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Evaluating the perceived existence of racial profiling and income inequalities in the South African banking sector.

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DECLARATION

I Tebogo Mogosi Diphoko, declare that this research report entitled ‘evaluating the perceived existence of racial profiling and income inequalities in the South African Banking sector’ is the own unaided work. I have acknowledged, attributed, and referenced all ideas sourced elsewhere. I am hereby submitting it in partial fulfilment of the requirements of the degree of Master of Business Administration at the University of the Witwatersrand, Johannesburg. I have not submitted this report before for any other degree or examination to any other institution.

Tebogo Mogosi Diphoko
Signed at Johannesburg on 20 April 2020

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DEDICATION

MPHOGOLO WA BA RAPHOGOLO…MOOKOLIDI OMOTSHO…MOKOTLA OSA KOLOBING HA E TSWELWA KA METSI… PHALA ATHLAMA RE BONE DING KAE… KWENA MODIMO WA DINOKA THALA MADIMA OA NYOLOSA.
PHOLO, KWENA, MPHOGOLO, DIPHOKO!!!!!

This dissertation is dedicated in memory of my late Grandparents Peter and Florence Diphoko, my uncle Steven Diphoko and my brother Kamogelo Diphoko I pray that you continue to Rest In Power.

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ABSTRACT

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Thesis title: Evaluating the perceived existence of racial profiling and income inequalities in the South African banking sector.

The purpose of the study was to investigate inequality of outcomes and opportunities. Inequality of outcome in the context of the role that education played in narrowing the income inequality gap. Inequality of opportunities in the context of disparities in financial services access by way of racially profiling and subsequently the role that media played in perpetuating the notion of racial profiling in the South African banking sector.

The research strategy utilised was quantitative with the research design being the cross-sectional research design. Moreover, the data collection instruments applied in this study was the fully structured questionnaire. Analytical methods include frequencies and correlations.

The results indicate that education does not narrow income inequality in the South African banking sector. This finding was confirmed by the hypothesis testing where the null hypothesis was not rejected which concluded that education is not significantly recognised to influence income inequality in the South African banking sector.

The results in relation to the second research questions indicated that disparities in financial services access by way of racial profiling does exist. Subsequently, this was confirmed by the hypothesis testing where the null hypothesis that suggested that the disparity does not exist was rejected. Meaning, that the banking sector do profile their clients.

Results in relation to the third research questions indicate that the notion of racial profiling is a phenomenon that had been personally experienced by individuals rather than perpetuated by media coverage.

The main recommendation of this study was that banks must have a transparent credit scoring system during the credit application process, so that it can demystify the notion of

discrimination. Furthermore, the study recommends that the definition of the term racial profiling be added to literature to providing a platform for future study replication.

In terms of value addition, this study is one of the first research papers to contribute to the pool of knowledge and to investigate the role of education in narrowing income inequality and the existence of racial profiling in the South African banking sector. Thus, providing a platform for future replication in other sectors and expansion on the topic.

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DEFINITION OF KEY TERMS AND CONCEPTS

Banking Sector	The business conducted or services offered by a bank by a distinct part or branch of a nation's economy or society or of a sphere of activity.
Education	the process of receiving or giving systematic instruction, especially at a school or university
Financial disparities	Exists when life outcomes depend only on factors for which persons can be considered responsible, and not on disadvantageous attributes outside of their control.
Inequality	The state of not being equal, especially in status, rights, and opportunities.
Inequality of outcomes	The state of not being equal, especially in status, rights, and opportunities.
Phenomenon	A fact or situation that is observed to exist or happen, especially one whose cause or explanation is in question.
Racial profiling	Is a disparity in opportunity and treatment that occurs as a result of someone's race.

1 INTRODUCTION TO THE RESEARCH

Generally, this research evaluates the perceived existence of racial profiling and income inequalities in the South African Banking sector. However, before getting to the research conceptualisation (Section 1.2), the researcher briefly introduces the terms and concepts that were used in conceptualising this research in Section 1.1 generally and broadly—while Chapter 2 has a more specific and detailed discussion on the research context. The research conceptualisation section provides for the research problem statement (Section 1.2.1) and consequently the purpose of this research (Section 1.2.1) as well as the research questions (Section 1.2.3). The delimitations and assumptions of the research study are in Section 1.3 which discussed the significance of the research study in Section 1.4 and provide a preface to the research report in Section 1.5.

1.1 Context of and background to the study

This study falls on the backdrop of inequality in post-apartheid South Africa, where there was a school of thought that argues that income inequality has worsened since the end of the apartheid regime (Chutel & Kopf, 2018). Chutel & Kopf (2018) further argue that inequality should be disassociated with race and instead with the vanishing middle class which constitutes all races, and this notion was also supported by Bisseker (2019).

It was broadly known that the high levels of inequality in South Africa were unsustainable and that they hinder the country's growth ability. The South African government had established targeted policies to curb inequality, yet it remains persistently high. The first policy reform was the establishment of the Black Economic Empowerment (BEE) in 2001, whose purpose was to address an isolated form of inequality, namely racial inequality and it was drafted with the aim to reform the legacies of apartheid and to address societal inequalities (Gelb, 2004). The BEE scheme had great intentions, however, it has been widely criticised as having failed. The scheme was meant to help all black South Africans, yet the scheme benefited a select few (Tangri & Southall , 2008).

As such, the living style among South Africans in terms of per capita was an upper-middle-income country. Nonetheless, Greenwood (2018) stated that majority of the population live below the national poverty line with black South Africans being more prone to poverty. In a comprehensive report, The World Bank (2019) supports the view that the chronically poor group is made up of coloured and black South Africans and that 70.9 percent of country's wealth is owned by whites who are 1 percent of the population, whereas 60 percent of the population which are blacks only hold 7 percent.

The South African banking sector is the custodian of national wealth. A report compiled by The Banking Association South Africa (2017) identified the functions of banks as the main funder of infrastructure projects, ensures that imported and exported goods and services were paid for, and also play an intergal part in a successful economy (Banking Association South Africa, 2017). Also, transactions between stakeholders in any economy is enabled by the banks' infrastructure, thus enabling employers to pay their employee's wages (South African Reserve Bank, 2004). However, The Banking Association South Africa (2017) suggested that the most important role of banks is the creation of jobs. The banking sector plays a key role in funding entrepreneurs and assessing the feasibility of their business plans and their ability to repay loans granted. Therefore, banks play a crucial role in enabling entrepreneur's ability to achieve their ambitions of starting business, access to loans, creation of income and jobs.

The South African Banking sector has 36 banks licensed by the South African Reserve Bank as depicted in Table 1.1 (Banking Association South Africa, 2017). The study only focused on the four largest Commercial Bank namely; Standard Bank, ABSA, FirstRand (FNB) and Nedbank.

Table 1.1: Breakdown of Banks

Locally and Foreign Controlled Banks	Local Branches of Foreign Banks	Mutual Banks	Cooperative Banks
16	15	3	2

Source: (Banking Association South Africa, 2017)

Therefore, this research focused on inequality of outcomes and opportunities. Inequality of outcome in the context of the role that education played in narrowing income inequality gap. Inequality of opportunities in the context of disparities in financial services access by way of racially profiling and subsequently the role that media plays in perpetuating the notion of racial profiling in the South African banking sector.

1.2 Research conceptualisation

1.2.1 The research problem statement

With the reform of South Africa post-apartheid regime, the government created policies and legislations to create a democratic South Africa that fosters equal opportunities for all. Blacks have been trying to get to state of economic equality, described as a state in which all people have similar economic conditions, through opportunities to generate income, access to education and parities in financial services access with effort to narrow the inequality gap. This view was supported by Chutel and Kopf (2018), who writes that income inequality has worsened since the end of the apartheid regime.

However, government interventions seemingly have yielded limited influence in the narrowing of inequality in the banking sector. Instead, Bapuji, Ertug, & Jason (2019) suggest that the inequality gap has been increasing post the apartheid regime; this notion was also supported by a report compiled by the World Bank (2019). Inequality in South Africa, as identified by Gelb (2004), originated from root causes such as; a capitalistic economic system, political exclusion, ownership of the banks, polarisation of income, unemployment in South Africa, social classism, education system in South Africa and inequality is not self-evident and is ambiguous in nature.

The consequences of not addressing inequality in financial services access by way of racial profiling mean that the financial sector can never be perceived as inclusive to all. Financial exclusion breeds intergenerational inequality, the diminishing of the middle class and the implementation of policy reforms that harm the growth of the economy.

The researches main problem was to evaluate the existence of racial profiling and income inequalities in the South African banking sector. In addition, the following sub-problems were a matter of concern:

I. Determining the relevance of education and the role it plays or ought to play in curbing the income inequality gap. Several studies have recommended education as a solution to curbing the income inequality gap (Bapuji, Ertug, & Jason, 2019; Dabla-Norris, Kochhar, Suphaphiphat, Ricka, & Tsounta, 2015; Bapuji & Mishra, 2015). However, the study failed to find literature that supports a correlation between a higher level of education and income range.

II. Investigating the notion that the banking sector racially profiles clients. The notion of racial profile creates inequality of opportunities by means of disparities in financial services access. These disparities further increase the perception that banking services in South Africa were expensive and the low-income segment was most affected (Ikdal, 2017). In addition, disparities in financial services access creates intergenerational inequality (Gelb, 2004; Bisseker, 2019).

III. Determining whether or not the notion of racial profiling is perpetuated by media or by individuals' personal experiences. In recent months, there have been an increased number of allegations that the banking sector discriminated against black customers, compared to white customers. A report by Ntsabo (2019) points out that approximately 4000 bank customers were charged 30percent more for home loans. The majority of those customers were black homeowners (Ntsabo, 2019). As such, the findings of this report generated extensive media coverage.

The evaluation of these problems was important, because they investigate the effect of education on income inequality and the impact of racial profiling on the banking sector customer and the banking sector.

This research also aimed to contribute to existing literature efforts aimed at defining the scope and severity of inequality and subsequently contributing towards curbing inequality. Moreover, the study ought to also contribute to the quest of realising financial emancipation in our lifetime by investigating the viability of education as a means of curbing poverty and income inequality. Lastly, this research aimed to contribute towards enriching conversations and raise awareness regarding income inequality and disparities in financial services access by way of racial profiling to mitigate the intergenerational inequality.

1.2.2 The research purpose statement

The purpose of the study was to investigate the effect of education on income inequality and the impact of racial profiling in the South African banking sector. Firstly, the researcher investigated the role that education ought to play in narrowing income inequalities as suggested by literature. Second, the study investigated the research questions raised, propose a research design, research strategy, research procedure and appropriate methods to evaluate the existence of income inequality and racial profiling. Third, the study proposed the interpretive research purpose which entails the use of academic theories to interpret the research findings anticipated. Fourth, the collection of data using survey questionnaires and secondary data and interpretation of the data to evaluate the existence of racial profiling and income inequalities in the South African banking sector. Lastly, based on the findings, the study ascertained if there was a relationship between the level of education and level of income and whether banks racially profile their customers.

1.2.3 The research questions and accompanying research hypotheses

1.2.3.1 What is the role education plays in narrowing the income inequality gap?

Null hypothesis 1:

There is no evidence to suggest that education is an effective method to curbing income inequalities.

Alternative hypothesis:

There is evidence to suggest that education is an effective method to curbing income inequalities.

1.2.3.2 Do disparities in financial services access by way of racial profiling existence?

Null hypothesis 2:

The notion of racial profiling and disparities in financial services access does not exist in the banking sector.

Alternative hypothesis:

Racial profiling and disparities in financial services access does exist in the banking sector.

1.2.3.3 Is the notion of racial profiling is perpetuated by media or by individuals' personal experiences?

Null hypothesis 3:

The notion of racial profiling is a phenomenon that has not been perpetuated by personal experience but rather media coverage

Alternative hypothesis:

The notion of racial profiling is a phenomenon that has been personally experienced by individuals rather than perpetuated by media coverage.

1.3 Delimitations and assumptions of the research study

The purpose of conducting research was to examine and analyse the said research topic, this was achieved through gathering data from a sample size that represents the employees in the banking sector, the sample size number was 109 and the participants represented the intended banks Absa, Nedbank, Standard Bank and FNB. Ideally, the researcher would have preferred to gather data from all 153 846 individuals employed in the banking industry as denoted by the Banking Association South Africa (2017). Thus, the sample size used was a delimitation. Nonetheless, the assumption made was that the sample size was fair and that the data collected could provide valid insights to the issue under investigation.

Another delimitation was that the research was limited by geographic location as the sample surveyed were based in Gauteng Province. Therefore, the assumption drawn meant that the findings were unique to one geographical area. However, Gauteng Province is an economic hub with people from all over the country hence the assumption is that it has reasonably represented the other provinces.

Lastly, there were 36 Banks licensed with the South African Reserve Bank however as a delimitation the research only focused on the four largest commercial banks, namely Absa, Nedbank, FNB and Standard bank. Thus, the assumption concluded was that the findings would not represent all licensed banks in South Africa. However, the banks representation was deemed valid and provided enough insights to the issue under investigation.

1.4 Significance of the research study

The significance of this research was that organisations were the biggest enablers of inequalities (Bapuji, Ertug, & Jason , 2019). Organisations were, therefore, impacted directly and indirectly, in their useful examination of the significance of researching the direct impact of income inequality. Bapuji, Ertug, & Jason (2019) found that the direct impact was on the organisational performance through influencing employee attitudes, perceptions, staff turnover and by creating an unhealthy competitive environment. Bapuji, Ertug, & Jason (2019) maintains that the indirect impacts were a low human development workplace, which means high cases of theft, high absenteeism and low education resulting in low productivity.

The significance of this research suggested that income inequality combined with limited skilled jobs opportunities have caused the plight of the diminishing middle income (Bisseker, 2019) The plight was caused by the South African economy's inability to create jobs for the middle class that was generally educated. Recent job opportunities were available in the low-skill services, manufacturing agriculture sectors (The World Bank, 2019) subsequently undermines the relevance of education and ability for education to be used as a tool to combat poverty and narrow the income inequality gap (Chutel & Kopf, 2018). The significance of the research was that disparities in financial services access increases income inequality which results in intergenerational inequality (Amis, Munir , Lawrence, Hirsch, & McGahan, 2018)

Moreover, the research ought to be beneficial firstly, to the banking sector by contributing to the knowledge pool that assists the sector to understand how it contributes to or maintains inequality in a nonfinancial and financial way (The World Bank, 2019). Also, to comprehend the trend of black clients' closing their bank accounts. However, the research also argues that some degree of inequality can be beneficial within the banking sector as it encourages employees to perform, plan better in terms of investing and creates a competitive environment the notion supported by Dabla-Norris, Kochhar, Suphaphiphat, Ricka, & Tsounta (2015).

Secondly, the benefactors of the research should be the education system and The Department of Higher Education, as the research aimed at evaluating the significance of the role education plays in narrowing income inequality.

Lastly, Banking Association South Africa ought to benefit from the research as it was their role to monitor and alleviate social inequality and the research aimed at exploring the new form of disparities in financial services access by racially profiling and making access to credit and funding more expensive for black customers (Banking Association South Africa, 2017).

1.5 Preface to the research report

To this end, the report has six chapters. Following this introductory chapter, Chapter 2 provides a literature review covering the problem, the past studies, the explanatory framework and the conceptual framework. Chapter 3 discusses the research strategy, design, procedures, reliability and validity measures as well as limitations. Chapter 4 and Chapter 5 presents and discusses the findings, respectively, to interrogating our research questions while Chapter 6 summarises and concludes the research.

2 LITERATURE REVIEW

This chapter had three broad objectives; namely to understand the research problem, to identify the knowledge gap, and to develop a framework for interpreting the research findings. Specifically, in Section 2.1, detailed the research problem. In Section 2.2, the study reviewed literature on studies that have attempted a similar study or research. With this knowledge, identify and detail a framework that was used to interpret our research findings in Section 2.3.

2.1 Research problem analysis

In a comprehensive report of which country is the most unequal, the World Bank found that South Africa is ranked the most unequal of 149 countries that the World bank monitors using the Gini index (Greenwood, 2018). The World Bank (2019) also pointed out that the inequality gap has been increasing since the end of apartheid in 1994, with the highest risk of poverty prone to the black South Africans.

The World Bank (2019) introduced the idea that inequality can be segregated into two components namely, inequality of outcomes and inequality of opportunities; this segregation was supported by a group of scholars (Dabla-Norris, Kochhar, Suphaphiphat, Ricka, & Tsounta, 2015). Furthermore, the United Nations (2015) suggested that inequality of outcome transpires when individuals were not at the same level of material wealth, income, access to education, access to health facilities, nutrition or the general economic living conditions. Lefranc, Pistolesi, & Trannoy (2006) described inequality of opportunities when individuals living in the same the social order do not have access to equal opportunities and the differences in circumstances were not in the control of the individuals namely; access to financial services, gender, birth location, ethnicity or family background. However, both explanations fail to fully acknowledge that inequality comes as a result of a combination of differences in individuals' efforts and access to opportunities and the context of intergenerational inequality, meaning limited opportunities based on the parental income (Dabla-Norris, Kochhar, Suphaphiphat, Ricka, & Tsounta, 2015).

The research focused on inequality of outcome in the context of the role education played in narrowing the income inequality gap. Inequality of opportunities in the context of disparities in financial services access by way of racially profiling and the role media plays in perpetuating the notion of racial profiling.

Symptoms:

Freud (1926) offers a definition of symptoms as “a sign of and a substitute for an instinctual satisfaction which has remained in abeyance, it was a consequence of the process of repression” (p.5). Therefore, the symptoms of income inequality and disparities in financial services access by way of racial profiling were; diminishing of the middle class, crime, intergenerational inequality, university drop-outs, capital funding reforms, high funding application decline percentage, corruption, media criticism, employee conflict and racial profiling. However, Hurst, Gibbon, & Nurse (2017) suggested that inequality can be used as a reward system that creates desirable symptoms such as a competitive and motivated workforce. Nonetheless, the symptoms were a justification of the significance of undertaking the research as they provide the possible outcome if inequality and racial profiling is left unattended.

Root causes:

Organisational inequality is partly the main reason for the growing inequality in the world and can be largely attributed to the severe income inequality gap (The World Bank, 2019). However, Gelb (2004) suggested that the apartheid regime is the biggest cause of inequality in South Africa. In addition to apartheid other root causes identified were namely; Capitalistic economic system, Political exclusion, Ownership of the Banks, Polarixation of income, Unemployment in South Africa, Social classism, education system in South Africa and inequality is not self-evident and is ambiguous in nature. It was important to focus on the root cause rather than the symptoms as the symptoms manifest from the root causes.

Consequences of inequalities and racial profiling:

The worsening levels of global inequality directly implicate living habits and the interactions of organisations. The consequences were that inequality causes distrust and damages the organisational cohesion (Freud, 1926). Subsequently, conflicts and absenteeism become prevalent as suggested by Dabla-Norris, Kochhar, Suphaphiphat, Ricka, & Tsounta (2015).

In addition, Bapuji, Ertug, & Jason (2019) stated that inequality leads to the government implementing policy reforms that harm the growth of the economy. Also, inequality hinders the pace of poverty reduction (Dabla-Norris, Kochhar, Suphaphiphat, Ricka, & Tsounta, 2015).

The article concluded by the Bisseker (2019), suggested that the consequence of inequality and racial profiling is the vanishing of the South African middle class, which was caused by the shift in distribution income and access to finance towards the higher and lower ends.

Lastly, the consequence of disparities in financial services access by way of racial profiling was that the financial sector can never be perceived as inclusive to all, whereas, financial exclusive breeds intergenerational inequality.

Interventions:

South Africa post-apartheid had created policies and opportunities that were aimed at closing the inequality gap. However, the weakness of the governments interventions was that there was minimal evidence that the policies put in place have any influence in narrowing the inequality gap and this notion was also supported by Bhorat (2014).

Nonetheless, some of the interventions implemented post-apartheid had prioritised the reform of inequality since 1994 (Gelb, 2004). One of the reforms used was the establishment of black economic empowerment (BEE) as a trade-off of macroeconomic stability with the intended aim of creating an inclusive environment that enables mutual opportunities and gains through financial access (Gelb, 2004).

Another intervention was the commencement of redistribution which had two aims. First approach based on outputs and outcomes by focusing on extent to which inequality and exclusion were addressed and second aimed at making resources available through the fiscus (Gelb, 2004).

2.2 Research knowledge gap analysis

Several attempts to research inequalities have been done, and all the studies reviewed so far primarily focus on inequality in terms of race, gender, health and education. The knowledge gap was that there was limited information that quantifies the effect that inequality has on an organisation and the effect on the employees. Bapuji & Mishra (2015) supported the notion and further suggested that the effects can be examined extensively through researching how organisations contribute to the maintenance of inequality and how inequality effects an organisation (Bapuji & Mishra, 2015).

A study conducted by Patel (2016) focused on income inequality in terms of the wage segment and examined the impact that the size of organisation influenced income inequality. The research approached used included the use of secondary data, such as annual financial reports and conducted a survey on five developed countries and five developing countries a total sample size of 644 organisations. Results of the study showed that, larger organisations do not pay their employees higher wages than those paid by small organisation (Patel, 2016). In addition the study suggested that education was the key factor for income equality as it aids people to get high paying jobs. Similar global study concluded by Amis, Munir , Lawrence, Hirsch, & McGahan (2018) supported the findings of Patel's (2016) research that suggested that the means to curbing income inequality was through education.

The knowledge gap in the studies were that there was no evidence to suggest that educated individuals' were remunerated equitably, meaning that individuals with similar education may get different salaries due to subjective reasons for example race or gender and that lesser educated individuals representing the minority race earn more due to the working experience they have which begs the question whether experience has more prevalence over education. Also, equitable remuneration was relative and with the high unemployment rate job seekers have limited remuneration negotiation power.

In a study conducted by Tomaskovic-Devey & Warren (2009) aimed at eliminating and explaining racial profiling from sociological research suggested that discrimination was generally perpetuated by organisational practices that were unintentionally racial and were from a premise of unconscious biases tied to social stereotypes. These findings were echoed in another study that was done by Soodyall (2018). Both authors agreed on the definition of racial profiling as the act of discrimination by law enforcement officials targeting people for suspicion of criminal activity on the base of their race, religion, nationality or ethnicity. However, the limitation of the definition was that it failed to acknowledge that other occupations were susceptible to racially profiling individuals on the same bases, yet not necessarily for criminal activities (Soodyall, 2018;Tomaskovic-Devey & Warren, 2009). Thus, creating the knowledge gap, which was to expand the definition of racial profiling and explore the existence of racial profiling in the banking sector. Moreover, there were no mitigating controls to prevent cognitive biases from influencing the fairness in interest rates offered and the cost of financing, thus, making disparities in financial access subjective and at the banking sectors discretion. Subsequently, it was this autonomy (Limited control NCA act) that created the public and media perception that racial profiling does exist in the banking sector.

2.3 Framework for interpreting research findings

2.3.1 Theoretical framework

In this section the study identified and discussed existing theoretical frameworks used for interpreting research findings. The research was underpinned by the theories of inequality, which suggested that the reality of social inequality was shown by the existence of unequal rewards by virtue of status within a society or group and unequal opportunities (Crossman, 2020). The theory of inequality was further characterised by persistent trends of unequal distributions of remuneration, wealth, goods and punishments (Milner, 1987).

The theory of inequality has two main considerations (Marx, 2000). Firstly, the functionalist theory suggested that inequality was necessary, unavoidable and was an important facet of how society functions (Milner, 1987). Functionalist theorists were of the view that inequality benefits society as it creates an incentive driven structure that creates competitive and motivated employees and members of the society (Crossman, 2020).

Whereas, the conflict theory views inequality as a result of the existence of domination, where there was a group that has power over another (Marx, 2000). The conflict theorists were of the view that social inequality aimed to maintain social order, through the hindrance of societal progress by those in power thus maintaining the status quo. Marx (2000) described the conflict theory as an ideal that aims to create competition amongst individuals or groups within society over limited resources and opportunities. The description by Marx (2000) made three fundamental assumptions, firstly, that competition was continual and almost always present in every human interaction and relationship. Secondly, the structural inequality assumption suggested that inequalities of power were inherent in social structures and human relationships (Milner, 1987). Meaning, that some individuals will gain more power and rewards than others, thus benefitting from structural inequality and tend to maintain those structures (Marx, 2000). Lastly, the assumption was that in order for change to occur in a power dynamic society or group a revolutionary event must occur (Marx, 2000). This assumption was supported by Milner (1987) who stated that changes in power dynamic were often abrupt and not gradual small scale events.

2.3.2 Interpretation of the framework

The theory of inequality can be interpreted as a social problem that incorporates three frameworks: social reforms, ideological support and structural conditions (Crossman, 2020). Structural conditions were the interpretation of measurable objectives that contribute to inequality, factors including wealth, poverty, educational attainment, power that leads to inequality amongst groups and occupations (Marx, 2000).

Ideological supports looked at the ideas that perpetuate inequality, factors examined include public policies, formal laws and societal dominant values lead and sustain inequality

(Crossman, 2020). Lastly, social reforms can be interpreted to highlight inequality since social reforms looked at things such as protest groups, organised resistance and social movements (Marx, 2000). Recently, there has been increased importance placed on the role of social media in helping to shape and change social inequality through social reform campaigns (Crossman, 2020). This importance helped to address one of the research questions that examined if the notion of racial profiling was a phenomenon that had been personally experienced by individuals rather than perpetuated by media coverage.

2.3.3 Theoretical models used in prior studies

The theoretical models for the analysis of the implementation of inequality used in prior similar researches include.

The Gini-opportunity index was the theoretical model for the analysis used in a study conducted by Harmse (2013) to explore South Africa's Gini coefficient: causes, consequences and possible responses, the study was qualitative and data collected through interviewing 16 subject matter experts. Harmse (2013) used the Gini index as a framework to interpret the research findings. As such, the findings from the research were that the main two reason why South Africa has worst Gini coefficient ranking was due to; "The apartheid policy of the pre-democratic government, marginalising black people on the economic and social terrain and the lingering generational effect" (Harmse, 2013, p43) and the poor education system and administration thereof.

Whereas, a phenomenological approach was the theoretical model used for the analysis implementation in a study by Lester (1999) who introduces the purpose of phenomenological research as the attainment of insightful information and perspective through inductive qualitative approaches in the form of discussions and interviews. In addition, phenomenology was the study of personal experience, paradigm of personal knowledge, subjectivity and focuses on personal interpretation and perspective (Lester, 1999). However, Husserl (1970) suggested that the purest form of phenomenology research aims to narrate as opposed to explain and was free from predeterminations. Moreover, the effectiveness of the phenomenological approach was that highlights the perceptions and experiences of the interviewee.

Lastly, the theorectical approach in a quantitative research framework was used to identify casual relationships between variables and to draw conclusion on their interrelationship, there were various research data analysis methods available for quantitative research, to name a few, content analysis, regressions analysis, correlation analysis, ANOVA analysis, factor analysis and cluster analysis. In a similar study by Dunlop (2019), that research the underrepresentation of females in senior leadership positions. This study used descriptive and inferential statistics as these test were used to predict a dependent variable based on numerous independent variables. The benefit of using the analysis tool was that it further identified the forecast capabilities of the independent variables in relation to the dependent variable (Dunlop, 2019).

2.4 Summary and conclusion

2.4.1 Summary of literature reviewed

South Africa was ranked amongst the unequal country according to a report by The World Bank (2019). Also, the report points out that the inequality gap has been increasing since the end of apartheid in 1994, with the risky group prone to poverty being the black South Africans.

The high levels of inequality in South Africa was inequality of opportunities and in this case the disparities in financial services access by way of racial profiling have huge social impact cost. The consequences of not addressing the root causes of inequality has perpetuated the symptoms mentioned in the literature. The interventions implemented by the post-apartheid government through the creation of policies and opportunities that were aimed at closing the inequality gap. Have been futile and weak with minimal evidence that the policies put in place have any influence in narrowing the inequality gap and this notion was also supported by Bhorat (2014).

Literature on the knowledge gap supports the pursuit of the research to focus on inequality of outcome in the context of the role education played in narrowing the income inequality gap and inequality of opportunities in the context of disparities in financial services access by way of racially profiling and the role media plays in perpetuating the notion of racial profiling.

2.4.2 Proposed research strategy, design, procedure and methods

In conclusion, after conducting extensive theorical research the below research strategy, design, procedure and methods undertaken with effort to solve for the posed research questions. Informed by previous studies such as Scott (2010), this study applies quantitative research strategy and cross-sectional research design. The detailed discussion of the research strategy, design, procedure and methods was given in Chapter 3.

3 RESEARCH STRATEGY, DESIGN, PROCEDURE AND METHODS

In Section 1.2.3, study had posed three questions that this research report intends to answer—that was, ‘to examine the role education plays in narrowing the income inequality gap in the South African banking sector?’ , ‘Investigate the existence of disparities in financial services access by way of racial profiling by the South African banks’ and ‘Ascertain whether the notion of racial profiling in the South African banking sector is perpetuated by media or by individuals’ personal experiences’. The study had since reviewed literature and developed an interpretative as well as conceptual framework that guided the choices of techniques used. This chapter identified and described research approach, design as well as procedure and methods that were employed in this research to collect, process, and analyse empirical evidence. Broadly, it has three objectives; namely, to identify and describe the research strategy (Section 3.1), the research design (Section 3.2), as well as the procedure and methods (Section 3.3). The chapter also described the reliability and validity measures (Section 3.4) that this research applied to make it credible as well as the technical and administrative limitations of the choices assumed (Section 3.5).

3.1 Research strategy

Research strategy was broadly defined by Reimann (2010), as detailed action plan that aims to provide direction to thoughts and research objectives, thus allowing the research to be systematic and timeous with effort to produce quality and thought-out reporting. There were three forms of research strategies namely qualitative, quantitative and mixed methods research strategies.

This research used a quantitative research strategy. Quantitative was defined as the use and analysis of numerical data using specific investigative techniques or descriptive methods to explain a phenomenon (Apuke, 2017). Based on literature, the quantitative research strategy was opted for because of its experimental, descriptive and correlational approach. The research strategy helps in the collation of knowledge and creation of better comprehension of social phenomenon's (Apuke, 2017). The quantitative research strategy incorporates techniques that can be used to analyse relations between variables (Showkat & Parveen, 2017). In a report on the quantitative research methods, Apuke (2017) suggested that this strategy employs statistical techniques to answer research processes like who, what, when, extent and how. Also, quantitative research strategy encompasses strategies of inquiry techniques such as, collecting numeral data & using statistical tools to analyse and by conducting surveys (Creswell, 2003). In a review of the description of quantitative research Johnson & Christensen (2008), describe the characteristics of quantitative research as depicted in the below Table 3.1. The descriptions of the characteristics were supported by Lichtman (2006).

Table 3.1: Characteristics of quantitative research.

Criteria	Quantitative Research
Purpose	To test hypotheses, look at cause & effect and make predictions.
Type of Data Collected	Numbers and statistics
Form of Data Collected	Quantitative data based on precise measurements using structured & validated data-collection instruments.
Type of Data Analysis	Identify statistical relationships.
Approach	Deductive approach.
Research objectives	Describe, explain and predict.
Final Report	Statistical report with correlations, comparisons & significance of findings

Source: (Johnson & Christensen, 2008; Lichtman, 2006)

There have been numerous literature reviews that have been published regarding inequality; these studies have utilised a quantitative research strategy. For example, Scott (2010) conducted research to illustrate how quantitative analysis can advance the understanding of the processes that trigger gender inequality. Moreover, the study shows the importance of examining the processes of selection and exclusion that highlight and create gender inequalities (Scott, 2010).

The quantitative research strategy was utilised in this study due to its able to investigate processes and different patterns of gendered resource allocation (Scott, 2010). Furthermore, quantitative research strategy creates relationship patterns comprehension. Hence, this study chose a quantitative approach because there were no reported secondary datasets that met the objectives of this study. More so, the benefit of the strategy was that it accentuates understanding, which enabled the gathering of insights into the experiences of individuals with regards to inequality and the ability to test the theories.

3.2 Research design

Bryman (2012) describes a research design as a method of data collection and examination thereof. Moreover, research design details the how research was done. These details include various aspects of the research process, such as the purpose of the study, drawing of the sample, selecting research tools and how to measure feedback (Symon & Cassell, 2012; Neurman, 2014; Bryman, 2012). Subsequently, Bryman (2012) pointed out that there were five types of research designs namely; longitudinal, experimental, case study, comparative and cross-sectional/ survey designs.

This study made use of the cross-sectional research design. Cross-sectional research design is the manner of data collection from several participants at the same time (Bryman, 2012). Babbie (2013) claims that cross-section refers to the sample selected from a population target or singularity of interest.

The cross-sectional research design was opted for, because it enabled the researcher ability to explain the relationship between education and income inequality. This also enables the researcher to prove or disprove the assumptions posed in the research question and cross-sectional research design allows the researcher to gather information at a particular point in time across many respondents.

Baigi, et al. (2018) had a study that investigated socioeconomic inequality in various health domains using cross-sectional research design method to collect the data. The objectives of their research were to explore the reduction of socioeconomic inequality in the health sector and to explore was to assess socioeconomic inequality in the different medical domains (Baigi, et al., 2018).

The method used allowed the researchers the opportunity to assess various health domains. The cross-sectional research design offers the benefit of being able to explain the relationship between health domains and socioeconomic indicators (Baigi, et al., 2018).

3.3 Research procedure and methods

This section documents the actual procedure and the methods employed in this research to collect, collate, process, and analyse empirical evidence. Broadly, it involved the detailing of the data and information collection instruments (Section 3.3.1), the target population and sampling of respondents (Section 3.3.2), the ethical considerations during the research process (Section 3.3.3), data and information collection process and storage (Section 3.3.4), data and information processing and analysis (Section 3.3.5).

3.3.1 Research data and information collection instrument

Data collection instruments

Babbie (2013) offered an explanation of a data collection instrument as a method that is designed to extract information is used in research analysis. This view is support by Neurman (2014) and expands on the explanation and suggested that there were two types of data collections instruments and that they were grouped according to the type of data being gathered; for quantitative research data, is collected in the form of numbers, whereas for qualitative research data is collected in the form of words and pictures. An example of data collections instrument would be survey questionnaires (Babbie, 2013). There were two types of data collection instruments namely, observation and interviewing (Bryman, 2012). This research used the interview schedule, which is described a set of structured questions used to guide the researchers quest to collect data on a predetermined topic (Babbie, 2013).

The proposed data collection instrument used is the quantitative survey questionnaire. The effectiveness of using a survey was highlighted in the literature as having the aim of eliciting information directly from the population sample. The aim that Kraemer (1991) concurred with and expanded the definition by stating that quantitative survey describes specific attributes of a given population, externally valid and subjective.

In a study on communication research, Showkat & Parveen (2017) introduced the quantitative survey method as a technique for collating data with the aim of eliciting information directly from the population sample. Kraemer (1991) concurs with the explanation. However, he expands the definition by stating that quantitative survey describes specific attributes of a given population, externally valid and subjective (Kraemer, 1991).

Among the benefits of the quantitative survey questionnaire is the ability to extract valid and reliable data in an organised fully structured interview schedule that is easy to interpret and report. This study chose a quantitative survey questionnaire approach because the survey questionnaires were cost-effective to conduct, quicker to gather information and were not subjected to interviewer desired outcome influence.

Research data collection instrument- structure

There were three varying types of data collection instrument structure. Bryman (2012) points out that the variation in the structure is attributed to the type of research strategy. The quantitative research structure that were normally used were fully structure as opposed to qualitative research structures which were usually semi-structured or unstructured (Bryman, 2012). The higher the intensity of the structure, the more likely the interviewer can control the scope of the responses expected. Thus, the aim of doing a survey is to extract valid and reliable data in an organised fully structured manner that is easy to interpret and report (Showkat & Parveen, 2017).

This study used structured interviews by utilising survey questionnaire. Thus, all the participants of the survey received the same set of predetermined questions in chronological sequence. Roopa & Rani (2012) define a questionnaire as a set of questions posed to individuals with the aim of gathering statistically meaningful data regarding a predetermined topic. When an accurate population sample has been selected, the questionnaire findings can be used to draw conclusion about a specific group of people or the entire population. A well-designed questionnaire needs to be thought-out, planned, precise and created in stages (Roopa & Rani, 2012).

Therefore, based on the purpose of structured interviews as described by Roopa & Rani (2012), which suggested that the gathering statistically meaningful data regarding a predetermined topic. That means that if a researcher uses the other structure the respondents may drift from the research questions which compromises the data’s validity and reliability.

So, with the aforementioned factors in mind, a fully structured survey questionnaire is utilised for this study.

The research conducted by Baigi, et al. (2018) on socioeconomic inequality in various health domains collected the data by using a fully structured survey questionnaire on individuals 18 years and above. The research data collection instrument objective was to assess vast health domains. The advantage of using the fully structured survey questionnaire was that the researchers were able to collect data from 1995 respondents (Baigi, et al., 2018).

Research instrument- source of questions

In their study of questionnaire designing for a survey, Roopa & Rani (2012) identified four types of questions, namely:

- **Contingency questions/Cascade format**- A follow up question when the respondent provided an answer on the previous question.
- **Matrix questions**- The same response categories were aligned to numerous other questions.
- **Closed-ended questions**- The answers available to the respondent were limited to a fixed set of answers.
- **Open-ended questions**- There were no suggested responses, the respondent respond in their own words with no pre-set possible response's constraints.

The above types of questions form part of three types of surveys as identified and described by (Showkat & Parveen, 2017) namely;

- **Explanatory or Correlational Survey-** The purpose of this approach is to record a correlation between two or more variables and to explore the relationship between them.
- **Cross-Sectional Survey-** Is the method of gathering data at only one point of time, this approach entails collecting data from a specific population sample at only specific point of time. This approach is used when recording the occurrence for a specific characteristic within a population.

- **Longitudinal Survey**-This method consists of conducting a survey repeatedly over prolonged period, as such it is the most expensive form of conducting a survey.

In addition to a combination of the types of questionnaire questions as identified by Roopa & Rani (2012), the survey type is the explanatory or correlational approach and the research instrument consists of three sections namely; demographic questions, screening questions and preference question. The questionnaire took about 05 minutes to complete. Therefore, based on the extensive literature interrogation of available data collection instruments and research data collection instruments this study applies a fully-structured questionnaire based of cross-sectional research design.

3.3.2 Research target population and selection of respondents

3.3.2.1 Research target population

The target population can be described as group of individuals being studied (Roopa & Rani, 2012). This description is supported by Neurman (2014), who writes that a target population is definitively group of many variables from which a sample is selected with the intention draw generalised outcomes.

Therefore, the target population identified for this study constitute of adults residing and working in the South African banking sector. The bulk of the participants were banking professionals, employed in the banking sector and have formal higher learning qualification for example; National Diploma, Degrees or post-graduate qualifications.

In a similar study, Kapingura (2017) completed a study to examine the correlation between inequality in South Africa and financial sector development. The objective of their research was to explore the roles and measures of both the financial sector development and financial inclusion in economic growth (Kapingura, 2017). The study used the similar target population, because of the convenience and access to the target population.

3.3.2.2 Sampling or selecting respondents from the target population

Babbie (2013) defines sampling as a group of individuals selected for the purpose of researching them. Similarly, the view is supported by Bryman (2012), who writes that a sample is a subsection of the population. Sampling is the process of selecting a sample size that represents the interest of the target population. The consideration regarding sampling is that the sample size ought to represent the interests of the target population because it not feasible to study an entire population. The research strategy selected is quantitative therefore the two sampling method principles available were non-probability sampling or probability sampling.

This study utilised the non-probability sampling principle. Therefore, the sample was not selected through random selection, meaning that the selection was at the researchers' discretions (Bryman, 2012). The principle allows for the inclusion and exclusion of individuals within the population on the bases of their characteristics, appropriateness and the required data to successfully fulfil the research objectives (Symon & Cassell, 2012). However, the non-probability principle is dependent on the participants willingness and availability. According to Bryman (2012), there were three ways of making use of the non-probability sampling for a quantitative research strategy namely; quota sampling, convenience sampling and snowball sampling. This view was supported by Neurman (2014).

Therefore, this study utlised convenience sampling and snowball sampling. The rationale for utilising the two non-probability sampling techniques was in their respective descriptions and purposes. Bryman (2012) describes convenience sampling as a sample selection process chosen based on availability, Neurman (2014) concurs with the description and further adds that the participants meet the criteria. Snowball sampling is initiated by approaching key individuals who were relevant to the attainment of the research objective (Babbie, 2013; Bryman, 2012; Neurman, 2014).

In a research report, Patel (2016) used a similar technique of sampling the population in his research to explore the influence of firm size on income inequality. The reason for the use on non-probability sampling was that it mitigated the randomly selected sample. The benefit thereof, was that the sampling suited the selection criteria for specific companies that represent five developed countries and five developing countries (Patel, 2016).

3.3.3 Ethical considerations when collecting research data

The researcher is employed of Rand Merchant Bank, a division of the FirstRand Group and has been working in the banking sector for 10 years, and previously worked at Standard Bank for 6 years. He is a part-time MBA student, registered with Wits Business School. The interest in the research is merely to raise awareness and add to the knowledge pool in the topic of inequality. As such, there is no requirement for a sponsor. The researcher further confirmed that he had no intention of deceiving the respondent, since he had the highest consideration of ethical practices. He partakes in annual ethical assessment programme, the assessments included; Advanced Diploma in Risk Management, FRG Ethics and business conduct training, Protection of Personal Information (POPI) and Rand Merchant Bank Code of Conduct 2019.

The moral compass that guide human behaviour is referred to as ethics (Wagner, Kawulich, & Garner, 2012). Babbie (2013) points out that ethical behaviours were governed by conduct standards set by respective professional bodies. The importance of ethical consideration is that the attainment of the research objectives should not be at the detriment of the participants whether physical or psychologically. In his description of ethical consideration Bryman (2012), identified the below ethical issues that need to be considered:

<u>Ethical issue- Deception:</u>

- Deception is the case when the researcher failed to disclose fully what the research pertains too, often this is done with effort to distort the participants understanding and to influence the feedback (Bryman, 2012).

- **The researcher assures no deception-** to mitigate potential deception, the researcher ought to supply the participants with the details of the research, that is, aim and objectives of the research.

Ethical issue- Harm:

- It is imperative that the researcher ensure that participants were not exposed to any harm attributed to their participation (Wagner, Kawulich, & Garner, 2012).
- **The researcher assures no harm-** The researcher adhered to the ethical committee guidelines to ensure that participants were not subjected to any harm. The ethical committee is a committee established to monitor, review and grant ethical clearance certificates for proposals that ensure no harm for participants**.**

Ethical issue- Informed consent:

- Informed consent is providing the potential participant the right to agree or disagree to participate in your research (Wagner, Kawulich, & Garner, 2012). The potential participants consent must be on the premise of full disclosure.

- **The researcher assures informed consent** - Participation on the research was purely voluntary and the participants were made fully aware of the research details and the voluntary nature of participation.

Ethical issue- Invasion of privacy:

- **Confidentiality and Anonymity**- The research had ensured the anonymity in the data collection process. As such, the names and ID numbers of the participants were not collected. In addition, the data collected had the potential of being sensitive, so confidentiality of the information was guaranteed to the respondent as per the Consent for on the survey.

- **The researcher assures privacy** - The data storage during and post the research was stored on a password protected laptop in a folder that is password protected and encrypted.

3.3.4 Research data and information collection process

Bryman (2012) defines data collection as the process of soliciting data from the identified sample for the purpose of answering the research questions. One of the limitations with this explanation is that does not separate the data collection process for qualitative or quantitative research. As such, Neurman (2014) points out that data collections for quantitative research is structured, methodical and uses a numeric form to store, analyse and validate collected data. The data collection process for qualitative research is less structured, more fluid and continuous (Neurman, 2014). In his review of data collections modes, Bryman (2012) identifies four research data collection mode namely; ethnography or participant observation, interviews (telephonic, face-to-face or internet-based); focus groups discussions and survey questionnaires(mail surveys; email and internet surveys).

For the purpose of this research, the internet survey questionnaire was used. The internet-based survey have increasingly become popular due to the advancement of technology (Wagner, Kawulich, & Garner, 2012). Internet based surveys allow for easier and convenient access to the survey and participants can be directed to the link for them to complete the questionnaire. Also, the internet-based survey allows the researcher a wider reach to the sample.

In a recent similar study, Baigi, et al. (2018) on socioeconomic inequality in various health domains collected the data by using an internet-based survey questionnaire, and 2987 individuals were invited to participate, however, only 1995 responses were received. The research data collection instrument objective was to assess vast health domains (Baigi, et al., 2018). The advantage of using the fully structured survey questionnaire was that this mode is cost-effective, limited administration cost and environmentally friendly.

<u>Data storage considerations:</u>

Data storage considerations have been extensively described under the Ethical consideration. However, the raw and unprocessed data especially personal data gathered is safeguarded from unauthorised access, the data is be stored in an encrypted password protected file. Also, the completed surveys were stored in the online survey application called Qualtrics Survey software that is password protected.

3.3.5 Research data and information processing and analysis

3.3.5.1 Research data and information processing

Bryman (2012) suggested that data processing is the act of transforming gathered information into data. Elsewhere, Babbie & Mouton (2005) points out that the data processing process incorporates the transformation of raw data into a computer-readable form. These views were supported by Auriacombe & Lutabingwa (2007) who expands the description and suggested that the data processing process for quantitative research had three steps namely: data coding, data entering and data cleaning (Bryman, 2012; Babbie & Mouton, 2005; Auriacombe & Lutabingwa, 2007).

<u>Step 1: Data coding</u>

Data coding is the process of allocating numbers to the feedback received on the questionnaire thus creating numerical codes (Auriacombe & Lutabingwa, 2007). The purpose of coding is to narrow the set of attributes of variables from a wider range of unique items of raw data (Babbie, 2013). Auriacombe & Lutabingwa (2007) suggested that coding is faster and easier for close-ended questionnaire questions rather than open-ended questions. For instance, in a closed-ended question that only had a response option of either Yes or No coding can be a code of 1 for Yes and 2 for No (Babbie, 2013). Resultantly, once all questions have been transformed into numerical codes a codebook was developed within SPSS software and documented the list of codes relative to the associated variable (Auriacombe & Lutabingwa, 2007). Therefore, most of the questions in the survey were closed-ended and electronic. Thus, no manual coding nor capturing was done but rather operationalised via precoding the code grouping.

<u>Step 2: Data entry</u>

Data entry is the process of transforming the numerical coding allocated and recorded on a survey into a format that a computer with statistical software can interpret (Babbie, 2013). There were numerous ways of transferring quantitative data into the computer, namely: bar code, direct-entry, code sheet and optical scan (Auriacombe & Lutabingwa, 2007; Neurman, 2014). As such, data entry were operationalised through the online data collection process.

Step 3: Data cleaning

The final step of data processing is the process of checking for errors, the potential existence of errors can deter the results of the research if the errors were not eliminated (Neurman, 2014). In addition, errors may also arise from the coding and entry processes. In their review data cleaning, Singleton and Straits (2004) identified four ways that data can be cleaned:

- Check if the responses were linked to the respective questions,
- Verification of data and monitoring of the data entered,
- Wild-code checking- refers to the codes that were not listed in the codebook,
- Continuous pre-testing of the computer system survey processes.

Resultantly, the researcher assures that the abovementioned data cleaning process is used in this study.

3.3.5.2 Research data and information analysis

Research data analysis is the process of probing and determining the meaning of the information collected in relation to the research questions (Wagner, Kawulich, & Garner, 2012). Babbie (2013) defined data analysis as the process of interpreting the gathered data with effort to draw ideas, conclusions and recommendations. In the instance of quantitative research, the purpose of data analysis is to test for an association between variables then to present the analysis findings (Bryman, 2012). There were various research data analysis methods available for quantitative research, to name a few; content analysis, descriptive analysis, inferential analysis, factor analysis and cluster analysis. This study used descriptive and inferential analysis.

Descriptive analysis describes the sample that has been selected, descriptive statistics is the process of collating data on a group of participants then use graphs and summary statistics to present the groups attributes (Frost, 2020). According to Frost (2020), there were four major types of descriptive statistics namely:

- *Measures of frequency*- measures the number of occurrences, such as the number of male and females in the sample.
- *Measures of central tendency*- measures where most values were located. The median and mean were used to determine the centre of the dataset.
- *Measures of dispersion or variation*- which measures how far the data is from the centre, this can be measured by using standard deviation or range.
- *Measures of position*- shows the position where a certain value or data point is located in a distribution or sample. Measures of positions used were quartiles, z-scores and percentiles.
- *Validity*- There were various methods to establish validity, Bryman (2012) however suggested that there were four main methods for quantitative research namely; internal validity, external validity, ecological validity and measurement validity.
- *Reliability*- reliability was tested using homogeneity Cronbach's α, item-to-total correlation test.

The benefits of descriptive statistics were that there is no uncertainty since the statistics merely describes the participants or items being measured (Frost, 2020). Also, this analysis involves reducing a potentially huge volumes of data points in the sample into few meaningful graphs and summary values, thus allowing for greater insights and visualisation of data (van Elst, 2019).

Frost (2020) explains inferential analysis as the process of taking data from the selected sample making interpretations about the larger population. The aim of inferential statistics is to draw suppositions from a sample that generally represent the sample population (Frost, 2020). Inferential statistics assumes confidence that the sample is a fair representation of the population (Frost, 2020). Subsequently, confidence in the sample is established by having a random sample as opposed to picking a convenient group. Van Elst (2019) suggested that the following were the different types of Inferential statistics:

- *Hypothesis testing*- which is the use of tests like T-test, ANOVA or Chi-Square to determine if a hypothesis regarding the mean is true or not.
- *Regression*- predicts or shows the relationship between two variables.
- *Correlation*- explains the relationship between two variables.

The benefit of inferential statistics is that the analysis is used to determine if the conclusion drawn from the sample can be generalised for the whole population (van Elst, 2019). Therefore, the importance of searching for relationships is that it reflects the causal relation one variable has with another. Moreover, it assisted to determine the factors that were related to the problem and the extent thereof (Auriacombe & Lutabingwa, 2007).

In a similar study by Dunlop (2019), that researched the underrepresentation of females in senior leadership positions. The study used inferential statistics as these tests were used to predict a dependent variable based on numerous independent variables. The benefit of using the analysis tool was that it further identified the forecast capabilities of the independent variables in relation to the dependent variable (Dunlop, 2019).

3.4 Research strengthens—reliability and validity measures applied

Consideration must be given to the reliability and validity of the research thus the rigour of the research must be ascertained (Bryman, 2012). Heale and Twycross (2015) define the research rigour as the extent of the strictness that the researcher uses to ensure the quality of the research. The rigour of the research can be reached through determining the researches credibility, believability and truthfulness of the research findings (Neurman, 2014). Reliability is explained as the extent to which the same results were reached by different researchers utilising the same research methods (Heale & Twycross, 2015). In addition, Neurman (2014) supports the explanation by writing that reliability is the consistency and dependability of measures. Invertible, Neurman (2014) describes unreliable results as being unstable and inconsistent. Validity is said to be the extent a quantitative researches concept is accurately measured (Heale & Twycross, 2015). Furthermore, validity is the truthfulness of the measure (Neurman, 2014).

Reliability

Heale and Twycross (2015) points out that there were three attributes of reliability. (i.) Homogeneity - the extent that all items in a scale consistently measure one construct. (ii.) Stability - consistently getting the same results through repetitive testing using an instrument. (iii.) Equivalence- consistent responses from varying users of the same instrument.

Realistically, it is not possible to provide a precise calculation of reliability. However, estimations can be determined via various measures (Heale & Twycross, 2015). Homogeneity- is tested by utilising Cronbach's α, item-to-total correlation, Kuder-Richardson coefficient and split-half reliability (Heale & Twycross, 2015). Stability- is assessed by using parallel and test-retest or alternate-form reliability testing. Lastly, Equivalence testing is assessed via inter-rater reliability (Heale & Twycross, 2015). Therefore, this proposed study reiterated the importance of predictor variables need for affect and the need for comprehension and reliability was tested using homogeneity Cronbach's α, item-to-total correlation test.

Validity

Continuation from the above-mentioned descriptions of validity, Heale and Twycross (2015) suggested that there were three types of validity; (i) Content validity- the extent to which all aspects of a construct were accurately measured by a research instrument. (ii) Construct validity- the extent that the intended construct is measured by a research instrument. (iii) Criterion validity- the research instrument reliability to other instruments that measure similar constructs.

There were various methods to establish validity, Bryman (2012) however suggested that there were four main methods for quantitative research namely; internal validity, external validity, ecological validity and measurement validity.

<u>Internal validity:</u>

Refers to validity of internal results or within the study; meaning that it refers to the prospects of errors in the research design that might deter the outcomes drawn in an experimental research (Wagner, Kawulich, & Garner, 2012). In the instance of quantitative research, internal validity refers to the results that suggest a causal relationship between variables can be presumed (Bryman, 2012). As with the study by Baigi et al. (2018), this study also made use of a survey. Based on the approach it is usually concerned with causalities between variables that is not established but can only be inferred (Auriacombe & Lutabingwa, 2007). In the context of the questionnaire, criterion validity was used meaning that the items in the questionnaire were measuring real-world issues (Auriacombe & Lutabingwa, 2007). Therefore, internal validity can be established by comparing questionnaire responses with objective measures of the real-world issues referred to.

External validity:

Bryman (2012) suggested that external validity relates to the viability of the research findings being generalised and applied externally to different group of people. The research utilised convenience and snowball sampling the bulk of the respondents were employees of FNB, Nedbank, Absa and Standard bank. Thus, rendering external validity limited as per the Patel (2016) research.

Ecological validity:

Ecological validity refers to the extent to which the research outcomes can be presumed to be the general findings across different geographic areas (Wagner, Kawulich, & Garner, 2012). As asserted by Cavendish (1999), the findings of the research may provide insight on the existence of income inequality in Gauteng and be appropriately generalised to the other South African provinces. In addition, the research explored the phenomenon of racial profiling which has not been formally identified in South Africa. As such, the findings of the research may be the initial attempt to address a new trend.

Measurement validity:

Measurement validity is also known as construct validity. Measurement validity encompasses different types of validity such as discriminant and convergent validity (Bryman, 2012). Simply described, a construct refers to a concept (Babbie, 2013). Meaning that the aim and objectives of the research must be attained through clearly stated research questions that stipulates the construct and how those concepts had to be measured (Heale & Twycross, 2015). In this study, measurement validity was assessed in terms of content validity via the questionnaire. The content validity test was the extent to which the questionnaire sufficiently addresses the construct being researched.

3.5 Research weaknesses—technical and administrative limitations

The proposed study was be subjected to the following technical and administrative limitations:

Technical limitations

- **Research design-** Considering that this is not an experimental research design, the researcher cannot establish the outcome variables. As such the interrelationship between variables is inferred (Auriacombe & Lutabingwa, 2007).

- **Data collection instruments-** opted for a quantitative survey-based method, therefore was exposed to the following limitations:
  - **Cardinal error-** the method is dependent on sampling (Lee, 2015), so if the sample did not represent the intended population the analysis would be insignificant.
  - **Quality of data-** the responses received must be cleaned and coded after. So, the quality of the data must make it difficult to code.

- **Sampling-** Ideally research seeks to represent the views of the entire identified population, however, that it is not feasible. Hence the reliance on sampling.

- **Clarity of responses-** questionnaire based research doesn't offer the researcher the opportunity to seek clarity if a responded misunderstands a question.

- **Reliability and validity-** The research utilised convenience and snowball sampling the bulk of the respondents were employees from FNB, Nedbank, Absa and Standard bank. Thus, rendering external validity limited to the banking sector.

<u>Administrative limitations</u>

- **Missing data-** Online surveys pose the risk of not being completed in full, respondents may commence the survey and not complete it.

- **Response rate-** There is risk that the response rate may be low.
    - Convenience sampling and snowball sampling assisted with mitigating the low response rate. Reason being, the researcher has convenient access to the respondent as he works within the banking sector.

- **Time-frame restriction-** The timeframe to collect data is limited, as the final report is due end of March 2020 meaning that the researcher only has a month to collect process, analysis and draw conclusions from the data.

4 PRESENTATION OF RESEARCH RESULTS

This chapter offered the description of the respondents who provided empirical evidence for this research study in section 4.1. The chapter further presents and discusses the findings to the first research question– what is the role of education in narrowing the income inequality gap in the South African banking sector? (Section 4.2). This discussion is accompanied by the null hypothesis: There is no evidence to suggest that education is an effective method to curbing income inequalities. Section 4.3 presented the findings of the second research question- were there disparities in financial services access by way of racial profiling by the South African banks? Subsequently this section discusses the null hypothesis: The notion of racial profiling and disparities in financial services access does not exist in the banking sector. Section 4.4 addresses the last research question being - is the notion of racial profiling in the South African banking sector perpetuated by media or by individuals' personal experiences. The accompanying null hypothesis is that: The notion of racial profiling is a phenomenon that has not been perpetuated by personal experience, but rather, media coverage. Lastly, Section 4.5 offered conclusions to the responses for the three research questions asked.

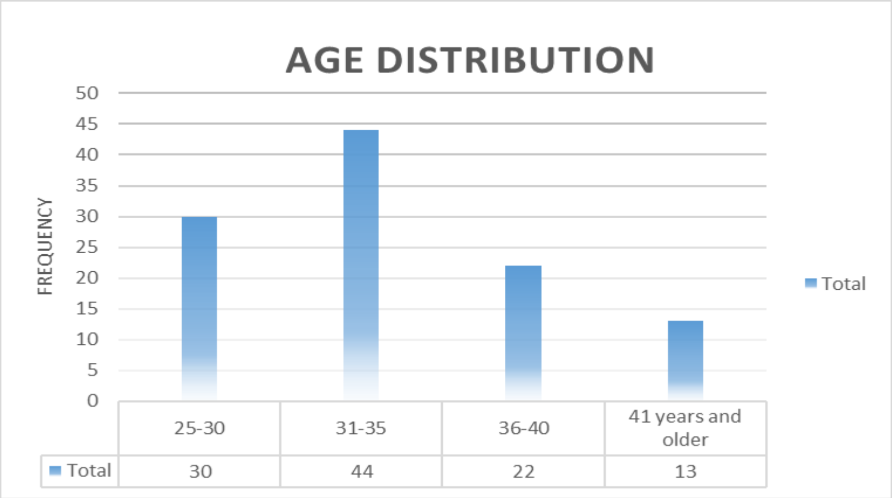
4.1 Description of the research respondents

The importance of describing the research respondents is to identify the characteristics of the respondents and subsequently authenticate the research respondents as the most appropriate sample to provide information. The characteristics include:

Age Distribution:

Figure 4.1 displays the age distribution of the sample, with 28 percent of the participants being in the 25-30-year-old age range, 44 percent of the participants being within the 31-35-year-old age range, 20 percent being in the 36-40-year-old age range and lastly 12 percent of the participants were older than 41 years of age. It is notable to mention that 68 percent of the sample were 35 years and below which groups them in the youth category.

Figure 4.1: Age distribution of the sample



Source: own construction

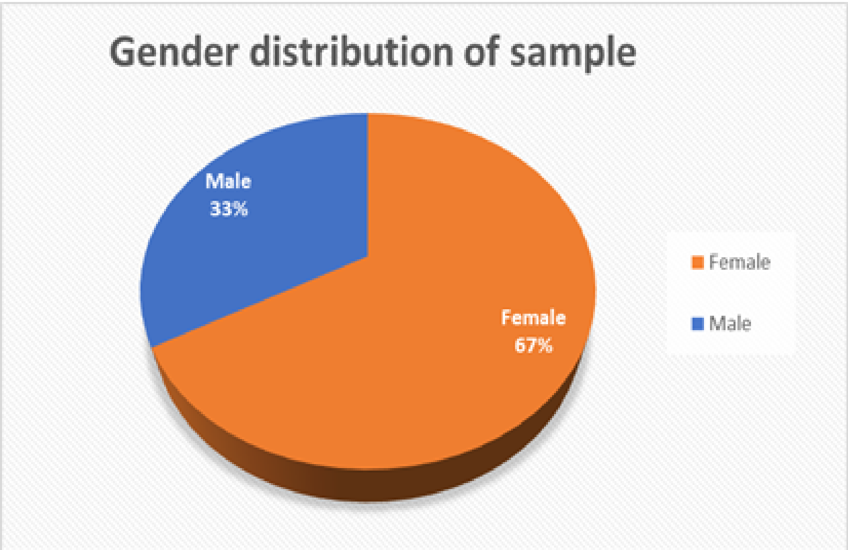
Education:

Participants needed to have a formal higher learning qualification for example; National Diploma, Degrees or post-graduate qualifications. Figure 4.10 depicts the participants level of education.

Gender:

Figure 4.2 shows that of the sample number of 109, 33 percent of the participants were male, whereas the females constituted 67 percent.

Figure 4.2: Gender distribution

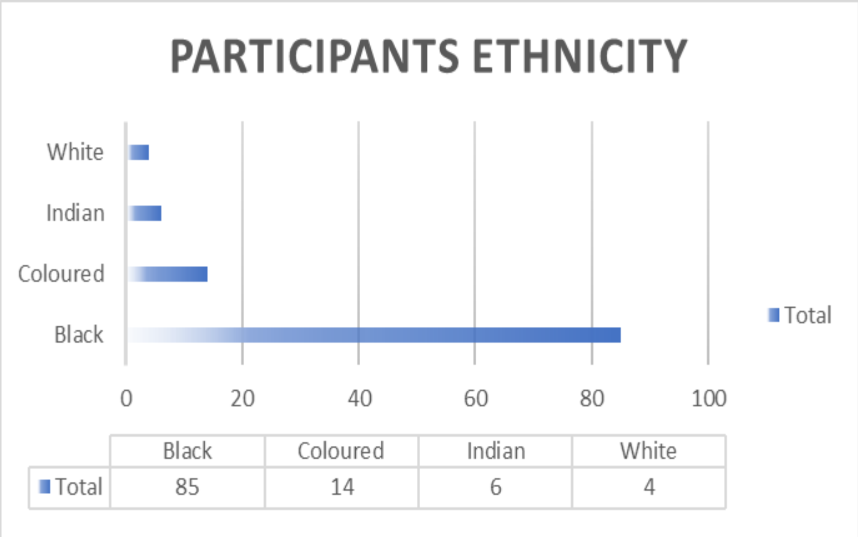


Source: own construction

Ethnicity:

The demographics of the sample is the ethnicity distribution of the sample, majority of the participants were Black Africans at 85 percent, Coloureds at 14 percent, Indians at 6 percent and Whites at 4 percent.

Figure 4.3 Race distribution of the sample



Source: own construction

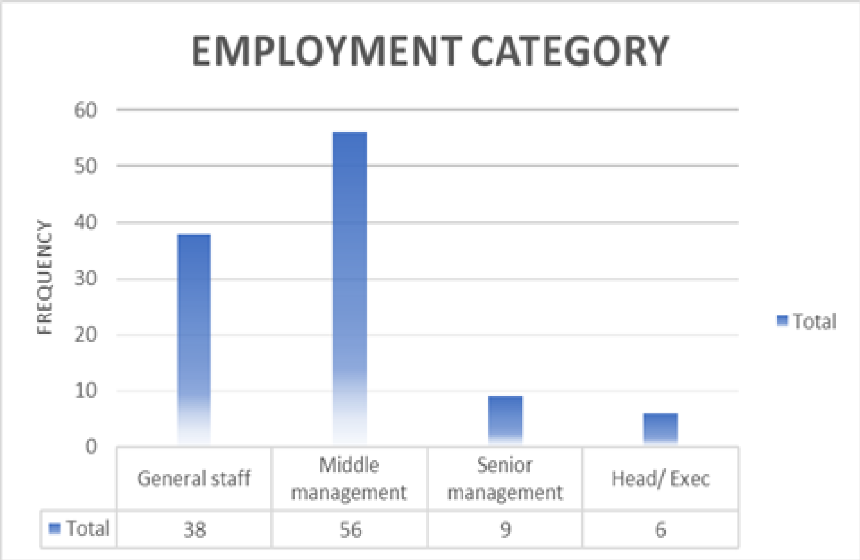
Key attributes:

- Ambitious individuals.
- Respondents must be employed within the Banking sector, Or
    - Respondents must also be a customer of the four major banks
- Respondents must have applied for credit facilities from the four major banks.

Job role:

Participants occupation level were presented in Figure 4.4 and depict that 35 percent of the participants were general staff, 56 percent were middle management, 9 percent were senior managers and 6 percent hold head or executive roles in their respective bank of employment.

Figure 4.4 Participants employment category



Source: own construction

Occupational sector:

All the participants were employed in the Banking Sector (FNB, Standard Bank, Nedbank & Absa)

4.2 The role of education in narrowing the income inequality gap in the South African banking sector

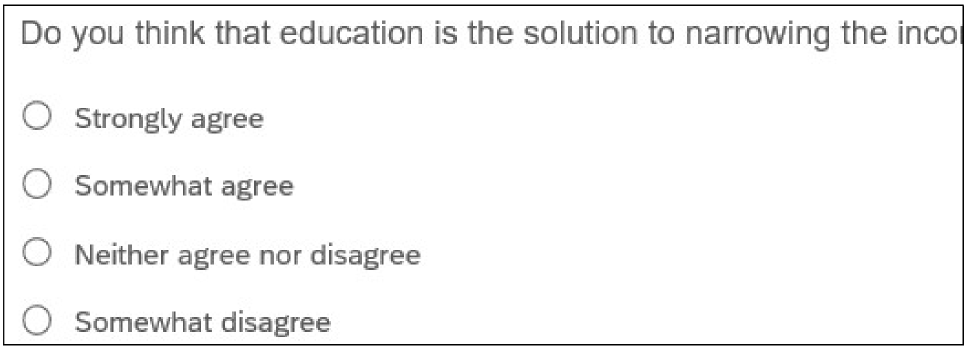
This section presents quantitative findings on the first research question regarding the role education plays in narrowing the income inequality gap. This discussion is accompanied by null hypothesis- there is no evidence to suggest that education is an effective method to curbing income inequalities. Conversely, accompanied by the alternative hypothesis- there is evidence to suggest that education is an effective method to curbing income inequalities.

Subsequently, the presentation of the findings for the first research question had been fragmented into two sections, (section 4.2.1) merely presented the results and (section 4.2.2) presented the comparison of results with other studies conducted in the similar area.

4.2.1 Presentation of empirical research results

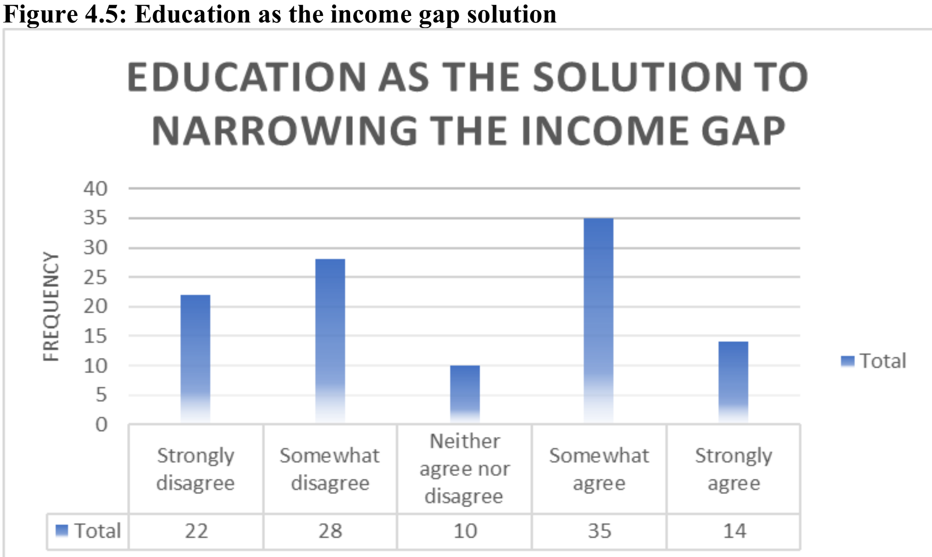
In gathering the data to address this research question ten questions from the twenty-four question in the survey questionnaire were considered in order to respond to the research question. These ten questions were a combination of a 5-point Likert scale and dichotomous questions. Below are samples of the 5-point Likert scale, dichotomous questions and Multiple-choice questions and presentation of feedback gathered.

5-point Likert scale question sample item:



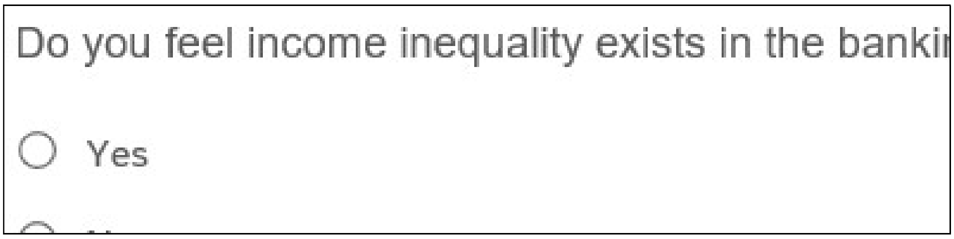
This study is based on the quest to investigate whether education is means to narrowing the income gap. The participants were asked whether education can narrow income inequality, the outcome as shown in Figure 4.5 highlight the significance of the study as 46 percent participants disagree that education is the solution, 45 percent agree and 9 percent neither agree nor disagree.

Figure 4.5: Education as the income gap solution



Source: own construction

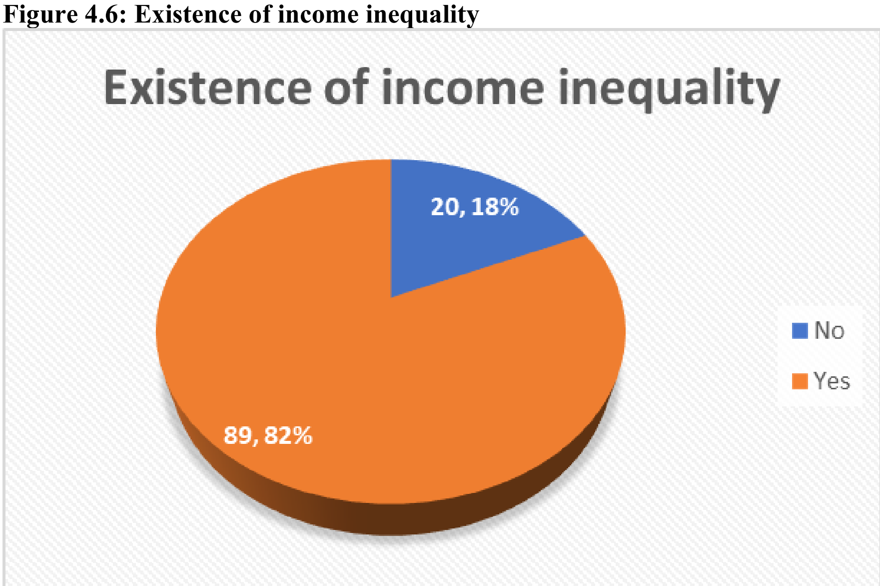
Dichotomous question sample item:


Do you feel income inequality exists in the banki

Yes

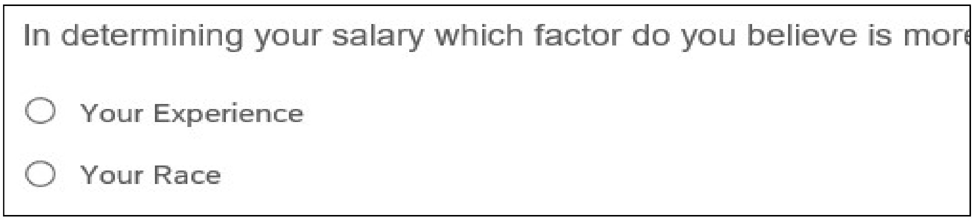
The purpose of this question was to gather a general sentiment of whether bank employees feel income inequality exists in the Banking sector. The outcome from the above dichotomous question is shown in Figure 4.6 which show that 82 percent of the participants believe that income inequality exists in their respective banks of employment and 18 percent feel income inequality does not exist.

Figure 4.6: Existence of income inequality



Source: own construction

Multiple choice questions sample:

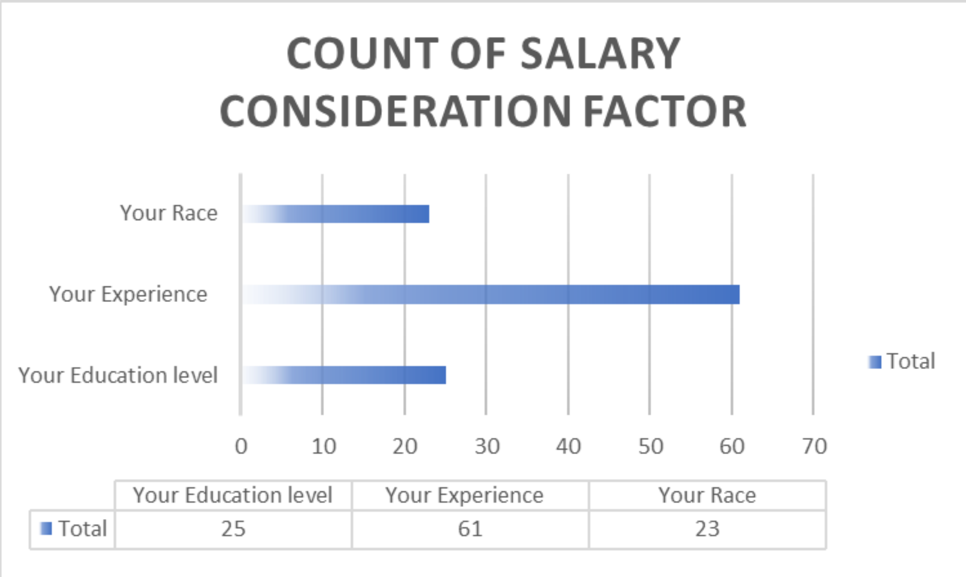

In determining your salary which factor do you believe is mor

Your Experience

Your Race

The goal for this question is to evaluate the factors deemed important when salaries were being considered. Figure 4.7 showed that 56 percent believe experience weighs more than educational level and race.

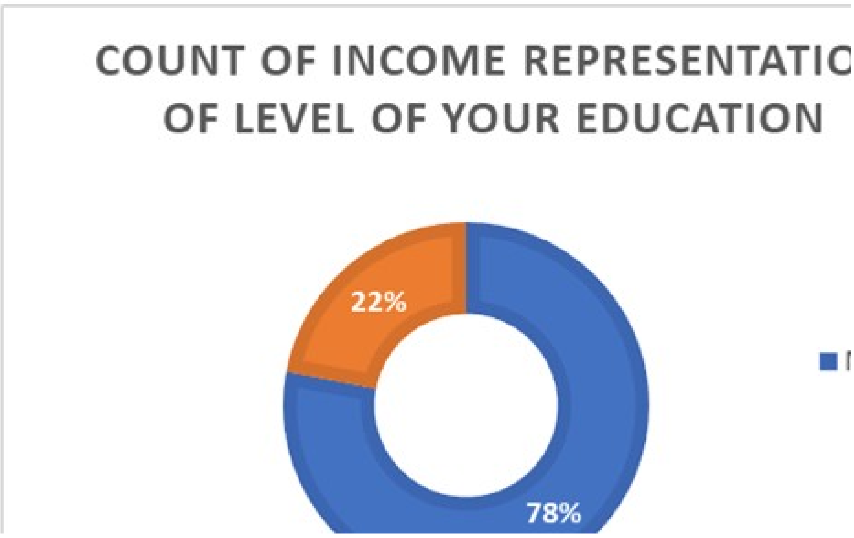
Figure 4.7: Salary consideration factors



Source: own construction

When the study examined if the participants believed that they were remunerated in accordance to their education level, the below outcome in Figure 4.8 further validate not supporting the theory that education is the solution. As 78 percent of the participants said their income does not represent their level of education.

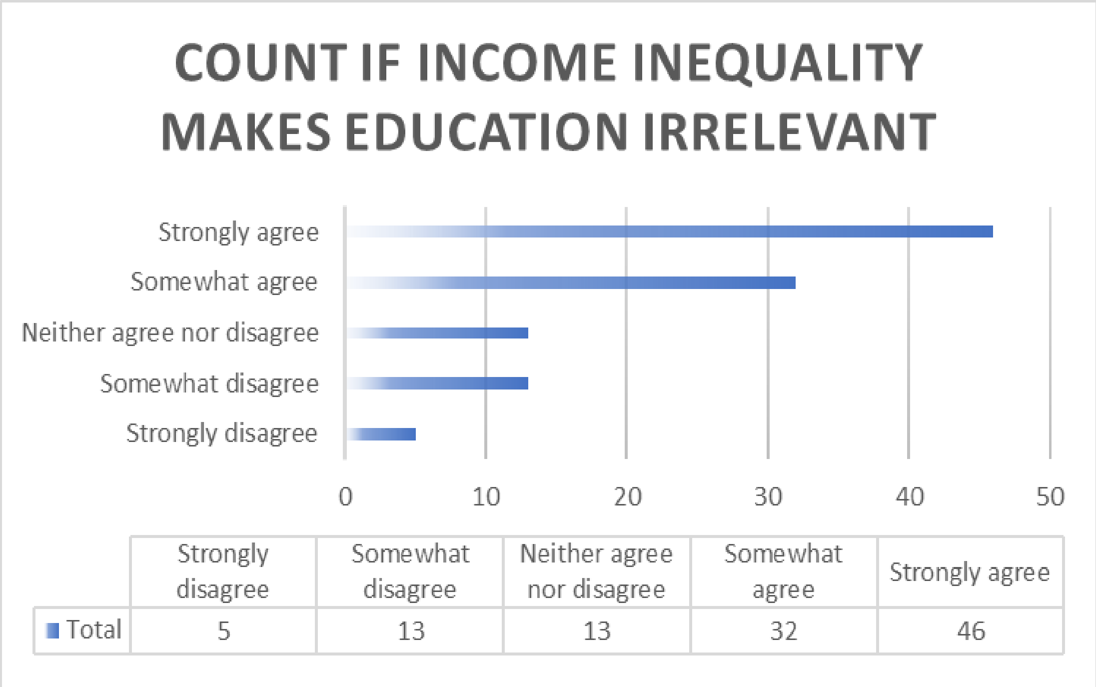
Figure 4.8: Income representation of level of your education



Source: own construction

Figure 4.9 shows the outcome when the participants were asked whether the existence of continuous income inequality makes education irrelevant. The outcome was that 17 percent disagreed, 12 percent neither agreed nor disagreed, whereas 72 percent agreed that the existence of continuous income inequality makes education irrelevant.

Figure 4.9: Income inequality makes education irrelevant



Source: own construction

4.2.1.1 Hypothesis testing

Prior to presenting the hypothesis tests findings this study performed and presents the descriptive and frequency statistics.

Descriptive statistics

Descriptive analysis describes the sample that has been selected, descriptive statistics is the process of collating data on a group of participants then use graphs and summary statistics to present the groups attributes (Frost, 2020).

Table 4.1 presents the descriptive statistics for income ranges for bank employees in relation to their level of education. Table 4.1 shows the values of the following: *N* labelled columnwhich records the number of cases in the dataset; *Mean*- measure the average of the income per level of qualification; *Standard deviation*- measures the extent to which the data points were dispersed from the mean (Statistical Consulting, 2012), *Standard error*-measure the accuracy that a sample distribution represents the respective population. Lastly, the range of the variables is presented by the *Minimum* and *Maximum* labels (Statistical Consulting, 2012).

The more notable data sets in Table 4.1 for interpretation were the mean values which suggestions that the average salaries in each group were relatively close to each other. The standard deviation values were further from the mean on average and within a range of 0.51 and 0.95. Based on the values the Masters/Doctorate standard deviation was the furthest from the mean with a value of 0.95 suggesting that this group of participants were paid more. Surprisingly, the Honours/Postgraduate group had closet value to the mean which suggested that this group was the least paid. However, the dispersion of the standard deviation from the mean could have been influenced by outliers within the data, meaning that some participant may be earning more or lesser than the group averages. Nonetheless, the data sets were normally distributed and were within the 95percent confidence interval for mean.

Table 4.1: Descriptive Statistics, Income and Education level

Descriptives

Income & Inequality Score

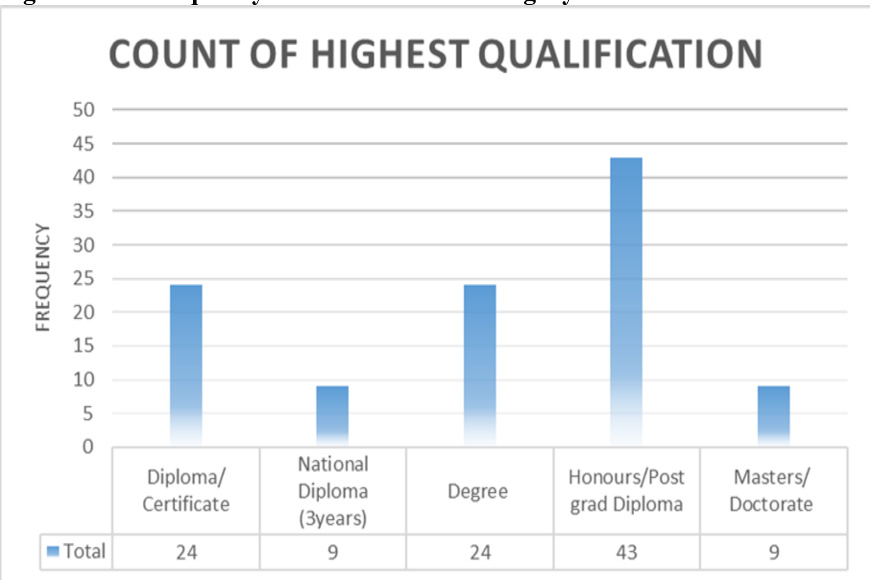
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
Diploma/Certificate	24	2.0526	.65721	.13415	1.7751	2.3301
National Diploma	11	1.8026	.61085	.18418	1.3922	2.2130
Degree	24	2.1318	.84071	.17161	1.7768	2.4868
Honours/Postgraduate	41	1.7642	.51381	.08024	1.6021	1.9264

Source: own construction on SPSS

Frequencies

The descriptive statistics above Table 4.1 offer a summarised set of data with an underlying continuous distribution (Statistical Consulting, 2012). Even though, descriptives were not important for data interpretation, they were useful for identifying the number of cases per categories. Thereafter, Frequency allows the study to identify the number of participants within each level of education category in the dataset and as depicted in Figure 4.10 there were 24 participants with a Diploma/Certificate, 9 with a National Diploma qualification, 24 with Degrees, 43 with Honours/Postgrad degree and 9 participants holding Masters/ Doctorate qualification.

Figure 4.10: Frequency level of education category



Source: own construction

Inferential analysis

When selecting the method to complete inferential analysis, consideration was on the premise of van Elst (2019) suggestion of the following inferential statistics tests. Namely; Hypothesis testing- T-test, ANOVA or Chi-Square to determine if a hypothesis regarding the mean is true or not, Regression- predicts or shows the relationship between two variables and Correlation- explains the relationship between two variables.

Hypothesis testing

Hypothesis testing is the process of wanting to find out the relationship or effect between variables (Frost, 2020). The hypothesis test examines the evidence in the sample. However, if test conducted failed to identify the relationship or effect, that alone is inconclusive evidence to conclude that the relationship does not exist (van Elst, 2019). The reason could be that the sample had insufficient amount evidence to conclude that a relationship or effect does exist (Frost, 2020).

According to Frost (2020) When conducting hypothesis testing there were two possible outcomes:

1. Reject the null hypothesis- if the p-value is equal to or less than the significance level. Meaning the findings were statistically significant and the results favour the alternative hypothesis.

2. Fail to reject the null hypothesis- occurs when the p-value is greater than the significance level. Meaning the results were not significant

The hypothesis test only tests the null hypothesis and the subsequent standing assumption is that the null hypothesis is correct (van Elst, 2019) as stated below:

Hypothesis 1:

H_0: there is no evidence to suggest that education is an effective method to curbing income inequalities.

Crosstabulation

Table 4.2 depicts the data breakdown collected for the two variables being education level and income ranges, the table shows the frequency of the variables. The crosstabulation provides us with information in terms of whether the observed counts and expected counts were different enough for these metrics to be significant. To verify the whether the results of the crosstab were statistically significant the Pearson chi-square test was used, and the results were presented in Table 4.3.

Table 4.2: Education and Income Crosstabulation

Education level * Income Group Crosstabulation

			Income Group				
			Less than R200k	R201k-R400k	R401k-R600k	R601k-800k	R801k-R
Education level	Diploma/Certificate	Count	5	7	9	2	
		Expected Count	1.3	6.4	7.3	4.2	
	National Diploma	Count	1	3	4	2	
		Expected Count	.6	3.0	3.4	1.9	
	Degree	Count	0	14	5	4	
		Expected Count	1.3	6.4	7.3	4.2	
	Honours/Postgraduate	Count	0	5	12	10	
		Expected Count	2.2	10.7	12.2	7.0	
	Masters/ Doctorate	Count	0	0	3	1	

Source: own construction on SPSS

<u>The Chi-Squared test</u>

Table 4.3: Pearson Chi-Square

Chi-Square Tests

	Value	df	A Si
Pearson Chi-Square	49.978[a]	20	
Likelihood Ratio	53.927	20	
Linear-by-Linear Association	24.699	1	
N of Valid Cases	108		

Source: own construction on SPSS

The Chi-squared test was used to test the relationship or the effect that education has on the income which were the two variables. The degrees of freedom(df) was 20 and the Pearson Chi-Square value was stated as (49.978). The output in Table 4.3 provides the statistical hypothesis test that income and education level were independent of each other. The large Chi-Square value (49.98) and its small significance level (0.000) which was $p < 0.01$ suggested that the variables were independent of each other. Therefore, the deduction was that there was a relationship between the variables. However, the Chi-Square assumes that the expected count of cells less than 5 ought to be less than 20 percent. The assumption has been violated as in this study the expected cell count was 22 at 73.3 percent.

Correlation

The inter-item correlation matrix aims to support the to support the Cronbach Alpha reliability test findings of 0.624 which was deemed reliable with caution. Therefore, the inter-item correlation range to proves reliability and validity. Table 4.4 presents the inter-item correlation matrix; the matrix scrutinises internal consistency reliability, it was therefore a measure of whether individual questions on a questionnaire provides appropriate and consistent results (Statistical Consulting, 2012). The below results display different questions that were used to measure the same construct with effort to ascertain if the scores were similar. According to Frost (2020), the ideal inter-item correlation range to prove reliability is 0.15 to 0.50. If it was below 0.15 that means the variables were not sufficiently correlated and the study deduced that the test does not measure the same construct well if at all. Inversely, if the items were above 0.50 that means that the items were related and were close to being redundant. Therefore, there was no point of measuring both variables (Statistical Consulting, 2012). The test concludes that the average inter-item correlation values fall within the reliability range of 0.15 and 0.50 which was a mean to support the Cronbach Alpha reliability test.

Table 4.4: Inter-item correlation matrix

Inter-Item Correlation Matrix

	Generational inequality	Makes education irrelevant	Damages the Org cohesion	Q16Recode	Q9Recode	Q1
Generational inequality	1.000	.149	.308	.222	.080	
Makes education irrelevant	.149	1.000	.452	.040	.220	
Damages the Org cohesion	.308	.452	1.000	.135	.298	
Q16Recode	.222	.040	.135	1.000	.313	
Q9Recode	.080	.220	.298	.313	1.000	

Source: own construction on SPSS

Homogeneity of variance test

The homogeneity of variance was a test that aimed at examining which hypothesis test can be considered robust between the Analysis of Variance (ANOVA) Test and the Non-parametric Kruskal-Wallis test. Frost (2020) describes the homogeneity of variances as test that assess if the variances of each comparison group were equal. The Homogeneity of variance test was required for the ANOVA test and the statistical test used was Levene's test which was also part of the inferential analysis and was used to test the equality of variances (Statistical Consulting, 2012). Moreover, the test assesses the null hypothesis whether the population variances were equal.

Ideally the significance value of the Levene test based on the comparison of means should not be significant therefore must not be great than 0.05 (Frost, 2020). When the results were not significant, the study concludes that the requirement of homogeneity of variance has been met and there was no real difference between the variances. The mean p-value was 0.20 which was greater than the significance value of 0.05 as shown in Table 4.5 concludes that the ANOVA test can be considered to be robust as the assumption of the homogeneity of variance has been met.

Table 4.5: Homogeneity of Variances test

Test of Homogeneity of Variances

		Levene Statistic	df1
Income & Inequality Score	Based on Mean	1.516	4
	Based on Median	1.215	4
	Based on Median and with adjusted df	1.215	4

Source: own construction on SPSS

Analysis of Variance (ANOVA) Test

The homogeneity of variances test in Table 4.5 confirmed that the ANOVA test was robust and was used to determine if there was a statistical relationship between variables and factors (Wagner, Kawulich, & Garner, 2012). The purpose of the study was to determine the relationship between employee's income and their level of education. Table 4.6 shows the p-value as 0.136 which was greater than the significance value of 0.05. Resultantly, with the p-value of 0.13 being greater than the significance level of 0.05- **do not reject the null hypothesis** that there was no evidence to suggest that education was an effective method to curbing income inequalities.

Table 4.6: ANOVA test- Income & education

ANOVA

Income & Inequality Score

	Sum of Squares	df	Mean Square	F
Between Groups	3.291	4	.823	1.7
Within Groups	47.752	104	.459	

Source: own construction on SPSS

4.2.1.2 Validity

Validity referred to whether the data collection method satisfactory measures the variable it intends to measure (Bryman, 2012). Therefore, validity tested in the study was constructed validity. Construct validity - the extent that the intended construct was measured by a research instrument (Heale & Twycross, 2015). The construct validity tested whether two measures that meant to measure the same construct duly did so. Resultantly, the correlation test was conducted on the constructs to verify the validity. The inter-item correlation Table 4.4 checked the average communalities that should be atleast 0.60 or be within the range of <0.30 and >0.90 values and the results in Table 4.4 depicted that most of the values fall within the prescribed range thus proving validity.

4.2.1.3 Reliability

Reliability suggested that should the same research be conducted again, the results drawn should be same (Heale & Twycross, 2015). Reliability has been extensively been discussed in (Section 3.4). Resultantly, reliability was tested using homogeneity Cronbach's α test. In order for the test to imply reliability the Cronbach's alpha coefficient must be 0.7. The Cronbach's alpha noted in this study was 0.624 as depicted in Table 4.7. The Cronbach's alpha of 0.624 was significant to assume reliability with caution.

Table 4.7: Reliability Statistics- Cronbach's Alpha

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of

Source: own construction on SPSS

4.2.2 Comparison of the results to other studies

In a similar study conducted by Faith, Derick, Lorraine & Kleynhans (2015), the purpose of the study was to examine possible reasons why there was an influx of unemployed graduates in the banking sector. The study highlights that the main causes for graduate unemployment in the South African banking sector were the skills obtained and the difference in remuneration expectations between the graduates and employers (Faith , Derick , Lorraine , & Kleynhans, 2015). These key findings were similar to the empirical research findings for this study as 78 percent of the participants said their income does not represent their level of education, which shows the difference in remuneration between banking sector employees and employers.

4.3 The existence of disparities in financial services access by way of racial profiling

Section 4.3 presents quantitative findings on the second research question stated as; to investigate the existence of disparities in financial services access by way of racial profiling. This presentation of findings was accompanied by the null hypothesis- The notion of racial profiling and disparities in financial services access does not exist in the banking sector. Inversely, accompanied by the alternative hypothesis- Racial profiling and disparities in financial services access does exist in the banking sector.

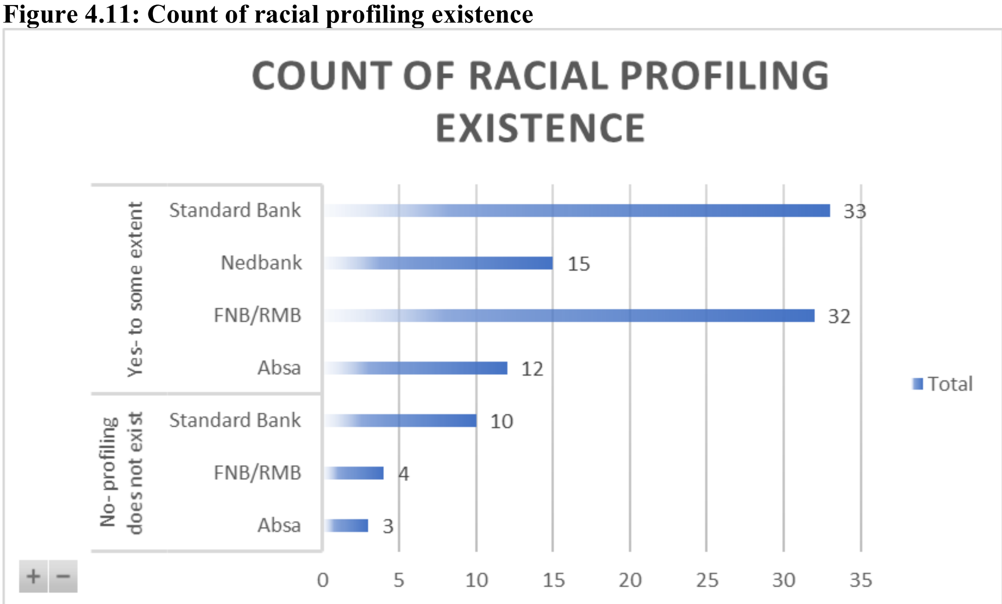
Presentation of the findings for the second research question were in two sections, (section 4.3.1) merely present the results and (section 4.3.2) presented the comparison of results with other studies conducted in the similar area.

4.3.1 Presentation of the empirical results

In gathering the data to address the second research question seven questions from the twenty-four question in the survey questionnaire were considered in order to respond to the research question, below were some of the findings:

Figure 4.11 shows the outcome from the question put to the participants whether they believe that banks racial profile their clients, thus, supporting the notion of the existence of racial profiling in the banking sector. The results were that 84 percent responded "yes- to some extent" and 16 percent responded "no- profiling does not exist".

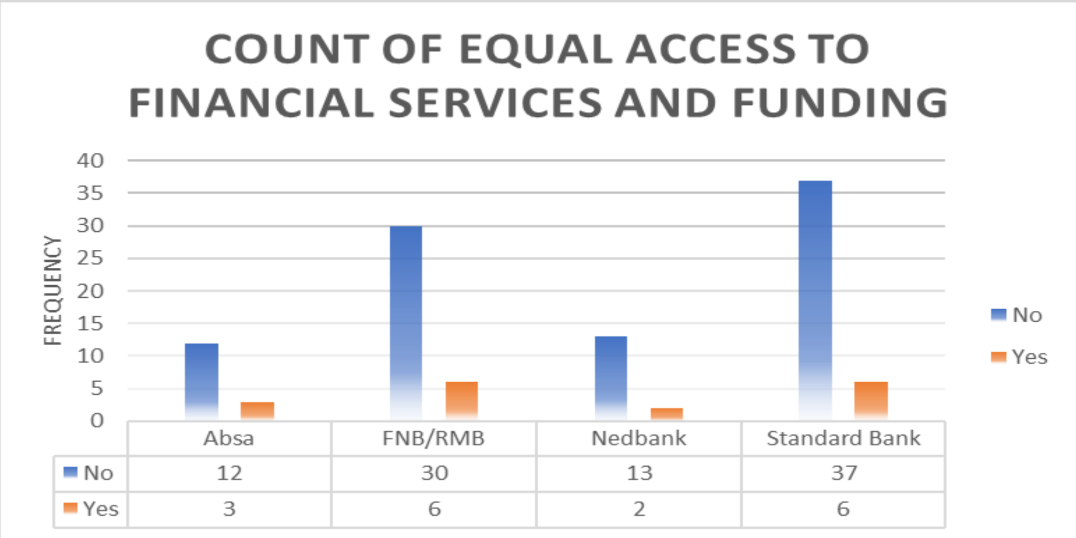
Figure 4.11: Count of racial profiling existence



Source: own construction

The importance of this question was that it assists with investigating disparities in financial services access based on race and if this form of disparity creates intergenerational inequality. When participants were asked whether they believe that all races have the same access to financial services and funding. The results as shown in Figure 4.12 were that 84 percent said no there was disparities in access to funding and financial services. Whereas, 16 percent believe that all races have the same level of access.

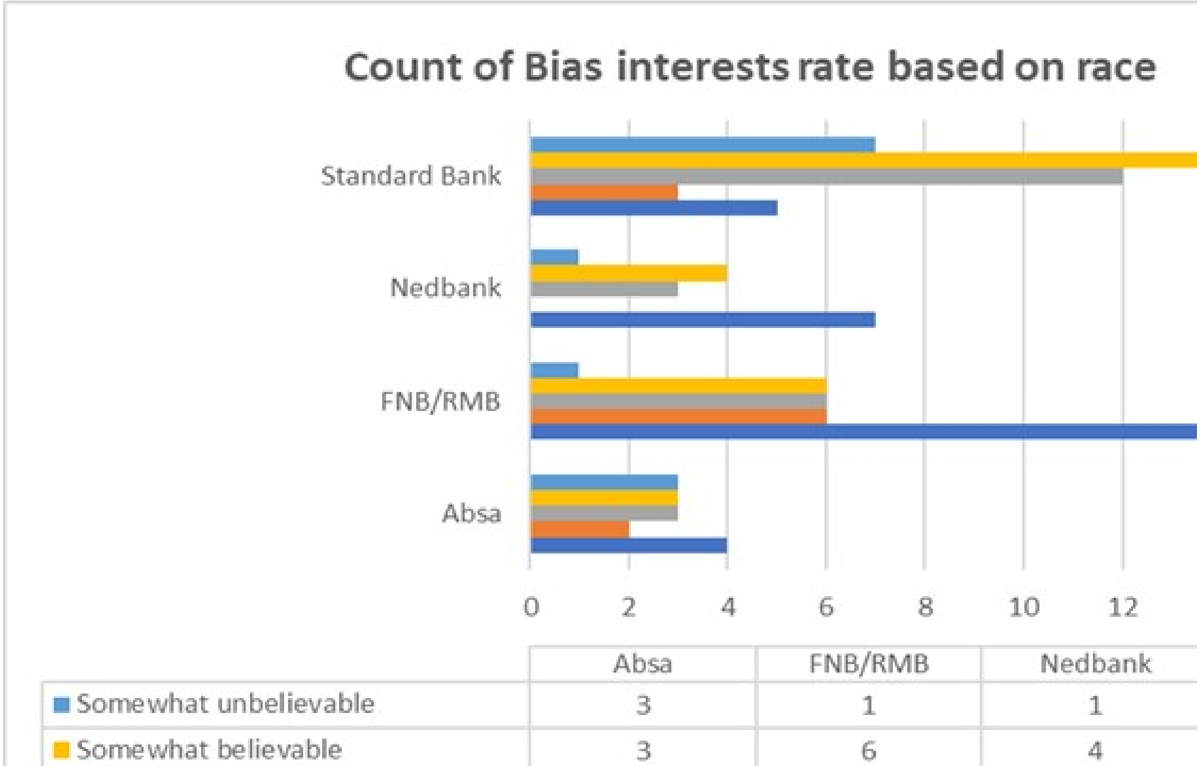
Figure 4.12: Equal access to financial services and funding



Source: own construction

Disparities in financial services access makes access to funding more expensive when the participants were asked if they have ever felt as though they were quoted a higher or lower interest rate bases of your race. The outcome as depicted on Figure 4.13 suggest that 57 percent of the participants believe they have been discriminated against or benefited on the base of their race, 22 percent have not experienced or were unaware of this disparity whereas 21 percent do not believe that have ever benefited or discriminated in this manner.

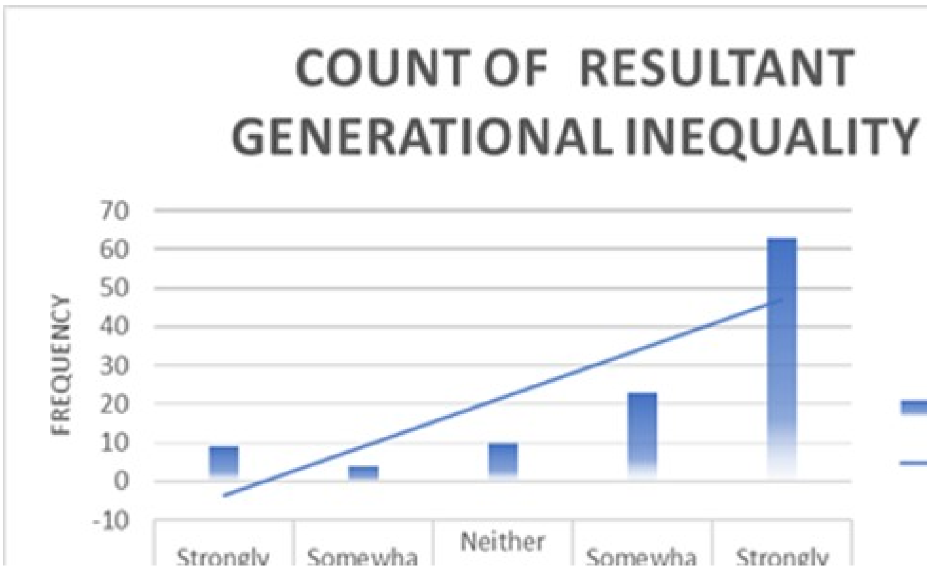
Figure 4.13: Count of bias interest rates perceptions



Source: own construction

Figure 4.14 presents the results from a question asked about the consequence of racial profiling whether the existence creates generational inequality. The outcome from the survey suggest that 79 percent of the participants agree that banks disparities in financial services access by way of racial profiling causes generational inequality, 9 percent neither agree nor disagree and 12 percent disagree.

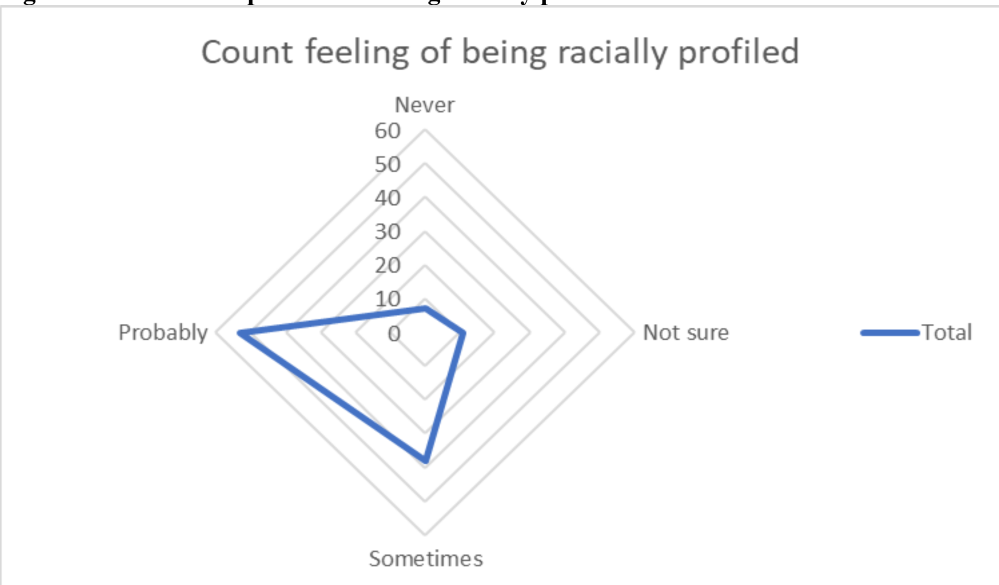
Figure 4.14: Count if racial profiling causes generational inequality



Source: own construction

Lastly, when the participants were asked if as bank employees, have they ever felt racially profiled the results as depicted in Figure 4.15 show that 49 percent feel they probably have been profiled, 35 percent said sometimes, 10 percent were not sure, and 6 percent have never felt racially profiled.

Figure 4.15: Count experience of being racially profiled



Source: own construction

4.3.1.1 Hypothesis testing

Descriptive Statistics

Table 4.8 presents the descriptive statistics for income ranges for bank employees in relation to their level of education. Table 4.8 shows the mean of the perception of disparities in financial services in the different banks with their respective standard deviation, standard error and the confidence interval for mean.

Based on the values presented in Table 4.8, the outcomes suggest that atleast 96 percent of the observations were within +/- 2 standard deviations from their respective means, thus it can be concluded that the data sets were normally distributed continuous constructs.

Table 4.8: Descriptive statistics- Disparities in financial services

Descriptives

Quoted rates based on race

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
Standard Bank	42	2.69	1.115	.172	2.34	3.04
FNB/RMB	36	2.25	1.500	.250	1.74	2.76
Absa	14	2.71	1.490	.398	1.85	3.57
Nedbank	12	1.67	.778	.225	1.17	2.16

Source: own construction on SPSS

Inferential analysis

In consideration of the inferential statistics tests available to test the below null hypothesis, the following tests were preferred; Homogeneity of variance test and the non-parametric Kruskal-Wallis test to conduct the hypothesis testing. The null hypothesis being tested was stated below:

Hypothesis 2:

H_0: The notion of racial profiling and disparities in financial services access does not exist in the banking sector.

Homogeneity of variance test

The ideal homogeneity of variances was met when statistical assumption was met. The assumption states that the p-value for Levene's test must be greater than or equal to 0.05. When the Levene's tests p- value was lower than 0.05, then the assumption of homogeneity of variance has been violated. Outcome in Table 4.9 showed the mean being p-0.03 which was lesser than the significance level of 0.05. The violation of the homogeneity of variance assumption concluded that the ANOVA test was not considered robust for testing hypothesis 2 and the Non-parametric Kruskal-Wallis test was used to conduct the hypothesis testing.

Table 4.9: Test of Homogeneity of Variances

Test of Homogeneity of Variances

		Levene Statistic	df1
Quoted rates based on race	Based on Mean	2.780	4
	Based on Median	1.778	4
	Based on Median and with adjusted df	1.778	4

Source: own construction on SPSS

Non-parametric Kruskal-Wallis test

McDonald (2015) describes the Kruskal-Wallis test as a statistical analysis that was rank-based nonparametric test. The test was used to determine the statistical significance differences between groups with independent variables (McDonald, 2015). In this study the Kruskal-Wallis test was used because the homogeneity of variance between the banks had been violated. The Kruskal-Wallis test assumes the groups that the groups being tested have same similar shape and that samples were from the identical population (Statistical Consulting, 2012). Whereas, the alternate assumption was that at least one of the samples debatably dominates the other sample sets. The outcome in Table 4.10 shows the Asymp. Sig 0.01 was the p-value which essentially means that there was a 1 percent chance that the sample results does not have any effect in the larger sample population. Resultantly, since the p-value was 0.01 which was lesser than the significance level of 0.05 - **REJECT the null hypothesis** that denotes that the notion of racial profiling and disparities in financial services access does not exist in the banking sector**.** The smaller p-value gives the study more confidence to reject the null hypothesis. Therefore, with the confidence level to reject the null hypothesis the study moved to **ACCEPT the alternative hypothesis** that suggested that racial profiling and disparities in financial services access does exist in the banking sector.

Table 4.10: Kruskal-Wallis test

Kruskal-Wallis Test

Ranks

	Quoted rates based on race	N	Mean Rank
Income & Inequality Score	Extremely believable	33	46.76
	Somewhat believable	29	53.93
	Neither believable nor unbelivable	22	44.75
	Somewhat unbelieveable	12	76.42

Test

Kruskal-Wa	
df	
Asymp. Sig.	

a. Kruska

Source: own construction on SPSS

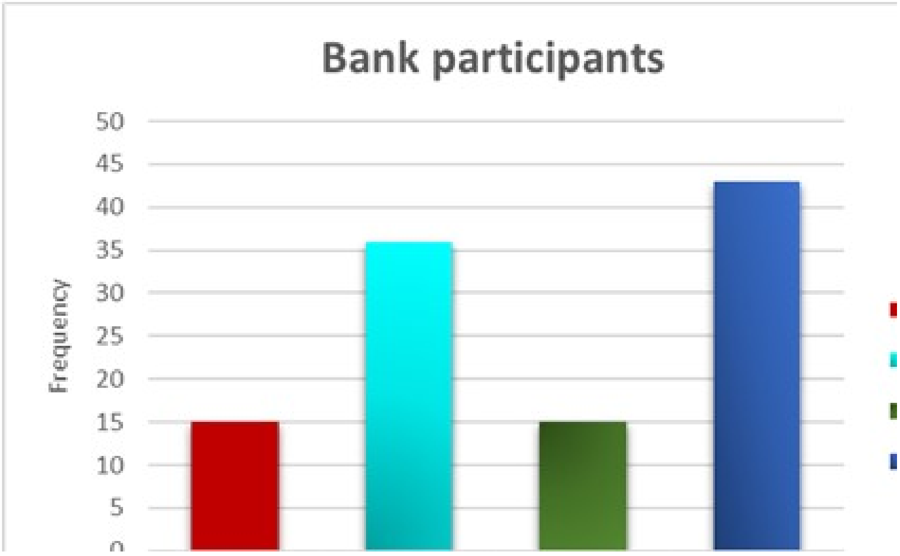
4.3.1.2 Validity

Validity for this section was based on ecological validity. Ecological validity refers to the extent to which the research outcomes in this study can be presumed to be the general findings across different geographic areas (Wagner, Kawulich, & Garner, 2012). The findings of this research provided insight on the existence of income inequality in the Gauteng banking sector and be appropriately generalised to the other South African provinces. In addition, the research explored the phenomenon of racial profiling which has not been formally identified in South Africa. As such, the findings of the research may be the initial attempt to address a new trend.

4.3.1.3 Reliability

The reliability of the study was determined by the quality of the data which was an important consideration for statistical analysis (Wagner, Kawulich, & Garner, 2012). Therefore, the data on the research needed to be reliable and accurate in order for the findings to be deemed valid (Heale & Twycross, 2015). In order to ensure data quality, the researcher strived to get a fair representation of the four banks. Figure 4.16 depicts the representation for the four banks: Absa and Nedbank with 14 percent representation, FNB/RMB with 33 percent and Standard Bank having 39 percent representation. Resultantly, the study has at least 10 counts per group thus made it viable and reliable to conduct a one-way ANOVA hypothesis test (Lee, 2015).

Figure 4.16: Reliability- Bank representatives



Source: own construction

4.3.2 Comparison of research results to other similar studies

In a similar report by Munro Consulting Actuaries (2019), they interrogated 75 000 loan agreements across the big four Commercial Banks same sample as this study. The aim of the research was to investigate claims of discrimination against black customers in terms of the interest rates charged. The findings of the report on the interest rate gap by race and loan size stated that Coloured and Black customers with the similar loan amounts exposure were paying higher interest rates than Whites for the same banking credit facility products, the findings suggest that on loans above R150 000: Coloured and Black customers pay on average 0.45percent below prime rates. Whereas, White customers pay on average 1.1percent lower than prime. In relation to loans less than R100 000, Coloured and Black customers pay 2percent above prime rate as opposed to White customers that pay 0.75percent above the prime rate (Munro Consulting Actuaries, 2019). These findings relate to the this studyings finds that 57 percent of the participants believe they have been discriminated against or benefited on the base of their race, 22 percent have not experienced or were unaware of this disparity whereas 21 percent believe that they have never experienced discrimination. Moreover, the report findings by Munro Consulting Actuaries (2019) relates with this researchs findings that found that the existence of disaparties in financial access makes access to funding more expensive and that not all races have the same access to funding.

4.4 Media influence on racial profiling

This section presents quantitative findings on the third research question being; to ascertain whether the notion of racial profiling was perpetuated by media or by individuals' personal experiences. This presentation of findings was accompanied by its null hypothesis - The notion of racial profiling was a phenomenon that has not been perpetuated by personal experience but rather media coverage. Conversely, accompanied by the alternative hypothesis- The notion of racial profiling was a phenomenon that had been personally experienced by individuals rather than perpetuated by media coverage.

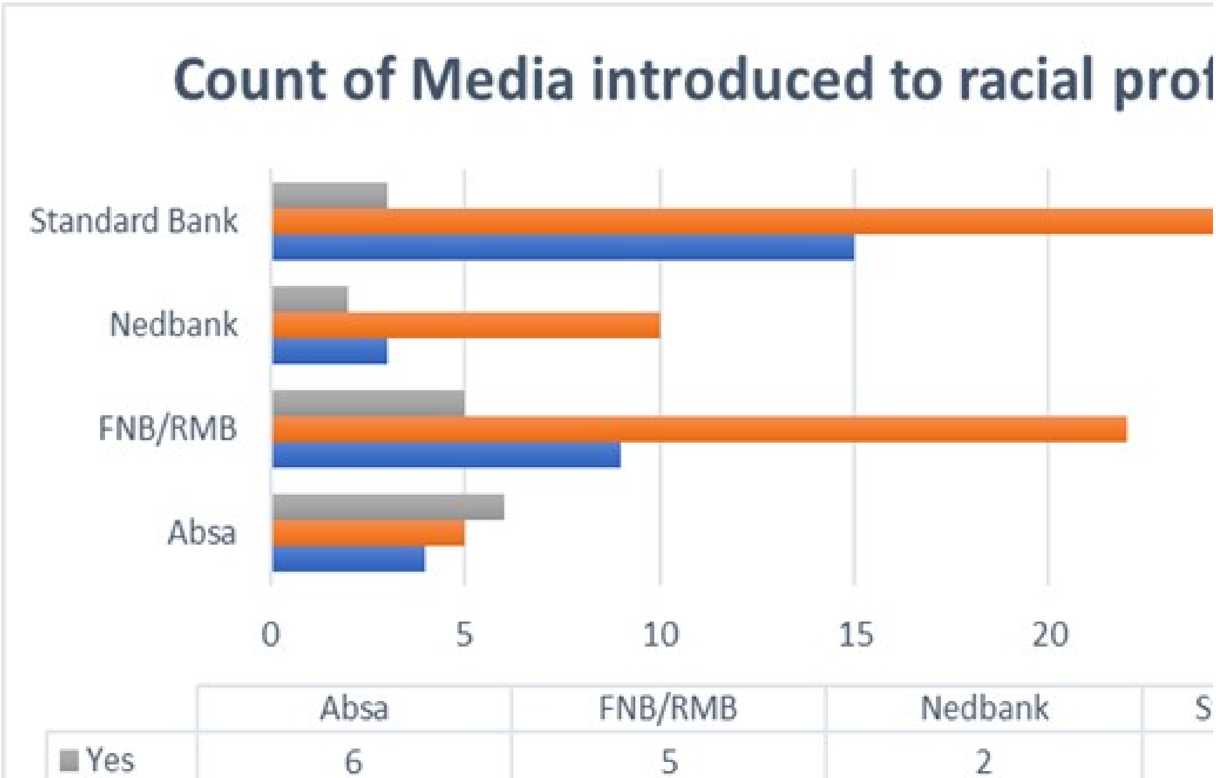
The presentation of the finds for the first research question were fragmented into two sections: Section 4.4.1 merely presented the results and Section 4.4.2 presented the comparison of results with other studies conducted in the similar area.

4.4.1 Presentation of the empirical results

In gathering the data to address this research question seven questions from the twenty-four question in the survey questions were considered in order to respond to the research question. The following presentations were selected findings from the survey conducted.

The notion of racial profiling was seemingly a new phenomenon. This study was unable to find published literature to support the idea of racial profiling especially in the context of phenomenon perpetuating income inequalities and disparities in access to financial services. However, the study found a similar report by Munro Consulting Actuaries (2019), The aim of the research was to investigate claims of discrimination against black customers. As such, the content of the report received extensive media coverage. Consequently, the third research question aimed to investigate whether this phenomenon was introduced by the media or were individuals introduced to the phenomenon through personal experiences. As such, when the participants were asked whether they had been introduced to racial profiling by the recent spike in media allegations regarding the phenomenon; 15 percent said "yes", 28 percent said "maybe", and 57 percent responded by saying "no". Figure 4.17 depicts the findings.

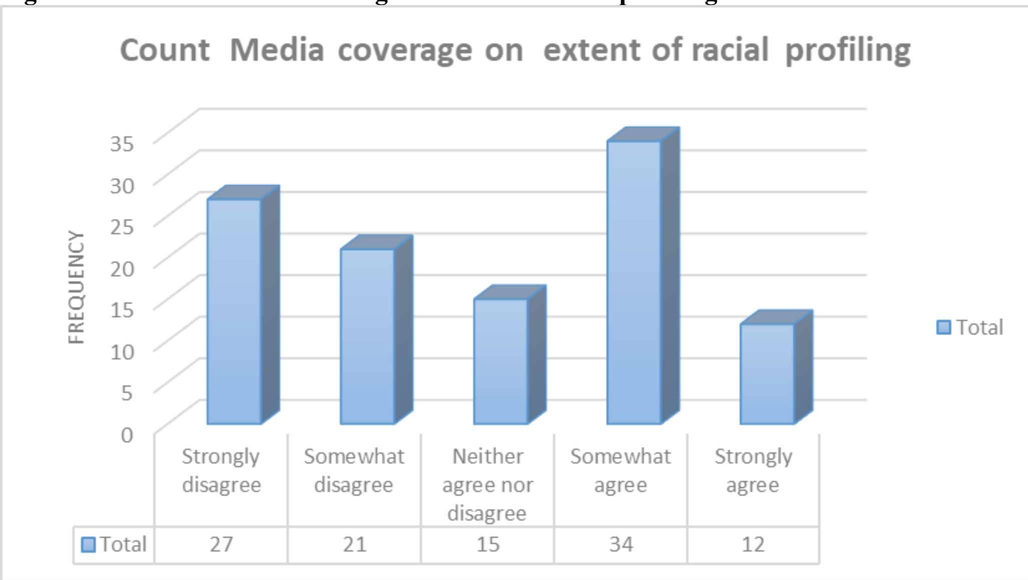
Figure 4.17: Count of media introduction



Source: own construction

Moreover, when the participants were asked whether they believed that the Media fairly reports the existence and the extent of racial profiling in the banking sector. The outcome from the survey as depicted in Figure 4.18 shows that 48 percent of the participants strongly or somewhat disagree that the media coverage fairly reports the existence and the extent of racial profiling done by banks, 15 percent neither agree nor disagree and 46 percent of the survey participants either strongly or somewhat agree that the media fairly reports the existence and the extent of racial profiling.

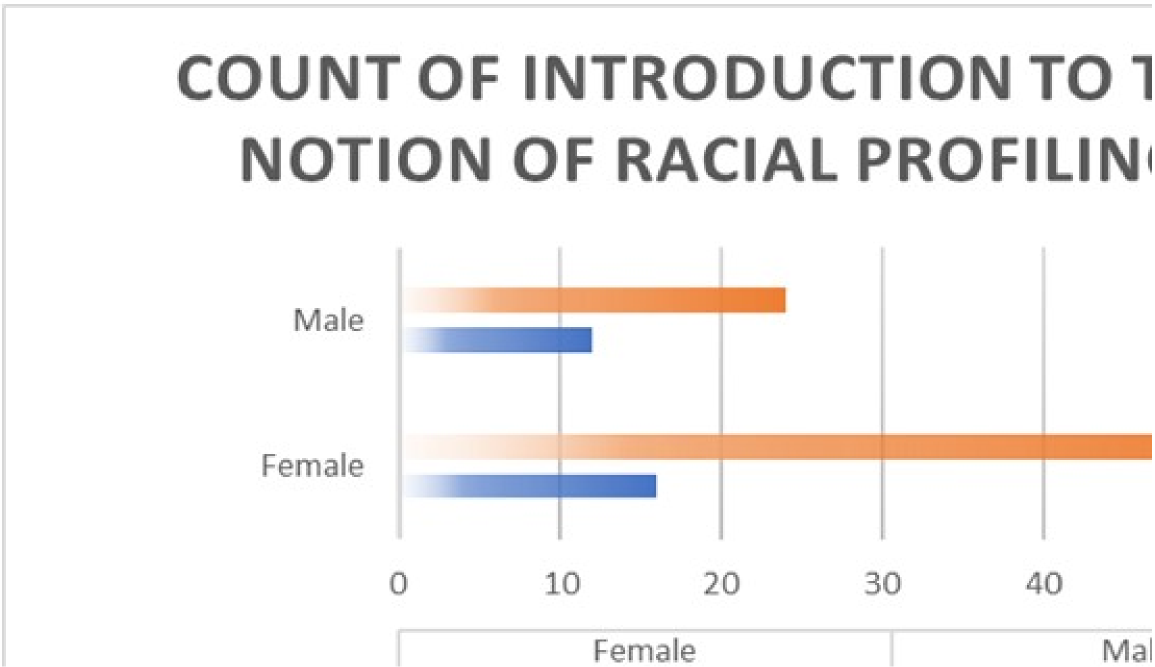
Figure 4.18: Count media coverage on extent of racial profiling



Source: own construction

Lastly, with effort to assess the impact that the media has in perpetuating the notion of racial profiling, the study asked the participants how they were introduced to the phenomenon the outcome was that 26 percent said they were introduced by the media whereas 74 percent was through their personal experiences. The breakdown in terms of gender was depicted in Figure 4.19.

Figure 4.19: Count of introduction to the notion of racial profiling



Source: own construction

4.4.1.1 Hypothesis testing

Descriptive Statistics

For descriptive statistics the study selected the group of bankers that the study wanted to describe and then measure all the variables in the group. Therefore, the statistical descriptives summary as shown in Table 4.11 describes the group with certainty having taken into consideration the measurement error.

Based on the values presented in Table 4.11 the outcomes suggest that the atleast 96percent of the observations were within +/- 2 standard deviations from their respective means, thus, it can be concluded that the data sets were normally distributed continuous constructs.

Table 4.11: Descriptive Statistics- Media influence on racial profiling

Descriptives

Media introduced idea of racial profiling

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
Personal experience	79	2.53	.676	.076	2.38	2.68
Media coverage	28	2.14	.848	.160	1.81	2.47

Source: own construction

Inferential analysis

For inferential analysis, the following tests were preferred; Homogeneity of variance test and the Analysis of Variance (ANOVA) to test the null hypothesis. The null hypothesis being tested is stated below:

Hypothesis 3:

> **H_0:** The notion of racial profiling is a phenomenon that has not been perpetuated by personal experience but rather media coverage.

Homogeneity of Variances

The assumption stated that the p-value for Levene's test must be greater than or equal to 0.05. When the Levene's tests p- value was lower than 0.05, then the assumption of homogeneity of variance has been violated. The outcome shown in Table 4.12 shows the mean value as p-0.06 which was greater that the significance level of 0.05. Thus, concluding that the variances were significantly different, and the homogeneity of variance has been met and a one-way ANOVA test can be conducted.

Table 4.12: Test of Homogeneity of Variances- Media influence on racial profiling

Test of Homogeneity of Variances

		Levene Statistic	df1
Media introduced idea of racial profiling	Based on Mean	3.574	1
	Based on Median	3.172	1
	Based on Median and with adjusted df	3.172	1

Source: own construction

Analysis of Variance (ANOVA) Test:

As previously stated, the purpose of an ANOVA test was to find out if there was a statistical relationship between factors and the variables. In this study the statistic relationship being tested was the group within that were introduced to racial profiling because of the media reporting verse the group that experienced racial profiling. Table 4.13 shows a p-value of 0.02 with was lesser than the significance level of 0.05. Therefore, the study **REJECTS the null hypothesis** that denoted that the notion of racial profiling was a phenomenon that has not been perpetuated by personal experience but rather media coverage. Subsequently, the study concluded to **ACCEPT the alternative hypothesis** that denotes that the notion of racial profiling was a phenomenon that had been personally experienced by individuals rather than perpetuated by media coverage.

Table 4.13: ANOVA- Media influence on racial profiling

ANOVA

Media introduced idea of racial profiling

	Sum of Squares	df	Mean Square	F
Between Groups	3.125	1	3.125	5.9
Within Groups	55.099	105	.525	

Source: own construction

4.4.1.2 Validity

The validation assumed in for this research question was external validity. Bryman (2012) suggested that external validity relates to the viability of the research findings being generalised and applied externally to different group of people. The research utilised random anonymous sampling thus suggested that if the same question was asked in a different group the results would be similar.

4.4.1.3 Reliability

Realistically, it was not possible to provide a precise calculation of reliability. However, estimations can be determined via various measures (Heale & Twycross, 2015). Homogeneity- was tested by utilising the Homogeneity of Variances test and the outcome thereof was reliable to consider the Analysis of Variance (ANOVA) Test robust for the hypothesis testing.

4.4.2 Comparison of the results to other studies

In an article published by The Citizen (2019) which highlights that racial profiling was a phenomenon that was personally experienced and the practicality of the occurrence. The article appealed to bank customers to provide their homeloan and vehicle financing contracts so that the financial investigating consultant can prove the alleged discrimination and then submit the report to the Human Rights Commission. The article further reports that they had received over 700 responses from individuals that have personally experienced being racially profiled (The Citizen, 2019). In addition, A report by Ntsabo (2019) points out that approximately 4000 bank customers were charged 30percent more for home loans. The majority of those customers were black homeowners (Ntsabo, 2019). As such, the findings of this report generated extensive media coverage. Thus, showing the extent of people that have personally experienced being racially profiled as found in this research.

4.5 Conclusion of presentation of research results

This study analysed and presented the findings from the data collected using the questionnaire survey using graphs, descriptive statistics and inferential statistics. The graphs were used to present some of the findings from the dataset and descriptive analysis was used because it describes the sample that has been selected and was the process of collating data on the group of participants. Lastly, inferential analysis was used as it provided evidence that a relationship or an effect amongst variables exists in the whole population as opposed to just the sample.

In terms of the role of education on income inequality, most of the participants feel income inequality does exist in the South African Banking. Where the participants differ in terms of whether they believe that education was the solution to narrowing income inequality as there was a 1 percent difference in thought. Whereas, the majority were of the opinion that experience was the most important factor during salary consideration which subsequently created a sentiment that 78 percent of the participants think that their salaries do not represent their level of education. Resultantly, the overall stance was that income inequality and the minimal effect that education has on narrowing the gap shall eventually render education irrelevant.

Moreover, the hypothesis testing accepted the null hypothesis that there was no evidence to suggest that education was an effective method to curbing income inequalities.

As for the second research question, the study established that there was an overwhelming perception that racial profiling does exist in the banking sector as 84 percent stated so. In addition, most of the participants across the banks believe in the existence of disparities in financial services access and that subsequently makes access to credit expensive for blacks and coloureds. Also, 57 percent of the participants expressed that they have experienced being discriminated against on the bases of their race. This occurrence and findings were supported by a similar study conducted by Munro Consulting Actuaries (2019) that concluded that Coloured and Black customers with the similar loan amounts exposure were paying higher interest rates than Whites for the same banking credit facility products

Moreover, the hypothesis testing rejected the null hypothesis that denotes that the notion of racial profiling and disparities in financial services access does not exist in the banking sector. The smaller p-value gives the study more confidence to reject the null hypothesis. Therefore, with the confidence level to reject the null hypothesis the study moved to accept the alternative hypothesis that suggested that racial profiling and disparities in financial services access does exist in the banking sector.

The summary of the empirical research findings with regards to the third research topic were that 57 percent of the participants were not introduced to the notion of racial profiling through the spike in media coverage pertaining to the recent allegations. Moreover, there were inconclusive empirical findings with regards to the extent and fairness of the reporting of racial profiling incidences. Suggested that 48 percent that media has not done enough to expose the plight of racial profiling, whereas 46 percent were seemingly satisfied with the recent spike of media attention pertaining to racial profiling. Lastly, when the participants were asked directly whether media had any influence in the introduction of the phenomenon 74 percent stated that they had experienced racial profiling rather than it being introduced by the media.

Rightfully, the hypothesis testing rejected the null hypothesis that denoted that the notion of racial profiling was a phenomenon that has not been perpetuated by personal experience but rather media coverage. Subsequently, the study concluded to ACCEPT the alternative hypothesis that denotes that the notion of racial profiling was a phenomenon that had been personally experienced by individuals, rather than perpetuated by media coverage.

5 DISCUSSION OF RESEARCH FINDINGS

This chapter discusses the research findings, Section 5.1 discusses the results for the first research question which is pertaining to the role of education in narrowing the income inequality gap. This discussion is accompanied by the null hypothesis that "*There is no evidence to suggest that education is an effective method to curbing income inequalities.*" Section 5.2 discusses the results of the second research question - are there disparities in financial services access by way of racial profiling by the South African banks? Subsequently this section discusses the null hypothesis that "*The notion of racial profiling and disparities in financial services access does not exist in the banking sector.*" Section 5.3 addresses the results regarding the last research question being- is the notion of racial profiling in the South African banking sector perpetuated by media or by individuals' personal experiences? The research question was accompanied by the null hypothesis that "*The notion of racial profiling is a phenomenon that has been perpetuated by media coverage.*" Lastly, Section 5.4 offer conclusions on the research findings.

5.1 The role education plays in narrowing the income inequality gap

The discussions of findings were in relation to the first research question, which indicates that education does not narrow income inequality in the South African banking sector. This finding was confirmed by the hypothesis testing where the null hypothesis was not rejected which concluded that education was not significantly recognised to influence income inequality in the South African banking sector.

Contrarily, there were several studies proposed the theory that education was the solution to curbing the income inequality gap (Bapuji, Ertug, & Jason, 2019; Dabla-Norris, Kochhar, Suphaphiphat, Ricka, & Tsounta, 2015; Bapuji & Mishra, 2015). This theoretically implies that education was relevant and has an important role to play in curbing the income inequality gap. When the participants were asked whether they believed that education was the solution to narrowing the income inequality gap, the results narrowly did not support the theory.

Figure 4.5 depicts the outcome as 46 percent participants disagreed that education was the solution, 45 percent agreed and 9 percent neither agree nor disagree. Thus, the 1 percent margin was insignificant to determine if the findings were theoretically expected. Therefore, the researched used more practical questions to draw conclusions. As such, when the participants were asked what they felt was more significant during income consideration, Figure 4.7 shows that 56 percent believed experience weighed more than educational level and race which suggested that these findings were against the theory, which also mean that the bank sector does not acknowledge education as a solution to curbing income inequality since education was not the greatest consideration factor in income negotiations. When the Banking sector disregard education as a solution this act supports the theory presented by the World Bank (2019) that corporates contribute to or maintains inequality in a nonfinancial and financial way. Moreover, when the study examined if the participants believed that they were remunerated in accordance to their education level, 78 percent of the participants said their income does not represent their level of education.

Logically, it makes sense that the percent different was insignificant when the respondents were asked if the education was relevant to narrow the income inequality gap, because the participants believe in education. However, the perceived importance does not translate to being equitable remunerated in relation to level of education. Even though, the study failed to find literature that supports a correlation between a higher level of education and income range. Nonetheless, based on the empirical research results it was evident that the participants were educated. However, the empirical results on the existence of income inequality in the banking sector as shown in the Figure 4.6 shows that 82 percent of the participants believe that income inequality exists in their respective banks of employment. The effect thereof was that it perpetuates the notion that education was irrelevant in curbing income inequality, as depicted in Figure 4.9 when the participants were asked whether the existence of continuous income inequality makes education irrelevant. The outcome was that 17 percent disagreed, 12 percent neither agreed nor disagreed, whereas 72 percent agreed that the existence of continuous income inequality makes education irrelevant.

Moreover, based on the hypothesis testing the results were that there was no evidence to suggest that education has no significant influence on curbing income inequalities further do not agree with the theory that implied that education was relevant and has an important role to play in curbing the income inequality gap as presented a school of scholars (Bapuji, Ertug,

& Jason, 2019; Dabla-Norris, Kochhar, Suphaphiphat, Ricka, & Tsounta, 2015; Bapuji & Mishra, 2015). As such, the null hypothesis was not rejected so the conclusion of this research was that education does not have a significant effect on income inequality.

Also, the validity of the results from a statistical perspective was highlighted in the validity testing, the results thereof shows the consequence relationships of income inequality if left unresolved and their consequences were that income inequality creates social classism and purports the irrelevance of education.

5.2 The existence of disparities in financial services access by way of racial profiling

The results indicate that disparities in financial services access by way of racial profiling do exist. Subsequently, this was confirmed by the hypothesis testing where the null hypothesis that suggested that the disparity does not exist was rejected and concluded that the alternative hypothesis that indicated that disparities in financial services access by way of racial profiling does significantly exist. Thus, meaning that the banking sector do profile their clients.

In a report by Gelb (2004) that focused on inequalities in financial access, the report indicated a theory that suggested that disparities in financial services access creates inequality of opportunities through disparities in financial services access and client profiling and resultantly creates intergenerational inequality. This theoretical construct was supported by the empirical research results, when the participants were asked whether they believed that banks racially profile their client the outcome as presented in Figure 4.11 were that were that 84 percent responded “yes - to some extent” and 16 percent responded “no- profiling does not exist”. The figure also shows that racial profiling was not unique to just a particular bank, it exists in all the banks represented. The resultant theory that disparities in financial services access and opportunity creates intergenerational inequality was also supported by the empirical results based on the question asked whether the existence of disparities in financial services access by way of racial profiling done by banks causes generational inequality. The empirical results from the question as shown in Figure 4.14 show that 79 percent of the participants agree that banks disparities in financial services access by way of racial profiling causes generational inequality, 9 percent neither agree nor disagree and 12 percent disagree. Therefore, these results support the theoretical consequence presentation and concludes that the findings were practically applicable.

Furthermore, another theory proposed by the Banking Association South Africa (2017) suggested that disparities in financial services access makes access to credit and funding more expensive for black customers (Banking Association South Africa, 2017). This theory was supported by Ikdal (2017) who in his report regarding the forms of disparities in financial services access, stated that it was expensive to bank in South Africa because South African bank fees were four times higher than developed countries like Australia and Germany. As such, making South African banks unaffordable for the lower income segment (Ikdal, 2017). The assumption that the lower income segment referred to by Ikdal (2017), this assumption was supported by Greenwood (2018), who stated that majority of the population live below the national poverty line and black South Africans being more prone to poverty. Resultantly, the empirical research results support the theory and the support was evident in the response when the participants were asked whether they thought that all ethnicities have equal access to financial service access and funding opportunities the outcome thereof was presented in Figure 4.12 the results show that 84 percent of the participants believe that not all ethnicities have equal access to financial service access whereas 16 percent believe that all ethnicities have equal access. The practicality of the findings was justified by the consistency in the results across the banks outcome.

Moreover, with regards to the theory presented by Ikdal (2017) that disparities in financial services access makes getting credit facilities and funding more expensive for black customers, the results from the empirical research support the theory and the support was justified through a question whether they have ever been quoted a bias interest rate purely on the bases of their race. The outcome of the findings shown in Figure 4.13 suggested that 57 percent of the participants believe that the credit rating was bias, 22 percent were unaffected, and 21 percent believe that the credit rating system was fair. The eventuality of being quoted interest rates on the base of race supports the theory that access to credit and funding becomes more expensive and bias in accordance to race. In addition, when they were asked if as bank employees have ever felt racially profiled the results as depicted in Figure 4.15 show that 49 percent feel they probably have been profiled, 35 percent said sometimes, 10 percent were not sure, and 6 percent have never felt racially profiled.

The practical consideration was formulated through further examination the possible reasons for the empirical research results and practical reasons to why the participants would feel as though there were disparities in financial access and the discrimination in terms of cost of credit. As such, this study found that it was also possible that the participants felt as though cost of credit was more expense because they might have had a low credit score. The Banking Association South Africa (2017) suggested that there were five factors that could influence a person's credit scoring namely: debt repayment timeframe, debt exposure, strong supporting documents, having no defaults nor judgement and whether other credit providers have declined the applicants loan request. Therefore, violation of these factors could influence the risk profile of a client, which subsequently influences the interest rate quoted.

However, the findings were logical as the notion of racially profiling was a relatively new phenomenon so it would make sense that the participants were relatively unsure if they have felt it explicitly or not, as is this study did not find supporting literature that defines what racial profiling was. Moreover, there were no mitigating controls to prevent cognitive biases from influencing the fairness in interest rates offered and the cost of financing. This makes disparities in financial access subjective and at the banking sectors discretion. The legitimacy of the logical argument was supported by a similar report by Munro Consulting Actuaries (2019) that was aimed at investigating claims of discrimination against black customers in terms of the interest rates charged. The loan agreement sample was made up of 58 percent loans held by Whites, 31 percent by Blacks, 10 percent by Coloureds and 1 percent held by Indians (Munro Consulting Actuaries, 2019). The outcomes of the interest rate gap by race and loan size findings suggested that on loans above R150 000: Coloured and Black customers pay on average 0.45 percent below prime rates. Whereas, White customers pay on average 1.1 percent lower than prime. In relation to loans less than R100 000, Coloured and Black customers pay 2 percent above prime rate as opposed to White customers that pay 0.75 percent above the prime rate (Munro Consulting Actuaries, 2019). The conclusion of the report stated that Coloured and Black customers with the similar loan amounts exposure were paying higher interest rates than Whites for the same banking credit facility products (Munro Consulting Actuaries, 2019).

Lastly, based on the hypothesis testing results that suggested that racial profiling and disparities in financial services access do exist in the banking sector with a 99 percent significance that the existence of disparities in financial services access affects the larger population. Thus, the hypothesis testing results agree with the views found in the report by Munro Consulting Actuaries (2019) that was aimed at investigating claims of discrimination against black customers in terms of the interest rates charged.

5.3 Whether the notion of racial profiling is perpetuated by media or by individuals' personal experiences

The results indicate that the notion of racial profiling was a phenomenon that had been personally experienced by individuals rather than perpetuated by media coverage and was duly confirmed when testing the null hypothesis that suggested that the notion of racial profiling was a phenomenon that had not been perpetuated by personal experience but rather media coverage, which was rejected and accepted the alternative hypothesis that suggested that personal experience significant effect on racial profiling awareness.

The views for this research question were based on the recent incline in the number of publicised allegations that banks discriminated against black customers compared to white customers, supported by recent views in literature (Munro Consulting Actuaries, 2019; Ntsabo, 2019) that banks discriminated against black customers compared to white customers. The views in the report by Ntsabo (2019) pointed out that approximately 4000 bank customers were charged 30percent more for home loans with most of those customers being black homeowners. These findings support this research view that customers were personally experiencing being racially profiled thus meaning that media coverage was a platform to merely report the extent of the phenomenon.

Furthermore, the empirical research findings support the on-going debate of the existence of racial profiling, which subsequently causes discrimination against other races in terms of cost of credit facilities. However, where the empirical research results differ from this view was how the notion of racial profiling was introduced. When the participants were asked whether or not they had been influenced to the existence of racial profiling by the recent spike in media coverage on allegations regarding the phenomenon at results as depicted in Figure 4.17 suggested that 15 percent said of the participants agreed that it was because of the recent media coverage, 28 percent of the participants said it was possible that possible and 57 percent responded that their introduction was not from media. These findings do not support the theoretical concept that the increase in media coverage on racial profiling allegation was what influenced the participants to the existence racial profiling.

The summary of findings from the empirical research suggested that most of the participants were influenced to the existence racial profiling by personal experience rather than from media coverage. The practical point of view was that individuals have probably felt discriminated but had no way of reporting the occurrence until media started reporting on this on-going argument. Therefore, this study was of the view that media merely created an opportunity of collective action as shown in an article by The Citizen (2019) that when an appeal was made for people to provide their credit facility agreements, within a few days the financial investigating consultant had received over 700 responses from individuals that have personally experienced being racially profiled. The article goes on to indicate that based on on-going Twitter conversations and a television interview by *Special Assignment* it was evident that there were more people that have experienced racial profiling and those people were requested to come forth (The Citizen , 2019). The debates support the notion that racial profiling was a phenomenon that had been personally experienced by individuals, rather than perpetuated by media coverage.

5.4 Conclusion of discussions of research results

The conclusion of results in relation to the first research question, indicate that education does not narrow income inequality in the South African banking sector. This finding was confirmed by the hypothesis testing where the null hypothesis was not rejected which concluded that education was not significantly recognised to effect income inequality in the South African banking sector. As such, the empirical research findings suggested that the participants were not remunerated in accordance to their education as experience was also a contributing factor in the remuneration consideration.

The conclusion of results in relation to the second research questions indicate that disparities in financial services access by way of racial profiling does exist. Subsequently, this was confirmed by the hypothesis testing where the null hypothesis that the disparity does not exist was rejected. The main explanation for these results was the lack of transparency during the credit facility application and the autonomous credit approval decisions in the banking process. Thus, highlighting inadequate banking policies that mitigate against unconscious biases.

The conclusion of results in relation to the third research questions indicate that the notion of racial profiling was a phenomenon that had been personally experienced by individuals rather than perpetuated by media coverage and was duly confirmed when testing the null hypothesis that suggested that the notion of racial profiling was a phenomenon that had not been perpetuated by personal experience but rather media coverage, which was rejected and accepted the alternative hypothesis that suggested that personal experience significant effect on racial profiling awareness. The main reason for these results was that individuals have probably been feeling discriminated but had no way of reporting the occurrence until media started reporting on this on-going argument. Thus, the role of media was to report on the extent racial profiling and not to influence the existence thereof.

6 SUMMARY, CONCLUSIONS, LIMITATIONS, AND RECOMMENDATIONS

6.1 Summary

The main objective of this study was to evaluate the existence of racial profiling and income inequalities in the South African banking sector. In addition, some accompanying sub-objectives were hypothesised with effort to assist in addressing the main objective of this research.

The research objectives were in the form of research question with their respective accompanying hypothesis. The first research question pertained to the role of education in narrowing the income inequality gap. This discussion is accompanied by the null hypothesis that "*There is no evidence to suggest that education is an effective method to curbing income inequalities.*" The second research question - are there disparities in financial services access by way of racial profiling by the South African banks? With the accompanying null hypothesis "*The notion of racial profiling and disparities in financial services access does not exist in the banking sector."* The third research question was- is the notion of racial profiling in the South African banking sector perpetuated by media or by individuals' personal experiences? The research question was accompanied by the null hypothesis that "*The notion of racial profiling is a phenomenon that has been perpetuated by media coverage."* Resultantly, the discussion of the research findings was presented per research question constructs

The importance of the study was to investigate the effect of education on income inequality and the impact of racial profiling on the banking sector. The research also aimed to contribute to existing literature efforts aimed at defining the scope and severity of inequality and subsequently contributing towards curbing inequality. Moreover, the study ought to contribute to the quest realising financial emancipation in our lifetime by investigating the viability of education as a means of curbing poverty and income inequality. Lastly, the research aimed to contribute towards sparking conversations and raising awareness regarding

income inequality and disparities in financial services access by way of racial profiling to mitigate the intergenerational inequality.
The consequences of not addressing inequality in financial services access by way of racial profiling mean that the financial sector can never be perceived as inclusive to all. Financial exclusion breeds intergenerational inequality, the diminishing of the middle class and the implementation of policy reforms that harm the growth of the economy.

In attempting to attain the objectives of the study the cross-sectional research design method was used, and the data collection instrument opted for was the quantitative survey questionnaire.

To ensure the robustness of the findings, this study carried out validity and reliability tests. Inter-item correlation matrix was the method used for the validity testing and the tests carried out for reliability were the homogeneity Cronbach's α test and the homogeneity of variances. The data passed both validity and reliability tests.

6.2 Conclusions

The conclusions regarding the three addressed research questions and the accompanying hypotheses were provided in this section.

6.2.1 The role of education in narrowing the income inequality gap in the South African banking sector

Most of the participants feel income inequality does exist in the South African banking sector. Where the participants differ in terms of whether they believe that education was the solution to narrowing income inequality as there was a 1 percent difference in thought. The majority were of the opinion that experience was the most important factor during salary consideration, which subsequently create a sentiment hence 78 percent of the participants think that their salaries do not represent their level of education. Resultantly, the overall stance was that income inequality and the minimal effect that education has on narrowing the gap thus resultantly rendering education irrelevant. Moreover, the hypothesis testing did not reject the null hypothesis that there was no evidence to suggest that education was an effective method to curbing income inequalities.

6.2.2 The existence of disparities in financial services access by way of racial profiling

The study established that there was an overwhelming perception that racial profiling does exist in the banking sector as 84 percent stated so. In addition, most of the participants across the banks believe in the existence of disparities in financial services access and that subsequently makes access to credit expensive for blacks and coloureds. Also, 57 percent of the participants expressed that they have experienced being discriminated against on the bases of their race. This occurrence and findings were supported by a similar study conducted by Munro Consulting Actuaries (2019) that concluded that that Coloured and Black customers with the similar loan amounts exposure were paying higher interest rates than Whites for the same banking credit facility products

Moreover, the hypothesis testing rejected the null hypothesis that the notion of racial profiling and disparities in financial services access does not exist in the banking sector. The smaller p-value gives the study more confidence to reject the null hypothesis. Therefore, with the confidence level to reject the null hypothesis the study moved to accept the alternative hypothesis that suggested that racial profiling and disparities in financial services access does exist in the banking sector.

6.2.3 Media influence on racial profiling

The summary of the empirical research findings with regards to the third research topic were that 57 percent of the participants were not introduced to the notion of racial profiling through the spike in media coverage pertaining to the recent allegations. However, there were inconclusive empirical findings with regards to the extent and fairness of the reporting of racial profiling incidences. This suggested that 48 percent that media has not done enough to expose the plight of racial profiling, whereas 46 percent were seemingly satisfied with the recent spike of media attention pertaining to racial profiling. Lastly, when the participants were asked directly whether or not media had any influence in the introduction of the phenomenon 74 percent stated that they had experienced racial profiling rather than it being introduced by the media.

Rightfully, the hypothesis testing rejected the null hypothesis that denoted that the notion of racial profiling was a phenomenon that had not been perpetuated by personal experience but rather media coverage. Subsequently, the study concluded to ACCEPT the alternative hypothesis that denotes that the notion of racial profiling was a phenomenon that had been personally experienced by individuals rather than perpetuated by media coverage.

6.3 Limitations

The was a lack of academic literature on the racial profiling and the existence thereof, the study was reliant on banking sector employees, thus was susceptible to personal biases. The technical limitation experienced by the study was the loss of data due to the quality of the responses received and the research was limited to the banking sector specifically FNB, Nedbank, Absa and Standard bank with participants residing in Gauteng. Furthermore, the administrative limitation experienced in this study were include incomplete surveys within the dataset that had to be disregarded due to missing data, and a delay by the Wits Business school to issue the ethical clearance. Lastly the lockdown due to the Covid-19 pandemic hindered the data collection process.

6.4 Recommendations

The empirical findings in conjunction with the literature review generate some recommendations that can guide various stakeholders. The study acknowledges that some of the recommendations might not work in isolation and would need a collaborative effort with the South African Education Department, Banking Association South Africa (BASA) and the National Credit Act (NCA).

Banks: Banks invest approximately R5 billion on various corporate social investment initiatives and two-thirds of the spend go to education (Banking Association South Africa, 2017). However, most of the bursary recipients remain as junior and middle managers. This study makes three recommendations for the banks: (i) That banks must aim to get a return on their investments by effectively placing these employees so that those employees can contribute back into the business. (ii) The Banks can incentivise employees that complete high education by having an out of cycle salary increase and (iii) Most importantly, banks must have a transparent credit scoring system during the credit application process so that it can demystify the notion of discrimination.

Academic and Researchers: The study recommends the addition to literature the definition of racial profiling. Clarify this recommendation to show its importance.

Regulatory Bodies: The regulatory bodies must impose and monitor policies that aim to mitigate against unconscious bias in the autonomous credit approval banking process. The NCA must play a more proactive role in the creation of a fair, transparent, effective and accessibility of the credit market and last the protection of all customers. The BASA must have tighter consequence management on these two pillars namely, empowerment financing and access to financial services. As these pillars there to aid transformation in the banking sector and transformation in access to finances.

South African Education Department: This study makes three recommendations for the education department: (i) The Education department must incorporate soft skills training that will close the gap for graduates entering the workplace, skills such as conflict resolution, storytelling and big picture thinking. (ii) Work readiness programmes and workplace simulations programmes would also benefit graduates and improve the relevance of education in narrowing income inequality and graduate's employability and (iii) The education system main objective should be to develop entrepreneurs rather than employable graduates.

6.5 Areas of further research

This study provided a platform for future replication in other sectors and expansion on the topic, especially the issue of racial profiling (inequality of opportunities). Other researchers can expand this study by considering the role education and racial profiling that may exist in many other sectors. More so, the study can be expanded to cover many provinces of South Africa and hence having a better representation of the South African context.

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Appendix 1.1

Appendix 1: Correlation Income and Management level

Correlations

		Income Group	Management level
Income Group	Pearson Correlation	1	.723**
	Sig. (2-tailed)		.000
	Sum of Squares and Cross-products	219.657	87.084
	Covariance	2.053	.822
	N	108	107
Management level	Pearson Correlation	.723**	1
	Sig. (2-tailed)	.000	
	Sum of Squares and Cross-products	87.084	68.324
	Covariance	.822	.639
	N	107	108

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

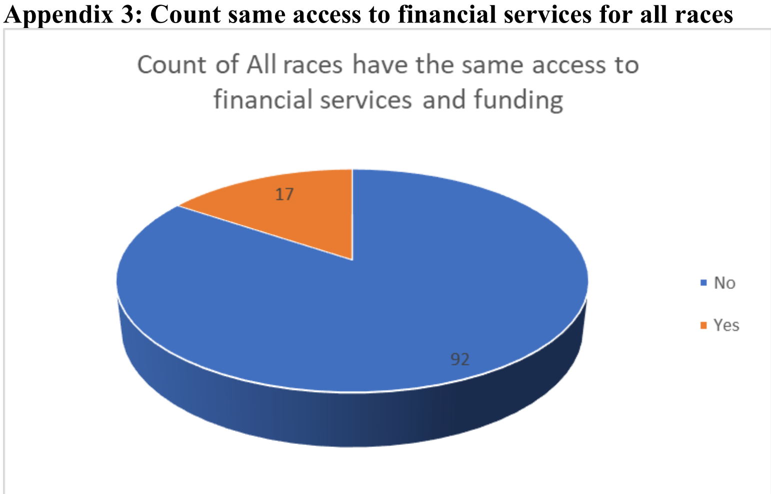
Appendix 2 Income Ryan-Einot Gabriel Welsch test

Income & Inequality Score

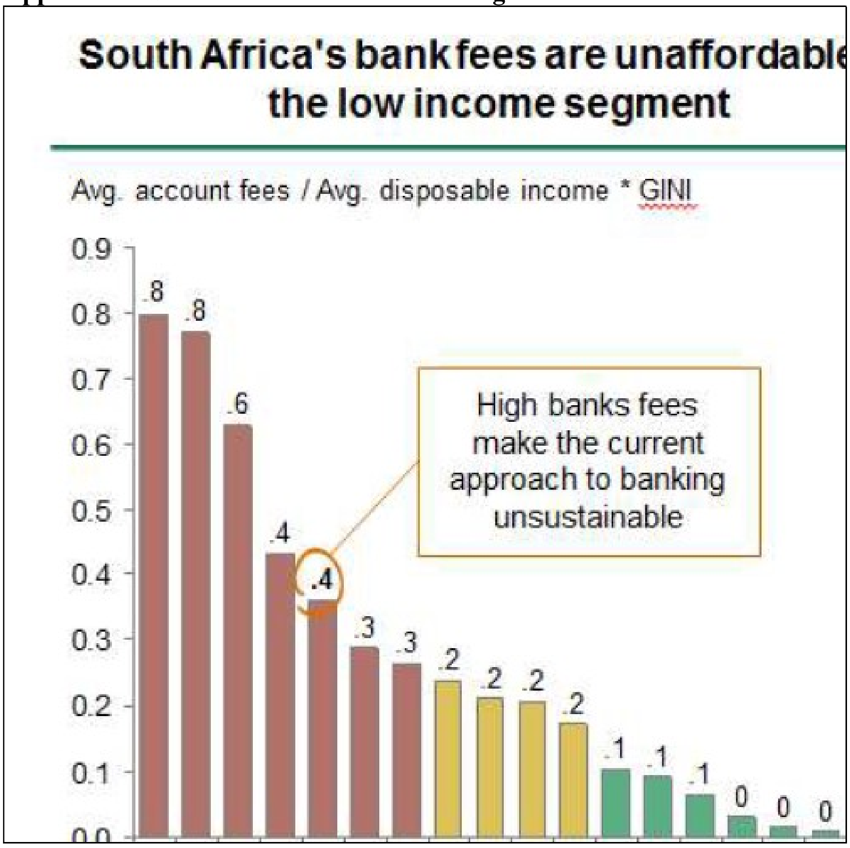
Ryan-Einot-Gabriel-Welsch F

Education level	N	Sub alp 0
Honours/Postgraduate	41	
National Diploma	11	
Diploma/Certificate	24	
Degree	24	
Masters/ Doctorate	9	

Appendix 3: Count same access to financial services for all races

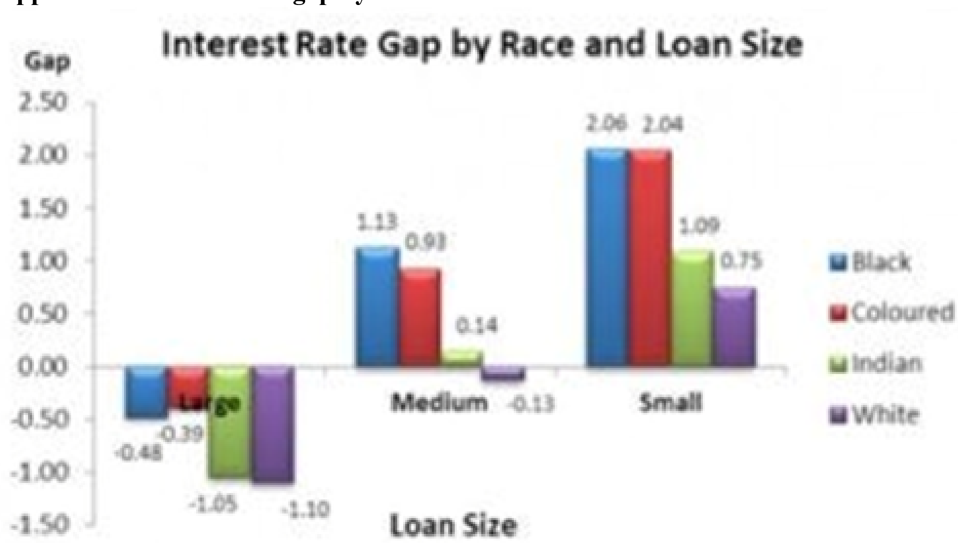


Appendix 4: South Africa's rank in banking fees



Source: (Ikdal, 2017)

Appendix 5: Interest rate gap by race and loan size



Source: (Munro Consulting Actuaries, 2019)

Appendix 1.2: Data collection instrument

MBA Research survey

iQ Score: Gr

Section A: Consent

Consent

Dear Participant,

You are invited to participate in an academic research study conducted by Teb
Master's in Business Administration student at Wits
Business School (WBS).
The purpose of the study is to evaluate the perceived existence of racial profil
inequalities in the South African Banking sector

Please note the following:
- Your participation in this study is important. You may, choose not to participat
- The answers you provide are strictly confidential and entirely anonymous.
- The survey comprises of 4 sections with a total of 23 questions.
- The survey will take you 5mins to complete.

If you have any questions about this questionnaire, please contact [Tebogo Dipl
443 5245]

Section B: Demographics Questions

Q1 What is your ethnicity?

- Black
- Coloured
- Indian
- White

Q2 Please select the relevant option, regarding your age:

- 18-24
- 25-30
- 31-35
- 36-40
- 41 years and older

Q4 In terms of your current occupation, how would you characterise your level?

- ☐ General staff
- ☐ Middle management
- ☐ Senior management
- ☐ Head/ Exec

Q5 In terms of the Banking sector, which Bank are you employed by?

- ○ Standard Bank
- ○ FNB/RMB
- ○ Absa
- ○ Nedbank
- ○ Other

Q6 Please select your approximate level of income per year. (Please remember tl
answers are anonymous)

- ○ Less than R200k
- ○ R201k- R400k

Q7 In terms of education, what is your highest qualification?

- ○ Diploma/ Certificate
- ○ National Diploma (3years)
- ○ Degree
- ○ Honours/Post grad Diploma

Section C: Answer the following in relation to income inequality

Q8 Do you feel income inequality exists in the banking sector?

- ○ Yes
- ○ No

Q9 What is your overall satisfaction rating with regards to efforts by your employe
inequality?

- ○ 5 - Very satisfied
- ○ 4 - Somewhat satisfied
- ○ 3 - Neither satisfied nor dissatisfied

Q10

Suppose we double the "real income" of everyone in the Bank, would that solve inequality?

- Yes
- No

Q11

Do you think that education is the solution to narrowing the income/salary gap?

- Strongly agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Strongly disagree

Q12

Does your income/salary represent the level of your education?

- Yes
- No

Q13

In determining your salary which factor do you believe is more imperative?

- Your Experience
- Your Race
- Your Education level

Q14

In determining your bonus and salary increase which factor do you believe is cc

- Your Race
- Your Performance

Q15

Income inequality and racial profiling, causes the below?
Please indicate, to what extent do you agree or disagree with the following sta

	Strongly agree	Somewhat agree	Neither agree nor disagree	Sor di
Generational inequality	○	○	○	
Makes education irrelevant	○	○	○	
Creates social classism	○	○	○	
Damages the organisational cohesion	○	○	○	

Section D: Answer the following in relation to racial profiling

Q17

Do you believe that banks racial profile their clients?

- Yes- to some extent
- No- profiling does not exist

Q18

Have you ever felt like you were quoted a higher or lower interest rate, on the b

- Extremely believable
- Somewhat believable
- Neither believable nor unbelievable
- Somewhat unbelievable
- Extremely unbelievable

Q19

Do you believe that all races have the same access to financial services and fu

- Yes
- No

Q20

Have you ever felt like you were being racially profiled?

- Probably
- Sometimes
- Not sure
- Never

Q22

Do you feel like the Media fairly reports the existence/extent of racial profiling?

- Strongly agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Strongly disagree

Q23

How were you introduced to the notion of "racial profiling"?

- Personal experience

Appendix 2.1: One-page bio of the researcher including declaration of interest in the research and funders

Tebogo Diphoko, is the first born of two children raised by a single mother. He also has two children a son 12-year-old Orapeleng Letlotlo Diphoko and a 2-year-old Leano Esihle Diphoko. His children are his greatest influence to succeed in life. He is currently employed at Rand Merchant Bank Corporate & Investment Banking division as a Corporate Service Manager. His role entails strategy planning with effort to integrate the client's transactional processes with the Bank. He previously worked at Standard Bank in the Wealth and Investment division and has been working in the banking & Finance sector for 10 years.

He holds the following qualification: National Diploma in Banking from the University of Johannesburg (UJ), Hons: Advanced Diploma in Risk Financing from the University of South Africa (UNISA), recently completed his Postgraduate Diploma in Business Administration (PDBA) obtained from Wits Business School (WBS) and is currently a Master's in Business Administration candidate at WBS.

Lastly Tebogo Diphoko lives by the mantra "Do you best and God will do the rest."

Appendix 2.2: Ethic documentation

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

SCHOOL OF GRADUATE SCHOOL OF BUSINESS ADMINISTRATION ETHICS
CONSTITUTED UNDER THE UNIVERSITY HUMAN RESEARCH ETHICS COMMITTEE (NON-M

CLEARANCE CERTIFICATE **PROTOCOL NUMBER: WBS/BA1812168/**

PROJECT TITLE	Evaluating the perceived existence of racial profiling and i in the South African Banking sector
INVESTIGATOR	Mr Tebogo Mogosi Diphoko
SCHOOL/DEPARTMENT OF INVESTIGATOR	MBA (Research Article)
DATE CONSIDERED	11 February 2020
DECISION OF THE COMMITTEE	Approved unconditionally
RISK LEVEL	LOW RISK
EXPIRY DATE	28 FEBRUARY 2021

Matshabaphala

ISSUE DATE OF CERTIFICATE 14 April 2020 **CHAIRPERSON** ____________________
(Dr MDJ Matshabaph

cc: Supervisor: Dr MDJ Matshabaphala

DECLARATION OF INVESTIGATOR

To be completed in duplicate and **ONE COPY** returned to the Chairperson of the School/Departme committee.

I fully understand the conditions under which I am are authorized to carry out the abovementioned r guarantee to ensure compliance with these conditions. Should any departure to be contemplated fr procedure as approved I/we undertake to resubmit the protocol to the Committee.

Appendix 2.2: Ethic documentation

UNIVERSITY OF THE
WITWATERSRAND,
JOHANNESBURG

Private
Fax
Tel

Reference: Ms J
E-mail: jennifer.mgol

Pe

Mr TM Diphoko
Unit 45 Malachite Mews
Van Dyk Park
Boksburg
1459
South Africa

Dear Mr Tebogo Diphoko

Master of Business Administration: Approval of Title

We have pleasure in advising that your proposal entitled *Evaluating the perceived profiling and income inequalities in the South African banking sector* has been appr that any amendments to this title have to be endorsed by the Faculty's higher degr formally approved.

Yours sincerely