can improve the livelihood of an individual or household, such as emotional support, knowledge, education, religion, affection/attention and social values (Annim, Awusabo-Asare and Amo-Adjei, 2015: 570; Akinyemi, Chisumpa and Odimegwu, 2016: 3). This is supported by the General Household Survey published by Statistics South Africa (2018: 4), which stated that households are the most important social institutions and most important reference groups for individuals. Households are also important for providing and sharing financial, economic and other resources. Financial or economic resources are monetary resources that can help a household afford and access its household needs, including money, employment, and valuable assets that can be sold for money. There are also different types of households. The next section will discuss the most prevalent types of households in South Africa.

2.11.1 TYPES OF HOUSEHOLDS IN SOUTH AFRICA

Households can be categorised by the person who is the head of the household (Rogan, 2016: 175; Madhavan,et al., 2017: 1893). A *head of household* refers to a person with authority to source and distribute resources within the household (Rogan, 2016: 176; Makhalima, 2020: 408). The person who heads the household can be nominated, although in most cases, they take the headship without a nomination (Sekhampu, 2012: 410). Households classified by headship include inter-alia child-headed households, youth-headed households, female-headed households, and male-headed households. Households may also be classified through their *structure*, which refers to the individuals that make up a household (Akinyemi, Chisumpa and Odimegwu, 2016). In terms of

household structure, the types of households include a joint/nuclear household, an extended household, a same-sex household and single-parent households. Each of these households is explained and discussed below.

2.11.1.1 Households classified by headship

Child-headed households refer to a household in which a person who is younger than eighteen years (seventeen or younger) is responsible for the upkeep of the household and provision of resources for themselves or for a group of people who live together for at least four nights a week (Mturi 2012: 508). Mokgotlane and Chauke (2010: 25) described child-headed households as households within which one of the children has assumed the principal responsibility of the other household members for various reasons. The Department of Social Development of South Africa (2021) also described a child-headed household as a household without an adult caregiver, headed by the eldest or most responsible child who assumes parental responsibility for various reasons. Some of the reasons behind the existence of child-headed households include the death of parents due to diseases such as HIV/and Aids (Meintjies et al., 2010: 40) and migration related to job search, where parents leave their homes and children to look for jobs elsewhere (Mogotlane et al., 2010: 25).

It is also worth noting that child-headed households are not synonymous with child-only households. Child-headed households refer to households led by a child under the age of eighteen. However, that household might have elderly members who are sick or too old to assume the responsibility of the head of the household. In contrast, the child-only household refers to households made up of children under the age of eighteen only (Mturi, 2012:507). Thus, there is no adult to assume responsibility as the head of the household.

Child-headed households face many challenges. According to Pillay (2011: 4), children living in child-headed households, especially the child heading the family, are likely to struggle to meet the basic needs of the household, such as food, clothing and shelter. The absence of parents as heads of households for various reasons is also likely to adversely affect the children's morals, values

and beliefs. The education of the children who head households might be affected by the constant absenteeism from school and even possible drop-out of the learners who head their households, as they need time to run the households and take care of the other household members (Pillay, 2011:4). In this study, a child-headed household is a household whose head is a child under the age of eighteen, who is responsible for providing and allocating resources and basic needs for the rest of the household members. It is worth noting that the questionnaire used to collect the data in this study limited its respondents to people sixteen years and older. Therefore, child-headed households refer specifically to those headed by young people who are either sixteen or seventeen years old.

Youth-headed households are another type of household that are becoming prevalent in Africa due to diseases such as HIV/Aids that are killing primary caregivers in households (Maila and Mabasa, 2021: 2). Generally, youth-headed households are households whose heads are young people who are eighteen years and older, who are responsible for taking care of and providing for the other members of the family (Ntuli, Sebola and Madiba, 2020: 2). However, Statistics South Africa (2013: 37) refers to youth-headed households as households headed by young people/youth, between the ages of 14 and 35. The report further categorised the youth into two groups: those between the ages of 14 and 24, who are considered the younger group as they have just left their teen years, and those between 25 and 35, who are considered the older group. A youth-headed household may include heads of households who are younger than 18, with the age limit of those who are considered the youth mainly dependent on the objectives and scope of each study (Maila and Mabasa, 2021: 2). Therefore, in this study youth-headed households were considered as those whose heads are young people between 18 and 35.

Youth-headed households face challenges such as psychological and emotional trauma, as well as the social distress associated with the loss of a parent (Ntuli, Sebola and Madiba, 2020: 2). According to the National Youth Policy of South Africa, young people are a powerful resource for the country, provided they are supported and enabled to become active members of society (Department of Women, Youth and People with Disabilities South Africa, 2020: 2). As such, youth

heading households should be supported in their endeavours to succeed in life (Maila and Mabasa, 2021: 3).

Another type of household, according to headship, is *female-headed households*. According to Sekhampu (2012: 411), female-headed households are households in which the main decision maker and the economic provider is a woman, regardless of her marital status. Female-headed households can be understood from diverse groups which essentially fall into two categories: de jure and de facto, where de jure refers to a woman who is the head of a household and has no husband, while de facto refers to when the female who is the head of the household has a husband, but the husband is away for over a year, making the woman the head by default (Sekhampu, 2012: 411). In this study, female-headed households refer to households where the primary provider and resource allocator is a female, regardless of marital status. Marital statuses fall within diverse groups, including unmarried women, divorced women, widowed women, married women with a nonresident husband, and separated or abandoned women (Milazzo and Van de Walle (2017: 1123). This study focused on females who are either married, single and not living with a partner, single and living with a partner, widow or widower, separated, and divorced, as long as they are heads of their households.

Various reasons lead to the growth of female-headed households, including divorce/marital dissolution, long-term migration of husbands to national or international destinations for jobs and higher earnings, and women engaging in non-household roles such as education and employment (Aghajanian and Thompson 2013: 117). Regardless of the reasons or causes behind the emergence and growth of female-headed households, it is important to note that female-headed households face many challenges or disadvantages. Flato, Muttarak and Pelser (2017) argued that households headed by females are at a disadvantage of falling into poverty because women have lower average earnings, fewer assets and less access to productive resources such as land and financial capital. Additionally, the study argued that these households face a greater disadvantage because if the females do not have another adult in the household, they face a ‘double burden’ where they have to fulfil both domestic duties and the breadwinner role.

Similar to female-headed households, *male-headed households* are also a type of household categorised according to headship. A male-headed household refers to a household headed by a male. In South Africa, Makiwane et al. (2017) conducted a study to determine the family structures in South Africa using the province of Mpumalanga. This study found that within the selected population of the study, there were more male-headed households than female-headed households.

This section discussed households in terms of headship and described households such as child-, youth-, female- and male-headed households. It identified the reasons behind the existence of these households and highlighted the challenges faced by them as well. Of these households, households headed by children, youth and females are considered vulnerable due to the socioeconomic factors or status of their heads of households (e.g., their age, gender, educational level and employment level), which may impact their ability to access regulated financial products and also impact their poverty status. The concept of vulnerable households is discussed further in Subsection 2.11.1.3.

2.11.1.2 Households classified by family structure

As previously indicated, households can also be classified according to their structure. These classifications include inter-alia nuclear households, extended households and same-sex households. This section describes these different households, provides possible reasons why they exist and highlights some of the challenges they face.

A *nuclear household* is a household comprising a married couple (man and woman) who are linked together by kinship, reside in the same house and share resources under the headship of a patriarch (Debnath, 2015: 488). For Makiwane et al. (2017: 51), a nuclear or joint household ideally consists of a married, heterosexual couple and all their dependent children. According to the revised White Paper on Families in South Africa by the Department of Social Development (2021: 12), 39.9% of households in South Africa are currently nuclear households. A nuclear household may be led by a male (father) or female (mother), and one of the reasons it exists is because it is the most preferred and understood structure approved by society (Lubbe, 2008: 326). Another reason for the existence of a nuclear household is that because these types of households usually have fewer

members, resources are more focused towards the well-being of children, and the parents are able to create their own values, and family practices separate from their parents (Annim, Amo-Adjei and Awusabo-Asare, 2015: 567). Some of the challenges faced by nuclear families include the following: a lack of support from extended families in raising children, parents having to work extra hard to provide for the household as there are no extended family members to contribute to the resources of the household, and a lack of emotional support for both parents and children (Annim, Amo-Adjei and Awusabo-Asare, 2015: 567).

In contrast, an *extended household* refers to a household where other adults besides the parents and their partners, such as grandparents, other kin such as aunts and uncles, and housemates are present (Mollborn, Fomby and Dennis, 2012: 1153). An extended household would often be expected to be bigger than a nuclear household as it would include not only the parents and their children but also grandparents and other relatives (Ciptanurani and Chen, 2021: 2631). According to the revised White Paper on Families in South Africa by the Department of Social Development of South Africa (2021: 12), many households encompass extended family members, with 34.2% of households in South Africa currently classified as extended households in South Africa.

Extended families exist due to various reasons. Griggs et al. (2010), as cited by Annim, Amo-Adjei and Awusabo-Asare (2015: 567), stated that family members such as grandparents, aunts and uncles might join a nuclear family to make it an extended one to share resources such as food, shelter and to help take care of the children in the family. A report by Statistics South Africa (2021) on the role of families and parents on the well-being of children stated that in South Africa, the more children there are in a household, the greater the chance that they are being looked after by extended family members, especially when their parents are working and have to go to their workplaces daily. While the existence of extended families sometimes proves beneficial, extended families also face some challenges. For example, extended families are usually bigger in number than nuclear households. Subsequently, the availability of resources of basic needs such as food, shelter and education are shared among more people and thus limited, especially for vulnerable households, which may negatively impact children's welfare (Annim, Amo-Adjei and Awusabo-Asare, 2015: 567).

Same-sex households refer to households in which couples within a household are of the same sex, either both male or both female. Same-sex households are increasingly visible within communities and are an integral part of the social structure (Bos, Kuyper and Gartrell, 2018). Scott (2013: 535) stated that same-sex marriages had been legally recognised in South Africa; thus, same-sex households are increasingly seen within the communities of South Africa (The Department of Social Development, 2021: 6). Some of the reasons why same-sex households exist in South Africa are because there has been an increase and acceptance of reproductive technology that allows these households to have children and complete their families (Breshears and Lubbe-De Beer, 2016: 87). Additionally, the change in legislation regarding donor insemination and legalisation of same-sex marriages has allowed more people to openly live in same-sex households, resulting in an increase in numbers of these households in South Africa (Lubbe, 2008: 235). Some challenges faced by same-sex households include negative cultural and religious attitudes from society towards these households and homophobic sentiments such as teasing of children that come from these households (Breshears and Lubbe-De Beer, 2016: 90-93).

This section highlighted households in terms of structure, such as nuclear households, extended households and same-sex households. It discussed the reasons behind the existence of these households, as well as their challenges. The next section discusses those households that are considered vulnerable due to the socioeconomic status of the heads of their households.

2.11.2 DESCRIPTION OF VULNERABLE HOUSEHOLDS

Ahmad, Mansor and Pain (2016: 197) described vulnerable households as households at high risk of being poor. According to Cheteni, Khamfula and Mah (2019: 4801), household vulnerability can be due to changes in income, changes in household portfolio activities, poverty traps and changes in the variability of existing income. Vulnerable households face idiosyncratic and covariate risks that put them at a high risk of being poor (Cheteni, Khamfula and Mah, 2019: 4801). Idiosyncratic risks refer to household-specific risks such as human illness, death, injury, crop pests and disease, and job and asset loss (Baiyegunhu and Fraser, 2011). Covariate risks include community shocks affecting households and natural disasters such as earthquakes and epidemics (Cheteni, Khamfula and Mah, 2019).

In South Africa, vulnerable households are defined as segments of the population that usually endure a high risk of poverty and social exclusion than the general population; thus, the need for the government and policymakers to pay attention to them (Statistics South Africa, 2020). Additionally, vulnerable households refer to the segment of the population that is at a disadvantage in participating in the formal financial sector because they have little to no access to the regulated financial products offered by the formal financial sector (Louis and Chartier, 2017: 170; Kitzman, 2020). According to Statistics South Africa (2020), vulnerable groups in South Africa may include children seventeen years old and younger, the youth, women, older persons sixty years and older, as well as persons living with disabilities.

In this study, vulnerable households refer to those more prone to adverse idiosyncratic and covariate risks that make them more likely to fall into poverty. They are identified using the household socioeconomic factors of the people heading them. As such, vulnerable households in this study included households whose head of the household is either a female, Black, speaks Nguni as their first or home language, a child (below 18 years of age), youth (between 18 and 35), or the elderly (above 60 years), have attained low levels of education, unemployed, not married, households with a large household size (6+household members) and households that do not own the land/property on which they live. These households are considered vulnerable due to the socioeconomic status of their heads of household, and they are more prone to falling into poverty or being negatively affected by idiosyncratic and covariate risks.

It should be noted that poor and vulnerable households are not the same. However, vulnerable households are said to be likely pushed into being poor by the unanticipated risks that can affect their income (Pritchett, Suryahandi and Sumarto 2000). Vulnerable households are households that are facing idiosyncratic and covariate risks that increase their chances of falling into poverty (Cheteni, Khamfula and Mah, 2019: 4801), while poor households are households that are currently in a state of deprivation and involuntary lack of monetary and other resources that can afford households basic human needs and a decent living standard that is above a chosen poverty measure (Akinwale and Ogundiran, 2014: 158). This, therefore, means that due to their socioeconomic factors/circumstances that may render them vulnerable, households may be pushed into poverty by the level of risks that they face.

This study used socioeconomic factors of the heads of households to classify them as vulnerable because heads of households are responsible for sourcing and distributing resources within their households (Makhalima, 2020: 408). Thus, their socioeconomic status affects the household and their ability to care for, provide for and ensure that the household is not poor. The reasons why these listed households are considered vulnerable by this study are included in the measurements of household vulnerability discussion below.

2.11.3 SOCIOECONOMIC FACTORS AS MEASURES OF VULNERABLE HOUSEHOLDS

Some studies presented household vulnerability using socioeconomic factors that determine whether those households are vulnerable or not (Baiyeguni and Fraser, 2011; Ahmad, Mansor and Pain, 2016; Koomson, Villano and Hadley, 2020). According to Baiyegunhi and Fraser (2011: 89-91), these socioeconomic factors of households are used to measure household vulnerability by helping to determine households' probability/expected poverty using prior expectations informed by past literature. Wentzel, Diatha and Yadavalli (2016: 2) stated that socioeconomic factors allow for easier identification of vulnerable households within a population. These socioeconomic factors include gender, age, race, employment status, marital status, education, home/first language, household size and land/property ownership.

Gender is one of the socioeconomic factors that measure the vulnerability of the household, with female-headed households considered vulnerable. Baiyegunhu and Fraser (2011: 94) found that female-headed households in the Eastern Cape, South Africa, were more vulnerable than male-headed households. Makhalima (2020: 406) also deemed female-headed households as vulnerable. According to Koomson, Villano and Hadley (2020: 615), the effect of having access to regulated financial products on reducing household vulnerability is more prominent in female-headed households than in male-headed households. Thus, female-headed households are more vulnerable than male-headed households. Without access to regulated financial products, female-headed households will remain more vulnerable than male-headed households as they lack the necessary resources to meet their daily and future needs (Koomson, Villano and Hadley, 2020: 615). Therefore, female-headed households were expected to be vulnerable in this study compared to male-headed households.

Age is another socioeconomic factor that measures the vulnerability of the household. Youth-headed households in South Africa are considered vulnerable because the youth face the highest rate of unemployment in South Africa, with 46.3% of the youth in South Africa being reported as unemployed (Statistics South Africa, 2021). Makhalima (2020: 406) added that households headed by youth are vulnerable too. Children heading households are susceptible to struggling to have access to education, food and other basic needs (World Bank, 2016: 13). Mturi (2012: 510) added that child-headed households are a result of parental deaths, thus leaving children to take care of themselves, making them economically and socially vulnerable. Elderly people are also considered vulnerable (Ahmad, Mansor and Paim, 2016: 197). They are often not part of the workforce and often not earning a monthly income to finance their basic needs, such as health and food. As such, households headed by elderly people are considered vulnerable. It is, therefore, expected that child-headed households, youth-headed households and households headed by elderly people should be vulnerable in this study.

Race is another socioeconomic factor used to measure household vulnerability, wherein being Black is associated with vulnerability. Bhorat et al. (2016) stated that being African (Black) renders one vulnerable. A household headed by an African/Black person is rendered vulnerable to poverty. Therefore, in this study, households headed by a Black person were considered vulnerable. Similarly, *employment status* is another socioeconomic factor that measures the vulnerability of the household. Sekhampu (2013: 150) found that the employment status of the head of a household significantly explains the probability of that household being poor, which this study has termed vulnerability. Wentzel, Diatha and Yadavalli (2016: 9-10) found that employment status was associated with being unbanked (financially excluded) at the bottom of the pyramid. Ahmad, Mansor and Paim (2016: 197) also stated that households headed by income-poor people are vulnerable. This means that households headed by people who are either unemployed or employed at low-pay jobs are vulnerable. Therefore, this study considered them as such.

Additionally, *marital status* is a factor that measures household vulnerability. Baiyegunhi and Fraser (2011: 94) found that households headed by single/unmarried people were more vulnerable.

Thus, by virtue of being the sole breadwinner of the household, single people often carry more burden to provide for the household than those who are married. This view is supported by Ahmad, Masor and Paim (2016: 197), who explained that households headed by people whose marital status was single were vulnerable. Therefore, this study proposed that households headed by single people are vulnerable in South Africa.

The *educational level* of the head of a household is another measure of household vulnerability**.** Wentzel, Diatha and Yadavalli (2016: 9-10) found that the highest level of education attained by the head of the household was associated with being unbanked (financially excluded) at the bottom of the pyramid. Baiyegunhi and Fraser (2011: 94) found that households headed by people with no formal education were the most vulnerable and that household vulnerability decreased with an increase in the number of schooling years. These findings supported the notion that households headed by people with no formal education are vulnerable in this study. Furthermore, the *home/first language* of the head of household is also a measure than can be used to measure household vulnerability. Wentzel, Diatha and Yadavalli (2016: 9-10) maintained that home language was associated with being unbanked (financially excluded), thus making households vulnerable. Atkinson and Messy (2013) also postulated that language could render a household vulnerable, wherein the head of the household does not sufficiently understand the language with which regulated financial products are offered. Therefore, this study proposed that households in South Africa headed by a person with Nguni languages as their first/home language are vulnerable.

Household size is another measure of household vulnerability, wherein larger households are often found to be vulnerable. Baiyegunhi and Fraser (2011: 94) explained that households with many dependents exert pressure on the household resources provided by the head of the household; as such, these households are more likely to be vulnerable. Additionally, Wentzel, Diatha and Yadavalli (2016: 9-10) found that the number of dependents was associated with vulnerable households being unbanked (financially excluded). According to Kaluwa and Kunyenje (2019: 59), increasing the household size beyond the initial size puts a strain on the household income, thus making it more vulnerable. This supports the study's expectation that households with large numbers of household members are vulnerable. Lastly, *land/ property ownership* is a measure that

can be used to measure household vulnerability as land ownership signals dignity and provides households with an asset that they can use to source funds, such as regulated credit that will protect them against the risks faced by vulnerable households (Meinzen-Dick, 2009: 1).

This subsection explored socioeconomic factors as measures of household vulnerability in South Africa. It discussed socioeconomic factors such as gender, age, race, employment status, marital status, education, home/first language, household size and land/property ownership, stating how they are used to identify vulnerable households. It also highlighted why these households are considered vulnerable.

2.12 SUMMARY OF THE CHAPTER

This chapter aimed to investigate the concepts of financial inclusion, poverty and vulnerable households. This was achieved by first defining financial inclusion. The findings of this chapter revealed that the formal financial sector of South Africa refers to the banking and formal nonbanking institutions that provide regulated financial products to all South Africans. The formal financial sector was identified as responsible for ensuring the financial inclusion of vulnerable households by enabling affordable access to regulated financial products for those vulnerable households. The findings further revealed that this sector is regulated by acts, codes and regulators that ensure the formal financial sector is run efficiently and is fair in offering affordable regulated financial products (e.g., transactional bank accounts, credit products, savings and investment products and insurance products) to all segments of the population, especially to vulnerable households.

Furthermore, this chapter described financial inclusion as a situation whereby households that want easy access to financial products can afford and use regulated financial products offered by the formal financial sector of South Africa, regardless of their socioeconomic status. This chapter also identified different measures of financial inclusion from past literature. It gave reasons this study used the four regulated financial products as proxies for financial inclusion: transactional bank account, credit, savings and investments, and insurance products. Additionally, it identified some

financial inclusion barriers and discussed why it is important to financially include vulnerable households in the formal financial sector of South Africa.

It further discussed the general state of financial inclusion in South Africa, revealing that while South Africa has made strides in including most of its households in the formal financial sector, vulnerable households mainly use transactional bank accounts only, and the use of these accounts is minimal. A review of past South African studies revealed that age, gender, educational level, employment status, marital status and household characteristics are some of the socioeconomic factors that impact financial inclusion in South Africa.

Furthermore, a review of poverty-related studies provided various descriptions of poverty which led to this study describing poverty as the involuntary lack of monetary and other resources that can afford households basic human needs and a decent living standard above the chosen poverty measure. Different measures of poverty previously used were discussed. The study resorted to measuring poverty using a multi-dimensional poverty index that this study will construct. A review of current poverty statistics painted a dull picture of poverty in South Africa, as poverty levels seemingly continue to rise and are forecasted to continue doing so by researchers. This gloomy picture draws questions about the purported relationship between financial inclusion and poverty, wherein past studies alluded to a negative relationship between financial inclusion and poverty. However, although financial inclusion levels seem to be rising in South Africa, poverty levels are not decreasing.

This necessitates a study that further explores this relationship and brings in a new dimension of the moderating effect of socioeconomic factors to better understand the relationship between these two phenomena. According to past literature, some socioeconomic factors affecting poverty include age, income, gender and race. The impact of these factors on poverty was discussed. Past studies also revealed that some households might not be currently poor, but they are vulnerable to poverty and should also be included in poverty alleviation strategies.

Consequently, the concept of vulnerable households was introduced by first describing what is meant by a household. The different types of households found within South African communities

were also discussed, followed by the definition of vulnerable households. Vulnerable households were described in this study as those households that are more prone to adverse idiosyncratic and covariate risks that make them more likely to fall into poverty. They were identified using the household socioeconomic factors of the people heading them. As such, vulnerable households in this study were found to include households whose head of the household is either a female, a child (below 18 years of age), youth (between 18 and 35), or the elderly (above 60 years old), Black, unemployed, single, uneducated, do not speak English or Afrikaans as the first/home language, households with a large household size as well as households that do not own the land/property on which they live. This critical overview of financial inclusion, poverty and vulnerable households is elaborated on in the next chapter. Chapter 3 provides a theoretical framework for the study and uses previous studies to establish relationships between financial inclusion, poverty and vulnerable households in South Africa.

CHAPTER 3

THEORETICAL FRAMEWORK

3.1 INTRODUCTION

The previous chapter provided a critical literature review on poverty, financial inclusion, and vulnerable households to address the first secondary objective of investigating the concepts of financial inclusion, poverty, and vulnerable households in South Africa. In order to meet the purpose of the study, another secondary objective was defined, namely, to propose a theoretical framework for the relationships between financial inclusion, poverty and vulnerable households in South Africa. Chapter 3 aims to meet this secondary objective by providing the theoretical framework of the study and defining, discussing and developing the proposed relationships between the three variables of the study. This chapter is important because it provides the theoretical basis as the foundation of the study and lays a foundation for the hypotheses statements that will be stated in Chapter 4 and tested in Chapter 5.

To achieve this, it first discusses different financial inclusion-related theories and how and to what extent they will be used to build a theoretical model for the study. It justifies the adopted theoretical framework of the study, briefly gives reasons as to why one theory is fully chosen and discusses the limitations of the other theories. This is followed by a literature review of past studies that will be used to discuss the proposed relationships between variables to develop the research hypotheses based on the research aim of the study and the secondary research objective of this chapter. The chapter will conclude with a summary of the discussions included in this chapter.

3.2 THEORETICAL FRAMEWORKS

Theoretical frameworks refer to the anchoring structures that are induced, supported by, and developed from theories through a critical literature review, which informs and supports the basis of the research arguments and research aim (Saunders, Lewis and Thornhill, 2016: 70). According to Leedy and Ormrod (2015: 192), theoretical frameworks help to derive research hypotheses that will be tested. Additionally, studies need to have theoretical frameworks because they help to interpret the findings or results of a research study and determine what has been achieved and what has not been achieved by the study (Adams, Khan and Raeside, 2014: 41). It is therefore important for this study to have a theoretical framework so as to anchor and substantiate the proposed relationships and hypothesis of this study.

Numerous researchers have studied the financial inclusion and poverty nexus (Demirguc-Kunt and Klapper, 2012; Louis and Chartier, 2017; Mindra and Moya, 2017; Mhlanga and Denhere, 2020). However, it still lacks concrete frameworks built from theories that substantiate and collate its contentions (Ozili, 2020). This has been the case in South Africa, where financial inclusion and poverty-related studies such as those of Wentzel, Diatha and Yadavalli (2016), Louis and Chartier (2017) and Chitimira and Ncube (2020) explored factors that affected the financial inclusion of the poor without necessarily adopting any clear theoretical framework. As stated by Adams, Khan and Raeside (2014: 37), not having a clear theoretical framework in a study negatively affects the need, strength and reliability of the research and its findings. Thus, it is important to have a South African study that explores the financial inclusion and poverty nexus supported by credible theories and a theoretical framework.

Nonetheless, some financial inclusion-related theories have been used in previous studies to provide a theoretical framework for financial inclusion and poverty-related studies. These include the financial development theory, the credit rationing theory, the public goods theory, and the vulnerable group theory of financial inclusion (Koomson, Villano and Hadley, 2020; Matsebula and Yu, 2020; Ullah, DingDing and Zeeshan, 2020; Nsiah et al., 2021). The next section discusses each of these theories and how they were used to build the theoretical framework of this study.

These theories have been chosen based on the works of Matsebula and Yu (2020), Koomson, Villano and Hadley (2020), Ullah, DingDing and Zeeshan (2020) and Nsiah et al. (2021).

3.2.1 FINANCIAL INCLUSION-RELATED THEORIES

This section discusses the aforementioned theories that are related to financial inclusion.

3.2.1.1 Financial development theory

The origins of the financial development theory can be traced back to Joseph Schumpeter's 1911 seminal work. His work viewed the facilitation and improvement of regulated financial products offered by financial institutions, such as transactions, savings and insurance (risk management), as financial development (Durusu-Ciftci, Ispir and Yetkiner, 2017: 291). Financial development refers to the improvement of the formal financial sector by making the regulated financial products and services that it offers more efficient and effective (Ibrahim and Alagidede, 2018: 95). The *financial development theory* is based on the premise that the improvement of the quality of regulated financial products and services results in the development of the formal financial sector (financial development) by making it more effective and efficient in allocating monetary funds to the most profitable and innovative borrowers (Uddin, Sjo and Shahbaz, 2013: 701), thus leading to positive economic results such as poverty reduction.

The financial development theory is a theory that contends that improvements in the formal financial sector through the provision of sound and efficient regulated financial products can result in economic growth and poverty reduction (Adeola and Evans, 2017: 4). According to this theory, there are direct and indirect channels through which financial development can help alleviate poverty (Nsiah et al. 2021: 3). Direct channels refer to the immediate and intended positive effects of financial development on economic growth at the household or individual level, while indirect channels refer to the positive ripple effects that vulnerable households eventually benefit from when financial development improves economic growth of a country as a whole (Koomson, Villano and Hadley, 2020: 630).

In terms of the direct channel, financial development helps reduce poverty by broadening access to credit, insurance and other financial products, enabling them to meet their daily transactional needs of consumption and investment and overall improve their economic well-being (Koomson, Villano and Hadley 2020: 630). In terms of the indirect channel, economic growth resulting from financial development tends to benefit vulnerable households through employment creation and increased government spending on education and social protection interventions, which eventually help alleviate poverty (Nsiah et al. (2021: 3).

Subsequently, past studies provided theoretical arguments supporting and cementing the financial development theory, which include McKinnon (1973) and King and Levine (1993). However, according to Durusu-Ciftci, Ispir and Yetkiner (2017: 291), the first seminal work to provide empirical evidence of the financial development theory and the relationship between financial development and economic growth was by Goldsmith in 1969. In this seminal work that used data from 35 countries, financial development was measured as the monetary value of the formal financial institutions' assets under the assumption that the size of the formal financial sector (the value of its assets) is positively correlated with the provision and quality of financial service, while economic growth was measured as the gross national product (GNP) (Levine, 1997: 703). Furthermore, a positive correlation between financial development and economic growth was found (Durusu-Ciftci, Ispir and Yetkiner, 2017: 291). Thus, the growth in value of the formal financial sector's assets due to the improvement in the quality of financial products and services it offers relates to positive improvements in the economy (e.g., improved income earned by households in an economy), which can help alleviate poverty. Consequently, some recent studies have used the financial development theory to provide a framework that explains the potential link between financial inclusion and poverty (Koomson, Villano and Hadley,2020; Nsiah et al., 2021). Similarly, this theory was partially used in this study to build the theoretical framework by viewing financial inclusion through improved access to regulated financial products as a form of financial development that may result in economic development by alleviating poverty (Nsiah et al., 2017: 3).

Notwithstanding the role of the seminal work by Goldsmith (1969) in cementing the financial development theory, it is worth noting that one of the main limitations identified in Goldsmith's (1969) measure of financial development was that using the size/value of the assets owned by the formal financial institutions may not accurately measure the functions and role of the formal financial sector in improving the economy (Levine, 1997: 704). In response to this, later studies such as those of Levine and King (1993), as cited in (Levine, 1997: 704), then added other measures of financial development besides the size of assets. Most of these measures were centred around credit provided by formal financial institutions such as banks. The use of credit to represent the formal financial sector and improvements in it had grown substantially, partly due to the assumption that formal financial institutions that offer credit engage in more customer research, provide insurance to mitigate risk, facilitate transactions and offer savings facilities; thus they are more prone to financial development (Levine, 1997: 705). The provision and improvement of these other regulated financial products and services can be seen as financial development through improving access to regulated financial products, simply referred to as financial inclusion.

3.2.1.2 Credit rationing theory

One of the first seminal papers that anchored the role of credit in the formal financial sector was by Stiglitz and Weiss. In 1981, they developed a financial inclusion-related theory called credit rationing (Matsebula and Yu, 2020: 176). According to Li et al. (2013: 20) and Matsebula and Yu (2020: 176), credit rationing means that providers of credit, such as formal financial institutions, often limit the supply of credit to some customers who demand it. The *credit rationing theory* refers to a risk-mitigating theory which explains the practice by providers of credit, namely the regulated credit providers, to purposefully limit their lending or supply of regulated credit to certain customers (Kundid and Ercegovac 2011: 64).

The providers of regulated credit might limit their credit to avoid the selection of excessive risk from customers, especially the credit default risk, which refers to the probability of borrowers not being able to repay the loan (Matsebula and Yu, 2020: 176). Additionally, Kundid and Ercegovac (2011: 64) and Matsebula and Yu (2020: 176) added that by avoiding riskier customers who, due to their increased credit default risk, may negatively affect the providers' expected return on credit

provided, providers of regulated credit may choose to limit the supply of regulated credit to some customers to maximise their return. However, Matsebula and Yu (2020: 176) found that this may often result in regulated credit providers limiting credit supply even to customers willing to pay interest rates higher than the market rates, as those are also deemed too risky. Therefore, when a household cannot access the desired amount of regulated credit at prevailing market interest rates, even though they can afford and qualify for it, that household is deemed credit rationed (Li et al., 2013: 19).

According to the credit rationing theory, in the case of banks and other formal financial institutions that provide regulated credit, interest rates cannot continuously be increased even if the demand for regulated credit continuous to increase (Li et al., 2013: 20; Matseula and Yu, 2020: 176). For Matsebula and Yu (2020: 176), one of the reasons that inhibit the increase of interest rates is that it would discourage non-risky customers from borrowing and demanding regulated credit. Also, increasing interest rates would encourage borrowers to use those financial funds to fund riskier projects or activities in the hopes of getting higher returns to be able to repay the loan, subsequently increasing the credit default risk and profitability of the expected return of the formal financial institutions that provide the regulated credit products (Matsebula and Yu, 2020: 176).

Consequently, since these institutions cannot easily keep increasing the interest rates when the demand for regulated credit products is high, they opt to reduce supply by rationing credit to maintain market equilibrium and avoid excessive credit risk (Kundid and Ercegovac, 2011: 64). Practically, in formal financial institutions, credit rationing entails tightening non-price terms of the regulated credit product such as collateral requirements that results in less supply of the loans (Kundid and Ercegovac, 2011: 67). The tightening of such terms may make it difficult for vulnerable households that cannot meet the other requirements to access the credit, thus rendering them financially excluded.

Additionally, in terms of operations, formal financial institutions may also implement credit rationing through the screening process, whereby in an attempt to reduce screening costs, they

prefer customers demanding higher amounts of credit and with better collateral, as they normally have more information about such customers as opposed to customers demanding lower credit amounts (Kostov, Arun and Annim, 2015: 37). Customers that demand lower credit are often those from vulnerable households. Thus, they are the ones who will often be financially excluded. In this study, the credit rationing theory was also partially used as part of the theoretical framework by explaining the challenge faced by vulnerable households when attempting to access regulated financial products such as credit from formal financial institutions that regard these households as risky, thus, purposefully or strategically deny them access to regulated credit. The credit rationing theory is limited in relation to the scope of this study as it justifies and supports limiting vulnerable households' access to regulated financial products such as credit. Since this study holds the view that access to regulated financial products should be made easy and affordable, especially for vulnerable households, it is important to adopt other theories that advocate for the provision of affordable and easy access to regulated financial products. One such theory is the public goods theory of financial inclusion.

3.2.1.3 Public goods theory of financial inclusion

Ozili (2020) recently formulated a public goods theory in an attempt to contribute to the literature by formulating theories that directly address the financial inclusion phenomenon. *The public goods theory of financial inclusion* proposes that the provision and access to regulated financial products and services should be unrestricted, free, and benefit the entire population (Ozili, 2020). This seminal work by Ozili (2020) that contains the origins of the public goods theory of financial inclusion explained that once an individual has a bank account, they should be given free debit cards and allowed to freely withdraw from ATMs without being charged any withdrawal fee. It further holds the view that formal financial institutions should bear the costs associated with providing all households with free access to financial products and services and that the government should provide subsidies to these formal financial institutions for doing so (Ullah, DingDing and Zeeshan, 2020: 49).

In terms of access, this theory states that regulated financial products should be treated like a public good in that they should be easily accessible to the entire population without any restrictions (Ozili,

2020: 5). The public goods theory of financial inclusion was also partially used in this study as part of the theoretical framework by explaining the importance of households having easy access to regulated financial products, wherein everyone within the population who is willing should be able to easily have access to regulated financial products without any barriers or restrictions. While Ozili (2020) stated that treating regulated financial products as a public good is advantageous because financial inclusion initiatives will benefit everyone regardless of their socioeconomic status, the study firmly admits that treating regulated financial products as public goods does not address the root problem of financial exclusion. This speaks to the limitation of the public goods theory of financial inclusion in relation to this study, wherein it does not identify or stipulate which households should be beneficiaries of financial inclusion initiatives; thus, the need for another theory that speaks directly to this course, which is the vulnerable group theory of financial inclusion.

3.1.2.4 Vulnerable group theory of financial inclusion

Ozili (2020) also formulated the vulnerable group theory of financial inclusion *The vulnerable group* theory of financial inclusion indicates that financial inclusion should be focused on the vulnerable members of the population who are mostly affected by adverse risks (Ozili, 2020). According to Ozili (2020: 8), this theory advocates for identifying vulnerable households that should be the main targets of financial inclusion initiatives using their different socioeconomic factors (e.g., age and gender). For Ullah, DingDing and Zeeshan (2020: 49), this theory considers vulnerable members of the population, such as young people, the elderly and women. It stresses that financial inclusion initiatives should primarily focus on including vulnerable groups in the formal financial industry. In terms of this theory, financial inclusion is a tool that can help alleviate poverty for those vulnerable households. The next section explains why the other three theories discussed above were only partially suitable for the study, while the vulnerable group theory of financial inclusion was the theoretical framework of choice for this study.

3.2.2 ADOPTION OF THE THEORETICAL FRAMEWORK

Four financial inclusion-related theories support the theoretical framework of this study: the vulnerable group theory of financial inclusion, which was fully adopted; the financial development theory; the credit rationing theory, and the public goods theory of financial inclusion, which were

all partially used to explain the reasons and the importance or lack thereof, of financial inclusion. The vulnerable group theory of financial inclusion was the theory of choice because it best suited this study due to its contentions that completely aligned with the study's aim and objectives. Firstly, the vulnerable group theory of financial inclusion acknowledges the existence of vulnerable groups within a population and that these vulnerable groups are the ones that are mostly affected by adverse risks that may affect income or poverty levels (Ullah, DingDing and Zeeshan 2020: 49). Secondly, the theory supports the view that vulnerable households are easily identified through their socioeconomic factors such as age and gender and even employment status (Ozili, 2020: 8). This study used socioeconomic factors to identify vulnerable households and tested the moderating effect of these socioeconomic factors on the relationship between financial inclusion and poverty. Lastly, the theory suggests that when financial inclusion initiatives are specifically targeted at vulnerable households, they can help alleviate poverty among those households by reducing income inequality in society (Ozili, 2020: 8).

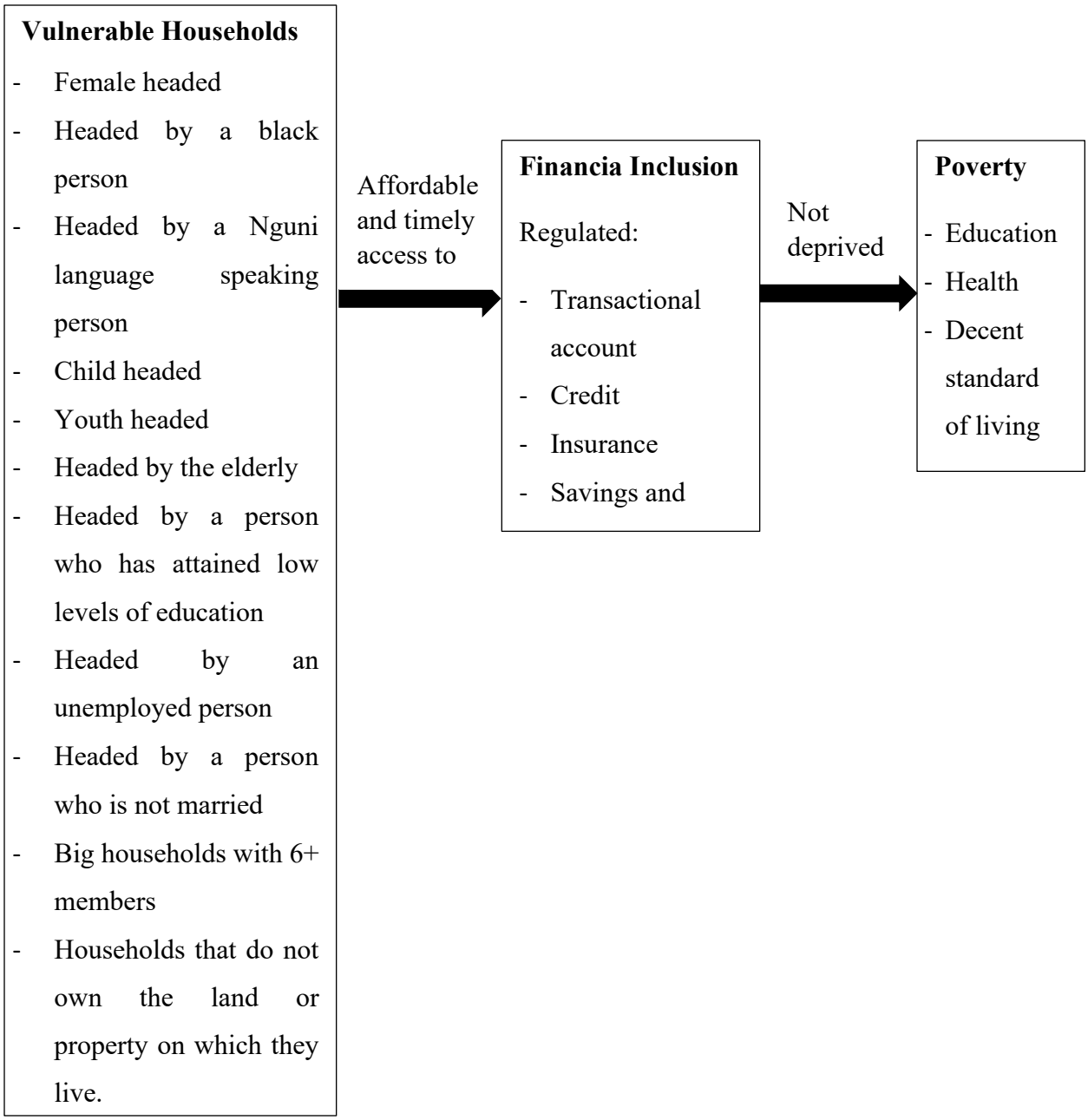
The other theories discussed were only partially adopted because of their various limitations. For example, *the financial development theory* was not fully adopted because financial development refers to macro-level overall improvements of the formal financial sector for the benefit of all sectors of the population and general economic growth (World Bank, 2014, as cited in Khier, 2018: 46). However, as stated earlier, this study was built on the premise that financial inclusion should specifically be aimed at the vulnerable households (Abel, Mutandwa and Le Roux, 2018:1), because those are the households that are in dire need of access to regulated financial products (Wentzel, Diatha and Yadavalli, 2016: 10). By virtue of being a phenomenon that focuses on individual households, specifically vulnerable households, instead of the entire economy of a country, financial inclusion presents itself as more of a microeconomic phenomenon than a macroeconomic phenomenon. Therefore, this study found that the financial development theory does not specifically deal with vulnerable households; subsequently, it was only partially adopted within the theoretical framework.

With regards to the *credit rationing theory*, credit rationing is viewed as a way of avoiding credit default risks by sieving and sorting who should be granted credit, with sieving usually affecting

the vulnerable households' ability to access regulated credit (Kundid and Ercegovac, 2011: 64). This study found that this theory only explains financial inclusion and access to one kind of regulated financial product, which is regulated credit. This study aimed to measure financial inclusion as having access to four regulated financial products: regulated transactional accounts, regulated credit, regulated insurance and regulated savings/investments. Therefore, the credit rationing theory was insufficient to fully explain the objectives and scope of this study.

Furthermore, while the *public goods theory of financial inclusion* partly aligned with the view of this study in that regulated financial products should be accessible to everyone, this study only partially adopted it because it contends that financial inclusion initiatives should be directed at everyone regardless of their economic status. This contradicts the study as this study holds the view that financial inclusion should be directed at vulnerable households. Access to regulated financial products by vulnerable households is important for poverty alleviation because it protects these households against adverse risks that can negatively harm their income, as well as give them access to extra funds that can help supplement their current income and afford basic households needs, thus keeping them out of poverty levels (Iqbal and Sami, 2017:1, Abel, Mutandwa and Le Roux, 2018:1). The theory also supports the view that regulated financial products should be accessed freely, not affordably, by everyone. Thus, the theory advocates that formal financial institutions should bear the costs of offering their products freely to everyone. However, this is unsustainable, as shown by the experiences of the failed Mzanzi account discussed in Chapter 2. The theory further identifies the government as an agent of financial inclusion, not the private sector. Since this study has highlighted the important role that both government and the formal (private) financial sector play in financial inclusion, it was only partially adopted. This theoretical model adopted and explained is illustrated below.

Figure 3.1: Theoretical framework of the study



Source: Researcher's own construction.

Given this adopted theoretical framework within which the relationship between financial inclusion and poverty among vulnerable households in South Africa has been explained, this study aimed to empirically determine this relationship quantitatively through hypotheses testing. As such, the hypotheses stated in Chapter 4 are discussed below using past empirical literature and the theoretical framework discussed and adopted above.

3.3 FINACIAL INCLUSION AND POVERTY

Financial inclusion is a panacea to reducing poverty, thus reporting a negative relationship between the two factors (Schoombee, 2015: 166; Dawood et al., 2019: 243). According to Koomson, Villano and Hadley (2020: 615), financial inclusion has a negative relationship with poverty as it provides vulnerable households with access to regulated financial products such as a transactional bank account, credit, savings/investments and insurance products. Studies have been conducted on financial inclusion and poverty in South Africa. Chitimira and Ncube (2020: 354) conducted a study to determine the challenges that affect the financial inclusion of the poor in South Africa. This study found that most poor South Africans still struggled to access regulated financial products because most formal financial institutions are concentrated in urban areas.

Matsebula and Yu (2020: 196) conducted an analysis of financial inclusion in South Africa. They used ownership of regulated formal products to measure financial inclusion and the lower poverty line to measure poverty. The study found that financial inclusion is associated with lower levels of poverty, and formal financial institutions often discriminate against poor households. Lastly, Baiyegunhu and Fraser (2011: 94) conducted a study on the vulnerability and poverty dynamics in rural areas of the Eastern Cape, South Africa, and also found that poverty was prevalent among households that did not have access to credit in the Eastern Cape, South Africa.

In contrast, few scholars do not support the poverty-reducing effect of financial inclusion. Koomson, Villano and Hadley (2020: 615) briefly opined that greater financial access and making it easy for vulnerable households to access and use regulated financial products can lead to indebtedness, poverty, and income inequality between financial inclusion initiatives recipients and non-recipients in the short-term. Therefore, this study advocated for financial inclusion to not be aimed at just vulnerable households but at all households. In Uganda, Burlando and Carnidio (2015) showed that financially including vulnerable households through savings and borrowings adversely affect non-vulnerable households. Therefore, since financial resources are scarce, those in poverty are more likely to be financially excluded. Therefore, these views would rather support the view that there is no significant relationship between financial and poverty.

3.4 VULNERABLE HOUSEHOLDS AND FINANCIAL INCLUSION

Vulnerable households in many developing countries, such as South Africa, are often not adequately included in their country's formal financial economy; thus, they have little to no access to regulated financial products (Louis and Chartier, 2017: 170). Although there has been an increase in financial inclusion in South Africa, a significant portion of vulnerable households in South Africa still do not have easy and affordable access to basic regulated financial products (Chitimira and Ncube, 2020: 338-340). This section discusses how vulnerable households, as identified by the socioeconomic factors of their heads of households, are less likely to have access to regulated financial products and subsequently less likely to be financially included.

Female-headed households are more vulnerable than males and consequently less financially included. In this regard, Matsebula and Yu (2020: 196) found that being a female had a negative relationship with financial inclusion; thus, female-headed households are less likely to be financially included than male-headed households. Musa et al. (2015), as cited in Abel, Mutandwa and Le Roux (2018: 4), found that in Nigeria, being a female decreased the probability of being financially included in the formal financial sector. Kaluwa and Kungenje (2019: 57) also found that in Malawi, levels of financial inclusion declined among females. Similarly, Iqbal and Sami (2017: 3) stated that in India, females struggle to obtain access to regulated credit products due to gender biases in the country, inhibiting the state of financial inclusion of those households headed by females. This speaks to the challenge female-headed households face due to vulnerability, wherein they are expected to be less financially included. Besides gender, race is also known to play an impactful role in household vulnerability in South Africa, wherein Black people are often more vulnerable than other races. The next type of vulnerable households discussed is those headed by Black people.

Households headed by Black people are less likely to be financially included than households headed by people of other races. Mhlanga Dunga and Moloi (2020: 5) found that households headed by Black people were more likely to be financially excluded compared to those headed by other races, thus implying a negative relationship between households headed by Black people and financial inclusion. Similarly, Mhlanga and Denhere (2020: 48) found that being Black was

associated with the lowest probability of being financially included. These findings support the argument that households headed by a Black person are expected to be less likely to be financially included than those headed by people of other races. The primary/home language spoken by the head of the household is closely related to race, which also impacts a household being financially included. Therefore, the next types of vulnerable households discussed regarding financial inclusion are those headed by Nguni-speaking people.

Households headed by people who do not speak English or Afrikaans (those who speak Nguni languages) as their home/first language are often less financially included in South Africa. For Wentzel, Diatha and Yadavalli (2016: 9-10), home language was associated with being unbanked (financially excluded). This, therefore, supports the proposition of this study that households headed by people who do not have English or Afrikaans as their home/first language, that is, Nguni-speaking people, often struggle with being financially included. The next types of vulnerable households that are discussed in relation to financial inclusion are those that are made vulnerable due to age. These include child-headed households, youth-headed households and households headed by the elderly.

Child-headed households, youth-headed households and households headed by the elderly face challenges regarding being financially included in the formal financial sector. According to Ozili (2020: 5), the young and the old are vulnerable, and they and the households they head would highly benefit from financial inclusion initiatives that focus on them. Additionally, Wentzel, Diatha and Yadavalli (2016: 9) found that households headed by young people (children and youth), as well as those headed by elderly people, are more likely to be financially excluded. Therefore, these findings imply that households headed by children, the youth and old people are often expected not to be financially included. Closely related to age is the highest level of education attained, which is another socioeconomic factor that impacts financial inclusion. This aspect is discussed next.

Households headed by people who have attained low levels of education are less likely to be financially included. Kaluwa and Kunyenje (2019: 57) found that being educated assisted heads of households to better understand the risks and benefits of accessing regulated financial products,

thus making them more likely to access the regulated financial products. This implies that households headed by those who are less educated often do not understand the risks and benefits of accessing regulated financial products, making them less likely to be financially included. Similarly, Mhlanga and Denhere (2020: 48) found a positive relationship between the highest educational level attained by the head of a household and financial inclusion. These findings imply that households headed by people who are less educated are expected to be less likely to be financially included. The highest level of education attained is closely related to the employment status of a person. The next type of vulnerable households discussed is those headed by unemployed people.

According to Chitimira and Ncube (2020: 341), *households headed by unemployed people* are less likely to be financially included than those headed by employed people, implying a possible relationship between employment status and financial inclusion. Mhlanga and Denhere (2020: 48) added that employed people earning an income often receive it through the bank due to the high crime risk in South Africa, increasing the need and use of regulated bank accounts, translating to financial inclusion. Therefore, households headed by unemployed people are expected to be less financially included than those headed by employed people, who are expected to be more financially included. Another type of vulnerable household is a household headed by a single person, and this is discussed next.

Households headed by unmarried people are more prone to being financially excluded. For Mhlanga and Denhere (2020: 48) and Mhlanga, Dunga and Moloi (2021: 6), a positive relationship exists between being married and being financially included, whereas unmarried people are less likely to be financially included. Interestingly, Wentzel, Diatha and Yadavalli (2016) previously found that marital status was not significantly associated with financial inclusion in South Africa. Nonetheless, this study expected households headed by unmarried people to be less financially inclusive. Closely related to marital status is the size of a household, wherein bigger households are expected to be less financially included. This is discussed next.

By being vulnerable, *bigger households* are often less financially included than smaller households. Matsebula and Yu (2020: 182) stated that a smaller household size, as depicted by a low dependency ratio, positively impacts the financial inclusion of that household, implying that the bigger the household, the less likely that household is to be financially included. Interestingly, Wentzel, Diatha and Yadavalli (2016: 210) earlier found that bigger households are more likely to be financially included than smaller households. Nonetheless, this study deemed bigger households vulnerable as much pressure is exerted on their financial resources expected to afford basic needs for everyone in the household (as stated in Chapter 2). Therefore, less money is saved for future consumption or investment. This study expected bigger households to be less likely to be financially included. Similar to the size of a household is the property ownership of the household, wherein not owning the property/land on which one lives makes one more vulnerable and less likely to be financially included. This is discussed next.

Households that do not own the land or property on which they live are less likely to be financially included. According to Derera, Chitakunye and O'Neill (2014: 99) and Schombee (2016: 177), land/property ownership affects households' ability to have access to regulated financial products (e.g., credit), as owning land can be used as collateral, easing access to regulated credit. Therefore, in this study, households that did not own the property/land on which they lived were expected to be less financially included. The findings from this section indicated that these nine socioeconomic factors of the heads of households used to identify vulnerable households in South Africa (gender, race, language, age, highest level of education attained, employment status, marital status, household size and land ownership) affect financial inclusion. Therefore, in this study, it was expected that vulnerable households (as measured by the head of household's nine socioeconomic factors) would be less financially included. Similar to financial exclusion, vulnerable households face a greater chance of falling into poverty. The next section discusses vulnerable households and poverty.

3.5 VULNERABLE HOUSEHOLDS AND POVERTY

Vulnerable households often experience poverty. *Female-headed households* fall into poverty more than male-headed households (Dawood et al., 2019: 237). In this regard, Makhalima (2020: 406-409) stated that female-headed households fall into poverty because women often earn less

income than men. Biyase and Zwane (2018: 122) and Kaluwa and Kungenje (2019: 57) also found that female-headed households were more prone to poverty than male-headed households in South Africa and Malawi, respectively. Therefore, this study expected female households to experience higher poverty levels than male-headed households. Similar to female-headed households, households headed by Black people and those headed by people who speak Nguni languages are also widely known to experience higher levels of poverty than those headed by people of other races and those headed by people who either speak English or Afrikaans. These are discussed next.

Studies show that *households headed by Black people* are more likely to face poverty than those headed by people of other races. This is supported by the findings of Biyase and Zwane (2018: 122), who found that as opposed to being Black, being White, Indian, or mixed was associated with fewer chances of being poor. This finding implies that households headed by Black people are more prone to poverty. This study expected that households headed by Black people would be poorer than those headed by people of other races. Closely related to households headed by Black people are *households headed by people who speak Nguni languages*. They often face more poverty than those who speak English or Afrikaans in South Africa. With eleven official languages in South Africa, Wentzel, Diatha and Yadavalli (2016: 3) argued that the language spoken by the head of a household could impact how they access regulated financial products. Since vulnerable households can use regulated financial products such as credit to afford basic household needs, their inability to access these regulated products due to the language barrier indicates the impact of language on poverty levels. This study expected households headed by people who speak Nguni languages to be poorer than those who speak English or Afrikaans in South Africa. Households that are vulnerable due to the age of the head of the household are also prone to poverty. These are discussed next.

Households led by young people (*child-headed households and youth-headed households*) are also more susceptible to poverty. In this regard, Sekhampu (2013: 151) found that age had a negative relationship with poverty, implying that households led by young people are more prone to poverty in South Africa. Similarly, Lekobane and Seleka (2017: 44) expressed that age and poverty have a negative relationship, wherein the youth are often unemployed or, if employed, have less work

experience, leading to less income and less asset ownership, thus more susceptible to poverty. Lekobane and Seleka (2017: 53) further found that the relationship between age and poverty is nonlinear. It is rather diminishing that poverty may be higher among child-headed households and youth-headed households, reduce at middle age and then increase again for elderly-headed households. This also implies that *households headed by elderly people* are more prone to living in poverty. This can be explained by the fact that old people are not employed, often do not have continuous income and deal with health risks. These findings, therefore, supported the view of this study that child-headed households, youth-headed households and households headed by the elderly are expected to be poorer than those headed by adults. Age is closely related to the highest level of education attained, employment status and marital status. Households headed by unemployed people are discussed next, followed by households headed by unemployed people and households headed by unmarried people.

Households headed people who have only attained low levels of education are more susceptible to poverty. Biyase and Zwane (2018: 122) found that higher educational levels of the head of the household reduce chances of being poor by providing better opportunities for getting a good paying job. This study expected households headed by uneducated people or people who attained low levels of education to be poorer than those headed by educated people or people who attained high levels of education in South Africa. Similarly, *households headed by unemployed people* are more prone to poverty than those headed by employed people. According to Sekhampu (2013: 10), when the head of a household is unemployed, this negatively affects the poverty levels of that household. Lekobane and Seleka (2017: 53) also found that when the head of a household is unemployed, that renders that household vulnerable, thus more prone to poverty. Therefore, these findings suggest that households headed by unemployed people are expected to often fall into poverty more than households headed by employed people. Additionally, *households headed by unmarried people* are more prone to poverty than households headed by married people. For Biyase and Zwane (2018: 122), households led by unmarried people are more likely to be poor than those headed by married people. Other vulnerable households more prone to poverty are bigger households and households that do not own the property/land on which they live, which are discussed next.

Bigger households are more prone to poverty than smaller households. According to Sekhampu (2013: 151), Biyase and Zwane (2018: 122) and Dawood et al. (2019: 242), households with a higher number of dependents are more prone to poverty, implying that a household with a larger household size is associated with higher levels of poverty. Additionally, Atake (2018: 8) found that an increase in the number of household members significantly increased the likelihood of that household being poor. Therefore, this study expected bigger households in terms of size to be poorer than smaller households.

Lastly, *households that do not own the land or property* on which they live are more prone to poverty than those that own their property/land. According to Meinzen-Dick (2009: 1), land provides shelter and dignity and can be sold or used to secure finance, thus helping alleviate poverty. This supports the proposition that not owning land/property relates to poverty. This study expected households that do not own property/land to experience higher levels of poverty than those that own the property/land on which they live. The findings from this section indicated that these nine socio-economic factors (gender, race, language, age, the highest level of education attained, employment status, marital status, household size and land/property ownership) impact poverty and also support the premise that being vulnerable households (as identified by the head of household's socioeconomic factors) makes households more susceptible to poverty. In this study, it was expected that vulnerable households would be poorer than those that are not vulnerable.

From the two discussions above, it is evident that these socioeconomic factors used in this study to identify vulnerable households in South Africa impact both financial inclusion and poverty separately. However, studies have not implicitly and empirically determined whether these socioeconomic factors moderate the relationship between financial inclusion and poverty in South Africa. Therefore, the next section discusses and substantiates the potential existence of this moderating effect.

3.6 THE MODERATING EFFECT OF SOCIOECONOMIC FACTORS ON THE RELATIONSHIP BETWEEN FINANCIAL INCLUSION AND POVERTY

Despite the lack of studies that explored the moderating effect of socioeconomic factors on the relationship between financial inclusion and poverty in South Africa, methods/techniques, findings and conclusions from some past studies have implicitly intimated the role played by socioeconomic factors in the success, or lack thereof, of financial inclusion helping to alleviate poverty. For example, using the term 'bottom of the pyramid' and focusing on financial exclusion, Wentzel, Diatha and Yadavalli (2016) conducted a study to determine the factors that may affect the financial inclusion of the poor in South Africa. Their study concluded that addressing socioeconomic factors is a better mechanism for including vulnerable households that face poverty in the formal financial sector than advancing access to financial inclusion through an increase in formal financial institutions in vulnerable communities. This conclusion alluded to the important possible effect of socioeconomic factors on the financial inclusion of the poor.

When specifying the research model and methodology of the study, Kaluwa and Kungenje (2019: 52) identified socioeconomic factors such as age, gender, employment status and education as independent variables that impact financial inclusion and poverty, including how financial inclusion fairs in reducing poverty. This implicitly alludes to the moderating effect of these factors on the relationship between financial inclusion and poverty among vulnerable households. Additionally, Allen et al. (2016: 2) expressed that financial inclusion initiatives at the country level without considering individual household socioeconomic factors are ineffective in reflecting intended results, especially in reducing poverty for vulnerable households. This view indicates that for financial inclusion initiatives to be impactful and for their intended results to be clearly observed, those initiatives and results should be viewed across different socioeconomic factors of households, thus implying the moderating effect of these socioeconomic factors on the relationship between financial inclusion and poverty.

Previous literature found that the relationship between financial inclusion and poverty is more evident among vulnerable households as measured by socioeconomic factors. Therefore, it is evident that for financial inclusion to effectively impact poverty, the moderating effect of

socioeconomic factors should be determined and well-understood. This study filled this identified gap in South African literature by conducting an empirical investigation of the moderating effect of socioeconomic factors on the relationship between financial inclusion and poverty among vulnerable households in South Africa.

3.7 SUMMARY OF THE CHAPTER

This chapter aimed to further build on Chapter 2 by providing a theoretical framework that supports the view that vulnerable households should be the main beneficiaries of financial inclusion because they are the most affected by poverty or likely to be affected by poverty in the future. It first identified some of the theories that have been used in financial inclusion and poverty-related studies. Among these were the financial development theory, the credit rationing theory, the public goods theory of financial inclusion and the vulnerable goods theory of financial inclusion. The vulnerable group theory of financial inclusion was found to be the best-suiting theory for the contentions, aim and scope of this study. It was fully adopted when building the theoretical framework. This theory states that financial inclusion should be focused on the vulnerable members of the population who are mostly affected by adverse economic and financial shocks. It further acknowledges that vulnerable households can easily be identified by their socioeconomic factors, making it suitable for this study. The other three theories were only partially adopted to the extent that some of their contentions can explain certain aspects of this study.

Based on a literature review of previous studies and the theoretical framework adopted in this study, this chapter discussed the hypotheses of this study. These hypotheses will be developed and tested in Chapter 4 to meet the objectives of the study. These discussions firstly stated that since financial inclusion has been identified as one of the tools that can help alleviate poverty, it is proposed that a significant relationship exists between financial inclusion and poverty. The second proposition was a significant relationship between households that are vulnerable and financial inclusion. Thirdly, it is expected that by virtue of being vulnerable, these households are more susceptible to poverty, positing a significant relationship between household vulnerability and financial inclusion. Lastly, a proposition was made that socioeconomic factors significantly moderate the relationship between financial inclusion and poverty in South Africa.

In short, this chapter provided theoretical and empirical support for the contention that by being vulnerable, these households are more susceptible to not being financially included and to poverty.

It, therefore, provided evidence about why the study maintains the relationship between financial inclusion and poverty may be more evident among vulnerable households in South Africa, including why it believes socioeconomic factors have a moderating effect on this relationship. As such, it highlighted the impetus of why vulnerable households should be specifically targeted through financial inclusion initiatives to help alleviate poverty in South Africa. The next chapter (Chapter 4) will provide the research design and methodology of this study, including thorough discussions of the paradigm, design, methods, procedures, techniques, hypotheses development and ethical considerations that were used in this study.

CHAPTER 4

RESEARCH DESIGN AND METHODOLOGY

4.1 INTRODUCTION

Chapter 3 provided a theoretical framework for the study, discussed and developed the relationships between financial inclusion and poverty, vulnerable households and financial inclusion as well as vulnerable households and poverty using findings of existing studies. Chapter 4 aims to meet the third and forth secondary objectives of this study, namely to determine the relationship between financial inclusion and poverty,vulnerable households and financial inclusion, as well as vulnerable households and poverty in South Africa, and to determine the moderating effect of socioeconomic factors on the relationship between financial inclusion and poverty among vulnerable households in South Africa. To achieve this, chapter 4 provides the research design and methodology used to analyze the secondary data of the study. This chapter outlines the techniques and ways of analysing the data to meet the aim and objectives of this study.

In order to achieve this, the chapter will identify the overall research paradigm of the study, providing the overall lens through which this study viewed reality and knowledge. Thus, a paradigm is defined, its different axioms are discussed, the types of paradigms are identified, and the paradigm that best suits this study is chosen and justified. This is followed by identifying and explaining the overall research design adopted by the study, which informed how the rest of the study was conducted. The research methodology of choice is also identified and discussed, followed by the research approach, which addresses the approach of reason and knowledge development. Additionally, this chapter will discuss the data collection methods, sources of data used, type of data and how the data was processed and prepared for analysis. The statistical techniques used to test the hypotheses are also identified and discussed. Supported by past literature and the adopted theoretical framework, the hypotheses statements to be tested in this study are presented in detailed tables, together with their possible outcomes and decision rules.

The chapter concludes by highlighting the ethical considerations adhered to by this study, followed with a summary.

4.2 RESEARCH PARADIGM

A research paradigm refers to a lens through which a certain community in academia views reality in terms of shared practices, beliefs, concepts and premises (McGregor and Murnane, 2010: 419). According to Saunders, Lewis and Thornhill (2016: 132), research paradigms provide philosophical assumptions that underpin the ideological orientation of researchers. Creswell (2009: 3) opted to use the term 'worldview' instead of paradigm and similarly explained these *worldviews* as the basic overviews of the world that are shaped by a researcher's beliefs and principles. Each paradigm is distinguished by its philosophical underpinnings, called *methodologies* and its unique techniques employed to conduct the research, known as *methods* (McGregor and Murnane, 2010: 420). Both will be discussed in detail in the subsequent sections. In simple terms, a research paradigm can be understood as a fixed, systematic pattern or approach in how one thinks about research and conducts it.

4.2.1 ASSUMPTIONS OF THE RESEARCH PARADIGM

Research paradigms can be differentiated along three axioms or assumptions: ontology, epistemology and axiology (Saunders, Lewis and Thornhill, 2016: 129). Axioms are claims that are believed to be true without ever being questioned, thus once a paradigm is chosen, its axioms/principles allow the researcher and the study to start integrally and reliably deducing and inferring the truths and beliefs of the study safely within the constraints of that paradigm (McGregor and Murnane, 2010: 420). This, therefore, essentially means that once a study falls under a particular paradigm, the axioms of that paradigm automatically guide the rest of that study. There are three types of axioms: ontology, epistemology and axiology.

Ontology refers to how the researcher defines the truth or reality, specifying the nature of reality and what can be known about it (Antwi and Hamza, 2015: 218). McGregor and Murnane (2010: 420) explained otology as the concept of understanding the form and nature of reality, thus

determining what can be known about it. There are two opposing views under ontology: objectivism and constructionism/subjectivism. *Objectivism* refers to the position that reality is independent of the researcher's personal views (realism), while *constructionism* holds that reality is subjective and results from social processes that can be interpreted and understood differently by different researchers (Antwi and Hamza, 2015: 218). This implies that an objective study is only concerned with research questions about what is real, how things really are, and how things really work. Any other research question outside these questions, such as those rooted in morality, falls outside the objective sphere of ontology and more into the subjective sphere. Thus, objectivism assumes there is only one reality, while constructionism believes reality is subjective and there are multiple realities.

Epistemology concerns what should be considered knowledge, the nature of the relationship between the knower/researcher and what is known and how this knowledge gets to be obtained (Antwi and Hamza, 2015: 219). Saunders, Lewis and Thornhill (2016: 136) explained epistemology as what constitutes acceptable knowledge, arguing that knowledge can either come from objective evidence that can be measured, come from subjective evidence from participants, or come from both objective and subjective points of view depending on the context. Epistemology can take two forms, empirical or interpretive, wherein *empirical* refers to the understanding that knowledge is verifiable, exists apart from personal thoughts and is governed by laws of cause and effects, while *interpretive* refers to the understanding that knowledge is constructed by researchers through personal experience and can have multiple interpretations (Antwi and Hamza, 2015: 219).

Axiology refers to the role of values in research (Saunders, Lewis and Thornhill, 2016: 128). McGregor and Murnane (2010: 420) explained axiology as the process of determining what counts as fundamental values and what counts as consciousness in research. McGregor and Murnane (2010: 420) further explained axiology as a concept that involves determining the place and voice of the researcher and the participants within the research study. Axiologically, research can either be *value-free*, wherein the researcher, their values and beliefs are detached from the study, or it can be *value-bound*, wherein the researcher's values and beliefs are integral and reflexive

(Saunders, Lewis and Thornhill, 2016: 129). These three axioms can be used to differentiate and determine the best-fitting paradigm for a research study.

4.2.2 TYPES OF RESEARCH PARADIGMS

Different research paradigms are explained along the axioms mentioned above, including inter-alia, the constructive/interpretive paradigm, the pragmatic paradigm and the positivistic. These paradigms are discussed below.

An *interpretive/constructive research paradigm* refers to the assumption or philosophy that humans are different from physical phenomena because they create meanings which can be interpreted in different ways; thus, social sciences research needs to be different from natural sciences research (Saunders, Lewis and Thornhill, 2016: 140). McGregor and Murnane (2010: 422) explained that an interpretive research paradigm, which falls within the post-positivism paradigm, is concerned with understanding and interpreting why people and the world operate as they do. *Ontologically*, this paradigm believes reality is constructive/subjective, meaning it infers from the researcher's interpretation, personal understanding, and experiences (Antwi and Hamza, 2015: 219). From an *epistemological* stance, an interpretive research paradigm holds that knowledge is interpretive, is obtained from firsthand experience and is context-based (Antwi and Hamza, 2015: 219). Saunders, Lewis and Thornhill (2016: 136) opined that in terms of *axiology*, an interpretive research paradigm believes that research should be value-bound, wherein researchers are part of what is being researched, and their values and beliefs are integral to the research study. The interpretive research paradigm is often related to qualitative research as it interprets why and how phenomena or human behaviour occur (McGregor and Murnane, 2010: 421).

A *positivistic research paradigm* refers to the assumption that the only way knowledge can be reliably obtained is through empirical means, using a scientific method (McGregor and Murnane, 2010: 421). Antwi and Hamza (2015: 218) also explained a positivistic research paradigm as

believing that the best way to understand reality and gain knowledge is through experiments and observation. At the *ontological level*, positivism believes that knowledge and reality are objectively given and can be measured using characteristics that are independent of the researcher, thus, also quantifiable (Antwi and Hamza, 2015: 218). According to Creswell (2009: 4), a positivistic research paradigm is an overview of the world and reality that assumes that causes often determine effects; thus, knowledge obtained from this paradigm is ascertained through a strict measurement of an objective phenomenon that exists in the world. Saunders, Lewis and Thornhill (2016: 135) further opined that a positivistic research paradigm relates to working with an observable reality to produce law-like generalisations. Therefore, these two studies support Antwi and Hamza's view (2015: 219) that at an *epistemological* level, positivistic research believes that knowledge is obtained from measurable empirical evidence and that the researcher is independent of the study.

In terms of *axiology*, a positivistic research paradigm holds that research should be value-free, meaning the researcher's values, opinions, and beliefs should be detached from the study; thus, the only thing considered as knowledge should be verifiable facts (Saunders, Lewis and Thornhill, 2016: 129). For McGregor and Murnane (2010: 421), it is important for research conducted within a positivistic paradigm to be value-free to reduce biased interpretations of the results. Consequently, a positivistic research paradigm is normally linked to quantitative research studies that use numerical data to test hypotheses using statistical models (McGregor and Murnane, 2010: 421; Antwi and Hamza, 2015: 218-219).

A *pragmatic research paradigm* reconciles both the positivistic and interpretive research paradigms. It is based on the premise that theories, concepts, ideas, hypotheses, and findings are all integral instruments of thoughts and actions that have practical outcomes in specific contexts (Saunders, Lewis and Thornhill, 2016: 143). Essentially, pragmatists believe that what works should be considered important in answering the research questions of each study (Antwi and Hamza, 2015:224). *Ontologically*, pragmatism believes reality is complex and is the practical consequences of ideas, while *epistemologically*, it asserts that it is absolutely possible to work with

different types of knowledge that is practical, as knowledge is valued for enabling actions to be carried out successfully (Saunders, Lewis and Thornhill, 2016: 143). Thus, in terms of *axiology*, pragmatism allows the researcher's values to drive the reflexive process of inquiry sparked by their intuitive instinct that something is wrong or out of place (Saunders, Lewis and Thornhill, 2016: 143). Therefore, this paradigm uses any kind of method and methodology that proves suitable for addressing the research questions and providing practical outcomes (Saunders, Lewis and Thornhill, 2016: 144).

This study was objective and observed only one reality *(ontology)* relating to the moderating effect of socioeconomic factors on the relationship between financial inclusion and poverty among vulnerable households in South Africa. It was further believed that knowledge is empirical as this study only used secondary numerical data from a reputable database that could be verified *(epistemology)* to achieve the objectives of this study. Additionally, this study was independent of the researcher's personal views or interpretations and was a value-free study *(axiology)*. Lastly, this study used a deductive approach to construct a hypothesis based on theory. It was a quantitative study that used numerical data and statistical tools to test the hypotheses and produce results, falling within and adopting a *positivistic research paradigm* (Aliyu et al., 2014:81). Some of the similar studies in this field that adopted a similar research paradigm include Churchill and Marisetty (2020) and Dawood et al. (2019) who conducted a quantitative study within the positivistic research paradigm to examine the effect of financial inclusion on poverty. Similarly, Koomson, Villano and Hadley (2020) adopted the positivistic research paradigm and conducted a quantitative study to determine the effect of financial inclusion on poverty and vulnerability to poverty among households.

4.3 RESEARCH DESIGN

A research design is a plan and procedure for research that spans the decisions from broad assumptions to detailed methods of data collection and analysis (Creswell, 2009: 2). Saunders, Lewis and Thornhill (2016: 165) stated that a research design is concerned with the overall plan of the research study. Adams, Khan and Raeside (2014: 64) explained a research design as a

blueprint or masterplan specifying methods and procedures for collecting and analysing data. There are three types of research designs: qualitative, quantitative, and mixed methods (Creswell, 2009; Saunders, Lewis and Thornhill, 2016: 164).

A *qualitative research design* encompasses studying phenomena in their natural state and making sense of the subjectively constructed meaning of the phenomena being studied (Saunders, Lewis and Thornhill, 2016: 168). Leedy and Ormrod (2015: 271) argued that qualitative research designs cannot be used for studies that aim to determine predictive relationships. On the contrary, a *quantitative research design* allows for testing relationships using hypotheses statements and numerical data (Saunders, Lewis and Thornhill, 2016: 166). A quantitative research design uses and generates numerical data and uses closed-ended questions or quantitative hypotheses to achieve the research objectives (Creswell, 2009: 1; Saunders, Lewis and Thornhill, 2016: 165). A *mixed research design* encompasses both qualitative and quantitative steps in conducting research per the scope and needs of that research (Leedy and Ormrod, 2015: 269). While all research designs are equally important, depending on the type of research being conducted, a study that has adopted a positivistic research paradigm is associated with a quantitative research design (Adams, Khan and Raeside, 2014: 6). This study tested hypotheses, used closed-ended questions and statistical methods to test data and meet the objectives of the study, all of which are associated with a quantitative research design.

A quantitative research design is usually associated with quantitative methodologies such as the survey methodology, the experimental methodology and a correlational methodology (Asamoah, 2014: 45; Saunders, Lewis and Thornhill, 2016: 168). A quantitative design is also associated with a deductive research approach to theory development, focusing on using data to test theory (Saunders, Lewis and Thornhill, 2016: 166). Additionally, a quantitative research design may use a single data collection method or more than one method (multi-method) to collect data (Saunders, Lewis and Thornhill, 2016: 166). Lastly, a quantitative research design uses highly structured statistical methods, techniques and models to analyse data and present findings (Adams, Khan and Raeside, 2014: 6).

The choice of methodology, approach, data collection techniques, sampling methods and analysis techniques used in this study will be discussed in detail later in this chapter. The main advantage of using a quantitative research design is that its findings can usually be generalised to the entire population (Creswell, 2009: 2). The overarching design of the study has been ascertained, highlighting the importance of exploring and discussing the subsequent methodology of the study further.

4.4 RESEARCH METHODOLOGY

According to Adams, Khan and Raeside (2014: 5), a research methodology is the science and philosophy behind a research study that enables a researcher to understand how knowledge is created, be able to analyse and criticise it within the strict constraints of the concepts of the adopted research paradigm. Creswell (2009: 7) referred to research methodologies as *strategies of inquiry* and described them as models that provide specific directions for procedures in a research design. There are different research methodologies in quantitative research, such as survey, experiment, and correlational methodology.

A *survey methodology* is based on the premise that data can be collected about a group of people or phenomena by asking questions and tabulating answers to learn about the entire population through surveying a sample of that population (Leedy and Ormrod, 2015: 159). Similarly, an *experimental methodology* is a scientific methodology whose principles lie in the premise that causal relationships between independent and dependent variables can be determined statistically by manipulating the independent variable (Asamoah, 2014: 51). A *correlational research methodology* refers to a quantitative methodology within the positivistic paradigm in which two or more quantitative variables obtained from the same group of subjects are subjected to some statistical computations to determine whether a relationship between those variables exist or not (Asamoah, 2014: 45).

This study adopted a correlation research methodology because a *correlational methodology* allows a researcher to describe the extent to which two variables are similar or different from each

other in terms of certain characteristics (homogeneity or heterogeneity), describe the degree to which variables are interrelated to each other, and interpret the data and give it meaning (Asamoah, 2014: 50; Leedy and Ormrod, 2015:157), making it advantageous and suitable for this study. The correlational research methodology is further discussed below.

4.4.1 CORRELATIONAL RESEARCH METHODOLOGY

Ellis and Levy (2009: 327) explained a correlational research methodology as a type of quantitative research methodology whose prime concern is to determine the existence of a predictive relationship between factors. Both Ellis and Levy (2009: 327) and Asamoah (2014: 45) emphasised that a correlational methodology does not seek to establish if a cause-and-effect relationship exists between factors or variables. However, instead, it aims to determine whether a predictive relationship exists and the nature and degree of that relationship.

Some of the characteristics of this methodology are that it often has two sets of variables; the dependent/output criterion variable and the independent/predictor variable, wherein the dependent/output criterion variable refers to the variable to be predicted or the outcome, while the independent/predictor variable is the variable believed to predict the outcome (Asamoah, 2014: 46). Additionally, as stated by Bryman and Cramer (2011: 6) and Asamoah (2014: 46), a study that has adopted a correlational research methodology holds the premise that the researcher should not manipulate any of the variables used in the study, thus making the researcher independent from the study.

This methodology was chosen as the most suitable for this study because it is in line with the objectives of the study, namely to determine the relationship between financial inclusion and poverty among vulnerable households in South Africa, as well as to determine the moderating effect of socioeconomic factors on this relationship. Also, the researcher did not manipulate any data or variables and was independent of the study. Furthermore, this study used this research methodology because it uses hypotheses testing to determine the relationship between an

independent quantitative variable and a dependent variable, as well as determine the moderating effect of other quantitative variables on this relationship between the independent and the dependent variables (Saunders, Lewis and Thornhill, 2016: 166).

4.5 RESEARCH APPROACH

A research approach refers to a way of reasoning in theory development and can either be inductive, abductive or deductive (Saunders, Lewis and Thornhill, 2016: 144). Adams, Khan and Raeside (2015: 9) described an *inductive approach* as the logical process of making conclusions and propositions and developing theories from observed facts. An *abductive approach* involves collecting data to explore phenomena to generate new or modify existing theories, which is later tested using additional data (Saunders, Lewis and Thornhill, 2016: 145). A *deductive approach* refers to an approach to theory development whereby empirical data is used to test hypotheses based on theory (Antwi and Hamza, 2015: 22).

The quantitative research design that falls within a positivistic research paradigm, which has both been adopted in this study, is associated with a deductive research approach to theory development (Saunders, Lewis and Thornhill, 2016: 166). A deductive approach involves a substantial review of the literature at the beginning of the study that provides direction for the research questions and hypotheses, which will then be tested and proven true or falls (Creswell, 2009: 21). According to Adams, Khan and Raeside (2014: 10), a deductive approach moves from general to specific, wherein a general set of propositions about a particular phenomenon that is informed by theory are narrowed down to specific hypotheses that are tested using statistical models. This study adopted a deductive approach because it used the vulnerable group theory of financial inclusion and established hypotheses that were tested using numerical data and statistical techniques.

4.6 SAMPLING AND DATA CODING

This section will discuss the sampling and data coding used in this study. It will discuss the population from which the data used in this study was drawn, including a discussion of the sample, how the data was captured as well as how it was coded.

4.6.1 POPULATION AND SAMPLE

The population of this study from which the sample was drawn consisted of all households across South Africa and is therefore the total population of South Africa, as the FinSope 2016 South Africa survey is a nationwide survey. A *sampling frame* refers to a complete list of all the cases in the target population from which the sample will be drawn (Saunders, Lewis and Thornhill, 2016: 277). This study used the FinScope South Africa household survey database as its research frame from which the sample was selected. FinMark through FinScope South Africa explained that a multiple probability sampling technique was used to obtain the sample from the entire South African households within its population (Insight2Impact, 2016).

By using the sampling strategy mentioned above, the survey drew a sample of 4992 respondents, representing all provinces in South Africa. According to Leedy and Ormrod (2015: 184), for large populations that are about 5000 and more, a sample size of about 400 is adequate. Therefore, since this sample size obtained from the survey is larger than 400, it was statistically sufficient to draw inferences from and generalise to the whole population.

4.7 DATA COLLECTION

This section discusses the sources from which the data was collected, the type of data collected, and how it was collected and stored. Also included are discussions about the different types of scales of measurement used in collecting the data, with a description of the variables by identifying the relevant questions from the questionnaire used to collect data on the variables.

4.7.1 SOURCES OF DATA AND METHOD OF COLLECTION

In line with the positivistic research paradigm, a correlational methodology and a quantitative research design of this study, quantitative/numeric data were required to meet the main aim of this study, as stated in Chapter 1. This study used secondary data to answer its objectives. *Secondary data* refers to pre-existing data collected for another purpose but can be used in other studies (Adams, Khan and Raeside, 2014: 104). Leedy and Ormrod (2015:389) explained secondary data

as data obtained from descriptions of primary data collected by previous studies. According to Saunders, Lewis and Thornhill (2016: 319), secondary data can either be obtained from documents (document-based), obtained from surveys (survey-based), or obtained from both documents and surveys (multiple-source).

Document-based secondary data was used in the literature review section of this study. *Document-based secondary data* refers to data obtained from books, journals, recordings and annual reports that were recorded or written and have been transposed across time and reanalysed for a purpose different from which they were originally collected (Lee, 2012 as cited in Saunders, Lewis and Thornhill, 2016: 319). These literature sources were obtained from journal articles, books and websites accessed through Google Scholar, EBSCOHOST, Sabinet, JSTOR, Emerald Insight and Science Direct. The researcher also consulted subject and course guides from the Rhodes University library website to search for these sources, including keywords such as financial inclusion, poverty, vulnerable households, South Africa, socioeconomic factors and correlational methodology.

Furthermore, this study used *survey-based secondary data,* referring to existing data about people, households or organisations, collected for a different purpose using a survey strategy such as a questionnaire or interviews (Saunders, Lewis and Thornhill, 2016: 321). Survey-based secondary data has been obtained from survey-based secondary data sources. The data used to test the hypotheses of this study was obtained from a FinScope South Africa 2016 household survey database by FinMark Trust. FinMark Trust is an independent non-profit trust that collects and analyses financial services demand-side data across different countries to make financial markets work for the poor by promoting financial inclusion and regional financial integration (FinMark Trust, n.d.). Lastly, *multiple-source secondary data* refers to existing data obtained from a mixture of document- and survey-based secondary data sources (Saunders, Lewis and Thornhill, 2016: 325).

The survey-based data used in this study was downloaded on an Excel workbook document. This document contained answers to questions posed using a FinScope South Africa 2016 questionnaire, with the corresponding questionnaire used to collect the data, as well as a supporting document explaining how and when the data was collected. A sample of 4992 households was obtained by FinMark using a multiple probability sampling method within a South African population (Insight2Impact, 2016). This was the latest publicly available data, as FinMark had not yet released the latest data. The survey was conducted by FinMark Trust among the same sample at one point in time in June and completed in August 2016, thus making this a cross-sectional study. A *cross-sectional study* refers to a study wherein data about phenomena is collected at a certain point in time and analysed to provide clarity and context about the state of those phenomena (Adams, Khan and Raeside, 2014: 69; Saunders, Lewis and Thornhill, 2016: 200). A closed-ended questionnaire was used to collect the data from respondents who were sixteen years and older. The data was relevant and sufficient in meeting the aim of this study and being used for hypotheses testing because the questionnaire collected household data related to households' structure, their access and usage of financial products and services, and general attitudes, statements, and demographics in South Africa, which fell within the scope of this study.

4.7.2 QUESTIONNAIRE DESIGN

A *questionnaire* refers to an instrument of data collection in which each person is asked to respond to the same set of questions and is either conducted physically or virtually (Saunders, Lewis and Thornhill, 2016: 437). A questionnaire uses open-ended and closed-ended questions. *Open-ended questions* refer to questions that allow respondents to answer in their own way, while *closed-ended questions* refer to questions that provide respondents with predetermined responses that they can choose from (Saunders, Lewis and Thornhill, 2016: 452). Closed-ended questions like those used in the FinScope questionnaire use different scales of measurement: nominal scale, ordinal scale, interval scale and ratio scale. The types of scales discussed below were used in this FinScope 2016 questionnaire.

Both nominal and ordinal scales are known as *categorial scales,* and these refer to scales of measurement that comprise categories that label or identify phenomena, whether in an order or without order (Field, 2009: 8). A *nominal scale* refers to a naming scale whereby variables are only labelled with no specific order or rank of importance (Adams, Khan and Raeside, 2014: 71). In a nominal scale, a respondent provides one particular answer that is mutually exclusive from the other answers/categories, meaning none fits into more than one category, and the understanding is that no one category is better than the other (Dawson, 2009: 130). If a nominal scale only offers two mutually exclusive options to choose from, it is usually referred to as a *binary scale* or binary variables (Field, 2009: 8). Statistical analyses that can be performed on data collected using nominal scales include the mode to indicate the most frequently occurring category, percentages of various subgroups within the total group and the chi-square to compare the relative frequencies of people in various categories (Leedy and Ormrod, 2015: 111).

An *ordinal scale* has all variables in a specific order beyond just labelling them. Thus, the categories that respondents are to choose from are given an order that implies that other categories are better than others, but it is not possible to numerically measure the difference between the categories (Dawson, 2009: 130). In addition to the statistical analysis techniques that can be performed on nominal data, some of the statistical analyses that can be performed on data collected using ordinal scales include the median that reflects the halfway point in a data set, percentiles rank to identify the relative position of any item or individual in a group and spearman's rank order correlation to determine the extent of the relationship between two characteristics.

Beyond categorial scales, there are also *continuous scales.* These refer to scales that give value to each phenomenon, wherein a variable can take up any value within the measurement scale being used (Field, 2009: 9), which includes an interval scale and a ratio scale. An *interval scale* is in the form of numbers, with precisely defined intervals that measure the difference or distance between two events (Leedy and Ormrod, 2015: 111). Thus, the scale indicates the order and measures the order in units of equal intervals, with the location of the zero point being arbitrary (Adams, Khan

and Raeside, 2014: 71). According to Leedy and Ormrod (2015: 111), interval scales further enable analyses such as the mean, standard deviation and Pearson's product-moment correlation.

A *ratio scale* is a type of continuous scale whereby absolute, instead of relative quantities are used to measure phenomena, with zero having an absolute meaning that represents the absence of a phenomenon (Adams, Khan and Raeside, 2014: 71). In addition to the analyses that are possible with interval data, data collected from ratio scales also allows for the calculation of the geometric mean to make proportional comparisons, including to conduct virtually any inferential statistical analysis (Leedy and Ormrod, 2015: 113).

Another common type of scale used in the questionnaire was a *Likert scale*, which measures the attitudes of respondents towards something by asking them to rate the extent to which they feel about something (Adams, Khan and Raeside, 2014: 126). Saunders, Lewis and Thornhill (2016: 457) stated that Likert scales include both positive and negative categories that cover how strongly the respondent feels about something.

The FinScope South Africa 2016 questionnaire includes the household registry, as well as sections A to M. Section A collects information on the household structure, services and community. Sections C to K collect information on households' access and usage of different financial products and services, such as getting and spending money, remittances, the use of cellphones in the financial sector, bank penetration, borrowing/credit, insurance, funeral cover, retirement/pension as well as savings/investments. Lastly, sections L and M collect information on the general attitudes and demographics of respondents. See Annexure A for questionnaire.

4.7.3 DESCRIPTION OF INDICATORS

From the questionnaire, the researcher used questions from sections F and K to measure financial inclusion, and questions from sections L and M and one from section A (A5: electricity) to measure

poverty. Socioeconomic factors used to measure vulnerable households in this study were measured using demographics from Section M and those from the household registry at the beginning of the questionnaire, except for question A2A, which was used to measure property or land ownership. See the attachment of the questionnaire in Annexure A. Based on these questions, this section describes the three variables of this study: financial inclusion, poverty and vulnerable households. Additionally, it states the scales used to measure each indicator by the questionnaire. All these are presented in the tables below.

4.7.3.1 Financial inclusion

As previously indicated, financial inclusion is a process of incorporating vulnerable households into the formal financial sector by ensuring that they receive timely and adequate access to regulated financial products at an affordable price, regardless of their socioeconomic status. Furthermore, this study measured financial inclusion as having access to four indicators: regulated transactional account, regulated credit, regulated insurance and regulated savings/investments. Table 4.2 illustrates these four indicators, the questions used to measure and collect data on these indicators, and the scales used to measure data related to these indicators.

Table 4.1: Measurements of financial inclusion

FINANCIAL INCLUSION		
INDICATOR	**MEASUREMENT**	**SCALE**
Transactional bank account	F7. For each product that I read out, please indicate your state of ownership: 6. Cheque or current account 11. Mzanzi account offered by banks (e.g., Absa, FNB, Nedbank, Post Bank, Standard Bank) 18. Student account 19. Transaction account	Categorical scale 1 = Never had 2 = Used to have in the past but don't have now 3 = Have now 4 = Don't know
Regulated Credit	F7: For each product that I read out, please indicate your state of ownership: 3. Car loan or vehicle loan from a bank either directly or via a dealer – you have or are paying this back	Categorical scale 1 = Never had

	5. Credit card (e.g., Visa, MasterCard, American Express or Diners Club) 10. Home loan, bond or mortgage – you have or are paying this back to buy, build, extend or improve a house from a bank or bond originator 14. Personal loan from a bank – you have or are paying this back	2 = Used to have in the past but don't have now 3 = Have now 4 = Don't know
Insurance	F7. For each product that I read out, please indicate your state of ownership: 27. Insurance policy from a bank 25. Funeral cover from a bank	Categorical scale 1 = Never had 2 = Used to have in the past but don't have now 3 = Have now 4 = Don't know
Savings and investments	F7: For each product that I read out, please indicate your state of ownership: 26. Savings account that you access your money immediately (e.g., Call account, Money market account) 7. Fixed or notice deposit account (e.g., 32-day) 17. Savings book at a bank 21. Savings/transactional account 24. Tax-free savings account K1. Please tell me about your use of each of the products you have, using the options I am about to show you. Please include products that you pay for directly as well as those which your employer provides and are deducted from your salary: 1. Unit trusts 2. Education policy or plan 3. Investment or savings policy	Categorical scale 1 = Never had 2 = Used to have in the past but don't have now 3 = Have now 4 = Don't know

	9. Shares on the stock exchange 11. Government bonds	

Source: FinScope SA 2016 questionnaire.

4.7.3.2 Poverty

As previously indicated, poverty is defined as the involuntary lack of monetary and other resources that can afford households basic human needs and a decent living standard above a chosen poverty measure. It was also previously stated that in this study, poverty was measured using three indicators, namely health, education and standard of living. Table 4.3 indicates these indicators, the questions used to measure and collect data on these indicators, as well as the scales used to measure data related to these indicators.

Table 4.2: Measurements of poverty

POVERTY		
INDICATOR	**MEASUREMENTS**	**SCALE**
Health	L15_2. **Medical treatment** – how often has anyone in the household gone without medicine or medical treatment that was needed in the last 12 months L15_1. **Nutrition** – how often has anyone in the household gone without enough food to eat because you/ they didn't have enough money to buy food in the last 12 months	Likert scale 1 = Often, 2 = Sometimes, 3 = Rarely, 4 = Never, 5 = Don't Know

Education of head of household	M3. Years of schooling – if the head of household has not completed at least matric: What is your highest level of education?	Categorical scale 1 = No schooling, 2 = primary school, 3 = some high school, 4 = matric, 5 = apprenticeship, 6 = diploma, 7 = university degree, 8 = other
Education of child	Child school in attendance – if the household has children, but they are not in school (either government or private school): L9. Have children who attend a government school L20. Have children who attend a private school	Categorical Scale 1 = Yes, 2 = No
Standard of living	A5. **Electricity** – Do you have electricity in your house? M5_1. **Drinking water** – Do you currently have tap water in your house or on your property? M5_3. **Sanitation** – Do you currently have a flush toilet inside or outside your house? **M5_28. House/Dwelling type** – Please tell me which of these, if any, are presently in your household or apply to your household: live in a built house/cluster house or townhouse excluding an RDP, township matchbox or improved township matchbox house	Categorial scale 1 = Yes, 2 = No

	M5. Assets – Do you own any of these assets: 16. Personal computer 11. Tv 12. Tv subscriptions such as M-Net, DStv or Top TV 17. Refrigerator 25. Motor vehicle E2_1. Cellphone **L15_3. Cooking fuel** – In the last 12 months, how often have you gone without energy to heat your home or cook food except for Blackouts or load shedding	Likert scale 1 = Often, 2 = Sometimes, 3 = Rarely, 4 = Never, 5 = Don't know

Source: FinScope SA 2016 questionnaire.

4.7.3.3 Vulnerable households

As indicated in Chapter 2, vulnerable households refer to those households that are more prone to adverse idiosyncratic and covariate risks, making them more likely to fall into poverty. They were measured using the socioeconomic factors of their heads of household households, thus, including households headed by a person who is either a female, Black, does not speak English or Afrikaans as their first home language, a child (below 18 years of age), youth (between 18 and 35), or the elderly (above 60 years), uneducated or have low levels of education, unemployed, single, households with a large household size and households that do not own the land/property on which they live. Table 4.4 illustrates the socioeconomic factors used to measure household vulnerability, the questions used to measure and collect the data on these factors as well as the sales used to measure the data related to these factors.

Table 4.3: Vulnerable households as measured by socioeconomic factors

SOCIOECONOMIC FACTORS		
Factors	**MEASUREMENT**	**SCALE**
Gender	Please tell me your gender.	Categorial scale 1 = Female, 2 = Male
Race	Please tell me your race.	Categorial scale 1 = Black, 2 = Coloured, 3 = Asian, 4 = White
Language	M1: Which is the main language you speak at home?	Categorial scale 1 = Afrikaans, 2 = English, 3 = IsiNdebele, 4 = IsiXhosa, 5 = IsiZulu, 6 = Sepedi, 7 = Sesotho, 8 = Setswana, 9 = SiSwati, 10 = Tshivenda, 11 = Xitsonga, 12 = Other (SPECIFY)
Age	Please can you give me your age?	Ratio scale Various
Education	M3. Educational level: What is your highest level of education?	Categorial scale 1 = No schooling, 2 = Primary school, 3 = Some high school – 3, 4 = Matric, 5 = Apprenticeship, 6 = Diploma, 7 = University degree, 8 = Other (SPECIFY)
Employment status	M4. Employment status: Which of these, if any, best describes your personal working status?	Categorial scale 1 = Work full-time or 30 hours a week or more for yourself or in your own business, 2 = Work full-time or 30 hours a week or more for a company or individual, 3 = Work part-time or less than 30 hours a week for yourself or in your own business, 4 = Work part-time or less than 30 hours a week for a company or individual, 5 = Student or learner, 6 = Housewife or house

		husband, 7 = Pensioner or retired, 8 = Unemployed and looking for a job – 8, 9 = Unemployed and not looking for a job, 10 = Other (SPECIFY)
Marital status	M2. Marital status: What is your PRESENT marital status?	Categorial scale 7 = Married, 8 = Single (not married) and not living with a partner – 8, 9 = Single (not married) and living with a partner, 3 = Widower or widow, 4 = Separated, 5 = Divorced, 6 = Other
Household size	Household size: Number of people in the household	Ratio scale Various
Land/property ownership	A2A. Land/Property ownership: Now, we are going to talk about ownership of your home and some of the things in your home. Please tell me which of these statements best describes your household's ownership of the home that you live in.	Categorial scale 1 = Is paying off a bond or home loan, 2 = Owns the home and is not paying off a bond or home loan, 3 = Rents the home, 4 = Does not own the home and does not pay anything for the home, 5 = Other, 6 = Don't know

Source: FinScope SA 2016 questionnaire.

4.7.4 DATA CAPTURING AND RECODING

The database downloaded as an Excel workbook was examined for missing data using a complete case approach, which computes values based on only complete cases, also known as the listwise deletion approach (Hair et al., 2014: 543). Respondents who did not give an answer and those who

chose the ‘don’t know’ options were eliminated from the study. Additionally, only respondents who were the heads of their households were used in this study. Therefore, those who were not were eliminated from this study. Furthermore, those who chose ‘other’ (except for the highest level of education attained question) were also eliminated from this study. In total, this reduced the final sample size from 4992 to 2759. A response rate, which refers to the number of responses received in comparison to the total number in the sample (Saunders, Lewis and Tornhill, 2016: 281) was also calculated by dividing the total number of responses used in the study by the total number of the responses in the database. Therefore the response rate of the study was 55%. A high response rate better ensures the sample is representative of the population hence results can be reliable (Saunders, Lewis and Tornhill, 2016: 281).

Data recoding refers to the process of grouping data to form new categories or variables to allow for a particular analysis that is required in the research study (Saunders, Lewis and Thornhill, 2016:505). In order to align the responses from the questionnaire with the objectives and scope of this study, responses were recoded. Table 4.1 summarises how the responses have been recoded.

Table 4.4: Data recoding

VARIABLE	RESPONSES	RECODING
Financial inclusion	1= never had, 2 = used to have in the past but don’t have now 3 = have now	Don’t have access Have access
Poverty	1 = often, 2 = sometimes, 2 = no, 1 = no schooling, 2 = primary school, 3 = some high school	Deprived
	3 = rarely, 4 = never, 1 = Yes, 4 = matric, 5 = apprenticeship, 6 = diploma, 7 = university degree, 8 = other	Not deprived

Vulnerable households/ socioeconomic factors	Gender: 1 = male, 2 = female	Male = **male**, female = **female**
	Race: 1 = Black, 2 = Coloured, 3 = Asian, 4 = White	Black = **Black**, Coloured, Asian and White = **Other races**
	Language: 1 = Afrikaans, 2 = English, 3 = IsiNdebele, 4 = IsiXhosa, 5 = IsiZulu, 6 = Sepedi, 7 = Sesotho, 8 = Setswana, 9 = SiSwati, 10 = Tshivenda, 11 = Xitsonga, 12 = Other	IsiNdebele, IsiXhosa, IsiZulu, Sepedi, Sesotho, Setswana, Siswati, Tshivenda, Xitsonga = **Nguni languages**, Afrikaans, and English = **Other languages**
	Age: various	0-17 = **children**, 18-35 = **youth**, 36-59 = **adults**, 60+ = **the elderly**
	Education: No schooling, 2 = Primary school, 3 = Some high school, 3, 4 = Matric, 5 = Apprenticeship, 6 = Diploma, 7 = University degree, 8 = Other	No schooling, Primary school, some high school, Matric, Apprenticeship = **low level of education**, Diploma, University degree, Other = **high level of education**
	Employment status: 1 = Work full-time or 30 hours a week or more for yourself or in your own business, 2 = Work full-time or 30 hours a week or more for a company or individual, 3 = Work part-time or less than 30 hours a week for yourself or in your own business, 4 = Work part-time or less than 30 hours a week for a company or individual, 5 = Student or learner, 6 = Housewife or house husband, 7 = Pensioner or retired, 8 = Unemployed and looking for a job,	Work full-time or 30 hours a week or more for yourself or in your own business; Work full-time or 30 hours a week or more for a company or individual; Work part-time or less than 30 hours a week for yourself or in your own business; Work part-time or less than 30 hours a week for a company or individual – **employed**; Housewife or house husband; Unemployed and looking

	8, 9 = Unemployed and not looking for a job, 10 = Other	for a job; Unemployed and not looking for a job; Pensioner or retired – **unemployed** * student/learner eliminated
	Marital status: 7 = Married, 8 = Single (not married) and not living with a partner, 8, 9 = Single (not married) and living with a partner, 3 = Widower or widow, 4 = Separated, 5 = Divorced, 6 = Other	Married = **married**; single and not living with a partner, single and living with a partner, widow or widower, separated, divorced = **not married**
	Household size	1-5 = **small**, 6+ = **big**
	Property/Land ownership: Is paying off a bond or home loan-1, Owns the home and is not paying off a bond or home loan-2, Rents the home-3, Does not own the home and does not pay anything for the home-4, Other- 5, don't know-6	Is paying off a bond or home loan, owns the home and is not paying off a bond or home loan, **owns land/ property**, rents the home, does not own the home and does not pay anything for the home, **does not own land/property**

Source: FinScope 2016 questionnaire, researcher's own construction.

Table 4.1 shows how the data was recoded to measure the variables of this study. To measure financial inclusion, *access scores* under each of the four indicators of financial inclusion were calculated using a ratio scale in the form of percentages for each household. Each of the four indicators was assigned an equal weighting of 1 or 100%. The subsequent questions under each indicator were thus assigned equal weights that sum up to 1 or 100%. A household was awarded that weighting if they had access to the product they were being asked about or no weighting if they did not have access. The sum of the weights of each question under each indicator was added up to form that *indicator's access score (measured in percentages)*, which was used as a unit of

measurement for that particular indicator during analysis. For example, if a household scored 0.25 for three questions and 0 for one question under the regulated transactional account, then that household's access score to a regulated transactional account was 0.75 or 75%. The access scores of each indicator were then added and averaged to calculate the overall access score of each household. A cut-off point of 0.5 or 50% was used. Households with total access scores of 0.5 or 50% and more were deemed financially included (1), while those with total access scores below 0.5 or 50 % were not financially included/financially excluded (0). Churchill and Marisetty (2020) also adopted this method of measuring financial inclusion.

Similarly, deprivation scores were calculated for each of the three indicators to calculate poverty using a ratio scale in the form of percentages. These three indicators were equally weighted, and the questions under each indicator were also equally weighted. For each question under each indicator above, if a household was deprived of that variable being asked about, then that household was awarded the deprivation weight of that question. The weights were added under each indicator to calculate the deprivation score of that indicator. This method for measuring poverty was also explained and adopted by Fransman and Yu (2019) and Churchill and Marisetty (2020: 1779). Additionally, each indicator's deprivation scores were added and averaged to determine the total deprivation score of each household. In line with both the Global Multi-Dimensional Poverty Index by Alkire and Santos (2010), as cited in Rogan (2016: 991) and the South African Multi-Dimensional Index by Statistics South Africa (2014: 3), a household was deemed poor *if its total deprivation score was equal to or above a third of the total weightings (0.3 or 30%)*. Thus, if a household was found to be poor, its poverty status was assigned 1, and if not found to be poor, its poverty status was assigned a 0. Fransman and Yu (2019) and Churchill and Marisetty (2020) also adopted this method of measuring poverty.

The socioeconomic factors used to measure vulnerable households were collected using categorical scales (except for age and household size). Therefore, their dummy variables were used to allow for multiple regression analysis. *Dummy variables* refer to variables created to transform a nonmetric variable into a metric one by assigning that variable a number (0 or 1) to indicate one state or another (Adams, Khan and Raeside, 2014: 208). There are two types of dummy coding:

indicator coding, in which each category of the variable is represented by either a zero or one and *effects coding,* in which a -1 is used instead of a zero (Hair et al., 2014: 173). Although both methods will yield the same results, this study used the most common of the two, which is indicator coding. Vulnerable households (as identified by the socioeconomic factors and previously stated) were coded 1, and those not vulnerable were coded 0. For example, in Table 4.3, female is coded 1, and male is coded 0.

4.8 DATA ANALYSIS

The following section discusses different quantitative data analysis techniques used to analyse the data. It first provides descriptive statistics, followed by inferential statistics that were used to analyse the data. The Statistical Package for the Social Sciences (SPSS) analytic software package was used to perform the analysis. SPPS analysis software is a statistical software often used in academic research to analyse data using different built-in statistical models (Leedy and Ormrod, 2015: 278).

4.8.1 DESCRIPTIVE STATISTICS

Descriptive statistics refer to a group of computational procedures that provide a summed-up descriptive picture of what the numeral data looks like (Leedy and Ormrod, 2015: 235). Adams, Khan and Raeside (2014: 171) stated that descriptive statistics are important because they provide an informative summary of data graphically, thus making the data easier to understand. According to Saunders, Lewis and Thornhill (2016: 527), there are two types of descriptive statistics: measures of central tendency and variability.

Central tendency measures indicate the centre of the frequency distribution of observations (Field, 2009: 20). Measures of central tendency include the mode, the mean, and the median (Saunders, Lewis and Thornhill, 2016: 528). The *mode* refers to an observation that occurs most frequently in a dataset, the *median* is the middle observation in a ranked dataset, and the *mean* refers to an average of a dataset that balances two sides of a data distribution (Leedy and Ormrod, 2015: 241). Additionally, *frequencies* are the number of occurrences of an observation (Hair et al., 2014: 36).

This study used frequencies, percentages and means to summarise household characteristics, demographics of heads of households, the access scores of financial inclusion and deprivation scores for poverty.

Measures of variability are techniques used to describe how data values are dispersed around the central tendency of a dataset (Saunders, Lewis and Thornhill, 2016: 529). Measures of variability include the range, the variance and standard deviation. The *range* refers to a measure that indicates the spread of data from the lowest/*minimum* to the highest/*maximum* value (Saunders, Lewis and Thornhill, 2016: 531). Lastly, the *variance* is a measure of variability that describes the average error between the mean and the observations made, while the *standard deviation* is the square root of the variance (Field, 2009: 39). This study used the minimum and maximum to summarise the household properties, demographics of heads of households, access scores and deprivations. These descriptive statistics were used in tables and graphs to summarise the data in terms of identifying proportions of households that have access to the different regulated financial products, as well as portray the generalised poverty status of households in relation to their socioeconomic factors. This subsection discussed the different descriptive statistics used to describe the data in this study. The next subsection discusses the inferential statistics used in this study.

4.8.2 INFERENTIAL STATISTICS

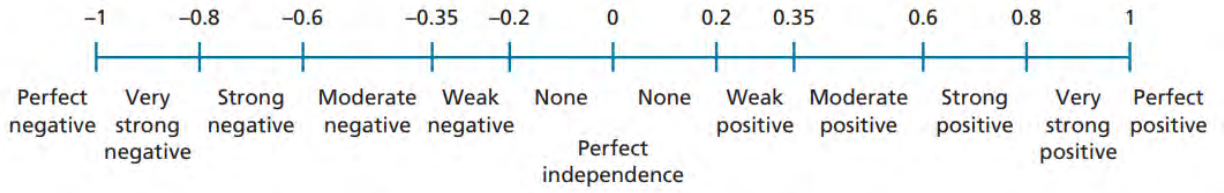
According to Leedy and Ormrod (2015: 236), inferential statistics refers to techniques used to test whether hypotheses about a certain population are true by drawing inferences from a sample of that population. Inferential statistics are used to test statistical hypotheses (Leedy and Ormrod, 2015: 252) and thus were used in this study to test the hypotheses. The inferential statistics used in this study to test the hypotheses were Pearson's product-moment correlation, multiple regression analysis and the Analysis of Variance (ANOVA).

4.8.3 PEARSON'S PRODUCT-MOMENT CORRELATION

Pearson's product-moment correlation (r) refers to a measure of relationship reflecting the direction and strength of the relationship between numerical variables using a correlation coefficient, which can assume any value between -1 and 1 (Adams, Khan and Raeside, 2014: 199; Leedy and Ormrod, 2015: 249). According to Saunders, Lewis and Thornhill (2016: 545), a *correlation coefficient* is a numerical measure of the strength of a linear relationship between numerical values, wherein a correlation coefficient of -1 represents a strong negative correlation, a correlation coefficient of +1 represents a strong positive correlation and a correlation of 0 means there is no correlation between variables. Correlations between various predictor variables are usually presented using a *correlation matrix*, which refers to a table showing intercorrelations among all variables tested for correlations (Hair et al., 2014: 90).

In this study, (*r*) was used to test for high correlations (multicollinearity) between the socioeconomic factors. Mathematically, Pearson's product-moment correlation is calculated by dividing the covariance of two variables by the product of their standard deviations (Adams, Khan and Raeside, 2014: 199). Figure 4.1 below shows the possible degrees of a correlation coefficient and what they mean.

Figure 4.1: Possible degrees of correlation



Source: Saunders, Lewis and Thornhill (2016: 545).

Multicollinearity refers to a strong relationship between two predictor variables, measured as the correlation (Field, 2009: 223). According to Hair et al. (2014: 21), multicollinearity refers to the extent to which any predictor's effect in the linear relationship can be affected by or accounted for by other predictors in the analysis. Pearson's product-moment correlation (r) is used to test for multicollinearity. It is important to ensure that the independent variables are not highly correlated before a multiple regression analysis is conducted (Saunders, Lewis and Thornhill, 2016: 548). In this study, multicollinearity was tested for the socioeconomic factors used.

Multicollinearity is undesirable because it renders regression coefficients of predictor variables unreliable during the multiple regression analysis. It creates shared variance between the predictor variables, thus reducing the reliability of interpreting the role played by each predictor variable in the linear relationship (Field, 2009: 224). As a rule of thumb, collinearity of 0.9 or higher indicates multicollinearity (Hair et al., 2013), as cited in Saunders, Lewis and Thornhill (2016:549). The presence of multicollinearity between variables has to be dealt with to ensure that variables are independent of each other, a situation termed orthogonal (Hair et al., 2014: 91) or at least have a very low correlation.

One way of dealing with multicollinearity is eliminating one of the predictors. However, this proves to be challenging as there is no guideline on which variable to eliminate (Field, 2009: 229). Field (2009: 300) suggested that another alternative to dealing with multicollinearity is using factor analysis to combine the highly correlated predictors into factors and using those resulting factors as predictors. Lastly, Field (2009: 300) maintained that a safer option would be to report the existence of multicollinearity between variables, thus acknowledging the unreliability of the model. This is, however, unsatisfactory and weakens the reliability of results. This study will deal with multicollinearity by combining the two highly correlated variables by multiplying them together to create one new variable.

4.8.4 ANALYSIS OF VARIANCE (ANOVA)

Analysis of Variance (ANOVA) is a statistical test used to determine whether groups (categories) are different by analysing the variance within and between variables and comparing their means (Saunders, Lewis and Thornhill, 2016: 544). The f-ratio or F-statistic represents these differences (Field, 2009:349). A large f-ratio with a p-value of less than or equal to 0.05 indicates that the likelihood of any difference between groups occurring by chance alone is low, indicating a statistically significant difference between the groups/categories (Saunders, Lewis and Thornhill, 2016: 544).

ANOVA was used in this study to determine whether a relationship exists between financial inclusion and vulnerable households and to determine whether there is a relationship between poverty levels and vulnerable households in South Africa by comparing the means of the categories under each socioeconomic factor. Specifically, it was used to determine whether the poverty and financial inclusion status or percentages differ among different categories of all the socioeconomic factors identified in this study as indicators of household vulnerability.

4.8.5 MULTIPLE REGRESSION ANALYSIS

A *multiple regression analysis* assesses the relationship between a numerical criterion variable and two or more numerical predictor variables (Hair et al., 2014: 151). This is done by calculating the *coefficient of multiple determination* (R^2). This measures the model fit or prediction accuracy, that is, the proportion of the variation in the criterion/dependent variable that can be explained statistically by the predictor variables and can take up any value between 0 and +1 (Saunders, Lewis and Thornhill (2016: 547). Adams, Khan and Raeside (2014: 28) described a *predictor variable* as a variable expected to impact or influence the other variable. For this study, the predictor variable was financial inclusion, represented by its four indicators. A *criterion or dependent variable* refers to a variable thought to be affected by changes in the independent variable, also known as the outcome (Field, 2009: 7). Similarly, poverty, as represented by its three indicators, was the criterion variable in this study.

An R^2 of 1, therefore, means that the predictor variables explain all the variation in the criterion variable, 0.5 means that 50% of the variation in the criterion variable is explained by the predictor variable and 0 means that none of the variations in the criterion variable can be explained by the predictor (Saunders, Lewis and Thornhill, 2016: 547). If there is more than one independent variable, as is the case with multiple regression, an adjusted R^2 is used instead and interpreted similarly (Adam, Khan and Raeside, 2014: 210). As previously stated, the criterion variable in this study was poverty, as measured multidimensionally using percentage deprivation scores, while the predictor variables were the four dimensions of financial inclusion (access to regulated transactional accounts, credit, insurance and savings), which were also measured using percentages.

4.9 TESTING HYPOTHESES

As mentioned in Chapter 1, four hypotheses were tested in this study. According to Adams, Khan and Raeside (2014: 9), a *hypothesis* as a statement about proposed relationships between variables which should be tested empirically. There are two types of hypotheses: the *null hypothesis* (H_0), which proposes that there is no significant relationship between the two variables, and the *alternative hypothesis* (H_1), which proposes a significant relationship between variables (Saunders, Lewis and Thornhill, 2016:179). Since the null hypothesis is the one that is tested, its rejection signifies the acceptance of its alternative hypothesis. The hypotheses of this study were as follows:

H_{0_a}: There is no significant relationship between financial inclusion and poverty among South African vulnerable households.

H_{1_a}: There is a significant relationship between financial inclusion and poverty among South African vulnerable households.

H_{0_b}: There is no significant relationship between vulnerable households and financial inclusion in South Africa.

H_{1_b}: There is a significant relationship between vulnerable households and financial inclusion in South Africa.

H_{0_c}: There is no significant relationship between vulnerable households and poverty in South Africa.

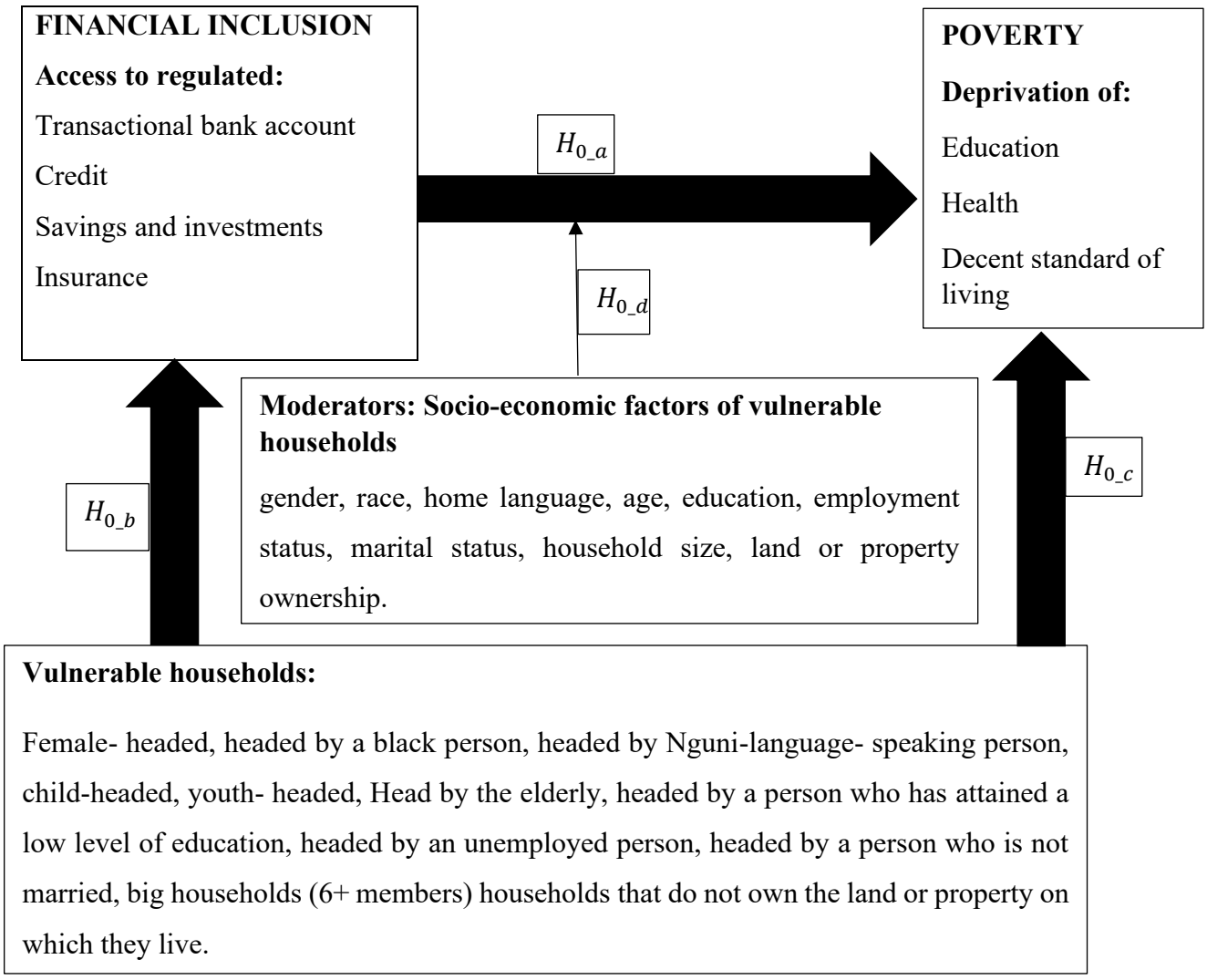
H_{1_c}: There is a significant relationship between vulnerable households and poverty in South Africa.

H_{0_d}: Socioeconomic factors do not have a significant moderating effect on the relationship between financial inclusion and poverty among South African vulnerable households.

H_{1_d}: Socioeconomic factors have a significant moderating effect on the relationship between financial inclusion and poverty among South African vulnerable households.

Consequently the below hypotheses framework was constructed and adopted:

Figure 4.2: Hypotheses framework of the study



4.9.1 PERFORMING THE TESTS

When testing the hypotheses stated above, four hypotheses are provided for eachfinancial inclusion indicator. Additionally, significance levels and decision rules were used to interpret the results of the tests. *Significance levels* refer to a cut-off point (whether 0.1 or 0.05) at which researchers decide that a result did not occur by chance alone but rather occurred due to other systematic factors that influenced the data (Leedy and Ormrod, 2015: 255). A cut-off-point of 0.05 signifies a 1-in-20 probability or 5% chance that the result did not occur by chance alone but was influenced by other factors. Similarly, other researchers may use a significance level of 0.01 or 1-in-100 criterion, meaning the result would occur by chance only once in 100 or 1% of the time. Therefore, if the observed result is due to something other than chance, the null hypothesis is rejected as this indicates a significant relationship (Leedy and Ormrod, 201: 255; Saunders, Lewis and Thornhill, 2016: 179).

A very low significance value/p-value (usually less than 0.05) means that the coefficient is unlikely to have occurred by chance alone; thus, a significant relationship exists between the predictor variable and the criterion variable in question. A p-value greater than 0.05 indicates that the coefficient of multiple determination could have occurred by chance alone; therefore, no significant relationship exists between the predictor variable and the criterion variable in question (Saunders, Lewis and Thornhill, 2016: 548).

4.9.2 DECISION RULES

In order to interpret the results of the hypotheses tests, the following decision rules were used**:**

Table 4.5: Financial inclusion and poverty (multiple regression)

H_{0_a}: There is no significant relationship between financial inclusion and poverty among South African vulnerable households. H_{1_a}: There is a significant relationship between financial inclusion and poverty among South African vulnerable households.		
Relationships	**Significance level**	**Outcome**
H_{0_a1}: There is no significant relationship between having access to a regulated transactional account and poverty. H_{1_a1}: There is a significant relationship between having access to a regulated transactional bank account and poverty.	P≥0.05 P≤0.05	Accept null, reject alternative Reject null, accept alternative
H_{0_a2}: There is no significant relationship between having access to regulated credit and poverty. H_{1_a2}: There is a significant relationship between having access to regulated credit and poverty.	P≥0.05 P≤0.05	Accept null, reject alternative Reject null, accept alternative
H_{0_a3}: There is no significant relationship between having access to regulated insurance and poverty.	P≥0.05	Accept null, reject alternative

H_{1_a3}: There is a significant relationship between having access to regulated insurance and poverty.	P≤0.05	Reject null, accept alternative
H_{0_a4}: There is no significant relationship between having access to regulated savings/ investment products and poverty.	P≥0.05	Accept null, reject alternative
H_{1_a4}: There is a significant relationship between having access to regulated savings/ investments and poverty.	P≤0.05	Reject null, accept alternative

Source: Researcher's own construction.

Decision rules:

Suppose the p-values of three or more relationships were greater than or equal to 0.05. In that case, the null hypothesis was fully accepted.

The null hypothesis was partially accepted if the p-values of exactly two relationships were greater than or equal to 0.05.

If the p-values of one or fewer relationships were greater than or equal to 0.05, the null hypothesis was fully rejected.

Table 4.6: Vulnerable households and financial inclusion (ANOVA)

H_{0_b}: There is no significant relationship between vulnerable households and financial inclusion in South Africa. H_{1_b}: There is a significant relationship between vulnerable households and financial inclusion in South Africa.		
Relationships	**Significance level**	**Outcome**
H_{0_b1}: There is no significant relationship between being female and financial inclusion.	P≥0.05	Accept null, reject alternative
H_{1_b1}: There is a significant relationship between being female and financial inclusion.	P≤0.05	Reject null, accept alternative
H_{0_b2}: There is no significant relationship between being Black and financial inclusion.	P≥0.05	Accept null, reject alternative
H_{1_b2}: There is a significant relationship between being Black and financial inclusion.	P≤0.05	Reject null, accept alternative
H_{0_b3}: There is no significant relationship between speaking a Nguni language and financial inclusion.	P≥0.05	Accept null, reject alternative
H_{1_b3}: There is a significant relationship between speaking a Nguni language and financial inclusion.	P≤0.05	Reject null, accept alternative

H_{0_b4}: There is no significant relationship between age (child-headed, youth-headed, household headed by the elderly) and financial inclusion. H_{1_b4}: There is a significant relationship between age (child-headed, youth-headed, household headed by the elderly) and financial inclusion.	P≥0.05 P≤0.05	Accept null, reject alternative Reject null, accept alternative
H_{0_b5}: There is no significant relationship between having a low level of education and financial inclusion. H_{1_b5}: There is a significant relationship between having a low level of financial inclusion.	P≥0.05 P≤0.05	Accept null, reject alternative Reject null, accept alternative
H_{0_b6}: There is no significant relationship between being unemployed and financial inclusion. H_{1_b6}: There is a significant relationship between being unemployed and financial inclusion.	P≥0.05 P≤0.05	Accept null, reject alternative Reject null, accept alternative
H_{0_b7}: There is no significant relationship between being unmarried and financial inclusion.	P≥0.05	Accept null, reject alternative

H_{1_b7}: There is a significant relationship between being unmarried and financial inclusion.	P≤0.05	Reject null, accept alternative
H_{0_b8}: There is no significant relationship between having a big household size and financial inclusion.	P≥0.05	Accept null, reject alternative
H_{1_b8}: There is a significant relationship between big household size and financial inclusion.	P≤0.05	Reject null, accept alternative
H_{0_b9}: There is no significant relationship between not owning land and financial inclusion.	P≥0.05	Accept null, reject alternative
H_{1_b9}: There is a significant relationship between not owning land and financial inclusion.	P≤0.05	Reject null, accept alternative

Source: Researcher's own construction.

Decision rules:

Suppose the p-values of six or more relationships were greater than or equal to 0.05. In that case, the null hypothesis was fully accepted.

If the p-values of five relationships were greater than or equal to 0.05, the null hypothesis was partially accepted.

The null hypothesis was fully rejected if the p-values of four or fewer relationships were greater than or equal to 0.05.

Table 4.7: Vulnerable households and poverty (ANOVA)

H_{0_c}: There is no significant relationship between vulnerable households and poverty in South Africa. H_{1_c}: There is a significant relationship between vulnerable households and poverty in South Africa.		
Relationships	**Significance level**	**Outcome**
H_{0_c1}: There is no significant relationship between being female and poverty.	P≥0.05	Accept null, reject alternative
H_{1_c1}: There is a significant relationship between being female and poverty.	P≤0.05	Reject null, accept alternative
H_{0_c2}: There is no significant relationship between being Black and poverty.	P≥0.05	Accept null, reject alternative
H_{1_c2}: There is a significant relationship between being Black and poverty.	P≤0.05	Reject null, accept alternative
H_{0_c3}: There is no significant relationship between speaking a Nguni language and poverty.	P≥0.05 P≤0.05	Accept null, reject alternative

H_{1_c3}: There is a significant relationship between speaking a Nguni language and poverty.		Reject null, accept alternative
H_{0_c4}: There is no significant relationship between age (child-headed, youth-headed, household headed by the elderly) and poverty. H_{1_c4}: There is a significant relationship between age (child-headed, youth-headed, household headed by the elderly) and poverty.	P≥0.05 P≤0.05	Accept null, reject alternative Reject null, accept alternative
H_{0_c5}: There is no significant relationship between having a low level of education and poverty. H_{1_c5}: There is a significant relationship between having a low level of education and poverty.	P≥0.05 P≤0.05	Accept null, reject alternative Reject null, accept alternative
H_{0_c6}: There is no significant relationship between being unemployed and poverty. H_{1_c6}: There is a significant relationship between being unemployed and poverty.	P≥0.05 P≤0.05	Accept null, reject alternative Reject null, accept alternative
H_{0_c7}: There is no significant relationship between being unmarried and poverty. H_{1_c7}: There is a significant relationship between being unmarried and poverty.	P≥0.05 P≤0.05	Accept null, reject alternative Reject null, accept alternative

H_{0_c8}: There is no significant relationship between having a big household size and poverty.	P≥0.05	Accept null, reject alternative
H_{1_c8}: There is a significant relationship between having a big household size and poverty.	P≤0.05	Reject null, accept alternative
H_{0_c9}: There is no significant relationship between not owning land and poverty.	P≥0.05	Accept null, reject alternative
H_{1_c9}: There is a significant relationship between not owning land and poverty.	P≤0.05	Reject null, accept alternative

Source: Researcher's own construction.

Decision rules:

If the p-values of six or more relationships were greater than or equal to 0.05, then the null hypothesis was fully accepted.

If the p-values of five relationships were greater than or equal to 0.05, the null hypothesis was partially accepted.

If the p-values of four or fewer relationships were greater than or equal to 0.05, the null hypothesis was fully rejected.

Table 4.8: The moderating effect of socioeconomic factors on the relationship between financial inclusion and poverty

H_{0_d}: There is no significant moderating effect of socioeconomic factors on the relationship between financial inclusion and poverty among South African vulnerable households. H_{1_d}: There is a significant moderating effect of socioeconomic factors on the relationship between financial inclusion and poverty among South African vulnerable households.		
Relationships	**Significance level**	**Outcome**
H_{0_d1}: There is no significant moderating effect of gender on the relationship between financial inclusion and poverty among vulnerable households in South Africa.	P≥0.05	Accept null, reject alternative
H_{1_d1}: There is a significant moderating effect of gender on the relationship between financial inclusion and poverty among vulnerable households in South Africa.	P≤0.05	Reject null, accept alternative
H_{0_d2}: There is no significant moderating effect of race on the relationship between financial inclusion and poverty among vulnerable households in South Africa.	P≥0.05	Accept null, reject alternative
H_{1_d2}: There is a significant moderating effect of race on the relationship between financial	P≤0.05	Reject null, accept alternative

inclusion and poverty among vulnerable households in South Africa.		
H_{0_d3}: There is no significant moderating effect of language on the relationship between financial inclusion and poverty among vulnerable households in South Africa.	P≥0.05	Accept null, reject alternative
H_{1_d3}: There is a significant moderating effect of language on the relationship between financial inclusion and poverty among vulnerable households in South Africa.	P≤0.05	Reject null, accept alternative
H_{0_d4}: There is no significant moderating effect of age on the relationship between financial inclusion and poverty among vulnerable households in South Africa.	P≥0.05	Accept null, reject alternative
H_{1_d4}: There is a significant moderating effect of age on the relationship between financial inclusion and poverty among vulnerable households in South Africa.	P≤0.05	Reject null, accept alternative
H_{0_d5}: There is no significant moderating effect of educational level on the relationship between financial inclusion and poverty among vulnerable households in South Africa.	P≥0.05	Accept null, reject alternative
H_{1_d5}: There is a significant moderating effect of educational level on the relationship between	P≤0.05	Reject null, accept alternative

financial inclusion and poverty among vulnerable households in South Africa.		
H_{0_d6}: There is no significant moderating effect of employment status on the relationship between financial inclusion and poverty among vulnerable households in South Africa.	P≥0.05	Accept null, reject alternative
H_{1_d6}: There is a significant moderating effect of employment status on the relationship between financial inclusion and poverty among vulnerable households in South Africa.	P≤0.05	Reject null, accept alternative
H_{0_d7}: There is no significant moderating effect of marital status on the relationship between financial inclusion and poverty among vulnerable households in South Africa.	P≥0.05	Accept null, reject alternative
H_{1_d7}: There is a significant moderating effect of marital status on the relationship between financial inclusion and poverty among vulnerable households in South Africa.	P≤0.05	Reject null, accept alternative
H_{0_d8}: There is no significant moderating effect of household size on the relationship between financial inclusion and poverty among vulnerable households in South Africa.	P≥0.05	Accept null, reject alternative
H_{1_d8}: There is a significant moderating effect of household size on the relationship between	P≤0.05	Reject null, accept alternative

financial inclusion and poverty among vulnerable households in South Africa.		
H_{0_d9}: There is no significant moderating effect of land/ property ownership on the relationship between financial inclusion and poverty among vulnerable households in South Africa.	P≥0.05	Accept null, reject alternative
H_{1_d9}: There is a significant moderating effect of land/ property ownership on the relationship between financial inclusion and poverty among vulnerable households in South Africa.	P≤0.05	Reject null, accept alternative

Source: Researcher's own construction.

These hypotheses were tested for each of the nine socioeconomic factors (gender, race, language, age, education, employment status, marital status, household size and land ownership).

Decision rule:

If the p-values of three or more relationships were greater than or equal to 0.05, then the null hypothesis was fully accepted.

If the p-values of exactly two relationships were greater than or equal to 0.05, the null hypothesis was partially accepted.

If the p-values of one or fewer relationships were greater than or equal to 0.05, the null hypothesis was fully rejected.

4.10 ETHICAL CONSIDERATIONS

Saunders, Lewis and Thornhill (2016: 239) defined *ethics* as the standards of behaviour that guide the research, how it is conducted and how it affects the rights of those affected by the research. This research used publicly available secondary data; therefore, no ethics application form was submitted using the Ethical Review Application System (ERAS) for publicly available data (low-risk desktop research). Instead, the researcher completed and submitted an ethics application form for DATA ONLY to the supervisor and Departmental/Business School Ethics Representative for noting and filing as guided and required by the University and department. The use of publicly available secondary data inhibits some of the ethical issues identified as unethical by Adams, Khan and Raeside (2014: 21), such as being biased and selective in sampling, making up data and falsifying results. Additionally, the study used both in-text referencing as well as compiling an extensive reference list to avoid plagiarism by citing, acknowledging and attributing information and past research to relevant sources that own them.

4.11 SUMMARY OF THE CHAPTER

This chapter presented the research design and methodology adopted by the study.It firstly introduced the chapter, then discussed different research paradigms. The positivistic research paradigm was identified as the most suitable paradigm. It is described as the assumption that the only way knowledge can be reliably obtained is through empirical means, using a scientific method. It was adopted for this study because this research relied on the premise that research should be objective, free of the values of the researcher and that knowledge relies on empirical knowledge that can be measured, which are all facets of a positivistic research paradigm. Other research paradigms, such as the interpretative and the pragmatic research paradigm, were also identified and discussed. It was concluded that their anchoring axiological, epistemological and ontological beliefs do not align with those of this study and could, therefore, not be adopted.

This chapter then identified the research design followed in this study. The research design is important because it provides an overall plan or map of how the research will be carried out. While three research designs were identified, namely quantitative, qualitative and mixed methods, the quantitative research design was chosen as the most appropriate design for this research study. A

quantitative research design is defined as procedures associated with testing objective theories by examining the relationship between variables. It was found fitting for this study as it aimed to determine the relationship between financial inclusion and poverty among vulnerable households in South Africa and the moderating effect of socioeconomic factors on that relationship.

The research methodology is closely related to the research design. It refers to the philosophy or general principle that guides research and how it will be conducted within certain constraints, ethical considerations, and dilemmas. This was therefore followed by the identification of the best-suiting methodology related to the positivistic research paradigm and quantitative research design. This study adopted the correlational research methodology. It is defined as a quantitative methodology within the positivistic paradigm in which two or more quantitative variables obtained from the same group of subjects are subjected to some statistical computations to determine whether a relationship exists between those variables or not. This section found that this methodology best suited this study because the study aimed to determine whether there is a relationship between variables and whether knowing the value of one variable can help predict the value of the other variable. This section also highlighted the importance of differentiating between a research methodology and a research method. While a methodology is an overall approach or principle of how the research will be approached, research methods are different tools used to conduct the actual research, such as those used to gather data.

Furthermore, chapter 4 discussed how theory could be developed; a phenomenon termed a research approach. The chapter found two overarching types of reasoning or theory development: deductive and inductive research approaches (both were explained). The deductive approach was adopted in this study and defined as an approach to theory development whereby empirical data is used to test hypotheses based on theory. This approach was chosen as the most fitting because this study extensively reviewed past literature, theories and knowledge to develop hypothetical statements that could be tested empirically, thus following a deductive approach.

Having ascertained the paradigm, design, methodology and approach relevant to the study, the chapter then discussed how the data would be sampled and coded by exploring how the data was cleaned for missing data using a listwise deletion approach. The responses stored as text in the Excel workbook were coded using the coding system of numbers provided in the questionnaire. The responses were then recoded in line with the objectives of the study. In order to measure financial inclusion, access scores of households were calculated across each of the four indicators (transactional bank account, credit, insurance, savings/investments) using percentages, and a household with a total access score of less than 0.5 was deemed financially excluded. A unit increase in the access score percentage meant a unit increase in the household's level of financial inclusion. In order to measure poverty, an overall multi-dimensional poverty index was created using three basic household needs: health, education and standard of living. A deprivation score under each of these three indicators was assigned to a household if they were deprived of that particular indicator. Resultantly, an overall deprivation score was calculated and measured in percentages. This section stated that a household with a deprivation score of 30% should be deemed poor. Lastly, socioeconomic factors were identified from household demographics and transformed using dummy variables where necessary to allow for statistical analysis.

Furthermore, the chapter explored how data would be collected, where it would be collected from and the type of data. The study used numerical data stored as an Excel workbook from FinMark Trust. The data relates to South African households' access to financial products and their demographics. A sample of 4992 was collected by asking questions to people sixteen years or older, using a closed-ended FinScope South Africa 2016 questionnaire. The questionnaire used different types of scales, including the ordinal scale, nominal scale, and a Likert scale, which were defined in this section.

The chapter then discussed the data analysis and introduced the two analytic techniques used in the study: descriptive statistics and inferential statistics. Descriptive statistics were defined as techniques used to summarise data and provide a graphical picture. Some descriptive statistics used include frequencies, percentages, means, minimum and maximum. Inferential statistics were described as those used to test hypotheses. Those used in this study included Pearson's product-

moment correlation, multiple regression and Analysis of Variance (ANOVA). Pearson's product-moment correlation was described as a technique used to test for multicollinearity among the socioeconomic factors before adding them to the multiple regression model. Multiple regression was used to test the hypotheses, proposing no significant relationship exists between financial inclusion and poverty. Also, socioeconomic factors do not have a moderating effect on the relationship between financial inclusion and poverty among South African vulnerable households respectively, while ANOVA was used to test the hypotheses statements which proposed that there is no significant relationship between household vulnerability and financial inclusion and household vulnerability and poverty, respectively.

Furthermore, the chapter provided the hypotheses statements, te hypotheses model, their related relationship that was tested, and the outcomes and decision rules. Lastly, chapter 4 acknowledged the importance of ethics in research. It highlighted that this research upheld all ethical considerations in its entirety. In short, Chapter 4 provided a framework or map of this study, as it identified, described, and justified the chosen research design and methodology adopted in conducting this research. Chapter 5 will present the results of the study.

CHAPTER 5
RESULTS OF THE STUDY

5.1 INTRODUCTION

Chapter 4 provided the chosen research design and methodology adopted in conducting this study. It also provided for the data analysis steps and procedures used to test the study's hypotheses. The study developed four null hypotheses and their respective alternative hypotheses, which were tested and reported in this chapter. The main objective of the study was to determine the moderating effect of socioeconomic factors on the relationship between financial inclusion and poverty among South African vulnerable households. Chapter 5 assists in accomplishing this by providing analysis results of the study's hypotheses and objectives. Subsequently, Chapter 5 addresses the third and fourth secondary objectives: to determine the relationship between financial inclusion and poverty,vulnerable households and financial inclusion, as well as vulnerable households and poverty in South Africa and to determine the moderating effect of socioeconomic factors on the relationship between financial inclusion and poverty among vulnerable households in South Africa.

In order to achieve these, this chapter provides this study's descriptive statistics and inferential statistics results. The descriptive statistics results for financial inclusion and its indicators, poverty and its indicators and the nine socioeconomic factors will be discussed. Inferential statistics results such as ANOVA determined whether financial inclusion and poverty differ among vulnerable households and households that are not vulnerable in South Africa. Multiple regression results showed the relationship between financial inclusion and poverty, as well as the moderating effect of socioeconomic factors on this relationship. Lastly, the hypotheses' outcomes and decisions are presented, followed by a summary of the chapter.

5.2 DATA CLEANING AND RESPONSE RATE

The data cleaning process explained in Chapter 4, section 4.6.2 showed that the total number of respondents who were heads of their households included in this study was 2759 (see Table 5.1), meaning out of 4992 respondents in the database, 2759 respondents were used for data analysis. This total number of respondents was obtained after eliminating those who did not give an answer to any of the questions, as well as those who chose the 'don't know' option in responding to any of the questions in the questionnaire. Therefore the response rate of the study was 55%, which was sufficient to conduct the analysis.

5.3 DESCRIPTIVE STATISTICS

The study used frequencies and percentages to summarise the socioeconomic factors of the households. The socioeconomic factors were segmented into household characteristics and demographics of heads of households. The results were presented in tables.

5.3.1 DESCRIPTIVE STATISTICS FOR HOUSEHOLDS

Table 5.1 also provides the information/properties of the households included in this study, starting with the household size and followed by the land ownership status of these households. Table 5.2 shows the demographics of the heads of the households.

Table 5.1: Characteristics of households

Households' information/ characteristics	**Frequency**	**Percentage**
Household size		
Small (1-5 members)	2609	95%
Big (6+ members)	150	5%
Household land or property ownership	1687	61.1%
Owns land	1072	38.9%
Does not own land		

Total number of households = 2759

Source: FinScope South Africa, 2016.

In relation to household size, Table 5.1 shows that most South African households are small, as 2609 households (95%) are small households with between one and five household members, while only 150 (5%) households are big households with more than six members. Additionally, the results show that 1687 households (61%) own the land or property on which they live, while 1072 households (39%) do not own the land or property on which they live. Thus, the majority of South Africans own the houses they live in and are either paying off a home loan for their houses or not paying off anything and fully owning their houses.

Table 5.2: Demographics of heads of households

Demographics	**Frequency**	**Percentage**
Gender		
Male	1425	51.6%
Female	1334	48.4%
Race		
Black	1861	67.5%
White	385	14%
Coloured	368	13.3%
Asian	145	5.3%
First/Home Language		
Nguni	1791	64.9%
Afrikaans	510	18.5%
English	458	16.6%
Age		
Adult (36-59)	1289	46.7%
Youth (18-35)	1010	36.6%
Old (60+ years)	443	16.1%
Child (0-17 years)	17	0.6%
Education level		

Low (no schooling, primary school level of education, some form of high school, matric, an apprenticeship programme)	2321	84.1%
High (a diploma, a degree or higher)	438	15.9%
Employment status		
Not employed (housewife, unemployed and looking for a job, unemployed and not looking for a job and retired)	973	35%
Employed (full-time, part-time, self-employed or working for another business or company)	1786	65%
Marital status		
Not married	1930	70%
Married	829	30%

Source: FinScope South Africa, 2016.

Table 5.2 shows that 1425 (52%) are male while 1334 (48%) are female. Thus, there are more male-headed households than female-headed households in South Africa. The results also show that the most dominant race is the Black race, as Black-headed households account for 1861 (68%) of the respondents, while the other races collectively account for 898 (32%) households. In particular, Coloured-headed households, White-headed households, and Asian-headed households account for 368 (13%), 385 (14%) and 145 (5%), respectively. Closely related to race is language. Most respondents spoke Nguni languages, with 1792 (65%) heads of households stating their first/home language as a Nguni language. Only 968 (35%) heads of households reported speaking other languages (Afrikaans = 510 households and English =458 households). These results show that in South Africa, most households speak Nguni languages, which was expected since the Black race was the most prominent race in this study, and Nguni languages are their first language.

Furthermore, the results indicate that 1289 (47%) heads of households are aged between 36 and 59 (adults), closely followed by those between 18 and 35 (youth) at 1010 (37%). Those aged 60 and above (old) comprised 443 (16%), and those 17 and younger (children) at 17 (0.6%). Thus, most households in South Africa are headed by adults, closely followed by youth-headed

households and households headed by the elderly. The lowest percentage of child-headed households can be attributed to the fact that only respondents who were 16 years and older were included in this study, thus limiting households headed by those younger than 16. Closely related to age are the level of education attained, the employment status and the marital status of heads of households. These socioeconomic factors are discussed next.

The results show that 2321 heads of households (84%) have attained a low level of education, including no schooling, primary school level of education, some form of high school, a matric or has been in an apprenticeship programme. The results further show that only 438 heads of households (16%) are headed by people who have attained a high level of education, either a diploma, a degree or higher. These results show that South Africa has gotten most citizens into the schooling system to attain basic education. However, the low percentage of 16% for households headed by people with at least a diploma, degree or higher certificates shows that not many heads of households in South Africa furthered their education beyond high school. The level of education attained impacts employment status. The next section discusses the results of this socioeconomic factor.

Regarding employment status, the results show that 1786 (65%) households are headed by employed people (these include full-time, part-time, self-employed or working for another business or company). A total of 973 (35%) are headed by those who are not employed (these include housewives, unemployed and looking for a job, unemployed and not looking for a job and retired). Furthermore, the results show that 1930 (70%) households are headed by people who are not married, while 829 (30%) are headed by people who are married. These results indicate that most households in South Africa are headed by a single person who assumes sole responsibility for their household without the assistance or support of a spouse. The next subsection discusses the descriptive statistics of the predictor variable financial inclusion and its indicators.

5.3.2 DESCRIPTIVE STATISTICS FOR FINANCIAL INCLUSION

Table 5.10 shows the levels of financial access, their respective percentages and meanings. No/low access was determined as having no ownership or having ownership of less than half of the products under each indicator. Partial access was determined as owning half of the products under each respective indicator. Moderately high access was determined as owning more than half (51%-74%) of the products under each indicator. High or total access was determined as having ownership of 75+ or all of the products under each indicator.

Table 5.3: Categories of access to different regulated financial products

Levels of access to financial products	**Access scores/ Percentages**	**Meaning**
Low access to a regulated transactional bank account (t-account) products	0% -25%	Households indicated that they own zero or one of the four types of transactional bank accounts.
Low access to regulated credit products	0% - 25%	Households indicated that they own zero or one of the four types of regulated credit products.
Low access to regulated insurance products	0%	Households indicated they have no ownership of any of the two types of regulated insurance products.
Low access to regulated savings or investment products	0% - 40%	Households indicated they have ownership of zero to four out of the ten types of regulated savings/investment products.
Partial access to regulated transactional account products	50%	Households indicated they own two of the four types of regulated transactional accounts.

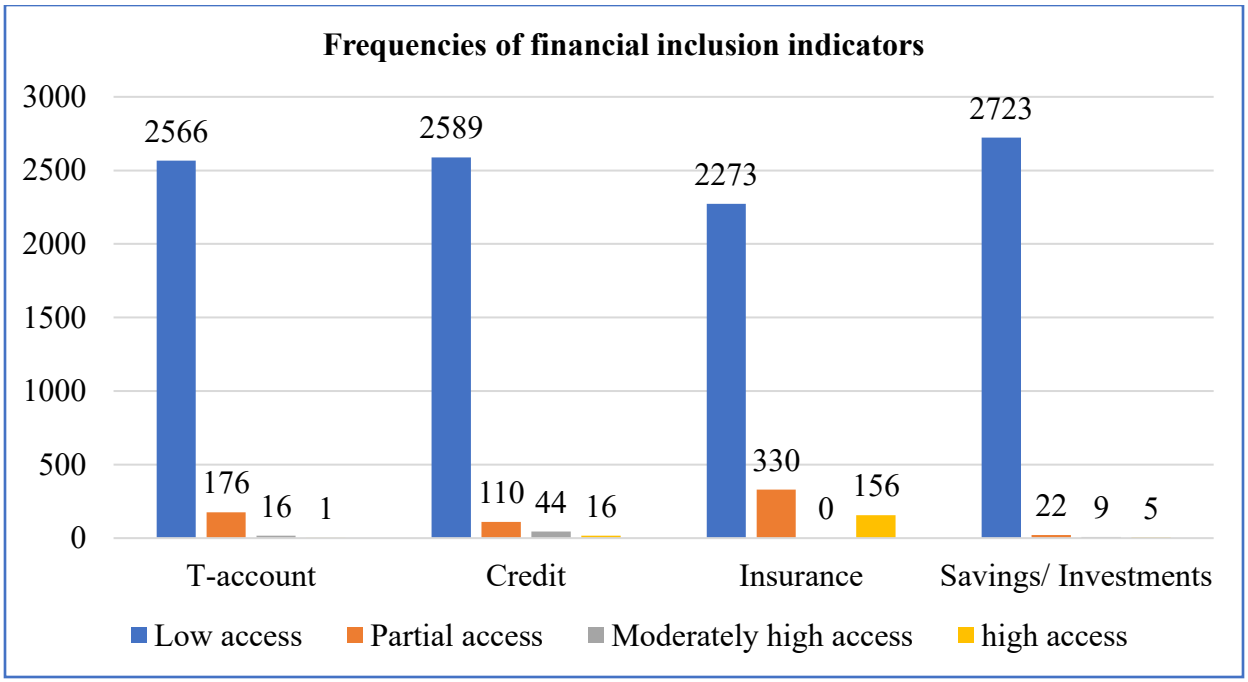
Partial access to regulated credit products	50%	Households indicated that they have ownership of two out of the four types of regulated credit products.
Partial access to regulated insurance products	50%	Households indicated that they have ownership of one out of the two types of regulated insurance products.
Partial access to regulated savings/ investment products	50%	Households indicated that they have ownership of five out of the ten types of regulated savings/investment products.
Moderately high access to regulated transactional account products	75%	Households indicated that they own three out of four of the types of regulated transactional bank accounts.
Moderately high access to regulated credit products	75%	Households indicated that they own three out of four of the regulated credit products.
Moderately high access to regulated insurance products	75%	N/A: the study used only two products.
Moderately high access to regulated savings/investment products	60%, 70%	Households indicated that they own six or seven out of the ten types of regulated savings/investment products, respectively.
High access to regulated transactional account products	100%	Households indicated that they have ownership of all four of the types of regulated transactional accounts.
High access to regulated credit products	100%	Households indicated that they have ownership of all four types of regulated credit products.

High access to regulated insurance products	100%	Households indicated that they have ownership of all two of the regulated insurance products.
High access to regulated savings/ investment products	80%- 90% &100%	Households indicated that they own eight, nine or ten out of the ten types of regulated savings/investment products, respectively.

Source: FinScope South Africa, 2016.

Table 5.3 above explains the different levels of access to regulated financial products. Figure 1 provides the results for frequencies of financial inclusion indicators.

Figure 5.1: Frequencies of financial inclusion indicators



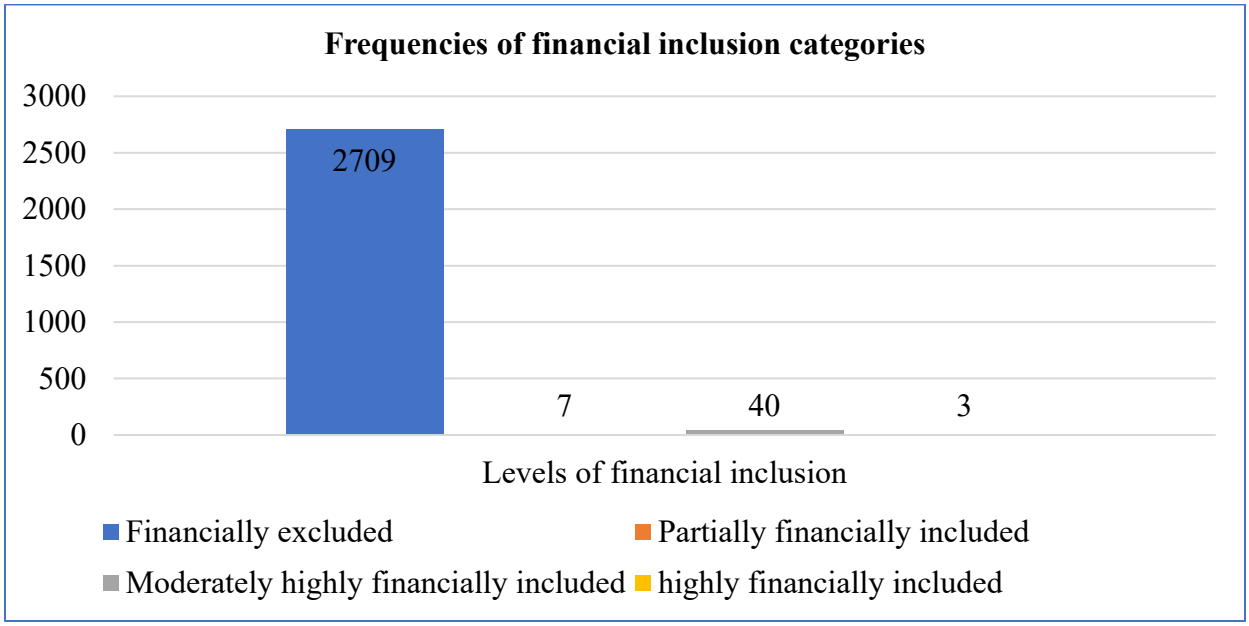
Source: FinScope South Africa, 2016.

Figure 5.1 shows that 2566 households (93%) have low access to regulated transactional accounts, while only 176 households (6.4%) in South Africa have partial access to regulated transactional

bank account products. Lastly, only 16 households (0.6%) and one household (0.1%) have moderately high access and high access to regulated transactional account products, respectively. Figure 5.1 also shows very low access to regulated credit among South African households. The results show that 2589 households (93.84%) have low access to regulated credit products. Only 110 households (4%) have partial access to regulated credit products. Lastly, only 44 households (1.6%) have moderately high access to regulated credit products, and about 16 households (0.6%) have high access to regulated credit products.

Figure 5.1 also indicated that 2273 households (82.4%) have low access to regulated insurance products, while only 330 households (12%) have partial access to regulated insurance products. Lastly, only 156 households (5.7%) have high access to regulated insurance products. In relation to regulated savings and investment products, the results show that 2723 households (98.7%) have low access to regulated savings/investment products. Furthermore, only 22 households (0.8%) have partial access to regulated savings or investment products, while nine households (0.33) have moderately high access to regulated savings or investment products. Lastly, only five households (0.18%) have high access to regulated savings or investment products. Figure 5.2 provides the frequencies of financial inclusion categories, following ascertaining the frequencies of the financial inclusion indicators.

Figure 5.2: Frequencies of financial inclusion categories



Source: FinScope South Africa, 2016.

The results in Figure 5.2 show that 2709 households (98.19%) are financially excluded, while seven households (0.25%) are partially financially included. Additionally, only 40 households (1.45%) are moderately highly financially included, and only three (0.11%) are highly financially included.

5.3.3 DESCRIPTIVE STATISTICS OF POVERTY

This subsection discusses the descriptive statistics for the criterion variable poverty and its subsequent indicators. Table 5.4 shows the deprivation levels, their respective cut-off percentages, and their meanings. The deprivation levels were measured by health, education and standard of living. As discussed in Chapter 4, health refers to a household's level of deprivation of medical treatment and nutrition. Education refers to the head of the household's deprivation of education and that of school-going children in that household. Lastly, deprivation of a decent standard of living describes a household's lack of electricity, tap water, cooking fuel, assets (e.g., TV, refrigerator, cell phone, personal computer, TV subscription or motor vehicle) and the type of house they live in.

Table 5.4: Categories of deprivations of poverty indicators

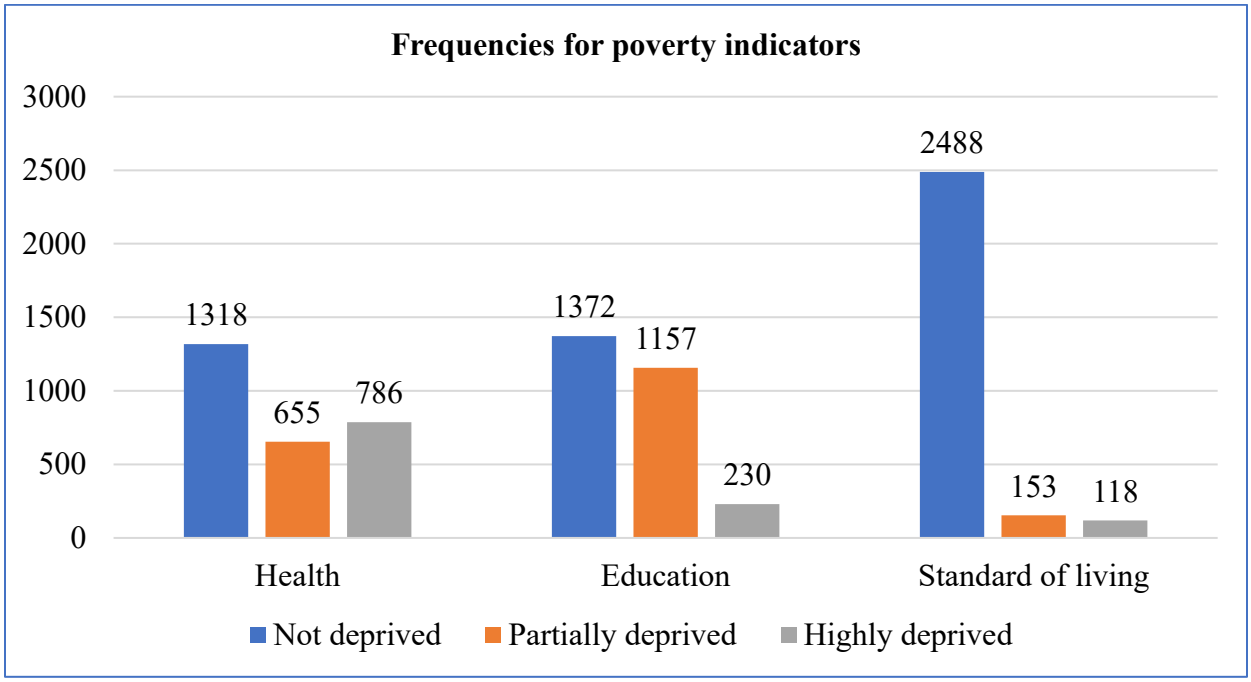
Deprivation levels	Percentages (Deprivation scores)	Meaning
Not deprived of health	0%	Not deprived of any of the two measures under health.
Not deprived of education	0%	Not deprived of any of the two measures under education.
Not deprived of a decent standard of living	0%-33%	Deprived of none, one or two of the six measures under standard of living.
Partially deprived of health	50%	Deprived of one out of two measures of health
Partially deprived of education	50%	Deprived of one out of two measures of education
Partially deprived of a decent standard of living	50%	Deprived of three out of six of the measures of standard of living
Highly deprived of health	100%	Deprived of all two measures under health.
Highly deprived of education	100%	Deprived of all two measures under education.

Highly deprived of a decent standard of living	67-100%	Deprived of four, five or all six measures under standard of living

Source: FinScope South Africa, 2016.

Table 5.4 shows the deprivation levels of the poverty indicators, their respective percentages and meanings. Figure 5.3 provides the results for frequencies of poverty indicators, while Figure 5.4 depicts frequencies for these overall poverty categories.

Figure 5.3: Frequencies for poverty indicators

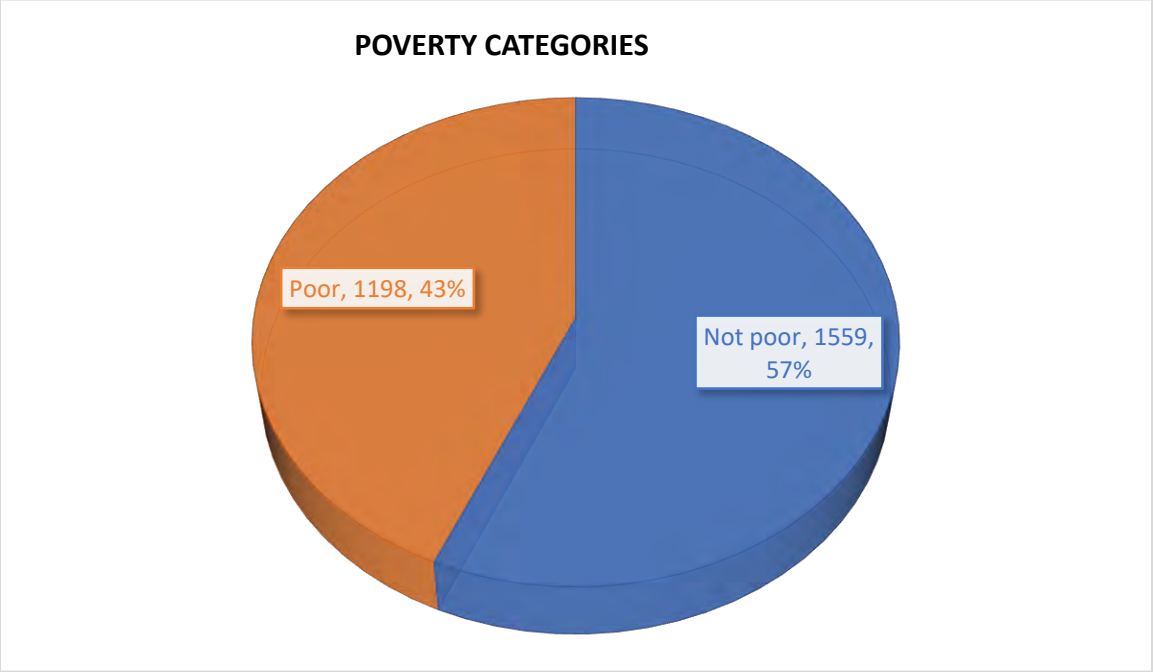


Source: FinScope South Africa, 2016.

Figure 5.3 shows that 1318 households (47.8%) are not deprived in terms of health, 655 households (23.7%) are partially deprived of health, and 786 households (28.5%) are highly deprived of the health indicator, thus, unable to afford both proper medical treatment and proper nutrition. In

relation to education, 1372 households (49.7%) are not deprived, 1157 households (41.9%) are partially deprived, and only 230 households (8.3%) are highly deprived of education. These results indicate that most South African households can afford some form of education. Furthermore, in relation to the standard of living, the results show that 2488 households (90.2%) are not deprived, 153 households (5.5%) are partially deprived, and 118 (4.3%) are highly deprived. These results indicate that most South African households can afford a decent and acceptable standard of living. Figure 5.4 depicts how many households are poor and how many are not poor.

Figure 5.4: Frequencies for poverty categories



Source: FinScope South Africa, 2016.

Figure 5.4 indicates that 1559 households (57%) are not poor, while 1198 households (43%) are poor. Having ascertained how many households are poor and how many are not poor, the next subsection provides the descriptive statistics of poverty and its indicators, including the mean, the median, the mode, the standard deviation, the minimum and the maximum.

5.4 ANOVA RESULTS

This section presents the results of the Analysis of Variance tests (ANOVA) conducted to determine whether differences exist between vulnerable households' level of financial inclusion and poverty and the level of financial inclusion and poverty of households that are not vulnerable, as described by the socioeconomic factors of the heads of households and their households. As stated in Chapter 4, Analysis of Variance *(ANOVA)* is a statistical test used to determine whether groups (categories) are different by analysing the variance within and between variables by comparing their means (Saunders, Lewis and Thornhill, 2016: 544). The results will also show whether the differences between the groups are significant using the F-statistic, wherein the larger it is, the more different the groups' pr categories will be (Field, 2009:349). Lastly, the results will indicate whether these differences between groups are statistically significant by using a p-value, wherein a p-value less than or equal to 0.05 indicates significant differences between variables, subsequently indicating the presence of statistically significant relationships between different vulnerable households and financial inclusion and poverty (Saunders, Lewis and Thornhill, 2016: 544).

5.4.1 VULNERABLE HOUSEHOLDS AND FINANCIAL INCLUSION

This section discusses the ANOVA results that show the relationship between financial inclusion and vulnerable households in South Africa. It was necessary to conduct an ANOVA test because it assisted in achieving the third objective of determining the relationship between financial inclusion and vulnerable households in South Africa. ANOVA shows whether groups (categories) are different by analysing the variance within and between variables by comparing their means (Saunders, Lewis and Thornhill, 2016: 544). ANOVA with a significant level of 0.05 or less indicates the presence of a statistically significant difference between groups/categories (Saunders. Lewis and Thornhill, 2016: 543). Table 5.5 shows ANOVA results for vulnerable households and financial inclusion.

Table 5.5: ANOVA results for vulnerable households and financial inclusion

Socioeconomic factors	**Categories**	**Financial inclusion means**	**F-statistic**	**Significance level**
Gender	Female	8.4961%	33.929	**<0.001**
	Male	11.3149%		
Race	Black	8.1690%	115.959	**<0.001**
	Other races	13.6470%		
Home Language	Nguni	8.1337%	107.341	**<0.001**
	Other languages	13.3161%		
Age	Child	4.5588%	18.488	**<0.001**
	Youth	8.6658%		
	Adult	11.8095%		
	Old	7.6862%		
Level of education attained	High level of education	22.7854%	648.441	**<0.001**
	Low level of education	7.5302%		
Employment status	Employed	12.8471%	286.922	**<0.001**
	Not employed	4.6377%		
Marital status	Not married	8.1276%	137.407	**<0.001**
	Married	14.1993%		
Household size	Small	10.2156%	20.570	**<0.001**
	Big	5.3667%		
Land ownership	Does not own land	8.6136%	19.362	**<0.001**
	Owns land	10.8025%		
Red & bold = statistically significant				

Source: Research findings: IBM SPSS Statistics.

The results in Table 5.5 show that the financial inclusion scores of female-headed households are less than those of male-headed households. Secondly, the results provide the F-statistic to determine whether the variances between the means of males and females are different. As seen above, the high F-statistic of gender shows variability between the financial inclusion scores of female-headed households and male-headed households. Lastly, the significant value was below 0.05, meaning the F-statistic was significant. This means that the observed difference in the financial inclusion scores of female-headed households and male-headed households was significant. Therefore, the results indicated the presence of a significant relationship between female-headed households and financial inclusion in South Africa.

In relation to race, the results show that the financial inclusion score means that households headed by Black people are less than those headed by people of other races. Secondly, the high F-statistic of 115.959 shows variability between the financial inclusion scores of households headed by Black people and those headed by people of other races. Lastly, the significance value of <0.01 was below 0.05, meaning the F-statistic was significant. This means that the observed differences in the financial inclusion scores of households headed by Black people and households headed by people of other races were significant. Therefore, the results indicated the presence of a significant relationship between households headed by Black people and financial inclusion in South Africa.

Furthermore, the results showed that financial inclusion differs between households headed by people who speak Nguni languages as their first/home language (IsiNdebele, IsiXhosa, IsiZulu, Sepedi, Sesotho, Setswana, Siswati, Tshivenda, Xitsonga) and those headed by people who speak other languages (English and Afrikaans). The results showed that the mean of the financial inclusion scores of households headed by Nguni-speaking people was less than those of households headed by people who speak other languages. Secondly, the high F-statistic showed variability between the mean financial inclusion scores of households headed by Nguni-speaking people and the mean of households headed by people who spoke other languages. Lastly, the significance value was <0.001, which is below 0.05, meaning the F-statistic was significant. Thus, the observed difference between the mean scores of financial inclusion of households headed by Nguni-speaking people and the mean of households headed by people who speak other languages was significant. Therefore, the results indicated the presence of a significant relationship between

households headed by people who speak any of the Nguni languages and financial inclusion in South Africa.

The results also indicated that financial inclusion differs between vulnerable households in relation to the age of the head of the household (child-headed, youth-headed and households headed by the elderly) and households not considered vulnerable in relation to age, which is adult-headed households. The results showed that the mean scores of financial inclusion of child-headed households, youth-headed households and households headed by the elderly were lower than the mean scores of financial inclusion of households headed by adults. Additionally, the high F-statistic indicated that there was indeed variability between the means of the different types/groups of households. Lastly, the low significance value of <0.001, below 0.05, indicated that the variability was significant across all four age groups. These results, therefore, indicated the presence of a significant relationship between child-headed households, youth-headed households and households headed by the elderly and financial inclusion in South Africa.

In relation to the highest level of education attained by the head of a household, the results further indicated that financial inclusion differs between households headed by people who have attained a low level of education and those headed by people who have attained a high level of education. The results showed that the mean access scores of households headed by people who attained a low level of education were less than those of households headed by people who attained a high level of education. Secondly, the high F-statistic showed variability between the mean financial inclusion scores of households headed by people who have attained a low level of education and those headed by people who have attained a high level of education. Lastly, the significance value was <0.001, which is below 0.05, meaning the F-statistic was significant. This means that the observed difference in the mean scores of financial inclusion of households headed by people who have attained a low level of education and that of households headed by those who have attained a high level of education was significant. Therefore, the results indicated the presence of a significant relationship between households headed by people who have attained a low level of education and financial inclusion in South Africa.

In relation to employment status, the results indicated that financial inclusion differs between households headed by employed people and those headed by people who are not employed. The results showed that the mean financial inclusion scores of households headed by people who are not employed were less than those headed by employed people. Secondly, the high F-statistic showed variability between the means of financial inclusion scores of households headed by people who are not employed and those headed by employed people. Lastly, the significance value was <0.001, below 0.05, meaning the F-statistic was significant. This means that the observed difference in the mean scores of financial inclusion of households headed by people who are not employed and households headed by employed people was significant. Therefore, the results indicated the presence of a significant relationship between households headed by people who are not employed and financial inclusion in South Africa.

In relation to marital status, the ANOVA results indicated that financial inclusion differs between households headed by people who are married and those headed by people who are not married. The results showed that, on average, the financial inclusion scores' mean of households headed by people who are not married was less than those headed by people who were married. Secondly, the high F-statistic showed variability between the financial inclusion scores' means of households headed by people who are not married and those headed by people who are married. Lastly, the significance value was <0.001, below 0.05, meaning the F-statistic was significant. This means that the observed difference in the financial inclusion scores' means of households headed by people who are not married and households headed by people who are married were significant. Therefore, the results indicated the presence of a significant relationship between households headed by people who are not married and financial inclusion in South Africa.

With regards to household size, the ANOVA results indicated that financial inclusion differs between big households (6+ household members) and small households (1-5 household members). The results showed that the financial inclusion scores' mean of big households was less than that of small households. These results showed that, on average, big households were less financially included than small households. Secondly, the high F-statistic showed variability between the financial inclusion scores' mean of big households and that of small households. Lastly, the

significance value was <0.001, below 0.05, meaning the F-statistic was significant. Thus, the observed difference in the financial inclusion scores' means of big households and small households was significant. Therefore, the results indicated the presence of a significant relationship between big households and financial inclusion in South Africa.

Lastly, in relation to land/property ownership, the ANOVA results indicated that financial inclusion differs between households headed by people who do not own the property/land on which they live and those headed by people who own the property/land on which they live. The financial inclusion scores' mean of households headed by people who do not own the property/land on which they live (8.6136%) was less than the financial inclusion scores' mean of households headed by people who own the property/land on which they live (10.8025%). The high F-statistic of 19.362 showed variability between the two means. The significance value of <0.01, which is lower than 0.05, showed that the variability between these two means was significant. Therefore, the results above indicated the presence of a significant relationship between households headed by people who do not own the property or land on which they live and financial inclusion in South Africa.

5.4.2 VULNERABLE HOUSEHOLDS AND POVERTY

This section discusses the ANOVA results that show the relationship between poverty and vulnerable households in South Africa. It was necessary to conduct an ANOVA test because it assisted in achieving the third objective of determining the relationship between poverty and vulnerable households in South Africa. ANOVA shows whether groups (categories) are different by analysing the variance within and between variables by comparing their means (Saunders, Lewis and Thornhill, 2016: 544). ANOVA with a significant level of 0.05 or less indicates the presence of a statistically significant difference between groups/categories (Saunders. Lewis and Thornhill, 2016: 543). Table 5.6 shows the ANOVA results for vulnerable households and poverty.

Table 5.6: ANOVA results for vulnerable households and poverty

Socioeconomic factor	Categories	Means	F- statistic	Significance value
Gender	Female	30.3428%	34.444	**<0.001**
	Male	25.2535%		
Race	Black	32.6755%	297.204	**<0.001**
	Other	17.4324%		
Home language	Nguni	33.1924%	326.626	**<0.001**
	Other	17.5784%		
Age	Child	44.1333%	10.927	**<0.001**
	Youth	26.4802%		
	Adult	26.8339%		
	Old	32.4415%		
Educational level	Low	31.3495%	425.086	**<0.001**
	High	8.4506%		
Employment status	Not employed	36.0427%	214.181	**<0.001**
	Employed	23.1769%		
Marital status	Not married	30.7147%	114.826	**<0.001**
	Married	20.7287%		
Household size	Big	42.4231%	67.009	**<0.001**
	Small	26.8685%		
Land/Property ownership	Does not own land/ property	25.7927%	12.395	**<0.001**
	Owns land/ property	28.9352%		
Red & bold = statistically significant				

Source: Research results: IBM SPSS Statistics.

Table 5.6 shows that, on average, female-headed households have a deprivation score mean (30.3428%) higher than that of male-headed households (25.2535%). This is also supported by the high F-statistic of 34.444. The latter indicates a difference between the two means and a significance value of <0.01, which is below 0.05, indicating that the difference between the two means was statistically significant. These results, therefore, indicate the presence of a significant relationship between female-headed households and poverty in South Africa.

The ANOVA results also indicated that poverty levels differ among households headed by Black people and households headed by people of other races (White, Colored and Asian). The results showed that in terms of the deprivation scores' means, households headed by Black people have a mean (32.6755%) higher than those headed by people of other races (17.4324%). Thus, on average, households headed by Black people are poorer than those headed by people of other races. This is also supported by the high F-statistic of 297.204, which indicated the presence of a difference between the two means and a significance value of <0.01. The latter was below 0.05, indicating that the difference between the two means was statistically significant. These results, therefore, indicated the presence of a significant relationship between households headed by Black people and poverty in South Africa.

Additionally, the results indicated that poverty levels are different among households headed by people who speak Nguni languages (IsiNdebele, IsiXhosa, IsiZulu, Sepedi, Sesotho, Setswana, Siswati, Tshivenda, Xitsonga) and households headed by people who spoke other languages (Afrikaans and English). The results showed that households headed by Black people have a deprivation score mean (33.1924%) that is higher than that of households headed by people of other races (17.5784%). This was also supported by the high F-statistic of 297.204, which indicated a difference between the two means, as well as a significance value of <0.01, below 0.05, which indicated that the difference between the two means was statistically significant. These results, therefore, indicated the presence of a significant relationship between households headed by Black people and poverty in South Africa.

The deprivation score means showed that, on average, child-headed households are the poorest as they have the highest deprivation scores mean (44.1333%), followed by households headed by old people (32.4415%), households headed by adults (26.8399%), and lastly youth-headed households (26.4802%). The F-statistic was also high (10.927), indicating a difference in the poverty levels of the households headed by people of different ages. The significance value of <0.01, below 0.05, also indicated that the difference between the four means was statistically significant. These results, therefore, indicated the presence of a significant relationship between households headed by old people, adults, youth and children and poverty in South Africa.

The results further indicated that poverty levels differ among households headed by people who have attained a low level of education and households headed by people who have attained a high level of education. The deprivation scores mean of households headed by people who have attained a low level of education (31.3495%) was significantly higher than the mean of households headed by people who have attained a high level of education (8.4506%), indicating that, on average, households headed by people who have attained a low level of education are poorer than households headed by people who have attained high levels of education. This was also supported by the large F-statistic of 425.086, which indicated a difference in the two means, as well as a significance value lower than 0.05, indicating that the difference in the means was statistically significant. These findings indicated the presence of a significant relationship between households headed by people who have attained low levels of education and poverty in South Africa.

The total deprivation scores mean of households headed by people who are not employed (36.0427%) was higher than the mean of households headed by people who are employed (23.1769%). This was also supported by the large F-statistic of 214.181, which indicated a difference between the two means, as well as the significance value of <0.001. The latter was lower than 0.05, thus indicating that the difference between the means was statistically significant. These findings indicated the presence of a significant relationship between households headed by people who are not employed and poverty in South Africa.

Households headed by people who are not married had a higher deprivation score (30.7147%) than those headed by people who are married (20.7287). This was also supported by the high F-statistic of 114.826, which indicated a difference between the two means, as well as a significance value of <0.01, below 0.05, indicating that the difference between the two means was statistically significant. These results, therefore, indicated the presence of a significant relationship between households headed by people who are not married and poverty in South Africa.

The total deprivation scores mean of big households (42.4231%) was significantly higher than that of small households (26.8685%). This was also supported by the large F-statistic of 67.009, which showed that the two means are different. The significance value of <0.001, which is lower than 0.05 indicated that the difference between the means was statistically significant. These findings indicated the presence of a significant relationship between big households and poverty.

Lastly, households headed by people who do not own the property/land on which they live had a total deprivation score mean (25.7927%) that was lower than that of households headed by people who own the property/land on which they live (28.9352%). This was also supported by the F-statistic of 12.395, as well as a significance value of <0.01, which is below 0.05, indicating that the difference between the two means was statistically significant. These results, therefore, indicated the absence of a significant relationship between households headed by people who do not own the property or land on which they live and poverty in South Africa.

5.5 MULTIPLE REGRESSION

This section first uses multiple regression to determine the relationship between financial inclusion and poverty. As stated in Chapter 4, multiple regression assesses the relationship between a numerical criterion variable and two or more numerical predictor variables (Hair et al., 2014: 151). A significance level less than or equal to 0.05 reflects a statistically significant relationship between the predictor variable and the criterion variable (Saunders, Lewis and Thornhill, 2016: 548). After the relationship between these two variables is determined, the moderating variables are tested by introducing socioeconomic factors on the relationship between the independent

variable (financial inclusion) and the dependent variable (poverty). In order to allow for inferential analysis, all nonmetric data was dummy-coded and used in the analysis as dummy variables. As indicated in Chapter 4, *dummy variables* refer to variables created to transform a nonmetric variable into a metric one by assigning that variable a number (0 or 1) to indicate one state or another (Adams, Khan and Raeside, 2014: 208). Table 5.7 shows the results of the multiple regression analysis used to determine the relationship between financial inclusion and poverty.

Table 5.7: Relationship between financial inclusion and poverty

Dependent variable: Poverty			
Independent variable		**Beta**	**Significance value**
Financial inclusion		-0.716	**<0.001**
Constant= 34.836			**<0.001**
R^2= 0.159	Adjusted R^2= 0.159		
Red& bold= statistically significant			

Source: IBM SPPS Statistics findings.

Table 5.7 shows that the model fit measures which are R^2 and adjusted R^2 are 0.159 or 15.9%, meaning only 15.9% of the variance in poverty can be explained by financial inclusion. The results further show that the regression/beta coefficient of financial inclusion is -0.716. This means that a unit change in financial inclusion leads to a -0.716 change in poverty in the opposite direction. A constant of 34.836 means that when a household is completely financially excluded (total access score of zero), their deprivation is 34.836, thus making them poor. Additionally, the beta coefficients of both the constant and the beta coefficient were <0.001, which is less than 0.05 and thus statistically significant. This, therefore, implies that, in general terms, there was a statistically significant negative relationship between financial inclusion and poverty in South Africa. In order to achieve the fourth objective of the study, namely to determine the moderating effect of socioeconomic factors on the relationship between financial inclusion and poverty among vulnerable households, socioeconomic factors were added to the multiple regression model. Before adding the socioeconomic factors, it was important to determine whether these socioeconomic

factors were not highly correlated, thus creating multicollinearity. To this, a Pearson's product-moment correlation analysis was first performed.

5.6 PEARSON'S PRODUCT-MOMENT CORRELATION

Pearson's product-moment correlation analysis was performed to determine the correlation between moderator variables. A very high correlation between variables is called multicollinearity (Field, 2009: 223). It is important to ensure variables are independent of each other (absence of multicollinearity) in multiple regression analysis because high correlations render regression coefficients of predictor variables unreliable during the multiple regression analysis, creating shared variance between the predictor variables and thus reducing the reliability of interpreting the role played by each predictor variable in the linear relationship (Field, 2009: 224).

Before a moderation analysis was made, it was important to determine whether the socioeconomic factors that were going to be introduced into the multiple regression model were highly correlated, as this could impact the results of the model (Hair et al., 2014: 21). A correlation coefficient which is greater than or equal to 0.5 shows high correlation (Saunders, Lewis and Thornhill, 2016: 545) and multicollinearity is indicated by a correlation coefficient which is greater than or equal to 0.9 (Hair et al., 2013 as cited in Saunders, Lewis and Thornhill, 2016:549). Table 5.8 provides a correlation matrix results of all the socioeconomic factors introduced into the model.

Table 5.8: Correlation matrix of socioeconomic factors

Socioeconomic factors	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**
1. Gender	1	0.32	-0.05	0.15	0.16	0.23	0.07	0.06	0	0	0.03
2. Marital status	0.32	1	0.17	0.28	0.28	0.09	0.15	-0.03	0.04	0.22	-0.09
3. Land ownership	-0.04	0.17	1	0.06	0.03	-0.14	0.04	-0.04	0.03	0.28	-0.24

4. Race	0.15	0.28	0.06	1	**0.93**	0.06	0.14	0.05	0.02	0.13	-0.14
5. Language	0.16	0.28	0.03	**0.93**	1	0.08	0.14	0.05	0.02	0.12	-0.11
6. Employment	0.23	0.09	-0.14	0.06	0.08	1	0.19	0.10	0.09	-0.09	0.48
7. Education	0.07	0.15	0.04	0.14	0.14	0.19	1	0.06	0.03	0.02	0.05
8. HH-size	0.06	-0.03	-0.04	0.05	0.05	0.10	0.06	1	0	-0.02	0.03
9. Age: Child	0	0.04	0.03	0.02	0.02	0.09	0.03	0	1	-0.06	-0.03
10. Age: Youth	0	0.22	0.28	0.13	0.12	-0.09	0.02	-0.02	-0.06	1	-0.33
11. Age: Old	0.03	-0.09	-0.24	-0.14	-0.11	0.48	0.05	0.03	-0.03	-0.33	1
Red & bold = strongly correlated (multicollinearity)											

Source: IBM SPPS Statistics findings.

The results of Table 5.8 show that only the race of the head of a household and their first/home language are strongly positively correlated with a correlation coefficient of 0.930, thus indicating the presence of multicollinearity between the two factors (Field, 2009: 223). In order to eliminate this multicollinearity, these two factors were combined into one factor; race*language, to eliminate redundancy and multicollinearity. The rest of the socioeconomic factors were not highly correlated; thus, there was no multicollinearity between them.

5.7 THE MODERATING EFFECT OF SOCIOECONOMIC FACTORS

Since the model fit results in Table 5.7 showed that only 15.9% of the variance in poverty could be explained by financial inclusion, the study introduced socioeconomic factors as moderators to determine whether they moderated the relationship between financial inclusion and poverty among vulnerable households in South Africa. The socioeconomic factors were multiplied by financial inclusion to create moderating variables, which were introduced into the model. The results are presented below.

Table 5.9: The moderating effect of socioeconomic factors

Dependent variable: Poverty		
Independent variable	**Beta coefficient**	**Significance value**
Financial inclusion	-0.010	0.885
Gender	-2.623	**0.008**
Marital status	6.291	**<0.001**
Land ownership	-4.250	**<0.001**
Race* Language	12.428	**<0.001**
Employment	5.245	**<0.001**
Educational level	21.608	**<0.001**
Household size	11.819	**<0.001**
Age: Child	0.529	0.923
Age: Youth	-5.474	**<0.001**
Age: Old	0.380	0.757
FI*Gender	0.122	0.057
FI*Marital	-0.180	**0.009**
FI*Land	0.109	0.096
FI* (Race*Language)	-0.006	0.965
FI*Employment	0.641	0.142
FI*Edu	-0.798	0.084
FI*HH-size	-0.090	0.308

FI*Child		-0.504			**<0.001**
FI*Youth		-0.358			0.074
FI*Old		0.168			**0.008**
Constant		3.449			0.52
Model fit	R^2 = 0.334	Adjusted R^2=0.329	R^2 change= 0.175	F-change= 34.155	Sif. F-change = <0.001
Red & bold = statistically significant					

Source: IBM SPPS Statistics findings.

The results in Table 5.9 show that introducing socioeconomic factors into the model increased the model fit measure adjusted R-square from 15.9% to 32.9%, meaning the socioeconomic factors impacted the variance in poverty. Furthermore, the R- square change of 0.175 implies that the model fit improved by 17.5% with a significance value of <0.001. These results indicate that introducing the socioeconomic factors into the analysis statistically significantly improved model prediction by about 18%.

The results above showed that as independent variables, gender and age in relation to youth and land or property ownership had a statistically significant negative relationship with poverty, as their coefficients were -2.623, -4.250 and -5.474, respectively. On the contrary, the results showed that as independent variables, marital status, race and language, employment status, the highest level of education attained, and household size had a statically significant positive relationship with poverty as the beta coefficients were 6.291, 12.428, 5.245, 21.608 and 11.819. The significance values were below 0.05. The results also showed that age in relation to children and age in relation to old people had a statistically insignificant positive relationship with poverty, as the beta coefficients were 0.529 and 0.38. Significance values were 0.923 and 0.757, respectively.

However, as moderating variables, the results in Table 5.18 showed that the interaction variable of gender and financial inclusion had a positive beta coefficient of 0.122 and a significance value of 0.057, which was not statistically significant. These results indicated that gender does not have a moderating effect on the relationship between financial inclusion and poverty among vulnerable households in South Africa. Similarly, the interaction variables of financial inclusion and land or property ownership and financial inclusion and employment status had beta coefficients of 0.109 and 0.641, respectively, and significance values above 0.05. Thus, not statistically significant. These results indicated that land or property ownership and employment status did not have a moderating effect on the relationship between financial inclusion and poverty among vulnerable households in South Africa.

The interaction variable of financial inclusion and marital status was found to have a significance value below 0.05, which was statistically significant, and a beta coefficient of -0.180. This means that marital status has a moderating effect on the relationship between financial inclusion and poverty among vulnerable households in South Africa. The interaction variable of financial inclusion and the product of race and language had a significance value of 0.965, which is above 0.05, and thus not statistically significant, and a beta coefficient of -0.006. This means that race and language do not have a moderating effect on the relationship between financial inclusion and poverty among vulnerable households in South Africa.

Furthermore, the results showed that the interaction variable of financial inclusion and the highest level of education had a negative beta coefficient of -0.798 and a significance value of 0.084, which is not statistically significant. This means that the highest level of education attained does not have a moderating effect on the relationship between financial inclusion and poverty among vulnerable households in South Africa. Similarly, the interaction variable of financial inclusion and household size had a beta coefficient of -0.090 and a significance value of 0.38, which is not statistically significant. This means that household size does not have a moderating effect on the relationship between financial inclusion and poverty among vulnerable households in South Africa.

Additionally, the interaction variable of financial inclusion and age in relation to youth had a beta coefficient of -0.358 and a significance value of 0.074, which is not statistically significant. This means that age in relation to youth does not have a moderating effect on the relationship between financial inclusion and poverty among vulnerable households in South Africa. Contrary to youth, the interaction variable of financial inclusion and age in relation to children had a beta coefficient of -0.504 and a significance value of <0.001, which is statistically significant. This means that age in relation to children has a moderating effect on the relationship between financial inclusion and poverty among vulnerable households in South Africa. Lastly, the interaction variable of financial inclusion and age in relation to old people had a positive beta coefficient of 0.168 and a significance value of 0.008, which was statistically significant. This means that age in relation to old people has a moderating effect on the relationship between financial inclusion and poverty among vulnerable households in South Africa.

5.8 HYPOTHESES, RESULTS, AND DECISIONS

This section presents the outcomes of the hypotheses tests as well as the decisions. It first presents the outcomes of the hypothesis testing the relationship between financial inclusion and poverty in South Africa. It also presents the outcomes and decisions of the hypothesis testing the relationship between vulnerable households and financial inclusion and that which tested the relationship between vulnerable households and poverty in South Africa. Those are followed by the outcomes and decisions of the hypothesis testing the moderating effect of socioeconomic factors on the relationship between financial inclusion and poverty among vulnerable households in South Africa. Lastly, a table of the outcomes of socioeconomic factors is presented as an alternative explanation to the relationship between socioeconomic factors and poverty among vulnerable households in South Africa.

Table 5.10: Financial inclusion and poverty (multiple regression results)

Hypothesis statements	**Direction of relationship**	**Significance**	**Outcome**
H_{0_a}: There is no significant negative relationship between financial			

inclusion and poverty among South African vulnerable households. H_{1_a}: There is a significant negative relationship between financial inclusion and poverty among South African vulnerable households.	Negative	**<0.001**	Reject null, accept alternative
Red & bold= statistically significant			

Source: IBM SPPS Statistics findings.

Decision rule: The significance/p-value is < 0.001, which is less than 0.05. Therefore, the null hypothesis was rejected, and the alternative was accepted. The results showed a significant negative relationship between financial inclusion and poverty in South Africa. The next table shows the hypothesis results for the relationship between vulnerable households and financial inclusion in South Africa.

Table 5.11: Vulnerable households and financial inclusion (ANOVA results)

H_{0_b}: There is no significant relationship between household vulnerability and financial inclusion in South Africa. H_{1_b}: There is a significant relationship between household vulnerability and financial inclusion in South Africa.		
Relationship tested	**Significance level**	**Outcome**
H_{0_b1}: There is no significant relationship between being female and financial inclusion. H_{1_b1}: There is a significant relationship between being female and financial inclusion.	**<0.001**	Reject null, accept alternative
H_{0_b2}: There is no significant relationship between being Black and financial inclusion. H_{1_b2}: There is a significant relationship between being Black and financial inclusion.	**<0.001**	Reject null, accept alternative

H_{0_b3}: There is no significant relationship between speaking a Nguni language and financial inclusion. H_{1_b3}: There is a significant relationship between speaking a Nguni language and financial inclusion.	**<0.001**	Reject null, accept alternative
H_{0_b4}: There is no significant relationship between age (child-headed, youth-headed, household headed by the elderly) and financial inclusion. H_{1_b4}: There is a significant relationship between age (child-headed, youth-headed, household headed by the elderly) and financial inclusion.	**<0.001**	Reject null, accept alternative
H_{0_b5}: There is no significant relationship between having a low level of education and financial inclusion. H_{1_b5}: There is a significant relationship between having a low level of education and financial inclusion.	**<0.001**	Reject null, accept alternative
H_{0_b6}: There is no significant relationship between being unemployed and financial inclusion. H_{1_b6}: There is a significant relationship between being unemployed and financial inclusion.	**<0.001**	Reject null, accept alternative
H_{0_b7}: There is no significant relationship between being unmarried and financial inclusion. H_{1_b7}: There is a significant relationship between being unmarried and financial inclusion.	**<0.001**	Reject null, accept alternative

H_{0_b8}: There is no significant relationship between having a big household size and financial inclusion. H_{1_b8}: There is a significant relationship between having a big household size and financial inclusion.	**<0.001**	Reject null, accept alternative
H_{0_b9}: There is no significant relationship between not owning land and financial inclusion. H_{1_b9}: There is a significant relationship between not owning land and financial inclusion.	**<0.001**	Reject null, accept alternative
Red & bold = statistically significant		

Source: IBM SPPS Statistics findings.

Decision rule: The p-values of all the relationships are less than 0.05, thus statistically significant. The null hypothesis was fully rejected, and the alternative hypothesis was fully accepted:

H_{0_b}: There is no significant relationship between household vulnerability and financial inclusion in South Africa – Rejected.

H_{1_b}: There is a significant relationship between household vulnerability and financial inclusion in South Africa – Accepted.

The next table shows the hypotheses' results for the relationship between vulnerable households and poverty in South Africa.

Table 5.12: Vulnerable households and poverty (ANOVA results)

H_{0_c}: There is no significant relationship between household vulnerability and poverty in South Africa. H_{1_c}: There is a significant relationship between household vulnerability and poverty in South Africa.		
Relationships tested	**Significance level**	**Outcome**
H_{0_c1}: There is no significant relationship between being female and poverty. H_{1_c1}: There is a significant relationship between being female and poverty.	**<0.001**	Reject null, accept alternative
H_{0_c2}: There is no significant relationship between being Black and poverty. H_{1_c2}: There is a significant relationship between being Black and poverty.	**<0.001**	Reject null, accept alternative
H_{0_c3}: There is no significant relationship between speaking a Nguni language and poverty. H_{1_c3}: There is a significant relationship between speaking a Nguni language and poverty.	**<0.001**	Reject null, accept alternative
H_{0_c4}: There is no significant relationship between age child-headed, youth-headed, household headed by the elderly) and poverty. H_{1_c4}: There is a significant relationship between age child-headed, youth-headed, household headed by the elderly) and poverty.	**<0.001**	Reject null, accept alternative

H_{0_c5}: There is no significant relationship between having a low level of education and poverty. H_{1_c5}: There is a significant relationship between having a low level of education and poverty.	**<0.001**	Reject null, accept alternative
H_{0_c6}: There is no significant relationship between being unemployed and poverty. H_{1_c6}: There is a significant relationship between being unemployed and poverty.	**<0.001**	Reject null, accept alternative
H_{0_c7}: There is no significant relationship between being unmarried and poverty. H_{1_c7}: There is a significant relationship between being unmarried and poverty.	**<0.001**	Reject null, accept alternative
H_{0_c8}: There is no significant relationship between having a big household size and poverty. H_{1_c8}: There is a significant relationship between having a big household size and poverty.	**<0.001**	Reject null, accept alternative
H_{0_c9}: There is no significant relationship between not owning land and poverty. H_{1_c9}: There is a significant relationship between not owning land and poverty.	**<0.001**	Reject null, accept alternative
Red & bold= statistically significant		

Source: IBM SPPS Statistics findings.

Decision rule: The p-values of all the relationships are less than 0.05, thus statistically significant. The null hypothesis was fully rejected, and the alternative hypothesis was fully accepted:

H_{0_b}: There is no significant relationship between household vulnerability and poverty in South Africa – Rejected.

H_{1_b}: There is a significant relationship between household vulnerability and poverty in South Africa – Accepted.

Table 5.13 shows the hypotheses' results for the moderating effect of socioeconomic factors on the relationship between financial inclusion and poverty among vulnerable households and poverty in South Africa.

Table 5.13: The moderating effect of socioeconomic factors on the relationship between financial inclusion and poverty (moderated multiple regression results)

H_{0_d}: There is no significant moderating effect of socioeconomic factors on the relationship between financial inclusion and poverty among South African vulnerable households. H_{1_d}: There is a significant moderating effect of socioeconomic factors on the relationship between financial inclusion and poverty among South African vulnerable households.			
Relationships	**Direction of relationship**	**Significance level**	**Outcome**
H_{0_d1}: There is no significant moderating effect of gender on the relationship between financial inclusion and poverty among vulnerable households in South Africa. H_{1_d1}: There is a significant moderating effect of gender on the	Positive	0.057	Accept null, reject alternative

relationship between financial inclusion and poverty among vulnerable households in South Africa.			
H_{0_d2}: There is no significant moderating effect of race and language on the relationship between financial inclusion and poverty among vulnerable households in South Africa. H_{1_d2}: There is a significant moderating effect of race and language on the relationship between financial inclusion and poverty among vulnerable households in South Africa.	Negative	0.965	Accept null, reject alternative
H_{0_d3}: There is no significant moderating effect of age on the relationship between financial inclusion and poverty among vulnerable households in South Africa. H_{1_d3}: There is a significant moderating effect of age on the relationship between financial inclusion and poverty among	Child: Negative Youth: Negative Old: Positive	**<0.001** 0.074 **0.008**	Reject null, accept alternative

vulnerable households in South Africa.			
H_{0_d4}: There is no significant moderating effect of educational level on the relationship between financial inclusion and poverty among vulnerable households in South Africa. H_{1_d4}: There is a significant moderating effect of educational level on the relationship between financial inclusion and poverty among vulnerable households in South Africa.	Negative	0.084	Accept null, reject alternative
H_{0_d5}: There is no significant moderating effect of employment status on the relationship between financial inclusion and poverty among vulnerable households in South Africa. H_{1_d5}: There is a significant moderating effect of employment status on the relationship between financial inclusion and poverty among vulnerable households in South Africa.	Positive	0.142	Accept null, reject alternative

H_{0_d6}: There is no significant moderating effect of marital status on the relationship between financial inclusion and poverty among vulnerable households in South Africa. H_{1_d6}: There is a significant moderating effect of marital status on the relationship between financial inclusion and poverty among vulnerable households in South Africa.	Negative	**0.009**	Reject null, accept alternative
H_{0_d7}: There is no significant moderating effect of household size on the relationship between financial inclusion and poverty among vulnerable households in South Africa. H_{1_d7}: There is a significant moderating effect of household size on the relationship between financial inclusion and poverty among vulnerable households in South Africa.	Negative	0.308	Accept null, reject alternative
H_{0_d8}: There is no significant moderating effect of land/property			

ownership on the relationship between financial inclusion and poverty among vulnerable households in South Africa. H_{1_d8}: There is a significant moderating effect of land/property ownership on the relationship between financial inclusion and poverty among vulnerable households in South Africa.	Positive	0.096	Accept null, reject alternative
Red & bold= statistically significant			

Source: IBM SPPS Statistics findings.

Decision rule: Six of the eight relationships are not statistically significant. Therefore, the null hypothesis was fully accepted, and the alternative was fully rejected:

H_{0_d}: There is no significant moderating effect of socioeconomic factors on the relationship between financial inclusion and poverty among South African vulnerable households – Accepted.

H_{1_d}: There is a significant moderating effect of socioeconomic factors on the relationship between financial inclusion and poverty among South African vulnerable households – Rejected.

5.9 SUMMARY OF THE CHAPTER

Chapter 5 aimed to provide the analysis, results and outcomes of the study. Firstly, it provided the descriptive statistics of the variables used in this study to provide a summarised visual picture of the variables. The results in this chapter showed that out of 2759 respondents, there were more male-headed households than female-headed households in South Africa. Households headed by Black people were more than twice the number of households headed by people of other races in

South Africa. Similarly, more heads of households speak Nguni languages as their first/home language than those who speak other languages as their first languages. Most households were headed by adults, followed by those headed by the youth, old people and lastly by children, although the low percentage of child-headed households could be attributed to the fact that the study only included respondents who were 16 years and older, thus limiting the number of respondents who were children.

Furthermore, it was found that more households were headed by people who only attained a low level of education compared to households headed by people who attained a high level of education. Additionally, 65% of households were found to be headed by unemployed people, while 35% were headed by employed people. Also, the number of households headed by people who were not married in South Africa was more than twice the number of households headed by married people. South Africa comprises small households of less than six members per household, as only 5% of households had six or more members per household. Lastly, the number of households that own the land/property on which they live was 22% more than the number of households that do not own the land/property on which they live.

In relation to financial inclusion and its indicators, it was found that in terms of having access to regulated transactional accounts, an overwhelming 93% of households had no access to any form of a regulated transactional account, while the rest either had access to one, two, three of the four regulated transactional accounts. Similarly, over 93% of households had no access to any of the four types of regulated credit products included in the study, while the rest either had access to one, two, three or four of the four regulated products used in this study. The chapter further found that the majority of households also did not have access to two of the two regulated products used in the study, while the rest either had access to one or both of the products. Lastly, it was found that 98.7% of households had no access to regulated savings and investment products, while the remaining households had access to half of the savings/investment products used in this study or more. Consequently, the study found that about 98% of households in South Africa are still financially excluded when using a multi-dimensional measure of access to the four basic regulated financial products that each household should have to be considered financially included, which

are regulated transactional accounts, regulated credit regulated insurance and regulated savings/investment products.

Similarly, with poverty and its indicators, the study found that about 48% of households were not deprived of decent health, while the majority of about 52% were either partially or fully deprived. The chapter further found that only 49% of households were not deprived of education in South Africa, while the majority of 51% were either partially or fully deprived. Additionally, the study found that most households in South Africa had or were afforded an acceptable standard of living, as only about 9% of households were deprived of a decent standard of living. Lastly, overall, the study found that about 45% of households in South Africa were poor when using a cut-off measure of 30% of the deprivation scores, while about 55% were not poor.

Through the ANOVA results, it was found that the level of financial inclusion significantly differed between vulnerable households and households that were not vulnerable in South Africa. On average, vulnerable households were less financially included than households that were not vulnerable. Additionally, the results showed that the level of poverty significantly differed between vulnerable households and households that were not vulnerable in South Africa. On average, vulnerable households were poorer than households that were not vulnerable. These two results, therefore, indicated that there were statistically significant relationships between vulnerable households and financial inclusion, as well as between vulnerable households and poverty in South Africa.

The multiple regression analysis found that financial inclusion had a statistically significant relationship with poverty and that the introduction of socioeconomic factors into the model increased the prediction of the model by about 18%. However, the results indicated that most socioeconomic factors did not have a statistically significant moderating effect on the relationship between financial inclusion and poverty. Instead, the chapter found that most of these socioeconomic factors were actually independent factors that had a statistically significant relationship with poverty among vulnerable households in South Africa.

Consequently, the first null hypothesis of no significant negative relationship between financial inclusion and poverty in South Africa was rejected. Its alternative was accepted as there was a significant negative relationship between financial inclusion and poverty in South Africa. The second null hypothesis of no significant relationship between vulnerable households was also rejected, and its alternative was accepted as a statistically significant relationship existed between vulnerable households and financial inclusion in South Africa. Furthermore, the third null hypothesis of no significant relationship between vulnerable households and poverty was rejected, and its alternative was accepted as there was a statistically significant relationship between vulnerable households and poverty. Lastly, the fourth null hypothesis of no significant moderating effect of socioeconomic factors on the relationship between financial inclusion and poverty among vulnerable households in South Africa was accepted, and its alternative was rejected as most of the socioeconomic factors did not moderate the relationship but rather were independent variables that had statistically significant relationships with poverty. Based on the analysed data and the found results, Chapter 6 will provide discussions, conclusions and recommendations that can be drawn and made from these findings.

CHAPTER 6

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

6.1 INTRODUCTION

Chapter 5 presented the results of this study. These results included the descriptive statistics, the results of the inferential statistics used, as well as the results of the hypotheses tests. The hypotheses tests mainly focused on determining the relationship between financial inclusion and poverty, vulnerable households and financial inclusion, and vulnerable households and poverty in South Africa, as well as determining the moderating effect of socioeconomic factors on the relationship between financial inclusion and poverty among vulnerable households in South Africa. This chapter uses the results to provide recommendations to formal financial institutions on how to promote access to regulated financial products and services for South African vulnerable households.

This chapter starts with an overview of previous literature chapters, followed by an overview of the research design and methodology used to analyse the data in the study. Also, an overview of the main results of the study will be presented. These results will be discussed and compared with relevant literature. Based on these discussions, recommendations and implications are drawn from the results and recommendations made to the formal financial institutions of South Africa.

6.2 RESEARCH OBJECTIVES OF THE STUDY

This section provides the primary and secondary objectives of the study. These objectives were addressed in previous chapters (see Table 6.1).

Table 6.1: Summary of the research objectives

PRIMARY OBJECTIVE To determine the moderating effect of socioeconomic factors on the relationship between financial inclusion and poverty among vulnerable households in South Africa.	
SECONDARY OBJECTIVES	**ADDRESSED IN CHAPTER**
To investigate the concepts of financial inclusion, poverty and vulnerable households in South Africa.	2
To propose a theoretical framework for the relationships between financial inclusion, poverty and vulnerable households in South Africa.	3
To determine the relationship between financial inclusion and poverty, vulnerable households and financial inclusion, as well as vulnerable households and poverty in South Africa.	4 & 5
To determine the moderating effect of socioeconomic factors on the relationship between financial inclusion and poverty among vulnerable households in South Africa.	4 & 5
To provide recommendations to formal financial institutions on how to promote access to regulated financial products and services for South African vulnerable households.	6

Source: Researcher's own construction.

Table 6.1 indicates both the primary objective and the secondary objectives that were defined in Chapter 1. Additionally, it indicated where the objectives were addressed in relevant chapters. The next section provides an overview of each of these chapters of the study.

6.3 OVERVIEW OF THE LITERATURE CHAPTERS

The first secondary objective of the study was to investigate the concepts of financial inclusion, poverty and vulnerable households. Chapter 2 addressed this objective by providing a literature review of financial inclusion, poverty, and vulnerable households in South Africa. Chapter 2 described financial inclusion as a process of incorporating vulnerable households in the formal financial sector by ensuring that they receive timely and adequate access to regulated financial products at an affordable price (Abel, Mutandwa and Le Roux, 2018: 1). Financial inclusion was measured as having access to four regulated financial products that were identified as the basic financial products needed by each household to be financially included in the formal financial sector of South Africa. These were regulated transactional accounts, credit, insurance and savings/investment products (National Treasury, 2020: 12). It was concluded that it is important to financially include the vulnerable households of South Africa because having access to these regulated financial products protects vulnerable households against adverse risks that could push them into poverty.

Chapter 2 also defined poverty as the involuntary lack of monetary and other resources that can afford households basic human needs and a decent living standard above a chosen poverty measure (Akinwale and Ogundarin, 2014: 158). Furthermore, the chapter indicated that poverty could be measured either objectively by using a pre-determined measure (e.g., poverty lines and indices) or subjectively wherein a respondent is the one who assesses their poverty levels in comparison to a reference group such as the community they live in (Fransman and Yu, 2019). It was acknowledged that any of these individual measures of poverty would yield an indication of the poverty level of a household in the specific segment on which the measure focused. However, it was noted that the study aimed to use a measure of poverty that would fully indicate the poverty level of households in all segments of the population. As such, this chapter measured poverty multi-dimensionally using an index made up of three identified poverty indicators: the deprivation of health, the deprivation of education and the deprivation of a decent standard of living (Churchill, and Marisetty, 2020: 1779).

Lastly, Chapter 2 described the concept of household vulnerability in South Africa. Firstly, a household was described as a group of individuals living together at least four nights a week, eating together and sharing resources, or an individual who lived by themselves (Statistics Act No. 6 of 1999; FinScope, 2016). It was further found that households provided their members with physical, financial and social resources such as emotional support, knowledge, education, religion, affection/attention and social values that could improve the livelihood of an individual or household (Statistics South Africa, 2018: 4). The chapter found that the types of households included child-headed households, youth-headed households, households headed by adults, households headed by old people. Additionally, nuclear households, extended households and same-sex households.

This study specifically described vulnerable households as more prone to adverse idiosyncratic and covariate risks that made them more likely to fall into poverty (Cheteni, Khamfula and Mah, 2019: 4801). These households included those headed by either a female, a Black person, a child (below 18 years of age), youth (between 18 and 35), the elderly (above 60 years), an unemployed person, a person who is not married, a person who has attained a low level of education, a person who speaks any Nguni language as their first home language, households with a big household size (6+) and households that do not own land or property. Consequently, the study used socioeconomic factors, including gender, race, language, age, the highest level of education attained, employment status, marital status, household size and land ownership as measures of household vulnerability.

Chapter 3 addressed the second secondary objective of the chapter, which was to propose a theoretical framework for the relationships between financial inclusion, poverty and vulnerable households in South Africa. This chapter identified and discussed financial inclusion-related theories. These theories included the financial development theory, the credit rationing theory, and the public goods theory of financial inclusion, which were partially adopted into the framework of the study, as well as the vulnerable group theory of financial inclusion, which was fully adopted as the framework of the study.

Chapter 3 also developed relationships between financial inclusion and poverty, financial inclusion and vulnerable households, and poverty and vulnerable households using previous literature. It found a negative relationship between financial inclusion and poverty (Schoombee, 2015: 166; Dawood et al., 2019: 243). This literature finding meant that when poor households were given access to regulated financial products, thus financially included, they could afford basic household needs and become less poor (Koomson, Villano and Hadley, 2020: 615). The chapter also found a negative relationship between household vulnerability and financial inclusion. This literature finding meant that vulnerable households tend to have less access to regulated financial products (Louis and Chartier, 2017: 170; Chitimira and Ncube, 2020: 338-340).

Lastly, Chapter 3 found a positive relationship between household vulnerability and poverty. This literature finding meant that vulnerable households were more likely to experience poverty due to their socioeconomic status (Biyase and Zwane, 2018: 122; Makhalima, 2020: 406-409). Overall, these literature findings meant that vulnerable households were less financially included and more prone to poverty. This chapter also discussed the moderating effect of socioeconomic factors on the relationship between financial inclusion and poverty. Literature showed that poverty levels were seemingly higher among vulnerable households that were less financially included (Wentzel, Diatha and Yadavalli, 2016; Allen et al., 2016: 2; Kaluwa and Kungenje, 2019: 52). These literature findings, therefore, alluded to the idea that the relationship between financial inclusion and poverty was more evident among vulnerable households, thus the necessity to determine this in South Africa.

6.4 OVERVIEW OF THE RESEARCH DESIGN AND METHODOLOGY

The third secondary objective was to determine the relationship between financial inclusion, poverty and vulnerable households in South Africa. Chapter 4 addressed this objective by providing the research design and methodology used to analyse the secondary data of the study. This study was objective (ontology), used empirical numerical data that could be verified (epistemology), and was independent of the researcher's personal views and interpretations; thus, the study adopted a positivistic research paradigm (Antwi and Hamza, 2015: 218; Saunders, Lewis and Thornhill, 2016: 135).

The research design aligned with the paradigm was quantitative. A quantitative research design uses numerical data to test relationships using hypotheses and numerical data (Asamoah, 2014: 45; Saunders, Lewis and Thornhill, 2016: 168). Furthermore, a suitable research methodology was the correlational research methodology. The correlation research methodology was adopted as it described the degree to which variables are interrelated to each other, interpreted the data and gave it meaning, thus was relevant for the study (Ellis and Levy (2009: 327; Asamoah, 2014: 45). Theory development was done through a deductive research approach as it allowed for the study to develop research hypotheses from existing literature and theories, as well as to test them using statistical analysis (Creswell, 2009: 21; Adams, Khan and Raeside, 2014: 10).

Finscope South Africa 2016 database was used in this study. A sample of 4992 households was obtained using a multiple probability sampling method within a South African population as the study's research frame. A multiple probability sampling technique was used to select suitable data from the Finscope South Africa 2016 database. After sampling, cleaning and sorting, a total sample of 2759 respondents was used in the study. The research instrument was a closed-ended questionnaire which used both categorial and continuous scales. Section A collected information on the household structure, services and community. Sections C to K collected information on households' access and usage of different financial products and services, such as getting and spending money, remittances, the use of cellphones in the financial sector, bank penetration, borrowing/credit, insurance, funeral cover, retirement/pension as well as savings/investments. Lastly, sections L and M collected information on the general attitudes and demographics of respondents.

The data was captured on Microsoft Excel and recoded according to the relevant financial inclusion, poverty and vulnerable households measures. The nonmetric data were transformed into dummy variables to allow for inferential statistics. Resultantly, access scores were used to measure households' access to the four financial inclusion measures: regulated transactional accounts, credit, insurance and savings/investment products. The access scores of each measure were added. The total access score was used to indicate a household's level of financial inclusion (0 - 49% = not financially included, 50% = partially financially included, 51 - 74% = moderately

highly financially included, 75% - 100% = highly financially included.) Similarly, deprivation scores of each of the three measures of poverty, which were education, health and a standard of living, were calculated for each household, and added up to form a total deprivation score that determined if a household was poor (total deprivation score = 30% or high) or not poor (total deprivation score = 29% and lower). The IBM SPSS statistics software was used to analyse the data.

Descriptive statistics that were used to summarise the data included frequencies and percentages, while inferential statistics used included Pearson's product-moment correlation in determining multicollinearity between socioeconomic factors, the ANOVA to determine the relationship between financial inclusion and vulnerable households, as well as the relationship between poverty and vulnerable households. Multiple regression was used to determine the relationship between financial inclusion and poverty among vulnerable households in South Africa, as well as to determine the moderating effect of socioeconomic factors on the relationship between financial inclusion and poverty among vulnerable households in South Africa. A p-value of 0.05 was used as a cut-off point of significance in the tests, and the decision rules used were interpreted.

Resultantly, four hypotheses of the study that were tested using the above techniques were stated as follows:

H_{0_a}: There is no significant relationship between financial inclusion and poverty among South African vulnerable households.

H_{1_a}: There is a significant relationship between financial inclusion and poverty among South African vulnerable households.

H_{0_b}: There is no significant relationship between vulnerable households and financial inclusion in South Africa.

H_{1_b}: There is a significant relationship between vulnerable households and financial inclusion in South Africa.

H_{0_c}: There is no significant relationship between vulnerable households and poverty in South Africa.

H_{1_c}: There is a significant relationship between vulnerable households and poverty in South Africa.

H_{0_d}: Socioeconomic factors do not have a significant moderating effect on the relationship between financial inclusion and poverty among South African vulnerable households.

H_{1_d}: Socioeconomic factors have a significant moderating effect on the relationship between financial inclusion and poverty among South African vulnerable households.

6.5 OVERVIEW OF THE RESULTS

Chapter 5 addressed both the third and fourth secondary objectives by providing the results of the analysis of the study. These objectives were: To determine the relationship between financial inclusion, poverty and vulnerable households in South Africa and to determine the moderating effect of socioeconomic factors on the relationship between financial inclusion and poverty among vulnerable households in South Africa. Chapter 5 provided the results of the descriptive statistics.

The results showed that out of the 2759 households that formed the final sample of the study, 95% had five or fewer members of the household. Only 5% had six or more members in the household. Additionally, 61% of households owned the land on which they lived, while 39% did not own the land on which they lived. Regarding demographics, the results showed that there were more male-headed households (51.6%) than female-headed households (48.4%). It further showed that Black (67.5%), followed by White (14%), Coloured (13.3%), and Asian (5.3%) dominated the race among heads of households. The most dominating languages in the households were Nguni languages (64.9%), followed by Afrikaans (18.5%) and English (16.6%).

Most households were headed by adults (46.7%), followed by youth-headed households (36.6%), households headed by old people (16.1%) and lastly, child-headed households (0.6%). The result

also showed that most (84.1%) heads of households had only attained one of the forms of low levels of education, while just a fraction (15.9%) of them had attained a high level of education. More heads of households were found to be employed (65%) compared to those who were not employed (35%). More households were headed by people who were not married (70%) compared to those who were married (30%).

In terms of financial inclusion indicators, 93% of households had low access to transactional account products, 6.4% had partial access, 0.6% had moderately high access, and 0.1% had high access to regulated transactional account products. Similarly, there were low levels of regulated credit products among South African households. A total of 93.84% of households had low access to regulated credit, 4% had partial access, 1.6% had moderately high access, and 0.6% had high access to regulated credit products. Furthermore, access to regulated insurance products was found to be low among households in South Africa, with 82.4% of households having low levels of access to these products, 12% had partial access, and 5.6% had high access to regulated insurance products. A total of 98.7% of households had low access to regulated savings or investment products, 0.8% had partial access, 0.33% had moderately high access, and 0.18% had high access to regulated savings/investment products. The chapter found that about 98.19% of households were financially excluded, 0.25% were partially financially included, 1.45% were moderately highly financially included and 0.11% were highly financially included.

In relation to poverty, 47.8% were not deprived in terms of health, 23.7% were partially deprived of health, and 28.5% were highly deprived of the health indicator, meaning they could not afford proper medical treatment and proper nutrition. Similarly, the chapter found that about 49.7% of households could afford some form of education as they were not deprived of the education measure, 41.9% were partially deprived, and 8.3% were highly deprived and thus could not afford education. The lowest number of deprivations was found for the standard of living measure, wherein 90.2% of households were not deprived and had a decent standard of living, 5.5% were partially deprived and 4.3% were highly deprived and did not have a decent standard of living. Overall, the results showed that 57% of households were not poor, while 43% were poor.

In relation to vulnerable households and financial inclusion, the results of the ANOVA test showed that, on average, male-headed households (average = 11.31%) were significantly more financially included than female-headed households (average = 8.50%). The results also showed that financial inclusion levels were significantly lower among households headed by Black people (average = 8.17%) and people who spoke Nguni languages (average = 8.13%) than the levels of other races (average = 13.65%) and other languages (average = 13.32%). In relation to age, the results found that financial inclusion was significantly higher among households headed by adults (average = 11.81%) and lower among households headed by the youth (average = 8.67%), the old (average = 7.69%) and child-headed households (average = 4.56%).

Furthermore, households headed by people who attained a higher level of education (average = 22.79%) were significantly more financially included than those who only attained a low level of education (average = 7.53%). Similarly, households headed by people who were employed (average = 12.85%) were more financially included than those who were not employed (average = 4.64%). Households headed by people who were married were also found to be more financially included (average = 14.20%) than households headed by people who were not married (average = 8.13%). Small households (average = 10.22%) were more financially included than big households (5.37%), and households that owned the land on which they lived (average = 10.80%) were found to be more financially included than households that did not own the land on which they lived (average = 8.61%).

In relation to poverty, the results showed that female-headed households (average = 30.34%) were significantly poorer than male-headed households (average = 25.25%). It also found that households headed by Black people (average = 32.68%) and households headed by people who spoke Nguni languages (average = 33.19%) as their first/home language were poorer than households headed by people of other races (17.43%) and households headed by people who spoke other languages (17.58%). Poverty levels were found to be higher among households headed by children (average = 44.13%) and old people (average = 32.44%), followed by an almost equal

average between those headed by adults (average = 26.83%) and youth-headed households (average = 26.48%). Additionally, households headed by people who only attained a low level of education (average = 31.35%) were found to be poorer than households headed by people who attained a high level of education (average = 8.45%). Households headed by people who were not employed (average = 36.04%) were also found to be poorer than households headed by people who were employed (average = 23.18%). Households headed by people who were not married (average = 30.71%) were found to be poorer than households headed by people who were married (average = 20.73%). Chapter 5 also found that big households (average = 42.42%) were poorer than small households (average= 26.87%). Households that owned the land on which they lived (average = 28.94%) were poorer than households headed by people who did not own the land on which they lived (average = 25.79%).

Chapter 5 provided the multiple regression analysis results. The results indicated a statistically significant (beta = -0.716, p-value = <0.001) negative relationship between financial inclusion and poverty in South Africa. This result indicated that a unit increase in a household's level of financial inclusion could lead to a decrease of 0.716 in that household's level of poverty. In order to determine the moderating effect of socioeconomic factors on the relationship between financial inclusion and poverty among vulnerable households in South Africa, socioeconomic factors were added to the multiple regression model.

The results showed that only interaction variables of financial inclusion and marital status, financial inclusion and age as it relates to child-headed households and financial inclusion and households headed by old people were statistically significant. This result meant that marital status, age in relation to child-headed households and age in relation to households headed by old people have a moderating effect on the relationship between financial inclusion and poverty among vulnerable households in South Africa. The rest of the socioeconomic factors, such as gender, race, age in relation to youth, the highest level of education attained, employment status, household size and household land ownership used in this study did not have a moderating effect on the relationship between financial inclusion and poverty among vulnerable households in South-

Africa. Instead, the results found that these socioeconomic factors that were not moderators had a significant relationship with poverty as the independent variable.

6.6 DISCUSSION OF THE RESULTS

This section discusses the results of the study. It further draws implications based on the results.

6.6.1 DESCRIPTIVE STATISTICS OF HOUSEHOLDS

In terms of household characteristics, the results of the study indicated that most households in South Africa are small, as they have between 1 and 5 household members. Sekhampu (2013: 149) supported this result and found that the average household size in South Africa was three members. According to Makhalima (2020: 414), the average household size in South Africa was about five members. This is still the status quo in South Africa. The latest General Household Survey (GHS) reported that only 14% of households in South Africa have six or more members (Statistics South Africa, 2021).

Furthermore, the result of the study that showed that in South Africa, more households (61.1%) own the land/property on which they live is similar to that of Wenzel, Diatha and Yadavalli (2016: 5). They found that more than 70% of households in South Africa owned the land/property on which they lived. Also, GHS reported that about 81% of households own the land on which they live in South Africa (whether fully paid, not yet fully paid or living rent-free) (Statistics South Africa, 2021).

In relation to the demographics of the heads of households, the result that showed that there are slightly more male-headed households (51.6%) than female-headed households (48.4%) in South Africa is similar to that of Mhlanga, Dunga and Moloi (2020: 5). They found that male-headed households accounted for 58.4% of the households in South Africa. This finding is in line with the current statistics, showing that 42% of households are headed by females in South Africa, while 58% are headed by males (Statistics South Africa, 2021). This result speaks to the patriarchal

nature of the society of South Africa that emanated from the past but still partially lingers in current times.

The result that the most predominant race and language among heads of households were the Black race (67.5%) who spoke Nguni languages (64.9%) is similar to the results of Wentzel, Diatha and Yadavalli (2016: 5) and Mhlanga, Dunga and Moloi (2020: 5). They found that the most predominant race in South Africa was the Black race. This is currently still the case, as Statista reported that the most predominant race in South Africa is the Black race (Galal, 2022). The results of the study also showed that there are more adult-headed households (46.7%) in South Africa, followed by youth-headed households (36.6%), households headed by old people (16.1%) and child-headed households (0.6%). This is similar to earlier results of Lekobane and Seleka (2017: 50), who found that in Botswana, the minimum age group was 43, which falls within the range of adults. Tran et al. (2022: 14) also found that the average age for a head of the household was 50 in Vietnam.

Furthermore, the result that most heads of households in South Africa had only attained a low level of education (84.1%) was similar to results that were earlier found by Sekhampu (2013: 149), who found that, on average, most heads of households had only attained primary school education in South Africa. Similar to this result, Wentzel, Diatha and Yadavalli (2016:5) also found that only about 2.6% of heads of households in South Africa had attained a diploma or higher. This result is supported by the current statistics showing that about 88% of people eligible for school attained a low level of education in South Africa, with only 5.6% attending university (Statistics South Africa 2021: 14).

The result that showed that employed people headed more households (65%) is similar to the results of Makhalima (2020: 413), who found that employed people headed 53.4% of households in South Africa. Lastly, the result that most households (70%) were headed by people who were not married is similar to earlier results by Wentzel, Diatha and Yadavalli (2016: 5). They found that more than 50% of households were headed by people who were not married. This result is still

supported by the Department of Social Development Republic of South Africa (2021: 156-157), which reported that most households in South Africa are headed by people who are not legally married.

In relation to financial inclusion, the result that shows that when a multi-dimensional measure of financial inclusion is used, almost all households (98.19%) in South Africa are financially excluded shows that while it has been reported that South Africa has reached a 90% level of financial inclusion (Abrahams, 2017: 632), this is only the case when past studies used one product such a transactional bank account or investment account (Wentzel, Diatha and Yadavalli, 2016; Mhlanga, Dunga and Moloi, 2020; Mhlanga and Denhere, 2020). However, when measuring financial inclusion multi-dimensionally using a regulated transactional account, regulated credit, regulated insurance and regulated savings/investment products, 98.19% of South Africans still did not have access to these four basic regulated financial products that a household should have to be financially included, thus were still highly financially excluded.

In relation to poverty, the study found that households that were not poor (57%) were more than poor households (47%) in South Africa. However, a percentage of 47% for poor households was worrisome. Current statistics support this high poverty level, as the Department of Social Development Republic of South Africa (2021) reported that about 52% of households were poor in South Africa. In particular, the results showed that vulnerable households in South Africa were mostly deprived of health (partially = 23.7%, highly deprived = 28.5%) and education (partially = 41.9%, highly = 8.3%) but at least had a decent standard of living (partially = 5.5%, highly = 4.3%). This result on health is strengthened by recent results that showed that only about 16% of households have medical aid to afford proper health care in South Africa and that most households in South Africa resort to public hospitals, which are often over-populated and strained on resources (Statistics South Africa, 2021).

6.6.2 FINANCIAL INCLUSION AND VULNERABLE HOUSEHOLDS

The result showed the presence of a significant relationship between female-headed households and financial inclusion in South Africa, wherein female-headed households (8.50%) had lower total access scores means than males' total access scores means (11.31%), thus, on average, female-headed households are less financially included than male-headed households. This result is similar to the results by Matsebula and Yu (2020: 196), who also found that in South Africa, being female had a negative relationship with financial inclusion, with female-headed households less likely to be financially included than male-headed households. Similar results have also been found in other developing countries such as Nigeria (Abel, Mutandwa and Le Roux, 2018: 4), Malawi (Kaluwa and Kungenje, 2019: 57) and India (Iqbal and Sami, 2017: 3).

The presence of a significant relationship between households headed by Black people and financial inclusion in South Africa, wherein households headed by Black people had lower total financial access scores means (8.17%) than households headed by people of other races (13.65%) showed that, on average, households headed by Black people were less financially included than households headed by people of other races. This result is similar with those of Mhlanga Dunga and Moloi (2020: 5), who found that Black-headed households had the least odds of being financially included by demanding an investment account compared to other races in South Africa. Similarly, Mhlanga and Denhere (2020: 48) also found that being Black had the least odds of demanding financial products and services in South Africa. Lastly, Mataebula and Yu (2020: 195) found that Black people were the least financially included in South Africa.

The presence of a significant relationship between households headed by people who spoke any of the Nguni languages and financial inclusion in South Africa, wherein households headed by Nguni-speaking people had lower total access scores means (8.13%) than households headed by people who spoke other languages (13.65%) as their first/home language showed that, on average, households headed by Nguni-speaking people were less financially included than households headed by people who spoke other languages. Wentzel, Diatha and Yadavalli (2016: 9-10) previously found that the data was insufficient to determine the relationship between financial inclusion and language as the sample size of some languages was too small. However, this study

found that speaking Nguni languages had a strong relationship with lower levels of financial inclusion, subsequently contributing to the gap in the existing literature.

Furthermore, the presence of a significant relationship between child-headed households, youth-headed households and households headed by the elderly and financial inclusion in South Africa, wherein the means of child-headed households (4.56%), youth-headed households (8.67%) and households headed by old people (7.69%) were lower than the means of those headed by adults (11.81%) means that on average, the child-headed households, youth-headed households and the households headed by the elderly were less financially included than adult-headed households. Ozili (2020: 5) similarly opined that these households are vulnerable and mostly financially excluded and would benefit the most from financial inclusion. This result is also partially similar to the result of Wentzel and Diatha (2016: 10), who found that financial exclusion was highest among young people (children and the youth) and cited the high rate of youth unemployment in South Africa as a possible reason as it is highly unlikely that people with a constant source of income can demand regulated financial products. Wentzel, Diatha and Yadavalli (2016: 9) further found that old people were also highly financially excluded in South Africa.

The indication of the presence of a significant relationship between households headed by people who have attained a low level of education and financial inclusion in South Africa, wherein households headed by people who have attained a low level of education were less financially included than households headed by those who have attained a high level of education showed that on average, households headed by people who have attained a low level of education (7.53%) were less financially included than households headed by people who have attained a high level of education (22.79%). Wentzel, Diatha and Yadavalli (2016: 9) found that in South Africa, the highest level of education had the most significant relationship with financial inclusion, whereas uneducated people were the most financially excluded. Kaluwa and Kunyenje (2019: 57) found similar results and lamented that attaining low levels of education decreases one's understanding of the risks and benefits of accessing regulated financial products, making those people less financially included, and the inverse is true. Mhlanga and Denhere (2020:48) argued that people who are not educated often face difficulty in understanding the regulated financial products offered by the formal financial sector of South Africa; subsequently, they are less financially included.

The presence of a significant relationship between households headed by people who were unemployed and financial inclusion in South Africa, wherein households headed by unemployed people were less financially included than households headed by employed people, showed that, on average, households headed by people who were unemployed (4.64%) were less financially included than households headed by employed people (12.85%). This result issimilar to that of Wentzel, Diatha and Yadavalli (2016: 9), who found that unemployed people had the highest levels of financial exclusion in South Africa. Chitimira and Ncube (2020) opined that people who do not have a reliable source of income often become indebted from borrowing money from irregulated financial product providers, which further inhibits them from accessing regulated financial products in South Africa. Mhlanga, Dunga and Moloi (2020: 6) stated that in South Africa, employed people are more likely to be financially included than unemployed people because those who are employed often receive their salaries through the bank, thus necessitating, at the very least, the need to have a regulated transactional bank account.

Similarly, the presence of a significant relationship between households headed by people who were not married and financial inclusion in South Africa, wherein households headed by people who were not married were less financially included than households headed by people who were married, showed that on average, households headed by people who were not married (8.13%) were less financially included than households headed by married people (14.20%). This result is similar to the finding by Mhlanga, Dunga and Moli (2020: 6), who found that unmarried people had lower odds of being financially included than married people. Mhlanga and Denhere (2020: 48) also found similar results. They found that unmarried people were less likely to demand regulated financial products in South Africa, and, therefore, were less financially included. This result contrasted the earlier finding by Wentzel, Diatha and Yadavalli (2016), who had found that marital status was not significantly associated with financial inclusion in South Africa.

The presence of a significant relationship between big households and financial inclusion in South Africa, wherein big households were less financially included than small households, showed that, on average, big households (5.37%) were less financially included than small households (10.32%). Secondly, the high F-statistic showed variability between the mean financial inclusion

scores of big households and that of small households. This result is in contrast with Wentzel, Diatha and Yadavalli (2016: 9), who found that bigger households with more dependents were more financially included than smaller households. This result is also in contrast with Matsebula and Yu (2020: 196), who found that bigger households were associated with higher levels of financial inclusion in South Africa.

Lastly, the presence of a significant relationship between households headed by people who did not own the property or land on which they lived and financial inclusion in South Africa, wherein households headed by people who did not own the property or land on which they lived were significantly less financially included than households headed by people who owned the property or land on which they lived showed that on average, households headed by people who did not own the property or land on which they lived (8.61%) were less financially included than households headed by people who owned the property or land on which they lived (10.80%). This concurs with Schombee (2016: 177), who asserted that land/property ownership affects households' ability to access regulated financial products such as credit, adding that owning land can be used as collateral, thus easing access to regulated credit and increasing chances of being financially included. On the contrary, Wentzel Diatha and Yadavalli (2016) found that home ownership did not have a significant relationship with financial inclusion.

6.6.3 POVERTY AND VULNERABLE HOUSEHOLDS

The result showed the presence of a significant relationship between female-headed households and poverty in South Africa. On average, female-headed households had a deprivation score mean (30.34%), which was higher than that of male-headed households means (25.25%). On average, female-headed households were found to be poorer than male-headed households. Dawood et al. (2019: 243) found that female-headed households were more likely to be poor than male-headed households. Similarly, in South Africa, Biyase and Zwane (2018: 122) found that female-headed households were more likely to be poor than male-headed households. Makhalima (2020: 406-409) stated that female-headed households often fall into poverty because women earn less than men.

The result showed the presence of a significant relationship between households headed by Black people and poverty in South Africa. Households headed by Black people had a total deprivation mean score (32.68%) that was higher than that of households headed by people of other races (17.43%) means. On average, households headed by Black people were poorer than those headed by people of other races. This result concurs with that of Jansen et al. (2014). They found that regardless of the method used to measure poverty, being Black was the race most associated with the higher chances of being poor in South Africa. In addition, Biyase and Zwane (2018: 122) found that Black people were more prone to poverty than other races and attributed this to the economic legacy of apartheid which mainly disadvantaged Black people.

Furthermore, the presence of a significant relationship between households headed by old people, adults, youth and children and poverty in South Africa, wherein child-headed households had the highest total deprivation scores mean (44.13%), followed by households headed by old people (32.44%), households headed by adults (26.83%) and lastly youth-headed households (26.48%) means that on average, child-headed households and households headed by older people were the poorest, followed by adult headed households, and then youth headed households.

The presence of a significant relationship between households headed by people who attained low levels of education and poverty in South Africa, wherein, on average, households headed by people who attained a low level of education had higher total deprivation scores mean (31.31%) than that of households headed by people who attained a high level of education (8.45%) means that on average, households headed by people who attained a low level of education were poorer than households headed by people who attained a high level of education. This result is similar to that of Biyase and Zwane (2018: 122). They found that attaining higher levels of education reduced the probability of being poor by increasing the opportunities of getting a better job, thus earning a higher income. Similar results were also found in Indonesia by Dawood et al. (2019: 243), who found that attaining higher levels of poverty reduced a household's chances of falling into poverty.

The presence of a significant relationship between households headed by unemployed people and poverty in South Africa, wherein households headed by unemployed people had higher deprivation

scores mean (36.04%) than households headed by employed people (923.18%) indicated that, on average, households headed by unemployed people were poorer than households headed by people who are employed. This result is similar to that of Sekhampu (2013: 150), who found that being employed reduced one's chances of being poor in South Africa. Biyase and Zwane (2018: 122) also found that households whose heads were employed were less likely to be poor in South Africa.

Additionally, the presence of a significant relationship between households headed by people who were not married and poverty in South Africa, wherein households headed by people who were not married had higher deprivation scores mean (30.71%) than that of households headed by people who were married (20.73%) means that on average, households headed by people who were not married were found to be poorer than households headed by people who were married. This result is similar to that of Biyase and Zwane (2018: 122), who found that households headed by unmarried people were more prone to poverty than households headed by married people in South Africa. Lekobane and Seleka (2017: 122) found similar results in Botswana. They found that households headed by unmarried people were poorer than those headed by married people.

The presence of a significant relationship between big households and poverty, wherein big households had deprivation scores mean of 42.42%, which was higher than that of small households (26.87%), means that, on average, big households were poorer than small households. Atake and Zwane (2018: 8) found that bigger households were more prone to poverty than smaller households. Sekhampu (2013: 151) and Lekobane and Seleka (2017: 53) found that bigger households were prone to poverty as it meant a higher number of people dependent on the household's income, leading to less per capita income in South Africa and Botswana, respectively. Biyase and Zwane (2018: 122) also found that bigger households were more associated with higher levels of poverty than smaller households in South Africa.

Lastly, the absence of a significant relationship between households headed by people who did not own the property or land on which they lived and poverty in South Africa, wherein households that owned the land on which they lived had higher deprivation scores mean (28.94%) than

households that did not own the land or property on which they lived (25.79%) means that on average, households headed by people who did not own the property or land on which they lived were found to be less poor than households headed by people who owned the property or land on which they lived. This result is against that of Sekhampu (2013: 145), who stated that not owning land was one of the basic causes of poverty in South Africa, as land can be used as collateral to get access to other regulated financial products such as credit, which may supplement households' income by affording them basic household needs thus reducing poverty (Meinzen-Dick, 2009: 1).

6.6.4 FINANCIAL INCLUSION AND POVERTY

The finding that there was a statistically significant negative relationship (beta = -0.716, p-value = <0.001) between financial inclusion and poverty in South Africa indicated that when households were more financially included, their poverty levels were reduced. This supports that of Matsebula and Yu (2020: 188), who found that poor households were mostly financially excluded in South Africa. Dawood et al. (2019: 242) also found a statistically significant negative relationship between financial inclusion and poverty in Indonesia. Koomson, Villano and Hadley (2020: 11) further found that financial inclusion decreases a household's chances of falling into poverty now and decreases their probability of falling into poverty in the future. This result isalso similar to that of Chitimira and Ncube (2020). They found a negative relationship between financial inclusion and poverty in South Africa and highlighted that some of the reasons behind this were high banking charges, mistrust in the banking system by poor people and lack of financial literacy.

The results further indicated that gender does not have a moderating effect on the relationship between financial inclusion and poverty among vulnerable households in South Africa. Instead, it was found to have a significantly negative relationship with poverty among vulnerable households in South Africa, indicating that it was an independent variable with a negative relationship with poverty. This finding implies that among vulnerable households in South Africa, being a female-headed household decreases that household's chances of being poor, which contrasts with earlier ANOVA findings and literature. For instance, Biyase ad Zwane (2018: 122) found that female-headed households were more likely to be poor than male-headed households in South Africa. Dawood et al. (2019: 237) also found that in Indonesia, female-headed households were poorer

than male-headed households. However, Sekhampu (2013: 150) found that female-headed households in South Africa were less prone to poverty because, in South Africa, vulnerable females and their children are eligible for social grants, which may boost their income and afford them basic household needs, thus making them less poor. Similarly, in Ghana, Koomson, Villano and Hadley (2020: 11) found that male-headed households were poorer than female-headed households.

The study further found that race and language did not have a moderating effect on the relationship between financial inclusion and poverty among vulnerable households in South Africa. Rather, they were independent variables with a statistically significant positive relationship with poverty in South Africa. This means that poverty levels are highest among vulnerable households headed by Black people in South Africa. This result is similar to that of Jansen et al. (2014), who found that households headed by Black people (i.e., Nguni-speaking) were more prone to poverty than other races in South Africa. Similarly, Biyase and Zwane (2018:122) found that poverty levels were highest among households headed by Black people in South Africa.

Age in relation to children had a negative moderating effect on the relationship between financial inclusion and poverty among vulnerable households in South Africa. The results showed that it had a positive but statistically insignificant relationship with poverty; thus, it is not an independent variable that has a relationship with poverty. This means that in South Africa, when households headed by children have low levels of financial inclusion, the poverty levels of such households tend to be high, and inversely, when child-headed households have higher levels of financial inclusion, this tends to lower their poverty levels. This is because regulated financial products such as credit, insurance and savings or investment products help protect these households against adverse events that may push them into poverty (Ozili, 2020: 5). Therefore, this result implies that giving them access to regulated financial products would help reduce poverty levels of child-headed households.

Age in relation to youth was found not to have a moderating effect on the relationship between financial inclusion and poverty among vulnerable households in South Africa. However, it was found to have a statistically significant negative relationship with poverty, making it an independent variable with a negative relationship with poverty in South Africa. According to this study, this result implies that households headed by people between 18 and 35 are less likely to be poor among vulnerable households in South Africa. This result issimilr to that of Sekhampu (2013: 150), who found that age negatively correlated with poverty in South Africa. This can be explained by the fact that age is directly proportional to a person's earning capacity, as people between 18 and 35 are in their earning years (Lekobane and Seleka, 2017: 50).

On the contrary, the study found that age in relation to old people had a positive moderating effect on the relationship between financial inclusion and poverty among vulnerable households in South Africa and was found to have a positive but statistically insignificant relationship with poverty, thus it was not an independent variable. This means that when households that are headed by old people have high levels of financial inclusion, these households experiences high levels of poverty. This result therefore bridged the gap between Lekobane and Seleka (2017: 49) and Kaluwa and Kunyenje (2019: 59), who found that vulnerable households that are headed by old people experience high levels of poverty, and Abel Mutandwa and Le Roux (2018: 5), who found that as people grow older, they become knowledgeable about regulated financial products and start using them hence are highly financially included but beyond old age, they lose interest. This gap is bridged by showing that in South Africa, although households headed by old people may have access to regulated financial products, hence are highly financially included, these old people lose interest in using these regulated financial products which protected them against adverse shocks that impact their income levels, thus likely to push them into poverty.

The level of education attained was found not to have a moderating effect on the relationship between financial inclusion and poverty among vulnerable households in South Africa. Instead, it was found to have a statistically significant positive relationship with poverty, making it an independent variable with a positive relationship with poverty in South Africa. This result means that vulnerable households headed by people who have attained no education or only attained a

low level of education (no diploma, degree or higher) are poorer in South Africa. This result is similar to that of Lekobane and Seleka (2017: 51) and Biyase and Zwane (2018: 122), who found that low levels of education reduce one's chances of getting a good-paying job and earning a better income, thus leading to higher levels of poverty.

The study also found that employment status does not have a moderating effect on the relationship between financial inclusion and poverty among vulnerable households in South Africa. Instead, it was found to have a statistically significant positive relationship with poverty in South Africa. Thus, vulnerable households headed by unemployed people experience higher rates of poverty in South Africa. This result issimilar to that of Sekhampu (2013: 10), who found that when the head of a household is unemployed, this negatively affects the poverty levels of that household. Lekobane and Seleka (2017: 52) and Biyase and Zwane (2018: 122) also found that households headed by employed people experience less poverty than those headed by employed people, as employment means people get paid and can afford more household needs.

The study further found that marital status had a negative moderating effect on the relationship between financial inclusion and poverty among vulnerable households in South Africa. Interestingly, it was also found to have a statistically significant positive relationship with poverty, thus making it an independent variable. This result showed that when households headed by people who were not married have low levels of financial inclusion, their poverty levels tend to be high. This means that financially including a vulnerable household headed by a person who was not married reduced their poverty levels. This result builds on the findings Mhlanga, Dunga and Moloi (2021: 6) who found that unmarried people were less financially included, and that of Biyase and Zwane (2018: 122) who found that households headed by people who are not married experience more poverty. Therefore, changing levels of financial inclusion among households headed by people not married would change their poverty levels.

Household size was found not to have a moderating effect on the relationship between financial inclusion and poverty among vulnerable households in South Africa. However, it was found to

have a statistically positive relationship with poverty, thus making it an independent variable with a positive relationship with poverty in South Africa. In this study, this result means that big vulnerable households experience more poverty than small households in South Africa. This result is similar to that of Sekhampu (2013:150-151) and Biyase and Zwane (2018: 122), who found that bigger households in South Africa experience more poverty. Kaluwa and Kunyenje (2019: 59) found the same results and explained that bigger households often find it difficult to improve their economic status or poverty levels as the household resources are shared among more family members.

Lastly, the results found that land or property ownership did not have a moderating effect on the relationship between financial inclusion and poverty among vulnerable households in South Africa. Instead, it was found to have a statistically significant negative relationship with poverty. This implies that land or property ownership was an independent variable that had a negative relationship with poverty in South Africa, meaning vulnerable households in South Africa that did not own the land experienced less poverty. This result contradicts the literature, which found land to be a resource that can either be sold for extra income or used as collateral to access regulated credit, thus reducing poverty (Meinzen-Dick, 2009: 1; Churchill and Marisetty, (2020: 1983).

6.7 RECOMMENDATIONS

The results of this study are integral to the policies, product development and initiatives of the government and formal financial institutions in South Africa. This study recommends that formal financial institutions design products that specifically meet the needs of vulnerable households so that these households can find them useful and actually demand them. Formal financial institutions can do this by providing regulated credit and savings or investment products specifically meant for low-education-headed households. The study found that there were low levels of education among vulnerable households, making them financially excluded and poorer. Banks can further do this by offering tailor-made banking products for vulnerable households and providing them with easy-to-understand financial products. Additionally, banks can offer vulnerable households financial products with fewer functions and are thus easy to understand and use by low-educated vulnerable households. Furthermore, banks can actively develop and offer educational loans to

vulnerable households at affordable and favourable conditions to increase their ability to afford education, thus reducing their poverty levels and increasing their chances of being financially included.

The results of unemployment and its impact on poverty and financial inclusion in this study should also be addressed. The results of this study show that unemployed-headed households are poorer and have less access to regulated credit products. Banks should offer regulated credit products as a way to encourage entrepreneurship. To increase financial inclusion and reduce poverty of vulnerable households, banks should provide vulnerable households with access to affordable regulated credit products and sound financial advisory, wherein banks become growth partners with entrepreneurs while still adhering to all regulations. One way of doing this is to reduce to collateral requirements, change the type of collateral required from vulnerable households or offer regulated credit that suites the needs of vulnerable households without requiring collateral security.

Additionally, the ability to afford health remains a big challenge in South Africa. The study results found that the deprivation of health was the highest level of deprivation of the three poverty indicators. As the custodians of financial funds in the country, this study recommends that banks play a central role in facilitating vulnerable households' affordability of health in South Africa, such as offering affordable healthcare products to vulnerable households. Using impact investing on the demand side (households), banks should create health-related products (health insurance) that are charged at more affordable prices. These can include healthcare products with lower initial cost and fewer compliance requirements to purchase. Additionally, by banks ensuring the proper health of their workers, their families and how they contribute towards healthcare in the country, this would encourage more companies to take healthcare more seriously.

Since most heads of households have a low level of education and are Black and Nguni-speaking, formal financial institutions should actively ensure that their financial products are presented in languages understood by the majority of people in any location. Financial institutions must also ensure that regulated financial products are being provided in Nguni languages and that the staff

available to provide financial advice on these products are competent to provide advice in Nguni languages. Lastly, banks can unlock a niche market by offering products that specifically meet the needs of single people, as this study has found that single people in South Africa head more households and that these people are often excluded from the formal financial sector, thus are faced with the burden of providing for their households. Financial products offered to single-headed households should have fewer requirements than for other groups. For instance, single-headed households have access to less income than two-income families, and thus, these financial products should be more cost-effective for single households.

6.8 CONTRIBUTION OF THE STUDY

Theoretically, this study has contributed to the existing body of literature by measuring financial inclusion and poverty using multi-dimension factors, thus providing a holistic view of the two phenomena (financial inclusion and poverty). This study showed that a single measure of financial inclusion and poverty is not enough to capture the complex relationship between the two phenomena, as the study found that about 98% of households were still financially excluded when using the sudy's multidimentsional measure, which is significantly higher than the findings of high financial inclusion levels in South Africa reported by earlier studies that used single measures. Similarly, the study found that about 43% of South African households are poor.

As far as it could be established, no study has explicitly and empirically determined the moderating effect of socioeconomic factors on the relationship between financial inclusion and poverty among vulnerable households in South Africa. Therefore, the finding that marital status and age in relation to old people and children had a moderating effect on this relationship contributed to the literature. This result showed that it was important to consider the moderators when capturing the nature of the relationship between financial inclusion and poverty, as they may show the limit or strength of the relationship. Practically, this study has illuminated the importance of developing tailor-made financial products for specific segments of society, especially vulnerable households. Financial institutions should customise their financial products for vulnerable households, as umbrella financial products do not meet the needs of most households in South Africa.

In terms of policy level, this study will assist banks in the financial sector to better foster the financial inclusion of vulnerable households.For example, banks can offer less regulated financial products such as insurance, credit and savings or investments specifically for single people and for unemployed people. Financial inclusion is important in South Africa, and the financial sector should help ensure the financial inclusion of vulnerable households, thus reducing their poverty levels and resultantly increasing their own market share. The results of this study will also inform the government of South Africa of the actual levels of poverty and financial inclusion in South Africa, which are lower when using multidimensional measures. This will inform their policies that relate to financial inclusion initiatives and poverty alleviation strategies, as it provides a more holistic view.

6.9 LIMITATIONS OF THE STUDY AND AVENUE FOR FUTURE RESEARCH

The data used in the study was collected in 2016. It was used because it was the latest publicly available data that wholly covered the scope of this study. However, to ensure that the findings are still relevant to recent times, a reference was made to recent statistics and literature to determine if the results are still relevant. It is suggested that a similar study be conducted in the future when recent data is available to see if any results would have changed. Additionally, the use of a closed-ended questionnaire as an instrument of data collection may have restricted respondents from openly expressing their views, and the options of answers provided may not have been precisely what their answers regarding financial inclusion, poverty and socioeconomic status were. Therefore, a combination of closed- and open-ended instruments is suggested. However, the results of this study will become a baseline for most future studies because of its contribution.

6.10 CONCLUDING REMARKS

Financial inclusion is instrumental in alleviating poverty among vulnerable households in South Africa. If done correctly, it could benefit banks too. Vulnerable households should be given more access to regulated financial products as this will assist them in fighting poverty. To fully determine the relationship between financial inclusion and poverty, multi-dimensional measures of both financial inclusion and poverty should be used. When financial inclusion initiatives are matched correctly to the needs of vulnerable households, South Africa will begin to see the impact of financial inclusion on poverty reduction among vulnerable households in South Africa.

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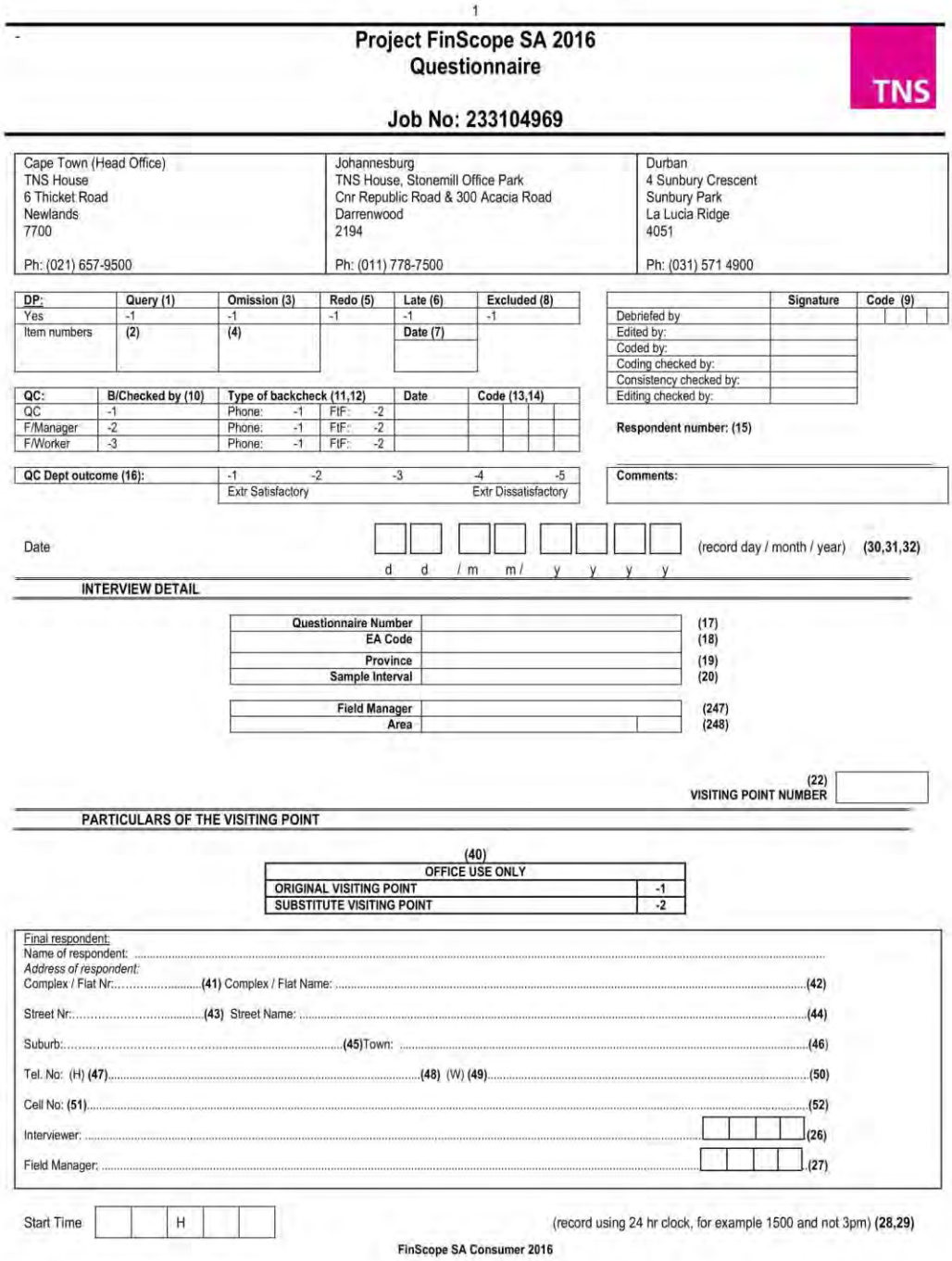
ANNEXURES

ANNEXURE A: FINSCOPE SOUTH AFRICA 2016 QUESTIONNAIRE



1

Project FinScope SA 2016
Questionnaire

TNS

Job No: 233104969

Cape Town (Head Office)	Johannesburg	Durban
TNS House 6 Thicket Road Newlands 7700 Ph: (021) 657-9500	TNS House, Stonemill Office Park Cnr Republic Road & 300 Acacia Road Darrenwood 2194 Ph: (011) 778-7500	4 Sunbury Crescent Sunbury Park La Lucia Ridge 4051 Ph: (031) 571 4900

DP:	Query (1)	Omission (3)	Redo (5)	Late (6)	Excluded (8)
Yes	-1	-1	-1	-1	-1
Item numbers	(2)	(4)		Date (7)	

	Signature	Code (9)
Debriefed by:		
Edited by:		
Coded by:		
Coding checked by:		
Consistency checked by:		
Editing checked by:		

QC:	B/Checked by (10)	Type of backcheck (11,12)		Date	Code (13,14)
QC	-1	Phone: -1	FtF: -2		
F/Manager	-2	Phone: -1	FtF: -2		
F/Worker	-3	Phone: -1	FtF: -2		

Respondent number: (15)

QC Dept outcome (16):	-1	-2	-3	-4	-5
	Extr Satisfactory			Extr Dissatisfactory	

Comments:

Date d d / m m / y y y y (record day / month / year) (30,31,32)

INTERVIEW DETAIL

Questionnaire Number		(17)
EA Code		(18)
Province		(19)
Sample Interval		(20)
Field Manager		(247)
Area		(248)

(22) VISITING POINT NUMBER

PARTICULARS OF THE VISITING POINT

(40)

OFFICE USE ONLY	
ORIGINAL VISITING POINT	-1
SUBSTITUTE VISITING POINT	-2

Final respondent:
Name of respondent: .....
Address of respondent:
Complex / Flat Nr:.....(41) Complex / Flat Name: .....(42)
Street Nr:.....(43) Street Name: .....(44)
Suburb:.....(45)Town: .....(46)
Tel. No: (H) (47).....(48) (W) (49).....(50)
Cell No: (51).....(52)
Interviewer: .....(26)
Field Manager: .....(27)

Start Time H (record using 24 hr clock, for example 1500 and not 3pm) (28,29)

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PARTICULARS OF VISITS (69)	(70, 71) DAY	(72) DATE	(73) TIME	(74) RESPONSE
First visit				
Second visit				
Third visit				
Substitute 1				
First visit				
Second visit				
Third visit				
Substitute 2				
First visit				
Second visit				
Third visit				
Substitute 3				
First visit				
Second visit				
Third visit				

INTERVIEWER: FILL IN CODES APPLICABLE. FROM TIME, DAY AND RESPONSE BOXES BELOW.

Day	
Monday	-1
Tuesday	-2
Wednesday	-3
Thursday	-4
Friday	-5
Saturday	-6
Sunday	-7

Time	
1	00:01 - 11:59
2	12:00 - 13:59
3	14:00 - 14:59
4	15:00 - 15:59
5	16:00 - 16:59
6	17:00 - 17:59
7	18:00 - 18:59
8	19:00 - 19:59
9	20:00 - 20:59
10	21:00 - 24:00

Response		
1	Interview completed	
2	Revisit:	appointment made
3		selected respondent not at home
4		nobody at home
5	Do not qualify:	vacant house/flat/stand/not a house or flat
6		no person qualifies according to the survey specifications
7		respondent is physically/mentally not fit to be interviewed
8		respondent cannot communicate with interviewer because of language
9	Refusals:	contact person refused
10		interview refused by selected respondent
11		interview refused by parent

Interviewer observe. ***This should be obsered for actual respondent***

	SM
Stand-alone house (not in a complex)	-1
Plot or agriculture holding	-2
Flat	-3
Retirement village	-4
RDP House	-5
Stay in an extended/renovated RDP house	-6
Stand-alone house in a security estate	-7
Flat/apartment in a security estate	-8

Good day, my name is ....., and I do work on behalf of TNS, an independent research company. We are currently conducting a national financial survey and we would like to understand your perceptions around your own financial and lifestyle needs and your means of accessing and using money. **All your responses will be treated confidentially, will only be used for research purposes and will <u>not</u> be linked to your identity.**

If you are not selected can I interview someone else in your household?

(504)

Yes -1 ⇨ ***Continue with household register on page 3 and then continue below with selected respondent from Kish grid***

No -2 ⇨ *Thank respondent, fill in reasons for refusal on page 2 above and close*

HOUSEHOLD REGISTER

Please can you give me the details of all the people who live in this household? By **household** I mean anyone who stays 4 nights a week and shares a pot of food.

- ***Record exact age of all males and females in the household in the grid below in order of oldest to youngest (including babies & children).***
- ***Record the name, gender and race next to the age of each member of the household.***
- ***Record respondent selected for interview from kish table in column provided.***
- ***Only respondents 16 years and older qualify for the interview.***

	(75,76,77,78,79)	Age *Write in from oldest (top) to youngest (bottom)*	Names of Members of Household *(Must stay 4 nights a week and share a pot of food)*		Gender F=1, M=2	Race B=1, C=2, A=3, W=4	(90) Respondent selected for interview
ADULTS 16+	People in household who qualify for this survey *(persons who are 16+ and will be available for the duration of this survey)*			01			-01
				02			-02
				03			-03
				04			-04
				05			-05
				06			-06
				07			-07
				08			-08
				09			-09
				10			-10
				11			-11
				12			-12
				13			-13
				14			-14
				15			-15
				16			-16
				17			-17
				18			-18
				19			-19
				20			-20
	(80,81,82,83,84)						
NON-QUALIFIERS *UNDER 16 YRS OLD*	Persons in the household who do not qualify for this survey **based on age**			01			[redacted]
				02			
				03			
				04			
				05			
				06			
				07			
				08			
				09			
				10			
	(85,86,87,88,89)						
NON-QUALIFIERS *16+*	Persons in the household who do not qualify for this survey or who will not be available for the duration of the survey *(other than age)*			01			[redacted]
				02			
				03			
				04			
				05			
				06			
				07			
				08			
				09			
				10			
	Note: Ask respondent reasons why persons do not qualify or are not available						

Reasons why non-qualifying persons 16+ do not qualify or are not available

1 ..... (92)

2 .....

3 .....

KISH TABLE

Interviewer: in order to determine who you will be interviewing you will need the last two digits of the questionnaire number as stated on page 1 of the questionnaire, and the number of persons 16+ in the household who qualify for the survey.

- ***Find the number running down the left side of the table that matches the end of the questionnaire number, and the number of household members that qualify running across the top of the table.***
- ***Circle the number where these two numbers meet in the table.***
- ***This is the number of the person that you will interview – record on previous page and check details.***
- ***Interview the selected individual.***

QUESTIONNAIRE NUMBER ENDS IN				NUMBER OF QUALIFYING PERSONS IN HOUSEHOLD THE RESPONDENT MUST BE DRAWN FROM																								
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
01	26	51	76	1	1	1	3	2	4	1	3	5	8	6	5	12	10	1	6	8	7	19	19	13	21	13	24	25
02	27	52	77	1	2	3	4	3	1	2	2	3	4	8	3	7	2	5	14	4	15	4	8	6	16	14	22	19
03	28	53	78	1	1	2	1	4	2	7	6	9	3	5	11	2	1	3	11	7	10	16	16	10	5	2	2	3
04	29	54	79	1	2	3	2	1	3	5	8	6	2	4	2	4	8	11	10	16	6	9	10	15	11	12	11	18
05	30	55	80	1	1	1	4	5	6	3	5	7	5	9	8	13	3	2	13	5	18	1	4	1	20	11	5	24
06	31	56	81	1	2	2	2	3	5	6	7	8	7	1	4	9	14	8	2	17	17	14	12	14	22	10	3	14
07	32	57	82	1	2	1	1	4	1	4	1	4	6	3	6	5	7	13	9	2	3	13	14	8	2	7	20	4
08	33	58	83	1	1	2	3	2	5	1	4	2	1	7	10	6	5	4	15	10	5	2	13	4	17	5	17	8
09	34	59	84	1	1	3	2	5	6	2	2	1	9	10	1	10	4	6	6	1	9	10	1	5	6	9	1	12
10	35	60	85	1	2	2	4	1	3	3	6	9	10	11	12	3	9	15	7	8	11	6	3	9	4	3	10	1
11	36	61	86	1	1	1	3	1	4	5	3	1	6	2	9	13	11	14	4	11	4	15	15	17	1	1	23	2
12	37	62	87	1	2	3	1	3	2	7	5	6	5	7	7	8	6	10	3	3	1	12	20	7	13	22	12	16
13	38	63	88	1	1	2	1	5	3	6	4	3	4	6	2	11	13	12	1	15	8	7	2	12	15	21	13	7
14	39	64	89	1	2	3	2	4	1	4	7	8	2	5	6	11	12	9	16	13	16	11	18	18	14	16	18	23
15	40	65	90	1	2	1	4	2	4	3	8	7	7	11	1	3	5	7	12	14	13	8	17	20	19	20	19	11
16	41	66	91	1	1	3	3	1	6	5	1	5	9	10	3	2	11	13	8	12	12	5	6	21	8	8	4	15
17	42	67	92	1	1	2	3	4	2	6	4	2	3	2	12	5	2	10	13	5	8	18	9	16	10	17	16	20
18	43	68	93	1	2	1	4	2	6	4	1	4	8	9	10	7	9	3	12	12	9	7	20	19	9	19	21	13
19	44	69	94	1	2	2	1	3	5	2	8	9	10	4	9	8	13	1	1	14	10	19	10	11	18	15	7	6
20	45	70	95	1	1	3	2	5	4	1	3	8	1	3	8	6	6	9	5	7	13	4	15	1	7	22	15	21
21	46	71	96	1	1	1	2	5	1	7	2	3	2	1	11	4	7	5	3	2	1	3	12	18	5	19	14	9
22	47	72	97	1	2	1	3	1	3	2	6	2	1	8	7	1	4	2	11	8	2	17	4	17	21	16	3	5
23	48	73	98	1	2	3	4	2	2	6	7	7	8	3	4	9	3	6	2	11	11	16	2	8	11	23	6	22
24	49	74	99	1	1	2	1	4	6	3	5	5	3	1	5	13	1	14	8	14	6	15	9	14	3	6	9	17
25	50	75	00	1	1	2	3	3	2	4	6	4	7	5	3	12	12	12	4	6	2	17	11	2	12	4	8	10

INTRODUCTION

Good day, my name is ....., and I do work on behalf of TNS, an independent research company. We are currently conducting a national financial survey and we would like to understand your perceptions around your own financial and lifestyle needs and your means of accessing and using money. **All your responses will be treated confidentially, will only be used for research purposes and will not be linked to your identity**.

The interview will take about 70 minutes of your time. May I continue and ask you the questions?

If no or in doubt, thank respondent and close interview.

Yes	-1	⇨ ***Continue***
No	-2	⇨ *Thank respondent, fill in reasons for refusal on page 2 and close*

SECTION A: HOUSEHOLD STRUCTURE, SERVICES AND COMMUNITY

A1. Who is the head of the household?

- ***Do not prompt.***
- ***Single mention.***

	(102)
I am ***(respondent)***	-1
Respondent's wife, husband, spouse or partner	-2
Respondent's parent	-3
Respondent's child	-4
Respondent's sister or brother	-5
Another family member	-6
Other (SPECIFY)	-7

.....

A2a. Now we are going to talk about ownership of your home and some of the things in your home. Please tell me which of these statements best describes your household's ownership of the home that you live in?

- ***Show screen***
- ***Single mention.***

	(103)
Is paying off a bond or home loan	-1
Owns the home and is **not** paying off a bond or home loan	-2
Rents the home	-3
Does not own the home and does not pay anything for the home	-4
Other (SPECIFY)	-5
.....	
Don't know ***(Do not show)***	-6

Ask only if code 2 in A2a. Others go to A3

A2b. You said that you or your family own the house where you live in. Are you in possession of a title deed for this property?

- ***Single mention.***

Yes	-1
No	-2

A3. How does your household get the water that you use in your home?

- ***Show screen***
- ***Multiple mention.***

	(104)
Access to tap water inside dwelling that is not shared with other households	-1
Tap water inside yard that is not shared with other households	-2
Shared or communal tap inside or outside dwelling or yard	-3
None of these ***(Single mention – do not show)***	-4

A4. What is the main type of toilet your household uses?

- ***Show screen***
- ***Single mention***

	(105)
Toilet in yard or stand but not in house	-1
Toilet inside the house	-2
Toilet shared by community	-3
Toilet inside the house **and** toilet in yard or stand	-6
Other (SPECIFY).....	-4
No toilet facilities	-5

A5. Do you have electricity in your house?

- ***Single mention.***

	(106)
Yes	-1
No	-2

A7. I am going to read some statements to find out your feelings about your everyday life. Here is a scale where 1 means completely disagree and 6 means completely agree. For each of these things, please use the scale to tell me how much you disagree or agree that:

- ***Show screen***
- ***Read out statements.***
- ***Single mention per statement.***

SP	(108,109)	Completely disagree	Disagree	Slightly disagree	Slightly agree	Agree	Completely agree	Don't know / NA *(Do not show)*
	1. You are happy with your current lifestyle	-1	-2	-3	-4	-5	-6	-7
	2. You are happy with your level of education	-1	-2	-3	-4	-5	-6	-7
	4. It is up to the South African government to provide for you and your family	-1	-2	-3	-4	-5	-6	-7
	6. You can rely on your neighbours to help you out	-1	-2	-3	-4	-5	-6	-7
	9. You would say that you are in good health	-1	-2	-3	-4	-5	-6	-7
	10. You would say that you are more responsible with money than people you know	-1	-2	-3	-4	-5	-6	-7

A8. Which of these groups, if any, are you **currently personally** involved in or do you **currently** belong to?

- ***Show screen***
- ***Interviewer please ensure to ask "Are there any other groups that have not been shown that you belong to or participate in?" and fill in under code -6 "Other (SPECIFY)".***
- ***Multiple mentions.***

	(114) Q.A8 Involved or belongs to
3. Savings group or club	-3
4. Stokvel	-4
5. Burial society	-5
6. Other (SPECIFY)	-6
7. None of these ***(Single mention) (Do not show)***	-7

SECTION C: GETTING AND SPENDING MONEY

C1. Thinking about the past 12 months, please tell me about **ALL** the ways **you personally received** money to pay for things? Any others?

- ***Show screen***
- ***Multiple mentions.***
- ***Transfer codes onto memory aid sheet page 1.***
- ***Note: For each source of money in Q.C1, ask Q.C2 and Q.C3 before asking next source of money in Q.C1.***

C2. How often do you usually receive your money from this source?

- ***Show screen***
- ***Single mention.***

C3. How is this money usually paid?

- ***Show screen***
- ***Single mention.***

Ask if more than one option was provided in Q.C1. If only one was selected, do not ask - just record from Q.C1.

C4. Which one is your **main** source of getting money or income?

- ***Show screen***
- ***Option in Q.C4 must be mentioned in Q.C1.***
- ***Single mention.***

Ask all.

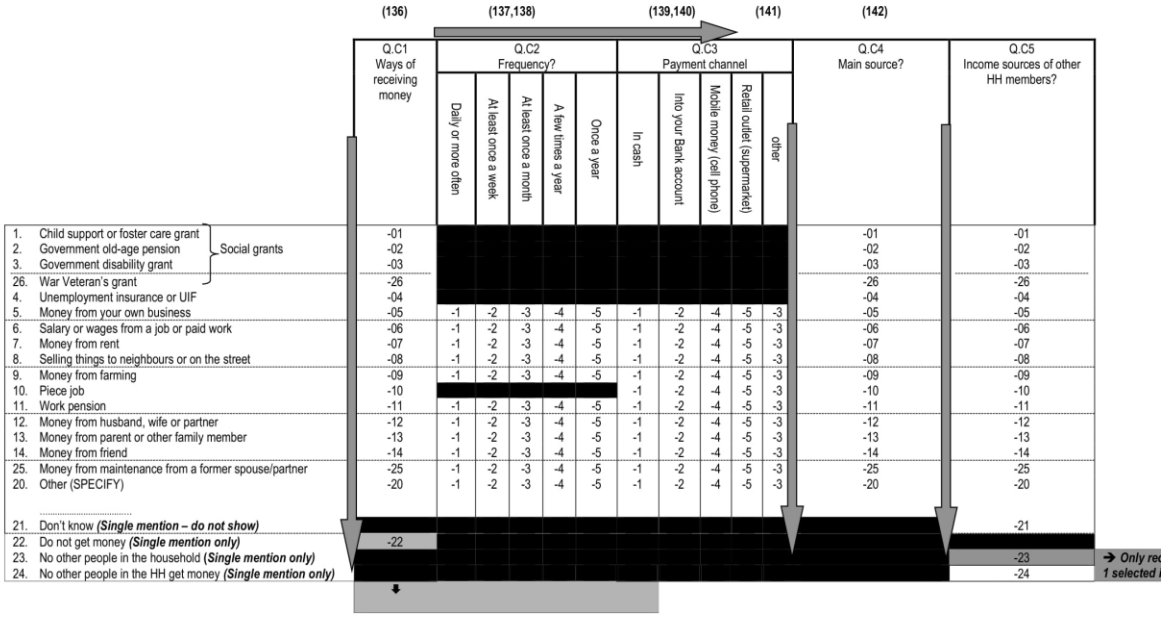
C5. Now we are going to talk about the money that **everyone else** who lives with you in your household gets.

Thinking about the past 12 months, please tell me about **ALL** the ways **other people in your household** get money from outside the household to pay for things?

- ***Show screen***
- ***Multiple mention.***
- ***Check against response in Q.A1. If respondent is only person in the household, record code -23 and go to next question.***

Continued/...

Q.C1– Q.C5 – Continued/…



FinScope SA Consumer 2016

C6. Including you, in total how many people in your household contribute to the household income?

(143)

⇨ ***IC Check: number of people in Q.C6 must be less than or equal to number of people in Kish Grid (page 3)***

Ask Q.C7 to Q.C10 if get money from family or friends (statements 12 to 14 & 25) in Q.C1 (Refer to memory aid sheet page 1)
All others go to Q.C11.

C7. You mentioned that you receive money from ***(read out mentions statements 12 to 14 & 25 in Q.C1)***. Do any of these people live outside your household?

- ***Single mention.***

	(144)	
Yes	-1	⇨ ***Continue with Q.C8***
No	-2	⇨ *Go to Q.C9*

C8. How often do you get or receive money from people outside of your household?

- ***Show screen***
- ***Single mention.***

	(145)
Daily or more often	-6
At least once a week	-1
At least once a month	-2
A few times a year	-3
Once a year or less often	-4
Don't know ***(Do not show)***	-5

Ask Q.C9 if get money (any statements -1 to -14, -20 & -25 & 26) in Q.C1 (Refer to memory aid sheet page 1). All others go to Q.C12.

C9. In total how many people do you support (excluding yourself) with the money that you get, whether they stay with you or not?

- ***Please record zero if the respondent does not support anybody.***

(152)

Ask Q.C10 if support anyone (1 or more) in Q.C9. All others go to Q.C12.

C10. And of these people that you support with this money, in total, how many of these live **outside** of your household?

- ***Please record zero if the respondent does not support anybody outside the household.***
- ***IC Note: Response number in Q.C10 must be the same or less than response in Q.C9.***

(153)

Ask Q.C11 if support anyone outside household (1 or more) in Q.C10. All others go to Q.C12

C11. How often do you give or send money to people outside of your household?

- ***Read out.***
- ***Single mention.***

	(154)
Daily or more often	-6
At least once a week	-1
At least once a month	-2
A few times a year	-3
Once a year or less often	-4
Don't know ***(Do not read)***	-5

C12. We are now going to play a game. We are going to give you 21 match sticks. Imagine that these 21 match sticks represent all the money you usually spend in any month. Thinking about how you spend your money, I would like you to look through this list of items people often spend money on in a month. Place your match sticks according to how you spent your money in the past month. You can put more match sticks on one item and less on another and even all your match sticks on one item, until all 21 match sticks have been placed.

- ***Show screen***
- ***Hand respondent chip game show card***
- ***Respondents must use all 21 matches***
- ***Make sure that all 21 match sticks are placed***
- ***Wait for all matches to be placed before recording on the CAPI device***

	(131,132)	Number
01.	Food and drink and other groceries	
02.	Water / Electricity, paraffin, petrol, gas and other fuel	
03.	Education (school fees, university or college fees, uniform, transport, stationery)	
04.	Transport expenses (taxi fare, bus fare, train fare, petrol for car)	
05.	Bond or home loan, credit card, car financing	
06.	Airtime, cell phone contract, Telkom/Neotel telephone line payments, internet payments, data	
07.	Medical, health expenses, doctors fees, pharmacy/chemist medicines	
08.	Rental payments and rates, levies	
09.	Other debt repayments (e.g. clothing store accounts, hire purchase)	
10.	Savings and investments	
11.	Insurance and Funeral premium payments (e.g., life insurance, burial society.)	
12.	Household furnishings, equipment and routine household maintenance	
13.	Personal spending e.g. haircuts, gym, lotto, cigarettes, alcohol, clothes, hobbies, car maintenance or repairs, charity and religious donations	
14.	Leisure, entertainment and miscellaneous goods and services / DSTV, MNet or other subscription	
Total		**21**

SECTION D: REMITTANCES

Ask all.

D1. In the last 12 months, have you sent money to someone in a different place within the country or outside of South Africa?

Interviewer Instruction 1: Check: If C10 greater than 1, i.e. respondent supports people outside their household, must be "Yes' in D1.

- ***Do not prompt***

Yes	-1	⇨ ***Continue with Q.D2***
No	-2	⇨ *Go to Q.D5*

D2. You said that you send money, where did you send the money?

- ***Read out***
- ***Multiple mention***

Within South Africa	-1
Outside of South Africa	-2

D3. How do you usually give or send money to people outside of your household?

- ***Show screen***
- ***Multiple mention***

Send airtime	-01	
By bank or ATM deposit or transfer, including PostBank transfers	-02	
Money transfer at supermarket and/or retail e.g. Shoprite's money market or Pep's Capfin	-03	⇨ ***Go to D4***
Cash with relative or friend	-04	
Via a paid taxi, bus or other vehicle	-05	
Internet transfer	-06	
Through Post Office, Money-gram or Western Union	-07	
Cell phone money, e.g. M-Pesa/Mobile money or e-wallet or Cash-send or Send-imali	-08	⇨ ***Go to D4***
Other (SPECIFY)	-09	
Don't know/can't remember ***(Do not show)***	-10	

Ask only if code -3 (Money transfer at supermarket) and/or code -8 (Cellphone money) in Q.D3. All other go to D5.

D4. You said earlier you transfer money at a supermarket and/or a retailer and/or you sent money via cellphone, which do you use to send money?

- ***Do not prompt***
- ***Multiple mention***

Boxer cash and carry	-1
Checkers	-2
Shoprite	-3
Spar	-6
Pep store	-7
Pick 'n Pay	-8
eWallet (FNB)	-9
mPesa (Vodacom)	-10
Send-imali (Nedbank)	-11
Instantmoney (Standard Bank)	-12
Cash send (Absa)	-13
Mobile Money (MTN)	-14
Other (SPECIFY)	-4
Don't know ***(Single mention – do not show)***	-5

Ask ALL

D5. In the last 12 months, have you received money from someone in a different place within the country or outside of South Africa?

- ***Single mention.***

Yes	-1	⇨ ***Continue with Q.D6***
No	-2	⇨ *Go to Q.E1*

D6. **You said that you received money,** where did you receive the money from?

- ***Show screen***
- ***Multiple mention***

Within South Africa	-1	⇨ ***Continue with Q.D7***
Outside South Africa	-2	⇨ *Go to Q.E1*

D7. How do you usually receive money from people outside of your household?

- ***Show screen***
- ***Multiple mention***

Received airtime	-01	
By bank or ATM deposit or transfer, including PostBank transfers	-02	
Money transfer at supermarket and/or retail e.g. Shoprite's money market or Pep's Capfin	-03	⇨ ***Go to D8***
Cash with relative or friend	-04	
Via a paid taxi, bus or other vehicle	-05	
Internet transfer	-06	
Through Post Office, Money-gram or Western Union	-07	
Cell phone money, e.g. M-Pesa/Mobile money or e-wallet or Cash-send or Send-imali	-08	⇨ ***Go to D8***
Other (SPECIFY)	-09	
Don't know/can't remember ***(Do not show)***	-10	

Ask only if code -3 (Money transfer at supermarket) and/or code -8 (Cellphone money) in Q.D7.

D8. You said you receive money at a supermarket and/or a retailer and/or you sent money via cellphone, which do you use to receive money?

- ***Do not prompt***
- ***Multiple mention***

Boxer cash and carry	-1
Checkers	-2
Shoprite	-3
Spar	-6
Pep store	-7
Pick 'n Pay	-8
eWallet (FNB)	-9
mPesa (Vodacom)	-10
Send-imali (Nedbank)	-11
Instantmoney (Standard Bank)	-12
Cash send (Absa)	-13
Mobile Money (MTN)	-14
Other (SPECIFY)	-4
Don't know ***(Single mention – do not show)***	-5

SECTION E: USING CELL PHONES FOR FINANCIAL SERVICES AND TECHNOLOGY

E1 Now I'd like to find out about the communication devices that you use or own. Please tell me which of these things do you use?

- ***Read out statements.***
- ***Single mention per statement.***

Ask Q.E2 if "Yes" (code -1) in Q.E1a. All others go to Q.E7

E2. Do you own a ***(read out device from Q.E1)***?

- ***Read out***
- ***Single mention per statement.***

SP		Q.E1 Devices use		Q.E2 Own	
		Yes	No	Yes	No
	1. Cell phone	-1	-2	-1	-2
	9. Telephone Fixed line	-1	-2	-1	-2
	3. Computer or laptop	-1	-2	-1	-2
	4. Tablet (e.g. Ipad, Galaxy)	-1	-2	-1	-2
	8. 3G Modem/Dongle	-1	-2	-1	-2

Ask Q.E3 to Q.E3b if own a cell phone/tablet/3G modem/dongle "Yes" (code -1) in Q.E2 .All others go to Q.F1.

E3. You indicated that you own a cell phone/tablet /3G Modem/dongle. Please indicate whether this is prepaid, contract or whether you use contract top-ups?

- ***Read out***
- ***Multiple mention.***

	(125)
Prepaid	-1
Contract	-2
Contract top ups	-3
Other (SPECIFY)	-4
.....	
Don't know ***(Single mention – do not show)***	-5

E3a. You indicated that you own a cell phone/tablet/3G modem/dongle, please indicate which network provider(s) and packages you use?

- ***Do not prompt***
- ***Multiple mention.***

8ta\Telkom mobile	-1
Cell C	-2
MTN	-3
Vodacom	-4
Virgin Mobile	-5
FNB Connect	-6
Other (SPECIFY)	-7
.....	

Ask Q.E3c if use telephone fixed line in QE1.

E3b. Please tell me what do you use the telephone fixed line for?

- ***Read out***
- ***Single mention.***

Make and receive calls	-1
Access the internet	-2
Both	-3

Ask Q.E4a to Q.E6 if own a cell phone/tablet "Yes" (code -1) in Q.E2

Cell phones and tablets are being used for more and more things in daily life. We would now like to ask you some questions about using your cell phone/tablet for financial activities.

E4a. Are you a registered mobile money user on any mobile network, e.g. MTN Mobile Money, Vodacom MPESA?

- ***Single mention.***

Yes	-1
No	-2

E4b. Which of these activities do you currently use your cell phone/tablet for?

- ***Show screen***
- ***Multiple mention.***

1. Paying bills like for water, power, rates, post paid phone bills	-1
2. Checking your bank balance or bank statement	-2
3. Buying air time	-3
4. Buying data bundle	-4
5. Paying insurances premiums	-5
6. Logging an insurance claim	-6
7. Send money by cell phone	-7
8. Receive money by cell phone	-9
9. Buying funeral cover	-10
9. Transfer money between accounts	-11
10. Apply for an banking account, loans or any other banking products	
11. None of these ***(Single mention)***	-12

E5. There are many different things that people use their cell phones/tablet for. Which of these things have you used or done before on your current cell phone/tablet?

- ***Show screen***
- ***Multiple mentions.***

E6. And which **<u>other</u>** things do you think **<u>your current cell phone/tablet</u>** can do, even if you are **<u>not actually doing them</u>**?

- ***Show screen***
- ***Multiple mentions.***
- ***Answers in Q.E6 cannot be in Q.E5.***
- ***If "no other" response, record as code 13.***

	(127) Q.E5 Used	**(128)** Q.E6 Not used but phone/tablet can do
1. Make and receive calls	-01	-01
2. Send or receive SMS's	-02	-02
3. Listen to music	-03	-03
4. Use the internet	-04	-04
5. Use messaging applications like BBM or Whatsapp (chatting)	-05	-05
6. Email	-06	-06
7. Use Facebook	-07	-07
8. Use MXit	-08	-08
9. Use Twitter	-09	-09
10. Download applications or games	-10	-10
11. Read internet blogs	-11	-11
14. Use cellphone banking	-14	-14
15. Instagram	-15	-15
12. Other (SPECIFY).	-12	-12
13. No others		-13

Ask ALL

E7. **Now I would like us to talk a bit more about technology.** Again, here is a scale where 1 means completely disagree and 6 means completely agree. For each of these statements, please tell me how much you disagree of agree that:

- ***Show screen***
- ***Read out each statement one at at time***
- ***Single metnion per statement***

SP	(...)	Completely disagree	Disagree	Slightly disagree	Slightly agree	Agree	Completely agree	Don't know / NA *(Do not show)*
	1. You would like to use landline to make payments and pay bills	-1	-2	-3	-4	-5	-6	-7
	2. You would like to use internet based services to make payments and pay bills	-1	-2	-3	-4	-5	-6	-7
	3. You would like to use a cellphone to make payments and pay bills	-1	-2	-3	-4	-5	-6	-7
	4. Technology helps to organise your financial life better	-1	-2	-3	-4	-5	-6	-7

SECTION F: BANKING PENETRATION

We are going to talk about your use of various banking products and services. We want to understand which products or accounts are in your name or in joint names of yourself and/or partner or yourself and another person.

F1. Do you have a bank account in your own name?

- ***Single mention***

Yes	-1	⇨ *Go to Q.F1b*
No	-2	⇨ ***Continue with Q.F2***
Don't know	-3	⇨ ***Continue with Q.F2***

F1b. Have you used it in the past month?

- ***Single mention***

Yes	-1	⇨ *Go to Q.F3*
No	-2	⇨ ***Continue with Q.F1c***
Don't know	-3	⇨ ***Continue with Q.F1c***

F1c. Have you used it the past 12 months?

- ***Single mention***

Yes	-1
No	-2
Don't know	-3

Only ask if F1 is code 2 or 3. All others go to F3.

F2. Do you use someone else's bank account?

- ***Single mention***

Yes	-1	⇨ ***Continue with Q.F3***
Sometimes	-4	⇨ ***Continue with Q.F3***
No	-2	⇨ *Go to Q.F7*
Don't know	-3	⇨ *Go to Q.F7*

F3. At which banks do you receive your salary, wage, grant, income or other sources of money?

- ***Show screen***
- ***Multiple mentions.***
- ***Logic Check: If respondents answers code -22 at Q.C1, must answer code -97 at Q.F3***

ABSA	-02
African Bank	-20
Bidvest	-03
Capitec	-04
FNB	-05
Investec	-06
Nedbank	-08
Postbank / Post Office	-09
SASSA MasterCard	-10
Standard Bank	-11
Ubank/Teba	-12
Other (SPECIFY)	-19
Does not apply ***(Single mention)***	-97
Don't know ***(Single mention) (Do not show)***	-98

F4. Why did you choose the bank that you have your salary, wages or income paid into?

- ***Do not prompt***
- ***Multiple mentions.***
- ***Probe to ensure correct reason/s is recorded.***

My employer banks with them	-01
They have great customer service	-02
They are easily accessible/found everywhere	-03
They provide value for money	-04
They are cheaper	-05
They have a great loyalty programme	-06
I can relate to them	-07
They have attractive marketing campaigns	-08
They are innovative	-09
Technology is superior	-10
Have been banking with this bank ever since I can remember	-11
Cannot recall, it has been a long time since I opened this account	-12
Recommended by family/friend (word of mouth)	-20
Other (SPECIFY).....	-19
Don't know ***(Single mention) (Do not show)***	-98

Ask all.

Note: For each statement in Q.F7 where code 3 'have now', ask Q.F8 before asking next statement in Q.F7 i.e. Complete Q.F7 and Q.F8 for each product with code 3 answered in Q.F7 before continuing with next product (complete horizontally).

F7. For each product that I read out, please use the Show screen to tell me whether you have "never had", "used to have in the past but don't have now", or "have now":

- ***Show screen***
- ***Read out products/services***
- ***Single mention per product/service***
- ***Transfer codes to memory aid sheet page 2.***

F8. Please tell me where or at which organisation(s) you have your ….. ***(ask for each product/service have now- code -3 in Q.F7)***.

- ***Show screen***
- ***Multiple mentions possible per product/service***
- ***Record code from code frame below grid.***
- ***. Interviewer: Record code numbers. If the respondent mentions a name not on the list, please write in detail the full name of where the product/service is held as well as the relevant code for 'other'***

SP		Q.F7 Never had	Q.F7 Used to have in the past but don't have now	Q.F7 Have now	Q.F7 Don't Know *(Do not show)*	Q.F8 Where is account or product held *(Only fill in codes)*
	1. ATM or debit card	-1	-2	-3	-4	
	26. Savings account that you access your money immediately (e.g. Call account, Money market account)	-1	-2	-3	-4	
	3. Car or vehicle loan from a bank either directly or via a dealer – you have or are paying this back	-1	-2	-3	-4	
	4. Cheque card	-1	-2	-3	-4	
	5. Credit card e.g. Visa, MasterCard, American Express or Diners Club	-1	-2	-3	-4	
	6. Cheque or current account	-1	-2	-3	-4	
	7. Fixed or notice deposit account e.g. 32-day	-1	-2	-3	-4	
	10. Home loan, bond or mortgage – you have or are paying this back to buy, build, extend or improve a house from a bank or bond originator	-1	-2	-3	-4	
	11. Mzansi account offered by banks, e.g. Absa, FNB, Nedbank, Standard Bank and Postbank	-1	-2	-3	-4	
	12. Overdraft facility	-1	-2	-3	-4	
	13. Personal garage card or petrol card	-1	-2	-3	-4	
	14. Personal loan from a bank – you have or are paying this back	-1	-2	-3	-4	
	15. Post Office / Postbank savings or transaction account	-1	-2	-3	-4	
	17. Savings book at a bank	-1	-2	-3	-4	
	18. Student account	-1	-2	-3	-4	
	19. Transaction account	-1	-2	-3	-4	
	27. Insurance policy from a bank	-1	-2	-3	-4	
	21. Savings/ transactional account	-1	-2	-3	-4	
	23. SASSA MasterCard **(See Instruction 4)**	-1	-2	-3	-4	
	24. Tax free savings account	-1	-2	-3	-4	
	25. Funeral cover from a bank	-1	-2	-3	-4	

Instruction 1: If code 2 in Q.E4b (page 15) i.e. checking your bank balance or bank statement was selected, then must choose at least one code 3 in Q.F7.
Instruction 2: If code 2 or code 3 in Q.F1 (page 17), cannot have code 3 in Q.F7.
Instruction 3: Check: If code -1 in Q.F1 (page 17), must be at least one code -3 in Q.F7.
Instruction 4: If code 3 selected for statement 23 at Q.F7 must be code 1, 2, 3 and/or 26 selected at Q.C1

Codeframe for Q.F8

African Bank	-01	FNB	-05	Postbank / Post Office	-09	ABSA Vehicle and Asset Finance	-13
ABSA	-02	Investec	-06	SASSA MasterCard	-10	Wesbank	-15
Bidvest	-03	Ithala	-07	Standard Bank	-11	Other (SPECIFY)	-19
Capitec	-04	Nedbank	-08	Ubank/Teba	-12	Don't know (Single mention)	-98

Ask F8a if ONLY code 23 in F7 and/or if codes 1, 2 or 26 at C1. Others go to F9

F8a. You said that you have a SASSA Mastercard or receive a government social grant. Do you have any other bank accounts or products?

- ***Single Mention***

Yes	-01
No	-02

If Yes , then script goes back to F7 to check for other products held. If no, continue to F9.

F9. ***Interviewer record if respondent is.*** **(255)**

Currently banked	-1	⇨ *Must have at least one response 'have now' (code -3) for any statement 1 to 27 in Q.F7*
Previously banked	-2	⇨ *Must not currently have an account (no code -3 mentioned for any statement 1 to 27 in Q,F7) and must have given one or more response 'used to have' (code -2) for any statement 1 - 27 in Q.F7*
Never banked	-3	⇨ *Only 'never had' or 'don't know' (codes -1 OR -4) mentioned for ALL statements 1 to 27 in Q.F7, NO code -2 OR -3 mentioned in Q.F7*

Ask Q.F10 if previously or never banked code -2 or -3 in Q.F9. All others go to Q.F12.

F10. There are many reasons why people **don't have a bank account or bank cards**. You said earlier that you don't currently have a bank account or bank cards. Why is this?

- ***Do not prompt.***
- ***Multiple mentions possible.***
- ***Probe to ensure correct reason/s is recorded.***

	(256)
I don't have a regular income	-01
I don't have a job (unemployed or retrenched or retired)	-02
I don't have money to save	-03
I earn too little to make it worthwhile	-04
It's expensive to have a bank account	-19
I will consider a bank account in future	-15
I prefer dealing with cash only	-10
I don't need a bank account	-14
I don't qualify to open an account	-12
I don't have an identity document	-11
I don't believe in it	-17
It's too much hassle or not worth the effort	-18
I don't understand how it works	-07
I am still a student	-22
I don't understand technology	-13
The bank is too far from where I live, work or travel to	-09
I don't have proof of residential address	-06
I don't know how to open an account	-05
I use someone else's bank account	-08
I do not feel comfortable in a bank	-16
Other (SPECIFY)	-20
Don't know ***(Do not show)***	-21

Ask currently banked (code -1 in Q.F9) and social grant recipients (C1 codes 1 to 3, 26 and C3 code 2). All others go to Q.G1a.

F12. Please tell me whether you agree or disagree that:

- ***Read out statements.***
- ***Single mention per statement.***

SP		(183,184)	Yes	Sometimes	No	Don't know ***(Do not show)***
	1.	You check your bank statements, e.g. for transactions, things paid for, etc.	-1	-4	-2	-3
	2.	As soon as money is deposited into your account, you take all of it out	-1	-4	-2	-3
	3.	You prefer to use your ATM, debit or bank card to buy things instead of using cash	-1	-4	-2	-3
	4.	You prefer to deal with people rather than with electronic devices like ATMs	-1	-4	-2	-3

F13. Please tell me how often you do each of these activities?

- ***Show screen***
- ***Read out statements.***
- ***Single mention per statement.***

SP	(185,186)	Daily	At least once a week	At least once a month	Less often	Never/Don't know
	1. Get cash from an ATM	-5	-1	-2	-3	-4
	2. Deposit cash at an ATM	-5	-1	-2	-3	-4
	3. Use internet banking	-5	-1	-2	-3	-4
	4. Do electronic bank transfers or EFT or debit order	-5	-1	-2	-3	-4
	5. Get cash at a **store till** using debit or ATM card ***(See instruction 1)***	-5	-1	-2	-3	-4
	6. Use cell phone banking NOT SMS notifications ***(See instruction 2 & 3)***	-5	-1	-2	-3	-4
	7. Do banking with a person at a bank shop in a spaza or supermarket	-5	-1	-2	-3	-4
	8. Use a bank's cash loan centre	-5	-1	-2	-3	-4
	9. Paying bills through your bank account	-5	-1	-2	-3	-4
	10. Use SnapScan/Zapper for payments	-5	-1	-2	-3	-4
	11. Use cell phone/tablet banking App	-5	-1	-2	-3	-4

Instruction 1: Check: If code -1, -2 or -3 for statement 2 or 5 in Q.F13 i.e. have an ATM or debit card must be code -3 for statement 1 in Q.F7 (page 2 on memory aid sheet)
Instruction 3: Check: If code -1, -2 or -3 for statement 6 in Q.F13 i.e. use cell phone banking must be code -14 in Q.E5 (page 14)

Ask ALL
F14. Please tell me what irritates you about your bank, if there is anything at all?

- ***Do not prompt***
- ***Multiple mentions possible***

They have poor customer service	-01
They take a long time to respond to queries	-02
They don't understand my needs	-03
Fraud is not proactively detected	-04
Charges are too expensive	-05
Queues are too long	-06
Don't have enough ATM's	-07
ATM's not always working or opened	-08
Have limited branches	-09
Branches are too far from where I live	-10
Their internet banking is not user-friendly	-11
Their mobile banking is not user-friendly	-12
They do not have good interest rates	-13
Banks do not answer the telephone	-14
They do not have an attractive reward system	-15
Do not offer all the services that I need	-16
Nothing	-17
Do not use bank services	-18
Their system is often offline	-21
Their system is slow	-22
Other (SPECIFY)	-19
Don't know ***(Do not show)***	-20

SECTION G: BORROWING (CREDIT/LOANS)

Ask all.

G1a. Are you currently paying off any debt? By debt I mean things like a home loan, cellphone contract, car loan, furniture account, clothing accounts at department stores, etc?

- ***Single mention.***

Yes	-1
No	-2

G1. Lots of people borrow money or take out loans. Looking at this list of statements, please tell me which of these are true for you?

- ***Show screen***
- ***Multiple mention.***

	(203)	
Have borrowed in the past 12 months	-1	
Have taken goods on credit in the past 12 months	-2	
Owe money and still need to pay it back	-3	
I have applied for a loan and am waiting to hear back	-7	
I am currently borrowing	-4	
None of these ***(Single mention)***	-5	⇨ ***Go to G2***
Don't know ***(Do not show)***	-6	

Ask Q.G2 if code -5 in Q.G1, all others go to Q.G3.

G2. There are many reasons why people don't have a loan or don't borrow. You said earlier that you don't have a loan or any borrowing. What are your reasons for this?

- ***Do not prompt.***
- ***Multiple mention possible.***
- ***Probe to ensure correct reason/s is recorded.***

	(257)
I don't want to have debt	-10
Can't afford it	-17
I don't have a job	-15
Don't believe in it	-06
The interest is too high	-07
I don't have a regular income	-16
Never thought about it	-05
I earn too little to make it worthwhile	-12
My salary is not high enough to qualify for a loan	-08
Don't know how to go about getting a loan or borrowing	-04
I was declined or did not qualify	-01
I am scared to approach a bank or place where I can borrow money	-09
I have too much debt	-13
I had it in the past but had a negative experience	-11
I do not need a loan	-20
I don't have an ID	-02
I am too young/still a student	-21
Don't know about loans or borrowing	-03
I have been blacklisted at the credit bureau	-14
Other (SPECIFY).....	-18
Don't know ***(Do not show)***	-19

G3. We want to talk about places where people borrow money and take loans out from. Which of these people or places, if any, are you currently borrowing/paying back or have either taken money out from or paid any money back to in the past 12 months?

- ***Show screen***
- ***Multiple mentions.***

G4. Please tell me where or at what organisation you have your… ***(ask for each statement 9 to 13 and 16 in Q.G3 that respondent has).***

- ***Show screen***
- ***Multiple mentions possible per row.***
- ***Interviewer: Record code numbers. If the respondent mentions a name NOT on the list, please write in detail the full name of where the product/service is held as well as the relevant code for 'other'.***

		(192) Q.G3	(193,194) Q.G4 Where currently hold or paid back in past 12 months *(Please use code)*
1.	Friends or family	-01	
2.	Colleagues	-02	
3.	Employer or getting an advance on your salary	-03	
4.	Mashonisa or loan shark	-04	
5.	Stokvel society, burial society, umgalelo or savings club	-05	
6.	Pawn shop	-06	
7.	Borrowed or taken goods e.g. sugar, bread, milk, candles etc. or paying over time for things on the book from a local spaza, general dealer, corner cafe or shop	-07	
8.	Village bank or co-operative bank (e.g. Yebo, Iemas), development bank, NGO or government	-08	
9.	Loan from a bank ***(See instruction 1)***	-09	
10.	Loan from a retail store e.g. Pep's Capfin	-10	
11.	Personal loan from an insurance company	-11	
12.	Taken out an educational or student loan	-12	
13.	Borrowed money against your policy	-13	
16.	Taken out a consolidation loan	-16	
14.	Other (SPECIFY)	-14	
15.	None ***(Single mention – Do not show-See instruction 2)***	-15	

Instruction 1: Check: If code -3 for statement 14 in Q.F7 (page 2 on memory aid sheet) i.e. have a personal loan from a bank, must be code -9 in Q.G3.
Instruction 2: Check: If code -5 in Q.G1 (page 19), must be code -15 in Q.G3.
Instruction 3: Check: if code -1 or -2 in Q.G1 (page 19), must be codes -1 to -14,16 in Q.G3.

Ask Q.G5 if borrowed in the past 12 months in Q.G3 (codes -1 to -14 or/and 16 in Q.G3). All others go to Q.G6.

G5. For which reasons have you borrowed money or taken out a loan from ***(read out statements in Q.G3)***?

- ***Do not prompt.***
- ***Multiple mention.***
- ***Interviewer first write verbatim and determine relevant codes after recording verbatim.***
- ***Ask respondent if there are any other reasons***

Food	-05
Bills e.g. rent, electricity	-01
Medical spending	-09
Give to another family member	-07
To extend/renovate/repair a house	-15
Child's education	-04
Clothes	-03
To buy a house	-08
For transport fees	-16
To build a house	-14
Own education	-11
Monthly fees e.g. burial society, stokvel etc.	-10
Start or invest in your own business	-12
To buy a motor vehicle	-17
Cell phone, laptop or computer	-02
Gift	-06
Funeral expenses	-20
Weddings	-21
Other (SPECIFY)	-13
Don't know ***(Single mention)***	-98

Ask all.

G6. In the past 12 months, have you had an outstanding balance for a service offered e.g. doctor's fee, lawyer's fee?

- ***Single mention.***

	(258)
Yes	-1
No	-2
Don't know	-3

G7. Have you bought a large item like furniture or a fridge in the past 12 months?

- ***Single mention.***

	(259)	
Yes	-1	⇨ ***Continue to Q.G8***
No	-2	⇨ *Skip to Q.G9*
Don't know	-3	⇨ *Skip to Q.G9*

Ask if 'yes' (code1) in Q.G7.

G8. Did you use a hire purchase agreement or did you pay for the item in another way?

- ***Single mention.***
- ***Read out***

	(260)
Accepted hire purchase	-1
Paid in cash	-2
Paid using credit card	-5
Paid another way	-3
Paid using money from loan	-6
Don't know **(do not read out)**	-4

Ask all.

G9. In the past 12 months, did you make use of a revolving credit or revolving loan facility, i.e. cashing money you have already repaid on your loan? Please note that this excludes overdraft, credit cards and store account that revolve.

- ***Single mention.***

	(261)
Yes	-1
No	-2
Don't know	-3

G10. In the past 12 months, did you have a temporal loan, i.e. a short-term loan repayable within 31 days after take up?

- ***Single mention.***

	(262)
Yes	-1
No	-2

G11. Do you have a store card or store account in **your own name** where you can take goods and pay for them later?

- ***Single mention.***

	(199)
Yes	-1
No	-2

Ask those who are formally borrowing:

G12. You said you had some form of borrowing, credit or store card or a loan. Can you tell me if you currently have insurance that will pay your loan or borrowing off if you die, lose your job or are disabled in any way?

- ***Single mention.***

Yes	-1
No	-2
Don't know	-3

SECTION H: INSURANCE

Note: For each statement in Q.H1 where code 3 "have it in my name" or 4 "covered by somebody else", ask Q.H2 before asking next statement in Q.H1 – i.e. Complete Q.H1 and Q.H2 for each product before continuing with next product (complete horizontally).

H1. We are going to talk about insurance. This is different from funeral cover, which we will speak about soon. Please tell me about your use of each of these insurance products or cover, using the options I am about to show you. Which statement best describes your use of...?

- ***Show screen***
- ***Read out products.***
- ***Single mention per product.***

H2. Where or at what organisation do you have this product? ..... ***(ask for each product/service "have it in my name" and "covered by somebody else" (Q.H1 code 3 or 4)).***

- ***Show screen***
- ***Multiple mention possible per row.***
- ***Interviewer: Record code numbers. If the respondent mentions a name not on the list, please write in detail the full name of where the product/service is held as well as the relevant code for 'other'.***

(206,207) → (208,209)

SP		Q.H1					Q.H2
		Never had	Used to have	Have it in my name	Covered by somebody else	Don't know (Do not show)	Where policy held *(Only fill in code)*
	1. Vehicle or car insurance	-1	-2	-3	-4	-5	
	2. Household contents or possessions insurance e.g. furniture and appliances	-1	-2	-3	-4	-5	
	3. Building or property insurance on your house structure, often sold with your bond	-1	-2	-3	-4	-5	
	4. Insurance for hand tools or agricultural equipment	-1	-2	-3	-4	-5	
	5. Cell phone insurance	-1	-2	-3	-4	-5	
	6. Travel insurance for holiday or business travel excluding taxi commuter insurance	-1	-2	-3	-4	-5	
	19. Value added insurance, e.g. insurance fixing dents etc.	-1	-2	-3	-4	-5	
	7. Taxi commuter insurance covers you when you travel in a taxi	-1	-2	-3	-4	-5	
	8. Disability insurance or cover. This pays out if you become injured and can no longer work.	-1	-2	-3	-4	-5	
	9. Dreaded disease insurance. This pays out if you get a serious disease.	-1	-2	-3	-4	-5	
	10. Personal accident insurance or cover	-1	-2	-3	-4	-5	
	11. Loss of earnings insurance. This pays out if you get an illness and can no longer work. ***Not UIF.***	-1	-2	-3	-4	-5	
	12. Life insurance or life cover	-1	-2	-3	-4	-5	
	13. Medical aid or Medical scheme or Hospital plan	-1	-2	-3	-4	-5	
	14. Hospital cash back plan which pays you cash if you are hospitalised	-1	-2	-3	-4	-5	
	15. Professional indemnity cover	-1	-2	-3	-4	-5	
	16. Loan protection insurance - not life insurance ***(See instruction 1)***	-1	-2	-3	-4	-5	
	17. Insurance that pays for any legal fees, expenses or legal advice e.g. Legal Aid, Legalwise, Scorpion	-1	-2	-3	-4	-5	
	18. Income or Salary cover that pays out if you get retrenched, excluding UIF/Unemployment Insurance Fund						

Instruction 1: Check: If code -3 or -4 for statement 16 in Q.H1, must be code -9, -10, -11 and/or -12 in Q.G4 (page 22) – i.e. have a formal loan.

Codeframe for <u>Q.H2</u>
<u>Banks</u>

1. African Bank	-01	6. Investec	-06	11. Standard Bank	-11
2. ABSA	-02	7. Ithala	-07	12. Ubank/Teba	-12
3. Bidvest	-03	8. Nedbank	-08		
4. Capitec	-04	9. Postbank / Post Office	-09		
5. FNB	-05	10. -	-10		

Codeframe for Q.H2 Insurance					
21. 1LifeDirect	-21	30. Discovery	-30	39. Old Mutual	-39
22. –AIG	-22	31. Fedhealth	-31	40. Outsurance	-40
23. Alexander Forbes	-23	32. GEMS	-32	41. Sanlam	-41
24. Assupol Life	-24	33. Hollard	-33	42. Santam	-42
25. Auto & General	-25	34. Legalwise	-34	43. Zurich	-43
44. Avbob	-44	35. Liberty	-35	50. Regent	-50
26. Bonitas	-26	36. Metropolitan	-36	49. Other (specify)	-49
27. Budget Insurance	-27	37. Momentum	-37	98. Don't know ***(Single mention)***	-98
28. Clientele	-28	38. Mutual & Federal	-38		
29. Dial Direct	-29				

Ask Q.H4 if "do not have' insurance (code-1, -2 or -5 for ALL statements in H1) - All others, go to Q.I1.

H4. There are many reasons why people don't have insurance. You said earlier that you don't have any insurance. Why is this?

- ***Do not prompt.***
- ***Multiple mention possible.***
- ***Interviewer first write verbatim and determine relevant codes after recording verbatim.***
- ***Ask respondent if there are any other reasons***

	(214)
Cannot afford / It is too expensive	-10
I earn too little/I don't have a job/I do not earn enough income	-09
Don't want it	-04
Don't believe in insurance	-01
Never thought about it	-02
I don't know enough about these products	-13
I don't need it	-03
Do not trust insurance to pay out when I claim	-08
These things are not meant for people like me	-12
There are better things to spend my money on	-06
Don't see the benefits	-05
If I miss a payment I lose the insurance cover and the money I have paid for the insurance cover	-14
I am too young/still a student	-19
I am not currently working	-20
I was declined or did not qualify	-07
The language used and conditions are too confusing	-11
I have never been told about it	-15
No reason	-16
Don't know	-17
Other (SPECIFY)	-18

SECTION I: FUNERAL COVER

Ask all.

Now we are going to talk about your use of various **funeral cover products and services and burial societies.**

I1. Please tell me about your experience with each of these products, using the options I am about to show you.

- ***Show screen***
- ***Read out products.***
- ***Multiple mention possible per product.***

Ask for each product "have it in my name' code 3 in Q.I1.

I2. And how many people in total are covered on this funeral cover, including yourself?

- ***Do not prompt***
- ***Answer of zero not acceptable***

Ask if code 3 in Q.I1.

I3. Please tell me where or at which insurance company you have funeral cover in your name or covered by somebody else*?*

- ***Show screen***
- ***Multiple mentions possible.***
- ***Interviewer: Record code numbers. If the respondent mentions a name not on the list, please write in detail the full name of where the product/service is held as well as the relevant code for 'other'.***

(215,216) → (217,218)

SP		Q.I1 Never had	Used to have	Have it in my name	Covered by somebody else	Don't Know *(Do not show)*	Q.I2 Number of people covered	Q.I3 Where is account/product held *(Only fill in codes)*
	1. Funeral cover from a shop or store e.g. Edgars, Jet, Pep	-1	-2	-3	-4	-5		
	2. Funeral cover from a sports team like Kaizer Chiefs	-1	-2	-3	-4	-5		
	10. Funeral cover through an undertaker	-1	-2	-3	-4	-5		
	11. Funeral cover from a funeral parlour	-1	-2	-3	-4	-5		
	4. Funeral cover from your current employer or a union e.g. SADTU, POPCRU	-1	-2	-3	-4	-5		
	5. Funeral cover with an insurance company	-1	-2	-3	-4	-5		
	6. Funeral cover with a bank including Post Bank	-1	-2	-3	-4	-5		
	7. Funeral cover from a funeral home	-1	-2	-3	-4	-5		
	8. Funeral cover through your church	-1	-2	-3	-4	-5		
	9. Belong to a burial society ***(See instruction 3)***	-1	-2	-3	-4	-5		

Instruction 3: Check: If code -5 at Q.A8 (page 7), i.e. belong to a burial society, must be code -3 or -4 for statement 9.

Codeframe for Q.I3
Banks

1. African Bank	-01	6. Investec	-06	11. Standard Bank	-11
2. ABSA	-02	7. Ithala	-07	12. Ubank/Teba	-12
3. Bidvest	-03	8. Nedbank	-08		
4. Capitec	-04	9. Postbank / Post Office	-09		
5. FNB	-05	10.	-10		

Codeframe for Q.I3
Insurance / Funeral companies

26. 1LifeDirect	-21	36. Clientele	-30	43. Old Mutual	-39
27. 21st Century	-22	37. B3	-31	44. Pep stores	-40
28. Alexander Forbes	-23	38. Dove	-32	45. Sanlam	-41
29. Assupol Life 24	-24	39. Hollard	-33	46. Shoprite	-42
30. Avbob	-25	40. Martins	-34	44. Local funeral parlour/undertaker	-43
31. City Funerals	-44	41. Liberty	-35	45. Other (specify)	-50
		39. Metropolitan	-36	46. Don't know ***(Single mention)***	-49
		40. Mutual & Federal	-37		

Ask Q.I4 only if answer in Q.I2 is greater than 1 for any of the products mentioned

I4. You said that you have covered more than yourself in (read out statements in Q.I1 have it in my name). Can you please tell me what your relationship with the people you have covered is?

- ***Show screen***
- ***Multiple mentions possible***

Immediate family	-1
Extended family	-2
Both	-3
Other (SPECIFY)……..	-4

Ask Q.I4a if "do not have' funeral cover (codes 1,2, 4 or 5 for ALL statements in Q.I1) - All others, go to Q.J1.

I4a. There are many reasons why people don't have funeral cover. You said earlier that you don't have funeral cover in your name. Why is this?

- ***Do not prompt.***
- ***Multiple mention possible.***
- ***Ask respondent if there are any other reasons.***
- ***Probe to ensure correct reason is recorded.***

	(219)
You cannot afford it	-08
Your family will be looked after if you pass away	-1
You do not need funeral cover	-7
You have never thought about funeral cover	-2
You don't want to think about dying	-3
Funeral cover is not important to you	-4
You are healthy so don't need this kind of insurance	-6
You are not currently working	-10
Your family will pay for your funeral	-11
Other (SPECIFY) ……	-9

Ask Q.I4b if "have it in my name' funeral cover (codes 3) for statements-1,-2,-4 to -9, -10 or -11 in I1- All others, go to Q.J1.

I4b. You said that you have… (***read out code -3 answers in I1***)? Does this service provider have the option of a cash payout?

- ***Single mention***

Yes	-1
No, it is not an option	-2
I don't know if it is an option	-3

I5. Have you used their services in the last year?

- ***Single mention***

Yes	-1	⇨ *Continue with Q.I6*
No	-2	⇨ ***Go to J1***
Don't know	-3	⇨ ***Go to J1***

I6. Did you have to pay to get the body released?

- ***Single mention***

Yes	-1
No	-2
Don't know/don't remember	-3

I7. What was the value of the policy?

- ***Write down exact value in Rands***

R……..

I8a. Did you take a cash portion or the funeral services?

- ***Do not prompt***
- ***Single mention only***

Cash option	-1	⇨ *Continue with Q.I8b*
Funeral services	-2	⇨ ***Go to Q.I9***

I8b. You said that you took out the cash option. Was there a penalty for taking the cash option?

- ***Do not prompt***
- ***Single mention only***

Yes	-1
No	-2
Don't know/don't remember	-3

I9. You said that you used the funeral services instead of taking cash. On a scale of 1 to 6, where 1 means completely disagree and 6 means completely agree, please tell me how satisfied you are with the following services

- ***Show screen***
- ***Single mention per statement***

(....)	Completely disagree	Disagree	Slightly disagree	Slightly agree	Agree	Completely agree	Don't know / NA *(Do not show)*
1. The value of the service met your expectations	-1	-2	-3	-4	-5	-6	-7
2. All services were provided on time	-1	-2	-3	-4	-5	-6	-7
3. They showed dignity and respect throughout the process	-1	-2	-3	-4	-5	-6	-7
4. The quality of equipment e.g. tent, cars, etc. was what I expected	-1	-2	-3	-4	-5	-6	-7
5. The coffin/casket was the quality I expected it to be	-1	-2	-3	-4	-5	-6	-7
6. The parlour was willing to accommodate my special requests	-1	-2	-3	-4	-5	-6	-7

SECTION J: RETIREMENT/PENSION

Ask all.

Note: For each statement in Q.J1 where code 2 'have now', ask Q.J2 and Q.J3 before asking next statement in Q.J1 – i.e. Complete Q.J2 and Q.J3 for each product before continuing with next product (complete horizontally).

J1. Now we are going to talk about your use of various **retirement and pension products and services**. Please tell me about your use of each of these products, using the options I am about to show you. Do you currently have a...?

- ***Show screen***
- ***Read out products.***
- ***Single mention per product.***
- ***Ask Q.J2 and Q.J3 for each product 'have now' (code -2) before asking the next product.***

J2. Please tell me who pays for the... ***(ask for each product "Have now" (Q.J1 code 2)?***

- ***Show screen***
- ***Multiple mention possible per product.***

J3. Please tell me where you have.... ***(ask for each product "Have now" (Q.J1 code 2)).***

- ***Show screen***
- ***Multiple mention possible per row.***
- ***Interviewer: Record code numbers. If the respondent mentions a name not on the list, please write in detail the full name of where the product/service is held as well as the relevant code for 'other'.***

(220,221) **(222,223)** **(224,225)**

SP		Q.J1			Q.J2					Q.J3
		Do not have	Have now	Don't know	Pay directly myself	Deducted from salary	Employer pays	Family pays	Other	
	1. Retirement annuity	-1	-2	-3	-1	-2	-3	-4	-5	
	2. Provident fund	-1	-2	-3	-1	-2	-3	-4	-5	
	3. Pension fund	-1	-2	-3	-1	-2	-3	-4	-5	

Codeframe for Q.J3

Banks

1. African Bank	-01	6. Investec	-06	10. Standard Bank	-11
2. ABSA	-02	7. Ithala	-07	11. Ubank/Teba	-12
3. Bidvest	-03	8. Nedbank	-08		
4. Capitec	-04	9. Postbank / Post Office	-09		
5. FNB	-05	10. SASSA MasterCard	-10		

Insurance / investment companies

21. 1LifeDirect	-21	30. Discovery	-30	39. Old Mutual	-39
22. AIG	-22	31.		40. Outsurance	-40
23. Alexander Forbes	-23	32.		41. Sanlam	-41
24. Assupol Life	-24	33. Hollard	-33	42. Santam	-42
25. Auto & General	-25	34. Legalwise	-34	43. Zurich	-43
26. Bonitas	-26	35. Liberty	-35	50. Regent	-50
27. Budget Insurance	-27	36. Metropolitan	-36	49. Other (Please Specify)	-49
28. Clientele	-28	37. Momentum	-37	98. Don't know ***(Single mention)***	-98
29. Dial Direct	-29	38. Mutual & Federal	-38		

Ask J4 only if at least one code -2 " have now" in J1

J4. You said that you have (***ask for each product "Have now" Q.J1 code 2).*** Please can you tell me how this fund will pay you out when you reach retirement?

- ***Show screen***
- ***Multiple mention possible per row***

Lump-sum only	-1
Lump-sum and monthly payment	-2
Monthly payments	-3
Other Specify	-4
Don't know	-5

Ask J5 if code 1 or 2 in J4

J5. What do you intend to use your lump-sum pension pay out for when you receive it?

- ***Show screen***
- ***Multiple mention possible***

Pay off a debt	-1
Pay for children education	-2
Pay off home loan	-3
Re-invest all or part of it	-4
Use it for day to day expenses	-5
Buy a car	-6
Buy/build a house	-7
Invest in a business	-8
Other Specify	-9
Don't know	-10

SECTION K: SAVINGS/INVESTMENTS

Ask all.

K1. Finally, we are going to talk about **savings products and services**. Please tell me about your use of each of the products you have, using the options I am about to show you. Please include products that you pay for directly as well as those which your employer provides and are deducted from your salary.

- ***Show screen***
- ***Read out products.***
- ***Single mention per product***

Ask Q.K2 if have unit trust, education policy or plan, investment or savings plan, endowment policy ,stokvel account at a bank and or tax-free savings . Code 3 for statements 1, 2, 3, 4 5 and/or 19.

K2. Please tell me where or at what organisation you have now your ***(ask for each product "Have now" code -3 in Q.K1).***

- ***Show screen***
- ***Multiple mention possible per row.***
- ***Interviewer: Record code numbers. If the respondent mentions a name not on the list, please write in detail the full name of where the product/service is held as well as the relevant code for 'other'.***

SP		(226, 227) Q.K1 Never had	Used to have	Have now	Don't know ***(Do not show)***	(228,229) Q.K2 Where account product is held ***(only fill in codes)***
	1. Unit trusts	-1	-2	-3	-4	
	2. Education policy or plan	-1	-2	-3	-4	
	3. Investment or savings policy	-1	-2	-3	-4	
	4. Endowment policy	-1	-2	-3	-4	
	5. Stokvel account at a bank	-1	-2	-3	-4	
	19. Tax Free savings	-1	-2	-3	-4	
	6. Savings book at a bank ***(See instruction 1)***	-1	-2	-3	-4	
	7. Deposit account - fixed or notice deposit e.g. 32 day ***(See instruction 2)***	-1	-2	-3	-4	
	8. Savings account that you access your money immediately (e.g. Call account, Money market account) ***(See instruction 3)***	-1	-2	-3	-4	
	9. Shares on the stock exchange	-1	-2	-3	-4	
	10. Other shares such as Sasol shares (Inzalo), MTN or Post Office shares	-1	-2	-3	-4	
	11. Government bonds	-1	-2	-3	-4	
	12. Off-shore investments	-1	-2	-3	-4	
	13. Co-operative or village bank savings	-1	-2	-3	-4	
	14. Stokvel or umgalelo ***(See instruction 5)***	-1	-2	-3	-4	
	15. Savings club/groups ***(See instruction 6)***	-1	-2	-3	-4	
	16. Giving money to family or any of your household members who will guard it for you, to keep it safe	-1	-2	-3	-4	
	17. Keep cash or savings at home - kept aside for a specific purpose and not for everyday use	-1	-2	-3	-4	

Instruction 1: Check: code for statement 17 at Q.F7 (page 2 on memory aid sheet), must be the same code for statement 6 – i.e. have savings book at a bank.
Instruction 3: Check: code for statement 26 at Q.F7 (page 2 on memory aid sheet), must be the same code for statement 8 – i.e. have call account.
Instruction 5: Check: If code -4 in Q.A8 (page 7), must be code -3 for statement 15 – i.e. have stokvel or umgalelo.

Ask for any code -1 (Never had) and/or-2 ("used to have") in Q.K1 statements 1 to 14,17 & 19, all others go to Q.K4.

K3. There are many reasons why people don't have investment or savings products. You said earlier that you have never had investments or savings. Why is this?

- ***Do not prompt.***
- ***Multiple mention.***
- ***Ask respondent if there are any other reasons.***

(...)

Never thought about it	-1
I prefer to spend money on other things I need more	-2
I prefer to invest in other things e.g. property, livestock	-3
My children will look after me so I don't need it	-4
I save in other ways e.g. keep cash at home	-5
I won't be able to access my money if I need it	-6
I don't want to save	-7
I don't need to save	-8
Don't know about investment and savings	-9
I don't have money to save or invest	-10
I do not have a bank account	-11
It is too expensive	-12
I don't have a job	-13
I do not understand the investment/savings products	-14
There are too many to choose from so I get confused	-15
Other (SPECIFY)	-16
.....	
Don't know ***(Do not show – single mention)***	-17

Ask All

K4. What, if anything, are you currently saving for?

- ***Do not prompt.***
- ***Multiple mentions possible.***
- ***Ask respondent if there are any other reasons.***

In case of an emergency	-01
For funeral costs	-02
For medical expenses	-03
For food	-04
For school fees or education	-05
For retirement or old age	-06
For future holidays or to go overseas	-07
For buying household goods e.g. furniture or appliances	-08
For a car or vehicle	-09
To provide for my family if I die	-10
For a deposit on a house or to improve or extend house	-11
To leave a legacy for my children	-12
For nothing specific or in particular ***(Single mention)***	-13
Weddings	-16
Other (SPECIFY)	-14
.....	
Not currently saving ***(Single mention)***	-15

Ask Q.K6 if code -15 was NOT mentioned in Q.K4. else go to Q.L1

K6. What amount of the money that you get each month would you say that you save or put aside each month? This includes all the money that you pay to things like stokvels, savings clubs, and investment and retirement products.

- ***Show screen***
- ***Read out.***
- ***Single mention***

K7. How much do you think you should be saving per month?

- ***Show screen***
- ***Read out.***
- ***Single mention***

		Q.K6	Q.K7
1.	Do not save	-01	-01
2.	R1 - R49	-02	-02
3.	R50 - R99	-03	-03
4.	R100 - R199	-04	-04
5.	R200 - R499	-05	-05
6.	R500 - R999	-06	-06
7.	R1,000 - R1,999	-07	-07
8.	R2,000 - R4,999	-15	-15
9.	R5,000 - R9,999	-08	-08
10.	R10,000 or more	-09	-09
11.	Don't know ***(Do not read out or show)***	-10	-10
12.	Refused ***(Do not read out or show)***	-11	-11

SECTION L: GENERAL ATTITUDES STATEMENTS

L1. I am going to read a list of statements people have said about planning for the future and putting money away. Please tell me whether these apply to you or not.

- ***Read out statements.***
- ***Single mention per statement.***

- SP	(165,166)	Yes	Sometimes	No	Don't know *(Do not read)*	N/A *(Do not read)*
	1. You have enough money left for savings after covering all your spending needs	-1	-5	-2	-3	-4
	2. You are worried that you will not have enough money for retirement	-1	-5	-2	-3	-4
	3. Dealing with personal finances is stressful	-1	-5	-2	-3	-4
	4. You find the language used in financial paperwork confusing	-1	-5	-2	-3	-4

L2. Which of these things, if any, do you do or use?

- ***Show screen***
- ***Multiple mention.***

	(134)
Loyalty points such as Pick n Pay Smart Shopper, Clicks, Dis-Chem, Bank affiliated loyalty cards	-1
Gift cards, including store or shopping mall gift cards	-2
Vouchers from a shopping mall, supermarket or other shop e.g. U-Cash	-3
Shopping coupons or stamps	-4
None of these ***(Single mention)***	-9

L3. I am going to read a few statements to you. Please tell me whether ……..

- ***Read out statements.***
- ***Single mention per statement.***

	(264,265)	Yes	Sometimes	No	Don't know *(Do not read)*
	1. You have written up a plan or budget of your spending and earnings to make sure they balance	-1	-4	-2	-3
	2. You keep track of money that you get and spend	-1	-4	-2	-3
	3. You have heard of a village or cooperative bank	-1	[redacted]	-2	-3
	4. You have heard of the ombudsman	-1	[redacted]	-2	-3
	5. You have a will/testament	-1	[redacted]	-2	-3
	6. You have heard of Tax free savings accounts	-1	[redacted]	-2	-3

Ask only if code 1 'yes' for statement 5 in Q.L3.

L3b. Where would the will/testament held?

- ***Show screen***
- ***Single mention***

Independent financial advisor	-1
Lawyer	-2
Accountant	-3
In the bank	-4
With the insurance company	-5
Other specify	-6
Do not know (Do not show)	-7

Ask only if code 2 "no' in statement 5 in QL3.

L3c. Why do you not have a will/testament?

- ***Do no prompt***
- ***Multiple mention***

Never thought about it	-1
I do not know how to get it	-2
I do not trust financial institutions	-3
I am not going to die soon	-4
I do not need it	-5
The language in the will is confusing	-6
I am planning to have a will	-7
I cannot afford it	-8
I don't have a job	-9
Other (Specify)	-10
Do not know	-11

L4. We are now going to talk about decisions some people make before buying a product, policy or service from a shop, bank, insurance company, and so forth. Think about the last time you went to buy a product or a service, please tell me if you agree or disagree with each of the statements that I will read to you. Do you agree or disagree that

- ***Read out statements.***
- ***Single mention per statement.***

SP	(267,268)	Yes	Sometimes	No	Not applicable *(Do not read)*	Don't know *(Do not read)*
	1. When buying a product or service, you ensure that the features of the product or service are explained to you	-1	-5	-2	-3	-4
	2. Before buying a product or service, you get alternative quotes from other providers	-1	-5	-2	-3	-4
	3. You understand how long your loans would take to pay back	-1	-5	-2	-3	-4
	4. You know how much you need to spend on your premiums	-1	-5	-2	-3	-4
	6. You have applied to have your debt consolidated or have had a debt consolidation	-1		-2	-3	-4
	7. You have had a garnishee or emolument order or have been garnisheed	-1		-2	-3	-4

L5. Here is a scale where 1 means completely disagree and 6 means completely agree. For each of these statements, please tell me how much you disagree or agree that:

- ***Show screen***
- ***Read out statements.***
- ***Single mention per statement.***

SP	(204,205)	Completely disagree	Disagree	Slightly disagree	Slightly agree	Agree	Completely agree	Don't know / NA *(Do not show)*
	7. You have considered going to see someone to help you with your debt problems	-1	-2	-3	-4	-5	-6	-7
	8. You have considered cancelling insurance or investment policies to pay back money that you have borrowed	-1	-2	-3	-4	-5	-6	-7
	9. You usually have problems making ends meet. By that I mean you do not have enough money to pay for the things you needs	-1	-2	-3	-4	-5	-6	-7
	10. In the past 12 months you had problems regarding the arrears with payments for things like rent, municipality bills or debt payment	-1	-2	-3	-4	-5	-6	-7
	11. In total, you now have more money compared to three months ago	-1	-2	-3	-4	-5	-6	-7

L7. I am going to read a list of statements that people have made. On a scale of 1 to 6, where 1 means completely disagree and 6 means completely agree, please tell me how much you disagree or agree that:

- **Show screen**
- ***Read out statements.***
- ***Single mention per statement***

SP	(...)	Completely disagree	Disagree	Slightly disagree	Slightly agree	Agree	Completely agree	Don't know / NA *(Do not show)*
	1. Since you started using financial services, you feel much more in control of your financial situation	-1	-2	-3	-4	-5	-6	-7
	2. You think that financial institutions are generally difficult to deal with	-1	-2	-3	-4	-5	-6	-7
	3. You generally find it difficult to get good information about financial products	-1	-2	-3	-4	-5	-6	-7
	8. You find it stressful to switch financial products	-1	-2	-3	-4	-5	-6	-7

L8. I am going to read a list of statements people have said about using money and things like banks. Please tell me whether these statements apply to you or not?

- ***Read out statements.***
- ***Single mention per statement.***

SP	(181,182)	Yes	No	Not Applicable *(Do not show)*
	7. You understand the difference between banking products offered	-1	-2	-3
	8. You understand the differences amongst banks	-1	-2	-3
	3. Banking fees are too expensive	-1	-2	-3
	9. You are sure which bank account is the best one for you	-1	-2	-3
	10. You actively find out what you are paying in bank fees	-1	-2	-3
	11. You have switched banks in the past year	-1	-2	-3

L9. We would like to understand a bit about your **lifestyle and interests**. Please can you tell me which, if any, **personally apply to you for the last year,** or you have persor

- ***Read out.***
- ***Single mention per statement.***

(231,232)	Yes	No
1. Been on an overseas holiday	-1	-2
2. Stayed in a 2 or 3 star hotel	-1	-2
3. Member of a golf or country club	-1	-2
4. Travelled first class or business class by plane	-1	-2
5. Eaten out at a branded family restaurant such as Spur, Saddles, Panarotti's etc.	-1	-2
6. Hired self-catering accommodation when holidaying	-1	-2
7. Own an exotic, sports or luxury car or 4X4	-1	-2
8. Attended a live performance at the theatre	-1	-2
9. Stayed in a 4 or 5 star hotel	-1	-2
10. Made use of public transport such as bus, train, minibus taxi	-1	-2
11. Visited a private game or safari lodge	-1	-2
12. Have children who attend a government school	-1	-2
13. Part of your wealth is invested overseas	-1	-2
14. Own a pre-owned vehicle	-1	-2
15. Purchased or commissioned an original artwork	-1	-2
16. Stayed in a caravan park or camping site when holidaying	-1	-2
17. Was involved in fundraising	-1	-2
18. Attended a society event such as a gala dinner, opening etc.	-1	-2
19. Eaten out at an exclusive restaurant	-1	-2
20. Have children who attend a private school	-1	-2
21. Member of a boat club or yacht club	-1	-2
22. Have travelled on a private plane, jet or helicopter	-1	-2
23. Own two or more properties	-1	-2
24. Stayed in family holiday home or flat when holidaying	-1	-2

L10a. There are many things that are important to people when they choose an insurance provider. Which of the following, if any, are very important to you when choosing an insurance provider?

- ***Show screen***
- ***Multiple mention***

Agent recommendation	-1
Customer service	-2
Financial stability of company	-3
Location of branches	-4
Insurance premium	-5
Reputation of the company	-6
Simplicity of application	-7
Size of company	-8
Years in business	-9
Being widely advertised	-11
Other(SPECIFY)	-10

.....

L10b. Who do you ask if you need financial advice?

- ***Show screen***
- ***Multiple mention***

Family member	-1
A friend	-2
Your employer	-3
A financial institution	-4
Savings club/burial society	-5
A financial adviser/planner	-6
Other (SPECIFY)	-7
.....	
No one	-8

Ask only if code 6 in QL10b

L10c. Which institution does your financial advisor/planner belong to?

- ***Show screen***
- ***Multiple mention***

Cooke Fuller Garrun	-1
Fia broker	-2
Hemisphere brokers	-3
Insure Safe	-4
PSG	-5
Success Financial Services Group	-6
Financial planners from bank	-7
Financial planner from insurance company	-8
Independent financial planners	-9
RBS Katz Breskal	-10
Other (SPECIFY)	-11
.....	
Don't know	-12

Ask if codes 1 to 5 and/or 7 in L10b

L10d. Why do you not use a financial adviser/planner?

- ***Do not prompt***
- ***Multiple mention***

Do not know they exist	-1
They are costly	-2
Do not trust them	-3
I used to use them but not now	-4
Financial advisers are for wealthy people	-5
Other (SPECIFY)	-6
.....	
Don't know	-7

L11 Here is a scale where 1 means completely disagree and 6 means completely agree. For each of these statements, please tell me how much you disagree or agree that:

- ***Show screen***
- ***Read out statements***
- ***Single mention per statement***

(...)	Completely disagree	Disagree	Slightly disagree	Slightly agree	Agree	Completely agree	Don't know / NA *(Do not show)*
8. It is important to be safe with your money even if you lose out on higher rates of return	-1	-2	-3	-4	-5	-6	-7
9. You prefer to spread your money in different investments than to put all your money in one investment	-1	-2	-3	-4	-5	-6	-7
2. It is important to have a lump sum saved up in case risks happen	-1	-2	-3	-4	-5	-6	-7
3. It is important to you to be able to alter premiums up or down or skip a premium in a given year	-1	-2	-3	-4	-5	-6	-7
4. You do not like insurance because you get nothing back if you do not make a claim	-1	-2	-3	-4	-5	-6	-7
5. Insurance is not available for people with your income	-1	-2	-3	-4	-5	-6	-7
6. You would probably take out insurance if there was no excess to pay if you made a claim	-1	-2	-3	-4	-5	-6	-7
7. You would probably take out insurance if you were certain that a legitimate claim would be paid out	-1	-2	-3	-4	-5	-6	-7

Ask all.

L15. In the last 12 months, **how often** have you or your household .....?

- ***Show screen***
- ***Read out statements.***
- ***Single mention per statement.***

SP	(163,164)	Often	Sometimes	Rarely	Never	Don't know *(Do not show)*
	1. Gone without enough food to eat because you didn't have enough money to buy food	-1	-2	-3	-4	-5
	2. Gone without medicine or medical treatment that was needed	-1	-2	-3	-4	-5
	3. Gone without energy to heat your home or cook food **except for blackouts or load shedding**	-1	-2	-3	-4	-5
	4. Felt unsafe in your home because of crime	-1	-2	-3	-4	-5
	5. Gone without clean water to drink or cook with	-1	-2	-3	-4	-5

Ask all.

L16 How would you rate each of the following financial institutions in terms of 'level of trust', where 1 is Completely Distrust and 4 is Completely Trust?

- ***Show screen***
- ***Read out statements.***
- ***Single mention per statement.***

	Completely distrust	Distrust	Trust	Completely Trust
1. Banks	-1	-2	-3	-4
2. Insurance	-1	-2	-3	-4
3. Retail stores (e.g. Edgars, Shoprite etc.)	-1	-2	-3	-4
4. Mobile network operators (e.g. MTN, Cell C)	-1	-2	-3	-4
5. Stokvels and/or Burial society	-1	-2	-3	-4

Ask ALL

L17. Please tell me what irritates you about your insurance company(ies), if there is anything at all?

- ***Do not prompt***
- ***Multiple mentions possible***

They have poor customer service	-01
They take a long time to respond to queries	-02
They don't understand my needs	-03
They take a long time to respond to claims	-04
Their premiums are too expensive	-05
Have limited branches	-09
Branches are too far from where I live	-10
They do not want to pay out claims	-14
They do not have an attractive reward system	-15
Do not offer all the services that I need	-16
Nothing	-17
Other (SPECIFY)	-19
Don't know ***(Do not show)***	-20

SECTION M: GENERAL ATTITUDES AND DEMOGRAPHICS

Ask all.

We are almost finished. I am going to ask some questions to find out a little more about you.

M1. Which is the main language you speak at home?

- ***Do not prompt.***
- ***Single mention.***

	(233)
Afrikaans	-01
English	-02
IsiNdebele	-03
IsiXhosa	-04
IsiZulu	-05
Sepedi	-06
Sesotho	-07
Setswana	-08
SiSwati	-09
Tshivenda	-10
Xitsonga	-11
Other (SPECIFY)	-12

M2. What is your **PRESENT** marital status?

- ***Do not prompt.***
- ***Single mention.***

	(234)
Married	-7
Single (not married) and not living with a partner	-8
Single (not married) and living with a partner	-9
Widower or widow	-3
Separated	-4
Divorced	-5
Other SPECIFY	-6
.....	

M2a. And which of these apply to you?

- ***Show screen***
- ***Single mention.***

Do not have any children	-1
Have children under the age of 6	-2
Have school going children	-3
Have children beyond school age living at home	-4
Have children beyond school age living outside the family home	-5

M3. What is your highest level of education?

- ***Show screen***
- ***Single mention.***

	(235)
No schooling	-1
Primary school	-2
Some high school	-3
Matric	-4
Apprenticeship	-5
Diploma	-6
University degree	-7
Other (SPECIFY)	-8
.....	

M4. Which of these, if any, best describes your personal working status?
INTERVIEWER: Check against C1.

- ***Show screen***
- ***Single mention.***

	(236)
Work full-time or 30 hours a week or more for yourself or in your own business	-01
Work full-time or 30 hours a week or more for a company or individual	-02
Work part-time or less than 30 hours a week for yourself or in your own business	-03
Work part-time or less than 30 hours a week for a company or individual	-04
Student or learner	-05
Housewife or house husband	-06
Pensioner or retired	-07
Unemployed and looking for a job	-08
Unemployed and not looking for a job	-09
Other (SPECIFY).....	-10

Ask all.

M5. Now I am going to read out a list of things to you. Some of these things might sound strange to you, but we need to ask them to understand a bit more about your lifestyle. Please tell me which of these, if any, are presently in your household or apply to your household.

- ***Circle the correct number for each statement.***
- ***Do not read out the statements in bold.***

No	LSM 2014nsv	YES	NO
1	Tap water in your house or on your property	1	2
2	Hot running water from a geyser	1	2
3	Flush toilet inside or outside house	1	2
4	Built-in kitchen sink	1	2
5	Ordinary Telkom or Neotel telephone	1	2
6	3 or more cellphones in this household	1	2
7	Exactly two cellphones in this household	1	2
8	Exactly one cellphone or no cellphones in this household	1	2
9	More than 1 radio, excluding a car radio	1	2
10	Swimming pool	1	2
11	TV set	1	2
12	Pay TV subscription such as M-Net, DStv or Top TV	1	2
13	Air conditioner, not just a fan	1	2
14	Any kind of DVD or Blu Ray player	1	2
15	Home theatre system	1	2
31	Hi-fi/Music centre	1	2
16	Personal computer such as laptop or desktop	1	2
17	Fridge or combined fridge/freezer	1	2
18	Deep freezer which is free standing	1	2
19	Electric stove	1	2
20	Microwave oven	1	2
21	Floor polisher or vacuum cleaner	1	2
22	Washing machine	1	2
23	Tumble dryer	1	2
24	Dishwashing machine	1	2
25	Motor car	1	2
26	Live-in, full-time or part-time domestic servant, helper or gardener	1	2
27	Home security service	1	2
28	Live in a built house/cluster house or town house excluding a RDP, township matchbox or improved township matchbox house	1	2
29	Live in one of these cities or their suburbs and townships: Johannesburg, Soweto, Alberton, Benoni, Boksburg, Kempton Park, Pretoria, Vanderbijlpark, Vereeniging, Welkom, Bloemfontein, Durban, Pietermaritzburg, Port Elizabeth/Uitenhage, East London, Cape Town	1	2
30	Live in a *rural area* such as a farm or traditional tribal village, *outside* Gauteng or the Western Cape	1	2

(300,301)

Instruction 1: Check: If codes -1 or -2 at Q.A3 (page 6), must be code -1 for statement 1 – i.e. have tap water in house or on property.
Instruction 2 : Check: If codes -1 to -3 for statement 7 at Q.C12 (page 8), must be code -1 for statement 12 – i.e. have Pay TV.
Instruction 3: Check: If code -1 for statement 3 at Q.E2 (page 15), must be code -1 for statement 16 – i.e. have personal computer or laptop.

M6a. Please tell me your personal average **TOTAL MONTHLY PERSONAL INCOME** before tax and other deductions. Please include all sources of income i.e. wages, grants, piecemeal work, salaries, pensions, income from investment, etc.

- ***Record in rands.***
- ***Give to respondent to self-complete.***
- ***Transfer answer to M6b on next page***
- ***If refused, don't know or no income please leave box blank and don't fill in zero (0) & record below***

(244)

R [ ] ⇨ ***Interviewer record answer into corresponding band in Q.M6b and Go to Q.M7***

Refused	-RF	⇨ ***Continue to Q.M6b***
Don't know	-DK	
No Income	-NI	

Instruction 1: Check: If code -22 at C1 (check memory aid sheet page 1) must be "No Income" at M6a

---

Ask Q.M6b if refused (-RF) or don't know (DK) in Q.M6a. All others go to Q.M7.

M6b. Which of these best describes your personal average **TOTAL MONTHLY PERSONAL INCOME** before tax and other deductions? Please include all sources of income i.e. wages, grants, piecemeal work, salaries, pensions, income from investment, etc.

- ***Show screen***
- ***Single mention only.***
- ***If No Income (NI) selected at Q.M6a, code Q.M6b as code 1 (No Income).***

Ask all.

M7. Which of these best describes your **TOTAL MONTHLY HOUSEHOLD INCOME** before tax and other deductions? Please include all sources of income i.e. wages, grants, piecemeal work, salaries, pensions, income from investment, etc. This includes all income generated by everyone in the household.

- ***Show screen***
- ***Single mention only.***
- ***Value in Q.M7 must be greater than or equal to value in Q.M6a and Q.M6b.***

		(245) Q.M6b Personal/month	**(246)** Q.M7 Household/month
A.	No income	-01	-01
B.	R1 - R999	-02	-02
C.	R1,000 - R1,999	-03	-03
D.	R2,000 - R2,999	-04	-04
E.	R3,000 - R5,999	-05	-05
F.	R6,000 - R7,999	-06	-06
O.	R8,000 - R9,999	-07	-07
P.	R10,000 – R11,999	-15	-15
H.	R12,000 – R16,999	-08	-08
I.	R17,000 – R24,999	-09	-09
J.	R25,000 – R29,999	-10	-10
K.	R30,000 – R39,999	-11	-11
L.	R40,000 or more	-12	-12
M.	Refuse to answer ***(Do not show)***	-13	-13
N.	Uncertain or Don't know ***(Do not show)***	-14	-14

THANK RESPONDENT AND CLOSE INTERVIEW

I hereby certify that this interview has been carried out by me in accordance with the instructions I received from TNS, and has been checked.

SIGNED _____

Please record the approximate duration of the interview on the grid below.

Day of Week (36)	
Monday	-1
Tuesday	-2
Wednesday	-3
Thursday	-4
Friday	-5
Saturday	-6
Sunday	-7

Time of Day (37)	
Morning (before 12:00)	-1
Afternoon (12:01-17:00)	-2
Evening (17:01 or later)	-3

End time (38,39)
(PLEASE FILL IN)
..... h .....
Record using 24 hr clock, for example 15h00

BUSINESS MANAGER	**SUPPORT MANAGER**	**DPU**

ANNEXTURE B: LETTER OF DECLARATION FROM LANGUAGE EDITOR.

LANGUAGE PRACTITIONER: Anneke-Jean Diesel

BA Communication Science (Corporate and Marketing Communications)*
BA Hons Communication Science (Corporate and Marketing Communications)*
* Cum Laude

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December 2022

DECLARATION

I, Anneke-Jean Diesel, hereby declare that I did the language editing of the thesis of Ponts'o Khalane, titled *THE MODERATING EFFECT OF SOCIOECONOMIC FACTORS ON THE RELATIONSHIP BETWEEN FINANCIAL INCLUSION AND POVERTY AMONG SOUTH AFRICAN VULNERABLE HOUSEHOLDS*. The thesis is to be submitted in fulfilment of the requirements for the degree of MASTER OF COMMERCE IN FINANCIAL MANAGEMENT at Rhodes University. All the suggested changes, including the implementation thereof, were left to the discretion of the student.

Please note:

The language editing excludes reference editing/checking and technical formatting. The editor will not be held accountable for any later additions or changes to the document that the editor did not edit, nor if the student rejects/ignores any of the changes, suggestions or queries, which he/she is free to do. It remains the student's responsibility to ensure that the similarity index is according to the University's regulations. The editor can also not be held responsible for errors in the content of the document or whether or not the student passes or fails. It is the student's responsibility to review the edited document before submitting it for evaluation.

Sincerely

SATI Registration #: 1003466